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Equity Research

Initiating Coverage

25 Proprietary Company Profiles

The Only Global Investment Bank Focused Exclusively On FinTech

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FT Partners: The Most Trusted Brand in FinTech Investment Banking

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- InsurTech
- SaaS
- GRC

2+ *Decades*
6 *Continents*
10+ *Sectors*

- M&A
- LBO
- Majority Recap
- Equity Underwriting
- IPO Advisory
- Growth Equity
- Minority Recap
- Consortium

With Clients Across Six Continents

Capital Raising / IPO Advisory

Revolut
on its Series E financing led by
SoftBank
TIGERGLOBAL
for a total amount of
$1,250,000,000
at a valuation of
$33,000,000,000

upgrade
on its Series F financing led by
COATUE DST GLOBAL
for a total amount of
$280,000,000
at a valuation of
$6,000,000,000

mollie
on its financing led by
Blackstone
for a total amount of
$800,000,000
at a valuation of
$6,500,000,000

GreenSky
on its
$1,010,000,000
Initial Public Offering

SpotOn
on its Series F financing led by
DRAGONEER
for a total amount of
$300,000,000
at a valuation of
$3,600,000,000

cloudwalk
on its Series C financing led by
COATUE
for a total amount of
$150,000,000
at a valuation of
~$2,150,000,000

Remitly
on multiple financing rounds for a total amount of
$370,000,000+

stone co.
on its
$1,400,000,000
Initial Public Offering

M&A Advisory

Heartland
on its sale to
globalpayments
for total consideration of up to
$4,500,000,000

ASSURANCE
on its sale to
Prudential
for total consideration of up to
$3,500,000,000

Divvy
on its sale to
bill.com
for total consideration of
$2,500,000,000

GreenSky
on its sale to
Goldman Sachs
~$2,240,000,000

Truebill
on its sale to
ROCKET
for total consideration of
$1,275,000,000

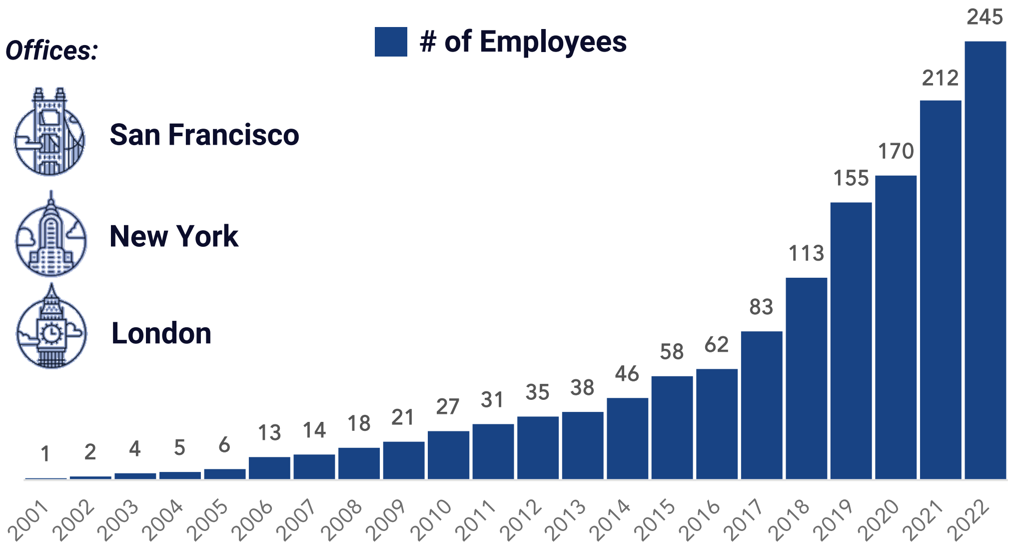
Finicity
on its sale to
mastercard
for total consideration of up to
~$1,000,000,000

Currencycloud
on its sale to
VISA
~$1,000,000,000

Payrix
on its sale to
FIS
for total consideration of
~$800,000,000

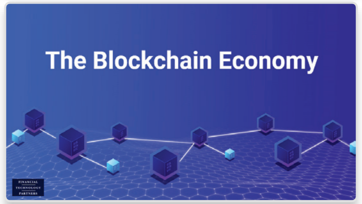
Largest FinTech Investment Banking Team in the World

Offices:
- San Francisco
- New York
- London



Leading Producer of FinTech Industry Research

– Click to View –



- Quarterly Deal Activity Insights
- Monthly Market Updates
- Infographics
- Sector Deep-Dives
- CEO / Executive Interviews
- Video Panels

FT Partners – Focused Exclusively on FinTech

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About FT Partners

Financial Technology Partners ("FT Partners") is the only global investment banking firm focused exclusively on providing top-tier strategic and financial advisory services to FinTech CEOs, founders and investors. The Firm offers a wide array of strategic advisory services in mission-critical transactions including Private Capital, M&A, IPO Advisory, Debt Advisory, LBOs and Recapitalizations. The Firm was founded by Steve McLaughlin, formerly a senior investment banker in Goldman Sachs & Co.'s Financial Technology Group and Financial Institutions Group in New York and San Francisco. With offices in San Francisco, New York and London, FT Partners is comprised of a team of experienced investment bankers formerly with the FinTech, M&A and investment banking groups of Goldman Sachs, Citi, JP Morgan and Morgan Stanley.

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About FT Partners Equity Research

Led by Co-Directors of Research Craig Maurer and Matt O'Neill, who bring a combined 30+ years of sell-side research experience from firms including Goldman Sachs & Co., Autonomous Research US, and Alliance Bernstein L.P., FT Partners Equity Research builds upon the Firm's best-in-class knowledge of the FinTech space, as exemplified by the in-depth global, sub-sector specific, and private market research already published by the Firm. The Equity Research offering heavily leverages FT Partners' deep understanding of the private FinTech market to provide a unique view of publicly traded companies in the space.

FT Partners' Equity Research differs substantially from what has become typical of sell-side research coverage over the past 40+ years. Eschewing the inherent friction introduced by ratings, price targets and proprietary earnings estimates, our highly visual and analytical research along with full three-statement models instead provides buyside clients with a deep understanding of the company, both operationally and financially, as well as an analysis of the consensus outlook, where results may deviate, and multiple scenario-based valuation frameworks to consider with a focus on long-term profitability. Without the traditional reliance on ratings and price targets, we are able to provide real-time, unbiased views into events driving stock price movements.

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FT Partners Equity Research

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ADYEN PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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ADYEN-NL TTM Price Performance

Price as of 03/17/23:	€ 1,385	Shares Out (mm):	31
Market Cap (mm):	€ 42,916	Beta (2 Year Avg.):	2.0
52-Wk Range:	€1,148 - €1,935	Avg. Daily Vol (mm):	0.1

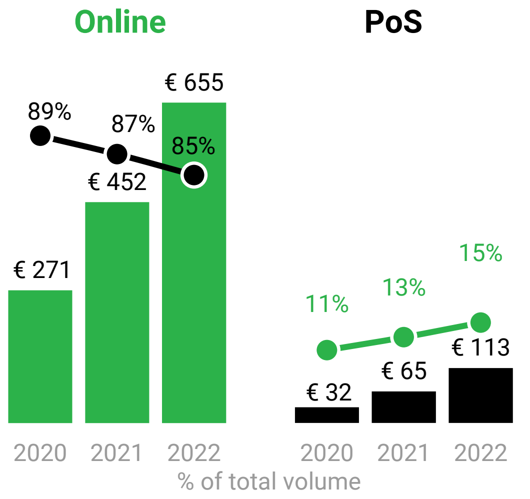
COMPANY OVERVIEW

Adyen operates a global payments platform that was born online, but now operates across all channels, integrating the full payments stack — gateway, risk management, processing, issuing, acquiring, and settlement. Adding additional value to merchants on their platform, Adyen also offers issuing services, enabling merchants to offer physical and virtual cards.

The platform primarily services large global merchants, connecting them directly to Visa, Mastercard or other payment methods and networks. Adyen's merchant portfolio includes Nike, Uber, Netflix, Facebook, Spotify, Etsy, Vodafone, Sephora, Tory Burch, L'Oréal, Booking.com, and more. This land and expand commercial strategy has driven strong volume growth, with the natural outcome being a lower net take rate as merchants gain negotiating power through scale. Deeper penetration of SMB merchants can help offset margin pressure from the enterprise segment.

Adyen's business is primarily full-stack acquiring, however it does have some gateway-only business for customers like airlines.

PROCESSED VOLUME (bn)



KEY DEBATES

1. **Margin Pressures:** Adyen has laid out a long-term target for EBITDA margins of 65%+. After the EBITDA margin reached 64% in 2H21, it declined to 59% in 1H22 and 52% in 2H22. According to management, this decline is attributed to the high level of investment in the business, specifically headcount growth. Management stated margins will bottom in 2023 as the current investment cycle in headcount runs its course, rebounding in 2024.

2. **Macro Environment:** In 2H22, on a constant FX basis, net revenue was at the lower-end of management's medium-term guidance. Looking into 2023, investors are attempting to quantify the impact of a weaker macro environment on top-line growth. Management has stated that the macro environment is not a significant issue as it is focused on expanding its wallet share with existing merchants. Nonetheless, pressure on discretionary spend is not something Adyen would be immune to.

3. **TAM Expansion:** During its 2022 Investor Day, Adyen provided updates on a range of new products to better address clients' embedded finance needs, including cash advance, bank accounts, and card issuing. Specifically, Adyen has outlined issuing and capital as two products that it expects to drive meaningful standalone net revenue contributions over the long-term. Today, these new products are not meaningful contributors to the P&L.

REVENUE MODEL

Adyen derives revenue through four business segments:

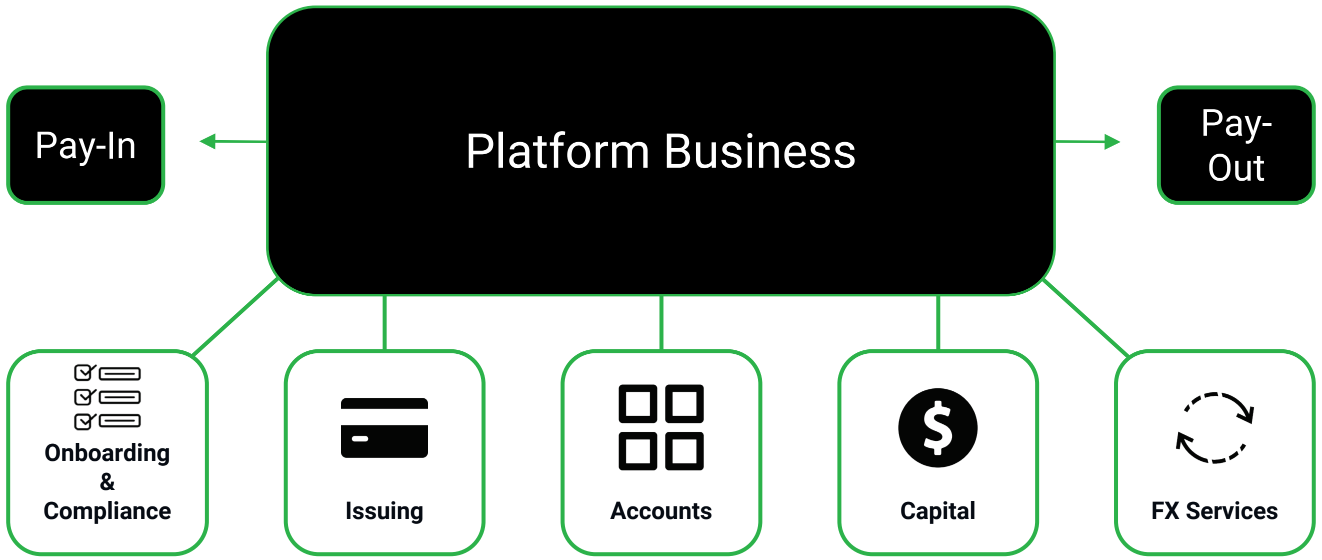
1) **Settlement Fees (93% of TTM Gross Revenue):** Settlement Fees are fees paid by merchants, usually as a percentage of the transaction value, where Adyen offers acquiring services. These fees are recognized as revenue when a payment transaction has been completed by means of settlement with a merchant. Settlement fees include interchange and payment network fees, as well as other costs incurred from financial institutions.

2) **Processing Fees (4%):** Fixed fee per transaction paid by merchants for the use of Adyen's platform and recognized as revenue when the transaction is initiated via the Adyen payment platform.

3) **Sales of Goods (1%):** Sale of hardware (primarily PoS terminals) and related accessories to merchants.

4) **Other Services (2%):** Includes foreign exchange service fees, third party commission and issuing services, which are deemed other services – recognized at point in time. Services transferred over time relate to the amortization of deferred revenue for services provided as part of the merchant contract and terminal services fees as part of the unified commerce offering.

PLATFORM



Pay-In

Platform Business

Pay-Out

Onboarding & Compliance

Issuing

Accounts

Capital

FX Services

Source: Company filings

adyen

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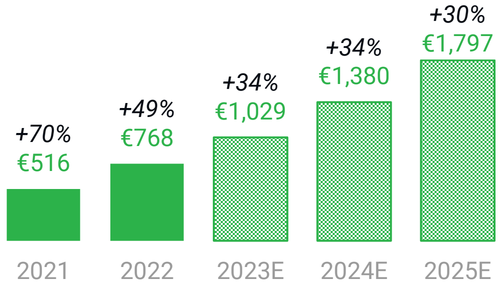
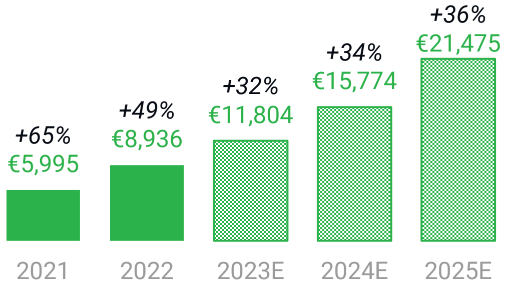
(€ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS(1)

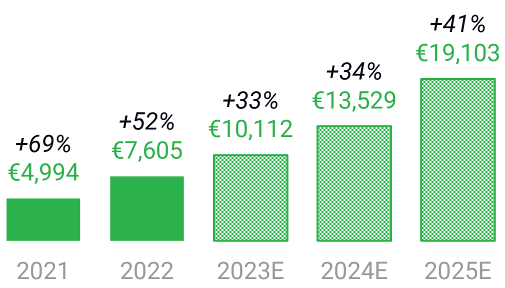
Processed Volume (bn)



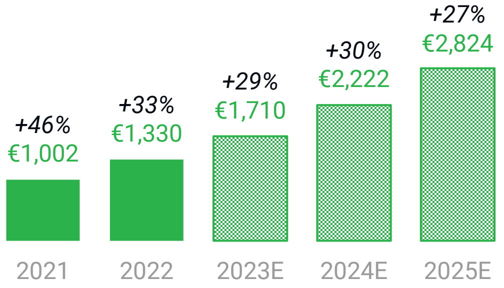
Gross Revenue



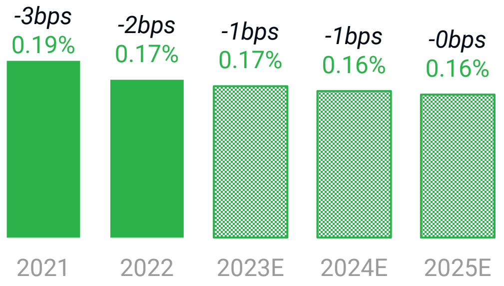
Cost of Sales



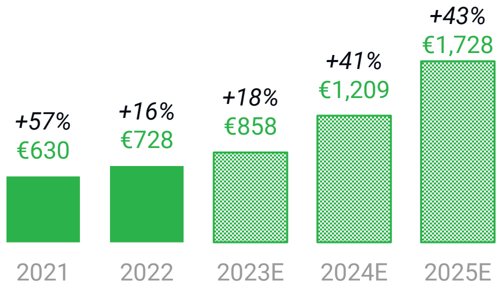
Net Revenue



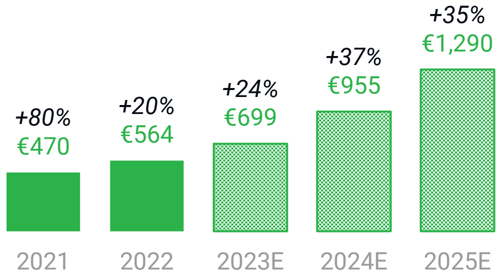
Net Revenue Take Rate



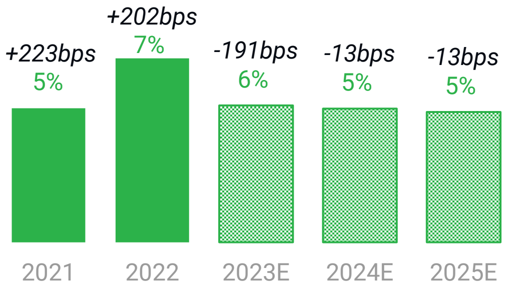
EBITDA



Net Income



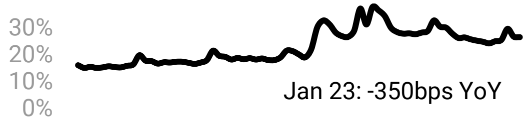
Capex as % of Net Revenue



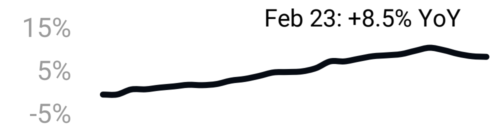
INDUSTRY KPIs

Global Card Volume(5) (1Q21-4Q22)

U.K. e-Comm as % of Retail Sales(3) (Jan 17-Jan 23)

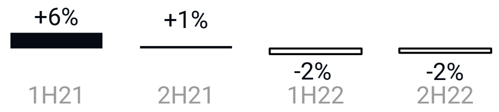


European Inflation(6) (Nov 19-Feb 23)

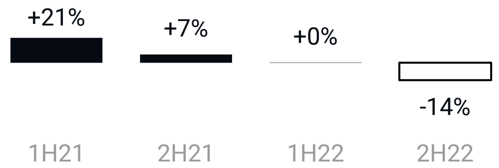


SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES(1)

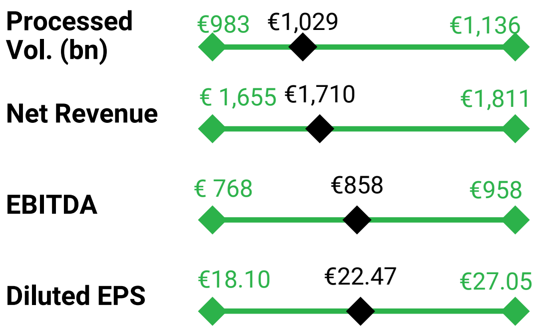
Net Revenue



Diluted EPS

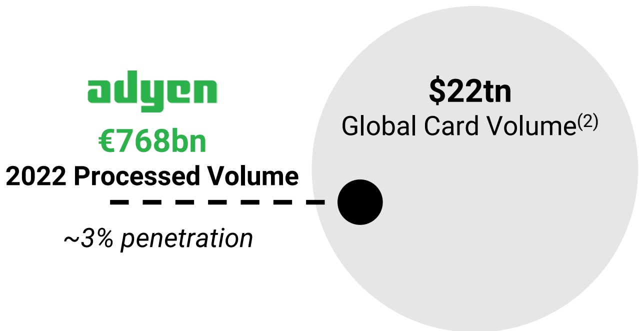


FY23

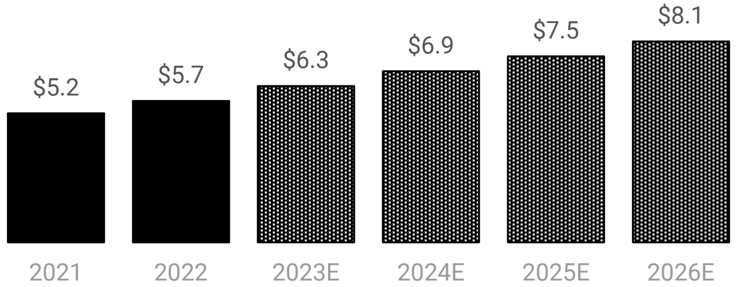


TOTAL ADDRESSABLE MARKET

Total Global TAM



Forecasted E-Commerce Growth (tn)(4)



Source: Company filings
1) FactSet, Visible Alpha
2) Nilson: #1225, Global Network Cards – 2021
3) UK Office for National Statistics
4) Shopify: Global Ecommerce Sales Growth Report for 2021-2026
5) MA/V Payment Volume Data
6) HICP Eurostat Inflation Data

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VALUATION CONSIDERATIONS

Relative Valuation:

While Adyen is profitable and can be looked at on P/E, the combination of its high multiple and lack of profitable high-growth peers make EV/GP (which in Adyen's case represents net revenue(2)) a better metric. As of March 20th, Adyen traded at a 24.4x EV/GP, 5.7x below its 3-year average NTM EV/GP multiple of 30.1x. Adyen also trades at a 22.8x premium to the Euronext 100 relative to its 3-year average premium of 28.0x. **If Adyen were to trade in-line with peers when adjusted for growth, it would imply a 12-month price of €754 (46% downside).** However, Adyen's premium multiple is often attributed to a combination of its high growth profile, e-commerce business mix, and scarcity value (due to the general lack of high-growth European tech stocks). While Adyen's current EV/GP multiple represents a significant premium to its peer group, the shares likely benefit from the combination of defensibility in the model and top-line growth, which has been otherwise scarce in Europe. That said, given the anticipated high growth coupled with the premium valuation, there is negative multiple rerating risk should execution disappoint.

DCF Scenarios:

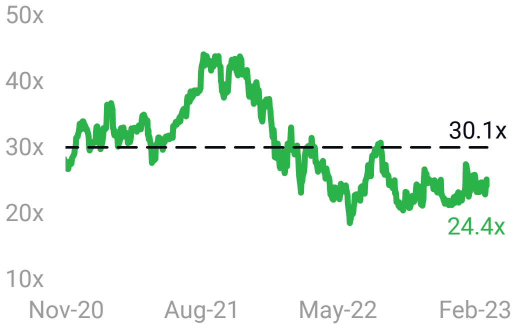
Scenario 1 – Current Price (€1,385, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires sustained revenue growth of ~30% through 2026, before gradually decelerating to the terminal rate. EBITDA margins in this scenario gradually increase, reaching 65%+ over the long-term. The terminal FCF growth rate in this scenario is 3%. Comparatively, management's financial objectives call for a net revenue CAGR of mid-twenties to low-thirties over the medium-term, and EBITDA margins of 65%+ over the long-term. Were shares of Adyen to remain at the current price in 12-months, it would imply a 19x NTM EV/GP multiple (based on current STM consensus gross profit/net revenue of €2,217).

Scenario 2 – High-End of Guidance (€1,732, 25% Upside): The second DCF outlines a scenario where Adyen achieves the high end of its long-term guidance of mid-30's percent net revenue CAGR, EBITDA margins above 65%, and annual capex of 5% of net revenue. The FCF terminal growth rate in this scenario is 3%. This scenario points to a 12M price of €1,732, implying 25% upside to the current share price, which based on the current STM consensus gross profit implies a 24x NTM EV/GP multiple.

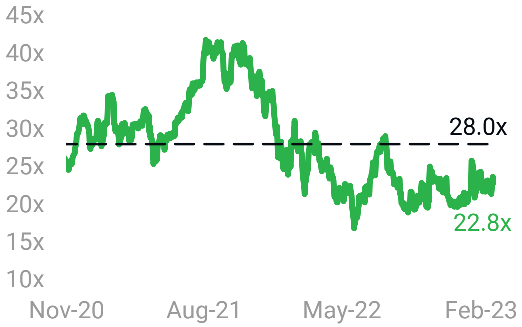
Scenario 3 – Low-End of Guidance (€1,197, 14% Downside): The third DCF outlines a scenario where Adyen only reaches the low-end of its guidance, implying a revenue CAGR of mid-20's percent over the medium term, and margins only just reaching 65% over the long-term. The FCF terminal growth rate in this scenario is 3%. The assumptions in this scenario point toward a 12-month forward price of €1,197 implying 14% downside to the current share price, which based on the current STM consensus gross profit implies a 16x EV/GP multiple.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

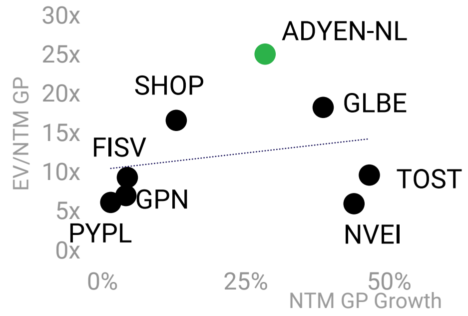
NTM EV/GP & 3-Year Avg.



NTM EV/GP Premium to Euronext 100(1)



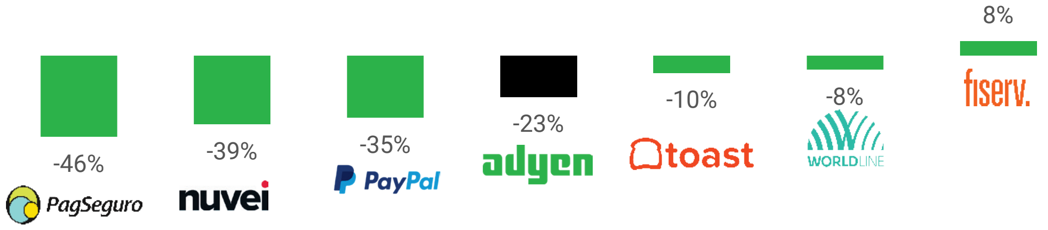
NTM EV/GP & Peer Avg.



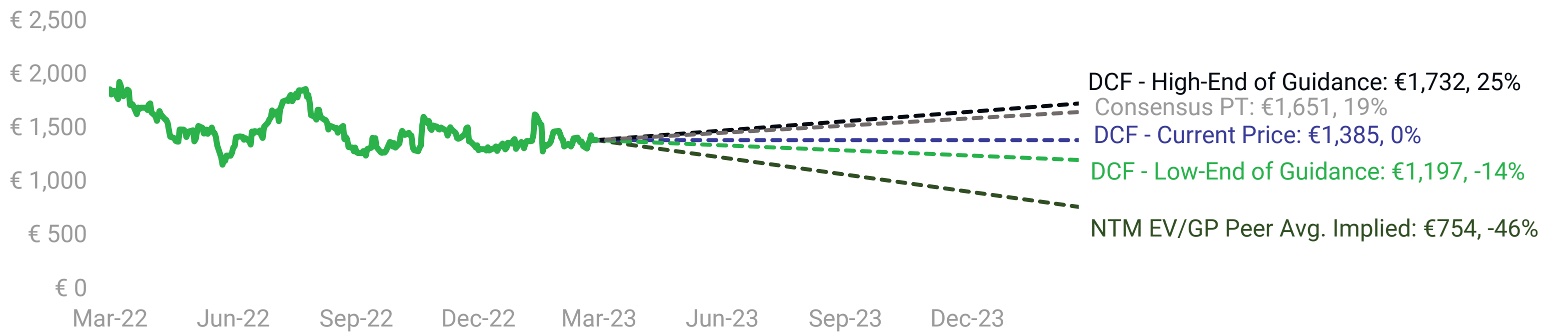
DCF Key Assumptions(3)

10-Yr RFR	**2.6%**
Cost of Equity	**14.1%**
Cost of Debt	**5.0%**
WACC	**14.1%**
Beta	**2.1**
FCF Terminal Growth Rate	**3.0%**
SBC Terminal Growth Rate	**1.0%**
Equity Value Reduction due to Current + Future SBC	**€ 7,894**

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet
1) Adyen EV/Net revenue less Euronext 100 EV/Sales
2) Adyen gross profit is equivalent to reported net revenue
3) SBC in millions

adyen

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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) potential for recession and 2) EBITDA margin. While there are other drivers of Adyen's performance (mid-market expansion, card issuing, etc.), these represent the most likely area(s) of upside/downside relative to management's outlook/consensus.

Consensus Case:

The average consensus price target for Adyen is €1,651, with STM gross profit estimates of €2,217 implying a 21x NTM EV/GP multiple, if shares of ADYEN-NL trade at this price in 12-months. This 21x multiple is 9x below Adyen's 3-year average EV/GP multiple of 30x. The consensus price target implies 19% upside to the current share price.

Upside Case(s):

(+) €1,576, 14% Upside: This scenario assumes the global economy avoids a recession and PCE trends remain strong. The scenario reflects this outcome by 1) assuming no deceleration in the stacked growth rate of processed volume relative to 2H22 and 2) a moderate increase in the number of transactions to match the higher processed volume. This implies 32% gross profit growth and 14% upside to the current share price with a 22x multiple.

(+-) €1,501, 8% Upside: This scenario assumes no recession, but forecasts EBITDA margins declining to 2017 levels (~46%) vs. 2022 EBITDA margins of 55%. While this doesn't impact NTM gross profit estimates, the impact is reflected with a lower multiple. Though it assumes a smaller multiple contraction than the upside case, as a better macro backdrop would likely move focus away from margins. This implies 8% upside to the current share price with a 21x multiple.

(++) €1,728, 25% Upside: The best-case assumes no recession and a quicker rebound in EBITDA margins, recovering to ~63% by FY24. This implies 25% upside to the current share price with a 24x multiple.

Downside Case(s):

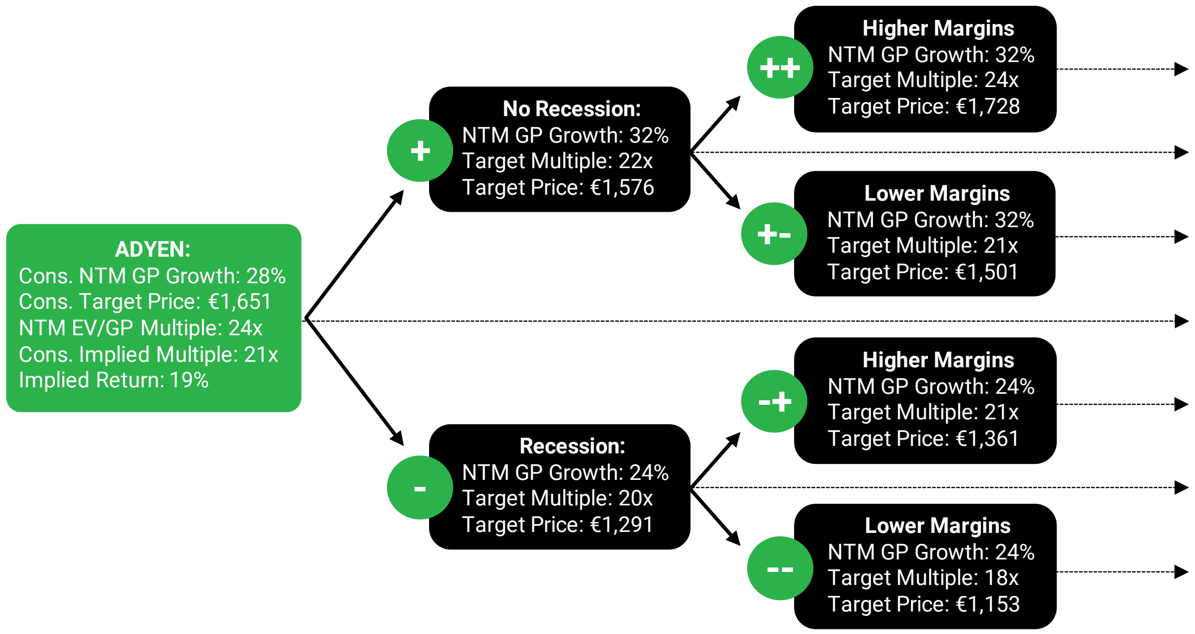
(-) €1,291, 7% Downside: This scenario assumes a global recession, weighing on overall volume. The model reflects this by assuming purchase volume declines to the YoY growth trough of PCE during the GFC. It also assumes a moderate contraction in transactions to match processed volume. This implies 24% gross profit growth and 7% downside to the current share price with a 20x multiple.

(-+) €1,361, 2% Downside: This scenario assumes a global recession and the previously mentioned margin rebound. This implies 2% downside to the current share price with a 21x multiple.

(--) €1,153, 17% Downside: The worst-case scenario assumes a global recession and the previously mentioned slower margin rebound. This implies 17% downside to the current share price with a 18x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



ADYEN:
Cons. NTM GP Growth: 28%
Cons. Target Price: €1,651
NTM EV/GP Multiple: 24x
Cons. Implied Multiple: 21x
Implied Return: 19%

\+

No Recession:
NTM GP Growth: 32%
Target Multiple: 22x
Target Price: €1,576

\++

Higher Margins
NTM GP Growth: 32%
Target Multiple: 24x
Target Price: €1,728

+-

Lower Margins
NTM GP Growth: 32%
Target Multiple: 21x
Target Price: €1,501

\-

Recession:
NTM GP Growth: 24%
Target Multiple: 20x
Target Price: €1,291

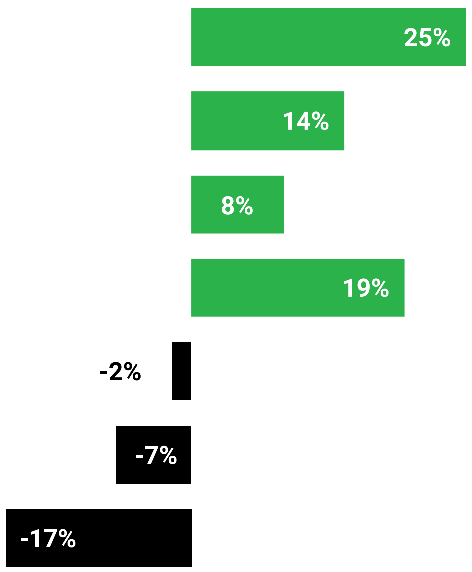
-+

Higher Margins
NTM GP Growth: 24%
Target Multiple: 21x
Target Price: €1,361

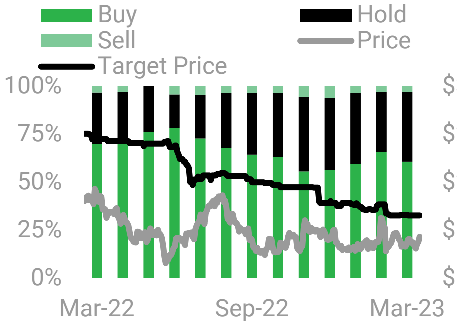
--

Lower Margins
NTM GP Growth: 24%
Target Multiple: 18x
Target Price: €1,153

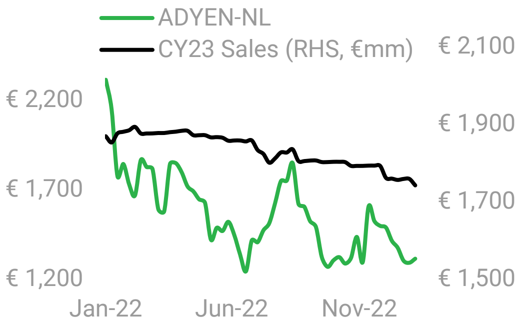
12-Month Price Return



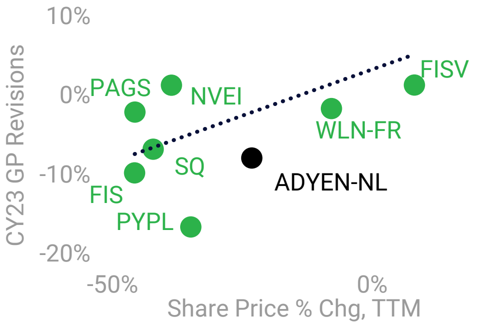
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

ADYEN-NL TTM Price Performance

Price as of 03/17/23:	€ 1,385	Shares Out (mm):	31
Market Cap (mm):	€ 42,916	Beta (2 Year Avg.):	2.0
52-Wk Range:	€1,148 - €1,935	Avg. Daily Vol (mm):	0.1

(€ in millions, except where otherwise noted)

2H22 EARNINGS CALL RECAP

Takeaway: Adyen shares fell ~17% following the earnings release, effectively in line with the EBITDA miss in 2H22. Prior to releasing earnings, the company traded at 23x NTM EV/GP, well above most of its peers. Given Adyen's history of strong growth and earnings outperformance, an EBITDA miss of this magnitude was undoubtedly going to cause a significant reaction. In the short-term, investors will need to trust management regarding an EBITDA margin rebound starting in 2024 for shares to recover lost ground.

Results Recap: With 2H22 results, Adyen reported TPV of €422bn, up 41% YoY, which missed expectations of €428bn by 2%. The company reported net revenue of €722mm, falling short of consensus by 2% (€735mm), growing 30% YoY. Net income grew 73% YoY to €282mm, markedly below consensus expectations of €331mm due to rapidly growing personnel costs.

Guidance Recap: Management made no major changes to its long-term EBITDA margin guidance of 65% and reiterated its net revenue guidance of mid-twenties to low-thirties annual percentage growth. Adyen also noted that it intends to bring its capital expenditures back down to 5% of net revenue in FY23, in line with long-term guidance, from the 8% level reported in the most recent half.

Incremental From the Call:

- **Guidance:** Adyen emphasized its investment in new full-time employees, having hired ~1,200 employees in FY22 and likely hiring a similar number in FY23, which the company noted would have a short-term negative impact on its EBITDA margins. However, management reiterated that this investment in new employees is important for maintaining the medium-term net revenue growth guidance of mid-twenties to low-thirties. With plans to continue hiring at the same pace in FY23 followed by a roughly steady employee base in FY24, margins are expected to bottom in FY23 and expand toward the guided-to long-term EBITDA margin of 65% starting in FY24. Management stated that it expects margins to stay above the ~40% margins the company saw during its previous investment period in the middle of last decade.
- **Interest Income:** With interest rates on the rise, interest income had a material impact on the income statement (adding €27mm in revenue). Adyen management declined to offer any real guidance on the impact of interest income going forward, as it sees this revenue as a side-effect of the core business. It was noted that the interest rate earned thus far has been below interest rates set by European central banks, which management attributed to a large portion of these funds being held at commercial banks that tend to lag central bank interest rate changes. While the company mentioned that interest income may slightly offset employee onboarding costs throughout FY23, it does not expect it to make up for the overall growth in operating expenses.
- **Geographic Expansion:** Adyen has recently expanded into two new countries, Japan and Mexico. Management noted that these territories are in the early stages of launching Unified Commerce but feel quite far ahead of competitors in terms of capability, and that the major hurdle to overcome is a lack of brand awareness.
- **Management Changes:** Ingo Uytdehaage is set to become Adyen's co-CEO alongside Pieter van der Does, and Ethan Tandowsky is being added to the company's management board as CFO. Kamran Zaki will be stepping down from his role as COO of Adyen.
- **Growth Drivers:** Existing merchants continue to represent more than 80% of growth, driven by strong retention rates and churn of less than 1% during 2H22. Adyen noted that its investments are focused on expanding product offerings, particularly embedded finance. Oracle has been a notable partnership leading to additional platforms approaching Adyen regarding embedded finance solutions. Adyen is not yet seeing significant revenue from this product offering, as it is in early stages, though it was mentioned that embedded finance solutions could lead to a longer growth runway for the business. Adyen's revenue and growth will be dominated by its core business for the foreseeable future.

2H22 REPORTED VS. CONSENSUS

Line-Item	Reported	Cons.	Abs.▲	%▲
Total Processed Volume (bn)	**€ 422**	**€ 428**	-€ 6.64	-2%
growth (%, yoy)	*41%*	*43%*		
Number of Transactions (bn)	**10.0**	**11.2**	-1.19	-11%
growth (%, yoy)	*18%*	*32%*		
Settlement fees	**€ 4,629**	**€ 4,428**	€ 201	5%
growth (%, yoy)	*46%*	*39%*		
Processing fees	**€ 208**	**€ 215**	-€ 7.81	-4%
growth (%, yoy)	*27%*	*32%*		
Sales of goods	**€ 27.5**	**€ 31.0**	-€ 3.45	-11%
growth (%, yoy)	*49%*	*68%*		
Other services	**€ 124**	**€ 115**	€ 9.15	8%
growth (%, yoy)	*47%*	*37%*		
Costs Incurred To Financial Institutions	**€ 4,238**	**€ 4,115**	€ 122	-3%
growth (%, yoy)	*47%*	*43%*		
Net Revenue	**€ 722**	**€ 735**	-€ 13.2	-2%
growth (%, yoy)	*30%*	*32%*		
Total Operating Expenses	**€ 388**	**€ 318**	€ 70.3	-18%
growth (%, yoy)	*78%*	*46%*		
EBITDA	**€ 372**	**€ 444**	-€ 72.4	-16%
EBITDA Margin (%)	*52%*	*60%*		
Net Income	**€ 282**	**€ 331**	-€ 49.1	-15%
Net Income Margin (%)	*39%*	*45%*		
Diluted Earnings Per Share	**€ 9.08**	**€ 10.61**	-€ 1.52	-14%
growth (%, yoy)	*5%*	*23%*		

Long-Term Guidance	Old	New
Net Revenue Growth	"Mid-twenties to low-thirties percent"	Unchanged
EBITDA	65% long-term margin	Unchanged
Capital Expenditures	5% of net revenue	Unchanged

Source: Company filings; FactSet; Visible Alpha

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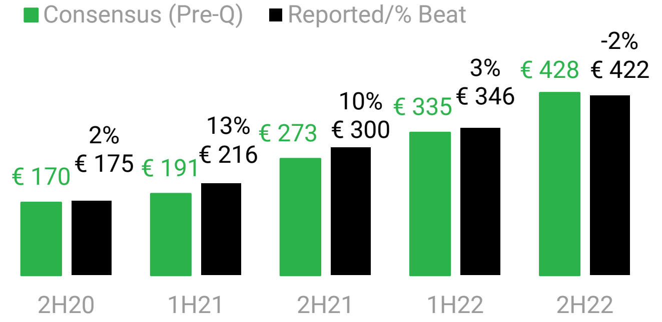
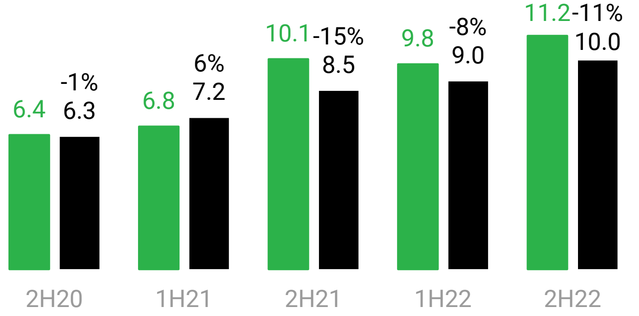
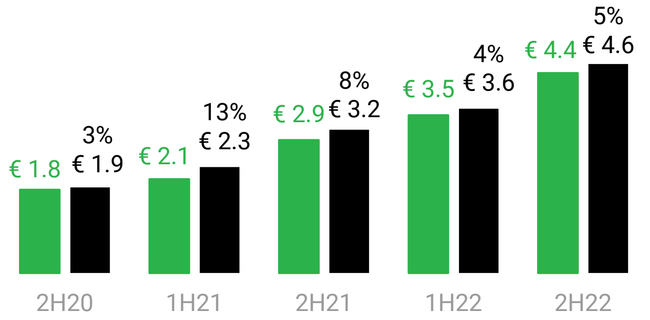
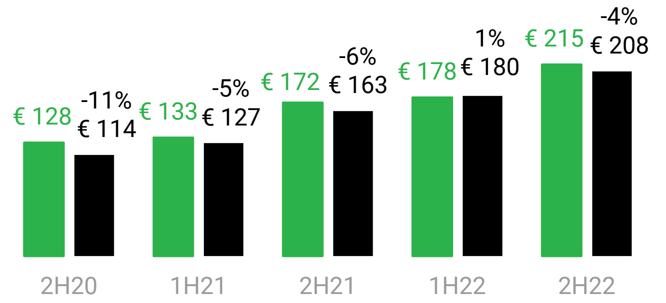
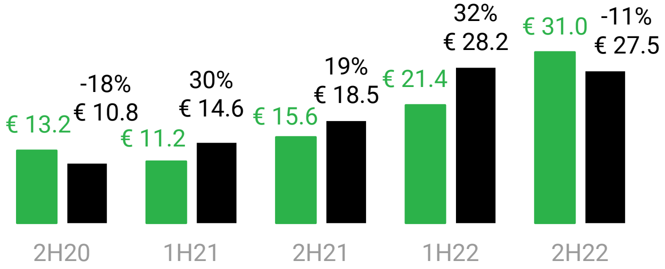
REPORTED VS. CONSENSUS

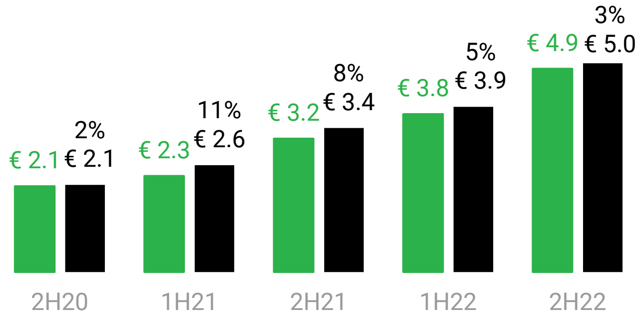

Total Processed Volume (bn)

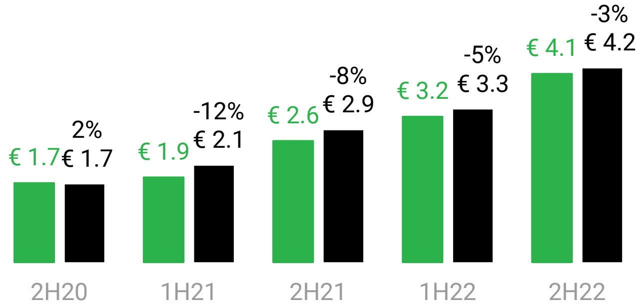

Number of Transactions (bn)

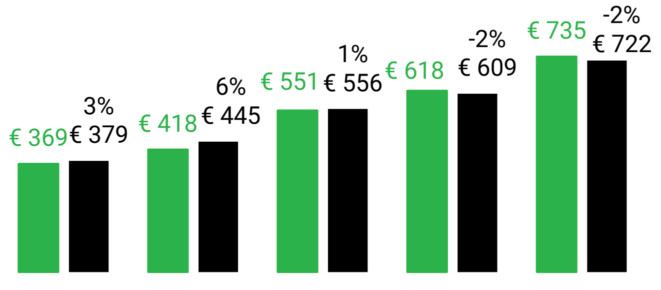

Settlement Fees (bn)

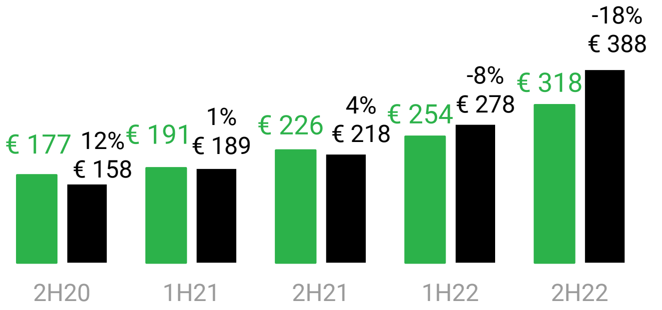

Processing Fees

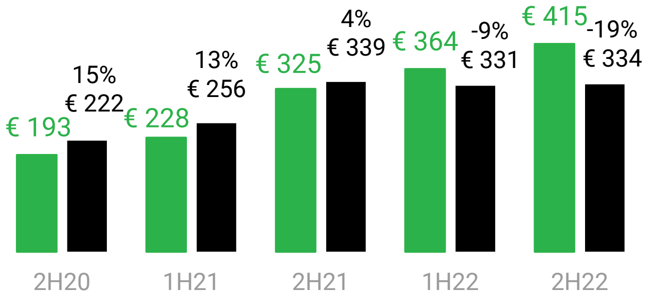

Sales of Goods

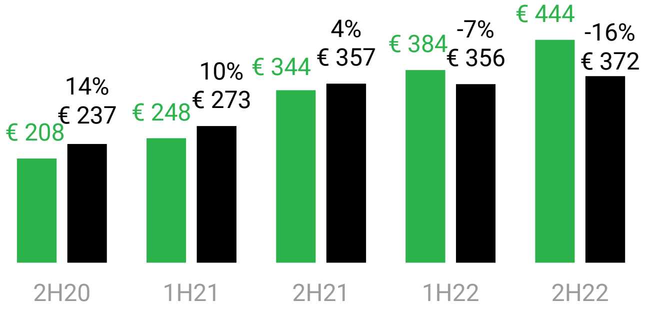

Gross Revenue (bn)

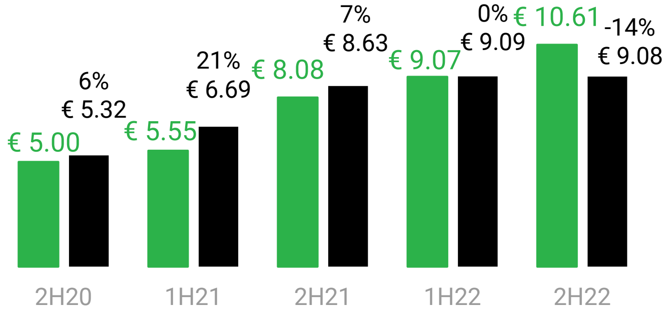

Costs Incurred to Financial Institutions (bn)


Net Revenue


Total Operating Expenses


Income Before Interest and Taxes


EBITDA


Diluted EPS

Source: Company filings; FactSet; Visible Alpha

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1H23 EARNINGS OUTLOOK

Adyen is projected to report 1H23 earnings on August 17th.

What's In Focus:

Over the past year, investor focus has been on balancing the growth/margin equation, as management's outlook for net revenue growth is in the mid-twenties to low-thirties range over the medium-term with EBITDA margins of 65%+ over the long-term. That said, over the past two halves the stock has been penalized as investors have been forced to digest lower margins in the near-term (55% in 2022) after reaching 63% in 2021. Management has attributed the step function down to investment in new people and products. Specifically, Adyen has outlined a plan to hire an additional 1,200 people in 2023, equivalent to the new additions in 2022. The average cost per employee was €61,555/€66,651 in 1H22/2H22 compared to €60,916/€55,739 in 1H21/1H22. Management stated this was a result of hiring more senior personnel/engineers relative to previous years. On the bottom right of this page, it highlights EBITDA sensitivity based on the amount of hiring and cost per employee. If personnel related expenses on per employee basis remain at the same level as 2H22, and Adyen hires the planned 1,200 employees, it implies 2% downside to consensus EBITDA estimates. At the same time, there is some variability around the average cost per employee, as the job market is moderately weaker (due to widespread tech layoffs), but overall wages likely remain elevated.

Estimates:

Since Adyen reported on February 8th, estimates for processed volume have been revised down by ~1% to €458bn. implying 32% YoY growth. With a 0.17% net take rate, consensus expects net revenue of €777mm (+28% YoY), at the low-end of management guidance of mid-twenties to low-thirties. Operating expenses are forecasted to grow 55% YoY, primarily driven by 74% YoY growth in personnel related expenses. EBITDA in 1H23 is expected to be €385mm, implying a ~50% EBITDA margin. This represents a 940bps decrease relative to 1H22 and would be the lowest EBITDA margin since 1H18. As a result of the aforementioned investments, EPS estimates have been revised significantly downwards to €9.48 from €10.88 prior to the print.

Outlook:

While Adyen is not expected to report for several more months, there will likely be further revisions to FY23 EBITDA numbers, as consensus has likely yet to fully adjust for the additional personnel costs. That said, the overall spending environment is likely to change over the course of the year, which could also impact top-line forecasts. As the year progresses, investors will remain focused on overall hiring, wage growth, GDP growth, and notable merchant wins.

POST-RESULTS ONE-DAY ALPHA VS. EURONEXT 100

1H21
- 6%/10% beat on net revenue/EBITDA
- Processed volume +67% YoY
- EBITDA margin expanded to 61% vs. 54% in 1H20

2H21
- Revenue modestly ahead of consensus; EBITDA 4% beat
- Processed volume +72% YoY

1H22
- Revenue missed by 2%; ~7% miss on EBITDA
- Confirmed no headcount reductions over the near-term

2H22
- 2% revenue miss; 16% miss on EBITDA
- Continued hiring expected through 2023 and will impact margins in the short term.

EBITDA SENSTIVITY TO PERSONNEL EXPENSES

		Headcount Increase				
		1,400	1,300	1,200	1,100	1,000
Avg Personnel Cost vs 2H22	10%	€ 749	€ 763	€ 778	€ 793	€ 807
	5%	€ 780	€ 794	€ 808	€ 822	€ 836
	0%	€ 812	€ 825	€ 838	€ 852	€ 865
	-5%	€ 843	€ 856	€ 869	€ 881	€ 894
	-10%	€ 875	€ 887	€ 899	€ 911	€ 923

		Headcount Increase				
		1,400	1,300	1,200	1,100	1,000
Avg Personnel Cost vs 2H22	10%	-12%	-11%	-9%	-7%	-5%
	5%	-9%	-7%	-5%	-4%	-2%
	0%	-5%	-3%	-2%	0%	1%
	-5%	-1%	0%	2%	3%	5%
	-10%	3%	4%	5%	7%	8%

Source: Company filings; FactSet
1) U.S. Census Bureau

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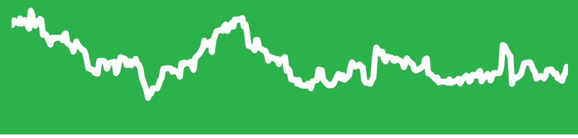
ADYEN-NL TTM Price Performance



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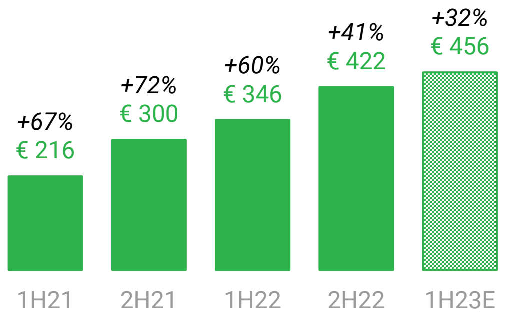
(€ in millions)

1H23 CONSENSUS ESTIMATE RANGES

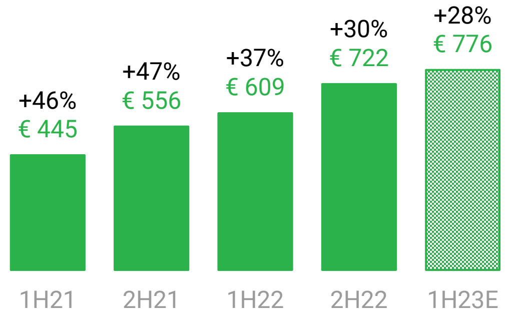
	Low	Average	High
Total Volume	**€ 411,380**	**€ 457,784**	**€ 468,500**
growth (%, yoy)	*19%*	*32%*	*35%*
Number of Transactions	**10,297**	**11,060**	**11,700**
growth (%, yoy)	*12%*	*21%*	*28%*
Net Take Rate	**0.16%**	**0.17%**	**0.17%**
▲ *in % (bps)*	*-1bps*	*-1bps*	*0bps*
Settlement Revenue	**€ 4,662**	**€ 4,883**	**€ 5,040**
growth (%, yoy)	*28%*	*34%*	*38%*
Processing Fees	**€ 207**	**€ 223**	**€ 234**
growth (%, yoy)	*15%*	*24%*	*30%*
Sales of Goods	**€ 30.1**	**€ 40.2**	**€ 46.7**
growth (%, yoy)	*7%*	*43%*	*66%*
Gross Revenue	**€ 5,019**	**€ 5,261**	**€ 5,558**
growth (%, yoy)	*27%*	*33%*	*41%*
Transaction Costs	**€ 4,251**	**€ 4,460**	**€ 4,667**
growth (%, yoy)	*27%*	*34%*	*40%*
Net Revenue	**€ 757**	**€ 777**	**€ 820**
growth (%, yoy)	*24%*	*28%*	*35%*
Total Expenses	**€ 346**	**€ 433**	**€ 483**
growth (%, yoy)	*25%*	*57%*	*75%*
Operating Income	**€ 296**	**€ 349**	**€ 417**
Operating Margin (%)	*39%*	*45%*	*51%*
EBITDA	**€ 334**	**€ 385**	**€ 446**
EBITDA Margin (%)	*44%*	*50%*	*54%*
Net Income	**€ 268**	**€ 316**	**€ 412**
Net Income Margin (%)	*35%*	*41%*	*50%*
Diluted EPS	**€ 8.60**	**€ 10.13**	**€ 13.43**
growth (%, yoy)	*-5%*	*11%*	*48%*

Source: Company filings; FactSet
1) 7-Day Pre-Half ADTV

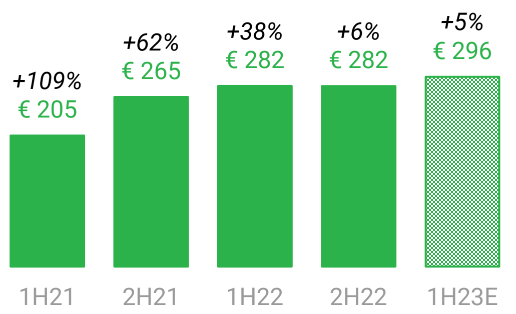
SEMI-ANNUAL CONSENSUS ESTIMATES & OPTION ACTIVITY



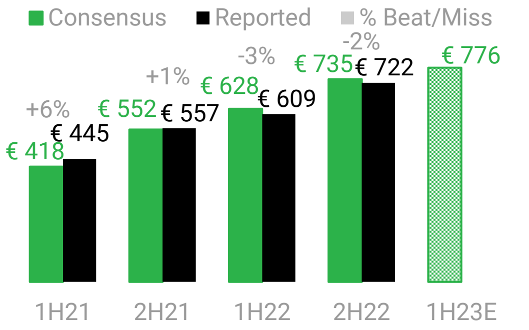
Processed Volume(bn)/YoY Growth



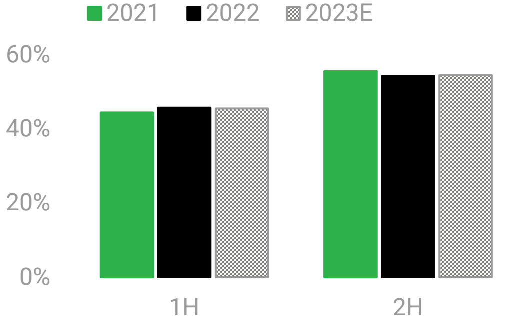
Net Revenue/YoY Growth



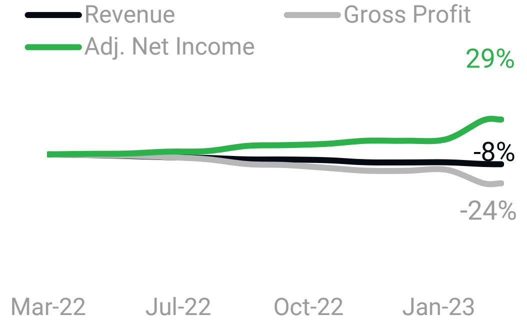
Net Income/YoY Growth



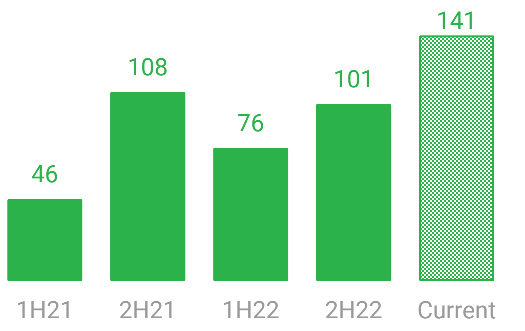
Revenue/Cons. vs. Reported



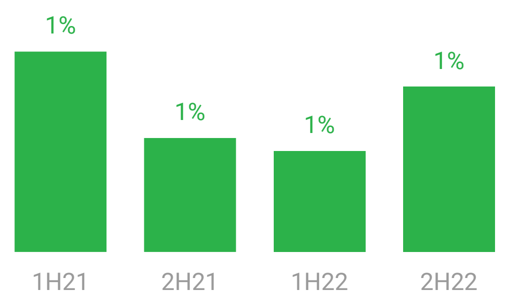
Revenue Seasonality



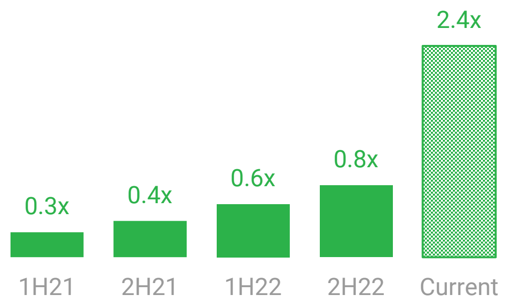
1H23 Consensus Revisions



ADTV (000's)(1)



Hedge Fund Ownership as % of S/O



Put/Call Ratio(2)

2) Put/Call Ratio throughout HY

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QUESTIONS FOR MANAGEMENT

Competitive Landscape

1) Can management give an overview of the competitive landscape and where Adyen sees the most opportunity for market share gains?
2) What are the primary drivers to gain wallet share penetration with existing clients?
3) Does management believe it's harder for a merchant acquirer that builds its business via enterprise customers to move down-market or for an acquirer established in the SMB space to move up-market?

Macro Environment

2) Has Adyen seen any changes in consumer behavior in the portfolio since last reporting?
3) Has inflation been a visible drag in Adyen's volume growth considering the minimal presence of non-discretionary spend in the company's portfolio?
4) Does management expect higher rates to at some point become a rate-limiting factor for clients and their ability to launch new products that take advantage of Adyen's offerings?

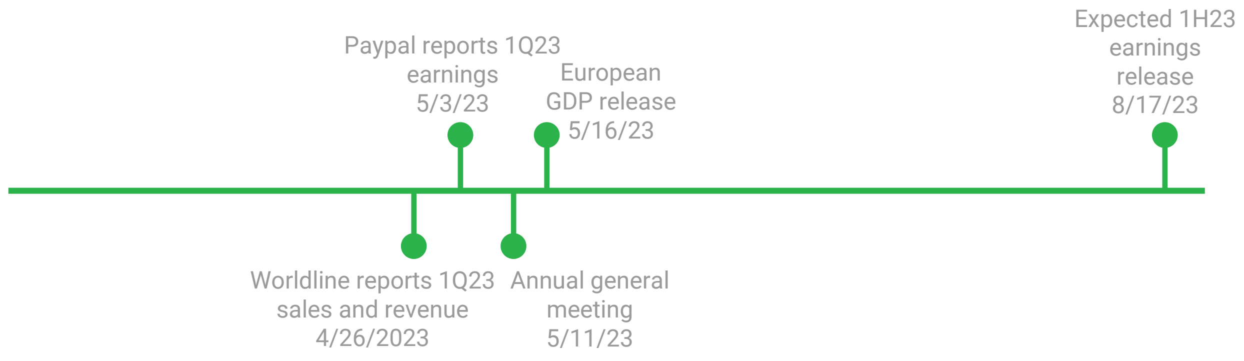
Products and Offerings

4) During 1H22, Adyen launched the first models of the company's in-house developed terminals (partnered with hardware manufacturers). What has early feedback been and when should investors expect the rollout of the full range of devices?
5) In 1H22 Adyen announced the broadening of the product offering to include an embedded financial product suite for platform businesses (card issuing, bank accounts, business financing, etc.). Can management talk about the expected synergies and financial impact of this offering?
6) As Adyen rolls out this broader suite of financial service products, how do the company's total addressable market and revenue opportunities change?
7) When does Adyen expect card issuing to have a material impact on revenue?
8) In terms of the new lending product, what percentage of loans does management expect to hold on the company's balance sheet initially, and is that expected to change as the product gains traction?

Fundamentals:

9) Management mentioned on the last call that if investments weren't made in new personnel Adyen could be back in the ~65% margin range already. Given this, could there be room for upside to the company's long-term EBITDA margin guide of 65%+?
10) Adyen has stepped up investment and hiring. Can management help investors understand the payback period around these investments?
11) How should investors think about the take rate as the mix of business changes over time? How will a higher percentage of TPV coming from PoS impact take rate?

POTENTIAL CATALYSTS



Worldline reports 1Q23 sales and revenue 4/26/2023

Paypal reports 1Q23 earnings 5/3/23

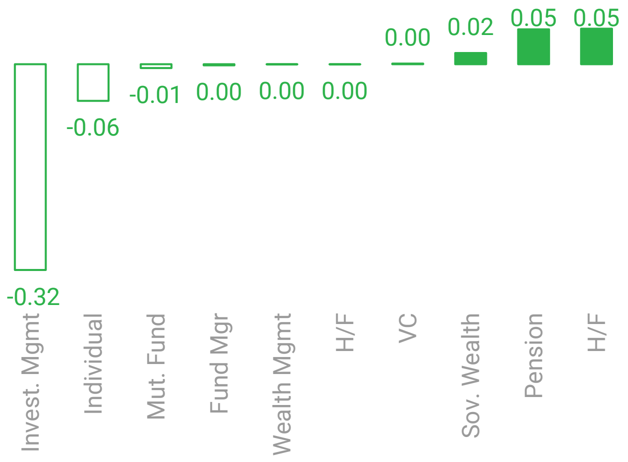
Annual general meeting 5/11/23

European GDP release 5/16/23

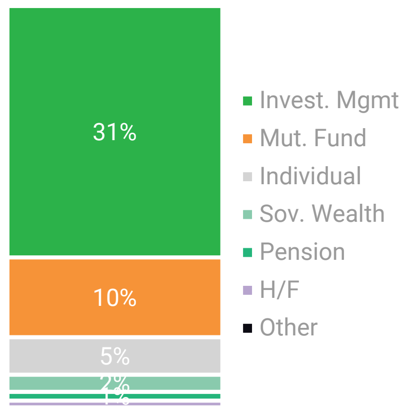
Expected 1H23 earnings release 8/17/23

SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Ownership Summary

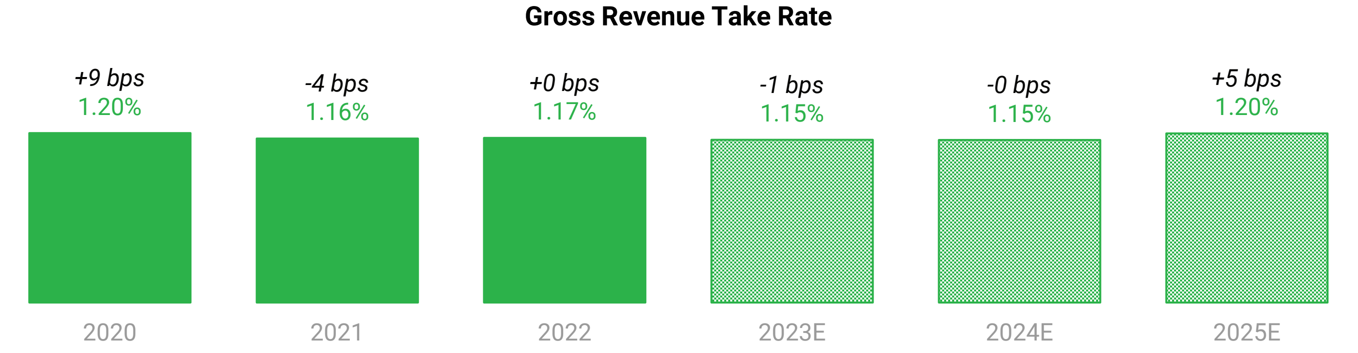


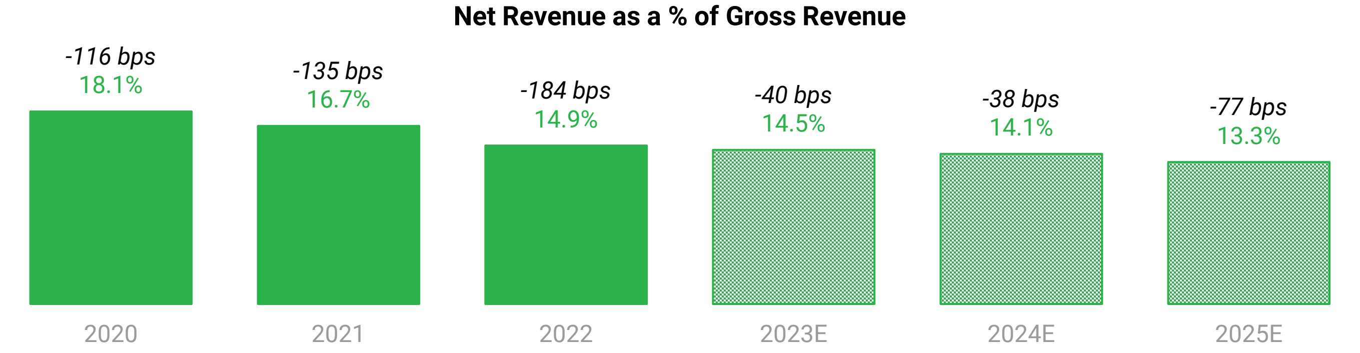
Source: Company filings; FactSet

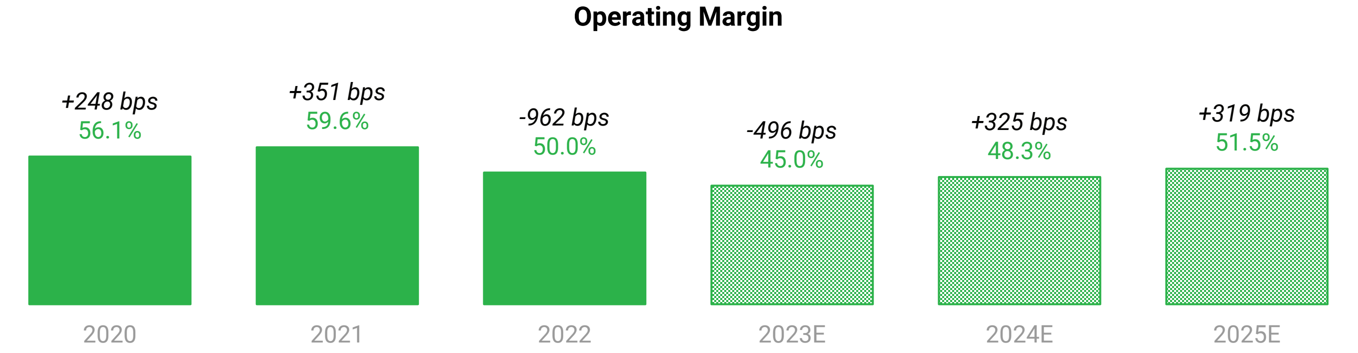

ADYEN-NL TTM Price Performance

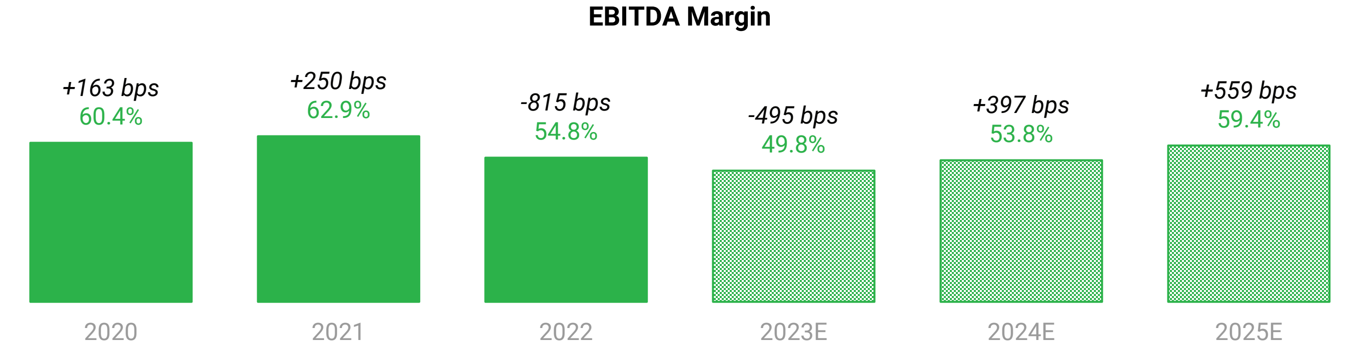
Price as of 03/17/23:	€ 1,385	**Shares Out (mm):**	31
Market Cap (mm):	€ 42,916	**Beta (2 Year Avg.):**	2.0
52-Wk Range:	€1,148 - €1,935	**Avg. Daily Vol (mm):**	0.1

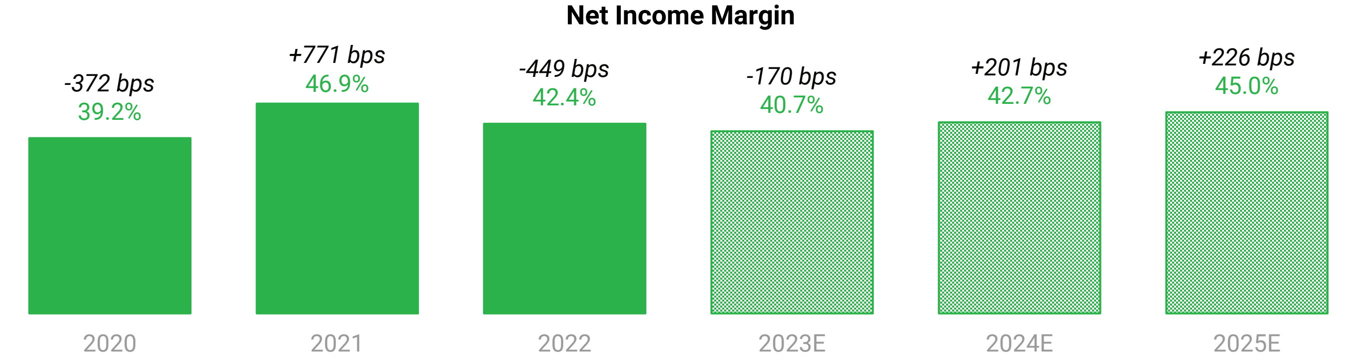
COMPANY RATIOS/MARGIN ANALYSIS(1)

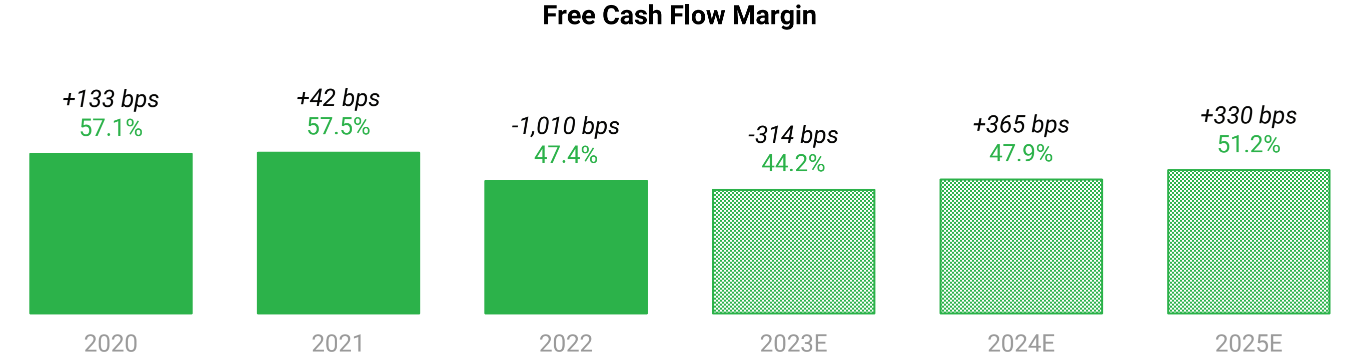

Gross Revenue Take Rate


Net Revenue as a % of Gross Revenue


Operating Margin


EBITDA Margin


Net Income Margin

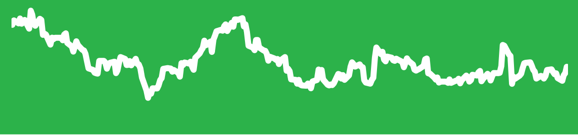

Free Cash Flow Margin

Source: Company filings

1) Visible Alpha Consensus

adyen

ADYEN-NL TTM Price Performance



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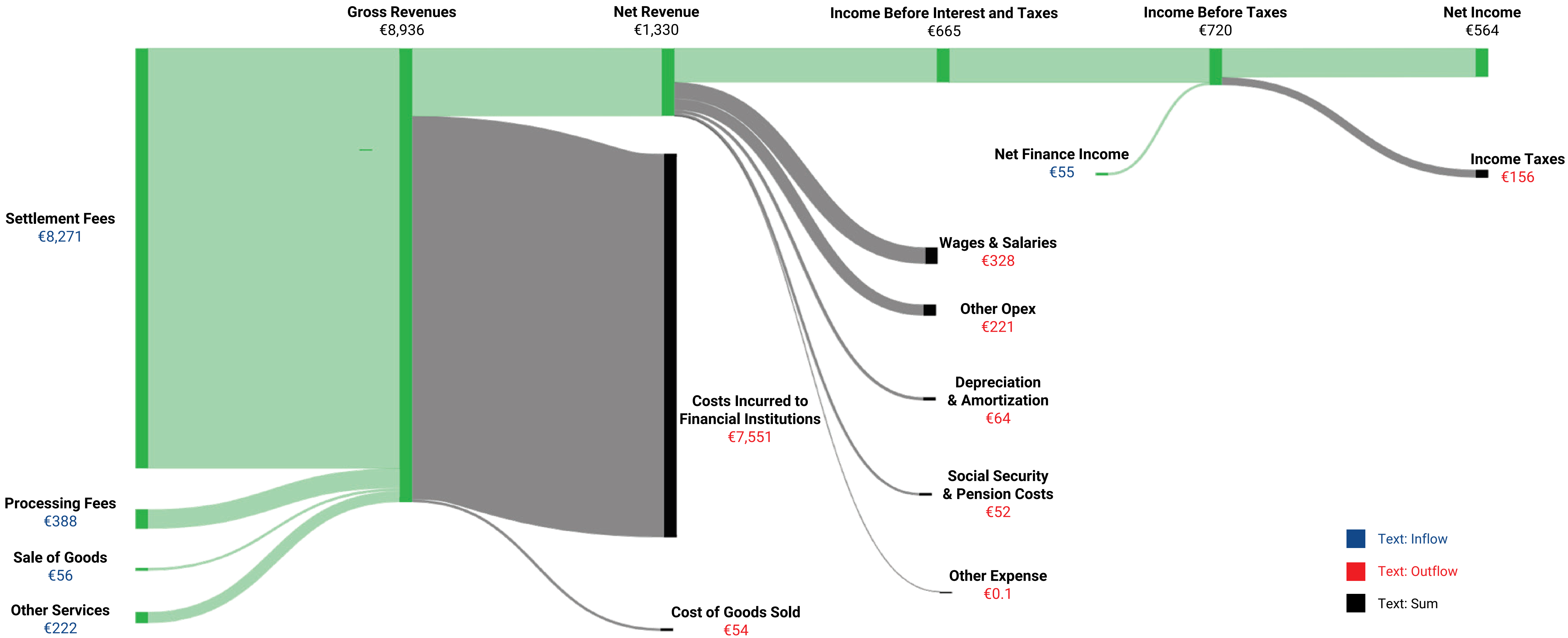
(€ in millions)

P&L VISUALIZATION – TTM



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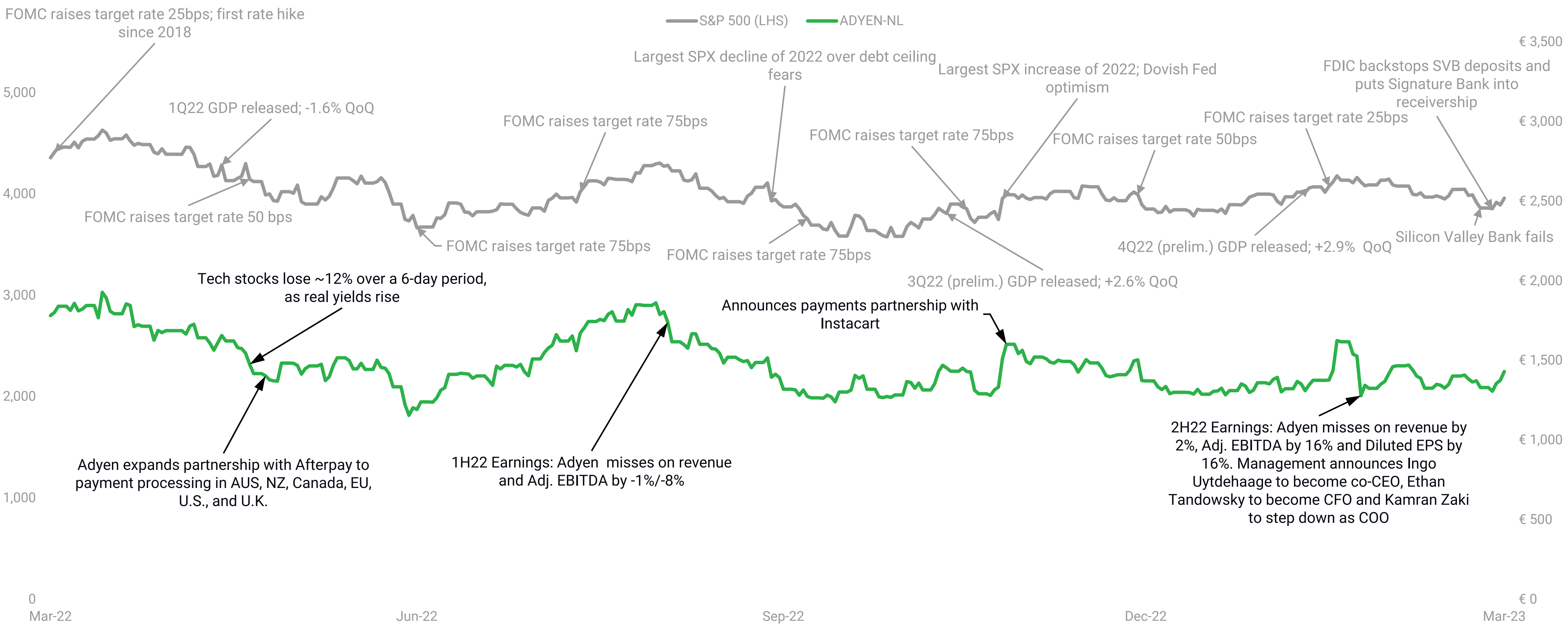
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

3Q22 (prelim.) GDP released; +2.6% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

FOMC raises target rate 25bps

4Q22 (prelim.) GDP released; +2.9% QoQ

Silicon Valley Bank fails

Tech stocks lose ~12% over a 6-day period, as real yields rise

Adyen expands partnership with Afterpay to payment processing in AUS, NZ, Canada, EU, U.S., and U.K.

1H22 Earnings: Adyen misses on revenue and Adj. EBITDA by -1%/-8%

Announces payments partnership with Instacart

2H22 Earnings: Adyen misses on revenue by 2%, Adj. EBITDA by 16% and Diluted EPS by 16%. Management announces Ingo Uytdehaage to become co-CEO, Ethan Tandowsky to become CFO and Kamran Zaki to step down as COO

Source: Company filings; FactSet

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Non-Investment Banking Client, Securities-Related client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as non-investment banking, securities related clients: Adyen*

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AFFIRM PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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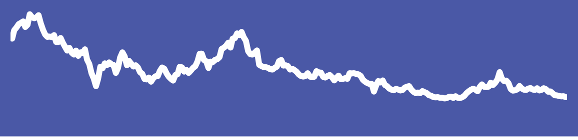
Matthew.O’Neill@ftpartners.com (347) 614-2481 *(AC) | FTP Securities LLC is a FINRA registered broker dealer (www.finra.org) and member SIPC (www.sipc.org). The firm and its reps can be found here: FTP SECURITIES LLC - BrokerCheck (finra.org) | March 20, 2023
Please refer to page 46 for important disclosures.

AFRM TTM Price Performance



Price as of 03/17/23:	**$9.49**	**Shares Out (mm):**	**294**
Market Cap (mm):	**$2,790**	**Beta (2-Year Avg.):**	**3.5**
52-Wk Range:	**$8.62 - $51.49**	**Avg. Daily Vol (mm):**	**18.8**

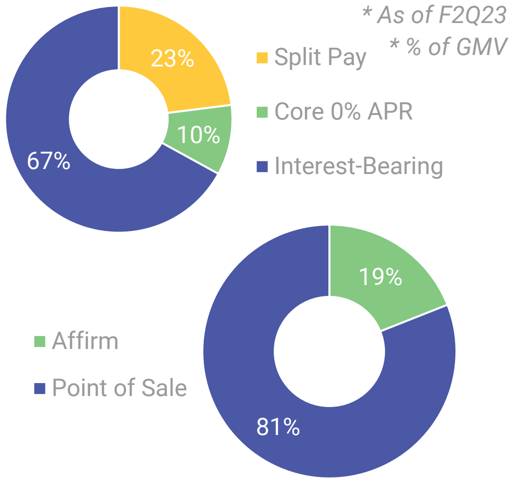
COMPANY OVERVIEW

Affirm primarily provides Buy-Now-Pay-Later (BNPL) financing solutions to consumers as an alternative to credit card offerings.

The company partners with a variety of merchants to give customers the option to finance their purchases over time with interest-bearing and interest-free installment plans. **With integrated merchants, Affirm provides consumers the option to finance purchases over time with interest bearing or 0% APR installment plans, with options typically present at the merchant PoS. With non-integrated merchants, the company provides consumers the option to finance purchases with interest-bearing plans through a single-use virtual card.**

According to Affirm, BNPL solutions are better alternatives relative to traditional credit offerings because they 1) do not charge late fees 2) never sell servicing rights to outstanding consumer balances 3) provide multiple repayment timelines (biweekly, 3, 6, or 12 months) and 4) has a risk model that outperforms traditional credit models.

PRODUCT BREAKDOWN



KEY DEBATES

1. **Credit Quality:** At the time of its IPO, Affirm's delinquency rates outperformed traditional credit providers due to its volume mix of high-credit quality Peloton loans and excess consumer savings on the back of COVID-19 stimulus checks. Since then, Affirm's credit quality has deteriorated, with 30-day delinquencies reaching ~2.4% in F2Q23. As the broader economic conditions deteriorate, investors have become heavily focused on Affirm's ability to grow GMV while also managing losses.

2. **Regulation:** As BNPL has grown more popular, regulators have focused on 1) implications for consumers and 2) the lack of information reported to nationwide consumer reporting companies. As a result, investors have grown concerned over additional regulatory burdens for BNPL, and how growth could be adversely affected if Affirm must disclose its lending/payment information to credit score companies.

3. **Funding Constraints:** After decreasing the loans held for investment as a percentage of the total platform post-IPO, Affirm has meaningfully expanded the portion of loans it retains on its balance sheet (up 4.9ppt YoY to 43% of total platform portfolio). This shift has been mostly involuntary as liquidity has tightened in the ABS market, driving less favorable economics on loans Affirm sells. The overall mix of loans held for investment vs. loans sold could drive material under/outperformance. Going forward, reversing this trend will be a main point of focus.

REVENUE MODEL

Affirm reports revenue in five segments:

Merchant Network (33% of TTM Net Revenue): Affirm charges their partnered merchants a fee for transactions executed over Affirm's platform. These merchant fees are dependent on the agreement made with the merchant partner and are recognized at the time of the transaction.

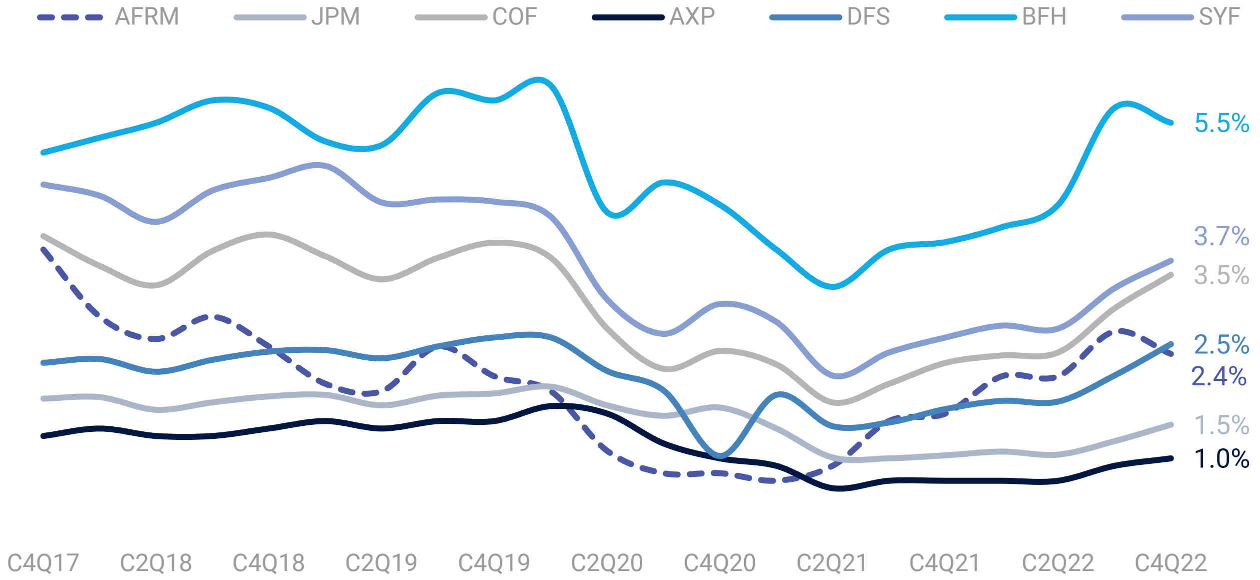
Virtual Card Network (7%): Originating bank partners, on behalf of Affirm, originate installment loans to consumers that want alternative financing with non-partner merchants. A single-use virtual card is issued upon application from the consumer, and the issuer processor funds the credential at the time of approval. The issuer processor charges the merchant interchange fees at the point-of-sale, which are shared with Affirm.

Interest Income (38%): Affirm earns interest income from the issuance of interest-bearing installment plans to consumers. This item is netted against accretion/amortization of discounts/premiums recognized when the company issues the installment plan or purchases the loan from partner banks.

Gain on Sales of Loans (16%): Affirm earns revenue when it chooses to sell a portion of its loan portfolio to third-party investors. This is recognized when the sale price exceeds the carrying value of the installment plan.

Servicing Income (6%): The company earns fees from servicing loan portfolios on behalf of third-party investors. The amount recognized is a fixed monthly percentage of the outstanding loan balance.

30-DAY DELINQUENCY RATES[1]



Source: Company filings

1) Excludes Affirm Pay-In-Four, represents delinquency rates of credit cards

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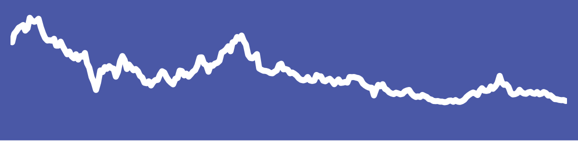
AFRM TTM Price Performance



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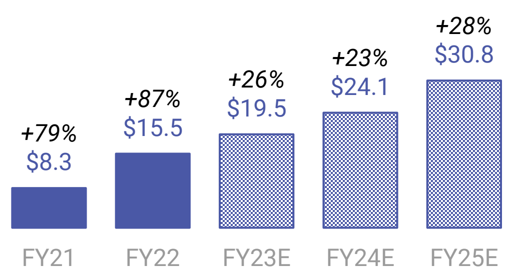
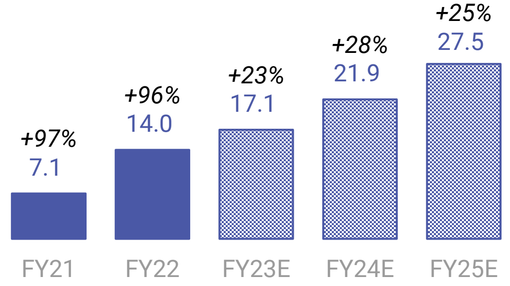
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

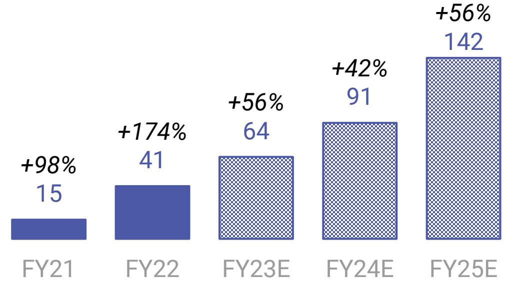
Gross Merchandise Value (bn)



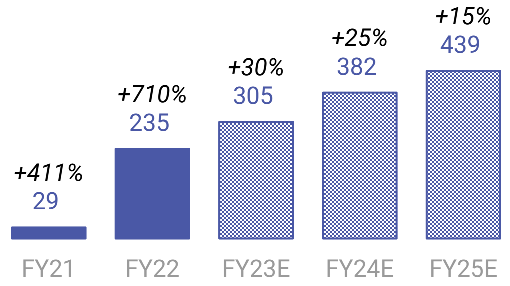
Active Customers (EOP, mm)



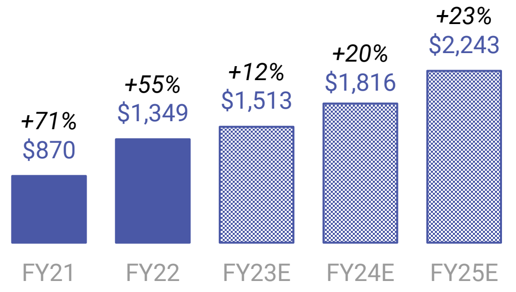
Total Transactions



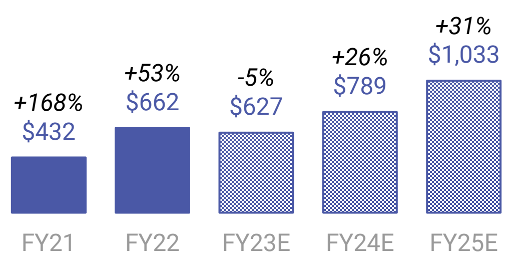
Active Merchants (EOP, 000)



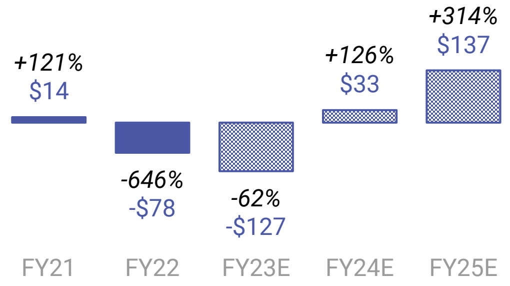
Total Revenue



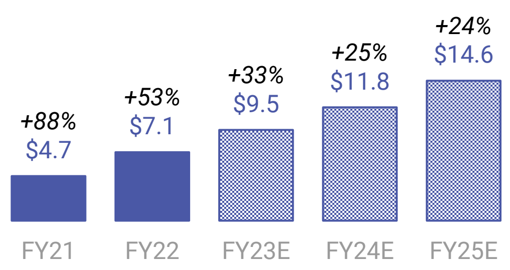
Revenue Less Transaction Costs



Adj. Operating Income



Total Platform Portfolio (bn)



INDUSTRY KPIs

Credit Card Delinquency Rate[1] *(C1Q06–C4Q22)*

C4Q22: 2.25%, +68bps YoY

Real Disposable Income Per Capita (000's)[1] *(C1Q18-C1Q23)*

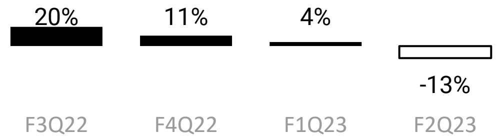
C1Q23: $46.5, +2.3% YoY

Credit Utilization Rate[2] *(C3Q12-C3Q22)*

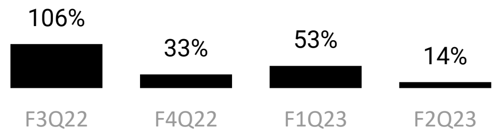
Jan-23: 8.2%, +131bps YoY

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[3]

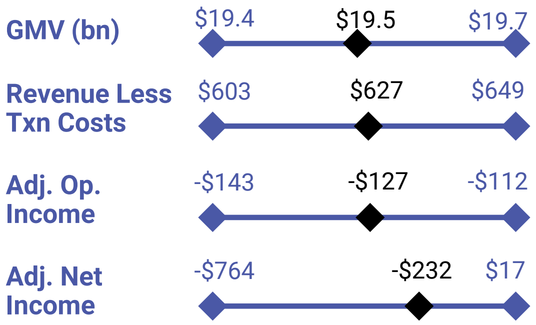
Revenue Less Transaction Costs



Adj. Operating Income

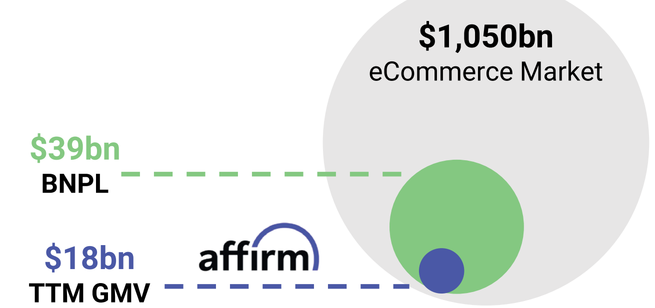


FY23

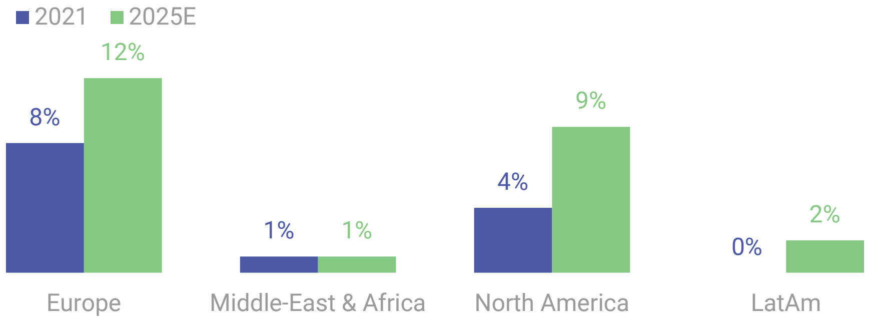


TOTAL ADDRESSABLE MARKET

North America Market Opportunity 2022



BNPL Penetration of E-Commerce[4]



FT Partners | Equity Research

Source: Company filings, FactSet, Visible Alpha
1) FRED
2) Large Bank Credit Utilization Rate, 50th Percentile (FRED)
3) Visible Alpha Consensus Low/Average/High Range
4) FIS Worldpay 2022 Global Payments Report

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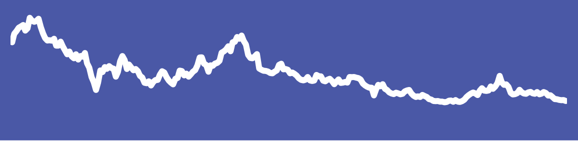
AFRM TTM Price Performance



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($ in millions)

VALUATION CONSIDERATIONS

Relative Valuation:

For many FinTech companies that have yet to turn profitable EV/GP (in Affirm's case RLTC) dis used for relative valuation to account for costs associated with the core operations of the business (such as funding costs and provision for credit losses for Affirm), while also providing a relatively standardized valuation approach across peers. As of March 17th, Affirm trades at a 7.9x NTM EV/RLTC multiple, 15.5x below its average multiple of 23.4x since its IPO. It trades at a 4.8x premium to the Nasdaq (which is measured on an EV/Sales basis) 14.9x below its average premium of 19.7x since the IPO. **When looking at the peer average NTM EV/RLTC and when adjusting for RLTC growth (or the equivalent metric) it implies a 12-month price of $7.31 (23% downside).**

DCF Valuation:

Scenario 1 – Current Price ($9.49, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires low 20's revenue growth over the medium term before decelerating over the long term. Operating margins are expected to turn positive in 2025 and reach a terminal rate of ~20%. The terminal FCF growth rate is 3%. Were shares of Affirm to remain at the current price in 12-months, it would imply a 6x NTM EV/RLTC multiple (based on current STM consensus RLTC of $964mm).

Scenario 2 – LT Guidance ($20.04, 111% Upside): At its 2021 investor day, Affirm outlined its long-term outlook with RLTC at 37.5% - 50% as a percentage of revenue for periods where GMV growth is below 30% and adjusted operating margins of 20% - 30%. While the market has significantly shifted since this investor day, this DCF assumes Affirm is able to return to these targets in a better macro-backdrop. The terminal FCF growth rate is 3%. This scenario points to a 12M price of $20.04 (111% upside) which based on current STM consensus gross profit implies a 9x NTM EV/RLTC multiple.

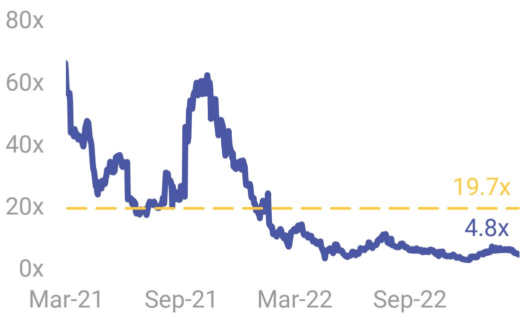
Scenario 3 – Lower Funding Costs ($15.98, 68% Upside): Our third DCF outlines a scenario where interest rates remain flat and decrease sooner than expected, allowing Affirm to sell a greater portion of its loans off its balance sheet, and ultimately take on more volume, accelerating revenue growth in the near-term. The longer-term revenue growth and operating margins remain unchanged from scenario 1. This scenario points to a 12M price of $15.98 (68% upside) which based on current STM consensus gross profit implies an 8x NTM EV/RLTC multiple.

Scenario 4 – Regulation ($4.74, 50% Downside): The final DCF scenario attempts to account for incremental regulation on BNPL providers in the U.S., particularly in the form of reporting incremental lending data to the credit reporting agencies. This could weigh on revenue growth as some consumers see the main advantage of BNPL is that it does not actively impact your credit score. This scenario points to a 12M price of $4.74 (50% downside) which based on current STM consensus gross profit implies a 5x NTM EV/RLTC multiple.

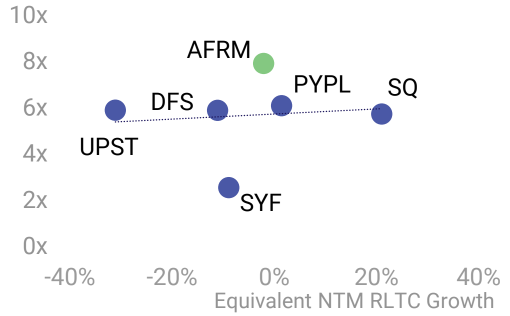
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM EV/RLTC Premium/Avg. Since IPO

NTM EV/RLTC Premium vs. NASDAQ



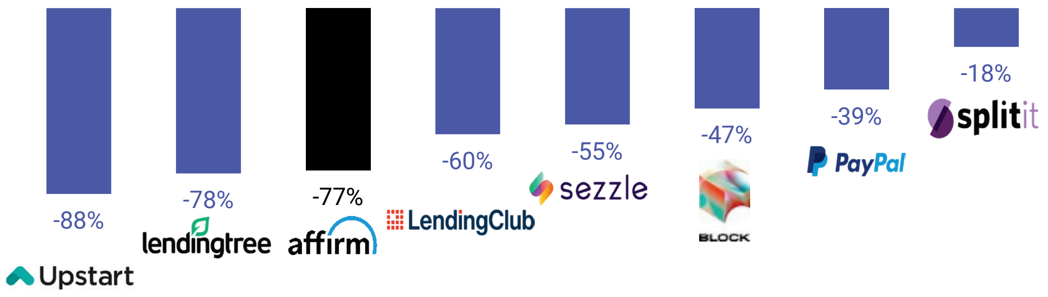
NTM EV/RLTC Peer Avg. vs. Growth



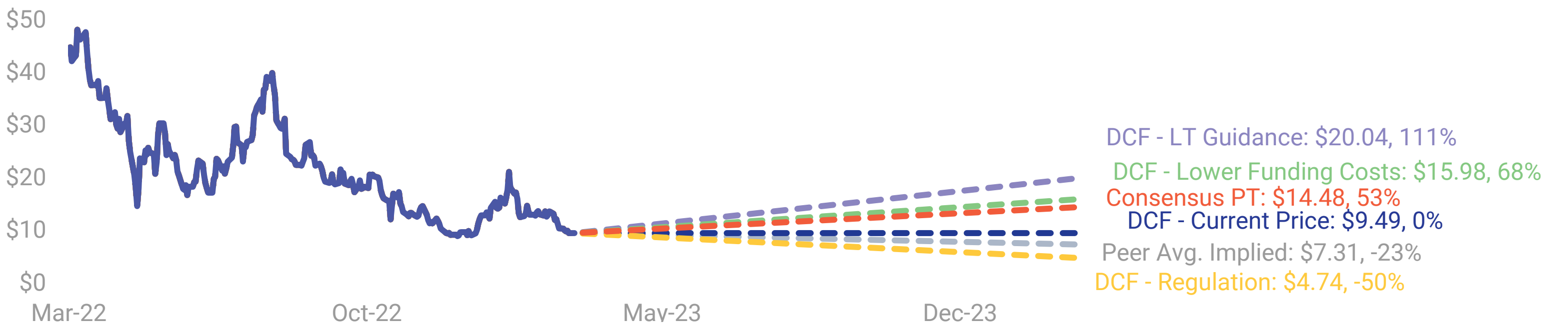
NTM EV/RLTC & Equivalent Metrics

10-Yr RFR	3.9%
Cost of Equity	28.6%
Cost of Debt	5.0%
WACC	19.5%
Beta	3.7
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$4,071mm

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings, FactSet

1) Defined as Affirm's net revenue less transaction costs minus NASDAQ Index's NTM EV/Sales

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AFRM TTM Price Performance

Price as of 03/17/23:	$9.49	Shares Out (mm):	294
Market Cap (mm):	$2,790	Beta (2-Year Avg.):	3.5
52-Wk Range:	$8.62 - $51.49	Avg. Daily Vol (mm):	18.8

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DECISION TREE INPUTS

In order to evaluate potential outcomes and their valuation implications, the decision tree to the right is built around 1) impact from extended macro pressure on consumer spend and credit quality and 2) the net of potentially tougher pricing competition vs. benefits from the recently increased interest rate cap to 36% on interest bearing loans. While there are other drivers of Affirm's performance, like regulation, these variables represent the most likely area(s) of upside/downside relative to management's outlook/consensus.

Consensus Case:

The average consensus price target for Affirm is $14.48. If shares of Affirm were to trade at this price in 12-months, it would imply a 7.6x EV/RLTC based on STM RLTC estimates of $964mm, 0.3x less than the current 7.9x multiple. The consensus price target of $14.48 implies 53% upside.

Upside Case(s):

(+) $18.18, 92% Upside: This scenario assumes no recession driven by strong consumer spending, improved credit quality, and improved liquidity in funding markets. The scenario reflects this by 1) incrementally increasing GMV, 2) decreasing loans held for investment as a percentage of the platform portfolio and decreasing funding costs, and 3) lower provisioning rates. This implies 9% RLTC growth and 92% upside to the current share price with an 11.0x EV/RLTC multiple.

(+-) $14.67, 55% Upside: This scenario assumes no recession, but forecasts lower-yielding products taking a greater share of the transaction mix, weighing on the total take rate. The model reflects this by decreasing gross MDR below consensus expectations. This implies 7% RLTC growth and 55% upside to the current share price with a 10.5x EV/RLTC multiple.

(++) $21.22, 124% Upside: This best-case assumes no recession and forecasts slower shift towards lower-yielding products in the GMV mix, slowing the take rate decline. This implies a 12% RLTC growth and 124% upside to the current share price with a 11.5x multiple EV/RLTC multiple.

Downside Case(s):

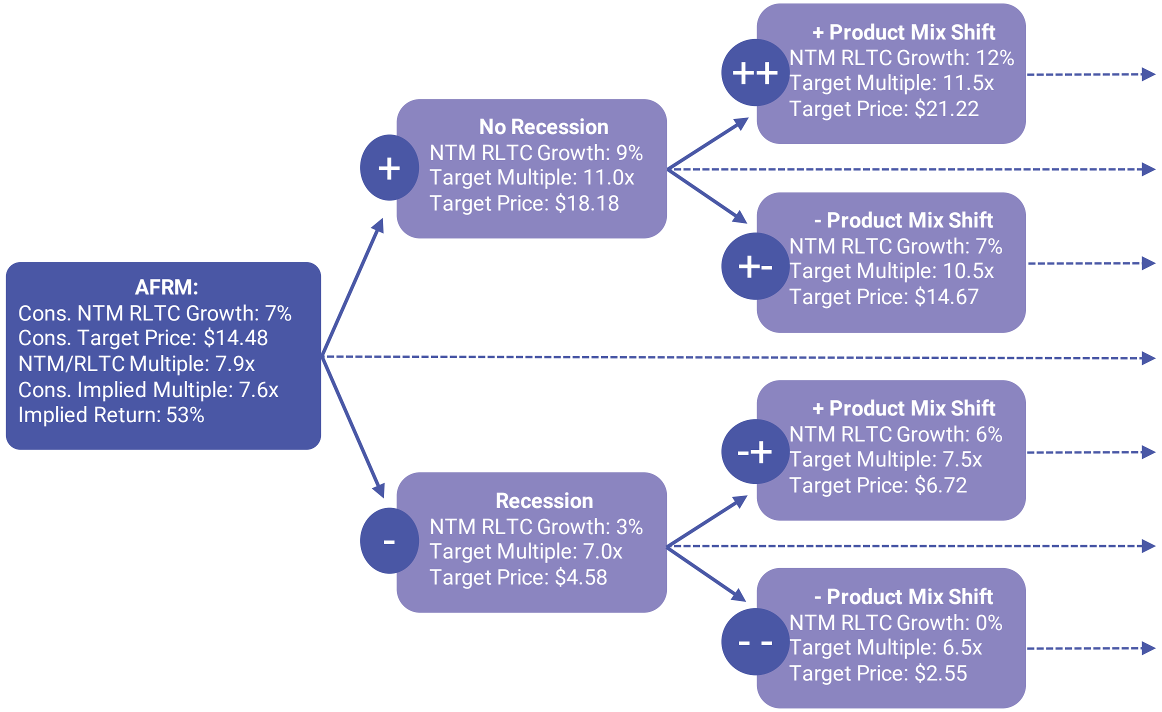
(-) $4.58, 52% Downside: This scenario assumes the economy experiences a recession and therefore increased pressure on consumer credit quality and discretionary spend. The model reflects this by assuming purchase volume declines to the YoY growth trough of PCE during the GFC. This implies 3% RLTC growth and 52% downside to the current share price with a 7.0x EV/RLTC multiple.

(-+) $6.72, 29% Downside: This scenario assumes the previously mentioned recession and more favorable product mix. This implies 6% NTM RLTC growth and 29% downside to the current share price with a 7.5x EV/RLTC multiple.

(--) $2.55, 73% Downside: The worst-case scenario assumes a global recession and the previously mentioned less favorable product mix, driving down total take rate. This implies 0% RLTC growth and 73% downside to the current share price with a 6.5x EV/RLTC multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



AFRM:
Cons. NTM RLTC Growth: 7%
Cons. Target Price: $14.48
NTM/RLTC Multiple: 7.9x
Cons. Implied Multiple: 7.6x
Implied Return: 53%

+ **No Recession**
NTM RLTC Growth: 9%
Target Multiple: 11.0x
Target Price: $18.18

- **Recession**
NTM RLTC Growth: 3%
Target Multiple: 7.0x
Target Price: $4.58

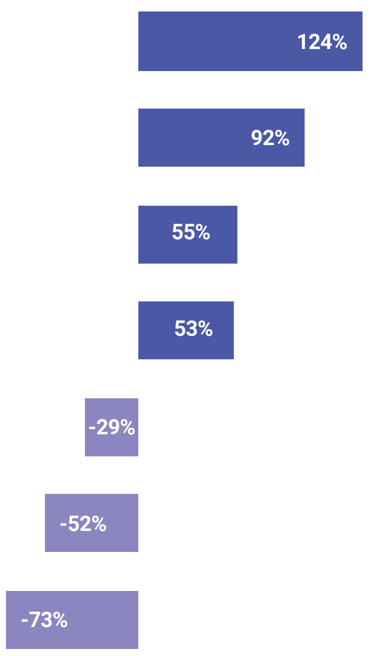
++ **+ Product Mix Shift**
NTM RLTC Growth: 12%
Target Multiple: 11.5x
Target Price: $21.22

+- **- Product Mix Shift**
NTM RLTC Growth: 7%
Target Multiple: 10.5x
Target Price: $14.67

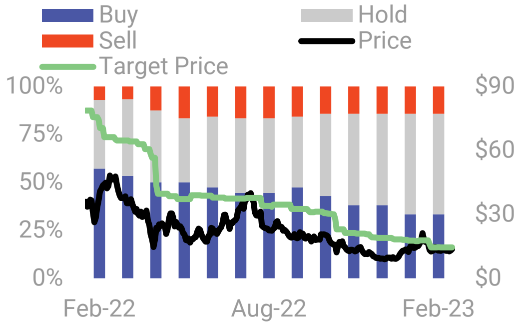
-+ **+ Product Mix Shift**
NTM RLTC Growth: 6%
Target Multiple: 7.5x
Target Price: $6.72

- - **- Product Mix Shift**
NTM RLTC Growth: 0%
Target Multiple: 6.5x
Target Price: $2.55

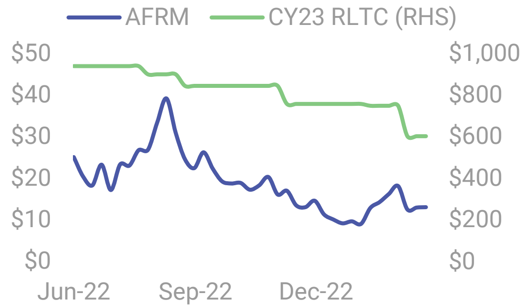
12-Month Price Return



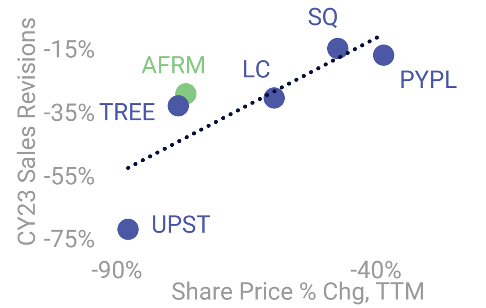
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

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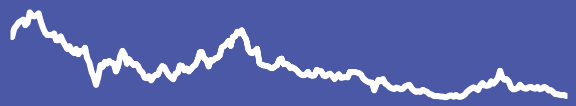
AFRM TTM Price Performance



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Market Cap (mm):	$2,790	Beta (2-Year Avg.):	3.5
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($ in millions, except where otherwise noted)

F2Q23 EARNINGS CALL RECAP

Takeaway: Management hosted its F2Q23 call on February 8th, highlighting challenges across the stressed macro-environment, namely declining consumer demand, credit quality, and funding liquidity. Shares traded down 17% the day following earnings as investors weighed Affirm's ability to handle the late stages of the credit cycle following large top-line and guidance misses.

Results Recap: Affirm reported total revenue of $400mm (11% YoY), 4% below consensus expectations of $417mm. The revenue miss was primarily driven by lower-than-expected gain on sale of loans (-17% vs. consensus), virtual card network revenue (-14% vs. consensus) and servicing income (-8% vs. consensus). Transaction costs were $255mm, representing 5% of GMV vs. consensus expectations of 4%. Operating expenses increased 33% YoY to $504mm vs. consensus of $486mm. Adjusted operating profit declined to -$62mm from -$19mm in F1Q, beating consensus expectations by 14%. Adjusted operating margin of -16% was on the high-end of F2Q quarterly guidance of -20% to -16%.

Guidance Recap: As a result of an increasingly challenging macro, management revised FY23 guidance down across the board. GMV expectations were revised downwards 7% at the midpoint, missing consensus expectations of $21.1bn. Revenue and revenue less transaction costs were similarly revised downwards, declining 8% and 14% at the midpoint, respectively, missing consensus expectations by the same spread.

- **Stressed Macro Limits Growth:** During the quarter, Affirm reported the slowest GMV growth in its public history, growing 27% YoY and missing consensus expectations by 2%. Guidance for GMV growth in FY23 was revised downwards by 7% from the previous quarter and missed consensus by 8% at the midpoint, **which management primarily attributed to two factors: 1) slowing consumer demand for big-ticket items and 2) stricter per-loan credit quality decisions**. During the earnings call, management noted that consumer spending with partnered retailers has slowed considerably, namely discretionary spend including larger-ticket durable goods in electronics (-11% YoY) and sporting goods and homewares ("down high negative thirties" YoY). Adding to this, management stressed that it has elected to prioritize loan portfolio credit quality despite worsening consumer credit quality, effectively reducing the conversion rate of consumer demand to loan origination. As a result of the strategy, NPL data has improved incrementally QoQ, whereas other lenders have seen NPL rates increase. Management noted on the call that on average it currently receives ~$1bn of loan demand per week, implying a sub-50% approval rate, however, this is higher given factors like cart abandonment. While management noted that it could lower its threshold to increase GMV by loosening credit decisions, it has no plans to do this.
- **Funding Costs:** Sub-optimal ABS market conditions and declining consumer credit quality placed increased pressure on Affirm in F2Q23, **incurring a substantial negative shift in funding dynamics and loan profitability.** Affirm's funding mix saw non-securitized on-balance sheet funding increase 126%, which now represents 27% of the platform portfolio, up from 14% in the previous quarter. Equity capital required jumped similarly, rising to 5% from 2% in F1Q23. Management did note that it expects the funding mix dynamics to remain relatively stable over the remainder of the year. **Although the company sees conditions improving incrementally in the ABS market, it revised FY23 RLTC guidance down 14% (funding costs contributed 6ppt pressure to the net revenue guide reduction) and adjusted operating income down 22% from the previous quarter, based on the updated operating margin guidance.**
- **Debit+:** Debit+ has seen significant progress with regards to profitability and adoption among Affirm users. Management noted that consumers who received the card were likely to convert effectively all spend volume from other products to the card, and that while initially largely unprofitable, the card was now profitable in every class of transaction. **Although management doesn't expect Debit+ to materially contribute to GMV or revenue in FY23**, we view the Debit+ commentary as a relative positive amongst an otherwise disappointing quarter.

NPL Data	F4Q20	F1Q21	F2Q21	F3Q21	F4Q21	F1Q22	F2Q22	F3Q22	F4Q22	F1Q23	F2Q23
30+ Day	1.1%	0.8%	0.8%	0.7%	0.9%	1.5%	1.6%	2.1%	2.1%	2.7%	2.4%
60+ Day	0.8%	0.5%	0.4%	0.4%	0.5%	0.9%	0.9%	1.2%	1.2%	1.6%	1.5%
90+ Day	0.4%	0.2%	0.2%	0.2%	0.2%	0.4%	0.4%	0.5%	0.5%	0.7%	0.7%

F2Q23 REPORTED VS. CONSENSUS

Line Item	Reported	Cons.	$▲	%▲
Gross Merchandise Volume (bn)	**$5.66**	**$5.77**	**-$0.11**	**-2%**
growth (%, yoy)	*27%*	*29%*		
Active Customers	**15.6**	**17.0**	**-$1.44**	**-8%**
growth (%, yoy)	*39%*	*52%*		
Merchant Network Revenue	**$134**	**$135**	**-$0.67**	**0%**
growth (%, yoy)	*5%*	*6%*		
Virtual Card Network Revenue	**$29.1**	**$34.0**	**-$4.85**	**-14%**
growth (%, yoy)	*10%*	*28%*		
Interest Income	**$155**	**$152**	**$3.16**	**2%**
growth (%, yoy)	*12%*	*10%*		
Gain on Sale of Loans	**$59.1**	**$71.5**	**-$12.4**	**-17%**
growth (%, yoy)	*2%*	*24%*		
Servicing Income	**$21.5**	**$23.5**	**-$1.96**	**-8%**
growth (%, yoy)	*90%*	*107%*		
Total Revenue	**$400**	**$417**	**-$17.9**	**-4%**
growth (%, yoy)	*11%*	*16%*		
Transaction Costs	**$255**	**$253**	**$2.76**	**-1%**
% of GMV	*4.5%*	*4.4%*		
Revenue Less Transaction Costs	**$144**	**$165**	**-$21.0**	**-13%**
RLTC Margin (%)	*36%*	*40%*		
Operating Expenses	**$504**	**$486**	**$17.4**	**-3%**
% of Revenue	*126%*	*116%*		
Adjusted Operating Income	**-$62.0**	**-$72.5**	**$10.4**	**14%**
Adj. Operating Income Margin (%)	*-16%*	*-17%*		

FY23 Guidance	Old	New	%▲	Cons.	%▲
GMV (bn)	**$20.5 - $21.5**	**$19.0 - $20.0**	-7%	**$21.1**	-8%
growth (%, yoy)	*32% - 39%*	*23% - 29%*		37%	
Revenue (bn)	**$1.60 - $1.68**	**$1.48 - $1.55**	-8%	**$1.64**	-8%
growth (%, yoy)	*19% - 24%*	*9% - 15%*		21%	
RLTC	**$715 - $765**	**$610 - $660**	-14%	**$735**	-14%
growth (%, yoy)	*8% - 15%*	*(7.9%) - (0.4%)*		11%	
Operating Loss	**($112) - ($92)**	**($133) - ($116)**	-22%	**-$113**	-10%
Operating Margin (%)	*(7.0%) - (5.5%)*	*(9.0%) - (7.5%)*	*-200bps*	*-6.9%*	

Source: Company filings; FactSet; Visible Alpha

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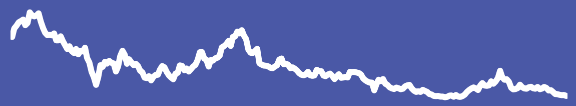
AFRM TTM Price Performance



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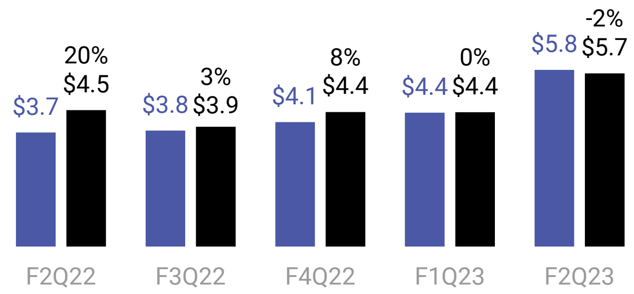
($ in millions, except where otherwise noted)

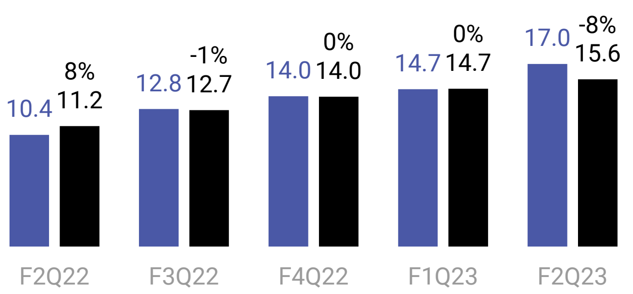
REPORTED VS. CONSENSUS

■ Consensus (Pre-Q) ■ Reported/% Beat

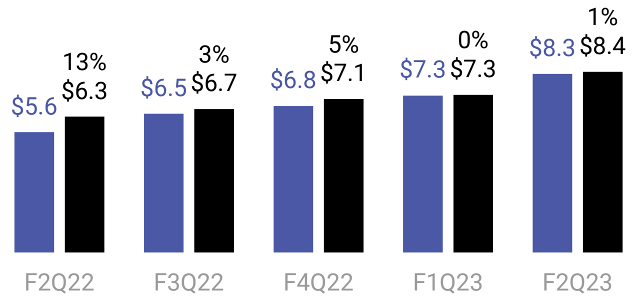
GMV (bn)



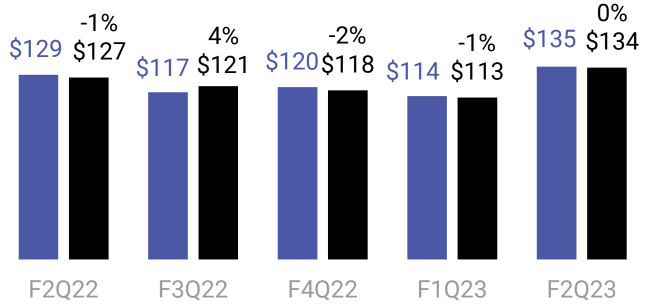
Active Customers (mm)



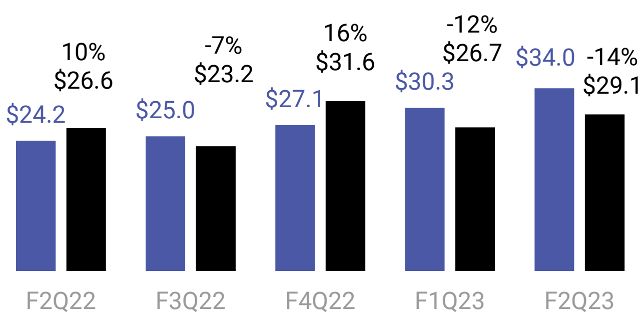
Platform Portfolio (bn)



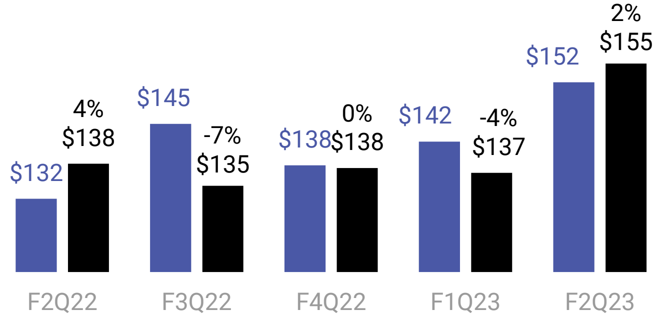
Merchant Network Revenue



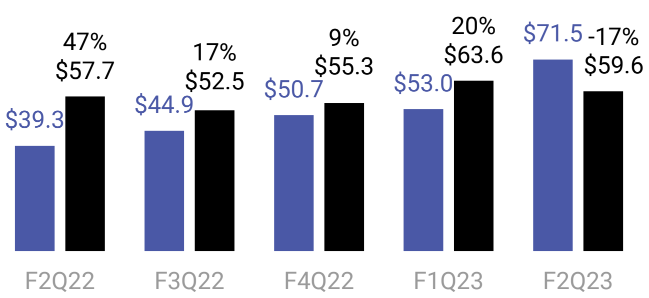
Virtual Card Revenue



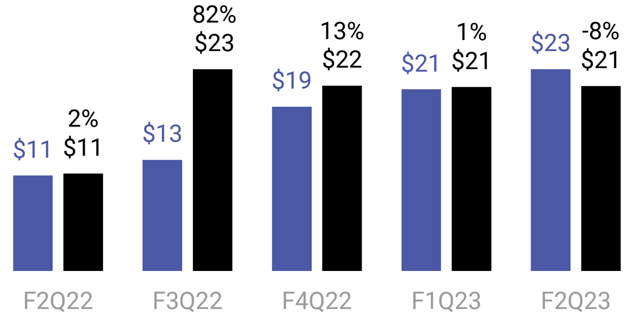
Interest Income



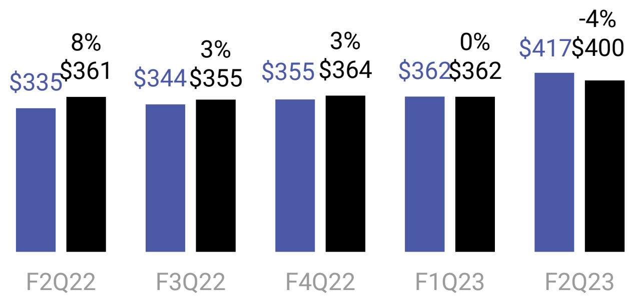
Gain on Sale of Loans



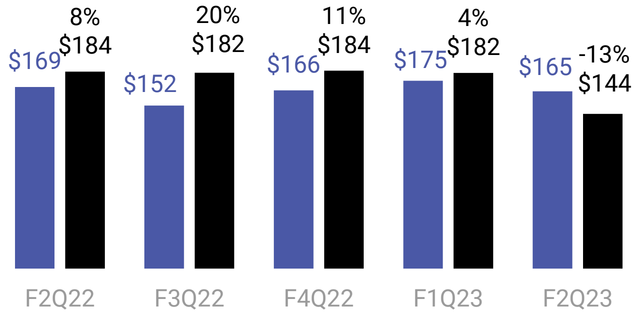
Servicing Income



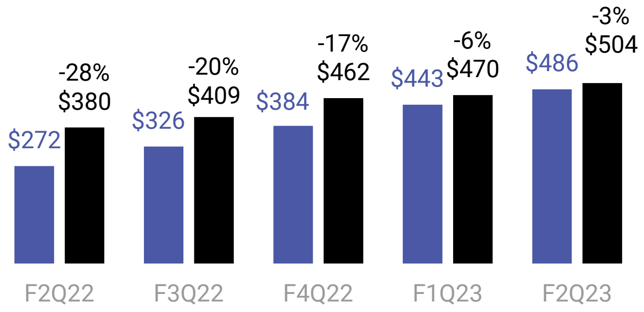
Total Revenue



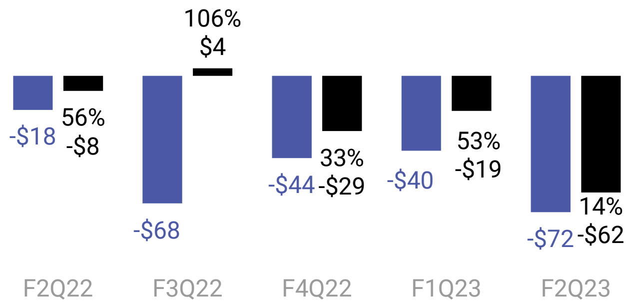
Revenue Less Transaction Costs



Operating Expenses



Adjusted Operating Income



Source: Company filings; FactSet

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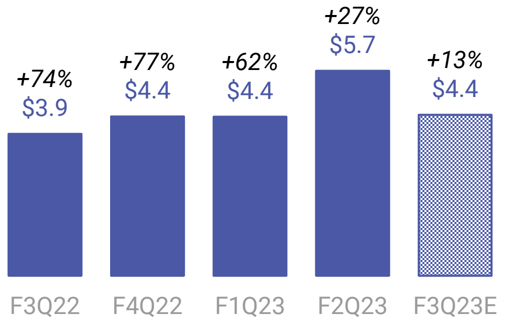
FINANCIAL TECHNOLOGY PARTNERS

($ in millions) F3Q23 CONSENSUS ESTIMATE RANGES

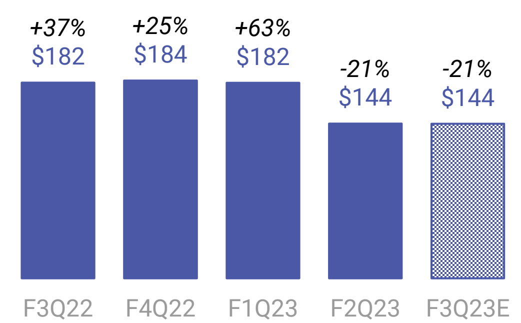
	Low	Average	High
GMV (billions)	**$4.39**	**$4.44**	**$4.50**
growth (%, yoy)	*12%*	*13%*	*15%*
Active Customers	**15.9**	**16.4**	**17.2**
growth (%, yoy)	*25%*	*29%*	*35%*
Merchant Network Revenue	**$101**	**$108**	**$117**
growth (%, yoy)	*-16%*	*-11%*	*-3%*
Virtual Card Network Revenue	**$22.7**	**$25.0**	**$26.7**
growth (%, yoy)	*-2%*	*8%*	*15%*
Interest Income	**$148**	**$166**	**$183**
growth (%, yoy)	*10%*	*23%*	*36%*
Gain on Sales of Loans	**$39.7**	**$46.1**	**$51.3**
growth (%, yoy)	*-24%*	*-12%*	*-2%*
Servicing Income	**$19.3**	**$22.2**	**$28.5**
growth (%, yoy)	*-18%*	*-5%*	*22%*
Total Revenue	**$352**	**$367**	**$374**
growth (%, yoy)	*-1%*	*3%*	*5%*
Transaction Costs	**$214**	**$223**	**$228**
growth (%, yoy)	*24%*	*29%*	*32%*
Revenue Less Transaction Costs	**$138**	**$144**	**$150**
RLTC Margin (%)	*39%*	*39%*	*40%*
Total Operating Expenses	**$515**	**$656**	**$721**
growth (%, yoy)	*-11%*	*13%*	*24%*
Adjusted Operating Income	**-$40.8**	**-$35.3**	**-$29.8**
Adj. Operating Margin (%)	*-12%*	*-10%*	*-8%*
Free Cash Flow	**-$235**	**-$104**	**-$20**

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

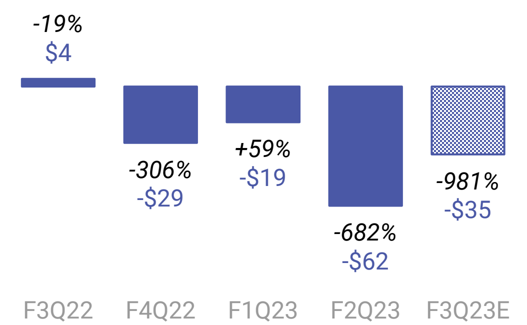
GMV (bn)/YoY Growth



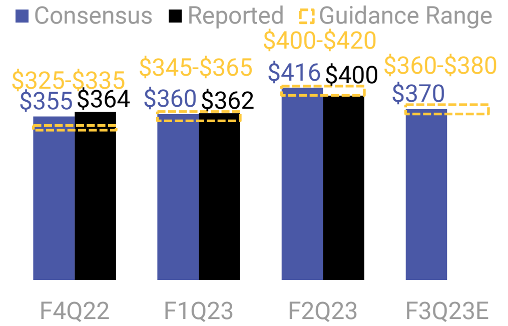
RLTC/YoY Growth



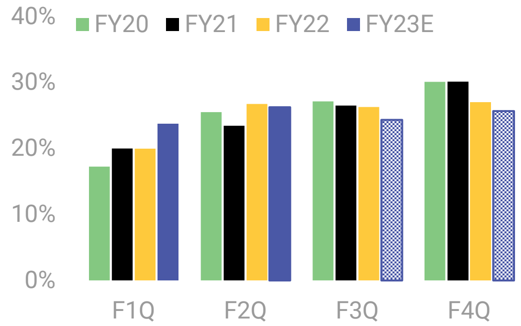
Adj. Operating Income/YoY Growth



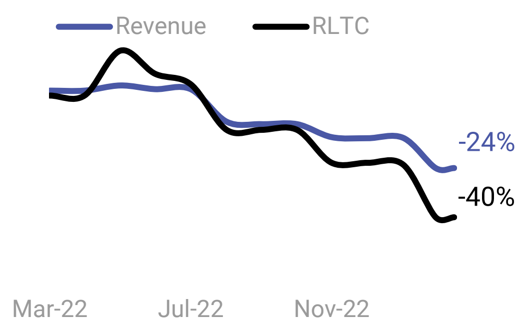
Revenue Guidance/Cons. vs. Reported



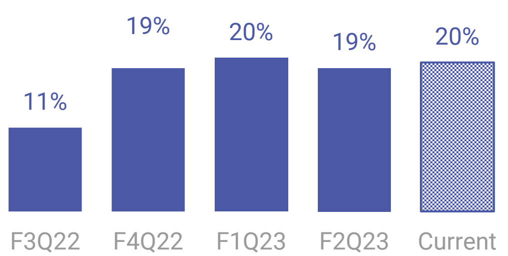
Revenue Seasonality



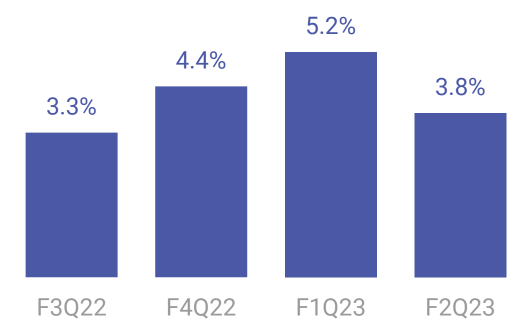
F3Q23 Cons. Revisions



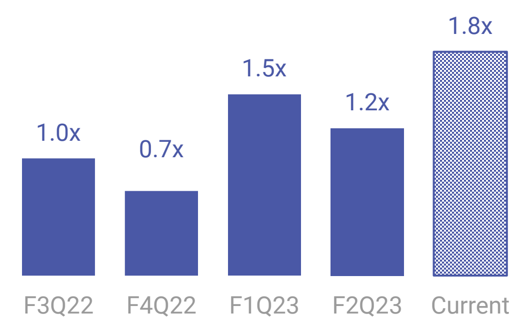
Short Interest



Hedge Fund Ownership as % of S/O

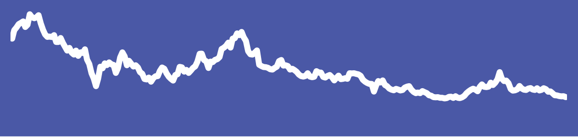


Pre-Earnings Put/Call Ratio[1]



Source: Company filings
1) FactSet
2) Put/Call Ratio over 7-days leading into earnings

AFRM TTM Price Performance



Price as of 03/17/23:	$9.49	Shares Out (mm):	294
Market Cap (mm):	$2,790	Beta (2-Year Avg.):	3.5
52-Wk Range:	$8.62 - $51.49	Avg. Daily Vol (mm):	18.8

1Q23 EARNINGS OUTLOOK

Affirm is projected to report F3Q22 results on May 10th after the market close.

What's In Focus:

Consumer Credit Quality & Spending: Given that the +30 Day NPL rate declined 30bps sequentially to 2.4% in F2Q23, credit quality will be one of the largest focal points for investors as the company's FY23 GMV growth guidance reduction was in-part predicated on maintaining credit quality. On the F2Q23 earnings call, management stated that it intends to prioritize credit quality over GMV, citing that strict per-loan credit decisions. As a result, Affirm will likely look to find the right balance between GMV growth and credit quality. However, Upstart noted on its C4Q22 earnings call that it's beginning to see signs of incremental improvement in consumer health, particularly with respect to improving dynamics between the personal savings rates and expenditures.

Funding Constraints: Funding market challenges have driven Affirm to increase the volume of loans retained on the balance sheet, which subsequently increased equity capital required to maintain the funding platform to 5.4% in F2Q23 from 2.4% in F1Q23. While management indicated it doesn't expect meaningful increases in equity capital required, continued funding constraints could force further increases.

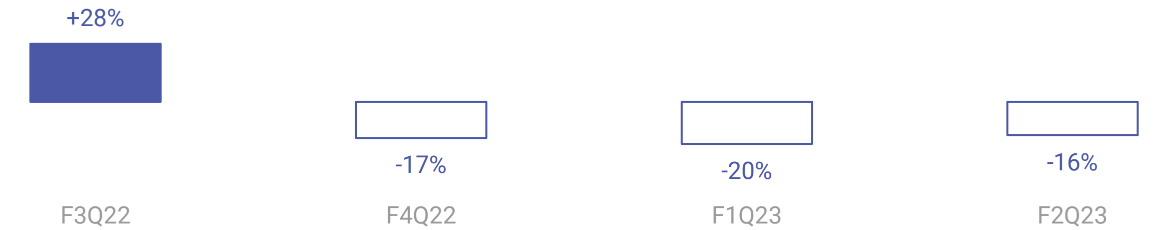
Estimates:

- **KPI's:** Since F2Q23 results, estimates for F3Q23 GMV have declined substantially from $5.2bn to $4.4bn while FY23 estimates have been revised down by 8% to $19.5bn from $21.1bn . Consensus estimates for total number of active merchants has stayed roughly flat at 269k after seeing its first QoQ attrition in F2Q23, driven in part by repricing initiatives. Active customers were revised down 8% to 16.4mm for the end of F3Q23.
- **Revenue:** Total revenue estimates for F3Q23 have been revised downwards to $367mm (-12% from F2Q23 earnings date) while FY23 estimates have been revised down by 8% to $1.51bn vs. $1.64bn previously. Revenue less transaction estimates were similarly revised downwards 23% to $144mm, implying a F2H23 RLTC margin of 40% vs. F1H23's 43%.
- **Expenses:** Since F2Q23 results, estimates for operating expenses have decreased by 3% to $446mm. Overall adjusted operating income estimates have been revised 88% lower to -$35mm for F3Q23 and similarly declined for FY23 from -$113mm to -$127mm.

Upcoming Events:

March 21st: Bank of America Electronic Payments Symposium

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ



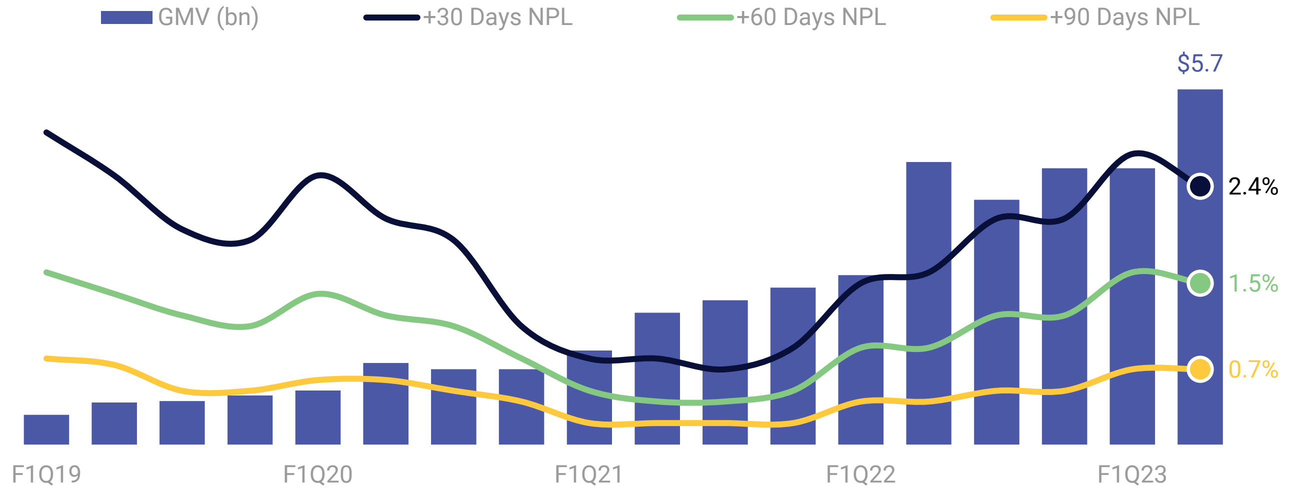
F3Q22
- ~3% beat on revenue; operating margins significantly better than expected
- Q4 revenue guide in line with consensus

F4Q22
- ~3% beat on revenue, 11% beat on RLTC
- Midpoint of 1Q/FY23 revenue guidance 8%/12% below consensus

F1Q23
- Revenue in-line with consensus, RLTC beats by 4%

F2Q23
- Misses on revenue/RLTC at -4%/-13%
- Large downward revisions on FY23 guidance, with revenue guides down 8% and RLTC guided down 14%.

GMV & CREDIT PERFORMANCE (EX-PAY IN 4)



Source: Company filings; FactSet

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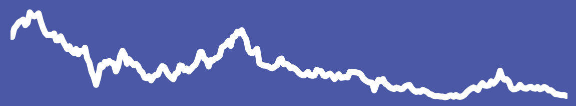
AFRM TTM Price Performance



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52-Wk Range:	**$8.62 - $51.49**	**Avg. Daily Vol (mm):**	**18.8**

FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

General:

1) How are the conversations around price increases progressing? Are there expected to be any more price increases throughout FY23?
2) When is the Debit+ card expected to have an impact on GMV/Revenue?
3) Affirm currently has half of the top ten U.S. retailers and commerce platforms integrated. Is the next leg of growth expected to come from a push down market (i.e Shopify)? Do the company have any pricing power with Shopify merchants?
4) Are there any noticeable behavioral differences between customers that shop/checkout directly through the Affirm app vs. selecting Affirm at checkout?

Credit:

5) Given funding constraints in the current environment, is there a cap on the percentage of loans the company originates that management would be willing to put on the balance sheet?
6) Affirm's delinquency rates have started to track closer to FY20, stepping up from FY22 levels, what are the drivers of that and where does management see the long-term delinquency rate settling in at?

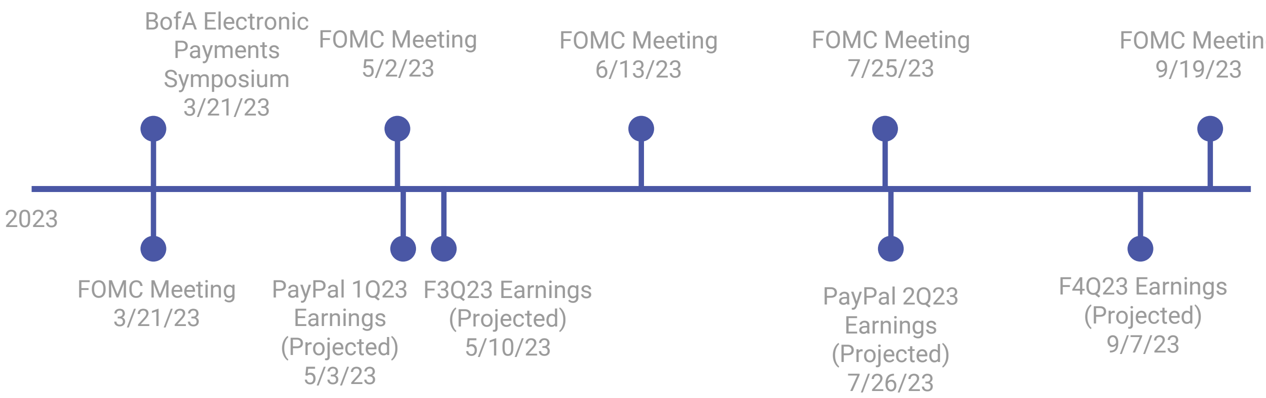
Guidance:

7) Given the adjustment of expectations on top-line GMV, is management still on pace to achieve profitability in FY24? Are there levers elsewhere that need to be pulled to hit that target?
8) Can management help us understand the drivers of the change in guidance? How much of the contribution is Peloton, general market, etc.?
9) Does the revised FY23 guidance include any assumptions surrounding further changes in interest rates?

Regulation:

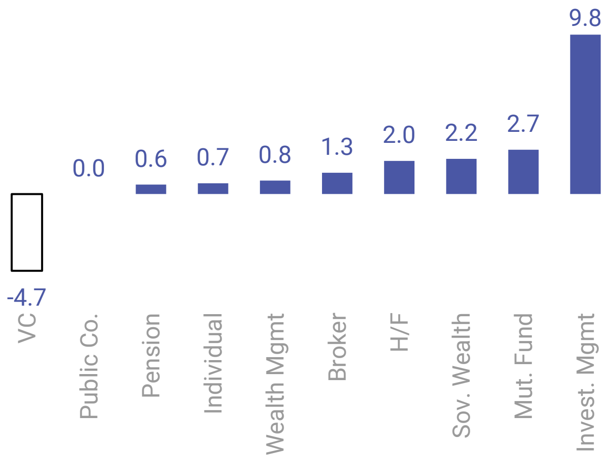
10) How is management thinking about the current regulatory environment with the CFPB report? Does management expect BNPL loans information to eventually be provided to the credit agencies?

POTENTIAL CATALYSTS

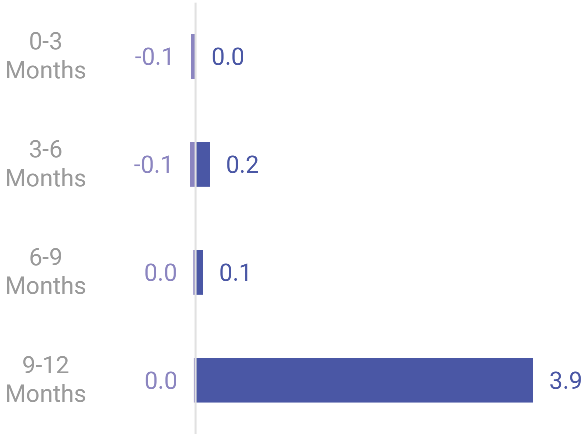


SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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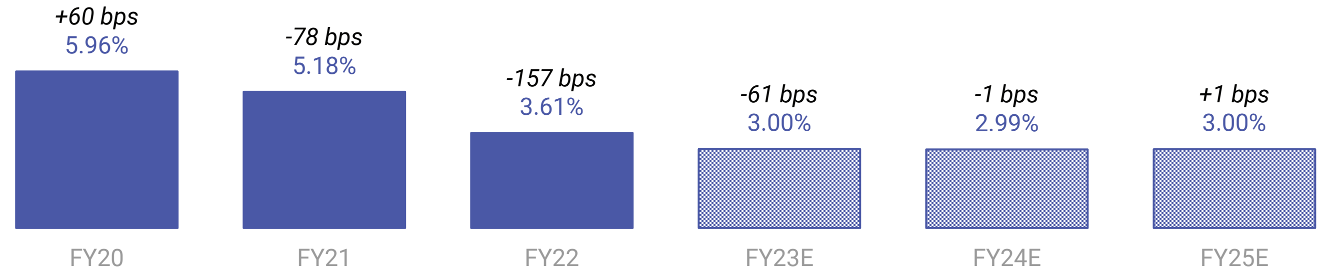
FINANCIAL TECHNOLOGY PARTNERS

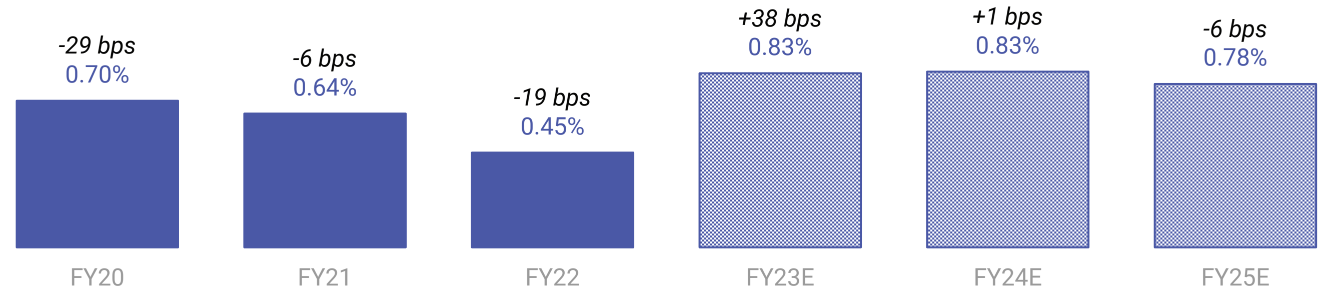
($ in millions, except where otherwise noted)

COMPANY RATIOS/MARGIN ANALYSIS

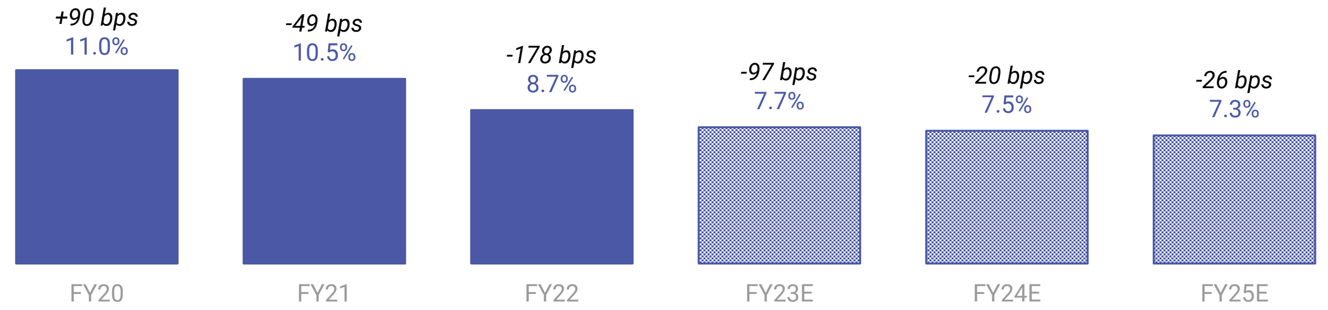
Network Yield (% of GMV)



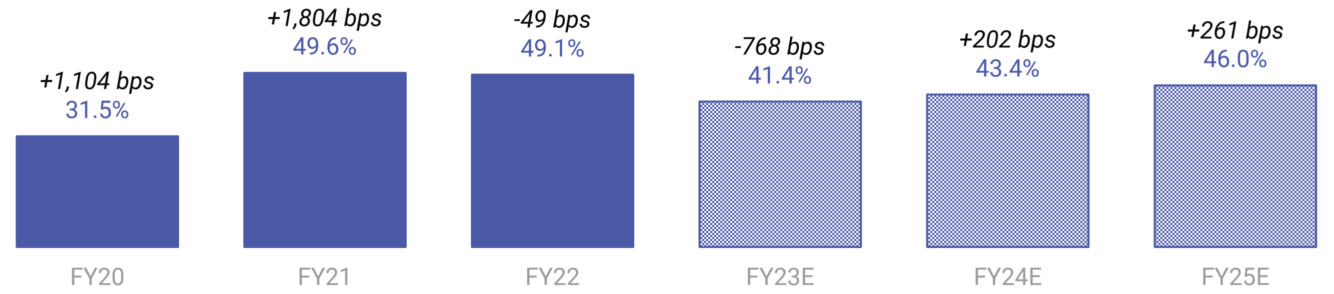
Funding Cost Rate (% of GMV)



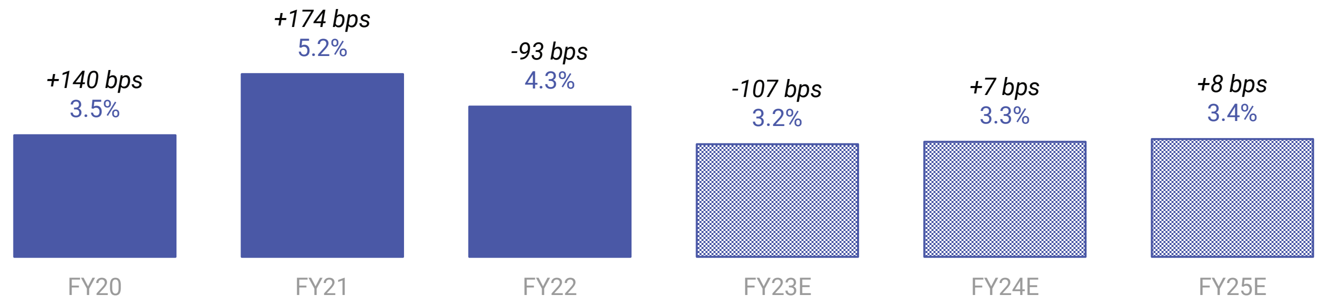
Total Revenue Yield (% of GMV)



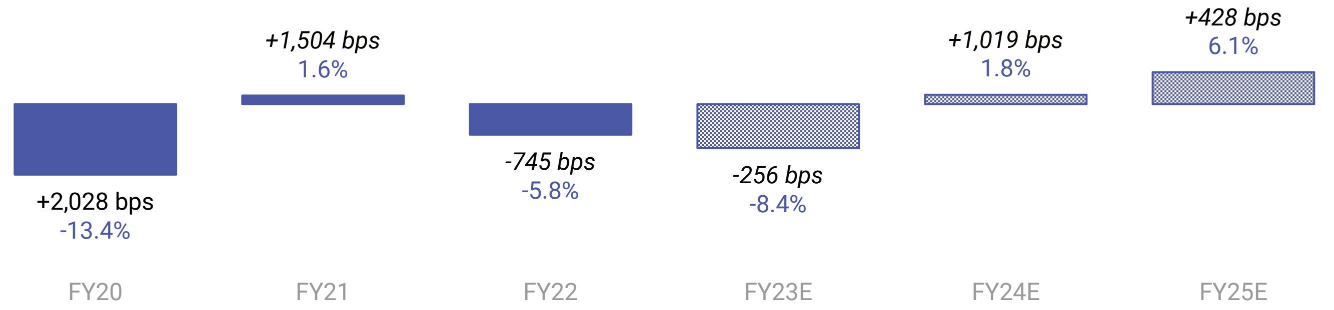
RLTC Margin (% of Total Revenue)



RLTC Yield (% of GMV)



Adj. Operating Margin (% of Total Revenue)



Source: Company filings; FactSet

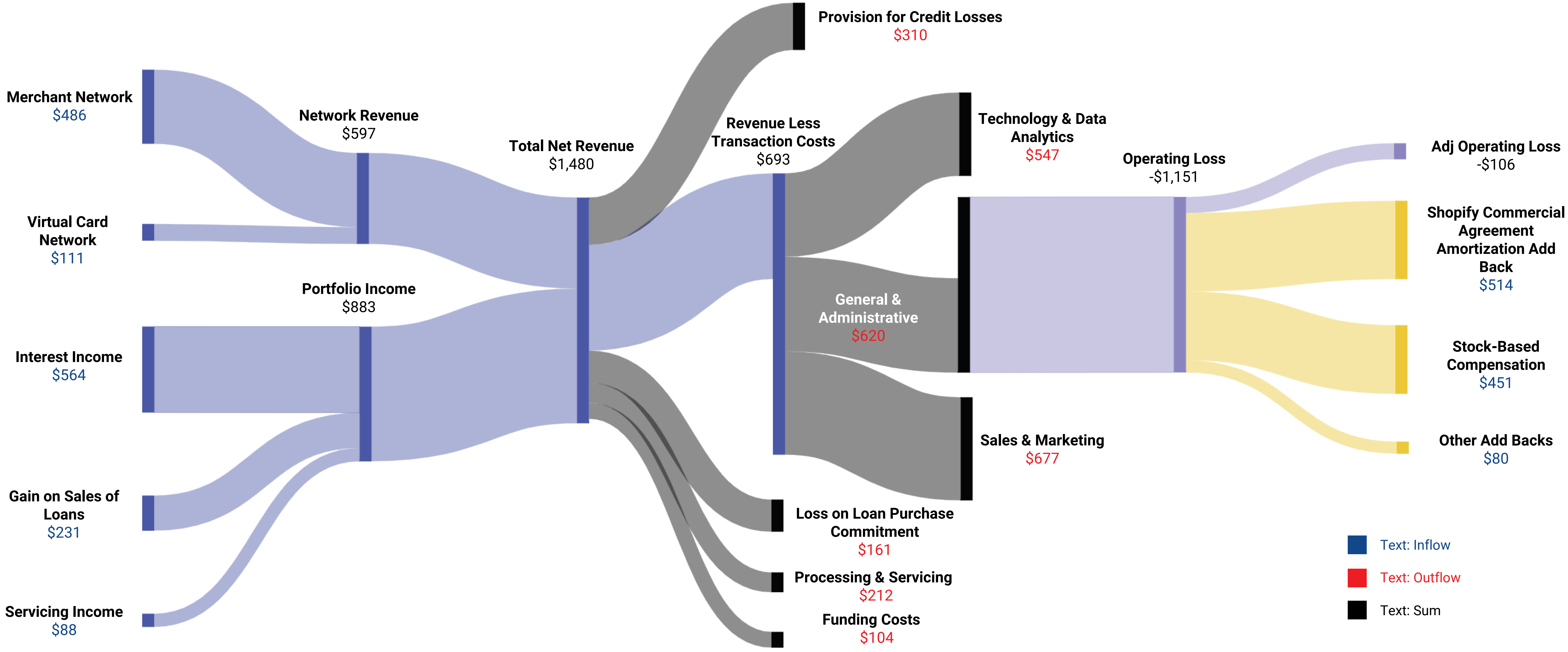
affirm

AFRM TTM Price Performance

Price as of 03/15/23:	$10.01	Shares Out (mm):	234
Market Cap (mm):	$2,341	Beta (2-Year Avg.):	3.5
52-Wk Range:	$8.62 - $51.49	Avg. Daily Vol (mm):	18.5

FINANCIAL TECHNOLOGY PARTNERS

P&L VISUALIZATION – TTM



Merchant Network
$486

Virtual Card Network
$111

Interest Income
$564

Gain on Sales of Loans
$231

Servicing Income
$88

Network Revenue
$597

Portfolio Income
$883

Total Net Revenue
$1,480

Provision for Credit Losses
$310

Revenue Less Transaction Costs
$693

Loss on Loan Purchase Commitment
$161

Processing & Servicing
$212

Funding Costs
$104

Technology & Data Analytics
$547

General & Administrative
$620

Sales & Marketing
$677

Operating Loss
-$1,151

Adj Operating Loss
-$106

Shopify Commercial Agreement Amortization Add Back
$514

Stock-Based Compensation
$451

Other Add Backs
$80

🟦 Text: Inflow
🟥 Text: Outflow
⬛ Text: Sum

Source: Company filings; FactSet

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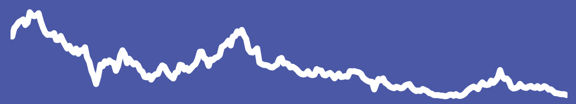

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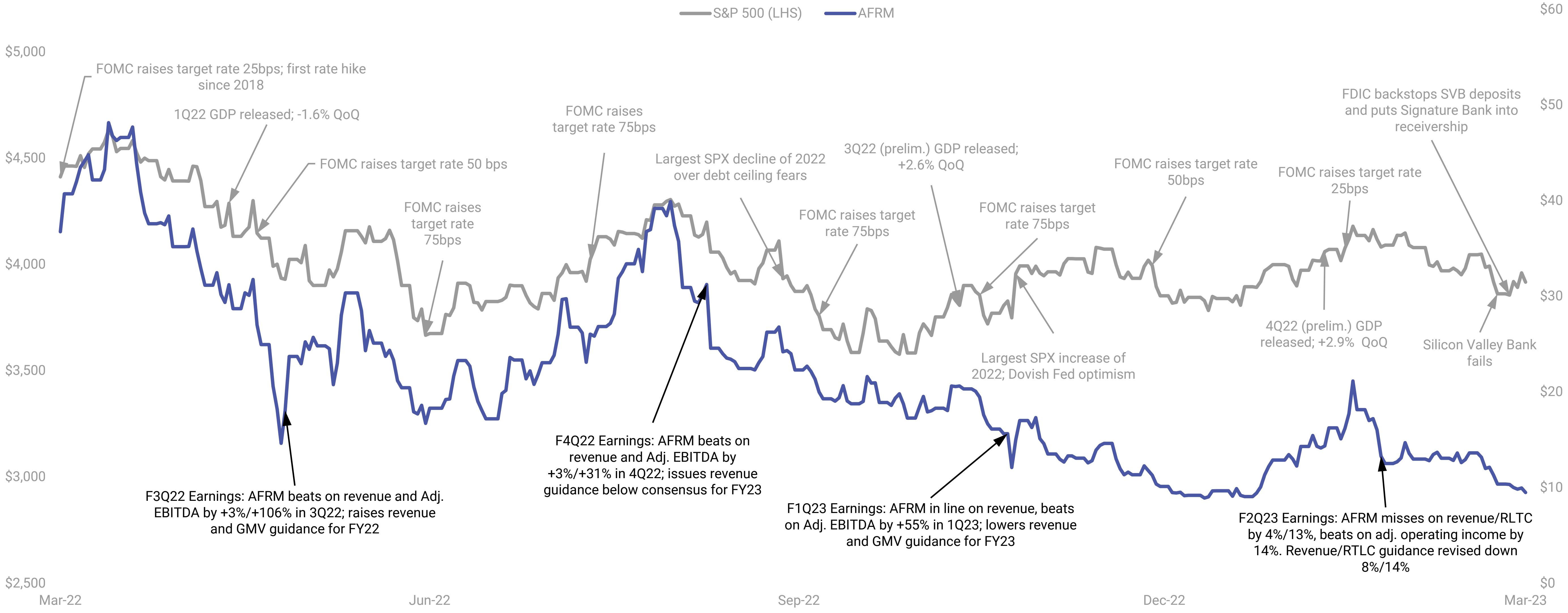
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

FOMC raises target rate 25bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

Silicon Valley Bank fails

F3Q22 Earnings: AFRM beats on revenue and Adj. EBITDA by +3%/+106% in 3Q22; raises revenue and GMV guidance for FY22

F4Q22 Earnings: AFRM beats on revenue and Adj. EBITDA by +3%/+31% in 4Q22; issues revenue guidance below consensus for FY23

F1Q23 Earnings: AFRM in line on revenue, beats on Adj. EBITDA by +55% in 1Q23; lowers revenue and GMV guidance for FY23

F2Q23 Earnings: AFRM misses on revenue/RLTC by 4%/13%, beats on adj. operating income by 14%. Revenue/RTLC guidance revised down 8%/14%

Source: Company filings; FactSet

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AMERICAN EXPRESS

AMERICAN EXPRESS PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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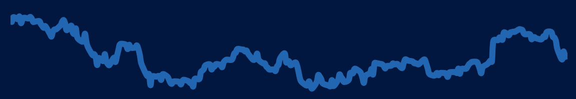
AMERICAN EXPRESS


TTM Price Performance

Price as of 03/17/23:	$156.52	**Shares Out (mm):**	744
Market Cap (bn):	$116	**Beta (2-Year Avg.):**	1.3
52-Wk Range:	$130.65 - $194.35	**Avg. Daily Vol (mm):**	3.46

FINANCIAL TECHNOLOGY PARTNERS

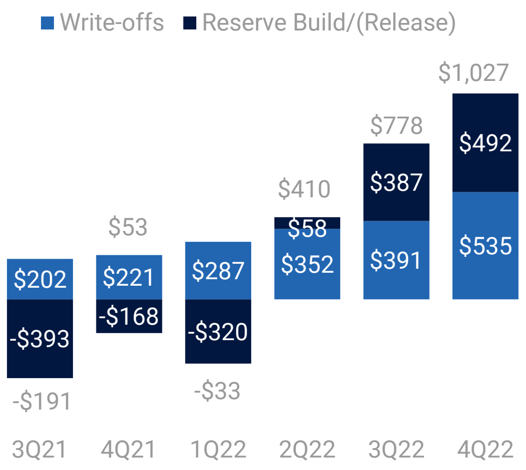
COMPANY OVERVIEW

American Express is an integrated payments platform that primarily provides credit and charge cards to consumers, small businesses, mid-size companies and enterprises. American Express operates both consumer and business ecosystems that combine credit, deposit accounts, travel, expense management, rewards and cardmember services, etc. with the company's payment network.

Through its general-purpose card-issuing, merchant-acquiring and card network businesses, American Express enables electronic forms of payment. With its primary three-party model, **the company maintains direct relationships with both cardmembers (as a card issuer) and merchants (as an acquirer),** handling all key aspects of those relationships. These relationships create a "closed loop" network, distinguishing its integrated payments platform from the more common four-party or "open loop" bankcard networks like Visa or Mastercard.

American Express does offer "open loop" payment capabilities, allowing other card issuers to process transactions on the American Express network, which accounts for a minority of the company's billed business.

TOTAL PROVISIONS (mm)



KEY DEBATES

1. **Macro Outlook:** American Express's FY23 guidance implies slowing macro growth. That said, consumer spending and inflation have remained resilient, causing the "blue chip consensus" cited by American Express to modestly shift. Specifically, consensus confidence in interest rate cuts in 2H23 had weakened before the SVB crisis reversed course. Ultimately, whether American Express can achieve upside to its FY23 guidance could come down to the T&E segment, where the company has outsized exposure.

2. **Long-Term Targets:** American Express has laid out ambitious long-term (2024+) targets of 10%+ revenue growth coupled with EPS growth in the mid-teens. However, there has been investor concern over the ability to achieve these targets in the event of a mild (or worse) recession. To that end, AXP has demonstrated that its products are resonating with consumers and small businesses who are still willing to absorb higher annual fees thanks to constantly refreshed cardmember rewards and benefits. In order to achieve the company's 2024+ aspirations, American Express will need to find the right balance of investment in new and existing customers, while continuing to successfully manage operating expenses.

3. **Premium Credit Quality:** AXP's industry-best credit metrics have been slow to normalize towards pre-covid levels, with annualized default rates net of recoveries at ~1.5% in January 23 vs. ~2.2% in 2019. Management has recently resumed provisioning at a level more in line with robust loan growth, now that reserving levels have returned to more normalized coverage levels following the extreme pandemic response. Moving forward, provision increases are likely to be manageable and not impact management's longer-term growth targets, providing the economy avoids a deep recession.

REVENUE MODEL

The revenue streams of American Express are split between two categories of line items: Non-interest revenue (discount revenue, net card fees, service fees, processing fees, and interest income.

Discount revenue (55% of TTM Gross Revenue): By far the largest revenue stream for the business, discount revenue is earned through facilitating transactions over American Express's network between merchants and card members by deducting a percentage from the payment to the merchant at the time the transaction occurs. The fees charged vary by factors such as the industry of the merchant's business, transaction volume, card type, etc.

Net card fees (11% of TTM Gross Revenue): Earned from annual card membership fees, these fees are deferred and recognized on a straight-line basis over a one-year membership period. These fees are recognized net of acquisition costs and projected refund reserves for cancellations.

Service fees & other (8% of TTM Gross Revenue): Primarily consisting of membership rewards program fees deferred and recognized over the period of the fee, delinquency fees, foreign currency conversion fees, loyalty coalition-related fees, travel commissions and fees, and service fees.

Total interest income (23% of Gross TTM Revenue): Interest on card member loans based on the daily average balance. Interest is based on the principal amount outstanding, unless the loan is classified as non-accrual. This is partially offset by interest expense.

Processed Revenue (3% of Gross TTM Revenue): Revenues related to network partnership agreements, comprising royalties, fees and amounts earned for facilitating transactions on cards issued by network partners.

MANAGEMENT GROWTH PLAN

As of 4Q22 earnings

2023 Guidance	2024+ Aspirations
Revenue Growth 15% - 17%	**Revenue Growth** In excess of 10%
EPS $11.00-$11.40	**EPS Growth** Mid-teens
Blue Chip Consensus - Slowing Macro Growth (2023)	**Steady State Macro Environment**

Source: Company filings

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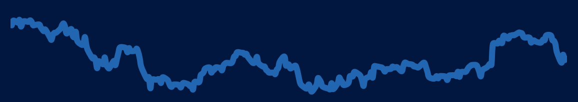
AMERICAN EXPRESS

TTM Price Performance



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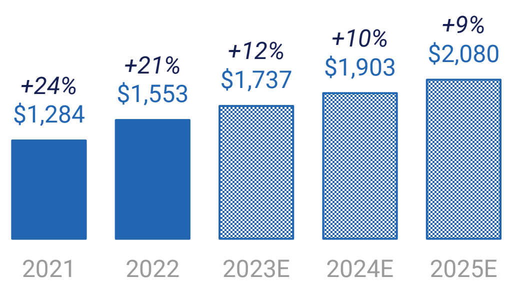
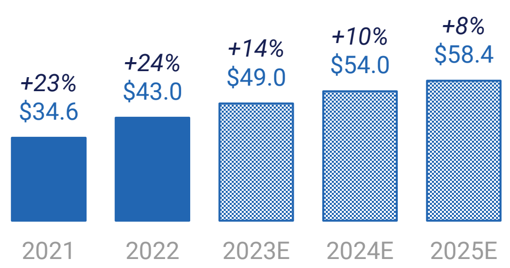
($ in billions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS(1)

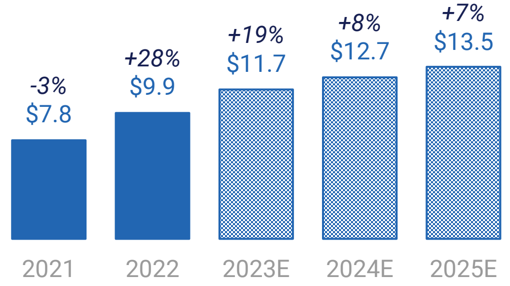
Network Volume



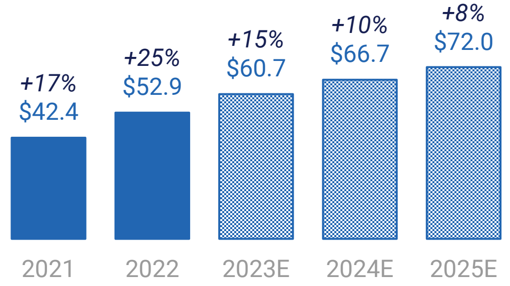
Non-Interest Revenue



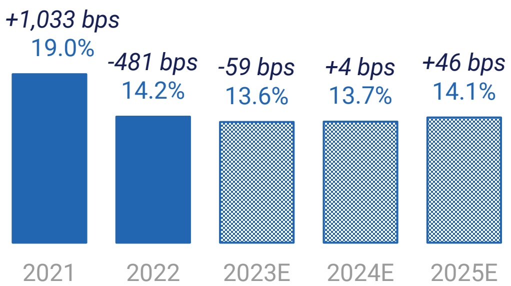
Net Interest Income



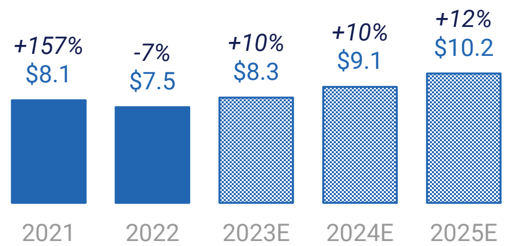
Net Revenue (Less Interest Expense)



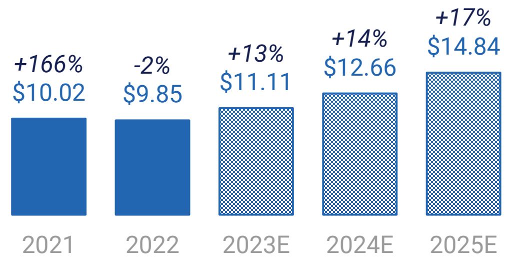
Net Income Margin(3)



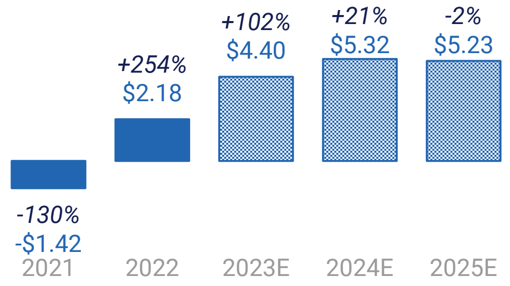
Net Income(3)



Diluted EPS(3)



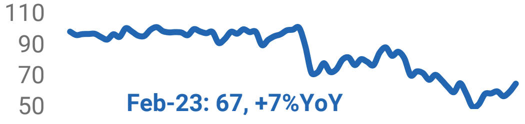
Total Provisions for Losses(3)



INDUSTRY KPIs

GDP Growth *(1Q17-4Q22)*

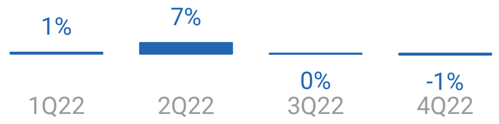
Consumer Sentiment *(Jan 17-Feb 23)*



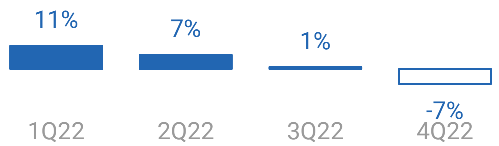
U.S Cross-Border Travel *(Jan 19-Feb 23)*

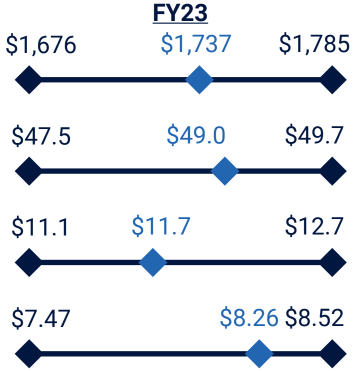
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES(2)

Net Revenue



Adjusted Diluted EPS

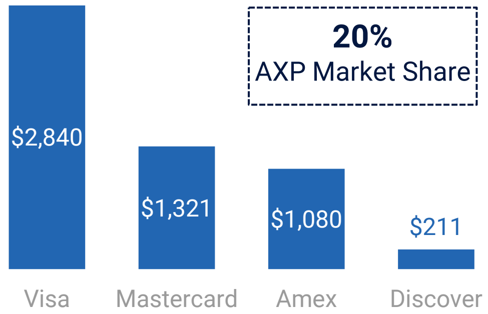




		FY23	
Network Volume	$1,676	$1,737	$1,785
Non-Interest Income	$47.5	$49.0	$49.7
Net Interest Income	$11.1	$11.7	$12.7
Net Income	$7.47	$8.26	$8.52

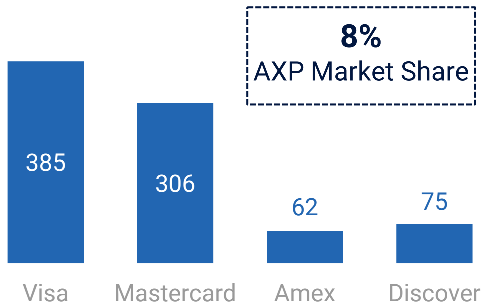
TOTAL ADDRESSABLE MARKET

2022 U.S. Credit Purchase Volume(4)



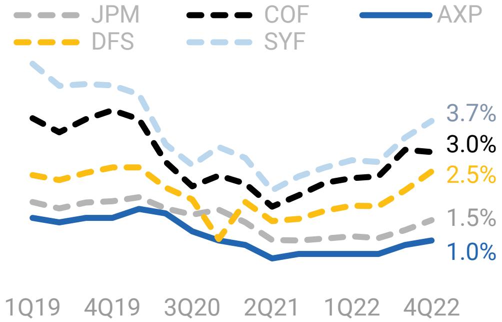
20%
AXP Market Share

2022 Active U.S. Credit Cards(4)



8%
AXP Market Share

Comparative 30+ Day Delinquencies



FT Partners | Equity Research

Source: Company filings
1) FactSet
2) FactSet, Visible Alpha Consensus Low/Average/High Range
3) 2021 Growth Rates Impacted By COVID-19 Grow Over
4) Nilson Issue #1235

03/20/23 - **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

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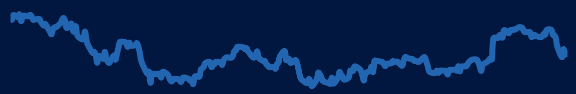
TTM Price Performance



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52-Wk Range:	$130.65 - $194.35	**Avg. Daily Vol (mm):**	3.46

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VALUATION CONSIDERATIONS

Relative Valuation:

American Express trades at a 14.0x NTM P/E multiple, 1.7x below its average 5-year multiple of 16.7x, currently trading at a 3.5x discount to the S&P500, relative to its 5-year average discount of 2.1x. American Express also trades at a significant discount to other card network peers (MA,V) due to its balance sheet exposure, but also retains a meaningful premium when compared to traditional balance sheet lenders. **When looking at peer average NTM P/E and adjusting for EPS growth, it implies a 12-month price of $172 (10% upside). Given consensus estimates remain meaningfully below management's long-term targets, there is room for upward revisions to FY24+ estimates,** which is likely underappreciating American Express's ability to grow with its premium customer base and through younger cohorts in a relatively uncertain macro environment.

DCF Scenarios:

Scenario 1 – Current Price ($157, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now involves 11% revenue growth in 2023 and HSD growth through 2027 before gradually decelerating towards the 3% terminal growth rate. Operating margins are also held constant. Comparatively, management's 2024+ targets call for 10%+ net revenue growth and mid-teens EPS growth.

Scenario 2 – Middle of Long-Term Guidance ($226, 44% upside): The second DCF outlines a scenario where revenue grows at 10%+ through 2025 and EPS growth is at the mid-point of the company's guidance for "mid-teens" growth through FY25 before gradually decelerating to the terminal growth rate. This scenario points to a 12-month price of $226 (44% upside) which based on the current STM consensus EPS implies a 18x P/E multiple.

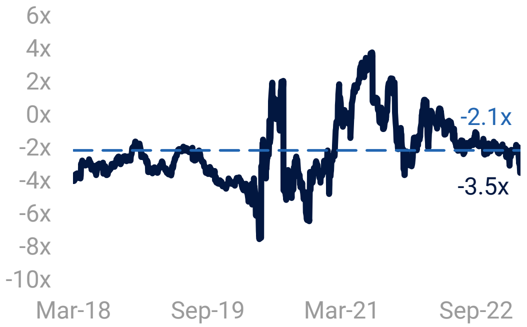
Scenario 3 – Low End of Long-Term Guidance ($205, 31% upside): The third DCF outlines a scenario modestly above consensus estimates and at the bottom-end of managements long-term guidance range for both revenue and EPS growth. In this scenario, revenue growth is maintained at 10% and EPS growth is at the low end of "mid-teens" growth through 2025, before gradually decelerating to the terminal growth rate. This scenario points to a 12-month price of $205 (31% upside) which based on the current STM consensus EPS implies a 16x P/E multiple.

Scenario 4 – Recession ($138, 12% downside): The fourth DCF outlines the impact of a significantly worsened macro backdrop, characterized by decreased volumes, reduced net card additions and elevated provisions. In this scenario, net revenue/EPS growth is decreased to MSD through FY25. This scenario points to a 12-month price of $138 (12% downside) which based on the current STM consensus EPS implies a ~12x P/E multiple.

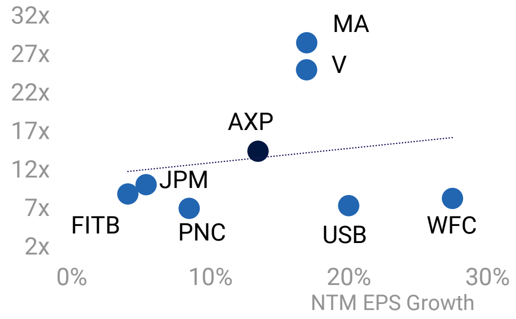
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM P/E & 5-Year Avg.

NTM P/E Premium vs. S&P500



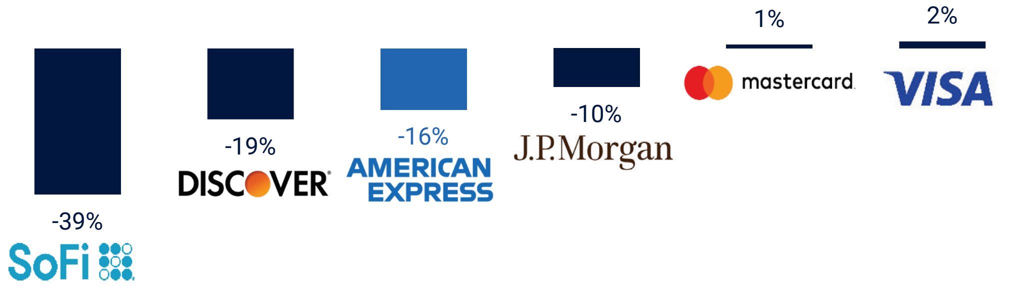
NTM P/E vs. EPS Growth



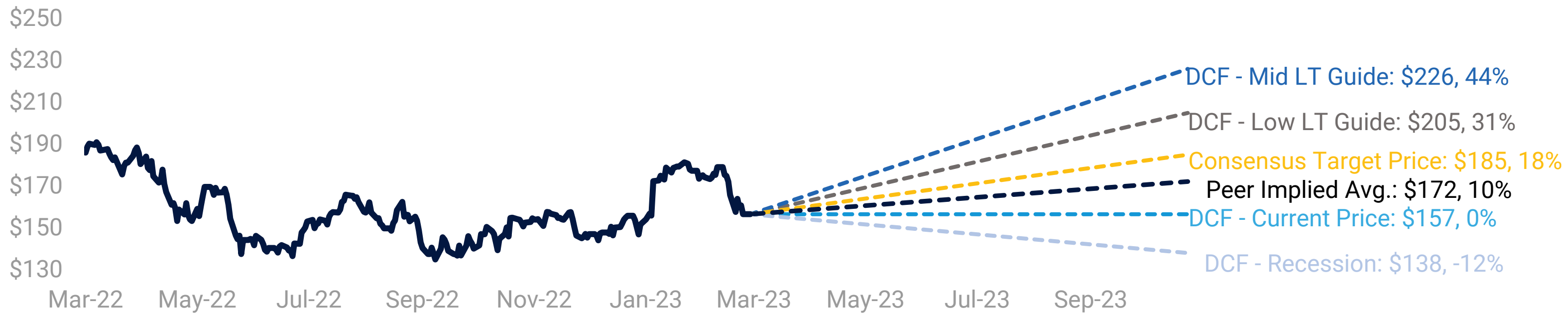
NTM P/E[1]

10-Yr RFR	3.8%
Cost of Equity	12.3%
Cost of Debt	5.0%
WACC	10.2%
Beta	1.3
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$5,201

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



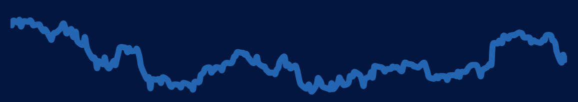
FT Partners | Equity Research

Source: Company filings, FactSet

1) SBC in millions

AMERICAN EXPRESS

TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) potential for recession and 2) percentage of billed business growth coming from younger cohorts (fastest growing segment of AXP cardmembers). While there are other drivers of AXP's performance these represent the most likely area(s) of upside/downside relative to management's outlook/consensus.

Consensus Case:

The average consensus price target for AXP is $185, with STM EPS estimates of $12.66, implying a 14.6x P/NTM earnings multiple if shares trade at $185 in 12-months, a ~0.6x expansion relative to the current 14x multiple. This 14.6x multiple is 2.3x below AXP's 5-year average P/E multiple of 16.7x. The consensus price target implies 18% upside to the current share price of $157.

Upside Case(s):

(+) $209, 34% Upside: This scenario assumes the global economy avoids a recession and PCE trends remain strong. The scenario model reflects this by 1) assuming no deceleration in the stacked growth rate of network volume/card fees 2) lower delinquency rates/provision expenses and 3) moderately faster loan growth. The model partially offsets the faster revenue growth with increased expense growth, particularly in marketing. This implies 16% EPS growth (at the high-end of management's FY23 guidance) and 34% upside to the current share price with a 15x multiple.

(+-) $191, 22% Upside: This scenario assumes no recession, but forecasts moderately slower cards in-force adds and volume growth to reflect slower penetration with younger cohort customers. Reward expenses are also lowered as a percentage of revenue to reflect the customer mix shift. This implies 13% EPS growth and 22% upside to the current share price with a 14x multiple.

(++) $227, 45% Upside: The best-case scenario assumes no recession and forecasts a higher level of penetration among younger cohorts. In this scenario, network volumes and net card fees are adjusted higher, while reward expenses as a percentage of revenue are increased. Remaining assumptions around credit/loan growth remain unchanged. This implies 18% NTM EPS growth and 45% upside to the current share price with a 16x multiple.

(-+) $176, 13% Upside: This scenario assumes a global recession and the younger cohort mix shift. It implies 12% EPS growth and 13% upside to the current share price with a 14x multiple.

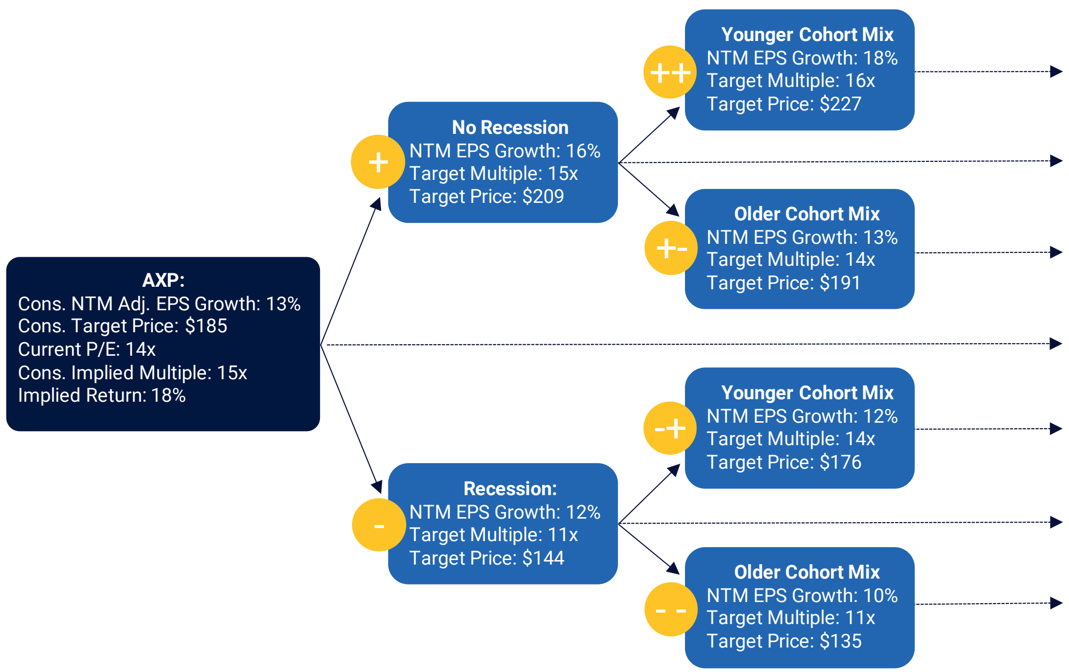
Downside Case(s):

(-) $144, 8% Downside: This scenario assumes a global recession weighing on card fees, network volume, loan growth and credit quality. Marketing and customer rewards costs are also modestly decreased. This implies 12% EPS growth and 8% downside to the current share price with a 11x multiple. This would represent the low-end of management's FY23 EPS range.

(--) $135, 14% Downside: The worst-case scenario assumes a global recession and the previously mentioned older cohort mix, with partial offsets coming from various expense lines. This implies 10% EPS growth and 14% downside to the current share price with a 11x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



AXP:
Cons. NTM Adj. EPS Growth: 13%
Cons. Target Price: $185
Current P/E: 14x
Cons. Implied Multiple: 15x
Implied Return: 18%

+ **No Recession**
NTM EPS Growth: 16%
Target Multiple: 15x
Target Price: $209

++ **Younger Cohort Mix**
NTM EPS Growth: 18%
Target Multiple: 16x
Target Price: $227

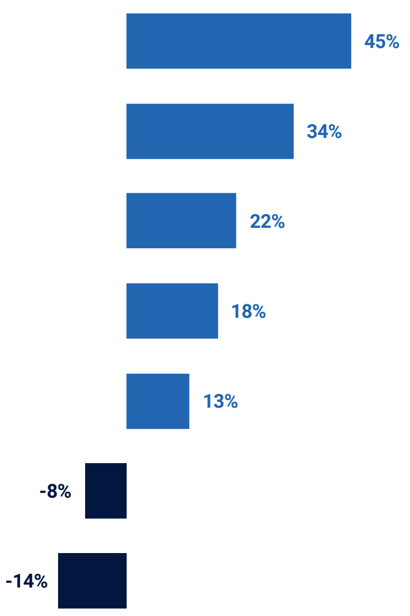
+- **Older Cohort Mix**
NTM EPS Growth: 13%
Target Multiple: 14x
Target Price: $191

- **Recession:**
NTM EPS Growth: 12%
Target Multiple: 11x
Target Price: $144

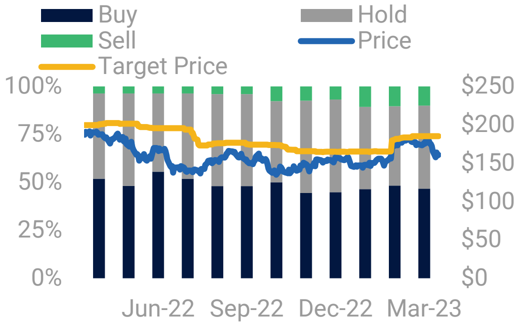
-+ **Younger Cohort Mix**
NTM EPS Growth: 12%
Target Multiple: 14x
Target Price: $176

-- **Older Cohort Mix**
NTM EPS Growth: 10%
Target Multiple: 11x
Target Price: $135

12-Month Price Return

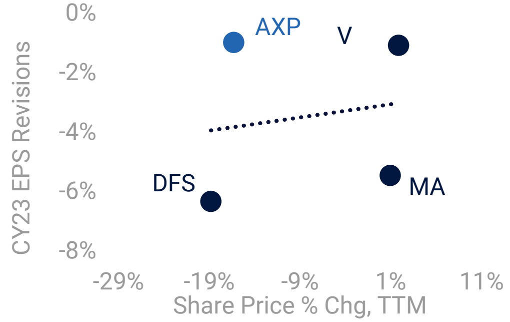


Sell-Side Ratings Distribution



Price Performance vs Est. Revisions

Est. Revisions vs Price Change, TTM



Source: Company filings; FactSet

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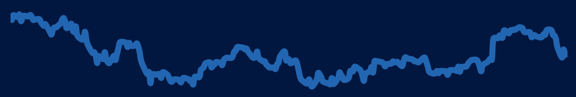
TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

4Q22 EARNINGS CALL RECAP

($ in billions, except where otherwise noted)

Takeaway: American Express shares finished +10% on the day of the 4Q22 release, driven by recent outperformance and the confidence displayed in management's long-term guidance. That said, **management did call out a modestly slowing SME segment as the only evidence the company had seen thus far of a weakening economic backdrop**.

Results Recap: While line-by-line performance against consensus expectations was mixed, **American Express's 4Q22 earnings featured strong underlying metrics and commentary that lend a high degree of confidence to performance in FY23 and beyond, despite the challenging macro-environment**. Total network volumes underperformed expectations by 2% at $413bn, while basic cards in force beat consensus by 1%. Total loan growth consensus by 1%, growing 22% YoY, as consumers continue to rebuild their loan balances. Net revenue modestly underperformed consensus expectations by 1% due to a 3% miss on discount revenue, which was partially offset by better performance in net card fees and net interest income of 3%/4%, respectively. Operating expenses were 2% higher than consensus expectations, primarily driven by scaling costs in customer engagement and benefits, as well as corporate compensation. Net income subsequently missed by 7% due to OpEx increases and negative mark-to-market adjustments in Amex Ventures investments of $234mm.

Guidance Recap: Despite a challenging macro picture for credit and spend volumes in 2023, **American Express published FY23 guidance substantially ahead of street expectations.** Management expects 15-17% revenue growth against pre-print consensus of 11.5%, and EPS of $11.00-$11.40 against pre-print consensus of $10.44.

Incremental From The Call:

- **Strong FY23 Guidance:** Management cited a range of reasons on the call for the expected strength, largely centered on **1) the premium nature of the product and customer base, 2) bifurcation of the economy insulating its premium customer base against a significant downturn, and 3) the diversification of the revenue stream across interchange, card fees and services, and interest income**. Other nuances to guidance worth calling out include operating leverage benefitting as marketing spend slows to historical levels, and rising interest rates providing for difficult YoY comps in 2023 compared to 2022 as deposit betas are expected to be more in line with historical levels (AXP is liability sensitive). Additionally, OpEx levels are expected to come in at roughly $14bn, provisioning costs should step up considerably in FY23 returning to historical levels, and net card fees are expected to be the fastest growing revenue line.
- **Continued Strong Credit Metrics:** American Express reported a net charge off rate for 4Q22 of 1.1%, a 30bps QoQ increase from the previous three quarters. While management noted that this increase and further inflation in the rate throughout FY23 are expected, net charge off rates are projected to stay below the pre-pandemic level of 2.3% for FY23. **These results are especially promising when considered in the context of the broader industry charge-off rate, which has seen our index (WFC, C, BAC, JPM) of large underwriting banks climb to 62% of pre-pandemic levels vs. American Express at 48%.** Furthermore, loan delinquencies remain well below pre-pandemic levels at 1.0% vs. 1.5% in 4Q19, and delinquencies for card member receivables sits just below pre-pandemic levels at 1.3% vs. 1.4% in 4Q19. **Though credit quality metrics will trend toward pre-pandemic levels over time, the company's premium cardmember base is likely to continue with stronger credit metrics relative to pre-pandemic levels in comparison to peers.**
- **Younger Demographic Push:** Millennials and Gen-Z continue to be the main driver of billed business growth, driving over 60% of new card acquisitions in the quarter and comprising 30% of consumer spending on AXP's network, now 12.5% of total spend, up from 10.6% in 4Q21. Noted on the call, this demographic segment is driven more by experiential rewards than older cohorts, meaning we're likely to see cardmember benefits expense increase on a per cardholder level as the younger cohort's share of volume increases.

4Q22 REPORTED VS. CONSENSUS

($ in billions)

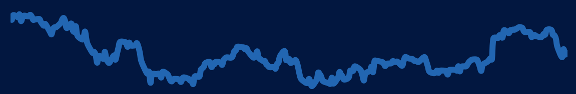
Line-Item	Reported	Consensus	Abs ▲	% ▲
Total Network Volumes	**$413**	**$421**	-$8.05	-2%
growth (%, yoy)	12%	14%		
Basic Cards in Force (mm)	**112**	**110**	1.11	1%
growth (%, yoy)	11%	10%		
Total Loans	**$108**	**$107**	$1.08	1%
growth (%, yoy)	22%	21%		
Discount Revenue	**$8.18**	**$8.40**	-$0.21	-3%
growth (%, yoy)	14%	17%		
Net Card Fees	**$1.63**	**$1.57**	$0.05	3%
growth (%, yoy)	21%	17%		
Service Fees and Other Revenue	**$1.18**	**$1.21**	-$0.03	-2%
growth (%, yoy)	-2%	0%		
Net Interest Income	**$2.76**	**$2.65**	$0.10	4%
growth (%, yoy)	31%	26%		
Net Revenue	**$14.2**	**$14.3**	-$0.10	-1%
growth (%, yoy)	17%	18%		
Provisions for Loan Losses (mm)	**$1.03**	**$1.04**	-$0.01	-1%
growth (%, yoy)	1838%	1853%		
Adjusted Net Revenue	**$13.1**	**$13.2**	-$0.09	-1%
growth (%, yoy)	9%	9%		
Operating Expenses	**$11.3**	**$11.0**	$0.27	-2%
growth (%, yoy)	15%	12%		
Pretax Income	**$1.87**	**$2.25**	-$0.38	-17%
Pretax Margin (%)	13%	16%		
Net Income	**$1.57**	**$1.69**	-$0.12	-7%
Net Income Margin (%)	11%	12%		
Diluted EPS	**$2.07**	**$2.23**	-$0.16	-7%
growth (%, yoy)	-5%	2%		

FY23 Guidance	New	Cons.	Mid +/-
Adj. Net Revenue	**$60.8 - $61.8**	**$58.8**	4%
growth (%, yoy)	*15% - 17%*	*11%*	
EPS	**$11.00 - $11.40**	**$10.4**	8%
growth (%, yoy)	*12% - 16%*	*6%*	

Source: Company filings; FactSet; Visible Alpha

AMERICAN EXPRESS

TTM Price Performance



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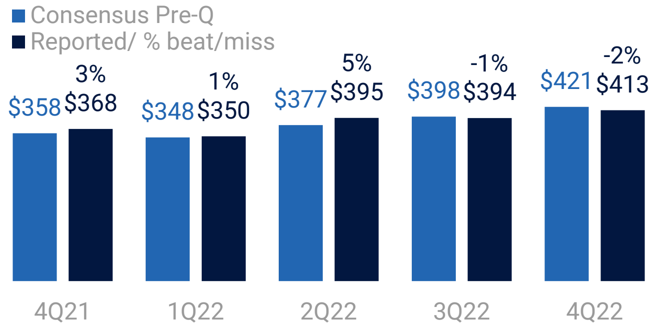
FINANCIAL TECHNOLOGY PARTNERS

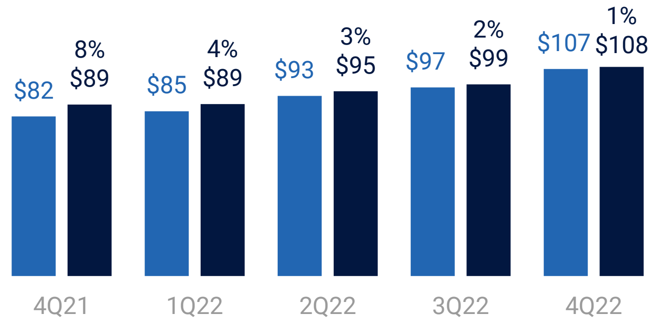
($ in billions, except where otherwise noted)

REPORTED VS. CONSENSUS

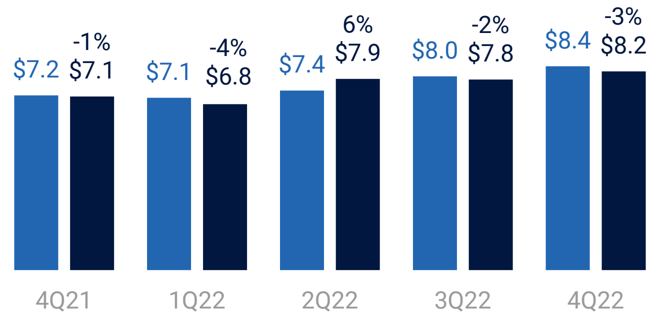
Total Network Volume



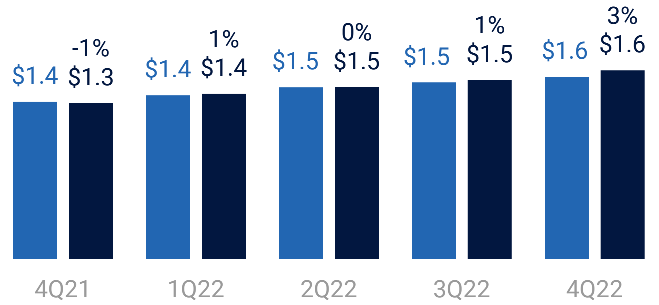
Total Loans



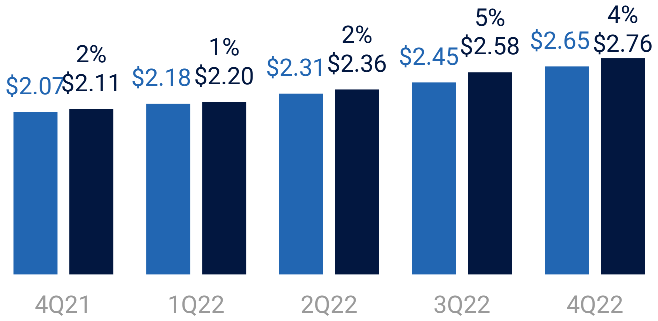
Discount Revenue



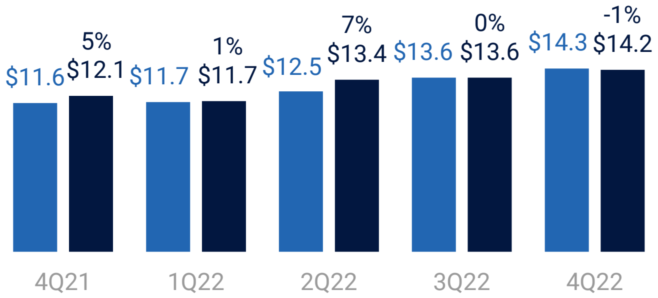
Net Card Fees



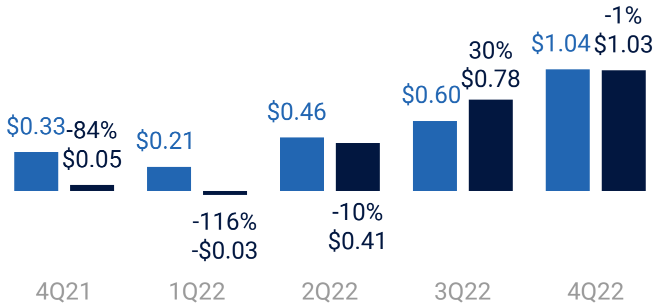
Net Interest Income



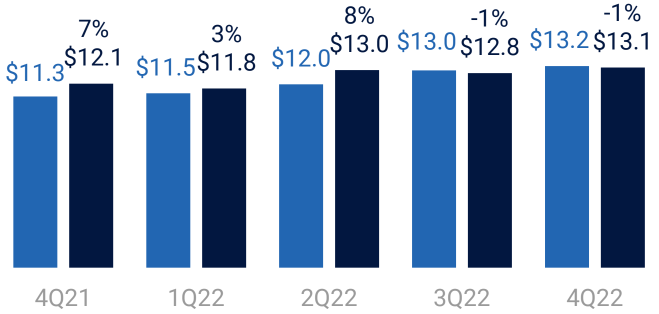
Total Revenues Less Interest Expense



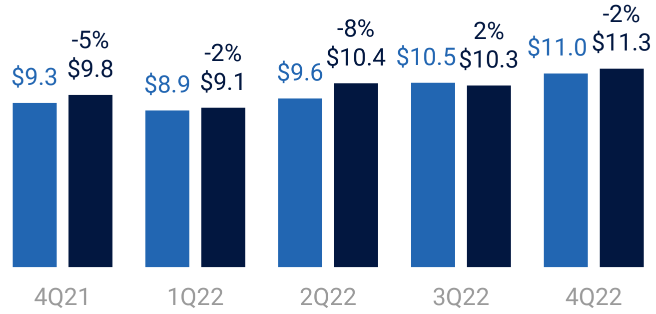
Total Provisions



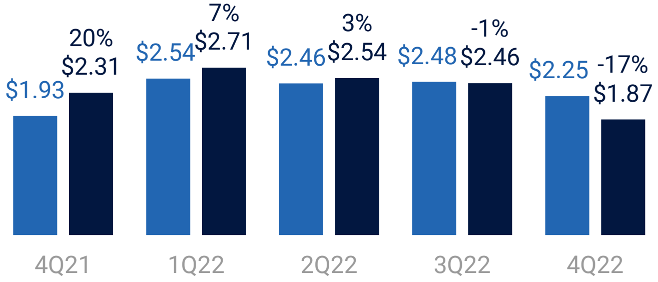
Net Revenue Less Provision Expense



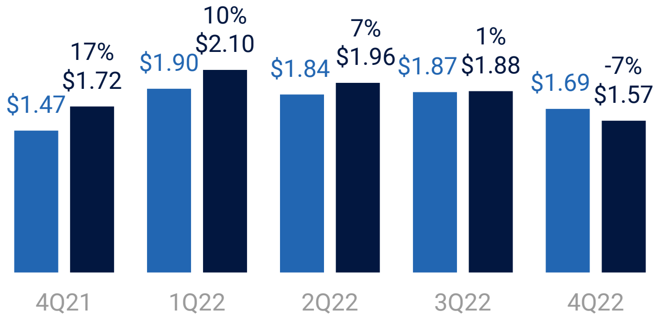
Total OpEx



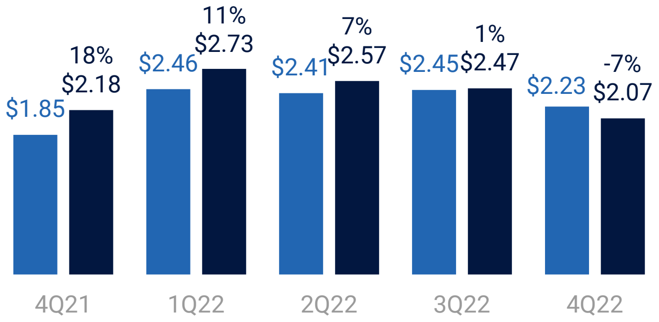
Pre-Tax Income



Net Income



Diluted EPS



Source: Company filings; FactSet; Visible Alpha

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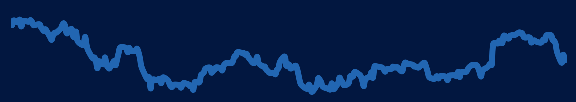
TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

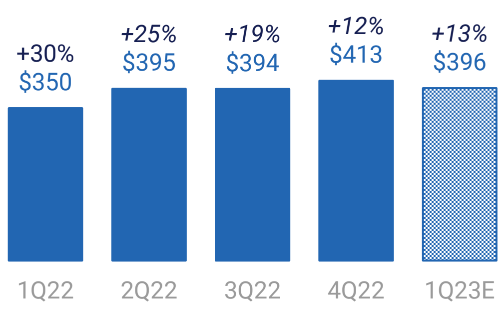
($ in billions)

1Q23 CONSENSUS ESTIMATE RANGES

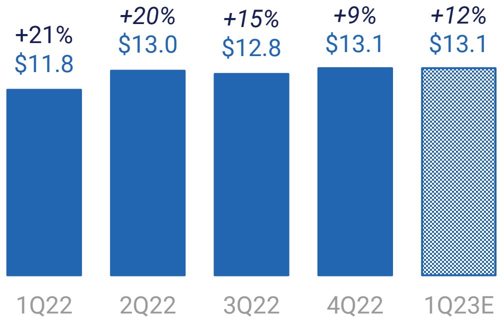
	Low	Average	High
Total Network Volume	**$389**	**$396**	**$406**
growth (%, yoy)	*11%*	*13%*	*16%*
Basic Cards in Force (mm)	**108**	**113**	**114**
growth (%, yoy)	*5%*	*9%*	*11%*
Total Loans	**$100**	**$106**	**$114**
growth (%, yoy)	*12%*	*20%*	*28%*
Discount Revenue	**$7.72**	**$7.91**	**$8.27**
growth (%, yoy)	*13%*	*16%*	*21%*
Net Card Fees	**$1.67**	**$1.70**	**$1.74**
growth (%, yoy)	*17%*	*20%*	*22%*
Service Fees and Other Revenue	**$1.04**	**$1.18**	**$1.36**
growth (%, yoy)	*15%*	*31%*	*50%*
Processed Revenue	**$399**	**$422**	**$521**
growth (%, yoy)	*7%*	*14%*	*40%*
Net Interest Income	**$2.65**	**$2.80**	**$3.11**
growth (%, yoy)	*20%*	*27%*	*41%*
Net Revenue	**$13.7**	**$14.0**	**$14.4**
growth (%, yoy)	*17%*	*19%*	*23%*
Provisions for Loan Losses (mm)	**$527**	**$884**	**$1,234**
growth (%, yoy)	N/A	N/A	N/A
Adjusted Net Revenue	**$13.2**	**$13.1**	**$13.2**
growth (%, yoy)	*12%*	*12%*	*12%*
Operating Expenses	**$10.2**	**$10.5**	**$10.9**
growth (%, yoy)	*12%*	*16%*	*21%*
Pretax Income	**$2.11**	**$2.65**	**$3.01**
Pretax Margin (%)	*15%*	*19%*	*21%*
Net Income	**$1.63**	**$2.02**	**$2.32**
Net Income Margin (%)	*12%*	*14%*	*16%*
Diluted EPS	**$2.16**	**$2.68**	**$3.08**
growth (%, yoy)	*-21%*	*-2%*	*13%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

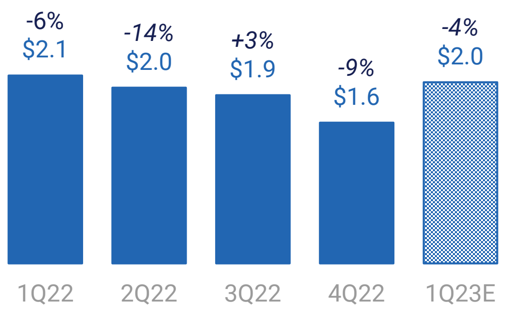
Total Network Volume/YoY Growth



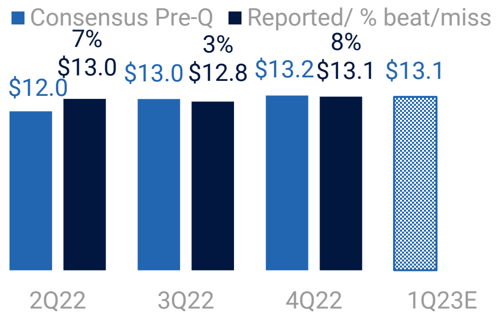
Revenue After Provisions/YoY Growth



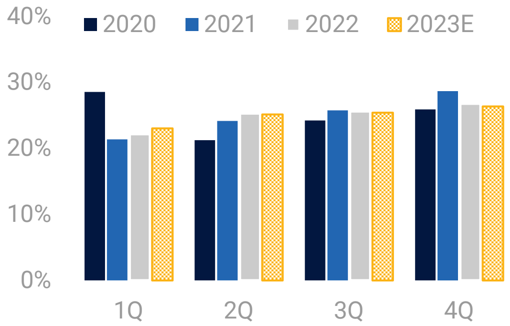
Net Income/YoY Growth



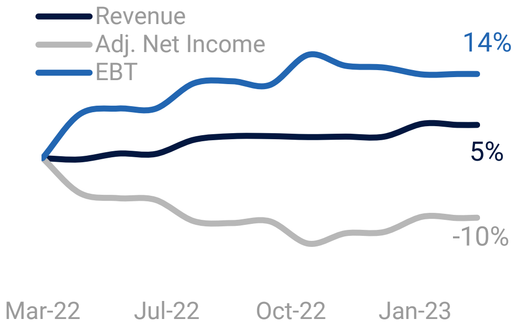
Net Revenue Cons. vs. Reported



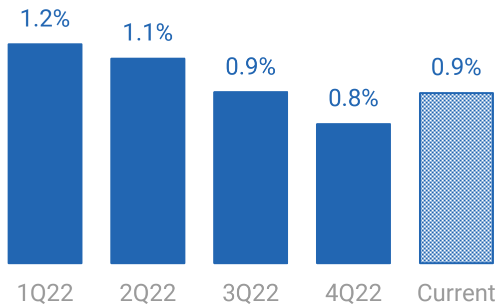
Revenue Seasonality



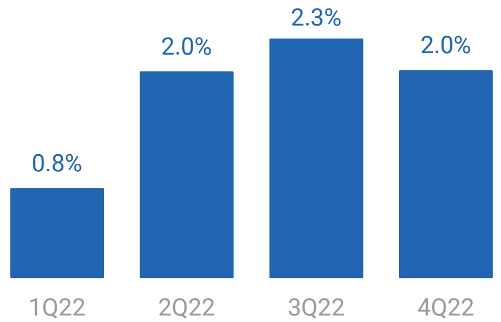
1Q23 Cons. Revisions



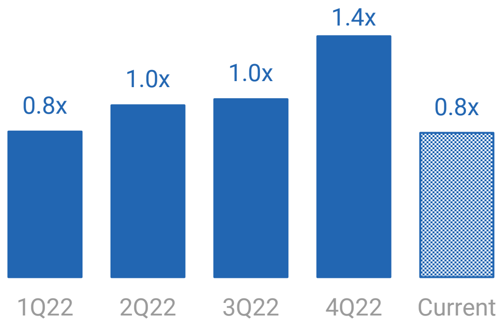
Short Interest (Pre-Print)



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio[1]



FT Partners | Equity Research

Source: Company filings; FactSet

1) Put/Call Ratio over 7-days leading into earnings

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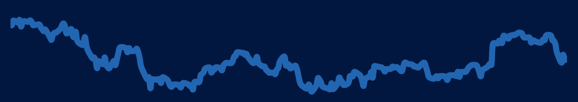
TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

1Q23 EARNINGS OUTLOOK

American Express is projected to report 1Q23 earnings on April 21st, 2023.

What's In Focus:

Against a weakening macro backdrop that peers have been susceptible to, American Express turned in strong 4Q22 earnings results and guided above street estimates for net revenue and EPS. Credit performance returned favorable results with rate of increase towards pre-COVID levels in charge-offs and provisions lagging peers, which management attributed to the company's premium consumer base benefitting more from the post-COVID economic backdrop. As a result, limiting increases in charge-offs and delinquencies beyond peers will remain core considerations in FY23. Furthermore, management identified cost-management as a priority for FY23 to drive operating leverage following FY22's step-function increase in expenses. Given that consensus currently expects EPS of $11.11 in FY23 (on the lower end of management's $11.00-$11.40 range), early signs of strong operating expense controls in 1Q23 will be received well, likely leading to materially higher FY23 EPS estimates, all else being equal.

Estimates:

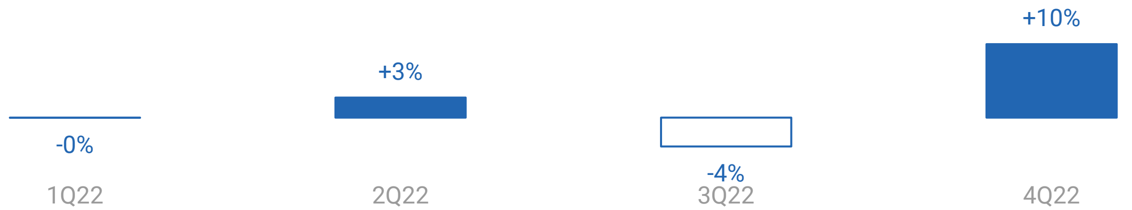
KPIs: Since 4Q22 results, 1Q23 consensus for total network volumes have stayed unchanged at $396bn (13% YoY), while FY estimates have increased 1% to $1.74tn (12% YoY). Estimates for basic cards in force have increased marginally from 112mm to 113mm (9% YoY) for 1Q23, and from 116mm to 117mm for FY23 (5% YoY). Estimates revisions for loan growth were more meaningful, seeing 1Q23 consensus increase 3.5% to $106bn (20% YoY). January and February credit data has been in line with management commentary and show no signs of stress or deviation from recent trends.

Revenue: Similar to network volumes, 1Q23 consensus for discount revenue remained unchanged at $7.9bn (16% YoY) and FY23 estimates were increased 1% to $34.8bn (13% YoY). Otherwise, 1Q23 consensus for servicing fees, net interest income, and net card fees were increased 4%, 7%, and 4% respectively, based on 4Q22 call commentary for new account acquisitions and credit performance. FY23 estimates for the same three revenue streams increased marginally higher than 1Q23 consensus, rising 5%, 8% and 5%, respectively. 1Q23 net revenue consensus increased 2% to $14.0bn (20% YoY) and FY23 is up 3% to $60.7bn (15% YoY).

Expenses: In accordance with management commentary on 4Q22's earnings call regarding credit quality, 1Q23 consensus for provisioning increased just slightly more than loan growth estimates, up 4% to $883mm. More importantly, FY23 estimates for provisions have only increased 1%, implying consensus has factored in expectations for a healthy credit book in FY23. Consensus estimates for 1Q23 non-interest expenses increased 2%, roughly in-line with estimates for revenue growth in the quarter.

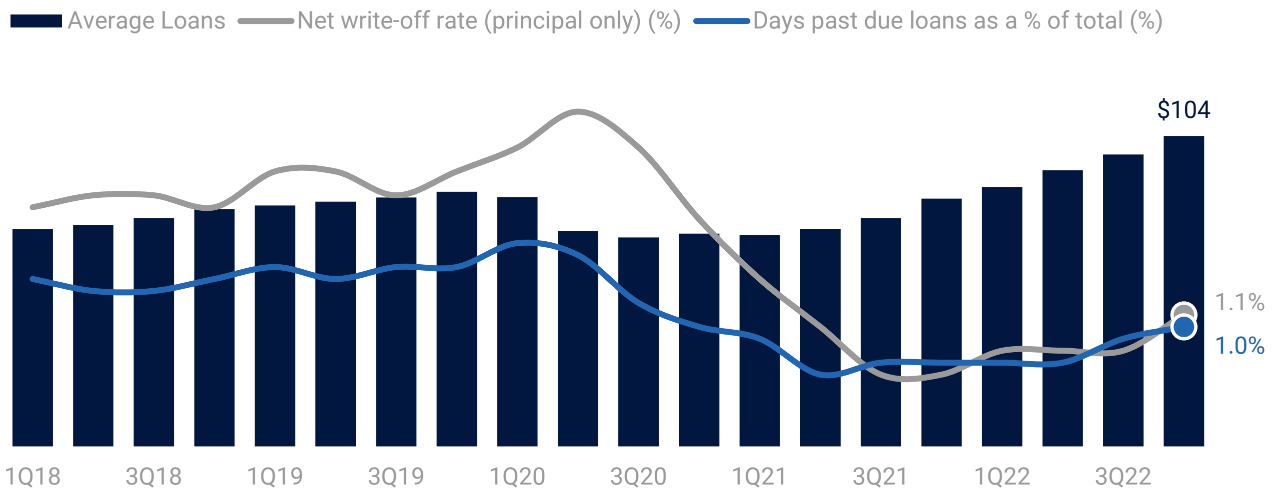
Earnings: While consensus estimates for 1Q23 earnings have increased 1% for EBT, net income, and EPS, FY23 consensus has risen 5%, 6%, and 7%, respectively, largely owing to reductions in expected provisions for loan losses.

POST-RESULTS ONE-DAY ALPHA VS. SP500



1Q22	2Q22	3Q22	4Q22
• 11% EPS beat, primarily due to lower provision and tax rate • T&E spend exceeded pre-pandemic levels in April for the first time • FY guidance maintained	• 7% net revenue beat, driven by non-interest revenue • Reaffirms EPS guidance, raises revenue growth guidance to 23-25% (from 18-20%)	• Results relatively in line with consensus; net interest income slightly exceeded expectations • Raised FY22 EPS guide, maintained revenue growth guide	• 3% miss on discount revenue; 1% miss on net revenue less provisions • FY23 guidance surpassed consensus expectations, 4%-6% ahead on revenue growth and 6%-10% ahead on EPS growth

LOAN PORTFOLIO



Source: Company filings; FactSet

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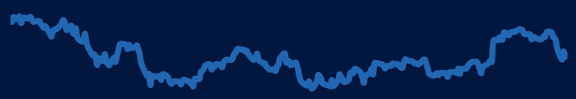
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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

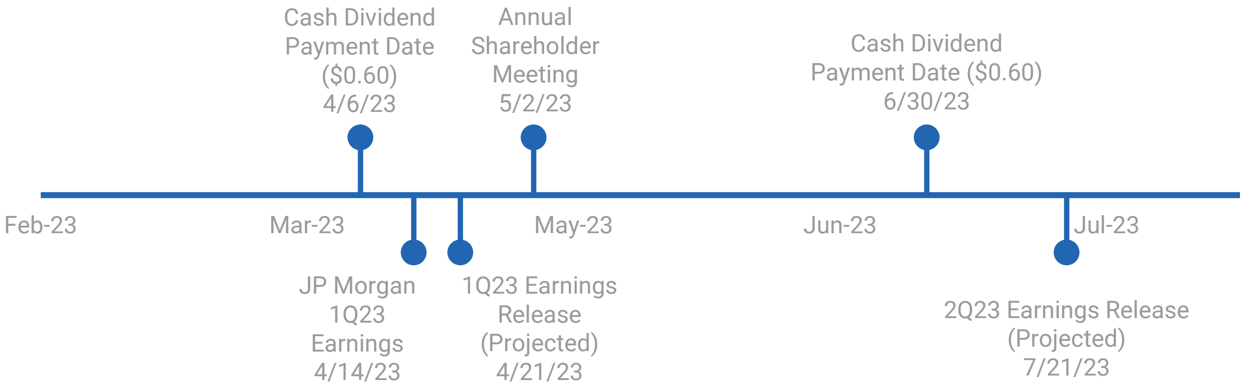
Macro:

1) What is management's view of the health of the American consumer?
2) Management mentioned on the 4Q22 call how the bifurcation in the American economy with regards to consumer strength is providing support to the company's loan portfolio. How does management see this bifurcation evolving over the next three years?
3) Looking into FY23, to what degree is FX expected to impact the top/bottom-line?
4) What impact is the increased rate environment having on all aspects of the business, not just NII?

American Express specific:

5) Coming out of the pandemic a common line was that consumer travel would rebound quickly and business less so. Regarding AXP's T&E portfolio, to what degree has this recovery already taken place and how much incremental is built into guidance?
6) Management recently reorganized the international side of the business. What's the strategy behind this and what are the expected results and timeline to deliver?
7) Does management have any thoughts on the current regulatory environment? Are there any incremental thoughts on potential changes to the Durbin Amendment?
8) American Express products have clearly resonated so far with Millennials and Gen Z. What has driven these strong adoption rates and how does management view the product offerings evolving to further serve these cohorts? How does the company view the group's growing card share driving net card fees over the long term?
9) In 4Q22, AXP posted industry-leading levels of loan growth. Please help us understand the decision to accelerate lending potentially late in the cycle?
10) What does the capital allocation strategy look like in the current environment? Is there a preference between internal investments, buybacks, dividends or M&A?
11) How should investors expect American Express depository products to evolve, especially with the introduction of a debit card?

POTENTIAL CATALYSTS


Cash Dividend Payment Date ($0.60) 4/6/23

Annual Shareholder Meeting 5/2/23

Cash Dividend Payment Date ($0.60) 6/30/23

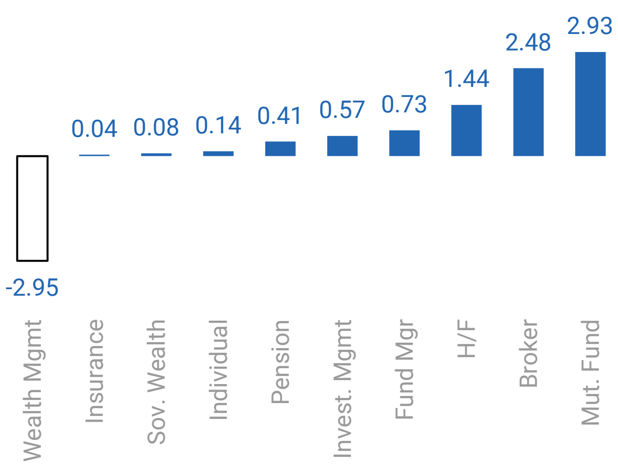
JP Morgan 1Q23 Earnings 4/14/23

1Q23 Earnings Release (Projected) 4/21/23

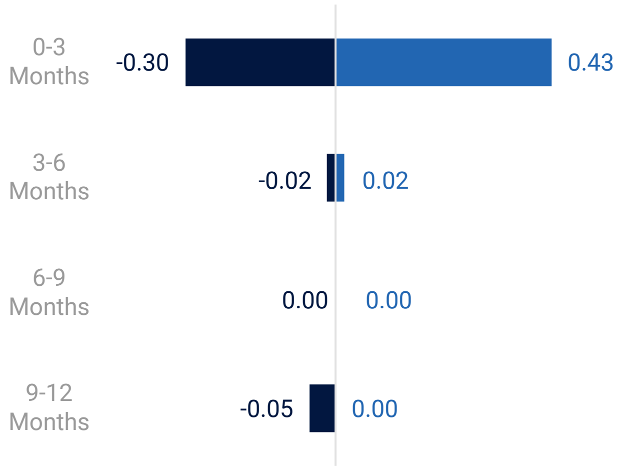
2Q23 Earnings Release (Projected) 7/21/23

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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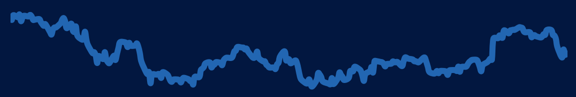

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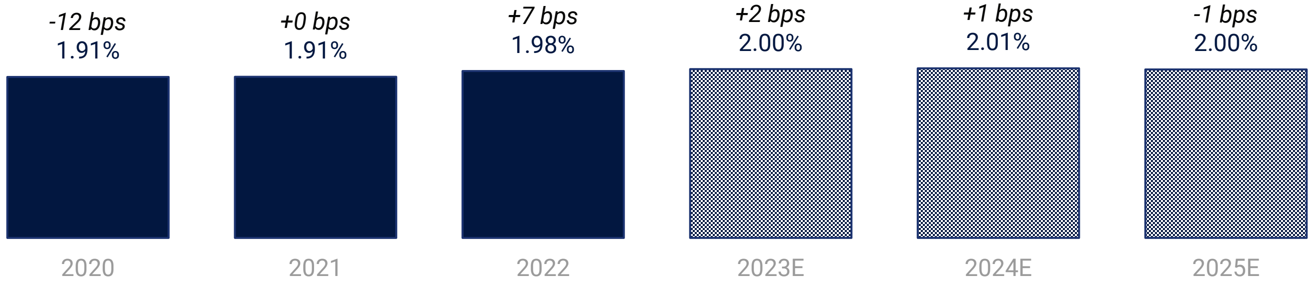
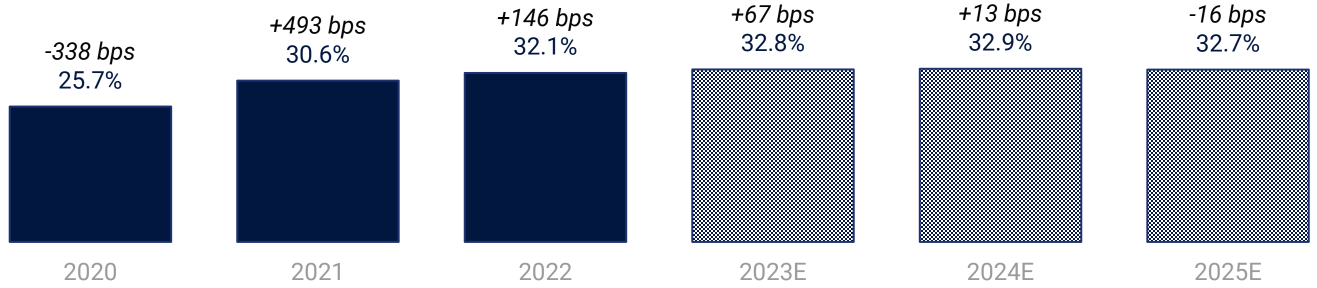
FINANCIAL TECHNOLOGY PARTNERS

COMPANY RATIOS/MARGIN ANALYSIS

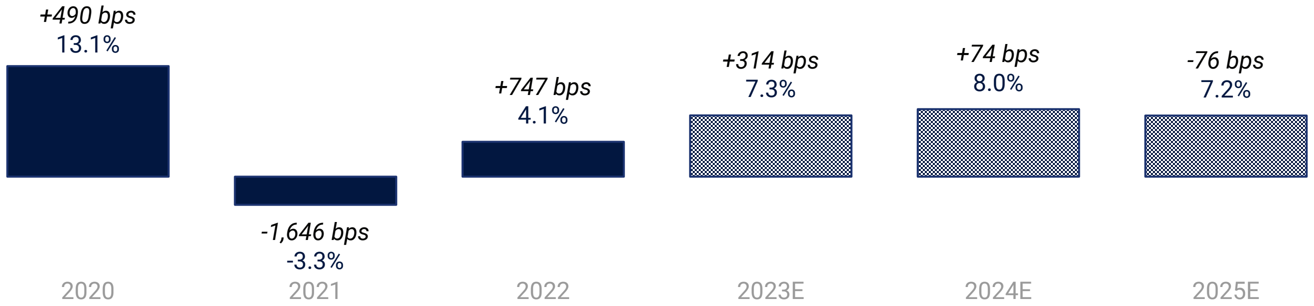
Discount Revenue Yield (% of Total Network Volumes)



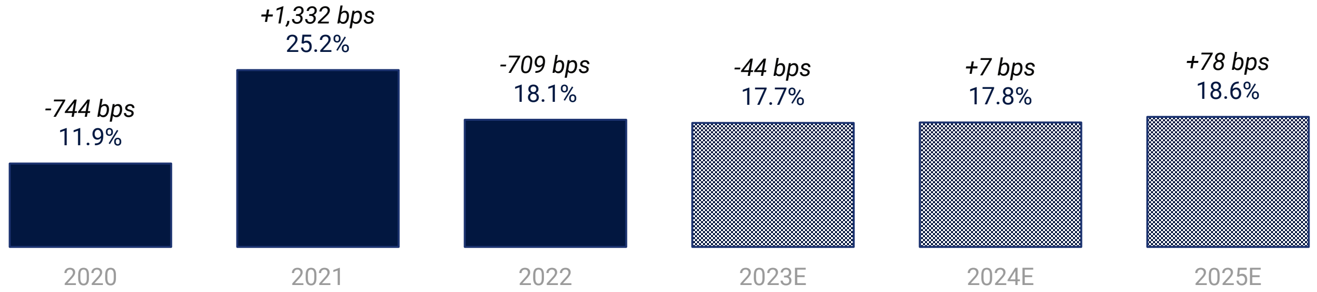
Card Member Services and Rewards (% of Net Revenue)



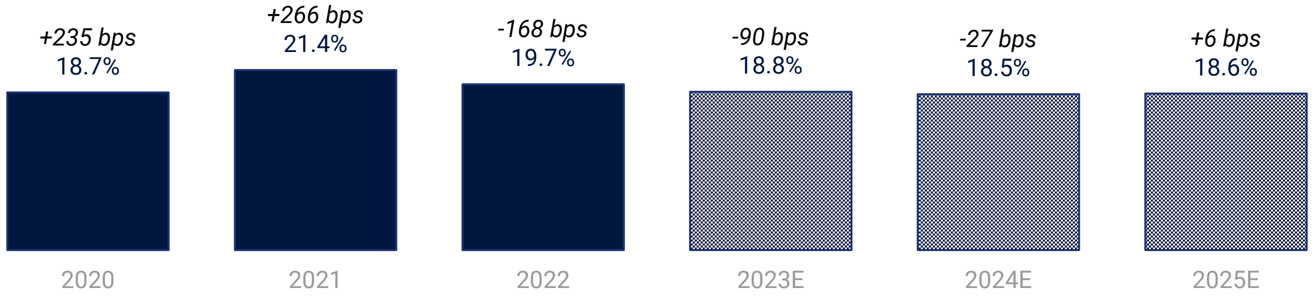
Total Provisions for Losses (% of Net Revenue)



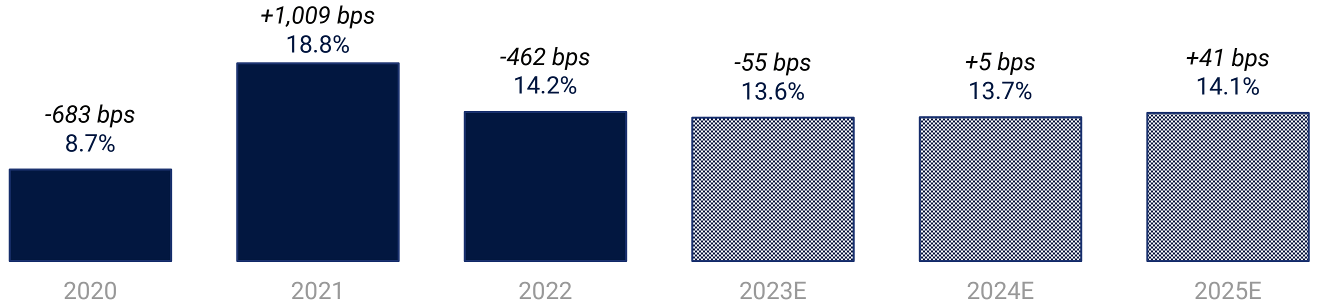
Pre-Tax Income Margin (% of Net Revenue)



Marketing and Business Development (% of Net Revenue)



Net Income Margin (% of Net Revenue)



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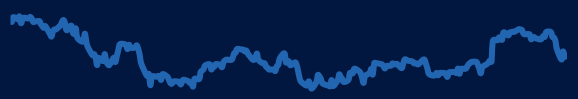

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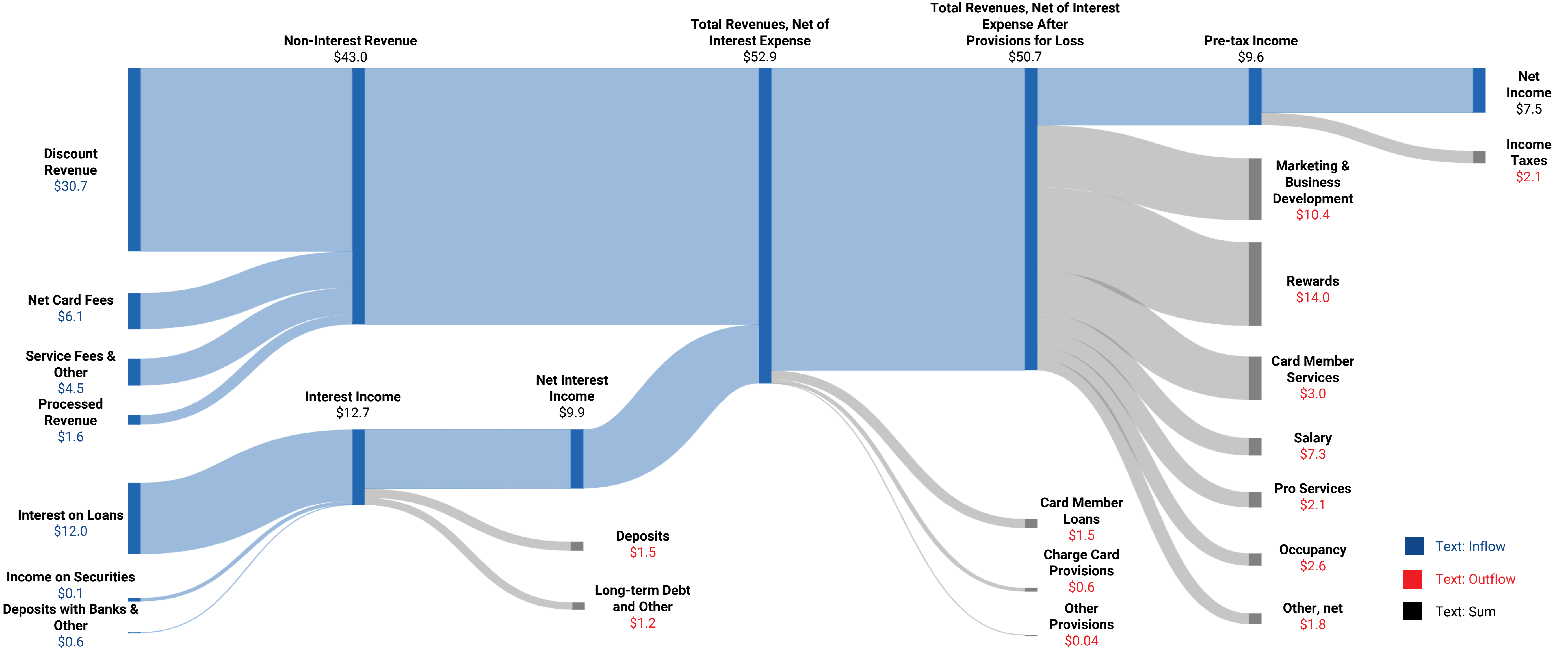
P&L VISUALIZATION – TTM



Source: Company filings; FactSet

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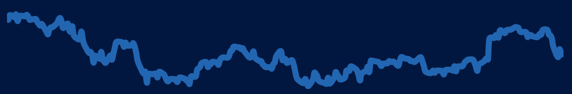

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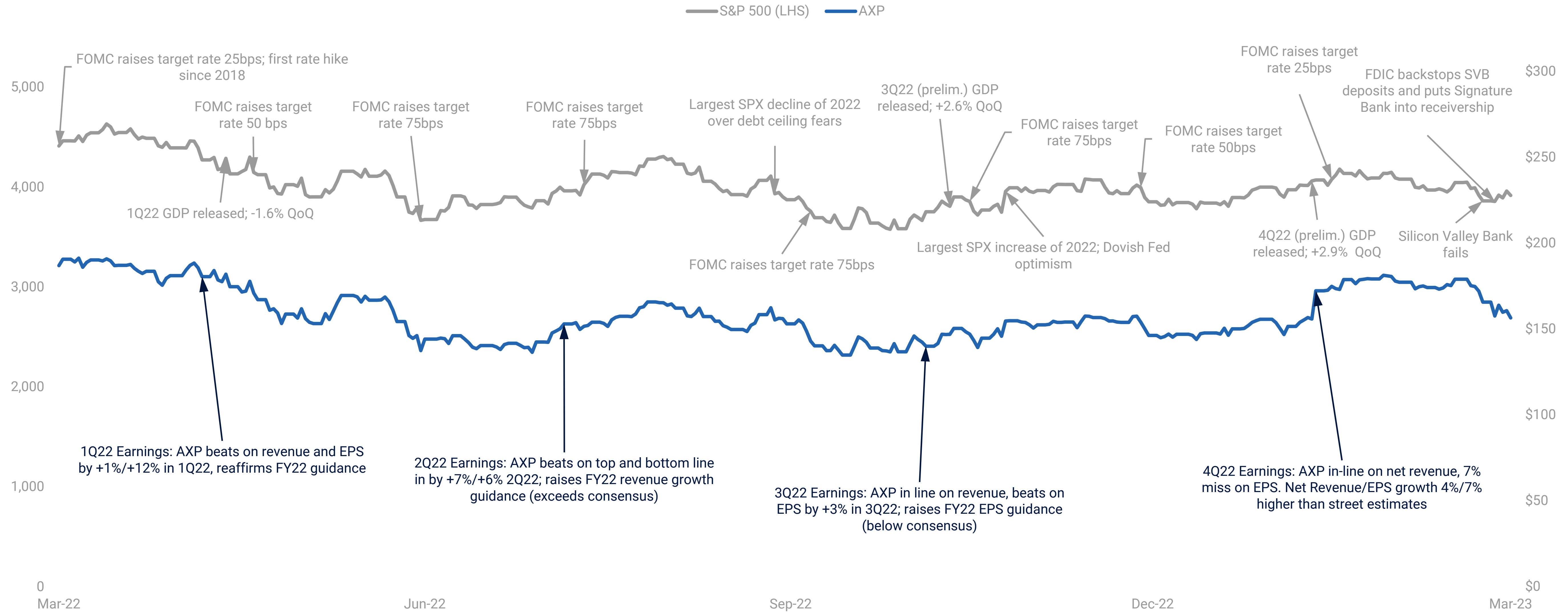
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

FOMC raises target rate 50 bps

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

FOMC raises target rate 25bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

Silicon Valley Bank fails

1Q22 Earnings: AXP beats on revenue and EPS by +1%/+12% in 1Q22, reaffirms FY22 guidance

2Q22 Earnings: AXP beats on top and bottom line in by +7%/+6% 2Q22; raises FY22 revenue growth guidance (exceeds consensus)

3Q22 Earnings: AXP in line on revenue, beats on EPS by +3% in 3Q22; raises FY22 EPS guidance (below consensus)

4Q22 Earnings: AXP in-line on net revenue, 7% miss on EPS. Net Revenue/EPS growth 4%/7% higher than street estimates

Source: Company filings; FactSet

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FT Partners Equity Research

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AVIDXCHANGE PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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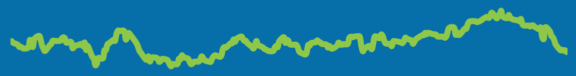
AVDX TTM Price Performance



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52-Wk Range:	$5.86 - $11.86	**Avg. Daily Vol (mm):**	1.7

FINANCIAL TECHNOLOGY PARTNERS

COMPANY OVERVIEW

AvidXchange provides accounts payable automation software and payment solutions for middle-market businesses and their suppliers.

AvidXchange aims to transform how businesses receive, manage and pay their bills. Most businesses in the U.S. continue to operate paper-intensive back offices, particularly in their AP workflows, which tend to be slow, expensive, and vulnerable to error and fraud. While solutions have been developed to address this friction, they are predominantly suited for small businesses (Bill) and larger enterprises (Coupa, SAP).

AvidXchange offers a faster and cheaper solution than legacy processes by **digitizing the entire AP process and providing software to manage the workflow from start to finish.** The platform is also purpose-built for middle-market businesses, which often have complex AP workflows and a high invoice throughput.

VERTICALS

- Real Estate
- Media
- Education
- Healthcare
- HOA
- Social Services
- Construction
- Financial Services

KEY DEBATES

1. **Macro Uncertainty:** Commentary on AvidXchange's 4Q22 call was cautious, citing a moderation in spend across verticals due to the macro-environment weighing on mid-market businesses. While AvidXchange is likely more insulated from these effects than down market peers, the outlook has weighed on the stock. However, there are several levers within AvidXchange that could drive upside to expectations, including monetization opportunities and better expense management.

2. **Monetization:** AvidXchange has looked to increase the percentage of transactions that it monetizes via payments. Most recently, management stated it is monetizing ~30% of transactions through VCC and ~10% through APD. These transactions, particularly those using VCC provide a significant unit economic uplift. However, the monetization rate has remained mostly unchanged as the rate of customers/new transactions has outpaced incremental monetization. AvidXchange's ability to increase its monetization rate is a key area of potential upside as the company continues to scale its buyer base.

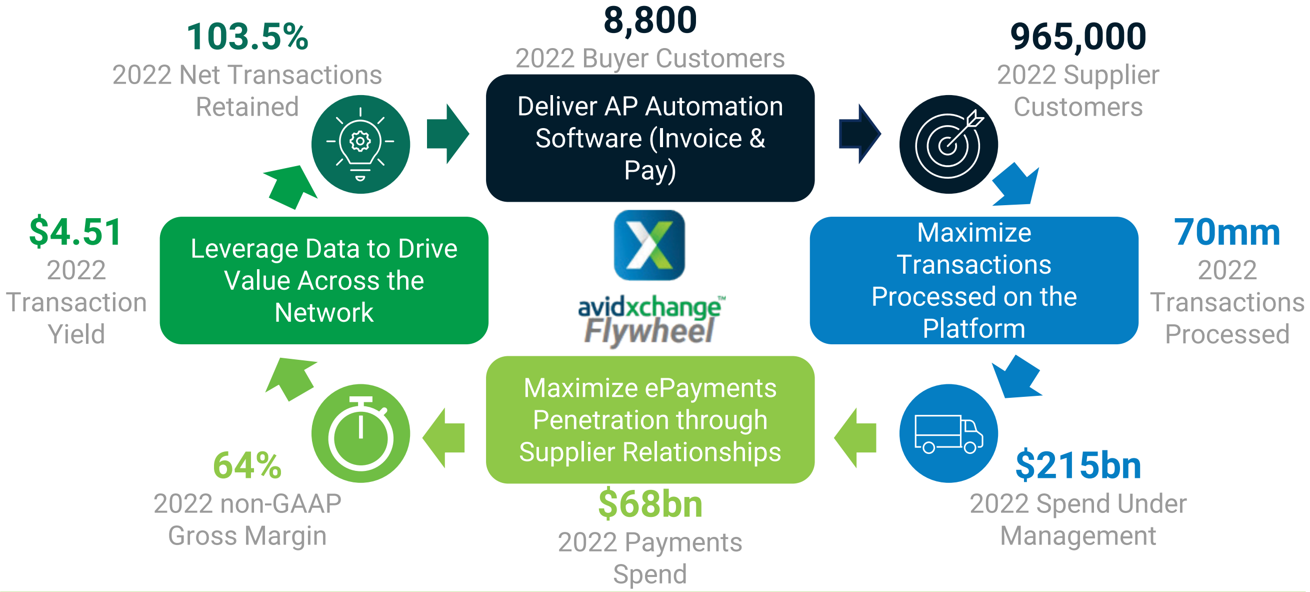
3. **Competition:** Success in the AP/AR industry is driven primarily by 1) network scale and 2) market positioning. AP/AR solutions are inherently very sticky with switching costs that tend to disincentivize changing providers. There remains a long runway of middle-market customers for AvidXchange to win, even as competition grows. AvidXchange will likely prioritize scale (while being mindful of the expense base) on both the buyer and seller sides of the business with the market still relatively nascent, as this should result in improved unit economics through cross-selling efforts.

REVENUE MODEL

AvidXchange revenues are derived from multiple sources, predominantly software revenue from buyers and revenue from payments made to suppliers. AvidXchange has three different classifications of revenue:

- **Software (31% of TTM revenue):** Software revenue is driven from buyers primarily through 1) fees calculated based on the number of invoices and payment transactions processed, and 2) recurring maintenance and SaaS fees. Software revenue is typically billed to and paid by buyers monthly. Contracts are generally multi-year, with revenue recognized over the contract term.
- **Payment (68% of TTM revenue):** Payment revenue is generated from the payments buyers make to their suppliers through 1) offering electronic payment solutions to suppliers, 2) fees charged to suppliers from the invoice factoring product "Invoice Accelerator", and 3) interest on funds held for buyers pending disbursement. Electronic payment solutions include virtual credit cards and AvidPay Direct (real-time ACH). Interest income represents interest received from buyer deposits held during the payment clearing process.
- **Services (1% of TTM revenue):** Services revenue includes fees charged for processing buyers' change-in-service requests.

MONETIZATION FLYWHEEL



103.5%
2022 Net Transactions Retained

8,800
2022 Buyer Customers

965,000
2022 Supplier Customers

Deliver AP Automation Software (Invoice & Pay)

Maximize Transactions Processed on the Platform

70mm
2022 Transactions Processed

$215bn
2022 Spend Under Management

Maximize ePayments Penetration through Supplier Relationships

$68bn
2022 Payments Spend

64%
2022 non-GAAP Gross Margin

Leverage Data to Drive Value Across the Network

$4.51
2022 Transaction Yield

avidxchange Flywheel

Source: Company filings; FactSet

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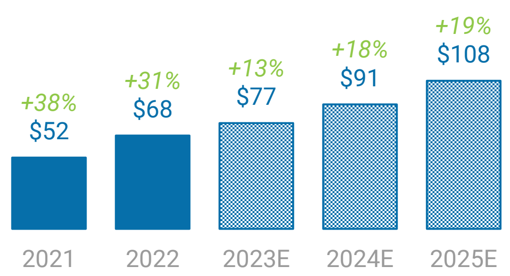
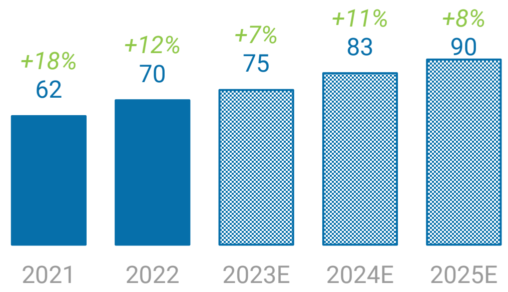
($ in millions, except transaction yield)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

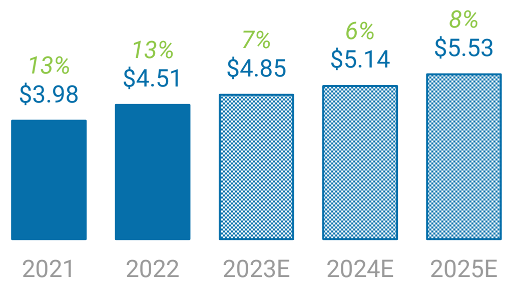
TPV ($ in billions)



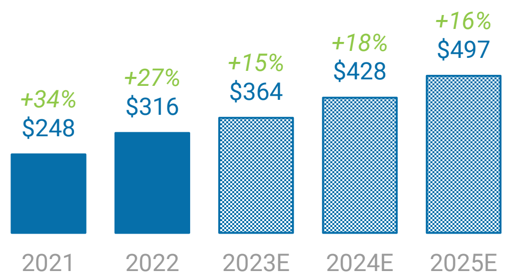
Transactions Processed (mm)



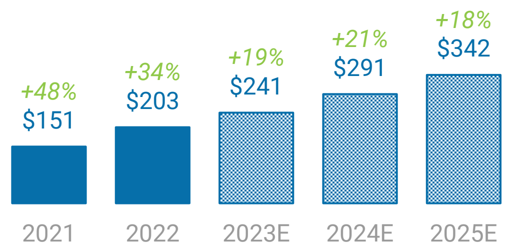
Transaction Yield



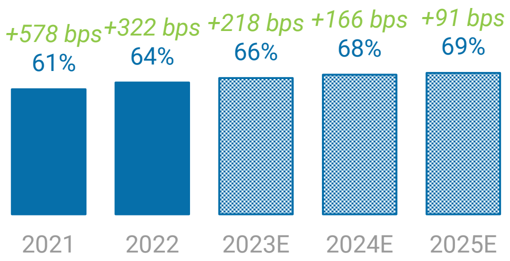
Revenue



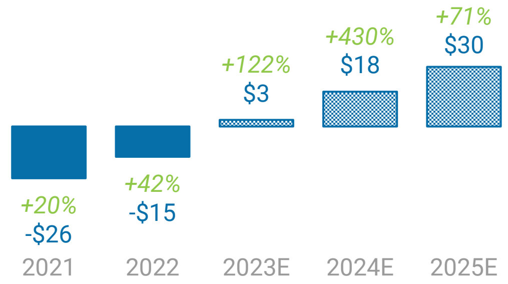
Adjusted Gross Profit



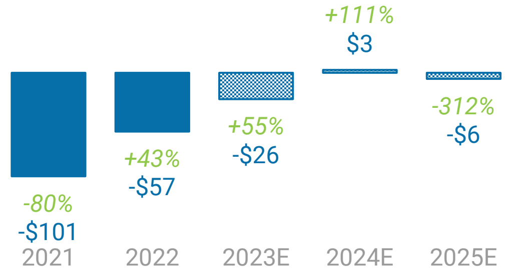
Adjusted Gross Margin



Adjusted EBITDA

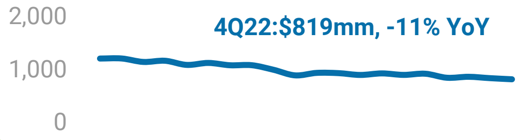


Free Cash Flow



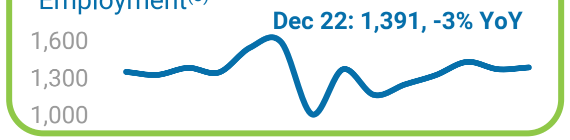
INDUSTRY KPIs

Commercial Check Vol.[2] *(1Q18-4Q22)*



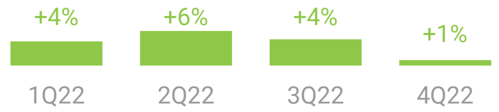
Middle Market Revenue[3] *(1Q18-4Q22)*

Middle Market Employment[3] *(Mar 18-Dec 22)*

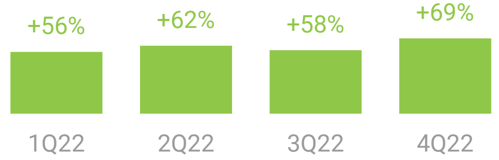


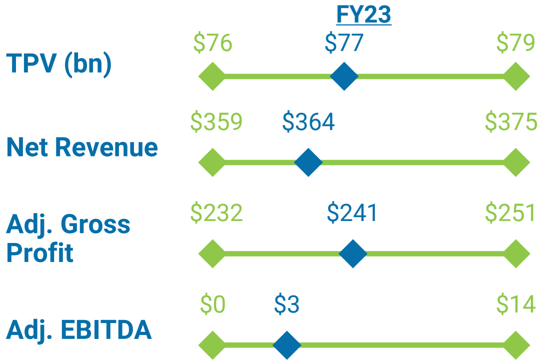
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[4]

Revenue



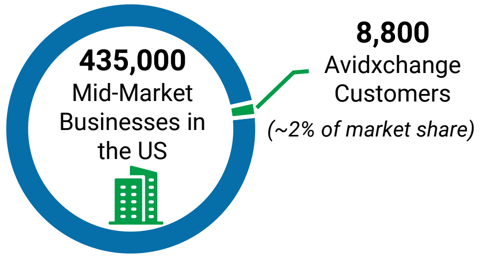
Adjusted EBITDA



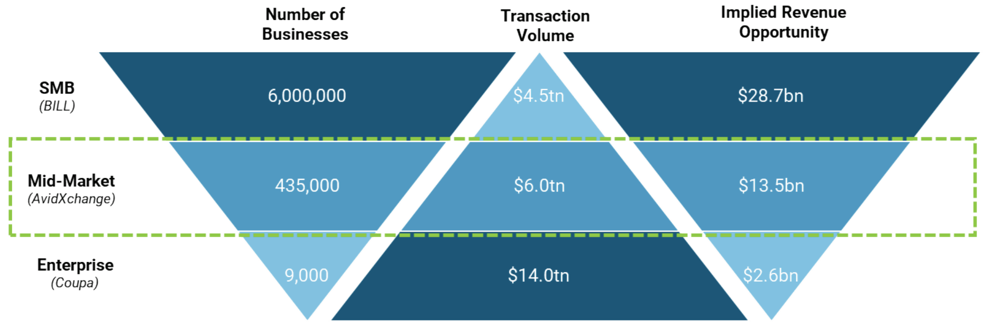


TOTAL ADDRESSABLE MARKET

Market Share By Customers



Accounts Payable/Accounts Receivable Market



FT Partners | Equity Research

Source: Company filings
1) FactSet
2) FRED Commercial Checks Collected through the Federal Reserve – Quarterly Data
3) National Center for the Middle Market
4) Visible Alpha

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AVDX TTM Price Performance

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VALUATION CONSIDERATIONS

For many newer FinTech companies that have yet to turn profitable, EV/GP is used for relative valuation to account for costs associated with the core operations of the business (such as cost of scanning invoices, personnel costs related to supplier/buyer onboarding for AvidXchange) while also providing a relatively standardized valuation approach across peers. As of March 20th, AvidXchange trades at ~5x NTM EV/GP multiple, below its average since IPO of 9.5x. It also trades at a 1.6x premium to the NASDAQ vs. its average since IPO of a 5.7x. However, these averages are heavily skewed due to the high multiples seen during late 2021. **If AvidXchange were to trade in-line with its peer group, after adjusting for gross profit growth, it would imply a 12-month forward price of $12.88 (71% upside). If AvidXchange is able to deliver on its longer-term revenue growth and monetization targets it could be one of the more structurally underappreciated assets in the space**, capable of driving significant operating leverage over the long-term. However, near-term concerns over the scalability of the model remain top of investors' minds.

DCF Valuation:

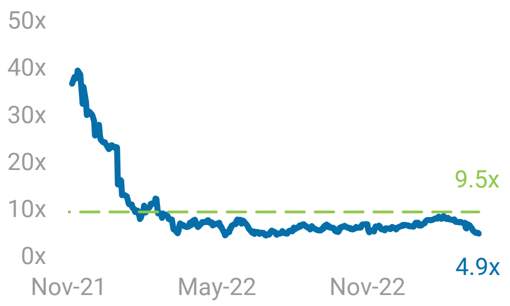
Scenario 1 – Current Price ($7.54, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of 15%/18%/18% in FY23/FY24/FY25 before gradually decelerating and reaching the terminal growth rate. We note this revenue growth is below managements longer-term targets for ~20% revenue growth. Operating margins are also expected to be negative until 2024 before reaching breakeven in 2025. However, the DCF does imply terminal operating margins of ~45%+. Were shares of AvidXchange to remain at the current price in 12-month, it would imply a 4.2x EV/GP multiple (based on current STM gross profit of $281mm).

Scenario 2 – Lower Transaction Monetization ($6.44, 15% downside): Management most recently provided monetized transaction updates in March 2023, citing 40% of transactions were monetized(1) relative to its long-term target of monetizing 70% of transactions. This scenario assumes that while AvidXchange continues to grow spend under management, the percentage of monetized remains flat as a percentage of transactions. This is reflected in the model by holding total transaction yield flat with 2022 levels. As a result, both top-line revenue and operating margins are impacted. This scenario points to a 12-month price of $6.44 (15% downside), which based on current STM consensus gross profit implies a 3.4x NTM EV/GP in 12-months.

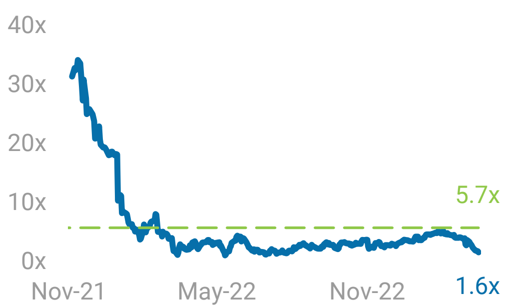
Scenario 3 – Higher Transaction Monetization ($12.26, 63% upside): This scenario assumes that transaction monetization reaches 50% by the end of FY24, which is reflected in the DCF by increasing both transaction yield and operating margins. This DCF also calls for revenue growth to reaccelerate to 20%+ in FY24/FY25 before gradually decreasing to the terminal growth rate. This scenario points to a 12-month price of $12.26 (63% upside), which based on current STM consensus gross profit implies a 7.6x NTM EV/GP multiple in 12-months.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

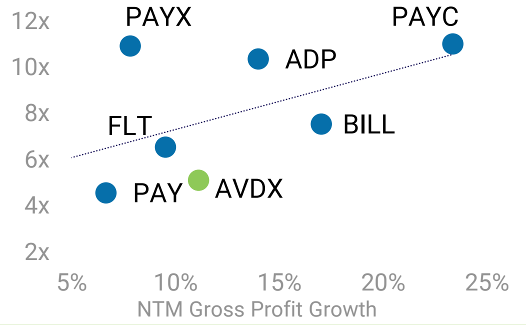
NTM EV/GP



NTM EV/GP Premium vs. NASDAQ(2)



Peer Avg. NTM EV/GP vs. GP Growth

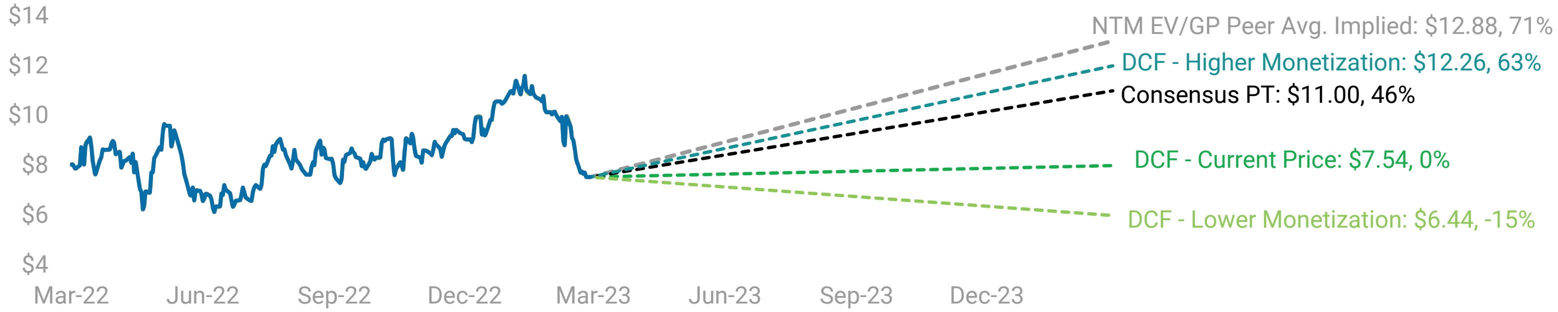


DCF Assumptions(3)

10-Yr RFR	**3.6%**
Cost of Equity	**14.8%**
Cost of Debt	**6.8%**
WACC	**13.9%**
Beta	**1.62**
DCF FCF Terminal Gowth Rates	**3.0%**
SBC Terminal Growth Rates	**1.0%**
Equity Value Reduction from Present + Future SBC	**$303**

TTM Peer Group Price Performance

Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) The percent of payment transactions being paid through VCC/APD (relative to sum of Check/VCC/APD)
2) AVDX EV/NTM Gross Profit vs. NASDAQ EV/S
3) SBC in millions

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FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) monetization of transactions and 2) AvidXchange's ability to manage its expense base. While there are other drivers of AvidXchange's performance (new vertical expansion, M&A, etc.), these represent the most likely area(s) of upside/downside relative to consensus over the next 12-months.

Consensus Case:

The average consensus price target for AvidXchange is $11.00. If AvidXchange were to trade at this price in 12-months it would imply a 6.7x NTM EV/GP multiple based on consensus STM gross profit estimates of $281mm. This 6.7x multiple is 2.8x below AvidXchange's average NTM EV/GP multiple of since its IPO. The consensus price target implies 42% upside relative to the current share price.

Upside Case(s):

(+) $13.12, 70% Upside: This scenario assumes that the overall transaction yield expands (driven by higher monetization) beyond consensus of $4.84 (compared to 4Q22 total transaction yield of $4.79) while keeping consensus expectations for transaction count unchanged. This implies 20% gross profit growth and 70% upside to the current share price with an 8.0x EV/GP multiple in 12-months.

(+-) $11.68, 51% Upside: This scenario assumes the overall transaction yield expands but AvidXchange delivers adjusted EBITDA at the mid-point or below its FY23 guidance range. This implies 51% upside to the current share price with a 7.0x NTM EV/GP.

(++) 14.55, 89% Upside: The best-case scenario assumes the improved transaction yield, while also delivering adjusted EBITDA materially above the high-end of its guidance range for $0mm - $3.50mm, as consensus is already pricing in adjusted EBITDA of $3.3mm. This implies 89% upside to the current share price with a 9.0x multiple.

Downside Case(s):

(-) $6.94, 10% Downside: This scenario assumes no improvement in the overall transaction yield (due to inability to drive higher monetization rates) while keeping consensus expectations for transaction count unchanged. This implies 15% gross profit growth and 10% downside to the current share price with a 4.0x EV/GP multiple

(-+) $7.60, 1% Downside: This scenario assumes a flat transaction yield, but AvidXchange delivers higher than expected Adjusted EBITDA due to better control of the cost base. This implies 1% downside with a 4.5x EV/GP multiple.

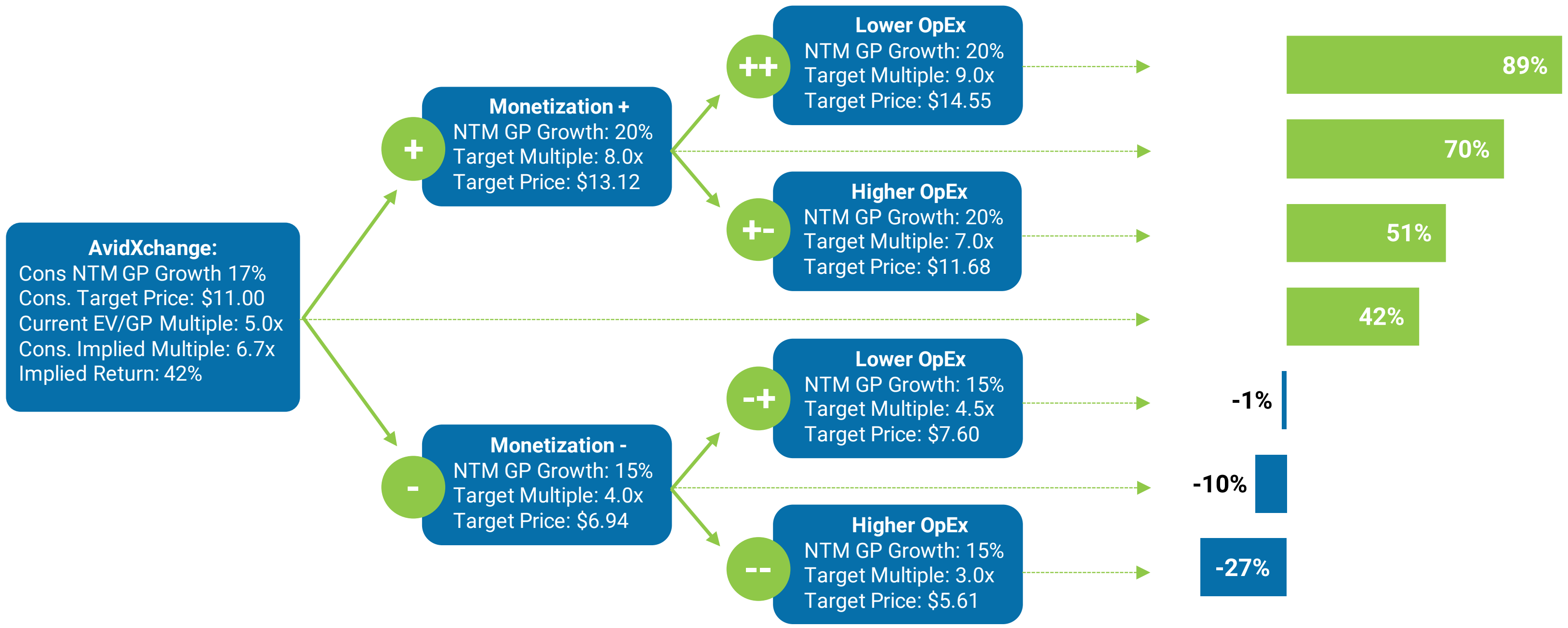
(--) $5.61, 27% Downside: The worst-case scenario assumes a flat transaction yield and underperformance on adjusted EBITDA, implying 27% downside with a 3.0x NTM EV/GP multiple.

Source: Company filings; FactSet

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk

12-month Price Return



AvidXchange:
Cons NTM GP Growth 17%
Cons. Target Price: $11.00
Current EV/GP Multiple: 5.0x
Cons. Implied Multiple: 6.7x
Implied Return: 42%

+ **Monetization +**
NTM GP Growth: 20%
Target Multiple: 8.0x
Target Price: $13.12

\- **Monetization -**
NTM GP Growth: 15%
Target Multiple: 4.0x
Target Price: $6.94

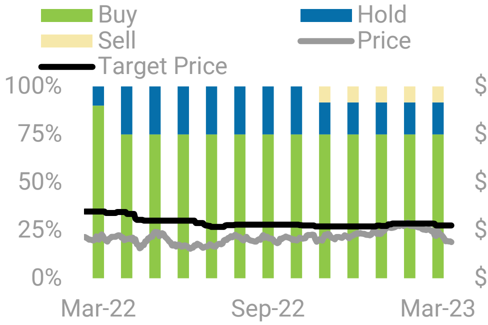
++ **Lower OpEx**
NTM GP Growth: 20%
Target Multiple: 9.0x
Target Price: $14.55

+- **Higher OpEx**
NTM GP Growth: 20%
Target Multiple: 7.0x
Target Price: $11.68

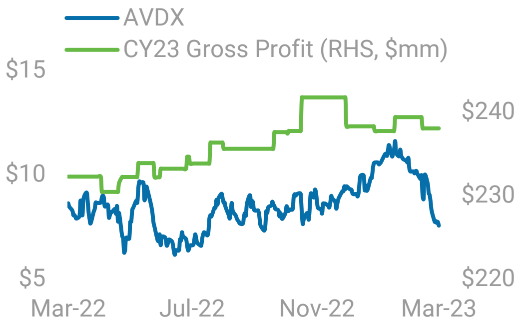
-+ **Lower OpEx**
NTM GP Growth: 15%
Target Multiple: 4.5x
Target Price: $7.60

-- **Higher OpEx**
NTM GP Growth: 15%
Target Multiple: 3.0x
Target Price: $5.61

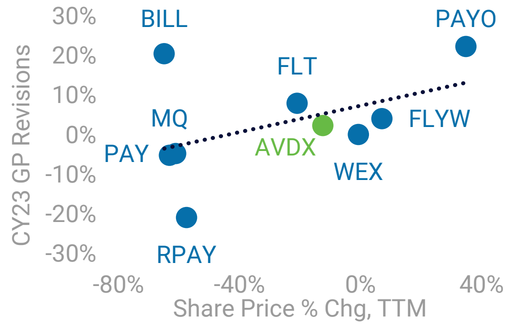
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



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FINANCIAL TECHNOLOGY PARTNERS

($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: Management updated investors on an accelerated pace for adjusted EBITDA profitability, with expectations of achieving this in FY23, while discussing 1Q23 revenue expectations roughly 5% below consensus. Shares traded down 9% following the report, likely driven by lower-than-expected revenue guidance and the surprising 4Q22 interest revenue contribution to the quarter's growth.

Results Recap: The company reported total processing volume of $18.3bn, 3% below consensus, growing 21% YoY. AvidXchange saw 18.0mm payment transactions in the quarter, expanding 9% YoY, short of consensus by 2%. Total revenue came in at $86.2mm, up 24% YoY, while adjusted gross profit improved 30% YoY to $56.0mm, both roughly 1% ahead of consensus. Adjusted gross profit margin was 65% for the quarter, up 278bps from 4Q21. Results were partially driven by a 3% higher than expected transaction yield of $4.79, which improved 14% YoY, and cost of revenues that was -24% below year-ago levels, 34% below consensus, both of which helped to offset the slight miss in volume KPIs. Adjusted EBITDA in the quarter was -$1.32mm, better than consensus of -$4.18mm. Net income was -$25.0mm, 2% better than consensus of -$25.5mm.

FY23 Guidance Recap: Management issued revenue guidance in the range of $359mm to $366mm, 3% below consensus of $373mm at the midpoint. The company provided adjusted EBITDA guidance of $0mm - $3.50mm, significantly higher at the midpoint than consensus of -$8.93mm and forecasting a positive Adj. EBITDA margin versus consensus at -2.4%. Management's guide represents an accelerated path to adjusted EBITDA profitability in 2023 rather than 2024.

Incremental From The Call:

- **Guidance/Outlook:** Management gave insight into the FY23 revenue outlook of $362.5mm at the mid-point (15% growth YoY), which includes an expected ~$30mm of interest revenues from customer funds, a YoY growth rate of ~173% and well north of the ~$11mm earned in 2022. There is no political revenue contribution expected in FY23 versus $8.5mm in FY22. Roughly 47% of revenues, or ~$170mm, is expected in the first half of the year representing a 15% YoY growth rate from the first half of 2022. Management stated the 1Q23 revenue expectation is $81mm to $83mm, 5% less than consensus at the midpoint and 15% YoY growth. This indicates ~$88.4mm in revenue is expected in 2Q23, a 3% shortfall of expectations and roughly the same YoY growth as Q1 of 15%. The remaining ~53% of revenues, ~$192mm, should represent 14% YoY growth in 2H23.
- **Revenue composition:** 4Q22 software revenue of $26.4mm grew by 12.5% YoY, representing ~31% of total revenue. Payment revenue of $59.1mm grew 31% YoY and represented ~69% of total revenue, of which $5.8mm was interest revenue. Total organic revenue growth for the quarter was 23.3% YoY, driven primarily by new buyer invoice and payment transactions, reflecting increased e-payments to suppliers and contribution of interest revenues. Organic payment revenue was $58.3mm for the quarter, growing 29.3% YoY and representing 67.6% of total revenues. Two thirds of the organic increase were driven by payment volume and the remainder by interest revenues. Excluding recently acquired PayClearly's $0.4mm contribution, transaction yield grew 12.9% to $4.75. Management disclosed half of the organic increase was driven by yield improvement, the other driven by interest revenue.
- **Gross Margin:** Management discussed expectations for adjusted gross profit margin expansion to continue toward 75%. Consensus does not expect adjusted gross margin to reach 70% until late 2025. Adjusted gross margin grew 327bps to 64% in 2022, with consensus calling for ~200bps growth in both FY23 and FY24 to 66%/68%, respectively.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs.▲	%▲
Total Processing Volume (bn)	**$18.3**	**$18.9**	-$0.56	-3%
growth (%, yoy)	*21%*	*25%*		
Number of Payment Transactions	**18.0**	**18.3**	-0.33	-2%
growth (%, yoy)	*9%*	*11%*		
Transaction Yield	**$4.79**	**$4.66**	0.13	3%
growth (%, yoy)	*14%*	*11%*		
Payment Revenue	**$59.1**	**$58.3**	$0.88	2%
growth (%, yoy)	*31%*	*29%*		
Software Revenue	**$26.4**	**$25.8**	$0.58	2%
growth (%, yoy)	*12%*	*10%*		
Total Revenue	**$86.2**	**$85.4**	$0.80	1%
growth (%, yoy)	*24%*	*23%*		
Adj. Cost of Revenue	**$19.8**	**$30.0**	-$10.19	-34%
growth (%, yoy)	*-24%*	*14%*		
Adj. Gross Profit	**$56.0**	**$55.4**	$0.56	1%
Adj. Gross Margin (%)	*65%*	*65%*	*5bps*	
Total Operating Expenses	**$78.7**	**$77.0**	$1.69	2%
growth (%, yoy)	*-22%*	*-24%*		
Operating Income	**-$23.7**	**-$22.3**	-$1.39	-6%
Operating Margin (%)	*-27%*	*-26%*	*-137bps*	
Adjusted EBITDA	**-$1.32**	**-$4.18**	$2.87	69%
Adj. EBITDA Margin (%)	*-2%*	*-7%*	*495bps*	
Net Income	**-$25.0**	**-$25.5**	$0.49	2%
Net Profit Margin (%)	*-42%*	*-44%*	*148bps*	

FY23 Guidance	New	Consensus	%▲
Revenue	**$359-$366**	**$373**	-3%
growth (%, yoy)	*15%*	*18%*	
Adj. EBITDA	**$0.00-$3.50**	**-$8.93**	120%
growth (%, yoy)	*111%*	*42%*	

Source: Company filings; FactSet; Visible Alpha

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AVDX TTM Price Performance

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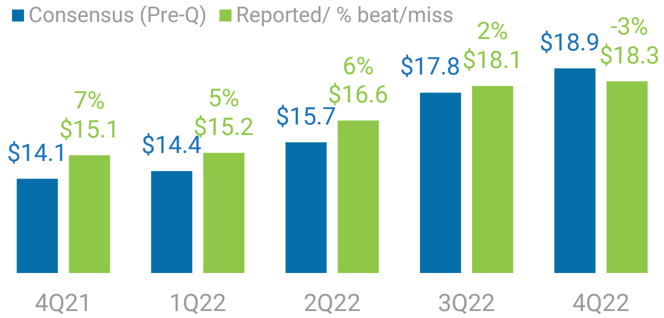
Market Cap (mm):	$1,504	**Beta (Since IPO):**	1.7
52-Wk Range:	$5.86 - $11.86	**Avg. Daily Vol (mm):**	1.7

FINANCIAL TECHNOLOGY PARTNERS

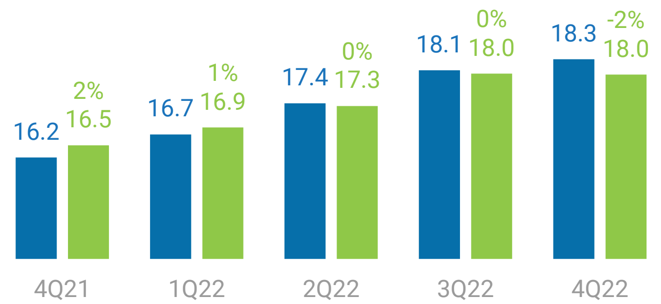
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

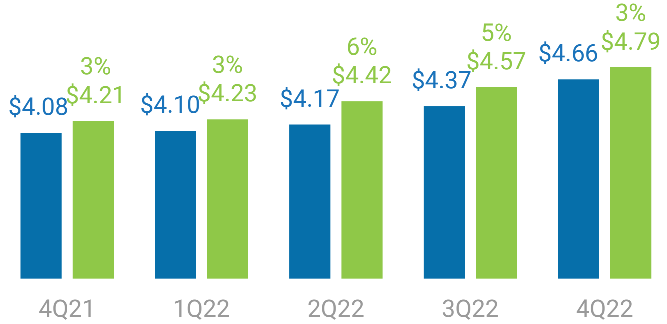
Total Payment Volume (bn)



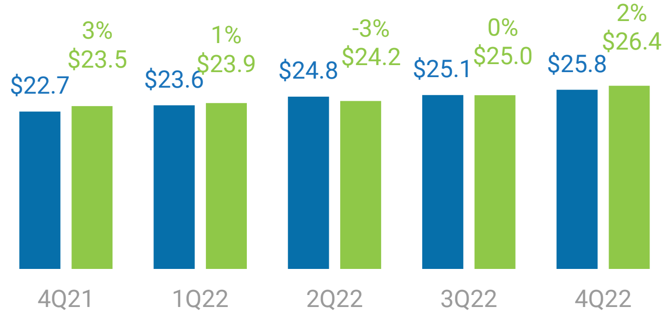
Transactions Processed (mm)



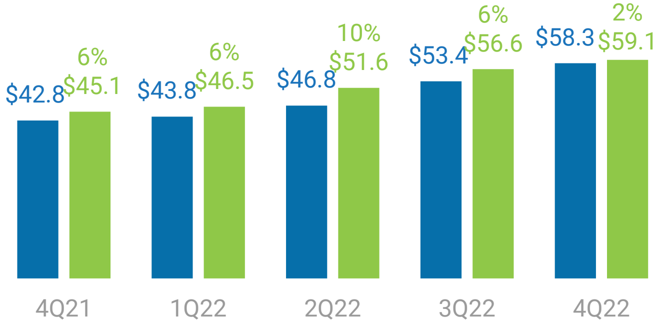
Transaction Yield



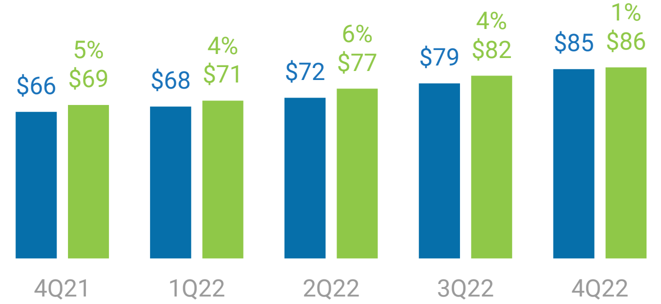
Software Revenue



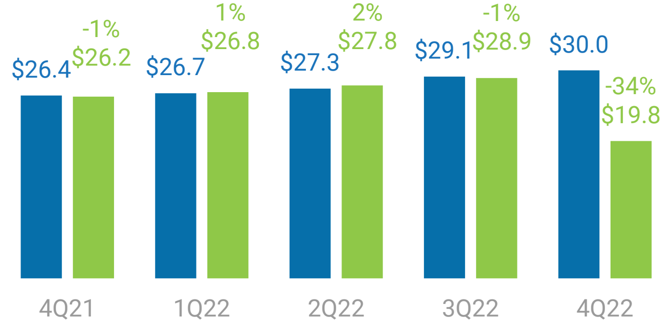
Payments Revenue



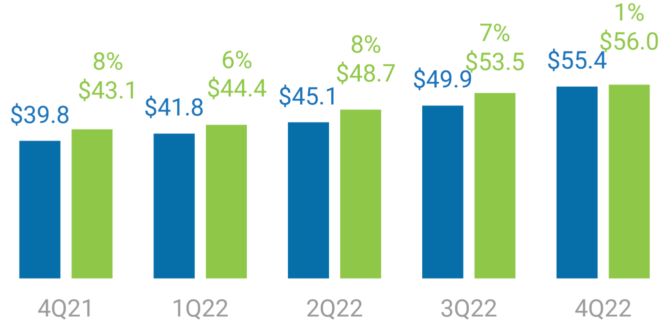
Total Revenue



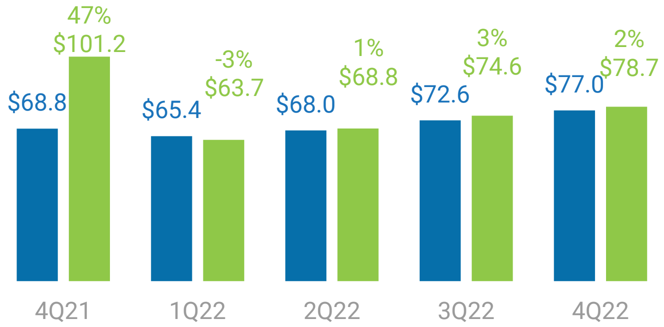
Adjusted Cost of Revenue



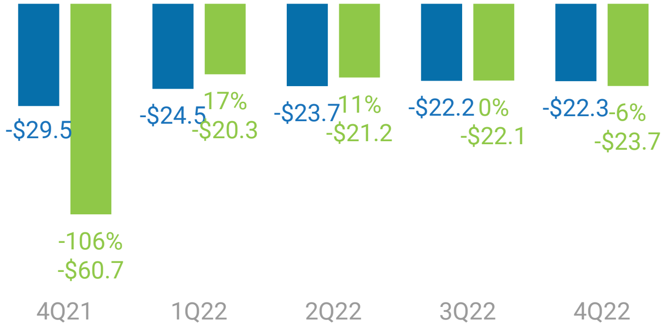
Adjusted Gross Profit



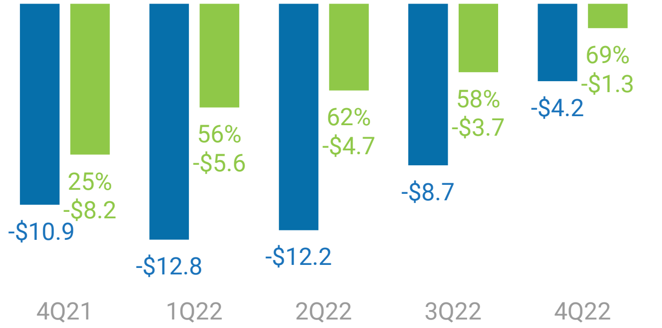
Operating Expense



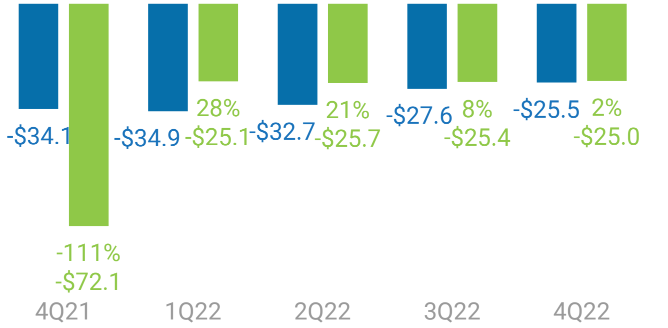
Operating Income



Adjusted EBITDA



Net Income



Source: Company filings; FactSet

FT Partners | Equity Research

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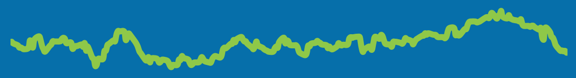
AVDX TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

($ in millions, except where otherwise noted)

1Q23 EARNINGS OUTLOOK

AvidXchange is projected to report 1Q23 earnings on May 4th after the market close.

What's in Focus:

Last quarter, management accelerated its path to adjusted EBITDA profitability, expecting to reach this milestone by the end of 2023, one year ahead of previous guidance. Management has outlined its adjusted EBITDA target of $0mm – $3.5mm for FY23. However, we note that management guidance calls for ~$30mm in contribution from float revenue in FY23, which we expect will flow directly to the bottom-line and likely provides some cushion in terms of guidance. While FY23 guidance was disappointing relative to consensus following the 4Q22 print and expectations have been reset, consensus remains at the high-end of management's targets for both revenue and adjusted EBITDA in FY23. Specifically, consensus for total revenue is $364mm vs. guidance of $359mm – $366mm, while consensus for adjusted EBITDA is $3.3mm vs. guidance of $0mm - $3.5mm.

Estimates:

- **KPIs:** Since reporting 4Q22 earnings, consensus for the number of payment transactions for 1Q23 has been revised downward by ~5% from 18.8mm to 17.9mm. Total payment volume has also been revised downward for 1Q23 by ~5% from $18.5bn to $17.5bn.
- **Revenue:** Since reporting, consensus for 1Q23 total revenues has been revised down ~4% from $86.2mm to $82.9mm. This reflects the high side of the estimate range management provided for Q1 during the Q&A of the 4Q22 earnings call of $81mm to $83mm. The largest revenue segment, payment revenue, was revised downward ~4% from $58.4mm to $56.4mm. Software revenue was also revised downward 3% from $26.6mm to $25.8mm.
- **Margins:** Consensus for gross profit excluding D&A have been revised downward by ~4% from $55.9mm to $53.6mm since the company reported 4Q22 earnings. The revision downwards does not drive a material change in the consensus gross margin. Operating income has been revised upwards by ~11% from -$21.1mm to -$18.8mm, representing an improvement in operating margin of 189bps from approximately -24.5% to -22.6%. Adjusted EBITDA, which management now anticipates to be positive buy the end of the year, has been revised upward from -$4.3mm to -$2.5mm for 1Q23, representing an adjusted EBITDA margin improvement of 201bps from approximately -5% to -3% for the quarter.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

1Q22:
- 4% revenue beat
- Non-GAAP Gross margins expand ~240bps
- FY22 Rev guide raised ~2% EBITDA guide raised $8mm

2Q22:
- 6% revenue beat
- Non-GAAP gross profit beat 8%
- Rev/Adj. EBITDA guide raised 1%/24%

3Q22:
- 4% revenue beat
- Rev/Adj. EBITDA guide raised 2%/34%

4Q22:
- 1% revenue beat
- Adjusted EBITDA beat
- FY23 revenue guide 3% below consensus, adj. EBITDA positive by end of year

MANAGEMENT COMMENTS/WHAT'S PRICED IN

- 47% of 2023 revenue expected in the first half, 53% in the second half.
- EBITDA is expected to be negative in the first half of FY23 before turning positive in the back half.
- Intelligent Data Capture (IDC) allows for digital scanning of various types and formats of invoices at scale. Product will be implemented in 2023 and should start to produce unit cost improvements in 2H23. More significant impact expected in 2024.
- Invoice accelerator 2.0, a short-term working capital financing tool for accelerated invoice payment, is expected to be launched in the second half of 2023 and serve as a growth lever in 2024 and onward.
- Management expects the uncertainties of the macro backdrop to provide opportunities as customers tackle revenue and cost pressures.
- Management stated market dislocations can unlock acquisition opportunities.
- No political media revenue contribution in 2023 compared to $8.5mm in 2022.

Source: Company filings, FactSet

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FINANCIAL TECHNOLOGY PARTNERS

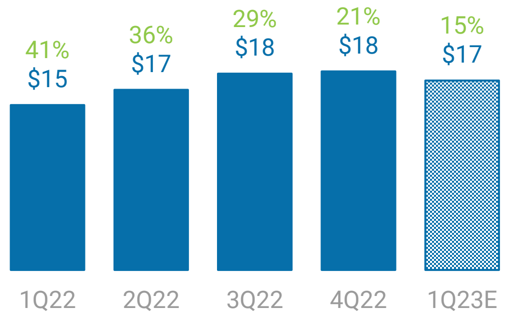
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

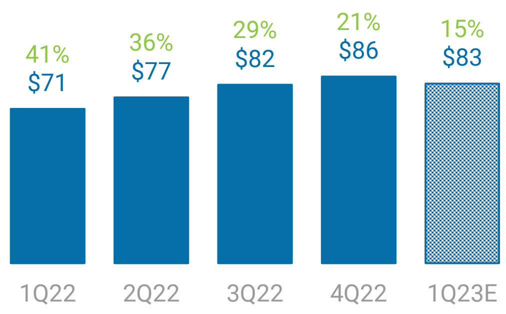
	Low	Average	High
TPV (bn)	**$17.3**	**$17.5**	**$17.9**
growth (%, yoy)	*14%*	*15%*	*18%*
Transactions Processed (mm)	**17.5**	**17.9**	**18.4**
growth (%, yoy)	*4%*	*6%*	*9%*
Payment Transaction Yield	**0.32%**	**0.33%**	**0.35%**
▲ in % (bps)	*1bps*	*2bps*	*4bps*
Payment Revenue	**$55**	**$56**	**$59**
growth (%, yoy)	*18%*	*22%*	*26%*
Software Revenue	**$25**	**$26**	**$27**
growth (%, yoy)	*3%*	*8%*	*11%*
Services Revenue	**$0.7**	**$0.7**	**$0.8**
growth (%, yoy)	*-20%*	*-9%*	*3%*
Total Revenue	**$82**	**$83**	**$85**
growth (%, yoy)	*15%*	*16%*	*19%*
Adjusted Cost of Revenue	**$28**	**$29**	**$30**
growth (%, yoy)	*4%*	*7%*	*11%*
Adjusted Gross Profit	**$53**	**$54**	**$56**
growth (%, yoy)	*20%*	*22%*	*25%*
Total Operating Expenses	**$71**	**$72**	**$74**
growth (%, yoy)	*12%*	*14%*	*16%*
Adjusted Operating Income	**-$13**	**-$11**	**-$10**
Adj. Operating Margin (%)	*-16%*	*-14%*	*-11%*
Adjusted Net Income	**-$13**	**-$10**	**-$6**
Adj. Net Income Margin (%)	*-16%*	*-12%*	*-7%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

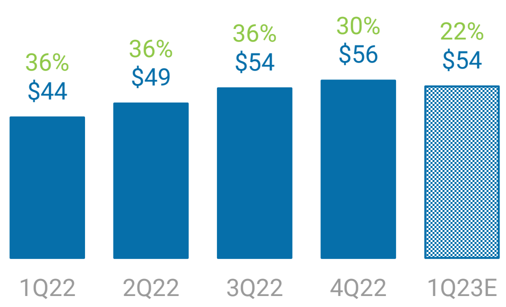
TPV (bn)



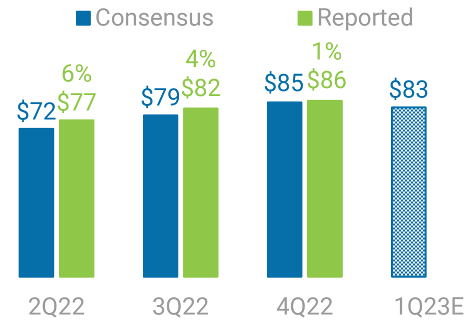
Revenue



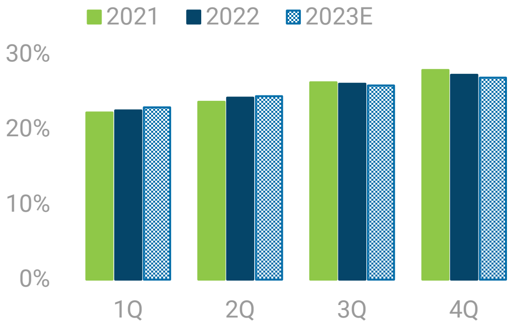
Adj. Gross Profit



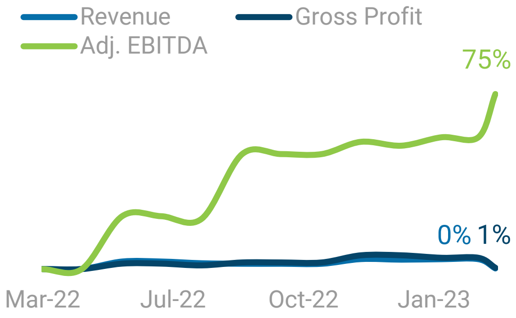
Revenue Consensus vs. Reported



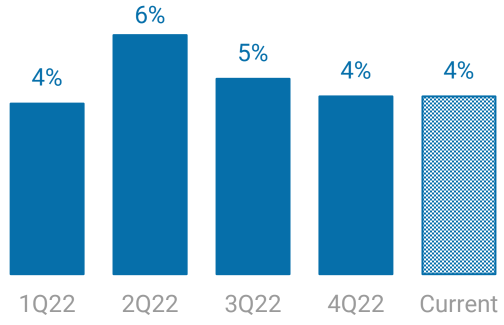
Revenue Seasonality



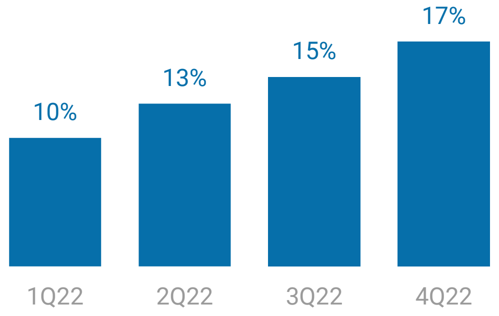
1Q23 Cons. Revisions



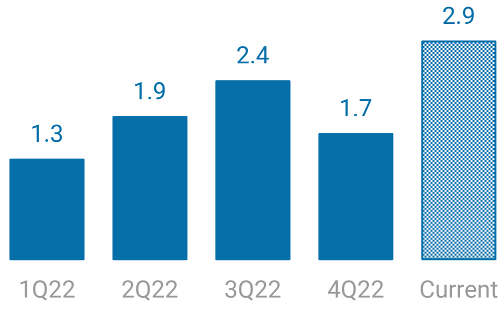
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings ADTV[1]



Source: Company filings; FactSet

1) Measured as ADTV over the prior 7-day period

03/20/23 - **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

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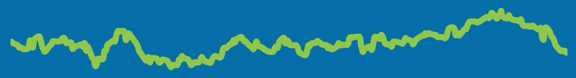
AVDX TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

General:

1) Has the macroeconomic backdrop impacted selling cycles and therefore the pipeline of new clients to be onboarded?
2) How does AvidXchange convince existing customers to add payment solutions?
3) Does AvidXchange incentivize suppliers to accept electronic payment methods, primarily VCC but also APD where appropriate?
4) Will the launch of FedNow have any impact on AvidXchange's RTP strategy?

Verticals:

5) Given the macroeconomic backdrop, can management outline which verticals are expected to perform better than others in 2023?
6) Is AvidXchange looking to expand into any new verticals in FY23?
7) What is the expected cadence of growth in the media/political business? Since spending around 2024 primaries likely start in late 2023, should investors expect strong momentum by 1Q24?

Near-Term:

8) The outperformance on operating expenses has driven a shorter timeline to achieving the adjusted EBITDA break even point. What are the primary drivers of the operational efficiencies?

Long-Term:

9) Is supplier growth expected to continue to offset the percentage of payments being monetized? Is there a point where investors should expect the 40% monetization rate to increase even with continued supplier growth?
10) Recently it was disclosed that AvidXchange still has single-digit penetration in every vertical. Over the long-term, how should investors think about growth in existing verticals vs. adding new verticals?
11) Given management's target for long-term gross margins of 75%+, and the targeted ~70% range by the end of 2023, will gross margin gains in 2024 slow significantly?

Capital Allocation:

12) Are there any updated thoughts around capital allocation? Primarily M&A?

POTENTIAL CATALYSTS

2023

Bill Projected 3FQ23 Earnings Release 5/4/23

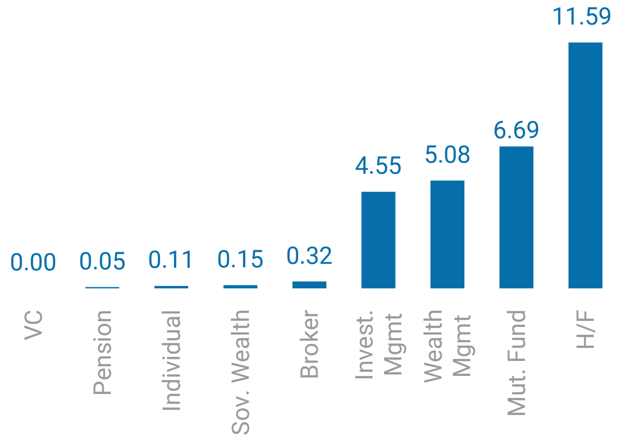
AVDX Projected 1Q23 Earnings Release 5/4/23

AVDX Projected 2Q23 Earnings Release 8/2/23

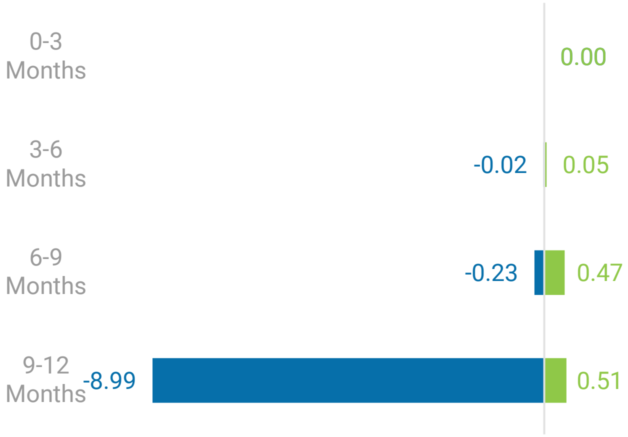
Bill Projected 4FQ23 Earnings Release 8/24/23

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



Insider Shares Sold/Bought (mm)



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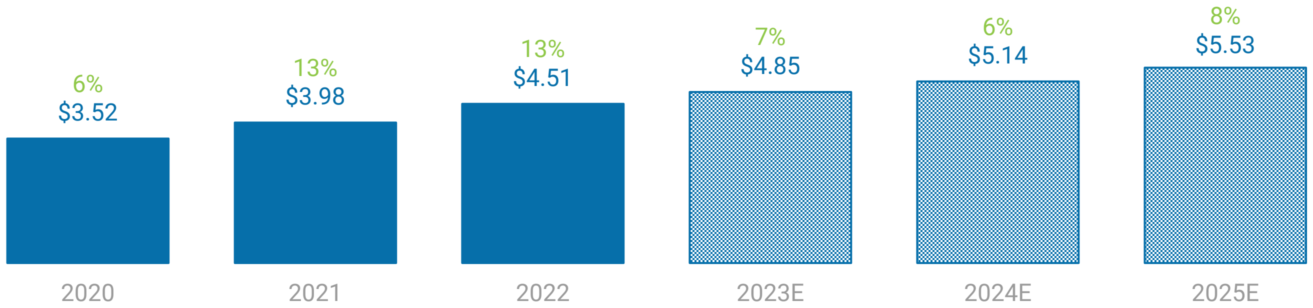
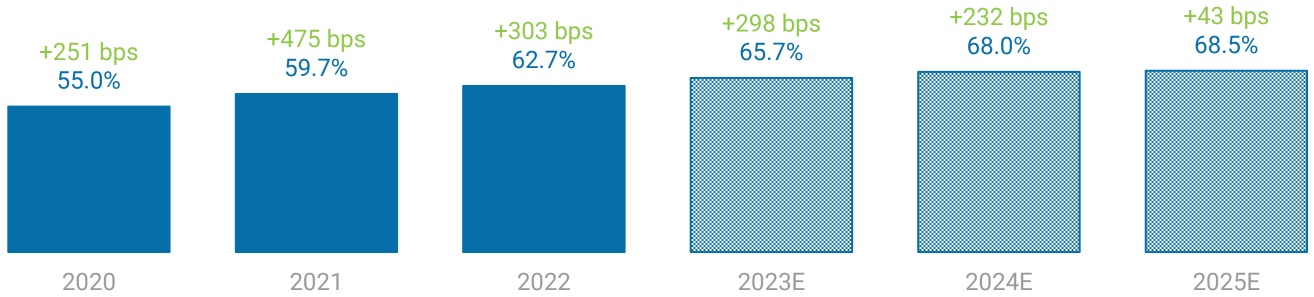
FINANCIAL TECHNOLOGY PARTNERS

COMPANY RATIOS/MARGIN ANALYSIS

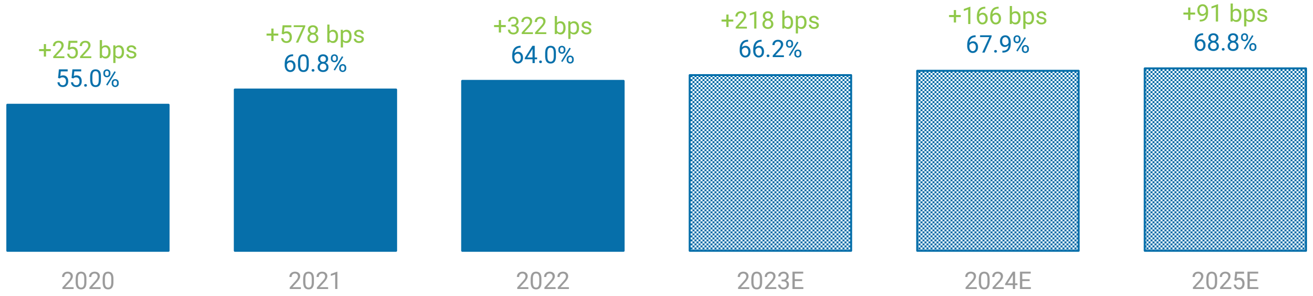
Transaction Yield ($)



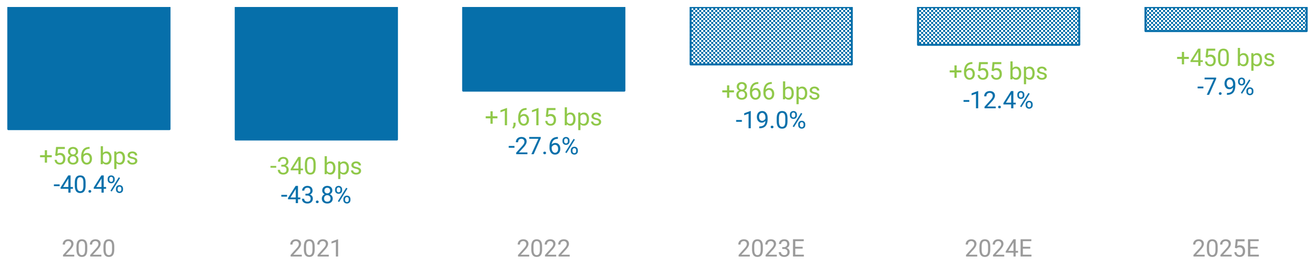
Gross Profit Margin (excl. D&A)



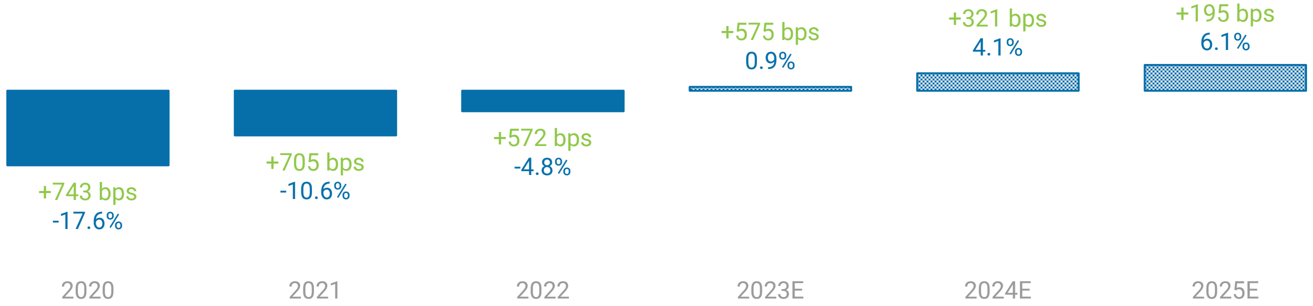
Adj. Gross Margin



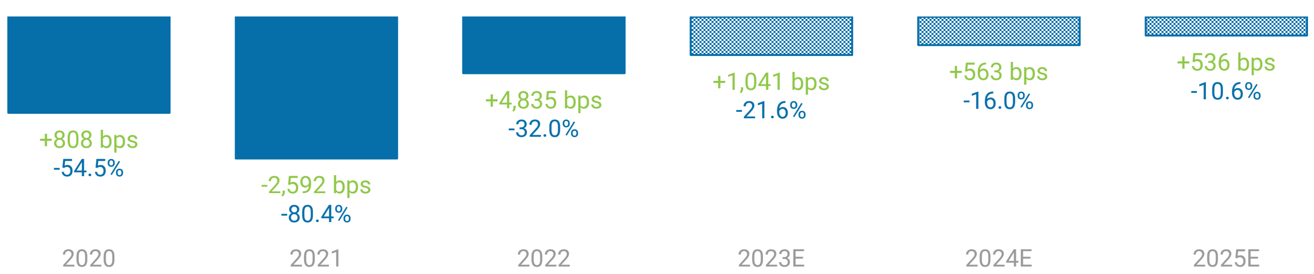
Operating Margin



Adj. EBITDA Margin



Net Income Margin



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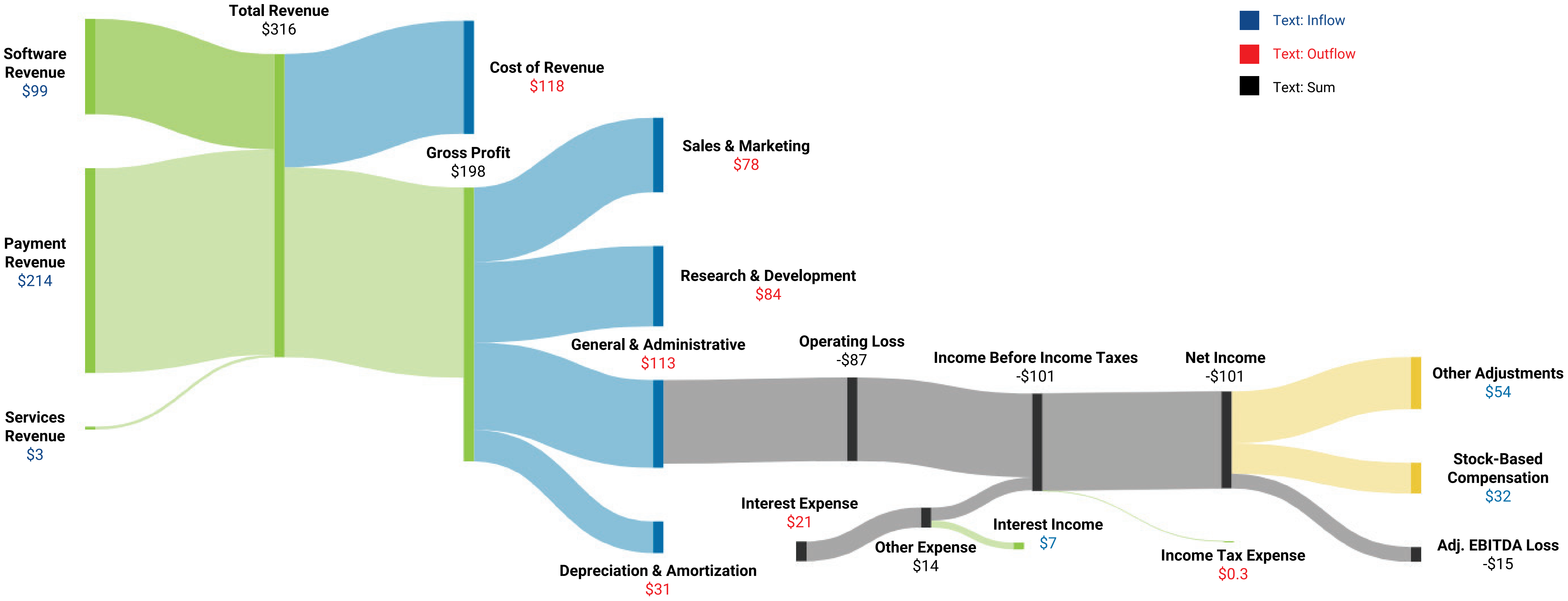
FINANCIAL TECHNOLOGY PARTNERS

($ in millions)

P&L VISUALIZATION – TTM



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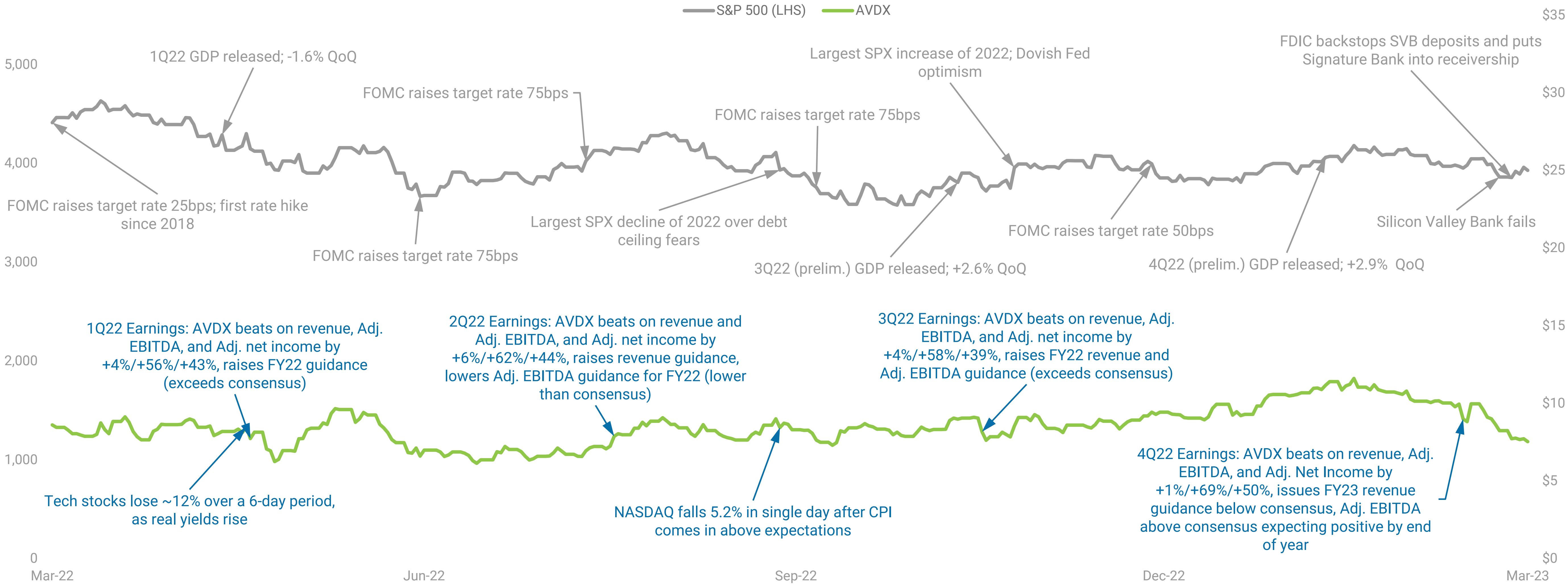
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FDIC backstops SVB deposits and puts Signature Bank into receivership

FOMC raises target rate 75bps

FOMC raises target rate 25bps; first rate hike since 2018

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 50bps

Silicon Valley Bank fails

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

4Q22 (prelim.) GDP released; +2.9% QoQ

1Q22 Earnings: AVDX beats on revenue, Adj. EBITDA, and Adj. net income by +4%/+56%/+43%, raises FY22 guidance (exceeds consensus)

2Q22 Earnings: AVDX beats on revenue and Adj. EBITDA, and Adj. net income by +6%/+62%/+44%, raises revenue guidance, lowers Adj. EBITDA guidance for FY22 (lower than consensus)

3Q22 Earnings: AVDX beats on revenue, Adj. EBITDA, and Adj. net income by +4%/+58%/+39%, raises FY22 revenue and Adj. EBITDA guidance (exceeds consensus)

Tech stocks lose ~12% over a 6-day period, as real yields rise

NASDAQ falls 5.2% in single day after CPI comes in above expectations

4Q22 Earnings: AVDX beats on revenue, Adj. EBITDA, and Adj. Net Income by +1%/+69%/+50%, issues FY23 revenue guidance below consensus, Adj. EBITDA above consensus expecting positive by end of year

Source: Company filings; FactSet

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BILL PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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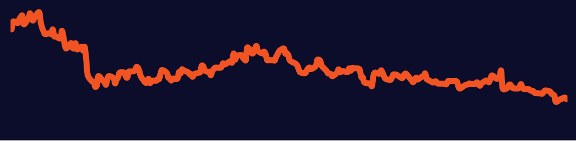
BILL TTM Price Performance



Price as of 03/17/23:	$73.64	**Shares Out (mm):**	106
Market Cap (mm):	$7,834	**Beta (2 Year Avg.):**	2.5
52-Wk Range:	$68.3 - $244.89	**Avg. Daily Vol (mm):**	2.8

FINANCIAL TECHNOLOGY PARTNERS

COMPANY OVERVIEW

BILL provides software that simplifies, digitizes, and automates complex back-office financial operations, including invoice and bill payments. The company targets small and mid-sized businesses, connecting them with customers and suppliers. BILL's software streamlines the invoice approval process, automates payments between counterparties, and integrates with accounting systems to manage cash flows.

In June 2021, BILL acquired Divvy, which expanded the platform into spend management and corporate cards. Divvy generates revenue through transaction fees, providing its software for free while monetizing payments made with the "Divvy card", further pushing the revenue mix for BILL away from software and towards transaction-based revenue. Also in 2021, BILL acquired Invoice2Go, enhancing BILL's accounts receivable offering and expanding its presence to 160 countries.

PRICING

Subscriptions

Essentials: $45 / user / mo.

Team: $55 / user / mo.

Corporate: $79 / user / mo.

Transactions

ACH: $0.49	Intl Wire (USD): $14.99
Check: $1.69	Vendor Direct VCC: $0.00
Card: 2.9%	Fast Check: $11.99-$22.99
Invoice: $1.49	Fast ACH: $9.99

KEY DEBATES

1. **VCC Adoption:** BILL's transaction revenue is highly sensitive to the level of virtual credit card (VCC) and cross-border adoption among its customers, as the incremental unit economics on these transactions are significantly greater than other transaction modalities. That said, VCC only represented ~2.7% of TPV as of FY22 (up from 2.2% in FY21), while cross-border was 4.5% in FY22 vs. 4.1% in FY21. Management has outlined its long-term goal for VCC/cross-border to be 10%/5% of TPV. The potential economic upside in incremental VCC/cross-border adoption is a significant driver of BILL's premium valuation.

2. **Acquisitions:** In June 2021, BILL closed the acquisition of Divvy for a total consideration of $2.3bn. If BILL is successful in cross-selling and integrating Divvy into the broader platform, it could drive higher attach rates for Divvy's card product, thereby increasing volume (and hence transaction revenue). Additionally, in September 2021, BILL announced it had completed its acquisition of Invoice2Go for a total consideration of $625mm, which is expected to expand BILL's market presence internationally.

3. **Expense Management:** BILL grew adjusted operating margins to 11.8% in F2Q23 from 2.2% in the prior year. However, when excluding the impact of float revenue, core adjusted operating margin decreased from 1.6% to 0.8% YoY, implying expenses grew faster in the quarter than overall core revenue and that float revenue has been a significant driver of net income/earnings outperformance. Investors remain focused on how BILL will manage the expense base considering the current macroeconomic backdrop and the potential for sales cycles to be extended and bankruptcies to accelerate.

REVENUE MODEL

BILL generates revenue through three primary streams: subscription revenue, transaction revenue, and float revenue. These revenue classifications are defined by the following:

1) **Subscription Revenue (26% of TTM revenue):** Businesses are charged on a per-seat basis, specific to the plan/services provided. BILL's primary plans include "Essentials" (base-level access to the platform), "Teams" (enhanced integrations with accounting providers), and "Corporate" (custom workflows and payment terms).

2) **Transaction Revenue (68% of TTM revenue):** BILL transaction revenue consists of transaction fees and interchange income on a fixed or variable rate assessed on a per transaction basis. Transactions primarily include card payments, check issuance, ACH originations, cross-border payments, and the creation of invoices. A large portion of BILL's transactions are scheduled payments, making them recurring in nature.

3) **Float Revenue (6% of TTM revenue):** This line item includes interest income from funds that are in the process of clearing. Revenue is primarily driven by payment volume, transit times, and interest rates.

On March 11th, following the collapse of Silicon Valley Bank, BILL announced that it had $300mm in corporate cash held at Silicon Valley Bank relative to its total corporate cash of $2.6bn. Additionally, Bill disclosed that of its $3.3bn in funds held for customers, it had $370mm held at Silicon Valley Bank.

AGGREGATE USERS OF BILL PRODUCTS

Invoice2go		Divvy		bill.com
229K Subscribers	+	**25K Spending Businesses**	+	**183K Customers**

Source: Company filings; FactSet

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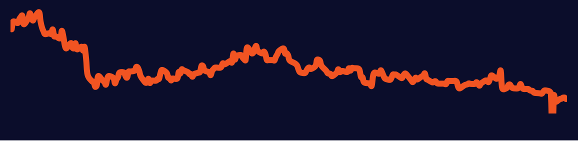
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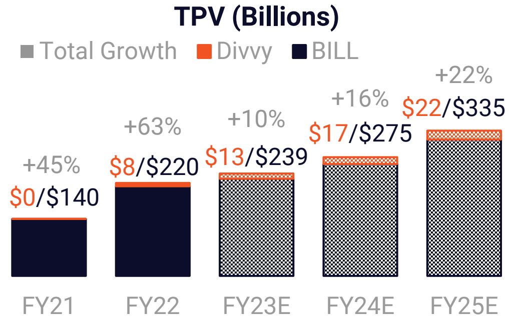
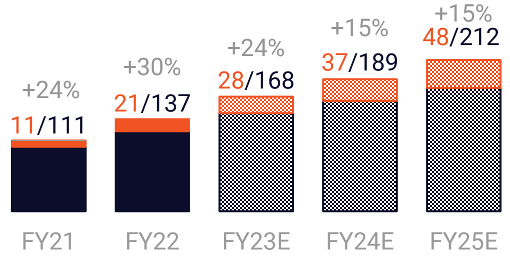
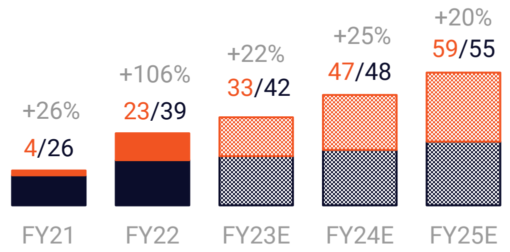
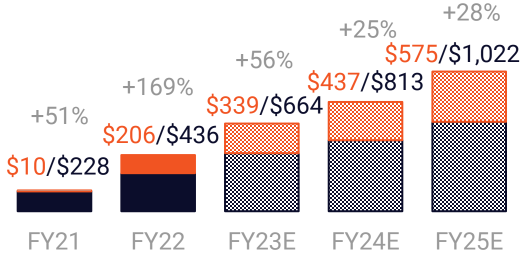
($ in millions, except per share amounts)

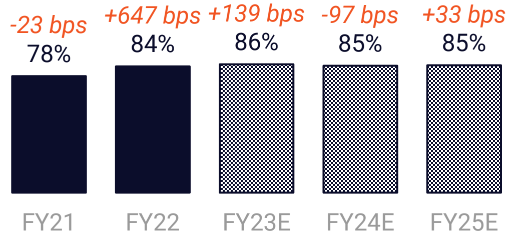
HISTORICAL RESULTS & CONSENSUS FORECASTS(1)

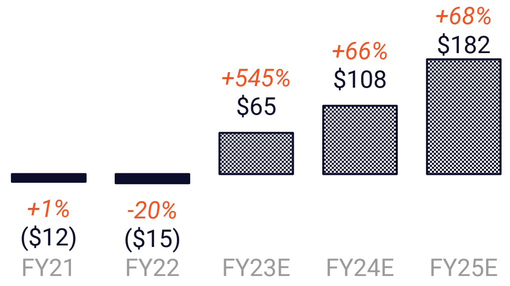

TPV (Billions)

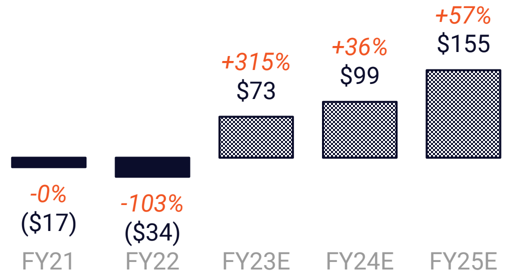

Ending Customers (in 000's)

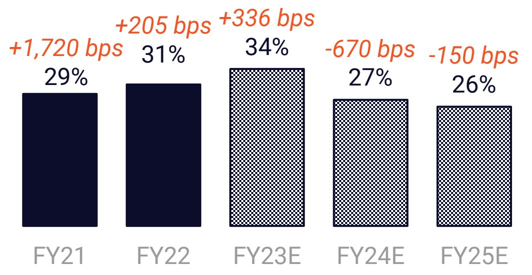

Transactions Processed


Revenue


Adj. Gross Margin

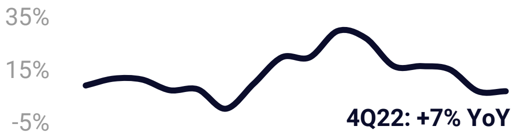

Adj. Operating Income

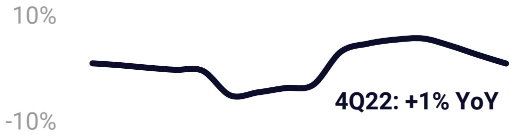

Free Cash Flow


SBC as % of Revenue

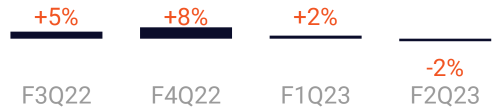
INDUSTRY KPIs


Commercial Check Vol.(2) *(1Q19-4Q22)*


B2B ACH Volume(3) *(1Q19-4Q22)*

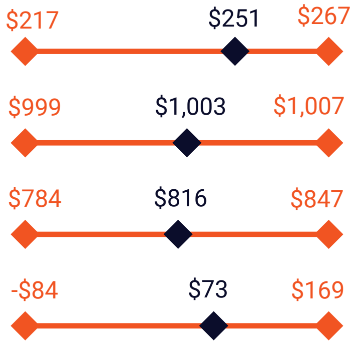

SMB Employment(4) *(1Q19-4Q22)*

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES


TPV


Revenue

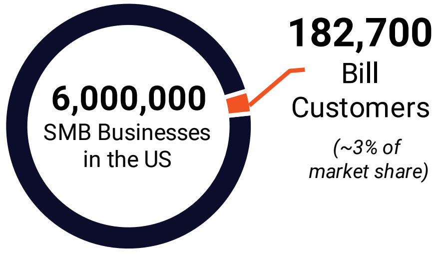
FY23



TPV (Billions)	$217	$251	$267
Net Revenue	$999	$1,003	$1,007
Gross Profit	$784	$816	$847
Free Cash Flow	-$84	$73	$169

TOTAL ADDRESSABLE MARKET

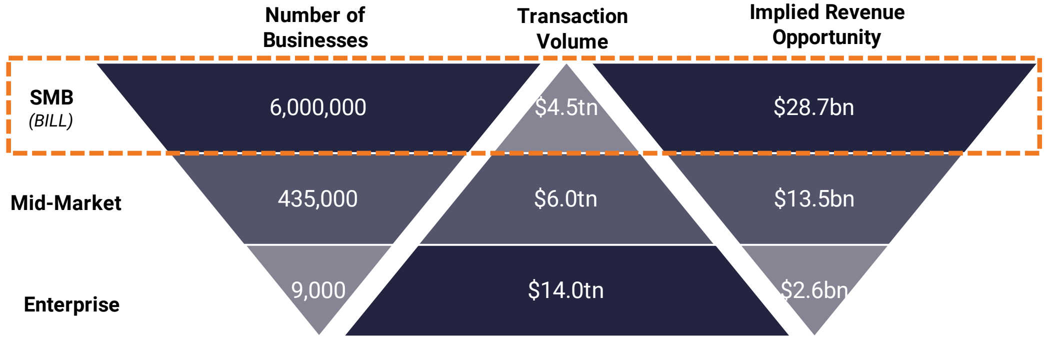
Market Share By Customers


6,000,000 SMB Businesses in the US

182,700 Bill Customers

(~3% of market share)

Accounts Payable/Accounts Receivable Market



	Number of Businesses	Transaction Volume	Implied Revenue Opportunity
SMB *(BILL)*	6,000,000	$4.5tn	$28.7bn
Mid-Market	435,000	$6.0tn	$13.5bn
Enterprise	9,000	$14.0tn	$2.6bn

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Source: Company filings
1) FactSet Consensus Estimates Low/Average/High Range
2) Federal Reserve Bank: Commercial Checks Collected through the Federal Reserve
3) Small Business Administration's Office of Advocacy: Small Business Profile
4) ADP: Small Business Report

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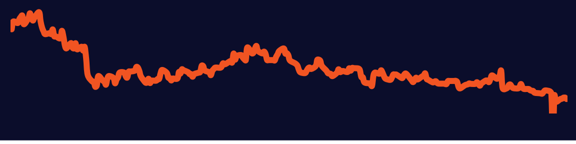
BILL TTM Price Performance



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VALUATION CONSIDERATIONS

Relative Valuation:

As of March 20th, BILL trades at a 7x NTM EV/GP multiple, 36x below its average 3-year multiple of 43x. It currently trades at a 4x premium to the NASDAQ, relative to its 3-year average premium of 39x. Historically, BILL has traded at a significant premium relative to peers. Recently BILL's valuation has compressed, particularly following F2Q23 results after issuing disappointing implied core revenue guidance that saw the stock down ~25% relative to the NASDAQ after reporting. **If BILL were to trade in-line with its peer group on an EV/GP basis, when adjusted for growth, it would imply a 12-month price of $106.00 (44% upside).** We have strong confidence in BILL's management team, including their achievable growth targets and sound long-term strategy. While BILL's valuation has experienced a rerating, it still trades at a significant premium relative to the broader comp group. As such, we believe there remains considerable execution risk built into the BILL story, especially as the macro remains uncertain.

DCF Valuation:

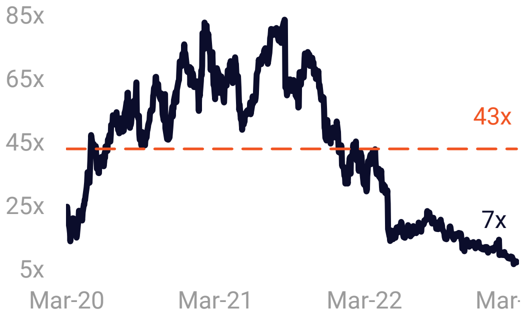
Scenario 1 – Current Price ($73.64, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires a combination of 50%+ revenue growth in FY23, followed by 25%+ revenue growth through 2027, before gradually decelerating towards the terminal growth rate. Operating margins are expected to turn positive in FY26 and reach ~45% over the long-term. Were shares of Bill to remain at the current price in 12-months, it would imply a 5x NTM EV/GP multiple (based on current STM gross profit estimates of $1,238mm).

Scenario 2 – High Long-Term Adoption ($114.70, 56% upside): The second DCF outlines a scenario where BILL reaches the high end of its VCC (5% - 10% of TPV)/Cross-Border (10% - 20% TPV) penetration target. In this scenario, revenue growth is 30%+ in FY24/FY25, with growth rates of 25%+ being sustained through 2029. Long-term operating margins are also increased to ~50%+. The terminal FCF growth rate remains unchanged. This scenario points to a 12-month price of $114.70 (56% upside), which based on the current STM consensus gross profit implies a 9x EV/GP multiple.

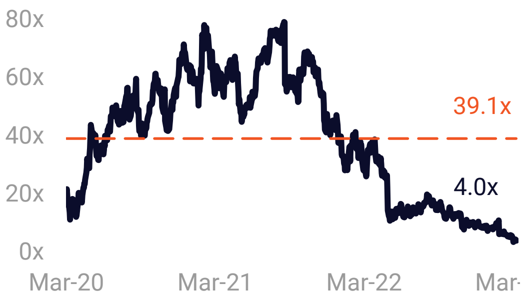
Scenario 3 – Low Long-Term Adoption ($50.78, 31% downside): The third DCF sees revenue growth decelerate following FY23 to ~20%, decelerating further to the low-teens by FY27, along with operating margins over the long-term topping out at 35%. The terminal FCF growth rate remains unchanged. This scenario points to a 12-month price of $50.78 (31% downside), which based on the current STM consensus gross profit implies a 4x EV/GP multiple.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

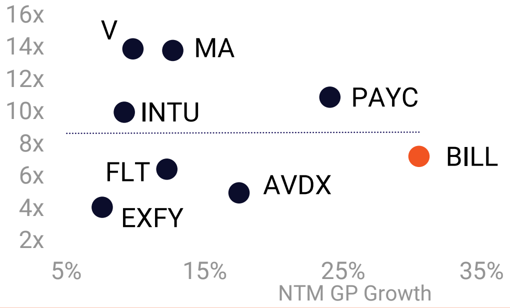
BILL NTM EV/GP & 3-Year Avg.



NTM EV/GP Premium vs. NASDAQ



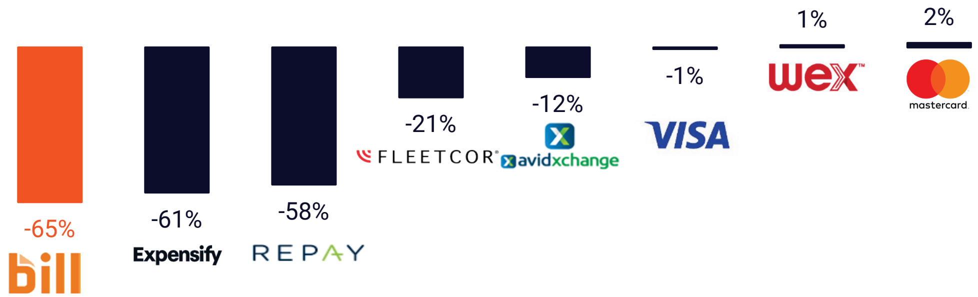
Peer NTM EV/GP Avg.[(1)]



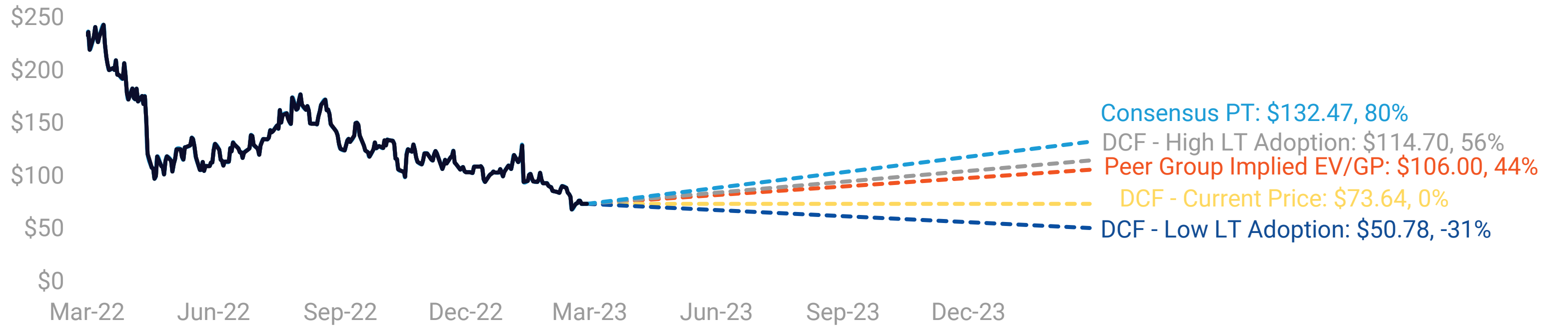
DCF Assumptions

10-Yr RFR	3.9%
Cost of Equity	18.3%
Cost of Debt	5.0%
WACC	15.7%
Beta	2.2
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC (mm)	$3,355

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) V/MA Multiple Based on Net Revenue

2) SBC in millions

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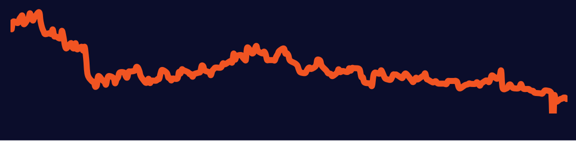
bill

BILL TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluation potential outcomes and their valuation implications. This decision tree is built around 1) potential for recession and 2) higher-yielding product penetration (primarily VCC). While there are other drivers of BILL's performance (Divvy growth, number of customers, etc.), these represent the most likely area(s) of upside or downside relative to management's outlook and consensus.

Consensus Case:

The average consensus price target for BILL is $132, with STM gross profit estimates of $1,238mm implying an 11x NTM EV/GP earnings multiple, if shares of BILL trade at this price in 12-months. This multiple is significantly below BILL's 3-year average EV/GP multiple of 43x. The consensus price target implies 80% upside to the share price as of the March 17th close.

Upside Case(s):

(+) $120, 63% Upside: This scenario assumes SMB spending rebounds from recent weakness and there is no recession. The model reflects this by 1) assuming a step up in core BILL volume/transaction growth and 2) a modest increase in client net adds. This implies 35% gross profit growth and 63% upside to the current share price with a 9x multiple.

(+-) $80, 9% Upside: This scenario assumes no recession but forecasts less VCC/cross-border penetration as a percentage of TPV. In this scenario, transaction count growth is decreased to match customer growth, while average ticket size is held in line with F2Q23. The model also assumes revenue per transaction is unchanged. This implies 32% gross profit growth and 9% upside to the current share price with a 6x multiple.

(++) $143, 94% Upside: The best-case assumes no recession and forecasts accelerating VCC/cross-border penetration as a percentage of TPV. This implies 40% NTM gross profit growth and 94% upside to the current share price with a 14x multiple.

Downside Case(s):

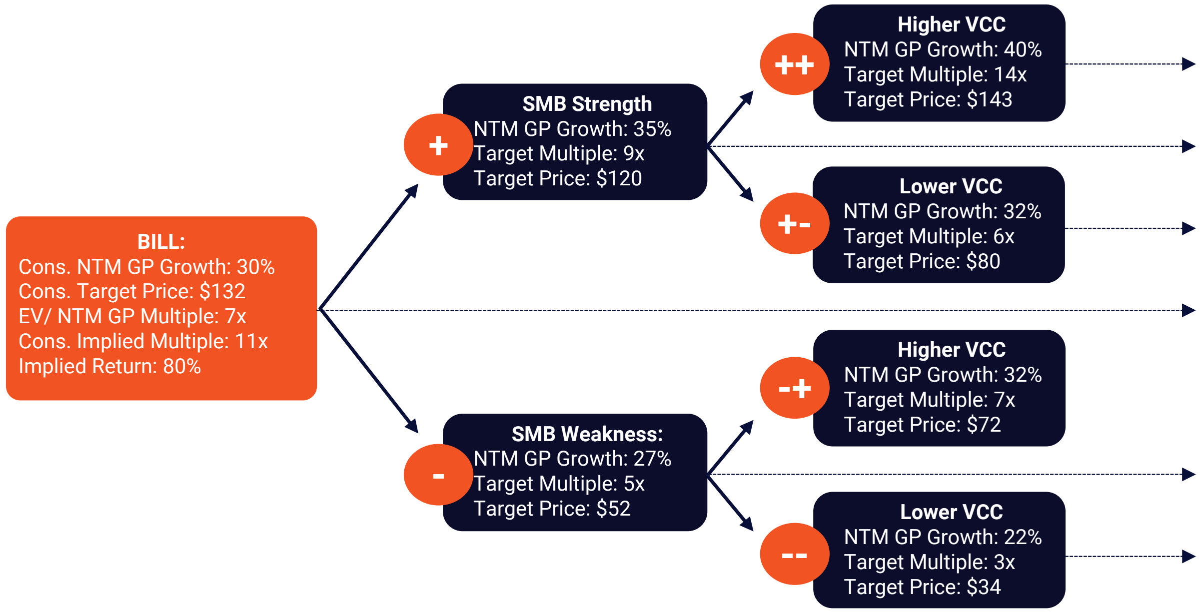
(-) $52, 29% Downside: This scenario assumes a recession and overall SMB weakness, weighing on overall volume and transactions. The model reflects this by assuming TPV growth declines to early COVID levels, as we view this as the best proxy for how volume could contract during a recession. It also assumes modestly lower net adds. This implies 27% gross profit growth and 29% downside to the current share price with a 5x multiple.

(-+) $72, 2% Downside: This scenario assumes a recession, partially offset by the previously mentioned stronger VCC/cross-border penetration. This implies 32% gross profit growth and 2% downside with a 7x multiple.

(--) $34, 54% Downside: The worst-case scenario assumes a recession and the previously mentioned slower volume penetration. This implies 22% gross profit growth and 54% downside to the current share price with a 3x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



BILL:
Cons. NTM GP Growth: 30%
Cons. Target Price: $132
EV/ NTM GP Multiple: 7x
Cons. Implied Multiple: 11x
Implied Return: 80%

\+ **SMB Strength**
NTM GP Growth: 35%
Target Multiple: 9x
Target Price: $120

++ **Higher VCC**
NTM GP Growth: 40%
Target Multiple: 14x
Target Price: $143

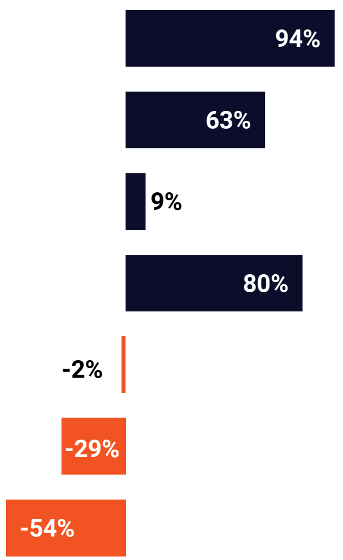
+- **Lower VCC**
NTM GP Growth: 32%
Target Multiple: 6x
Target Price: $80

\- **SMB Weakness:**
NTM GP Growth: 27%
Target Multiple: 5x
Target Price: $52

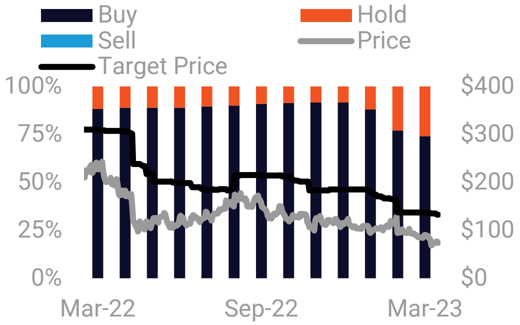
-+ **Higher VCC**
NTM GP Growth: 32%
Target Multiple: 7x
Target Price: $72

-- **Lower VCC**
NTM GP Growth: 22%
Target Multiple: 3x
Target Price: $34

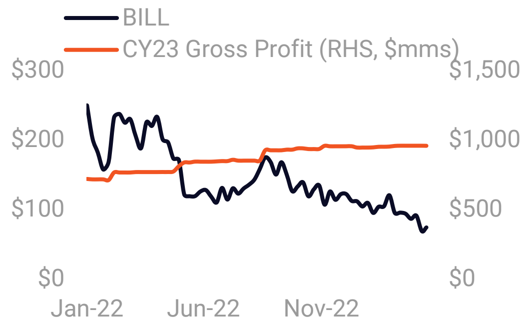
12-Month Return



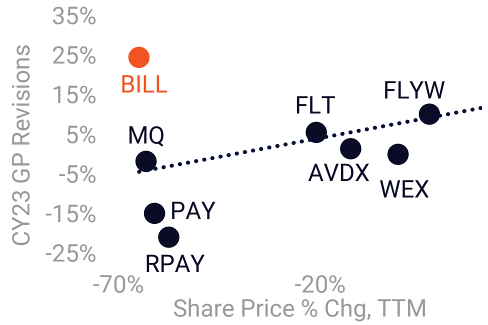
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



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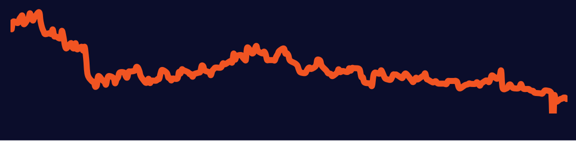
BILL TTM Price Performance



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($ in millions, except per share amounts)

F2Q23 EARNINGS CALL RECAP

Takeaway: BILL shares fell ~22% in after-hours trading following the F2Q23 earnings report, reflecting a disappointing implied core revenue guidance, as well as a cautious economic outlook. We note that prior to the print, BILL was trading at a relatively rich valuation of 14x EV/Adj. GP and the sell-off likely represented the resetting of expectations. We maintain that BILL is one of the most compelling stories in the space, and a valuation re-rating could represent a compelling entry point if macroeconomic conditions don't deteriorate.

Results Recap: BILL reported F2Q23 TPV of $67.3bn, up 15% YoY and missing expectations by 2%. The company reported total revenue of $260mm (+66% YoY), eclipsing guidance of $241.5mm – $244.5mm and exceeding consensus by 7%, a feat the company has managed every quarter since IPO. Adjusted net income was $49.4mm, up $50mm YoY, easily exceeding consensus of $15.8mm (guidance was $14.5mm - $17.0mm).

Guidance Recap: BILL provided an update on its FY23 guidance, marginally increasing expectations at the bottom end of the range, calling for total revenue of $999mm - $1,007mm (+56% YoY at the midpoint) vs. prior guidance of $994mm - $1,007mm. Additionally, BILL provided its outlook for F3Q23, stating it expects total revenue of $245mm - $248mm (+48% YoY at the midpoint), falling below the pre-release consensus of $249mm (+49% YoY). Adjusted net income/adjusted EPS for the quarter is expected to be $26.5mm - $29.5mm/$0.22 - $0.25, up 422% YoY at the midpoint, vs. pre-release consensus of $14.8mm/$0.12.

Incremental From the Call:

- **Guidance/Outlook:** Management explained the updated revenue guidance discussed above implies lower F2H23 TPV growth across BILL and Divvy, as well as slower monetization expansion, reflecting the softer environment that BILL is facing as SMBs adjust their spend and maintain a "wait-and-see" attitude towards the macroeconomy. Management expects float revenue to be ~$100mm (+$92mm YoY) in FY23, and $56mm in F2H23 (+$49mm YoY) vs. previous guidance of $40mm for F2H23. When contemplating higher float revenue in the model, it implies core revenue of $457.3mm, a 27% YoY increase in 2H23. Comparatively, after F1Q23, management provided expectations that F2H23 core revenue would be $487.6mm (up 35% YoY), implying a 6% decrease in core revenue forecasts for F2H23. Management also upped its adjusted net income guidance by 91% at the midpoint, from $57.5mm – $70.0mm to $117.5mm - $125.5mm, growth of $133mm YoY at the midpoint. Guidance for adjusted EPS also improved 91% at the midpoint, from $0.48 - $0.59 to $0.99 - $1.05.
- **VCC/Cross-Border Penetration:** Monetization was lighter than expected in F2Q23, driving questions about macroeconomic impacts on the uptake of cross-border/VCC. Management hasn't seen any direct impact on monetization expansion from macro factors, however it has baked slower monetization into future guidance. Management clarified that BILL is focused on repeat transactions more than monetization expansion (BILL has a long-term targets for 10%/5% of TPV for VCC/Cross Border volume), adding that BILL does not expect current macroeconomic conditions to negatively impact SMB spend or monetization over the long term.
- **Expense Growth vs. Margin Expansion:** While BILL grew non-GAAP gross margin to 86.7%, up 136bps YoY and their best on record, core expenses have also scaled. Investors remain focused on how BILL will manage the expense base considering the current macroeconomic backdrop. While adjusted operating margin expanded to 11.8% from 2.2% YoY, when excluding the impact of float revenue, core adjusted operating margin decreased from 1.6% to 0.8% YoY, implying expenses grew faster in the quarter than overall core revenue and that float revenue has been a significant driver of net income/earnings outperformance. BILL's management discussed striking the right balance between growth and profitability in the near term and reiterated that current guidance for FY23 represents a good balance of those objectives.
- **FI Channel:** Given the FI channel is now contributing ~45% of BILL's net customer adds on a quarterly basis, management broke down how the FI channel is expected to contribute to BILL's longer-term strategy. Management is focused on the ability for customers to add their network members and suppliers into the ecosystem, which it believes will be a tailwind to incremental revenues going forward. BILL expects FI channel contribution to revenue to be significantly higher than 45% in the long-term.

F2Q23 REPORTED VS. CONSENSUS

Line-Item	Actual	Consensus	Abs.▲	%▲
TPV (bn)	**$67.3**	**$68.7**	**-$1.35**	**-2%**
growth (%, yoy)	15%	18%		
Transactions Processed	**20.8**	**20.2**	**0.60**	**3%**
growth (%, yoy)	34%	30%		
Customer Count	**183**	**180**	**2.42**	**1%**
growth (%, yoy)	35%	34%		
Subscription Fees	**$61.5**	**$61.6**	**-$0.14**	**0%**
growth (%, yoy)	25%	25%		
Transaction Fees	**$170**	**$164**	**$5.86**	**4%**
growth (%, yoy)	60%	54%		
Float Revenue	**$28.9**	**$18.0**	**$10.9**	**61%**
growth (%, yoy)	N/A	N/A		
Total Revenue	**$260**	**$243**	**$16.6**	**7%**
growth (%, yoy)	66%	56%		
Adjusted Costs of Revenue	**$34.6**	**$38.6**	**-$3.95**	**11%**
growth (%, yoy)	51%	68%		
Adjusted Gross Profit	**$225**	**$205**	**$20.5**	**10%**
Adj. Gross Margin (%)	87%	84%		**249bps**
Adjusted OpEx	**$195**	**$196**	**-$1.61**	**1%**
growth (%, yoy)	50%	51%		
Adjusted Operating Income	**$30.8**	**$8.5**	**$22.3**	**262%**
Adj. Operating Income Margin (%)	12%	3%		**834bps**
Adjusted Net Income	**$49.4**	**$15.8**	**$33.5**	**212%**
Adj. Net Income Margin (%)	19%	7%		**1,248bps**
Adj. Diluted EPS	**$0.42**	**$0.13**	**$0.29**	**213%**
growth (%, yoy)	NA	NA		

FY23 Guidance	Old	New	+/-	Cons.	+/-
Total Revenue	**$994 - $1,007**	**$999 - $1,007**	**0%**	**$1,004**	**0%**
% growth	*55% - 57%*	*56% - 57%*		*56%*	
Adjusted Net Income	**$57.5 - $70.0**	**$117.5 - $125.5**	**91%**	**$122.0**	**0%**
% growth	*336% - 388%*	*583% - 616%*		*602%*	
Adjusted Diluted EPS	**$0.48 - $0.59**	**$0.99 - $1.05**	**91%**	**$1.03**	**-1%**
% growth	*NA*	*NA*		*NA*	

Source: Company filings; FactSet; Visible Alpha

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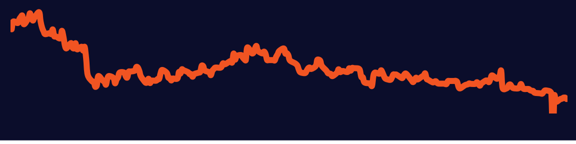
BILL TTM Price Performance



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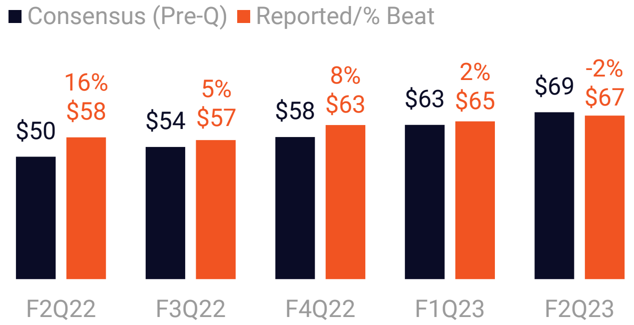
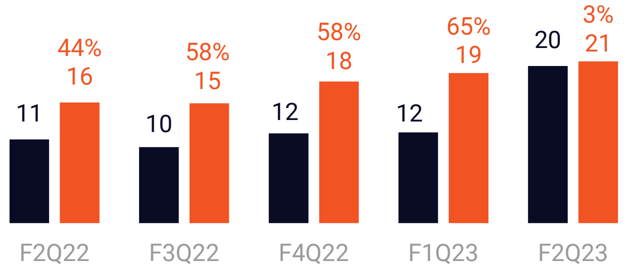
($ in millions, except per share amounts)

REPORTED VS. CONSENSUS

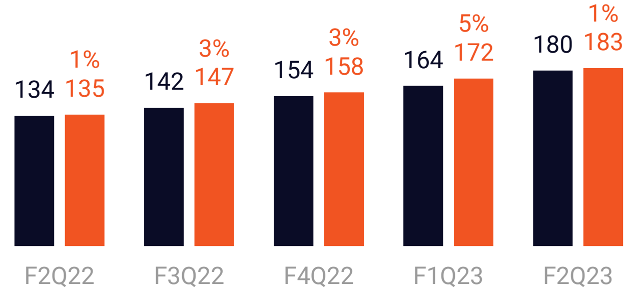
Total Payment Volume ($bn)



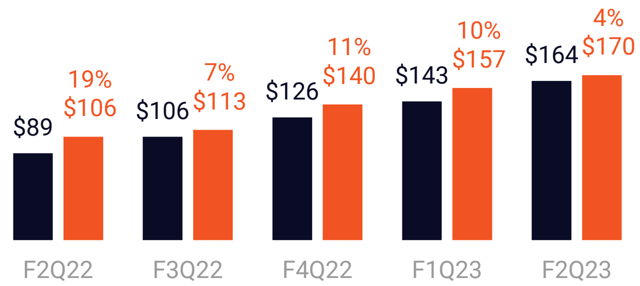
Transactions (mm)



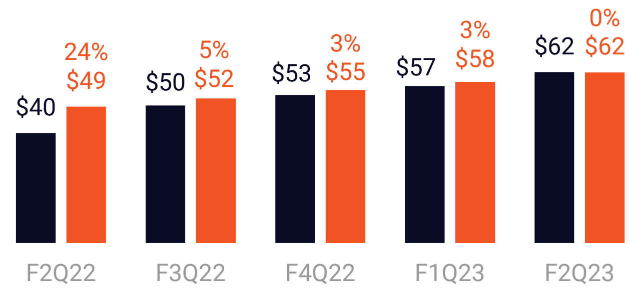
Customer Count (mm)



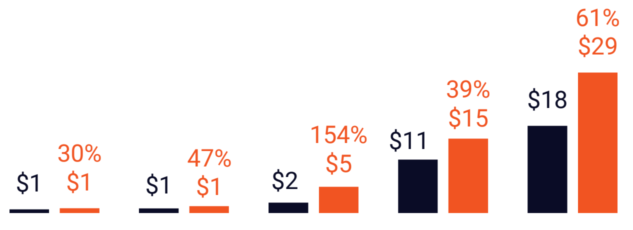
Transaction Revenue



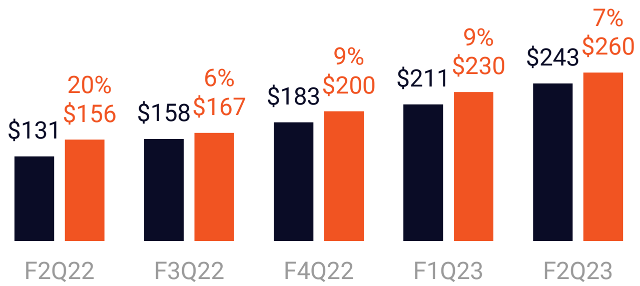
Subscription Revenue



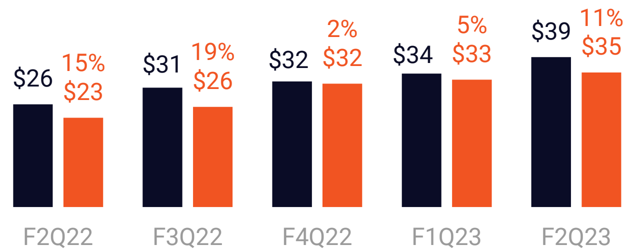
Float Revenue



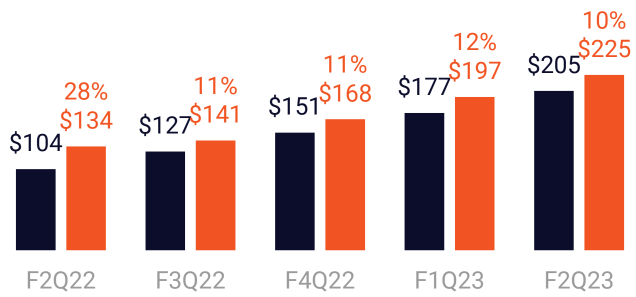
Total Revenue



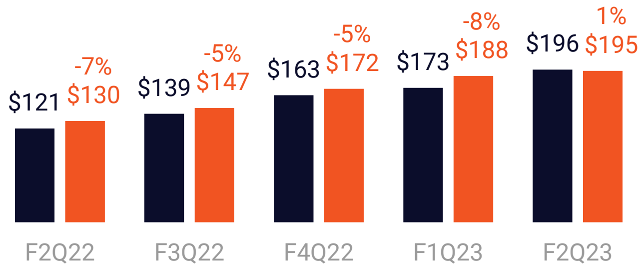
Adjusted Costs of Revenue



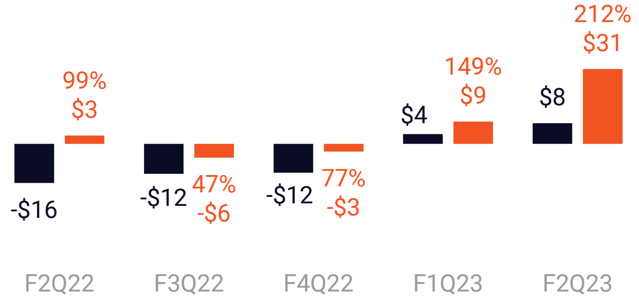
Adjusted Gross Profit



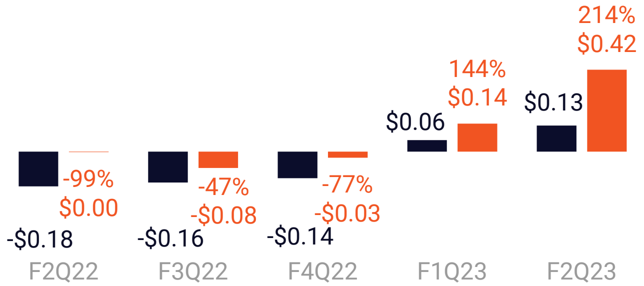
Adjusted Operating Expenses



Adjusted Operating Income



Adjusted Diluted EPS



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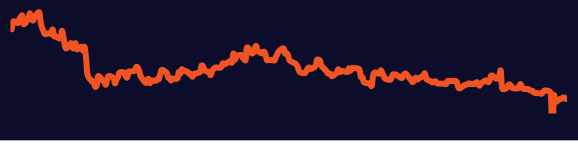

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($ in millions, except per share amounts)

F3Q23 EARNINGS OUTLOOK

BILL is projected to report F3Q23 earnings on May 2nd after the market close.

What's In Focus: On the F2Q23 call, the focus was on BILL's operating expense growth vs. gross margin expansion. While BILL grew non-GAAP gross margin to 86.7% (+136bps YoY) in F2Q23, the company's highest margin on record, core expenses have also scaled. Investors will likely remain focused on how BILL will manage the expense base given the current macroeconomic backdrop. Additionally, investors will look for any more color around management's discussion from the F2Q23 call regarding slower monetization through VCC and cross-border adoption. Lastly, commentary around the health of SMBs will be keenly focused on.

Estimates:

- **KPI's:** Since F2Q23 results, estimates for F3Q23 TPV have decreased 3%, while FY23 consensus has been revised down by 9% to $252bn (+11% YoY) from $275bn. Consensus for FY23 total customers has marginally improved by 1% to 196mm (+29% YoY). F3Q23 processed transaction estimates have been revised down by 2% to 19.6bn, growing 25% YoY, while FY23 consensus is lower by 8% to 76mm (+21% YoY). Divvy's transaction yield for F3Q23 was revised up by 9 bps to 2.63% (+8bps YoY), while FY23 estimates were revised up by 10 bps to 2.62% (+6bps YoY). Similarly, consensus for total transaction yield for F3Q23 is up 2bps to 27bps, up 7bps YoY, while FY23 estimates were also up 2bps to 26bps (+7bps YoY).
- **Revenue:** Divvy transaction fee estimates for F3Q23 have increased 5% to $83mm (+55% YoY), while FY23 estimates have been revised up 3% to $339mm (+64% YoY). F3Q23 BILL standalone transaction fee estimates were revised lower by 14% to $70mm (+19% YoY) from $82mm and down 8% to $305mm (+34% YoY) for FY23. Overall, this resulted in F3Q23 transaction fee revenue consensus falling 7% to $154mm (+36% YoY) and FY23 dropping 3% to $651mm (+148% YoY). Float revenue estimates for F3Q23 have increased significantly, up 61% to $27mm (+$26mm YoY), while FY23 consensus jumped 32% to $100mm (+$91mm YoY). Consensus for total subscription fee revenue for both F3Q23 and FY23 have remained unchanged at $65mm (+19% YoY) and $252mm (+30% YoY), respectively. Total revenue consensus for F3Q23 is lower by 1% to $247mm (+48% YoY) and FY23 remained unchanged at $1,003mm (+56% YoY).
- **Expenses:** Since F2Q23 results, F3Q23 adjusted cost of revenue estimates are down 10% to $36mm (+40% YoY). Consensus for F3Q23 adjusted operating expenses has remained relatively unchanged at $196mm (+34% YoY).
- **Earnings:** Consensus for F3Q23 adjusted diluted EPS is up dramatically since F2Q23 results were reported, doubling to $0.24 per share (+$0.32 YoY), while FY23 estimates have increased $0.48 to $1.04 per share (+$1.28 YoY).

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

F3Q22

- TPV beat but lower than typical magnitude, QoQ TPV decline
- QoQ decel in Sub. ARPU following one-time tailwinds in F2Q

F4Q22

- FY23 guidance above consensus expectations
- Beat revenue expectations by 9%, management noted updates to long term targets coming soon

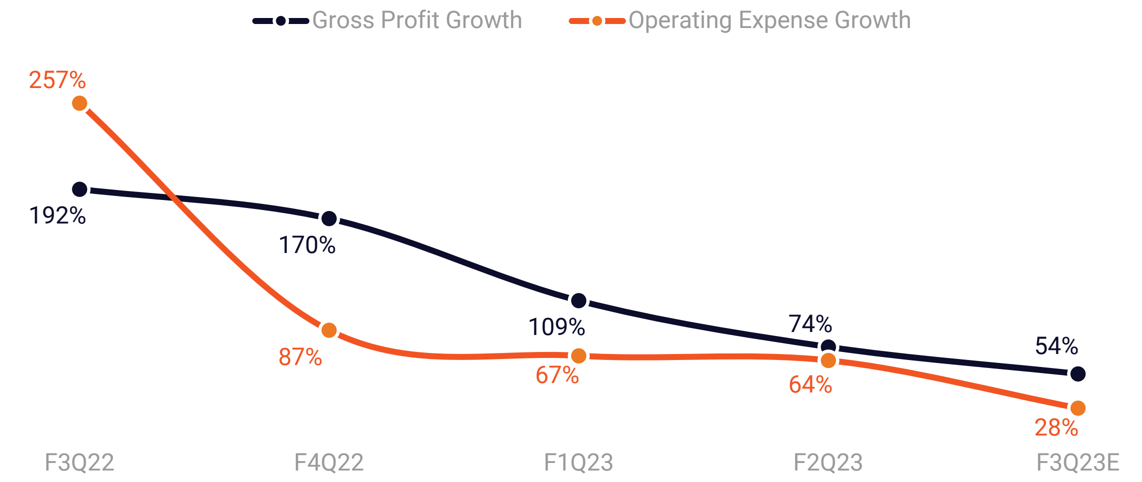
F1Q23

- 2nd quarter of Adj. Net Income profitability
- Beat TPV/Customers by 3%/4%
- Raised guidance but increased caution surrounding macro environment

F2Q23

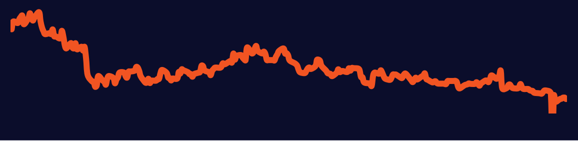
- Missed on TPV by 2%/ beat on customers by 1%
- Significantly raised guidance on adj. net income

GROSS PROFIT GROWTH VS. OPERATING EXPENSE GROWTH



Source: Company filings; FactSet
1) U.S. Census Bureau

BILL TTM Price Performance



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($ in millions)

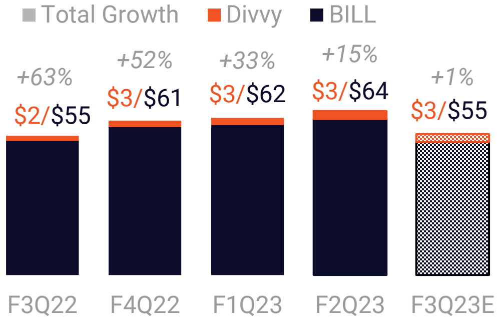
F3Q23 CONSENSUS ESTIMATE RANGES

	Low	Average	High
TPV (bn)	**$50**	**$58**	**$67**
growth (%, yoy)	-13%	1%	16%
Transactions Processed	**19**	**20**	**21**
growth (%, yoy)	21%	27%	36%
Customer Count	**134**	**189**	**220**
growth (%, yoy)	-9%	29%	50%
Subscription Fees	**$61**	**$65**	**$80**
growth (%, yoy)	17%	25%	53%
Transaction Fees	**$140**	**$154**	**$158**
growth (%, yoy)	23%	36%	39%
Float Revenue	**$26**	**$27**	**$30**
growth (%, yoy)	N/A	N/A	N/A
Total Revenue	**$245**	**$247**	**$252**
growth (%, yoy)	47%	48%	51%
Adjusted Costs of Revenue	**$32**	**$36**	**$42**
growth (%, yoy)	23%	39%	64%
Adjusted Gross Profit	**$204**	**$211**	**$220**
Adj. Gross Margin (%)	83%	86%	87%
Adjusted OpEx	**$180**	**$196**	**$203**
growth (%, yoy)	23%	34%	38%
Adjusted Operating Income	**$7**	**$14**	**$27**
Adj. Operating Margin (%)	*3%*	*6%*	*11%*
Adjusted Net Income	**$24**	**$28**	**$32**
Adj. Net Income Margin (%)	10%	11%	12%
Adjusted Diluted EPS	**$0.20**	**$0.24**	**$0.27**
growth ($, yoy)	$0.29	$0.32	$0.35

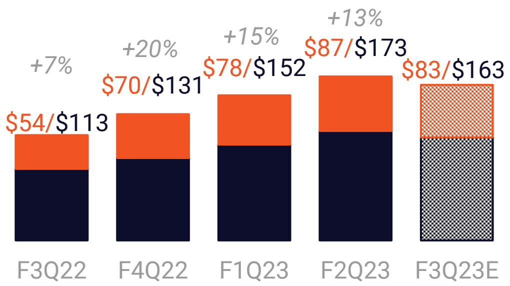
Source: Company filings; FactSet

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

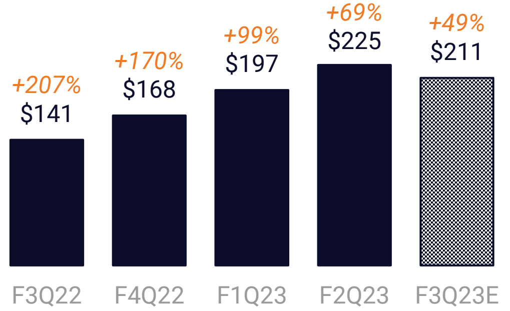
TPV ($ in Billions)/YoY Growth



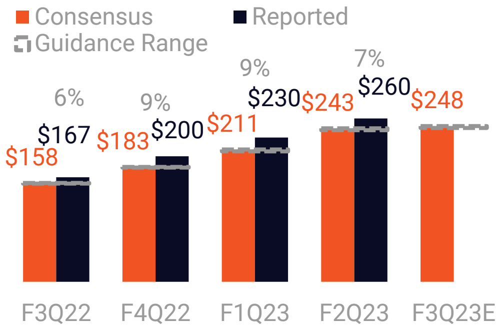
Revenue/YoY Growth



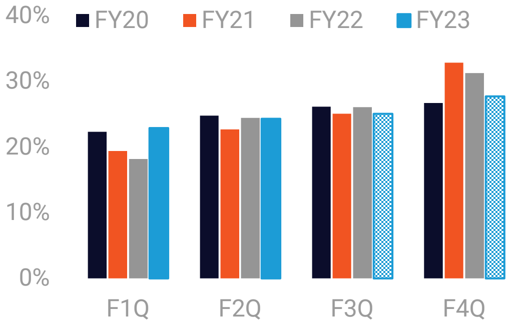
Adjusted Gross Profit/YoY Growth



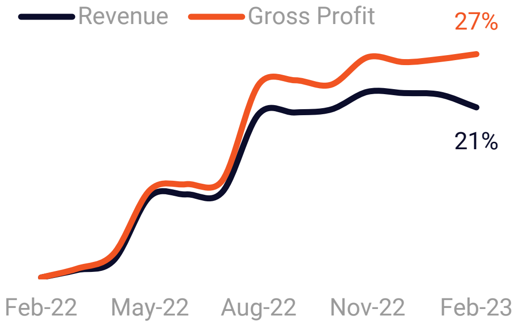
Guidance/Cons. vs. Reported



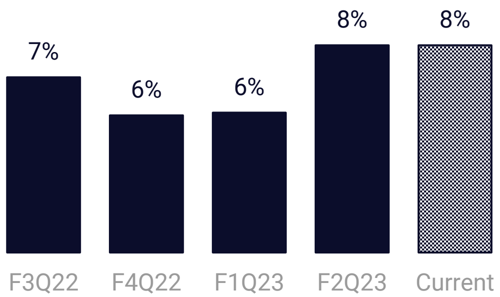
Revenue Seasonality



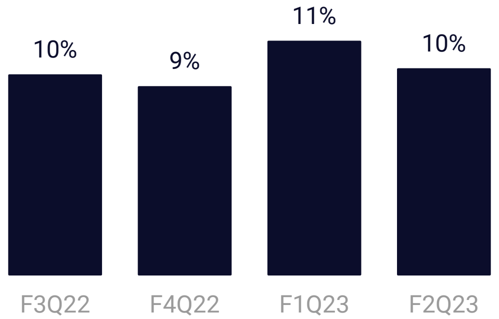
F3Q23 Cons. Revisions



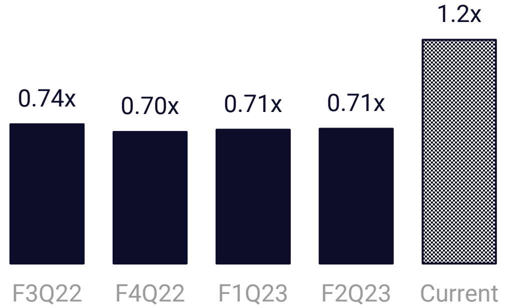
Short Interest (Pre-Print)



Hedge Fund Ownership as % of S/O

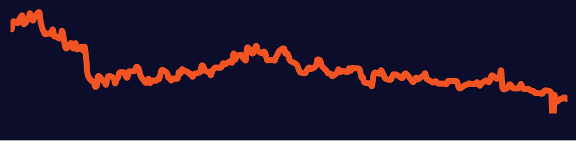


Pre-Earnings Put/Call Ratio[1]



03/20/23 - **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218 0540

BILL TTM Price Performance



Price as of 03/17/23:	$73.64	**Shares Out (mm):**	106
Market Cap (mm):	$7,834	**Beta (2 Year Avg.):**	2.5
52-Wk Range:	$68.3 - $244.89	**Avg. Daily Vol (mm):**	2.8

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($ in millions, except per share amounts)

QUESTIONS FOR MANAGEMENT

General:

1) How significant is the difference in TPV growth between your SMB customers and the larger middle-market customers?
2) Are there any specific verticals that have been surprisingly strong/weak in terms of TPV, especially as macroeconomic conditions have impacted growth?
3) SME spend on T&E has finally starting to accelerate. Can BILL benefit from this potential tailwind?
4) How significant of an impact will USD strength have on cross-border volume considering foreign currency payments now represent ~32% of total cross-border volume?
5) Has competition increased at the low-end of the market or is BILL still primarily competing against local accounts or self-serve software?

Fundamental:

6) Is there any implied cadence to the FY23 target for non-GAAP profitability?
7) FY23 guidance implies another 50%+ YoY revenue growth. What is the expected long-term growth rate for the business?
8) Can operating expense growth be held in check without limiting growth as a side effect?

Growth Opportunities:

9) What are the current rate limiting factors on VCC adoption?
10) What type of clients have you had the most success in driving VCC adoption with so far?
11) How quickly can BILL ramp up cross-border payments either among the existing client base or through international expansion?

Platform:

12) One of the 2023 priorities listed is to develop a unified platform experience. What is the timeframe for this enhancement and how will it impact BILL's cross-sell success rate?

Capital Allocation:

13) With valuations having pulled back, do you expect to use excess capital to potentially acquire other complimentary products to try and repeat the early successes with Divvy and Invoice2Go?

POTENTIAL CATALYSTS

2023

BILL @ Wolfe FinTech Forum
3/14/2023

SMB Optimism Index Release
4/11/2023

Facebook releases 1Q advertising spend
5/1/2023

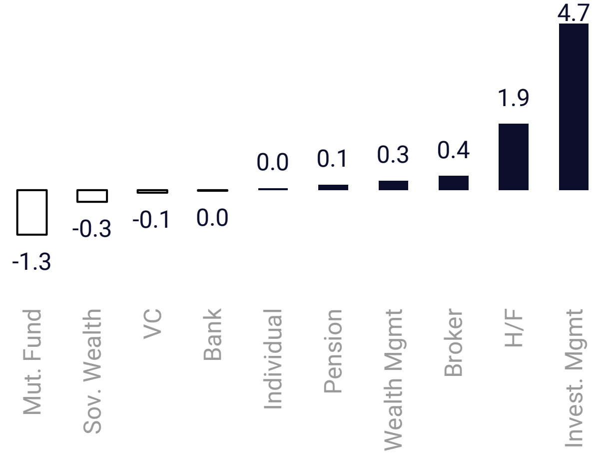
Bill Projected F3Q23 Earnings
5/2/2023

$75mm Revolving Credit Agreement Matures
6/1/2023

AvidXchange Projected 1Q23 Earnings
6/1/2023

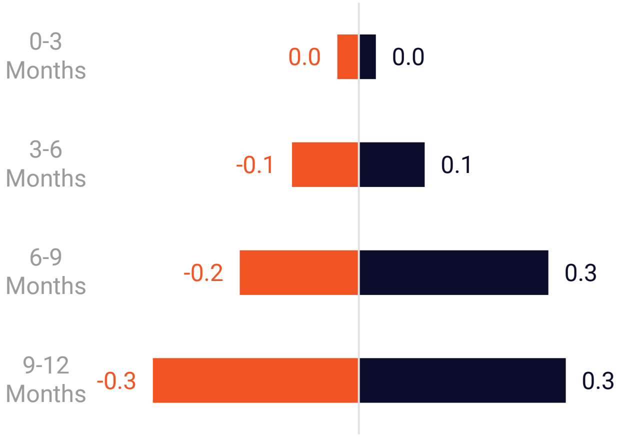
SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Mut. Fund	-1.3
Sov. Wealth	-0.3
VC	-0.1
Bank	0.0
Individual	0.0
Pension	0.1
Wealth Mgmt	0.3
Broker	0.4
H/F	1.9
Invest. Mgmt	4.7

Insider Shares Sold/Bought (mm)



0-3 Months	0.0	0.0
3-6 Months	-0.1	0.1
6-9 Months	-0.2	0.3
9-12 Months	-0.3	0.3

Source: Company filings; FactSet

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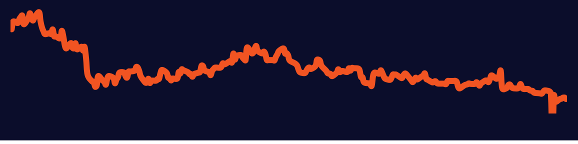
bill

BILL TTM Price Performance



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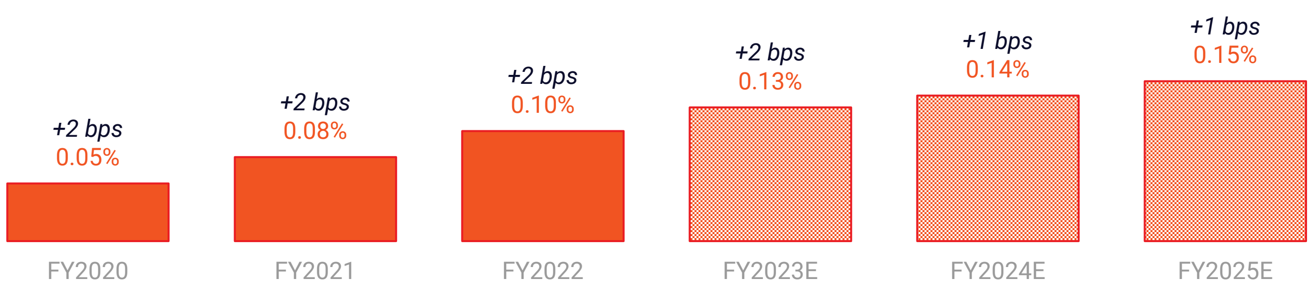
FINANCIAL TECHNOLOGY PARTNERS

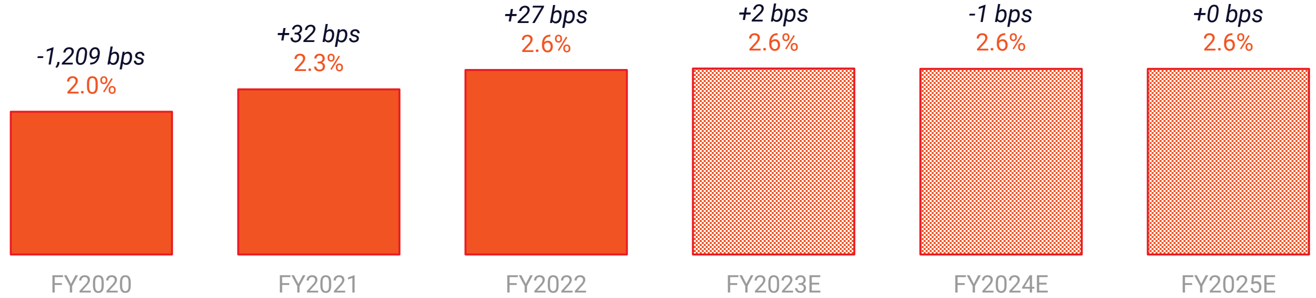
($ in millions, except per share amounts)

COMPANY RATIOS/MARGIN ANALYSIS

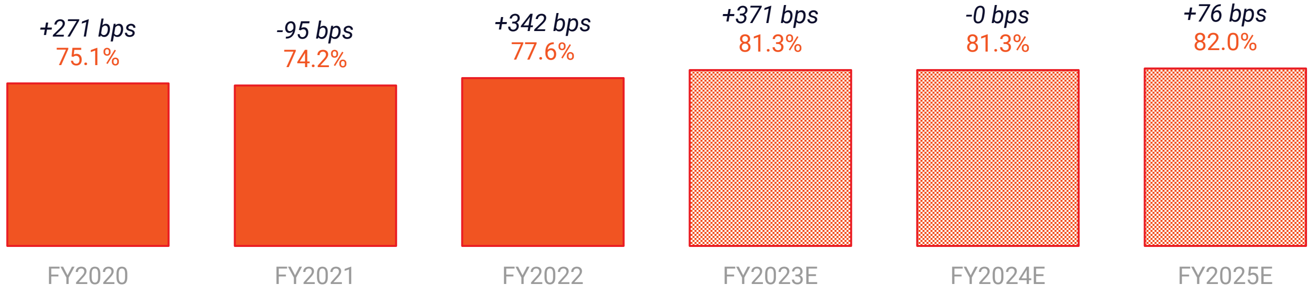
BILL Standalone Transaction Yield (% of Bill Standalone TPV)



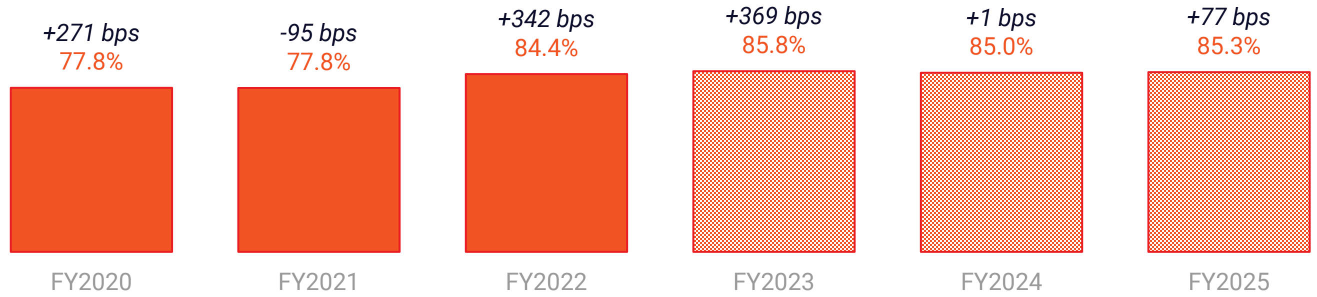
Divvy Transaction Yield (% of Divvy TPV)



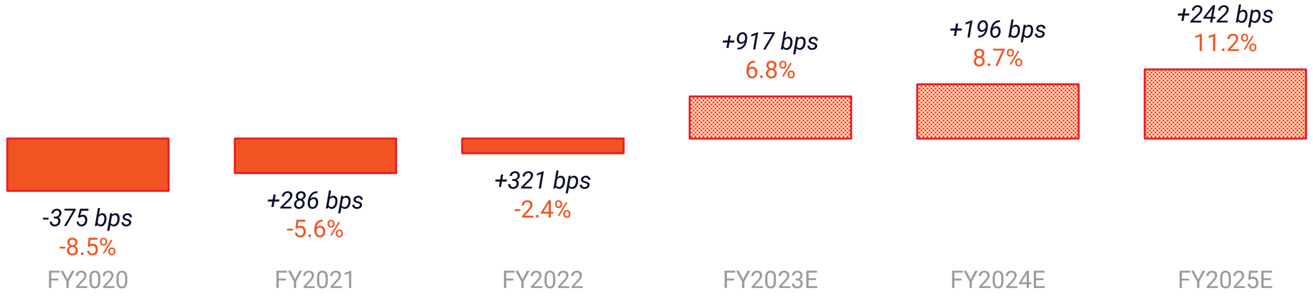
Gross Margin (% of Revenue)



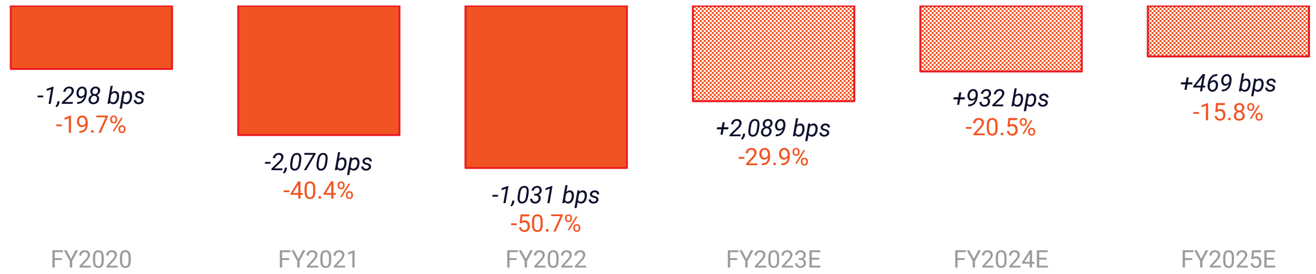
Adjusted Gross Margin (% of Revenue)



Adjusted Operating Margin (% of Revenue)

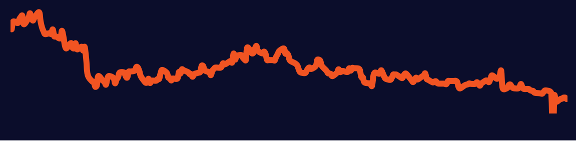


Net Income Margin (% of Revenue)



Source: Company filings, FactSet

BILL TTM Price Performance



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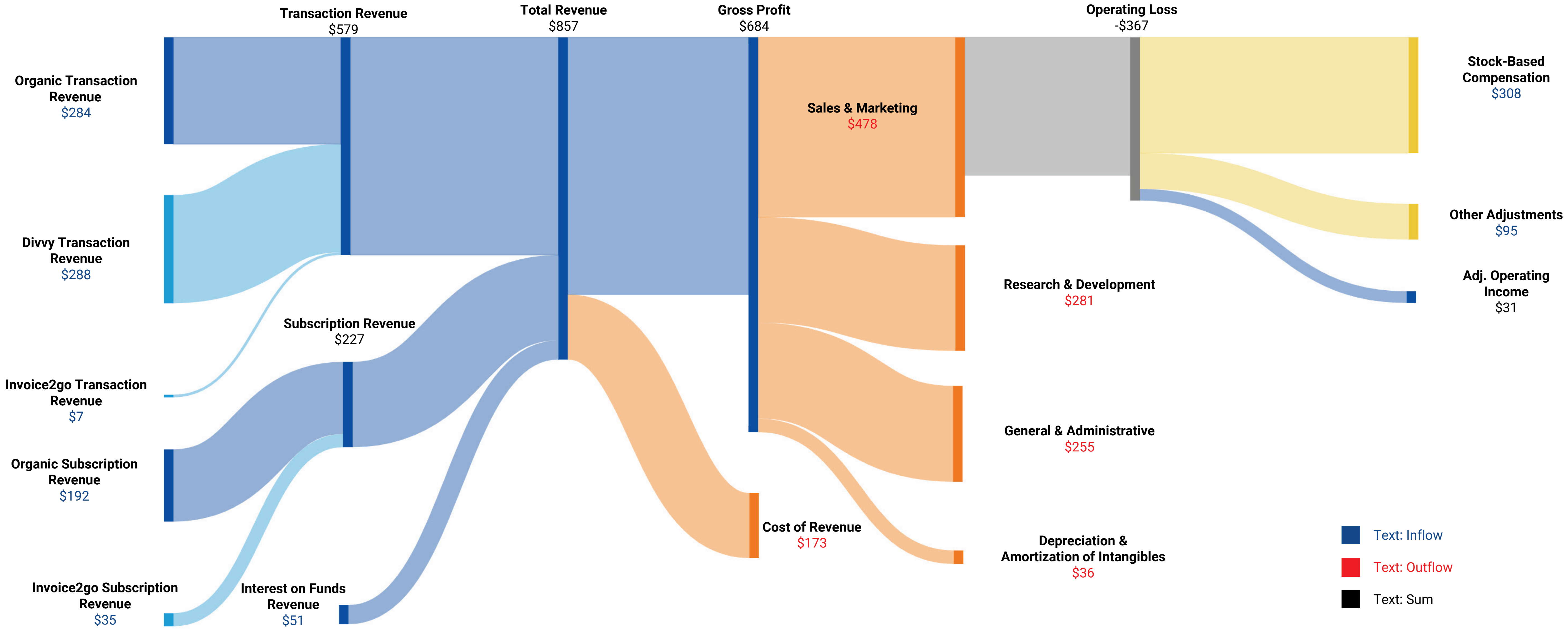
FINANCIAL TECHNOLOGY PARTNERS

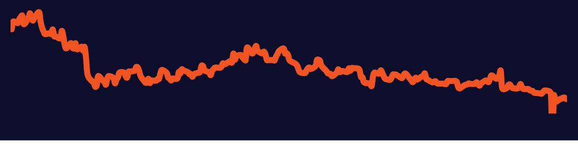
($ in millions)

P&L VISUALIZATION – TTM



Source: Company filings; FactSet

BILL TTM Price Performance



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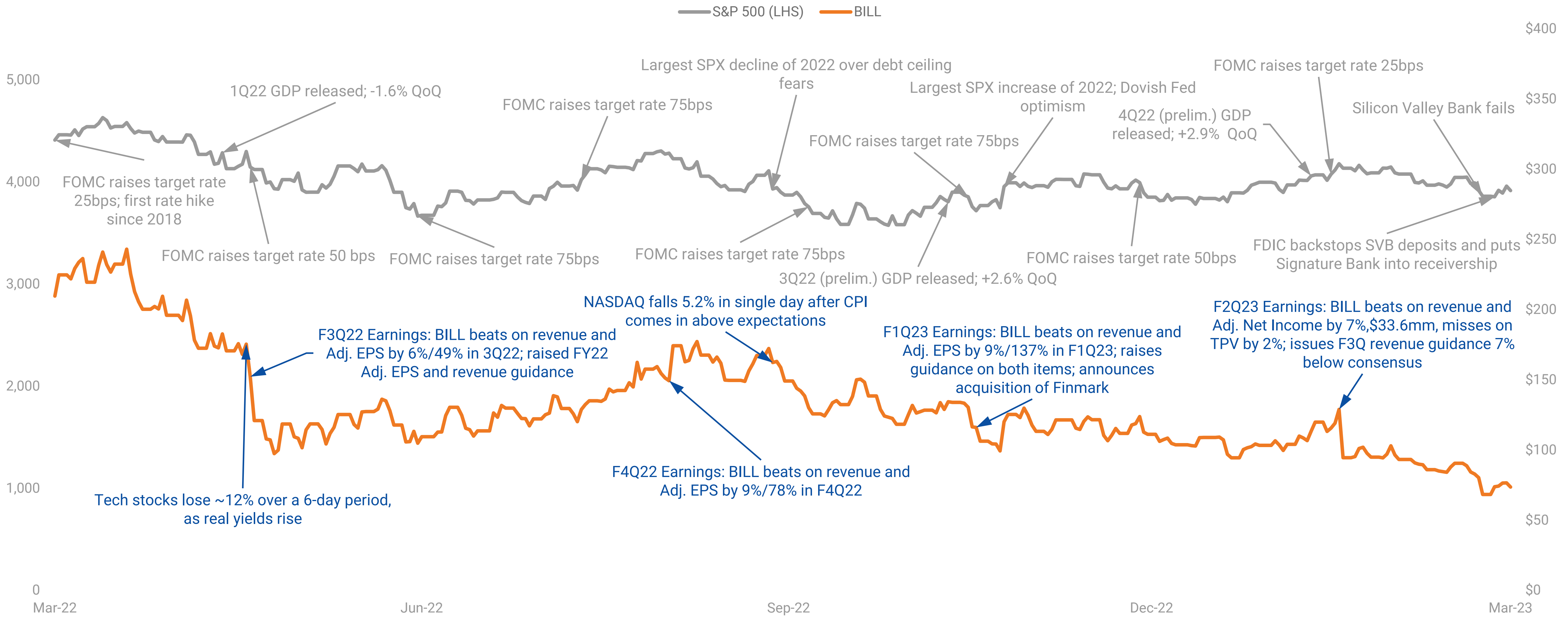
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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Craig Maurer | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516
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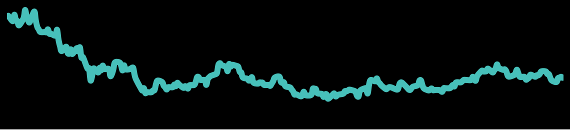
Matthew.O'Neill@ftpartners.com (347) 614-2481 *(AC) | FTP Securities LLC is a FINRA registered broker dealer (www.finra.org) and member SIPC (www.sipc.org). The firm and its reps can be found here: FTP SECURITIES LLC - BrokerCheck (finra.org) | March 20, 2023
Please refer to page 88 for important disclosures.

SQ TTM Price Performance



Price as of 03/17/2023:	$73.98	**Shares Out (mm):**	598
Market Cap (bn):	$44	**Beta (2 Year Avg.):**	2.5
52-Wk Range:	$51.34 - $149.00	**Avg. Daily Vol (mm):**	12.2

COMPANY OVERVIEW

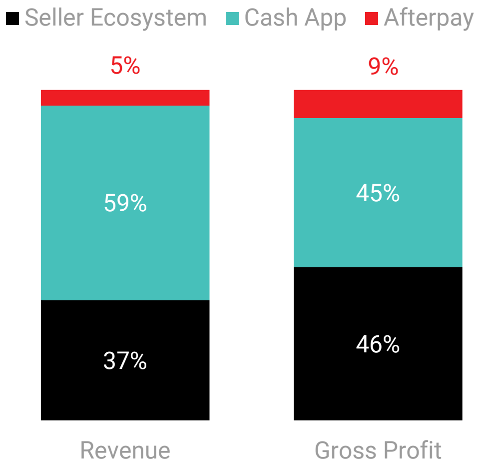
Block (FKA: Square) is made up of two separate financial ecosystems.

The **Square ecosystem (50% of TTM gross profit)** offers merchants a variety of software, hardware, and financial services primarily bundled through its iPoS (integrated Point-of-Sale) system. The Square ecosystem consists of subscriptions related to the PoS offering (like Square for Restaurants), PoS hardware, Square Loans, Afterpay, and merchant acquiring revenue. In FY22, Square processed ~$186bn in Seller GPV.

The **Cash App ecosystem (49% of TTM gross profit)** provides a suite of financial products and services to help individuals manage their money. Cash App products include the Cash Card, Instant Transfers, Cash App Business, Peer-to-Peer transfers, Bitcoin, etc. As of 4Q22, Cash App had 51mm monthly transacting users.

Afterpay's financial contribution is split 50/50 across each ecosystem.

FY22 SEGMENTS



KEY DEBATES

1. **Cost Management:** In FY22, Adj. EBITDA margins compressed ~3ppt as a percentage of gross revenue less BTC costs, driving management to focus on improving profit margins through slowing OpEx growth and investing in channels with more proven ROI. Consequently, management expects adjusted operating margin expansion over FY23. Block's ability to drive operating leverage and adjusted operating income will be a key focus in FY23, though the new operating income adjustment methodology may lead to variation in consensus.

2. **Cash App Monetization:** During its May 2022 investor day, Block outlined its Cash App monetization rate of 1.19%, while also highlighting a 31% increase in retention when a user utilizes 4+ Cash App products. While Cash App currently has a 27%+ gross margin (ex-Afterpay), as Block continues to expand product offerings, the monetization rate and gross margin are expected to expand, driving incremental profitability This will be a key focus of investors as the Cash App ecosystem matures and is no longer being driven by pandemic-related stimulus.

3. **Square Moving Upmarket:** While being a segment leader for micro and SMB merchant acquiring/PoS solutions, Square has been looking to expand further into the middle-market. Moving upmarket would provide stronger cross-sell and volume opportunities than the current merchant mix, however, concerns regarding take rate compression may limit upside. Additionally, 2019 and pre-2019 cohort monetization seems to be slowing, indicating a move upmarket may be critical to drive incremental gross profit dollars.

REVENUE MODEL

Block reports revenue through four segments:

Transaction-Based (32% of TTM Adjusted Revenue):
- Square Seller: Block charges sellers a merchant discount rate calculated as a percentage of the total transaction amount
- Cash App: Users are charged for P2P transactions to business accounts and/or payments funded with a credit card

Subscription and Services (63% of TTM Adjusted Revenue):
- Cash Card: Block earns interchange fees when users make purchases with the Cash Card (% of total transaction amount)
- Instant Transfer: Sellers receive funds from their payments instantly, while Block takes a percentage of the payout for advancing settlement
- PoS Subscriptions: Fees charged on a recurring basis for use of iPoS software solutions
- Square Loans: Originates SMB loans that are paid back through withholding of a percentage of sales processed by Block
- Afterpay: Provides BNPL products generally paid back in two-week increments, where Afterpay pays the retail merchant its full order value upfront (less a percentage fee) and assumes the credit risk

Hardware (2% of TTM Adjusted Revenue): Revenue from selling PoS hardware (typically sold at a loss)

Bitcoin (2% of TTM Adjusted Revenue): Square purchases Bitcoin on behalf of customers from private broker dealers and applies a margin before selling to the customer. Proceeds from Bitcoin sales to customers are recorded as revenue on a gross basis and the cost to acquire Bitcoin is included in Cost of Revenue. On a gross basis, Bitcoin was 41% of 2022 revenue but had a gross profit margin of only 2%.

PRODUCT ECOSYSTEM

Square Cash App Afterpay

2010
- Square Payments

2015
- Point of Sale
- Square Loyalty
- Square Loans
- Square Invoices
- Appointments
- App Marketplace
- Contactless + Chip
- Payroll
- Instant Transfer
- Team Management
- P2P Payments
- Cash for Business

2017
- eCommerce API
- PoS API
- Virtual Terminal
- Square Register
- Stored Balance
- Instant Deposit
- Cash App Card
- ATM Withdrawals

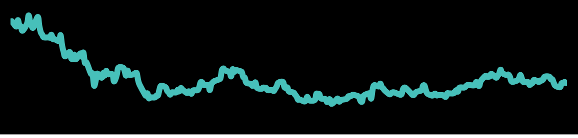
2020
- Restaurants
- Reader SDK
- Installments
- Terminal
- App Payments SDK
- Square Card
- Online Store
- Orders API
- Financial Services
- Check Deposits
- On-Demand Delivery
- Instant Payments
- Terminal API
- Bitcoin Trading
- Direct Deposit
- Cash Boost
- Stock Trading
- Cross-border Pay
- Cash Card Studio
- Borrow

2022
- Square Messages
- Subscriptions API
- Buy Now Pay Later
- Bitcoin P2P
- Paper Money
- Cash App Pay
- Stock & Bitcoin Gifting
- Taxes
- Lightning Payments
- Paid in Bitcoin
- Round up Feature
- Afterpay

Source: Company filings

BLOCK

SQ TTM Price Performance



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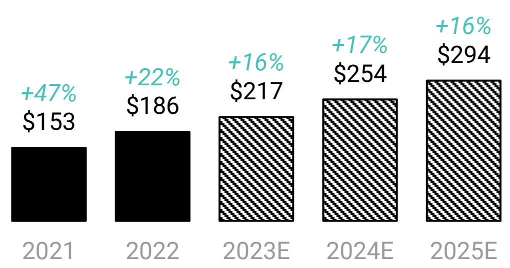
FINANCIAL TECHNOLOGY PARTNERS

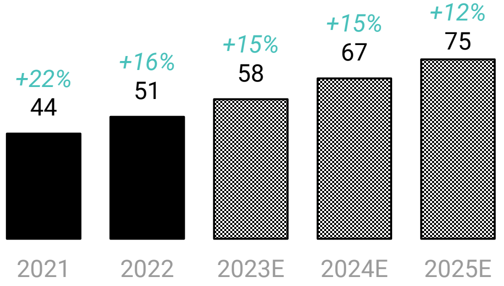
($ in billions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

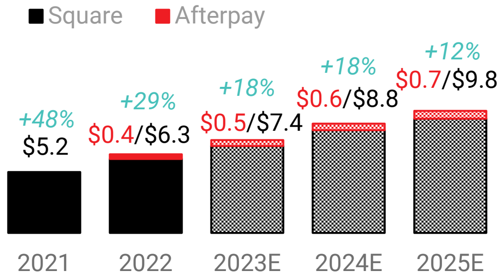
GPV – Seller Ecosystem



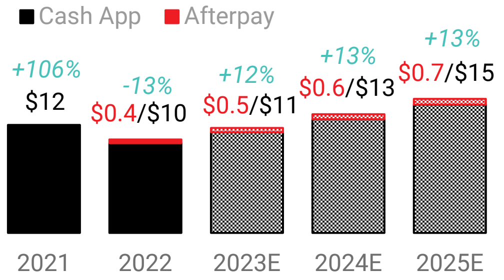
Cash App Users (mm)



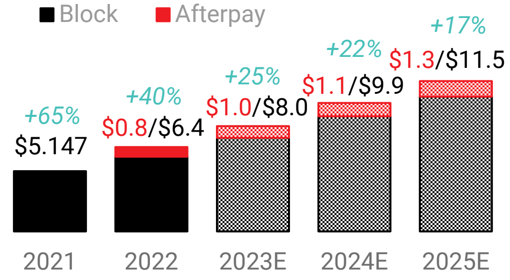
Gross Revenue – Square Ecosystem



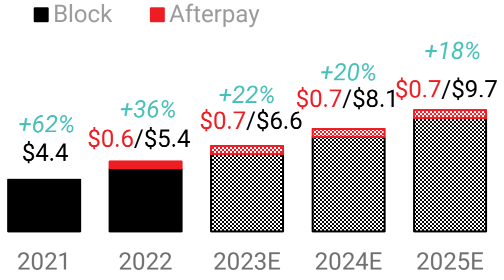
Gross Revenue – Cash App Ecosystem



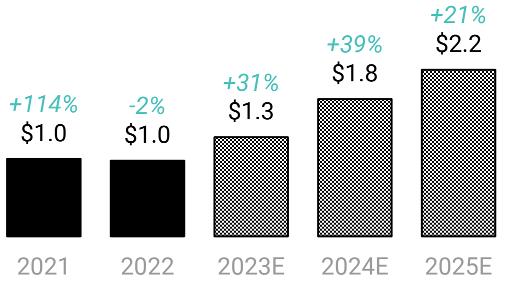
Total Adjusted Revenue



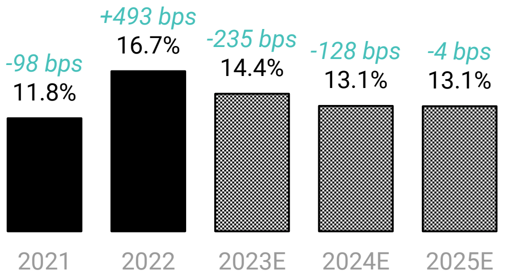
Total Gross Profit



Adjusted EBITDA

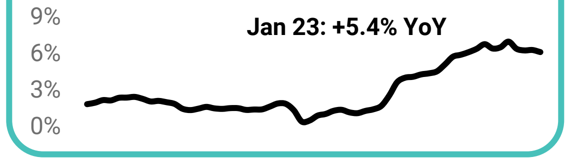


SBC % of Adjusted Revenue

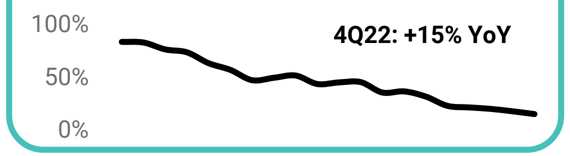


INDUSTRY KPIs

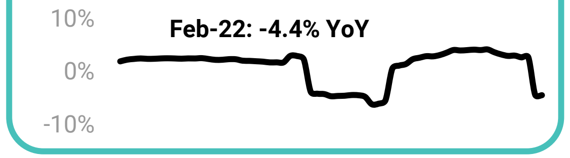
Consumer Spending[2] *(Jan 18-Jan 23)*



Neobank User Growth[3] *(1Q18-4Q22)*

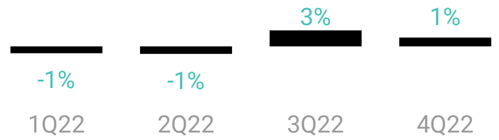


SMB Employment[2] *(Jan 17-Feb 23)*

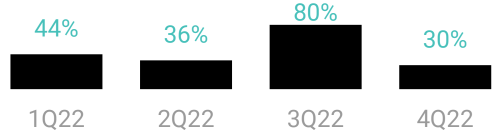


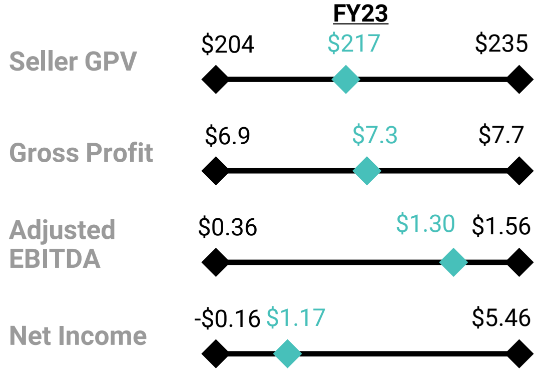
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[4]

Gross Profit

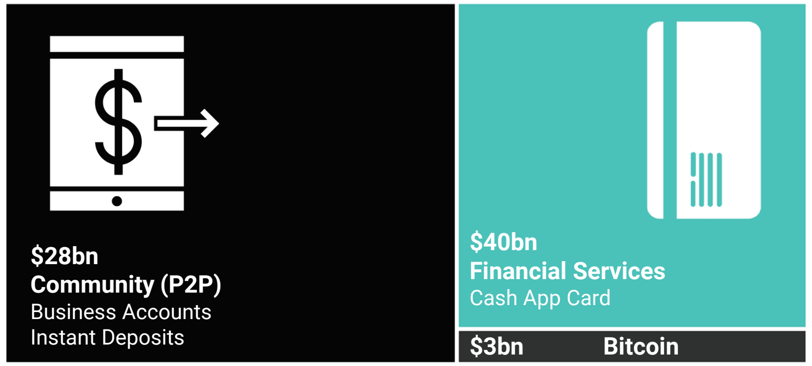


Adjusted EBITDA





Cash App Total Addressable Market[5]



$28bn
Community (P2P)
Business Accounts
Instant Deposits

$40bn
Financial Services
Cash App Card

$3bn **Bitcoin**

Square Seller Total Addressable Market[5]

$81bn
U.S. Commerce
Integrated Payments
Software
Financial Services

$25bn
International
Integrated
Payments
Software
Financial Services

$16bn
Financial Services
Square Loans
Financial Services

FT Partners | Equity Research

Source: Company filings
1) Visible Alpha
2) FRED
3) Aggregate number of users from Venmo, CashApp, SoFi, Moneylion and Dave
4) FactSet, Visible Alpha Consensus Low/Average/High Range
5) Block 2022 Investor Day

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SQ TTM Price Performance

Price as of 03/17/2023:	$73.98	**Shares Out (mm):**	598
Market Cap (bn):	$44	**Beta (2 Year Avg.):**	2.5
52-Wk Range:	$51.34 - $149.00	**Avg. Daily Vol (mm):**	12.2

VALUATION CONSIDERATIONS

Relative Valuation:

As of March 17th, Block trades at a 5.4x NTM EV/GP multiple, 10.9x below its 3-year average multiple of 16.3x. It currently trades at a 2.2x premium relative to the NASDAQ. Block's multiple over the past three years has benefitted from rapid consumer FinTech growth and higher iPoS adoption rates due to the COVID-19 pandemic.

However, since then Block (and many other FinTech companies) have suffered from the rerating of growth. This has, in part, driven Block's new focus on operating leverage and adjusted operating income (which importantly does not back out certain non-cash expenses such as SBC). While this will likely become a key valuation metric, today it remains immaterial. Therefore, valuation remains focused on gross profit until Block is able to deliver a greater level of profitability. **If Block were to trade in-line with peers on an NTM EV/GP basis it would imply a 12-month forward price of $108 (46% upside).**

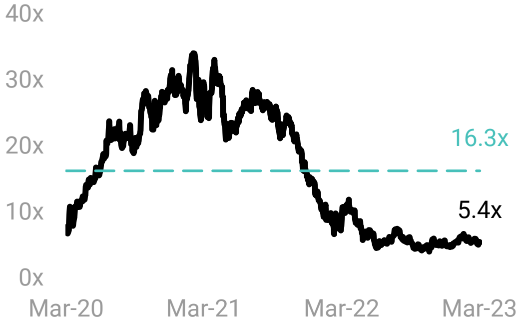
Scenario 1 – Current Price ($74, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. This requires a combination of sustained low double digit revenue growth through 2030 and terminal operating margins of 55%, implying significant margin expansion over the long-term. Were shares of Block to remain at the current share price in 12-months, it would imply a 4.8x NTM EV/GP multiple (based on current STM consensus GP of $9,144mm).

Scenario 2 – Cash App Monetization ($102, 38% Upside): The second DCF outlines a scenario where Block increases its Cash App user monetization rate. In this scenario, revenue growth is accelerated to mid double-digits through FY26 before gradually converging with the base case. We also incorporates into this scenario an earlier shift to GAAP operating income profitability in FY24. This scenario points to a 12-month price of $102 (38% upside), which based on current STM consensus gross profit implies a 6.5x NTM EV/GP multiple.

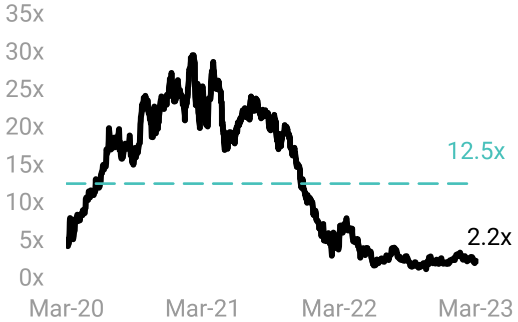
Scenario 3 – Competition ($56, 24% Downside): The third DCF scenario assumes a more competitive environment on the seller side of the business from the likes of Toast, SpotOn, etc. that could impact volume growth as well as pricing. As a result, revenue growth though FY27 falls to high-single digits, while margins expand slower than the base case. This scenario points to a 12-month price of $56 (24% downside), which based on current STM consensus gross profit implies a 3.4x NTM EV/GP multiple.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

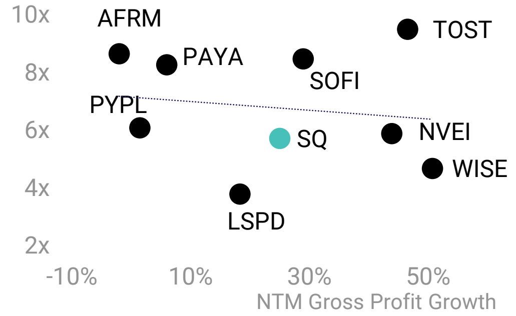
NTM EV/GP 3-Year Avg.



NTM EV/GP Premium vs. NASDAQ(1)



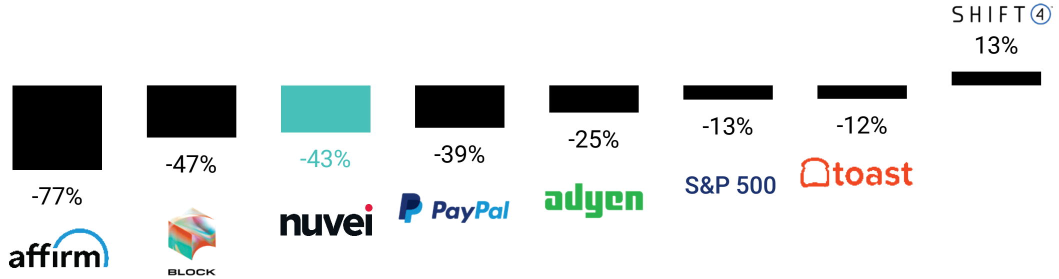
Peer Avg. NTM EV/GP(2) vs. GP Growth



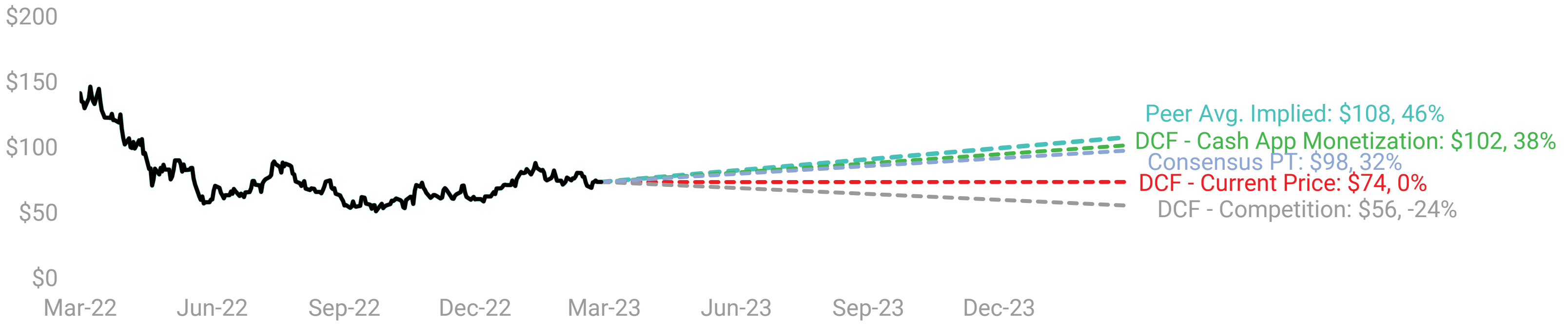
DCF Key Assumptions(3)

10-Year Rf	**2.8%**
Cost of Equity	**23.7%**
Cost of Debt	**4.5%**
WACC	**21.1%**
Beta	**2.7**
FCF Terminal Growth Rate	**3.0%**
SBC Terminal Growth Rate	**1.0%**
Equity Value Reducton from Present + Future SBC	**$1,168**

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) EV/NTM GP Less NASDAQ EV/NTM Sales
2) Gross profit or equivalent metric
3) SBC in millions

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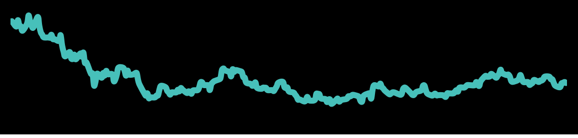

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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. The decision tree is built around 1) the potential for recession/weaker consumer spending and 2) operating expense management. While there are other drivers of Block's performance, these appear to represent the most likely area(s) of upside/downside relative to the consensus outlook over the short-to-medium term.

Consensus Case:

The average consensus price target for Block is $98. If shares of Block were to trade at this price, it would imply a 12-month forward NTM EV/GP multiple of 6.1x based on STM consensus gross profit estimates of $9.1bn, a 0.6x expansion relative to the current 5.4x multiple. This 5.4x multiple is 10.9x below Block's average NTM EV/GP. The consensus price target implies 32% upside relative to the current share price.

Upside Case(s):

(+) $100, 36% Upside: This scenario assumes the global economy avoids a recession and PCE trends remain strong by 1) assuming a return to early FY22 TPV growth in the seller business and 2) faster Cash Card TPV growth. This implies 23% gross profit growth and 36% upside to the current share price with a 6x EV/GP multiple.

(+-) $74, 1% Upside: This scenario assumes a stronger macro backdrop, but management not delivering on its plan for "slowing growth in operating expenses" with the operating expense growth rate remaining at FY22 levels. While this does not impact gross profit growth, the multiple is adjusted to account for the deviation. This implies 1% upside to the current share price with a 4.5x multiple. In the decision tree, there is a greater impact on the multiple for underperformance on operating expenses, as margin improvement has largely already been priced in by consensus.

(-+) $87, 18% Upside: This scenario assumes a weaker macro but more effective cost savings than expectations, implying 23% upside to the current share price with a 6x NTM EV/GP multiple.

(++) $118, 59% Upside: This best-case scenario assumes a stronger macro backdrop, with Block exceeding consensus expectations for operating expenses/margins (consensus of 14% EBITDA margin in FY23). This implies 59% upside to the current share price with a 7x NTM EV/GP multiple.

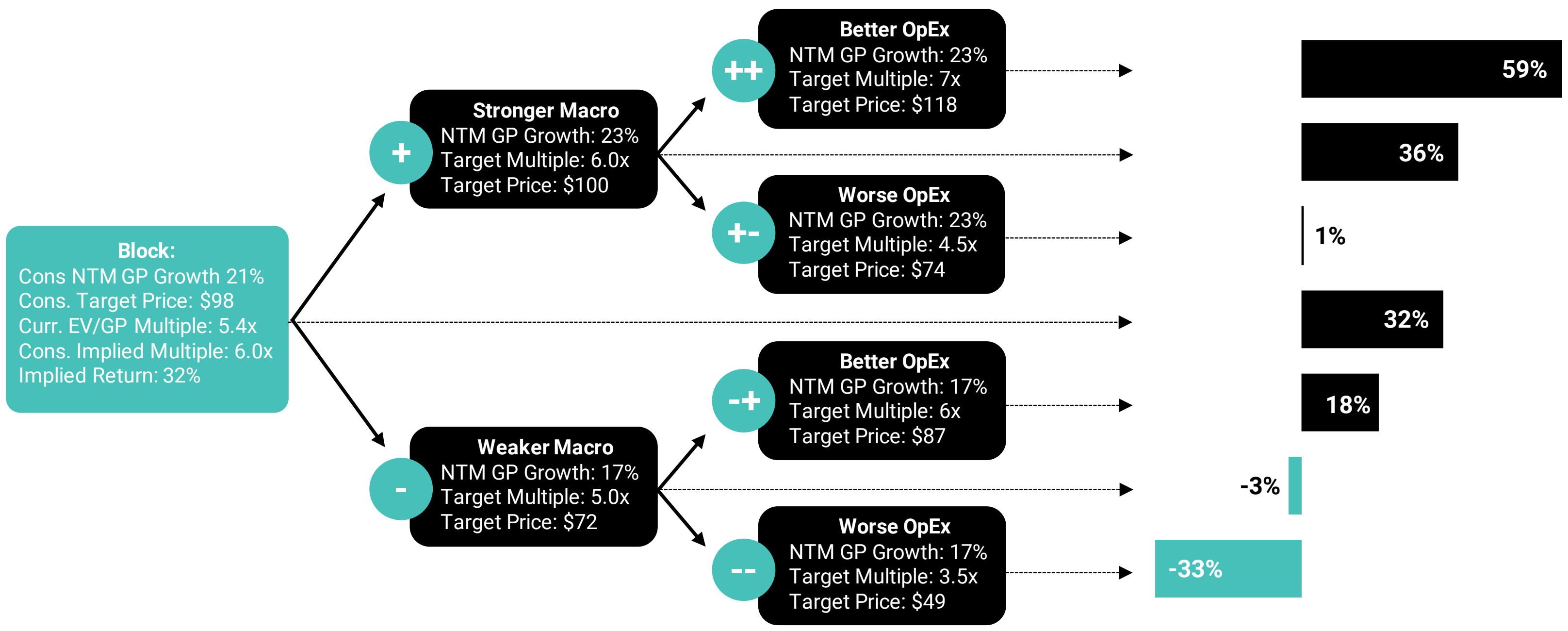
Downside Case(s):

(-) $72, 3% Downside: This scenario assumes a weaker macro backdrop by 1) assuming Seller YoY TPV growth is similar/below that of 4Q22 (~14%) vs consensus of 16%. This implies 3% downside to the current share price with a 5x NTM EV/GP multiple.

(--) $49, 33% Downside: This worst-case scenario assumes a weaker macro backdrop and underperformance on cost/margins leading to 33% downside with a 3.5x NTM EV/GP multiple.

DECISION TREE & CONSENSUS OUTLOOK

Decision Tree | 12-Month Return



Block:
Cons NTM GP Growth 21%
Cons. Target Price: $98
Curr. EV/GP Multiple: 5.4x
Cons. Implied Multiple: 6.0x
Implied Return: 32%

\+ **Stronger Macro**
NTM GP Growth: 23%
Target Multiple: 6.0x
Target Price: $100

++ **Better OpEx**
NTM GP Growth: 23%
Target Multiple: 7x
Target Price: $118

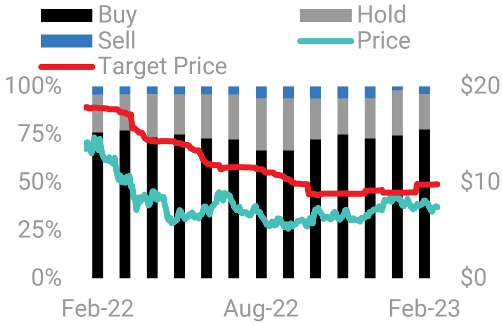
+- **Worse OpEx**
NTM GP Growth: 23%
Target Multiple: 4.5x
Target Price: $74

\- **Weaker Macro**
NTM GP Growth: 17%
Target Multiple: 5.0x
Target Price: $72

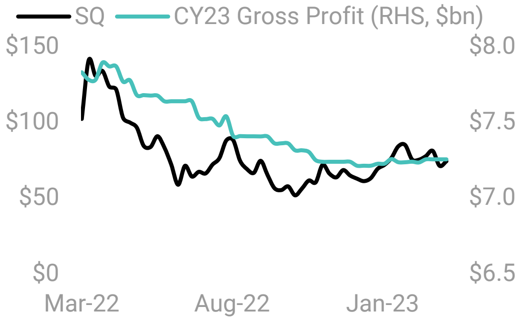
-+ **Better OpEx**
NTM GP Growth: 17%
Target Multiple: 6x
Target Price: $87

-- **Worse OpEx**
NTM GP Growth: 17%
Target Multiple: 3.5x
Target Price: $49

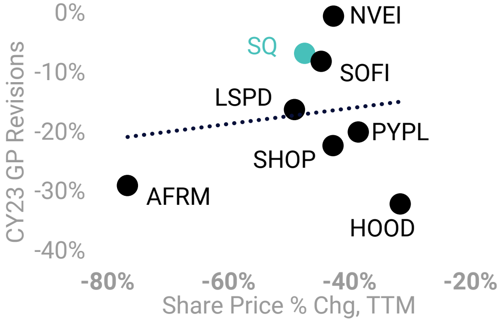
Sell-Side Ratings Distribution



Price Performance vs Est. Revisions



Est. Revisions vs Price Change, TTM



Source: Company filings; FactSet

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BLOCK

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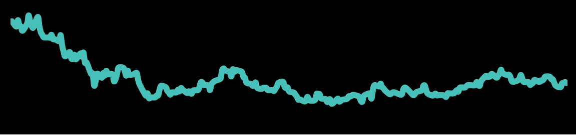
SQ TTM Price Performance



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($ in billions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: Management hosted its 4Q22 call outlining its focus on gross profit retention and increased cost discipline. Additionally, management's increased focus on non-cash expenses, including SBC and D&A, will be a welcome change from the current adjustment framework. Although shares traded down marginally pre-call on mixed results, shares eventually rose post-market 7%, likely a result of increased confidence in management's growth framework and clearly outlined cost savings.

Results Recap: Block reported mixed 4Q22 results, reporting GPV and revenue misses while surpassing consensus expectations on profitability measures driven by stronger than expected cost controls. The company reported Seller GPV of $48.6bn (+14% YoY) and Cash App GPV of $4.55bn (+23% YoY), missing expectations by 3% and 5% respectively. While Seller Ecosystem revenue also underperformed consensus by 3% (growing 20% YoY to $1.76bn), Cash App ecosystem revenue outperformed consensus expectations by 5% (growing 12% YoY to $2.86bn) on strong contributions from Instant Deposit, Cash Card and BNPL, which drove the 3% better performance in subscription revenue, reporting $1.31bn against consensus expectations of $1.23bn. Cumulative gross profit beat expectations by 1%, growing 40% YoY to $1.66bn vs. consensus of $1.64bn.

Guidance recap: Management issued FY23 Adj. EBITDA guidance in-line with street expectations, guiding to $1,300mm (+31% YoY) versus consensus expectations of $1,298mm. Management also provided FY23 guidance for adjusted operating income of -$150mm (with modest margin improvement YoY) using new framework that includes stock-based compensation and certain depreciation and amortization expenses. Block expects $1.43bn (+21% YoY) in adjusted operating expenses during 1Q23, above consensus of $1.42bn by 1%. Underlying management's guidance are 1) expectations to see Cash App grow faster than Square, 2) slowing gross profit growth in 2Q resulting from the grow-over of pricing changes, and 3) slowing growth in operating expenses.

Incremental from the call:

- **Realigned Investment Approach:** Management noted that it intends to pursue the following three key tenets: **1)** each ecosystem must show a "believable path" to gross profit retention in excess of 100%, **2)** each ecosystem must show a believable path to the Rule of 40, defined by management as gross profit growth plus adjusted operating income, and **3) profitability for the business will now primarily be evaluated by adjusted operating income, which in Block's methodology includes critical non-cash expenses like stock-based compensation and depreciation.** Given this, management clearly stated it intends to pull back on other go-to-market investments in favor of pursuing "more proven ROI" channels.
- **Cost Management:** Management reiterated the focus on cost-discipline during the call, specifically identifying both headcount and sales and marketing as key areas for savings. With headcount being the largest driver of operating expenses, management intends to slow the pace of hiring to 10% YoY in FY23 compared to 46% growth in headcount during FY22. Despite the slowed growth, the pace of hiring in late FY22 is expected to contribute to elevated operating expense growth rates early FY23 before levelling off in the back half of FY23 and through FY24. Overall, personnel expense is expected to expand in the mid-20% range in FY23. Additionally, sales and marketing expense is expected to grow 5%-10% YoY in FY23, with peer-to-peer and Cash App card issuance costs contributing to most of the growth. Management expects these factors to result in a 1ppt or greater adj. EBTIDA margin expansion.

The increased emphasis on investment efficiency and cost management will likely be well received by the investment community, as market conditions have driven renewed focus on operating leverage and profitability.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs ▲	% ▲
Seller GPV	**$48.6**	**$50.2**	-$1.62	-3%
growth (%, yoy)	*14%*	*18%*		
Cash App GPV	**$4.55**	**$4.79**	-$0.24	-5%
growth (%, yoy)	*23%*	*29%*		
Cash App MAU (mm)	**51.0**	**51.1**	-0.05	0%
growth (%, yoy)	*16%*	*16%*		
Transaction Revenue	**$1.47**	**$1.54**	-$0.06	-4%
growth (%, yoy)	*13%*	*17%*		
Subscription Revenue	**$1.31**	**$1.23**	$0.07	6%
growth (%, yoy)	*69%*	*60%*		
Seller Ecosystem Revenue(1)	**$1.76**	**$1.82**	-$0.06	-3%
growth (%, yoy)	*20%*	*24%*		
Cash App Ecosystem Revenue(1)	**$2.86**	**$2.72**	$0.14	5%
growth (%, yoy)	*12%*	*6%*		
Adjusted Revenue	**$1.99**	**$2.13**	-$0.14	-7%
growth (%, yoy)	*42%*	*52%*		
Seller Gross Profit (mm)(1)	**$801**	**$812**	-$11.2	-1%
growth (%, yoy)	*22%*	*24%*		
Cash App Gross Profit (mm)(1)	**$848**	**$793**	$55.1	7%
growth (%, yoy)	*64%*	*53%*		
Gross Profit	**$1.66**	**$1.64**	$0.02	1%
Adjusted Gross Margin (%)	*84%*	*77%*		
Operating Income (mm)	**-$32**	**$116**	-$148.1	-127%
growth (%, yoy)	*-122%*	*-20%*		
Adjusted EBITDA (mm)	**$281**	**$216**	$64.8	30%
Adj. EBITDA Margin (%)	*14%*	*47%*		

1Q23 Guidance	New	Consensus	Abs ▲	% ▲
Non-GAAP Operating Expenses	**$1,430**	**$1,423**	-$7	-1%
growth (%, yoy)	*21%*	*20%*		

FY23 Guidance	New	Consensus	Abs ▲	% ▲
Adj. EBITDA (mm)	**$1,300**	**$1,298**	$2.50	0%
growth (%, yoy)	*31%*	*31%*		
Adj. Operating Income (mm)(2)	**-$150**	***N/A***		
growth (%, yoy)	*N/A*	*N/A*		

Source: Company filings; FactSet; Visible Alpha

1) Inclusive of Afterpay Contributions

2) Utilizes new operating income adjustment methodology

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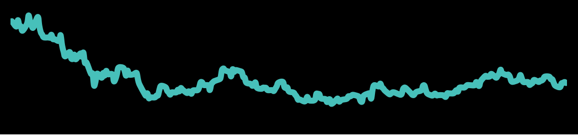
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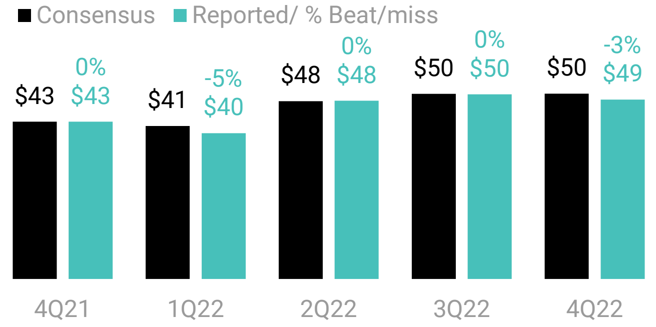
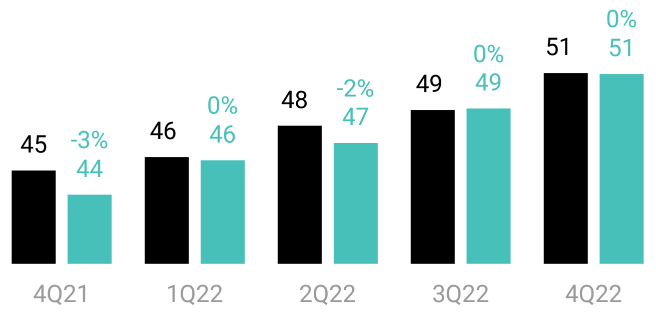
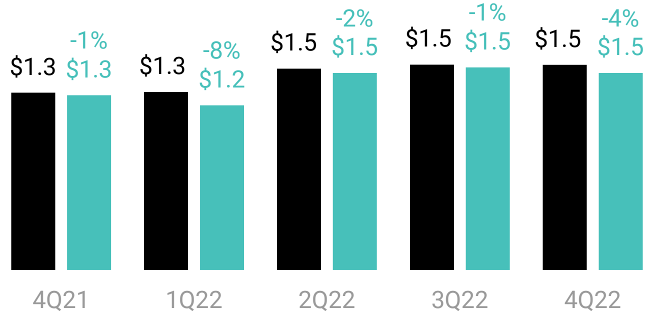
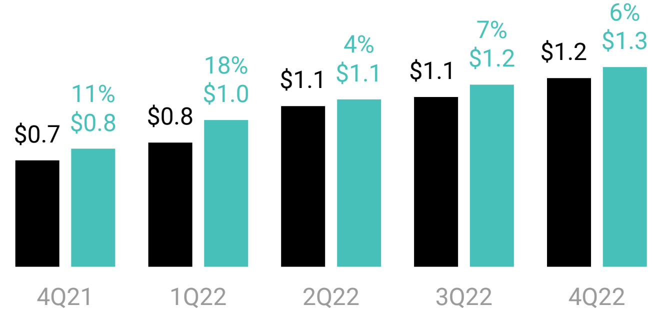
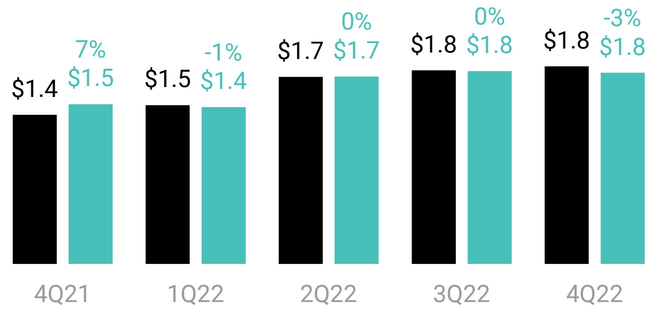
REPORTED VS. CONSENSUS

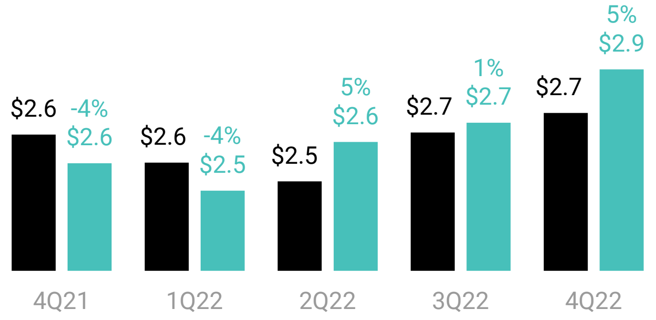

Seller GPV

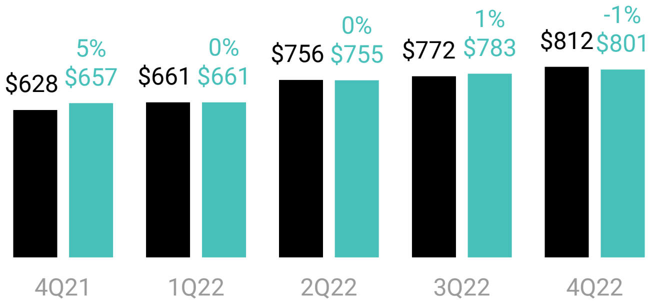

Cash App MAU (mm)

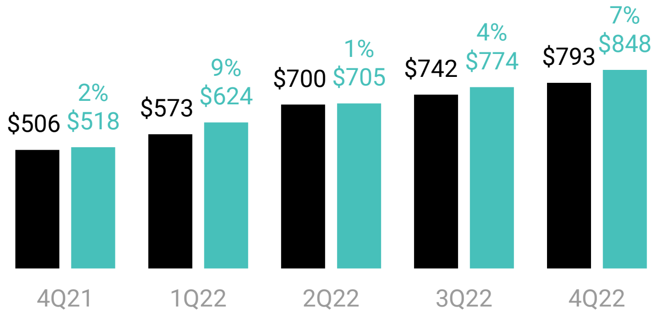

Transaction Revenue

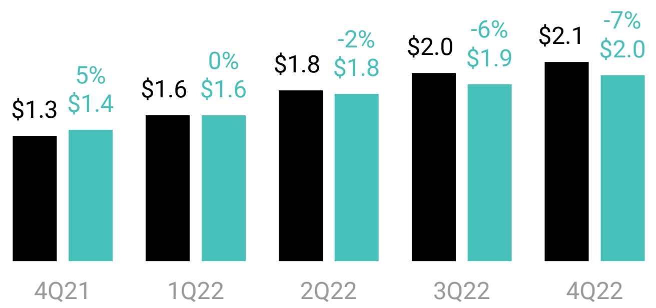

Subscription and Services Revenue

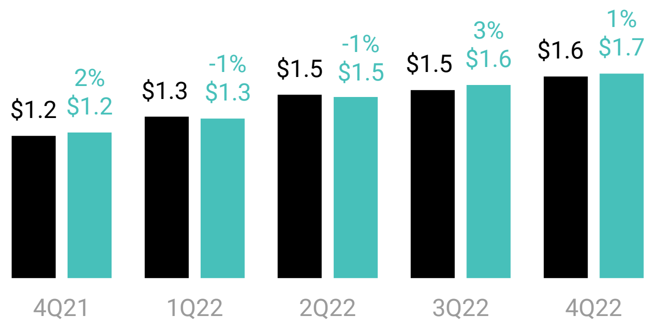

Seller Ecosystem Revenue

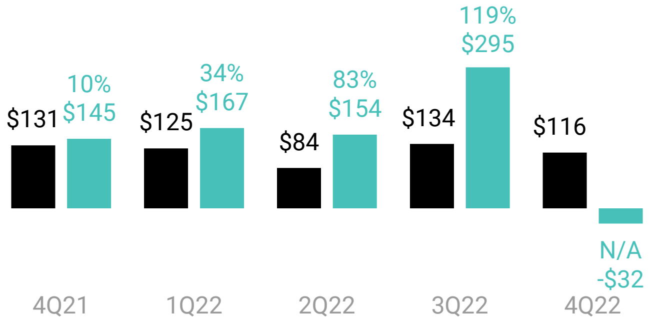

Cash App Revenue

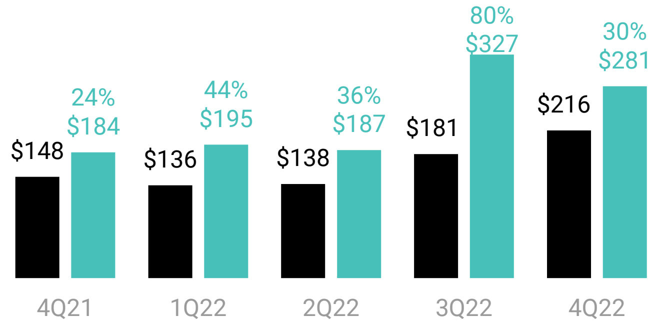

Seller Ecosystem Gross Profit (mm)


Cash App Gross Profit (mm)


Adjusted Revenue


Gross Profit


Adjusted Operating Income (mm)(1)

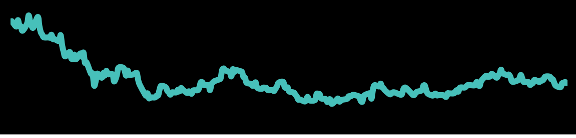

Adjusted EBITDA (mm)

Source: Company filings; Visible Alpha

1) Block redefined adjusted operating income to include stock-based compensation and certain other non-cash expenses in 4Q22

BLOCK

SQ TTM Price Performance



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1Q23 EARNINGS OUTLOOK

What's In Focus: Following a strategic re-assessment, Block has shifted its focus towards allocating investments more efficiently and improving margins. On the 4Q22 earnings call, management laid out a plan to improve OpEx largely based on reducing sales and marketing expense growth, as well as headcount growth. As a result, increasing operating leverage is one of the primary focal points for investors in 1Q23 and through the year. Additionally, investors are likely to focus more on Cash App gross profit growth than Square gross profit growth, as **consensus expectations see Cash App being the larger gross profit growth driver throughout FY23.** Management commentary around BNPL regulation globally will remain key as well, as recent developments in Australia and Affirm's departure of the region have casted doubt on the sustainability of growth in the business model as regulation catches up.

- **KPIs:** Amid commentary surrounding the weak macro during 4Q22 earnings, consensus for 1Q23 seller GPV was reduced 1% to $46.6bn (+18% YoY) from $47.2bn prior to 4Q22 earnings. FY23 estimates for seller GPV were cut further, down 3% to $217bn (+17% YoY). Cash App GPV estimates for 1Q23 were trimmed by 4% from $5.1bn to $4.9bn (+21% YoY), with FY23 estimates reduced 3% to $20.8bn (+22% YoY). 1Q23 estimates for Cash App MAU growth were similarly revised downwards, with consensus expecting 52.7mm MAUs (+15% YoY) vs. 53.1mm MAUs prior to the 4Q22 earnings release, and FY23 estimates falling 2% to 58.4mm (+15% YoY).

- **Revenue:** In-line with estimate reductions on transaction volume, 1Q23 estimates for transaction-based revenue were reduced 1% to $1.4bn (+16% YoY) and FY23 was reduced 3% to $6.6bn (+16% YoY) following 4Q22 results. Consensus for subscription-based revenue increased following earnings, rising 5% to $1.3bn for 1Q23 (+37% YoY) and 2% to $5.8bn (+27% YoY) for FY23. With respect to ecosystems, estimates for Cash App ecosystem revenue were increased 3% in 1Q23 to $2.8bn (+15% YoY) and FY23 consensus improved 2% to $11.9bn (+12% YoY). Adjusted net revenue expectations were reduced -4% and -5% for 1Q23 and FY23, respectively, now standing at $2.0bn (+30% YoY) and $9.0bn (+25% YoY), respectively.

- **Gross Profit:** Following 4Q22 earnings, estimates for gross profit were revised upwards 3% and 1% for 1Q23 and FY23, respectively, to $1.7bn (+28% YoY) and $7.3bn (+22% YoY), respectively. Consensus for 1Q23 Cash App gross profit were revised up 6% to $870mm and 3% to $3.7bn for FY23. This implies a 40% and 27% YoY growth for 1Q23 and FY23, respectively, considerably faster growth than consensus is forecasting for Square gross profit growth at 16% and 17% over the same periods. This is in-line with management commentary calling for Cash App gross profit growth to outpace Square's.

- **Bottom-Line:** As a result of increased focus on cost management and investment discipline, 1Q23 adjusted EBITDA margin (as a percentage of adjusted net revenue) expectations improved 2ppt to 13% (adjusted EBITDA of $264mm, up 35% YoY) and FY23 consensus was unchanged at 14% (adjusted EBITDA of $1,297mm, up 31% YoY) post-earnings. While consensus estimates have yet to account for the change in adjustment methodology following the recalculation of adjusted operating-income, 1Q23 earnings profitability commentary is likely to focus more heavily on adjusted operating margin.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

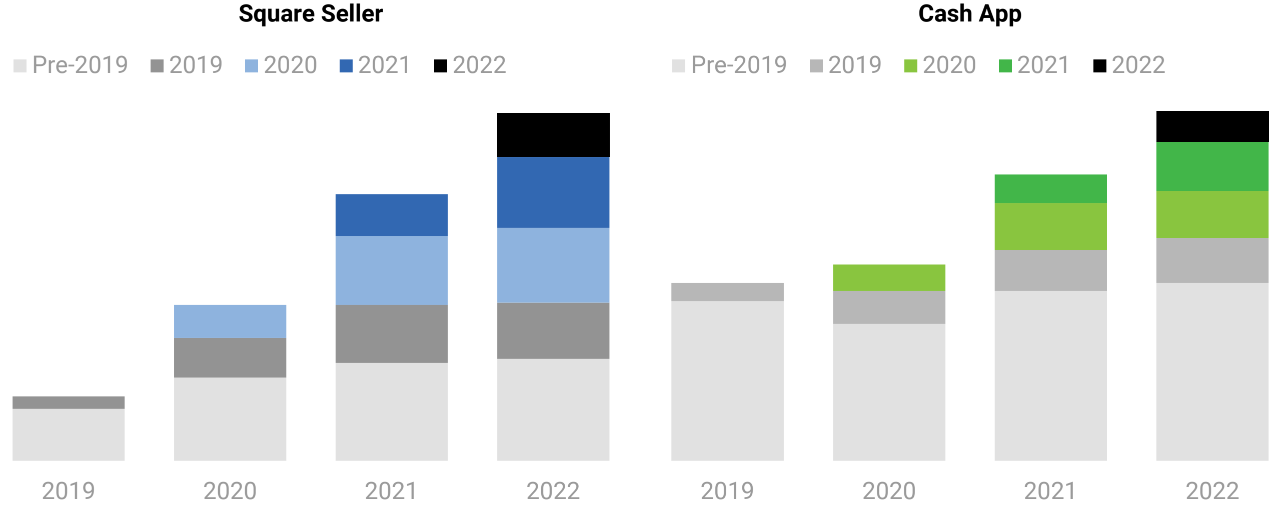
1Q22
- Adjusted revenue in-line with consensus, gross profit misses by 1%
- Management indicated expected decline in SBC following Afterpay txn

2Q22
- Adjusted revenue misses by 2%, gross profit misses by 1%
- Management reducing FY22 investment and opex guidance by $250mm and $450mm, respectively

3Q22
- Adjusted revenue misses by 6%, gross profit beats by 3%
- Adj. EBITDA margin beats by 11% (21%) on strong opex control, indicated more investment and opex cuts in FY23

4Q22
- Adjusted revenue misses by 7%, gross profit misses by 1%
- Issued new investment framework, new adjusted operating metric

ANNUAL GROSS PROFIT BY COHORT



FT Partners | Equity Research

Source: Company filings; FactSet
1) U.S. Census Bureau

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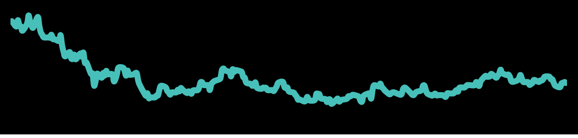
BLOCK

SQ TTM Price Performance



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Market Cap (bn):	$44	**Beta (2 Year Avg.):**	2.5
52-Wk Range:	$51.34 - $149.00	**Avg. Daily Vol (mm):**	12.2

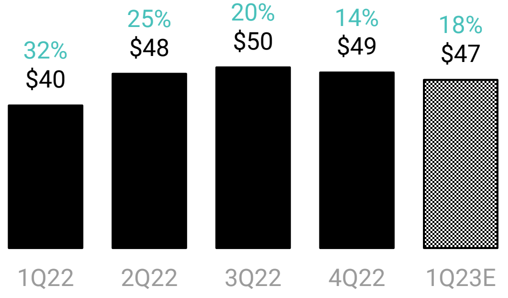
FINANCIAL TECHNOLOGY PARTNERS

($ in billions) 1Q23 CONSENSUS ESTIMATE RANGES

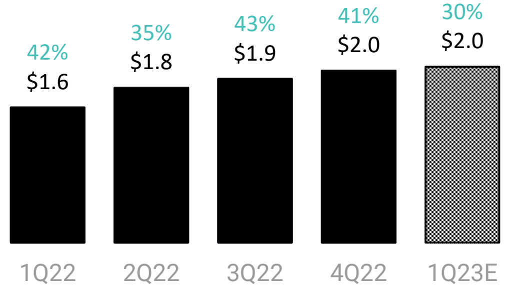
	Low	Average	High
Square GPV	**$49**	**$49**	**$50**
growth (%, yoy)	14%	14%	16%
Cash App Business GPV	**$4.4**	**$4.5**	**$4.6**
growth (%, yoy)	21%	26%	27%
Transaction-based Revenue	**$1.5**	**$1.5**	**$1.5**
growth (%, yoy)	13%	13%	17%
Subscription and Services-based Revenue	**$1.3**	**$1.3**	**$1.4**
growth (%, yoy)	65%	70%	86%
Bitcoin Revenue	**$1.8**	**$1.8**	**$1.8**
growth (%, yoy)	-11%	-7%	-6%
Gross Revenue	**$4.7**	**$4.7**	**$5.0**
growth (%, yoy)	14%	14%	23%
Adjusted Revenue	**$1.9**	**$2.0**	**$2.4**
growth (%, yoy)	37%	42%	69%
Costs of Revenue	**$3.0**	**$3.0**	**$3.5**
growth (%, yoy)	3%	4%	20%
Gross Profit	**$1.7**	**$1.7**	**$1.7**
growth (%, yoy)	40%	40%	40%
Total Operating Expenses	**$1.8**	**$1.8**	**$1.8**
growth (%, yoy)	45%	45%	45%
Adjusted Operating Income	**-$0.2**	**$0.2**	**$0.3**
Operating Margin (%)	-11%	9%	12%
Adjusted EBITDA	**$0.2**	**$0.3**	**$0.3**
Adj. EBITDA Margin (%)	12%	14%	14%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

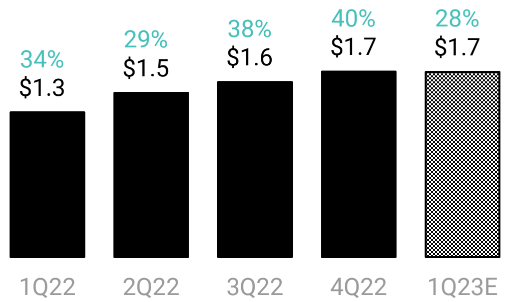
Square GPV



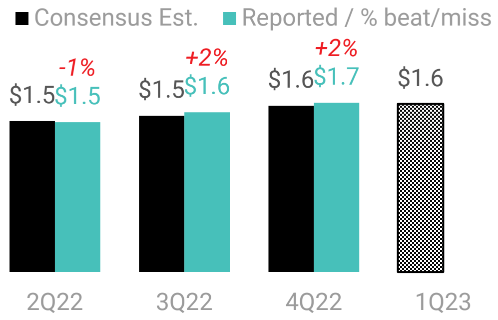
Adjusted Net Revenue



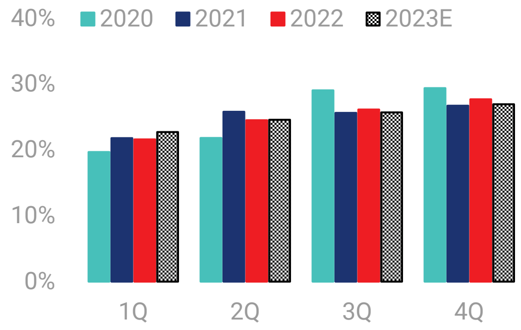
Gross Profit



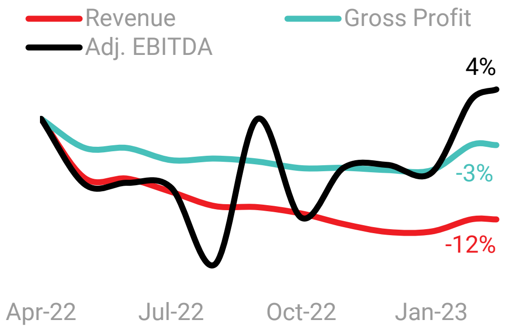
Gross Profit Consensus vs. Reported



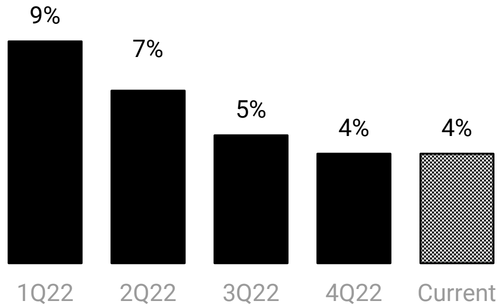
Gross Profit Seasonality



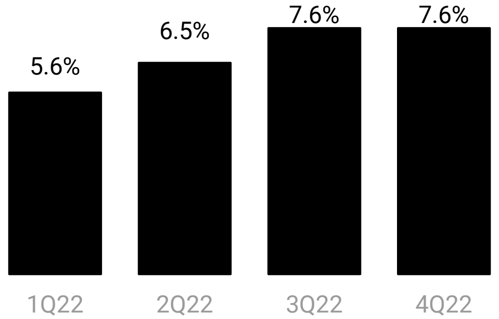
1Q23 Consensus Revisions



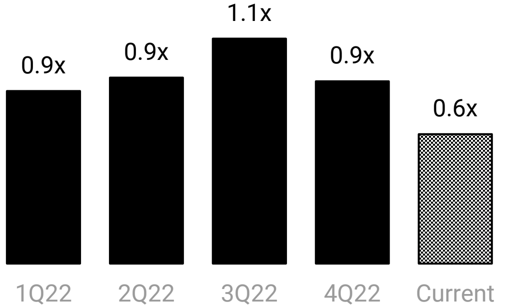
Short Interest (Pre-Print)



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio(1)

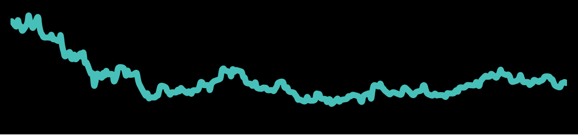


Source: Company filings, FactSet

1) Put/Call Ratio over 7-days leading into earnings

BLOCK

SQ TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

Square:

1) Are merchants on Square's platform experiencing any pullback in consumer spending?
2) Regarding the announced cutbacks on Sales & Marketing, which acquisition channels are currently generating the highest return and are likely to see continued investment?
3) What regions outside the US is Block seeing the strongest growth?
4) How do the unit economics of international customers differ relative to domestic customers?
5) Is Square for Restaurants performing well against other purpose-built offerings like Toast?
6) Has there been any signs of stress among SMBs considering inflation and other macroeconomic factors?
7) Clover has seemingly experienced large share gains in areas that Square has historically seen considerable success. Has pricing been a factor in this success from management's perspective?

Cash App:

8) How do the attach rates vary for age cohorts in Cash App? How can investors expect that to develop over time?
9) Does management intend to release an interest-bearing savings product on Cash App?
10) What kind of retention rates is management seeing in Cash App Borrow?
11) What impacts Cash App's Bitcoin gross margin? What effect is the crypto winter having?
12) Management has been big proponents of Bitcoin, is there any consideration of expanding trading to other coins?
13) More broadly, can management discuss the product roadmap for Cash App and what has the highest potential to drive ARPU?

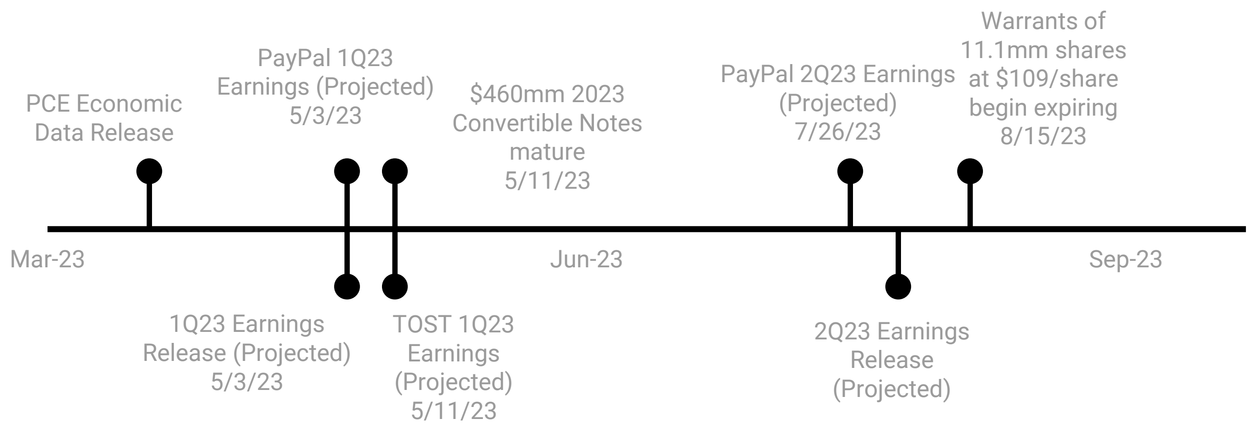
Afterpay:

14) What are management's thoughts on the current regulatory environment for BNPL in the US?
15) Does management expect Australia's actions regarding BNPL to provide precedent for similar actions in other countries around the globe?
16) How is BNPL credit performing and have any mitigating actions been taken incase of potential stress?

Investments:

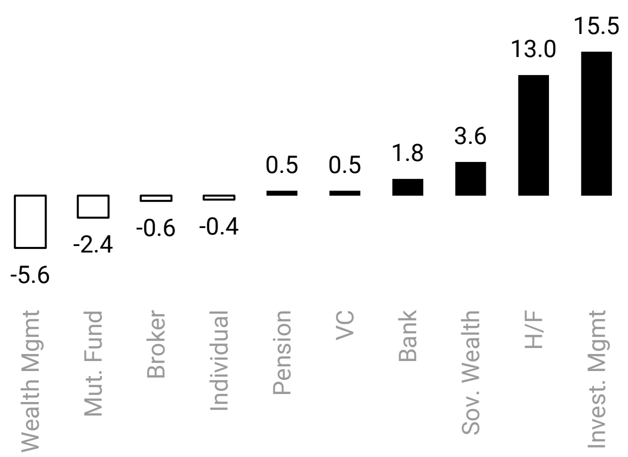
17) What areas of investment does management expect to produce the highest ROI over the next 2-3 years?
18) Is there an expected cadence of FY23 investment spend?

POTENTIAL CATALYSTS

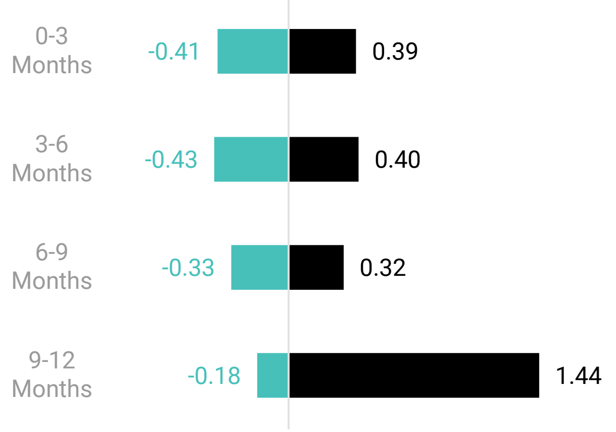


SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)

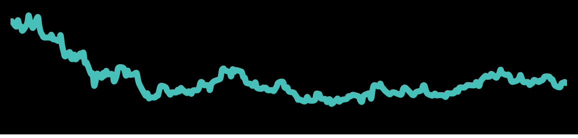


Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

SQ TTM Price Performance



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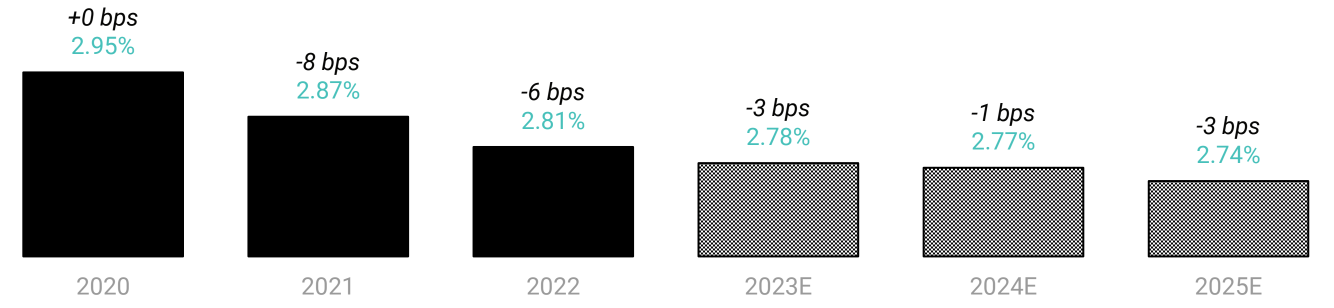
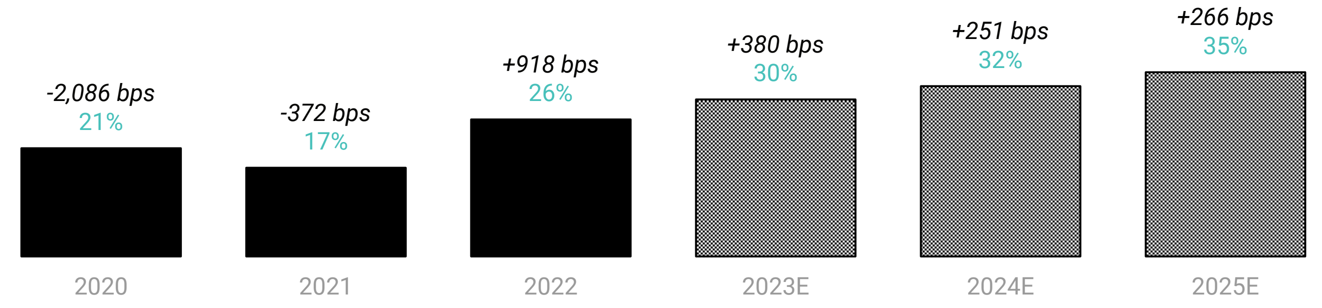
COMPANY RATIOS/MARGIN ANALYSIS

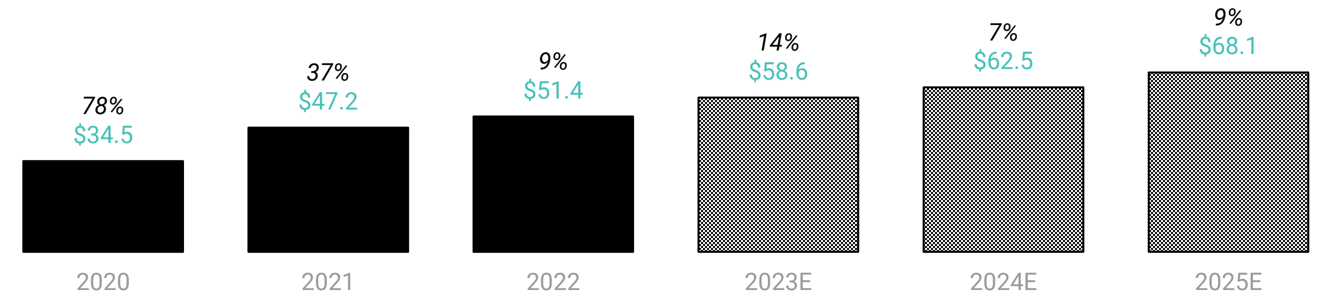
Seller Yield (Seller Ecosystem Transaction Revenue as % of Seller GPV)



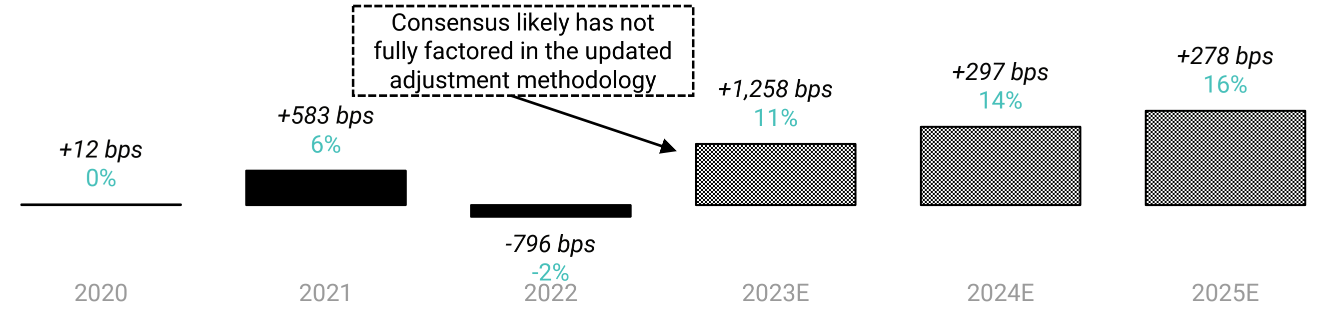
Cash App Ecosystem Gross Margin (Excluding Afterpay)



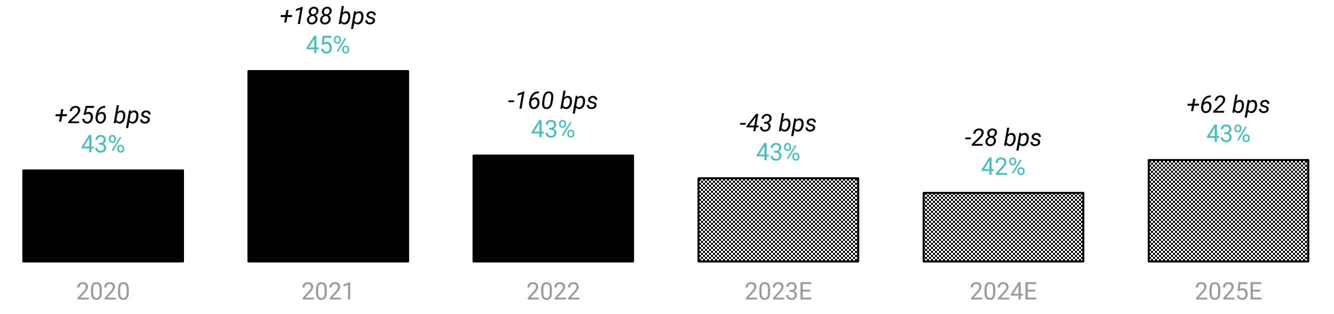
Cash App ARPU (Gross Profit Per EOP Users)



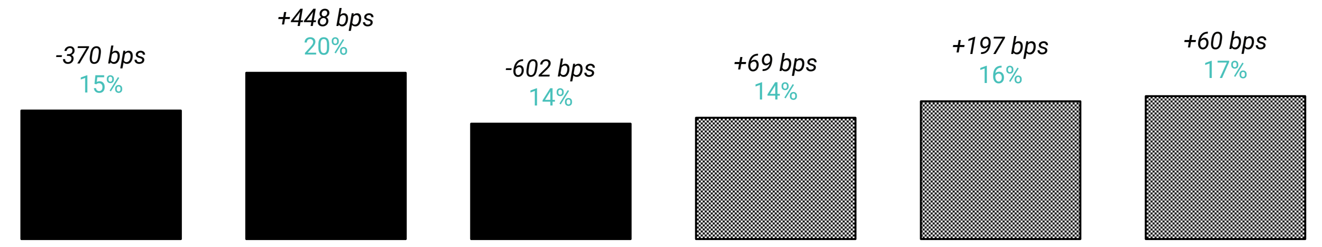
Adjusted Operating Margin (% of Adjusted Revenue)[(1)]


Consensus likely has not fully factored in the updated adjustment methodology

Seller Ecosystem Gross Margin (Excluding Afterpay)



Adjusted EBITDA Margin (% of Adjusted Revenue)

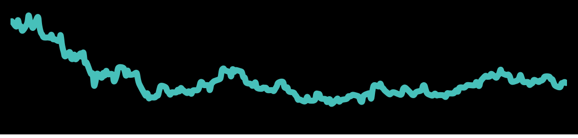


Source: Company filings; FactSet

1) Consensus estimates may be unreliable on a forward-basis due to the methodology adjustment

BLOCK

SQ TTM Price Performance



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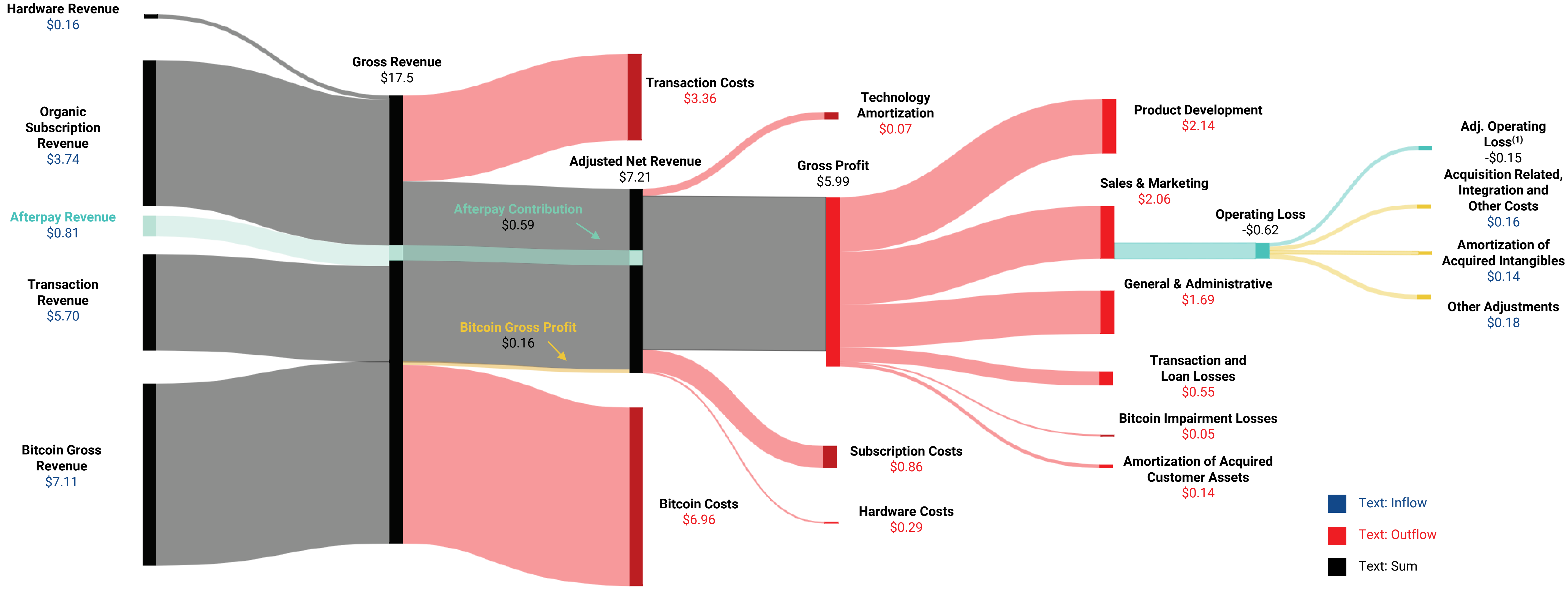
FINANCIAL TECHNOLOGY PARTNERS

($ in billions, except where otherwise noted)

P&L VISUALIZATION – TTM

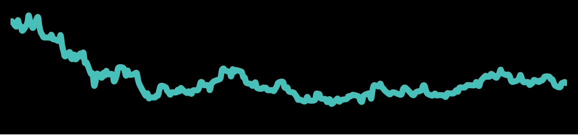


Source: Company filings; FactSet

1) Utilizes adjustment methodology outlined in 4Q22 earnings release

BLOCK

TTM Price Performance



Price as of 03/17/2023:	$73.98	**Shares Out (mm):**	598
Market Cap (mm):	$44,245	**Beta (2 Year Avg.):**	2.5
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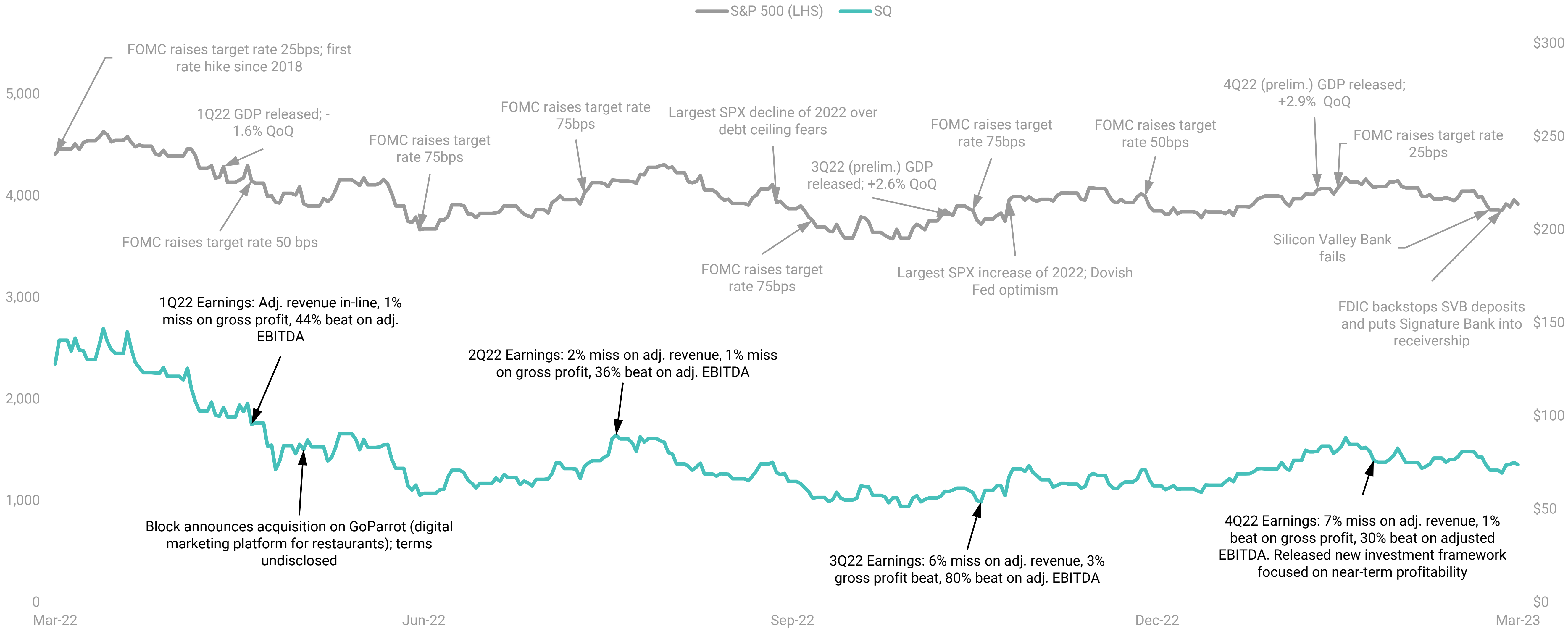
FINANCIAL TECHNOLOGY PARTNERS

P&L VISUALIZATION – TTM



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

3Q22 (prelim.) GDP released; +2.6% QoQ

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FOMC raises target rate 25bps

Silicon Valley Bank fails

FDIC backstops SVB deposits and puts Signature Bank into receivership

1Q22 Earnings: Adj. revenue in-line, 1% miss on gross profit, 44% beat on adj. EBITDA

Block announces acquisition on GoParrot (digital marketing platform for restaurants); terms undisclosed

2Q22 Earnings: 2% miss on adj. revenue, 1% miss on gross profit, 36% beat on adj. EBITDA

3Q22 Earnings: 6% miss on adj. revenue, 3% gross profit beat, 80% beat on adj. EBITDA

4Q22 Earnings: 7% miss on adj. revenue, 1% beat on gross profit, 30% beat on adjusted EBITDA. Released new investment framework focused on near-term profitability

Source: Company filings; FactSet

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coinbase

COINBASE PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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Zachary Gunn | Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

coinbase

COIN TTM Price Performance

Price as of 03/17/23:	$74.98	Shares Out (mm):	227
Market Cap (mm):	$17,014	Beta (Since IPO):	3.0
52-Wk Range:	$31.55 - $206.79	Avg. Daily Vol (mm):	18.6

FINANCIAL TECHNOLOGY PARTNERS

COMPANY OVERVIEW

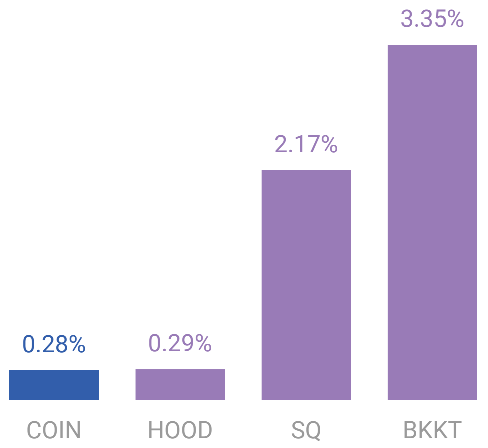
Coinbase operates as a centralized exchange (CEX) where users can trade, spend, and save crypto assets. Additionally, the company provides end-to-end financial infrastructure and technology to the crypto economy. Coinbase serves three customer bases: retail users, institutions, and ecosystem partners.

Coinbase services ~9mm monthly transacting users and directly integrates with over 25 blockchain protocols, while having over $278 billion in stored/custodied assets. In the previous twelve months, crypto trading volume on the Coinbase platform represented ~6% of total crypto volume.

Part of Coinbase's mission is building out a full-service crypto platform which now also includes wallets, an NFT marketplace, and payment solutions.

On March 12th following the Signature Bank failure, Coinbase disclosed that it has $240mm in corporate cash held at Signature bank that it expects to fully recover.

FY22 CRYPTO TAKE RATES



KEY DEBATES

1. **Crypto Winter:** As of 1Q23, the total market capitalization of all cryptocurrencies had fallen ~75% from the peak in November of 2021 of $3tn. The current crypto winter has been driven by a myriad of factors including 1) weakening macro backdrop 2) increasing interest rate environment, and 3) contagion from the FTX collapse and heightened regulatory scrutiny. As a result, the future of what had been one of the fastest growing sectors is less clear. At the moment, it remains impossible to separate Coinbase's future success from the future of the broader crypto space.

2. **Market Share:** Despite the broader implications of the Celsius/Voyager collapse and FTX contagion, Coinbase is a well positioned CEX (Centralized Exchange) to gain relative market share in the crypto space. Our view is that the failure of several high-profile crypto firms will reinforce customers preference for trusted exchanges, particularly those that have operated uninterrupted throughout previous crypto winters such as Coinbase and Blockchain.com.

3. **Regulation:** There has been an increased level of regulatory scrutiny in crypto activities and crypto companies since the FTX collapse. One notable recent example has been Kraken shutting down its crypto-staking service and agreeing to pay a $30mm fine. Given the regulatory environment for crypto remains uncertain (particularly in the U.S.), it is likely that Coinbase will have to continue engaging with lawmakers regarding various products and service offerings.

REVENUE MODEL

Coinbase drives revenue through three business segments:

- **Transactions (85% of TTM Net Revenue):** Coinbase generates revenue through transaction fees from trades that occur on the platform. The per-transaction fee earned is typically based on the price and quantity of the crypto asset that is bought, sold, or withdrawn. Transaction revenue is recognized at the time the transaction is processed and is directly correlated with trading volume on the platform. In FY22, Bitcoin trading volume represented 29% of total volume, while Ethereum and other cryptocurrencies represented 22%/49% respectively.
- **Subscription & Services (14%):** Primarily consists of Blockchain rewards, custodial fees, earn campaigns, interest income, and other. Blockchain rewards are earned through blockchain protocols where Coinbase controls the staking validator. Custodial fee revenue is based on a percentage of the daily value of crypto assets held on the platform. Coinbase also provides asset issuers with a platform to engage with users through educational videos, now called "Learning Rewards" that drive campaign revenue. Additionally, the company earns interest income on fiat currency held on the platform. Coinbase Cloud encompasses many of these service revenue streams, as well as subscription revenue from Coinbase One.
- **Other (1%):** Other revenue includes the sale of crypto assets when Coinbase acts as the principal in a transaction. This is a rare accommodation made to a Coinbase customer whose order size might not meet minimums or to meet expected platform performance during times of unanticipated disruption. Coinbase transactions using their own crypto assets accounted for less than 10bps of total revenue in 2022. Cost of sold crypto is recorded as an operating expense.

1Q23 OUTLOOK

Metric	Outlook	Commentary
Subscription & Services Revenue	$300mm - $325mm	"Prepared to grow subscription and services against this more moderate expense base."
Transaction Expenses	Mid teens as a % of net revenue	"Primary factors driving cost optimization are reduction in transaction losses, and increase in interest revenue"
Tech, R&D, G&A (incl. SBC)	$625mm - $675mm	Includes ~$200mm in stock-based compensation
Sales & Marketing (incl. SBC)	$60mm - $70mm	Includes ~$15mm in stock-based compensation
Restructuring Expenses	~$150mm	Tightened FY23 range from prior $500 - $600mm. Q4 higher versus Q3 due to seasonally higher spend

Source: Company filings

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COIN TTM Price Performance

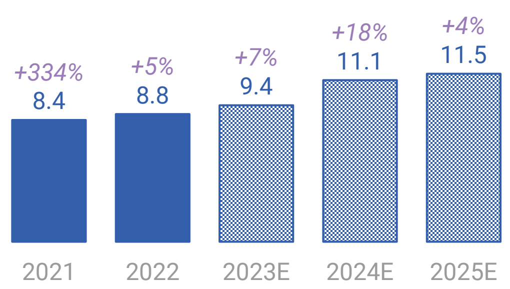
Price as of 03/17/23:	$74.98	**Shares Out (mm):**	227
Market Cap (mm):	$17,014	**Beta (Since IPO):**	3.0
52-Wk Range:	$31.55 - $206.79	**Avg. Daily Vol (mm):**	18.6

FINANCIAL TECHNOLOGY PARTNERS

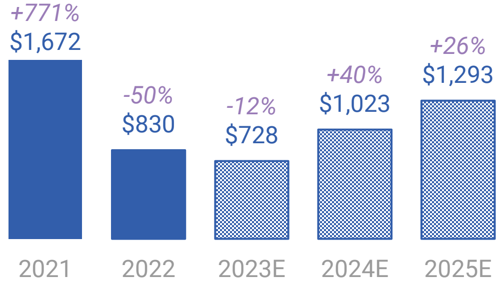
HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

($ in millions, except where otherwise noted)

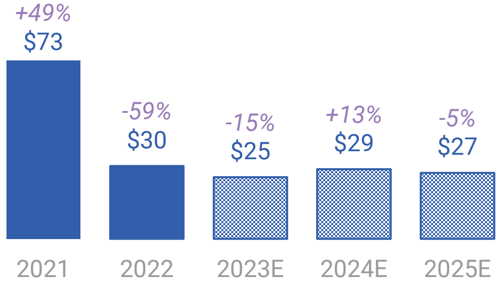
Transacting Users (mm)



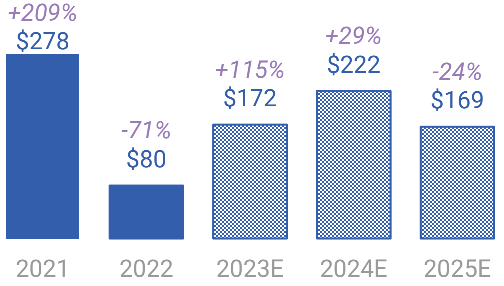
Trading Volume (bn)



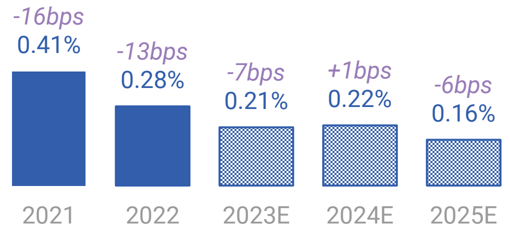
Average Revenue per MTU



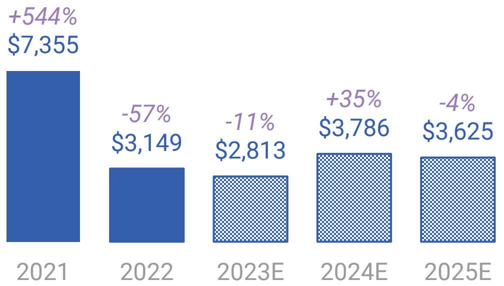
Assets on Platform ($ in billions)



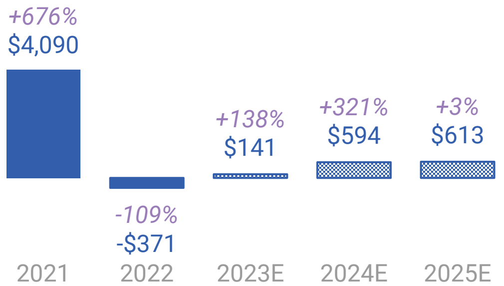
Transaction Revenue Take Rate



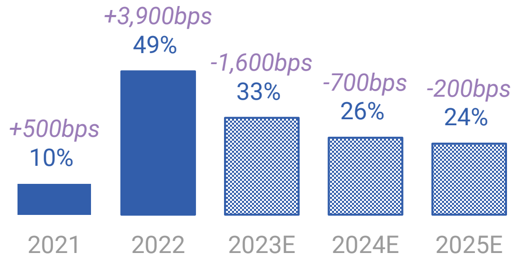
Net Revenue



Adjusted EBITDA

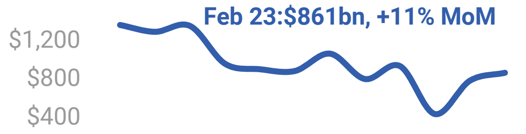


SBC as % of Revenue



INDUSTRY KPIs

Total Crypto Volume [2] *(Mar 22-Feb 23)*

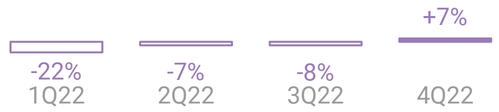


Bitcoin Price [3] *(Jan 20-Mar 23)*

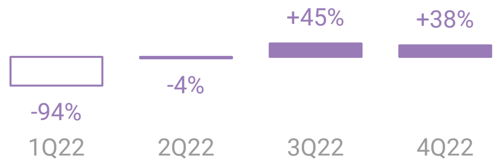
Coinbase Volume (bn)[2] *(Mar 22-Feb 23)*

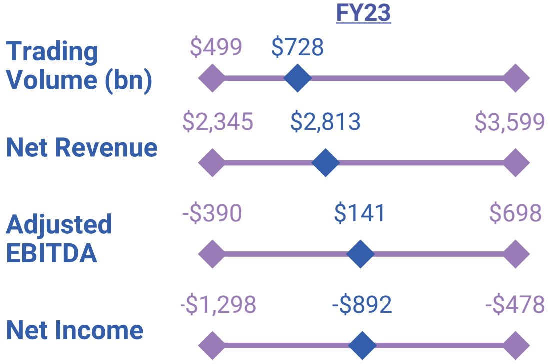
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[4]

Revenue

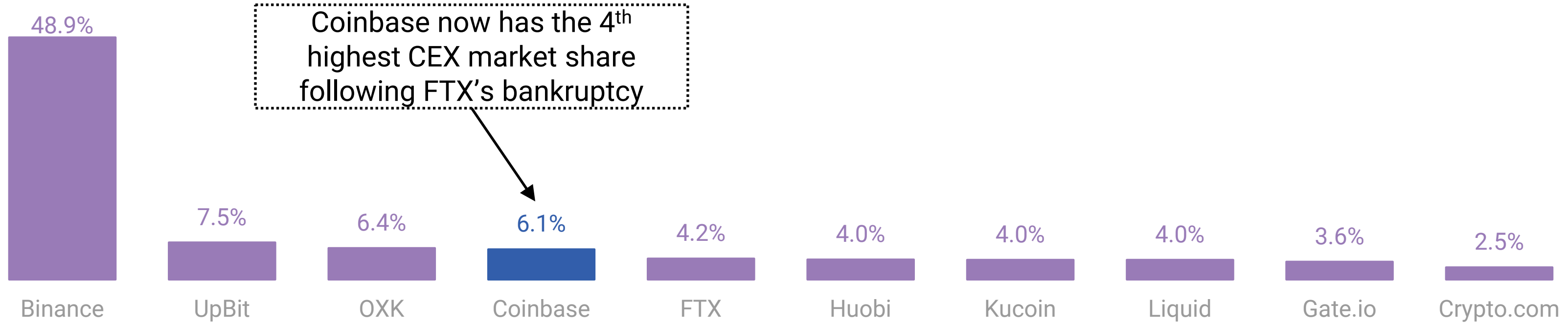


Adjusted EBITDA





TRADING VOLUME –TTM % OF TOTAL CRYPTO VOLUME[2]



Coinbase now has the 4th highest CEX market share following FTX's bankruptcy

FT Partners | Equity Research

Source: Company filings
1) FactSet, Visible Alpha
2) The Block Monthly Exchange Volume
3) NASDAQ
4) Visible Alpha Consensus Low/Average/High Range

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VALUATION CONSIDERATIONS

Relative Valuation:

Given Coinbase's end-market exposure and its end-market exposure (and the embedded risks of said end-market), expected high forward growth profile and lack of profitability we approach Coinbase's valuation using P/S. While we recognize the shortcomings of top-line based multiples, P/S serves as a useful metric for standardizing valuations across peers. **When looking at the peer average P/S and when adjusting for growth, it implies a 12-month price of $55.09 (27% downside).** As of March 20th, Coinbase trades at a 6.0x NTM P/S multiple, 0.2x below its average multiple since IPO of 6.2x. It also trades at a 2.8x premium to the NASDAQ, 0.3x above its average premium of 2.5x. Coinbase is a unique entity that provides exposure to the crypto-market, and while management has done well to diversify its revenue streams while managing its cost base, there remains significant execution and end-market risk.

DCF Valuation:

Scenario 1 – Current Price ($74.98, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of -11%/20%/49% in FY23/24/25. This scenario forecasts Coinbase's revenue returning to 2021 levels in FY26. Given the cyclicality of crypto, we recognize that revenue growth is likely to be more volatile than the longer-term forecasts for a steady deceleration to the terminal growth rate but given the inability to forecast crypto cycles or the consistency of cash flows, a linear deceleration in revenue growth is part of the base case. Were shares of Coinbase to remain at the current price in 12-months, it would imply a 5x NTM P/S multiple (based on current STM consensus revenue of $3,428mm).

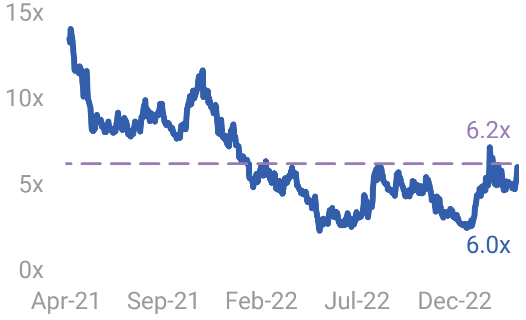
Scenario 2 – Faster Crypto Rebound ($128.68, 72% Upside): This DCF assumes the crypto market rebounds faster than expected, with Coinbase returning to its 2021 revenue levels by 2025 (vs. the base case of 2026). This scenario points to a 12-month price of $128.68 (72% upside), implying a 9x NTM P/S multiple based on current STM consensus revenue.

Scenario 3 – Margin Improvement ($104.36, 39% Upside): This DCF outlines a scenario where top-line revenue growth is in-line with consensus estimates, but Coinbase can deliver better than expected cost savings. Specifically, this scenario forecasts -30%/-12% operating margins in FY23/FY24 vs. consensus of -37%/-19%. These inputs drive a 12-month price of $104.36 (39% upside), which based on the current STM consensus revenue, implies a 7x NTM P/S multiple.

Scenario 4 – Extended Crypto Winter ($33.16, 56% downside): This scenario assumes that a crypto winter persists longer than expected, with minimal growth in Coinbase volume after 2023 through 2026, with revenue for Coinbase not returning to 2021 levels until 2027. This scenario points to a 12-month price of $33.16 (56% downside), which based on current STM consensus revenue implies a 2x NTM P/S multiple.

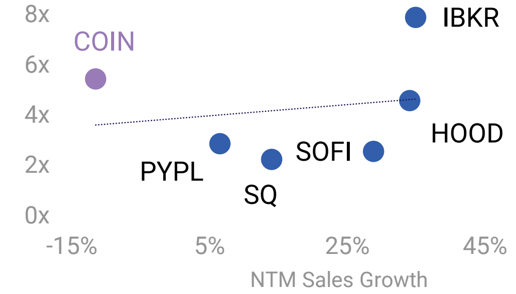
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM P/S & Avg. Since IPO



NTM P/S vs. NASDAQ

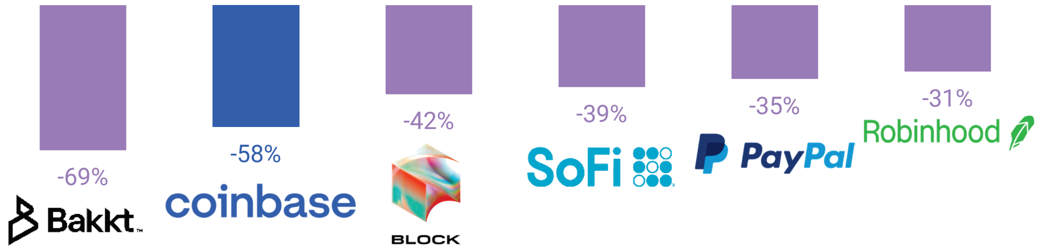
Peer Avg. NTM P/S vs. Sales Growth



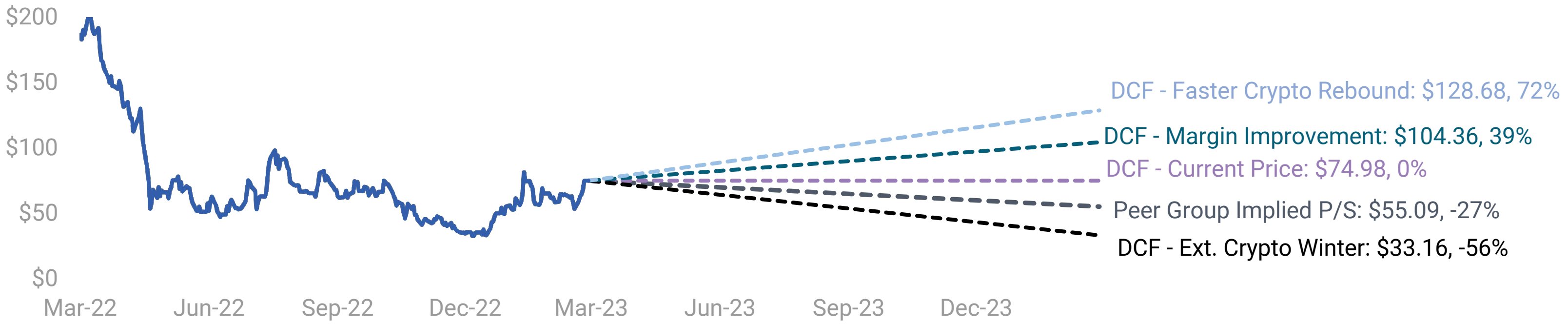
DCF Key Assumptions[1]

10-Yr RFR	3.6%
Cost of Equity	25.0%
Cost of Debt	5.0%
WACC	20.3%
Beta	3.1
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$9,485

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings, FactSet, Visible Alpha

1) SBC in millions

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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. These scenarios are built around 1) a longer/shorter crypto bear market and 2) the level of cost controls Coinbase can successfully execute. While there are other drivers of Coinbase's performance (market share gains, regulation, etc.) these represent the most likely area(s) of near-term upside/downside relative to consensus. Given the volatility of the crypto market, these scenarios offer an unusually wide array of outcomes.

Consensus Case:

The average consensus price target for Coinbase is ~$64 with a STM sales estimates of $3,428mm. If COIN were to trade at this price in 12-months, it would imply a 4x NTM Price/Sales multiple . This would represent 15% downside relative to the current share price of $75. However, Coinbase has seen significant price appreciation over the preceding week (~40%), which, if it holds or advances further, could drive positive price target revisions and/or analyst downgrades.

Upside Case(s)

(+) $133, 77% Upside: This scenario assumes a quicker recovery (vs. consensus) of crypto volumes, with volumes increasing on a YoY basis in 2Q23 whereas consensus doesn't imply YoY growth until 3Q23. The expected growth in volumes is based off exchange trade volume data from the 2020 crypto market recovery and assumes that volumes recover to positive YoY levels 6 quarters after Bitcoin's price peak, as opposed to 11 quarters in 2017-2020. This implies -1% NTM sales growth and 77% upside to the current share price with an 8x P/S multiple in 12-months.

(+-) $125, 67% Upside: This scenario assumes the quicker recovery in volumes, but less successful expense controls relative to consensus. While this does not immediately impact top-line growth, the multiple is handicapped to reflect underperformance relative to expectations, implying 67% upside to the current share price with a 7.5x P/S multiple. We assume a smaller multiple change on cost management in the better industry scenario, as investors would likely be less focused on driving profitability if top-line growth was to significantly reaccelerate.

(++) $141, 87% Upside: The best-case scenario assumes a quicker recovery in crypto volumes and better cost controls, implying 87% upside to the current price with an 8.5x NTM P/S multiple.

Downside Case(s):

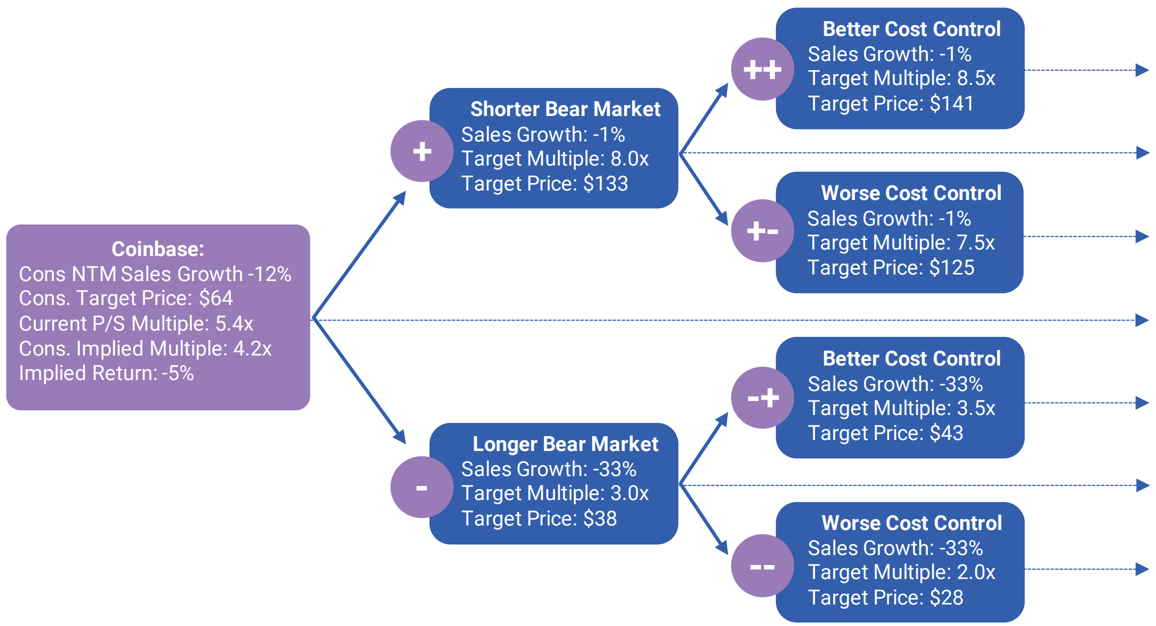
(-) $38, 50% Downside: The longer bear market scenario assumes the same volume growth as the 2017-2020 crypto market, with YoY trading volume growth rates continuing to decrease through the end of 2023. This implies 50% downside to the current share price with a 3x NTM P/S multiple.

(-+) $43, 43% Downside: This scenario assumes a longer bear market but better cost controls than expected by consensus, implying 43% downside to the current share price and a 3.5x NTM P/S multiple.

(--) $28, 62% Downside: The worst-case scenario assumes a longer bear market and underperformance on cost management, driving 62% downside to the current share price and a 2x NTM P/S multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Coinbase:
Cons NTM Sales Growth -12%
Cons. Target Price: $64
Current P/S Multiple: 5.4x
Cons. Implied Multiple: 4.2x
Implied Return: -5%

\+ **Shorter Bear Market**
Sales Growth: -1%
Target Multiple: 8.0x
Target Price: $133

++ **Better Cost Control**
Sales Growth: -1%
Target Multiple: 8.5x
Target Price: $141

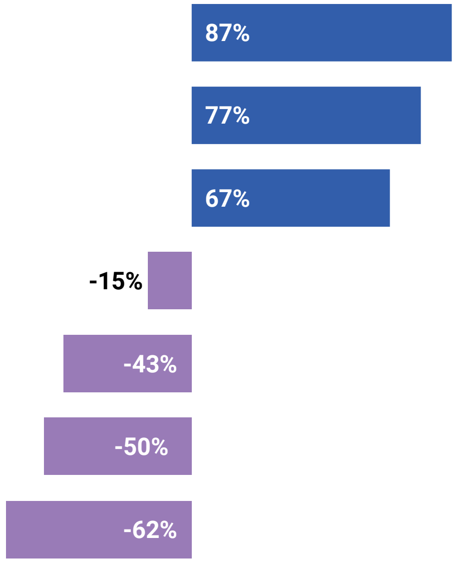
+- **Worse Cost Control**
Sales Growth: -1%
Target Multiple: 7.5x
Target Price: $125

\- **Longer Bear Market**
Sales Growth: -33%
Target Multiple: 3.0x
Target Price: $38

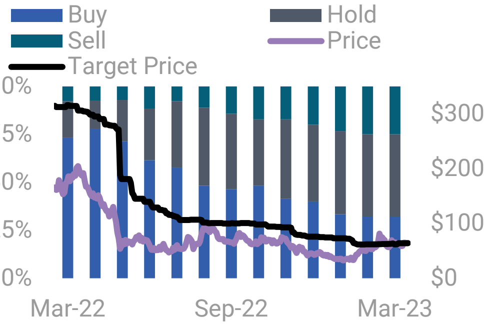
-+ **Better Cost Control**
Sales Growth: -33%
Target Multiple: 3.5x
Target Price: $43

-- **Worse Cost Control**
Sales Growth: -33%
Target Multiple: 2.0x
Target Price: $28

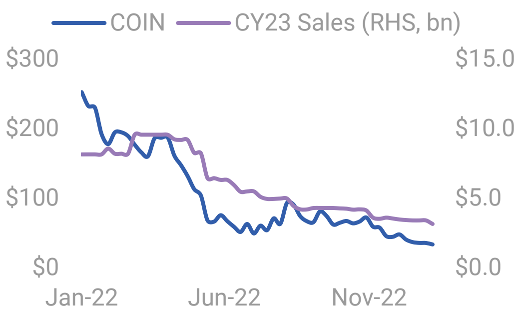
12-Month Price Return



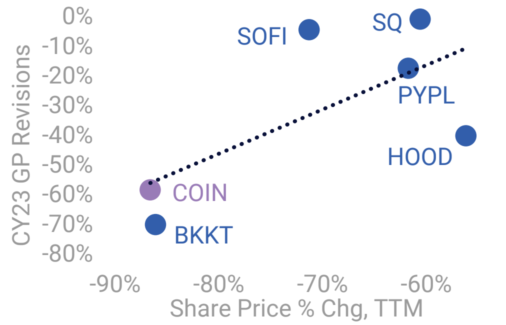
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

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($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: Management's tone on the call was positive around the idea of regulation coming into the crypto landscape, which would likely provide some stability. Coinbase also issued better than expected guidance for operating expenses. The shares traded relatively flat after reporting, down ~1%. We believe this is likely because, even though there have been positive incremental steps towards operational efficiency, the company continues to burn large amounts of cash, while its performance hinges on an extremely volatile asset class where volume is down more than 70% YoY.

Results Recap: Coinbase reported 4Q22 earnings after the market close on February 21st. The company reported total transaction volume of $145bn compared to consensus of $149bn, coming in 3% below estimates and declining 74% on a YoY basis. Coinbase also missed on its monthly transacting users (MTUs) by 1%, an 8.3mm shortfall versus consensus of 8.4mm for the quarter, representing a 27% decline YoY. Assets on the platform totaled $80bn, 34% below consensus of $122bn, representing a 71% decline YoY. Total revenue outperformed consensus of $587mm by 7%, coming in at $629mm (down 75% YoY).

Guidance Recap: 1Q23 guidance calls for subscription and services revenue of $300mm - $325mm, implying 33% YoY growth, 19% above consensus at the midpoint. Management issued positive guidance for its Technology and Development + General and Administrative expenses, providing a range of $625mm - $675mm, 21% below consensus of $787mm. Sales and Marketing expense guidance was also below consensus by 25% with an offered range of $60mm - $70mm. Restructuring expenses however are forecasted 23% higher than consensus, ~$150mm compared to consensus at $116mm. Transaction expenses are expected to grow in the mid-teens as a percentage of net revenue. Management provided minimal formal commentary on full-year guidance but highlighted that they are focused on cost management and operational efficiency Specifically, management would like to improve its Adjusted EBITDA in absolute dollar terms YoY. It is worth noting that management did not provide specific full-year guidance for adjusted EBITDA and MTU's as they have in previous quarters.

Incremental From the Call:

- **Guidance:** 2022 Adjusted EBITDA was -$371mm for the full year, 26% better than the -$500mm management had guided to. Totaling the operating expense guidance given by management, a more than 30% QoQ reduction is expected in 1Q23. No material changes in headcount are forecast and the current level of ~3,650 FTEs will be maintained going forward. Management stated that it previously was focused on building a business that could breakeven over a crypto cycle, but now the focus is on building a company that can generate positive EBITDA in all market conditions. Coinbase said that it believes fees will eventually compress due to commoditization, but that indications of this occurring have yet to materialize. Management highlighted there are scenarios where the company could be EBITDA positive in 2023.
- **Regulation:** Management cited increased regulatory scrutiny in the wake of FTX, however regulation is being welcomed by management, hoping it can bring increased legitimacy to the space. As a result of new SEC rules, Coinbase has expanded its disclosures around its lending activities, counterparty risk and interconnectedness with other market participants. Management is actively working with lawmakers to help shape the crypto regulatory environment, with stronger consumer protections, economic growth and national security being considered. While Kraken has had regulatory issues with its staking products, Coinbase does not expect issues with its product offerings because the products Coinbase offers for staking are not securities, while Kraken's staking offerings were considered as such. Although new regulation is coming to Hong Kong, there are currently no plans to move into the country, as the current strategy is focused on countries with already established regulatory frameworks.
- **Crypto Cycle:** Management highlighted the need to keep the irrational nature of the environment in perspective versus previous cycles rather than previous years. January of this year saw Bitcoin up ~80% compared to the average price in 2020, while the number of software developers in the space has doubled since 2020. Crypto markets have improved in 1Q23, with the total crypto market cap up 40% YTD through February 17th. Crypto volatility was 5% higher over the same period, which allowed the company to generate $120mm in transaction revenue in January.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Cons.	Abs.▲	%▲
Total Transaction Volume (bn)	**$145**	**$149**	**-$4.06**	**-3%**
growth (%, yoy)	*-74%*	*-73%*		
Monthly Transacting Users (mm)	**8.30**	**8.40**	**-0.10**	**-1%**
growth (%, yoy)	*-27%*	*-26%*		
Assets on Platform (bn)	**$80**	**$122**	**-$41.9**	**-34%**
growth (%, yoy)	*-71%*	*-56%*		
Transaction Revenue	**$322**	**$336**	**-$13.9**	**-4%**
growth (%, yoy)	*-86%*	*-85%*		
Subscription and Services	**$283**	**$242**	**$41.3**	**17%**
growth (%, yoy)	*33%*	*13%*		
Total Other Income	**$24.2**	**$12.9**	**$11.3**	**88%**
growth (%, yoy)	*186%*	*53%*		
Total Revenue	**$629**	**$587**	**$42.4**	**7%**
growth (%, yoy)	*-75%*	*-77%*		
Transaction Expense	**$83**	**$108**	**-$25.5**	**31%**
growth (%, yoy)	*-83%*	*-78%*		
Total Operating Expenses	**$1,184**	**$1,222**	**-$38.3**	**3%**
growth (%, yoy)	*-25%*	*-22%*		
Operating Income	**-$555**	**-$636**	**$80.7**	**13%**
Operating Margin (%)	*-88%*	*-108%*	*2,012bps*	
Adjusted EBITDA	**-$124**	**-$195**	**$70.8**	**36%**
Adj. EBITDA Margin (%)	*-20%*	*-33%*	*1,349bps*	
Net Income	**-$557**	**-$569**	**$11.7**	**2%**
Net Income Margin (%)	*-89%*	*-97%*	*839bps*	

1Q23 Guidance	New	Cons.	%▲
Subscription and Services Revenue	**$300 - $325**	**$263**	**19%**
MTU's	**$625 - $675**	**$787**	**21%**
Subscription and Services Revenue	**$60 - $70**	**$81**	**25%**
Sales and Marketing Expense	**~$150**	**$116**	**-23%**
Technology and Development	**Mid teens as a % of revenue**	**$109**	**NA**

Source: Company filings; FactSet; Visible Alpha

coinbase

COIN TTM Price Performance

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52-Wk Range:	$31.55 - $206.79	**Avg. Daily Vol (mm):**	18.6

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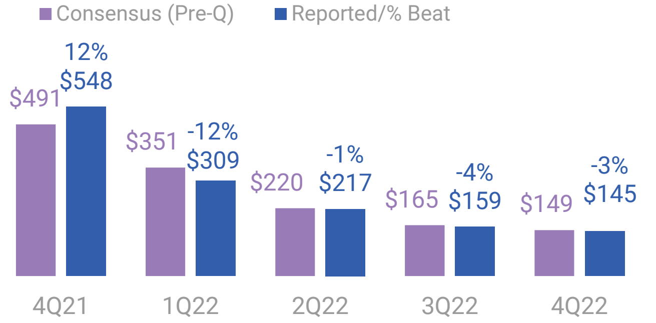
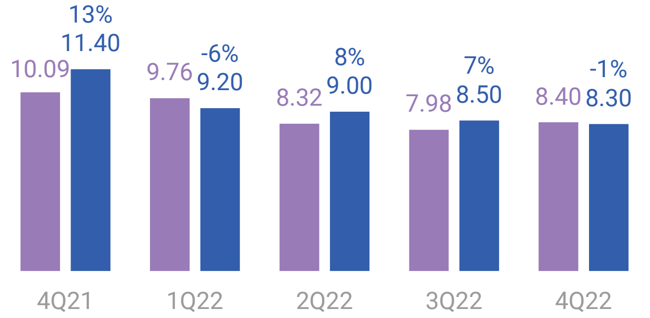
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

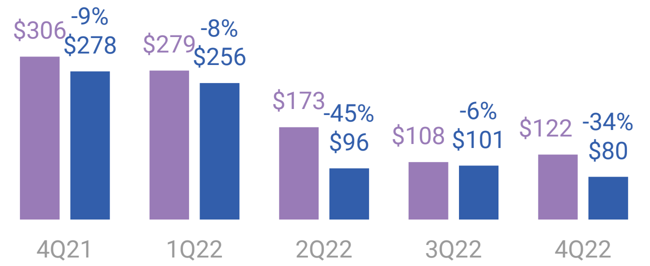
Total Transaction Volume (bn)



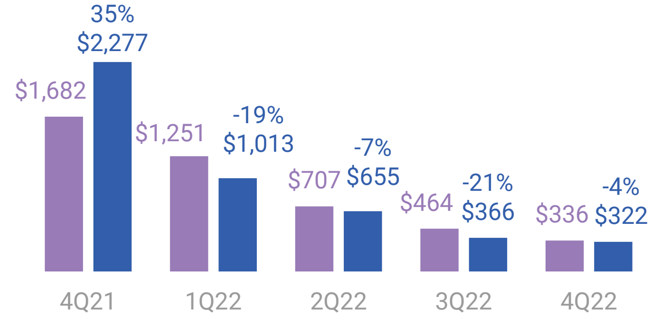
Monthly Transacting Users (mm)



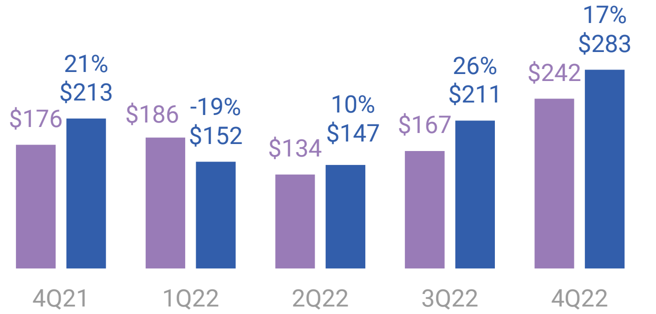
Assets on Platform (bn)



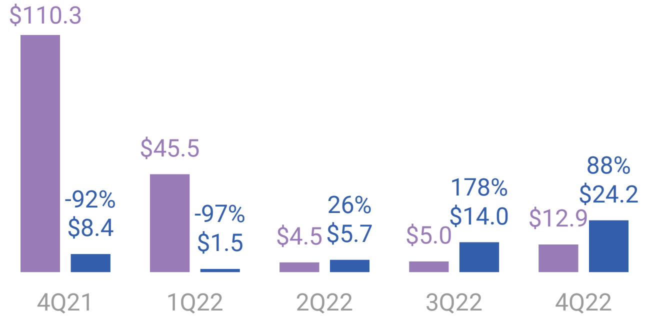
Transaction Revenue



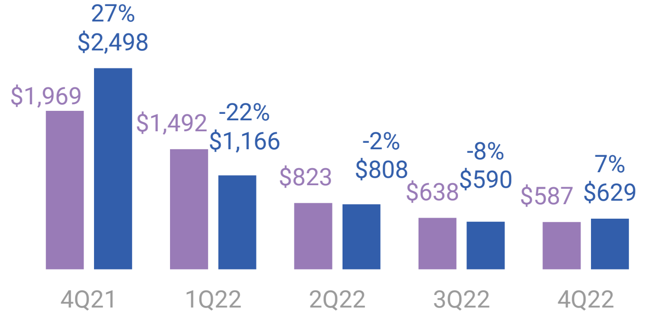
Subscription and Services



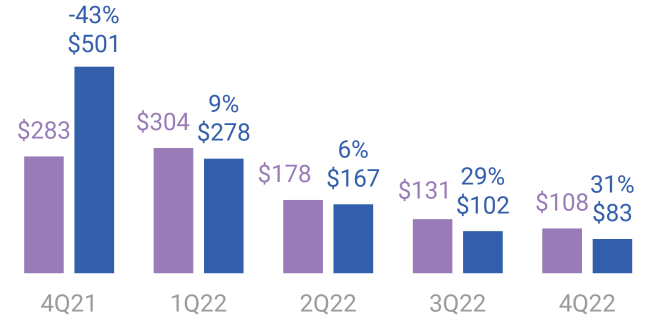
Total Other Income



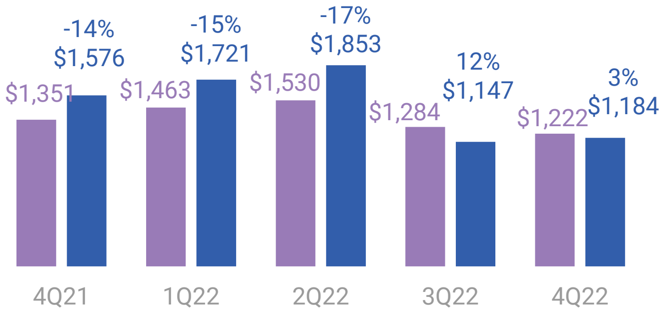
Total Revenue



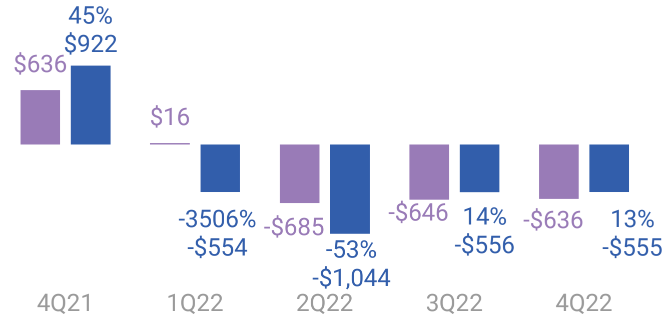
Transaction Expense



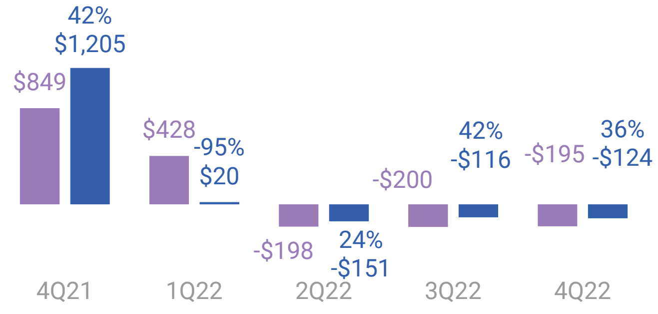
Total Operating Expenses



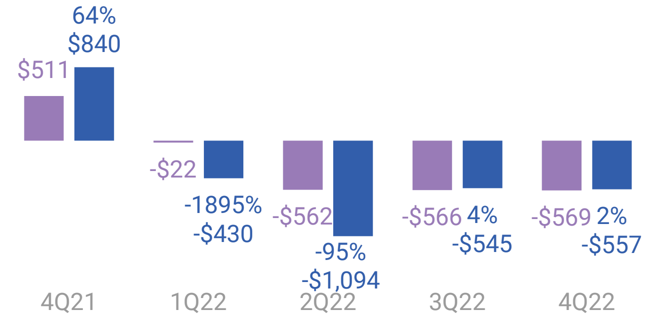
Operating Income



Adjusted EBITDA



Net Income



Source: Company filings; FactSet, Visible Alpha

FT Partners | Equity Research

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1Q23 EARNINGS OUTLOOK

Coinbase is projected to report 1Q23 earnings on May 10th after the market close.

What's in Focus:

Given the broader macro environment and crypto cycle, transaction revenue is down significantly over the past year, specifically down ~65% YoY from $6.8bn in 2021 to $2.4bn in 2022. The company has emphasized the Subscription and Services revenue segment, which now represents a more material portion of revenue (~25% of revenue in 2022 vs. 7% in 2021). With 4Q22 earnings, Coinbase raised its Subscription and Services revenue guidance for 1Q23 to $300mm - $325mm, which at the time was 19% above consensus at the midpoint and represents YoY growth of 106%. Additionally, management has stated that it intends to manage costs to an extremely conservative revenue base which they feel they have now reached.

Crypto Market Update:

At the end of 4Q22, 30-day average Bitcoin exchange trade volume across major crypto exchanges (though still a small portion of the whole) was $79bn(1). Since then, exchange trade volume has recovered modestly to $143bn in March (+81%), but is still down 51% YoY. However, total transaction fees paid to miners (which should be directionally correlated with total transactions) has reached the highest 30-day average level since June of 2022. The amount of unique addresses used on the blockchain also increased, reaching a 30-day average of 689,000 at the end of March versus 638,000 at the end of December. Additionally, the peak number of unique addresses was in 2017 at 890,00. According to The Block, between January and February of 2023, Coinbase's market share of total crypto volume decreased ~245bps from ~7.1% to ~4.65%. The largest cryptocurrency exchange by volume, Binance, transacted ~60.8% of total crypto volume during January, expanding market share in February by 245bps to ~63.3%.

Regulation:

With crypto regulation again in focus in 2023, it's important that Coinbase has a long history of working with regulators to shape the regulatory environment of the industry. Unlike many competitors who have historically lacked transparency, Coinbase seems to invite it, regularly hiring ex-SEC employees to better shape internal processes and disclosures. We believe that Coinbase is in a unique position to continue to shape the crypto regulatory environment, particularly in the U.S.

Estimates:

Since reporting 4Q22 earnings, estimates for 1Q23 MTUs have risen ~2% to 8.8mm down 4% YoY from 8.6mm, and AUC estimates are up ~4% to $139.5bn from $134.6bn, although still down 46% YoY. Revenue estimates for each segment have been revised upward as well, with the bulk of improvement coming from the Subscription and Services revenue segment, where 1Q23 estimates are up ~19% to $313mm representing 106% growth YoY from $262mm, while consensus for Transaction Revenue was revised upward by ~1% (down 68% YoY) and Other revenue saw a ~23% improvement for 1Q23 versus pre-print consensus, $15mm more than the year ago period. Estimates for 1Q23 total revenue improved ~11% to $657mm (down 44% YoY). With operating efficiency in focus, 1Q23 operating expenses were revised down ~7% to $1.0bn following 4Q22 earnings (down 15% YoY), important follow-through after Coinbase reduced operating expenses drastically over the course of 2022.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

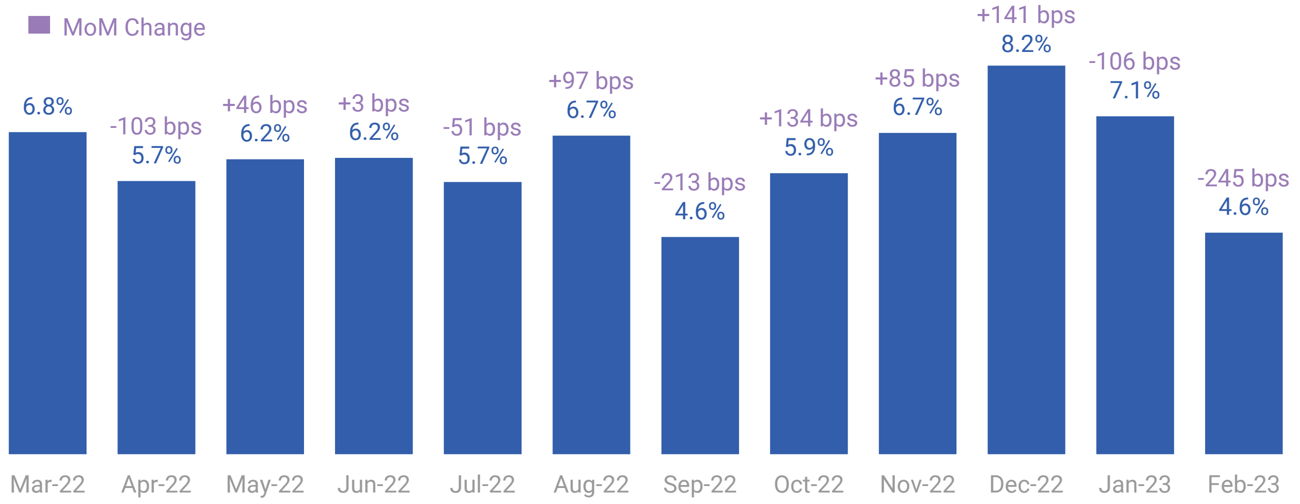
1Q22
- 22% miss on revenue and nearly 95% miss on adj. EBITDA
- Q2 outlook implies weakening MTUs and volume

2Q22
- Slight beat on adj. EBITDA despite lower-than-expected revenue
- Reduced FY22 expense guide given marketing costs cuts

3Q22
- Revenue and trading volume came in below expectations, but beat on adj. EBITDA due to cost-cutting measures
- Raised FY revenue guidance

4Q22
- Revenue beat expectations by 7%, Adj. EBITDA beat by 36%
- Raised 1Q23 subscription and services revenue guidance

COINBASE VOLUME MARKET SHARE[2]



Source: Company filings; FactSet, Blockchain.com

1) This volume is only from a small portion of exchanges, actual trading volume is much higher

2) The Block Monthly Exchange Volume

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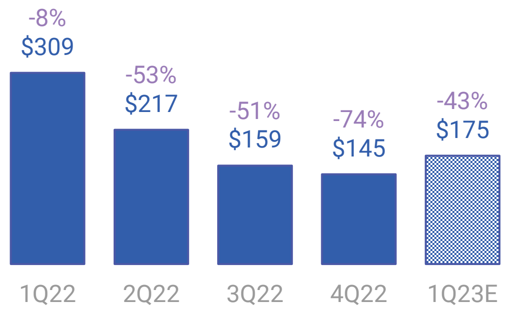
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

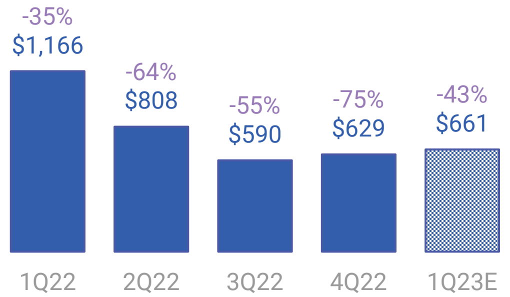
	Low	Average	High
Trading Volume (bn)	**$117**	**$173**	**$522**
growth (%, yoy)	*-62%*	*-44%*	*69%*
Monthly Transacting Users	**7.4**	**8.8**	**11.0**
growth (%, yoy)	*-20%*	*-5%*	*20%*
Assets on platform (bn)	**$84.0**	**$139.5**	**$602.1**
growth (%, yoy)	*-67%*	*-46%*	*135%*
Transaction Revenue	**$282**	**$327**	**$372**
growth (%, yoy)	*-72%*	*-68%*	*-63%*
Subscription and Services Revenue	**$298**	**$313**	**$338**
growth (%, yoy)	*96%*	*106%*	*123%*
Other Revenue	**$1**	**$17**	**$30**
growth (%, yoy)	*-35%*	*1004%*	*1851%*
Total Revenue	**$610**	**$657**	**$707**
growth (%, yoy)	*-48%*	*-44%*	*-39%*
Transaction expenses	**$44**	**$97**	**$114**
growth (%, yoy)	*-84%*	*-65%*	*-59%*
Total Operating Expenses	**$814**	**$1,005**	**$1,073**
growth (%, yoy)	*-53%*	*-42%*	*-38%*
Operating Income	**-$455**	**-$347**	**-$107**
Operating Margin (%)	*-75%*	*-53%*	*-15%*
Adjusted EBITDA	**-$310**	**-$6**	**$101**
Adj. EBITDA Margin (%)	*-51%*	*-1%*	*14%*
Net Income	**-$409**	**-$319**	**-$171**
Net Income Margin (%)	*-67%*	*-49%*	*-24%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

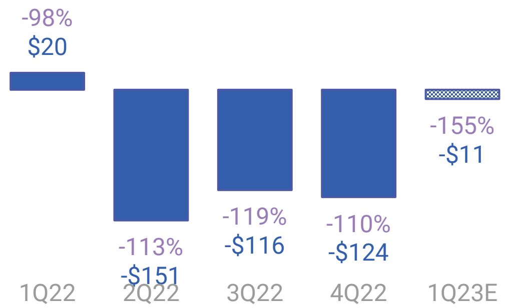
Trading Volume (bn)



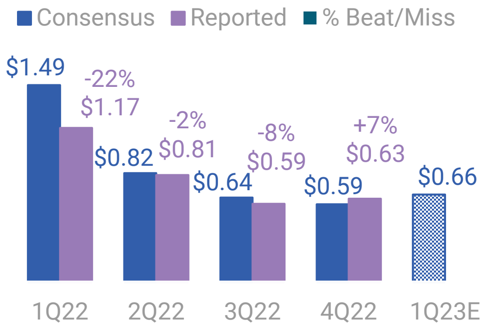
Total Revenue



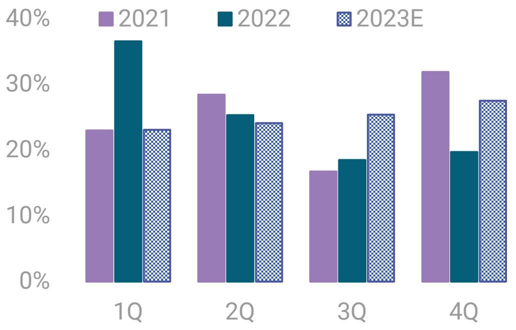
Adjusted EBITDA



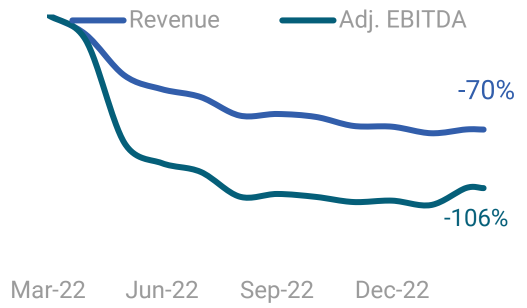
Revenue Cons. vs. Reported (bn)



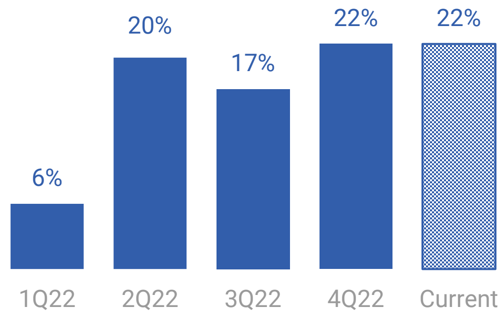
Revenue Seasonality



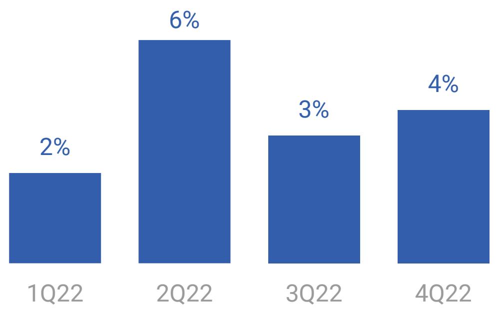
1Q23 Cons. Revisions



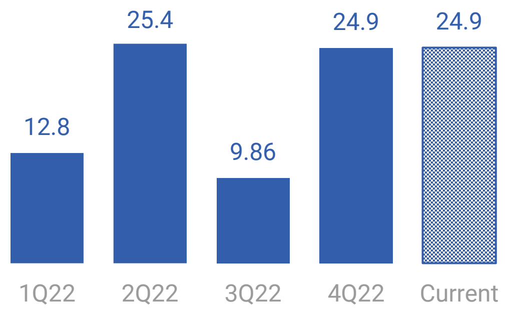
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings ADTV⁽¹⁾



FT Partners | Equity Research

Source: Company filings, FactSet, Visible Alpha
1) Measured as ADTV over the prior 7-day period

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coinbase

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QUESTIONS FOR MANAGEMENT

General:

1) What are management's thoughts on the current crypto market? How does the operating playbook differ in a crypto winter vs. bull market?
2) What effects are there from the FTX collapse? How will it will impact the space going forward?
3) Coinbase has recently announced several new products such as Wallets as a Service and Base. Can management talk about how these are additive to the platform?

Products:

4) Are there any conversations going on with big tech regarding NFT's and in-app purchases?
5) Can management talk about the product roadmap? Is there focus on expanding in the current market or providing services to a wider base?

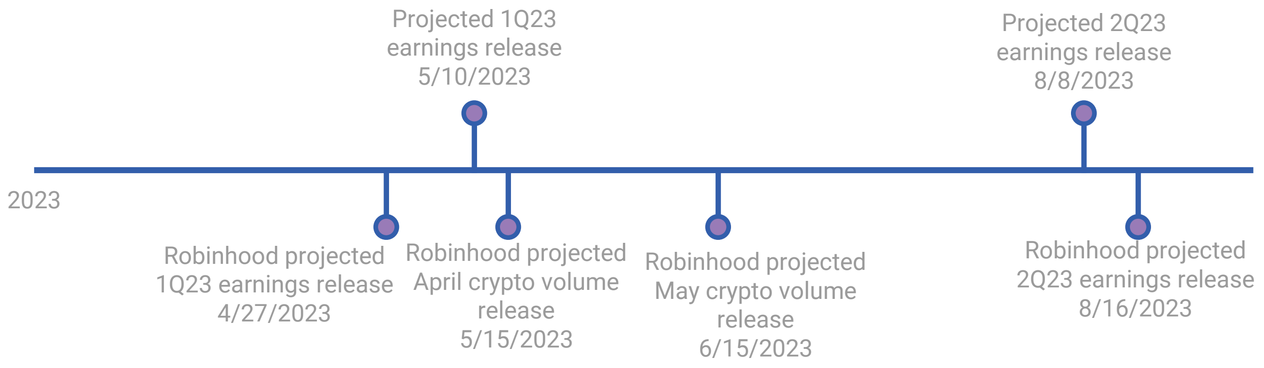
Fundamentals:

6) How much of Coinbase's projected revenue growth is attributed to broader crypto market dynamics vs. market share gains or new product launches?
7) How is management thinking about the cost base of the business? Is there room for incremental cost savings?
8) How is management thinking about CAC? Will Coinbase ramp up investment to capture customers who might be looking for a new exchange, especially in the wake of the FTX collapse?

Regulatory:

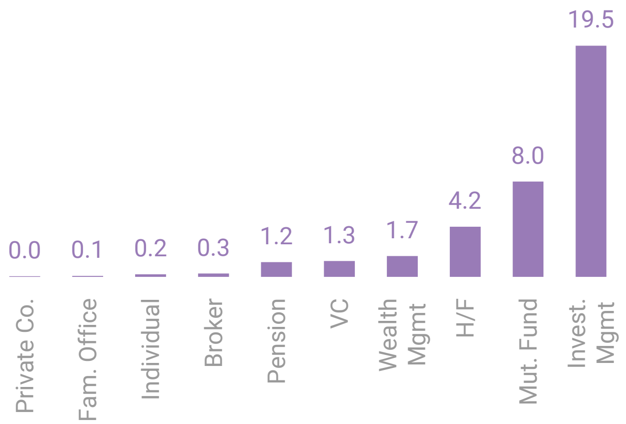
9) What diligence is done prior to adding a crypto asset to the platform?
10) What does the current regulatory environment look like? Does management see the ongoing regulatory scrutiny as healthy for the crypto space?

POTENTIAL CATALYSTS

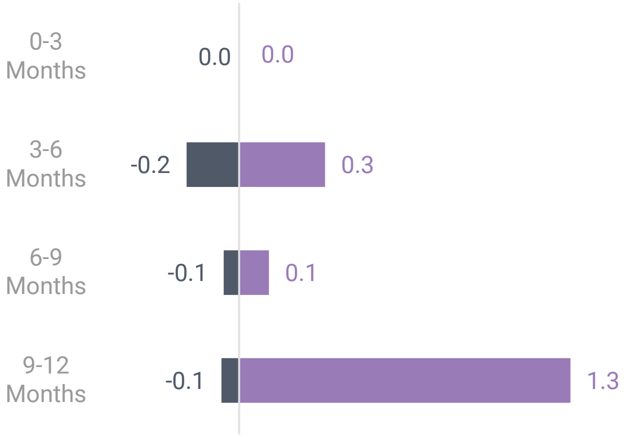


SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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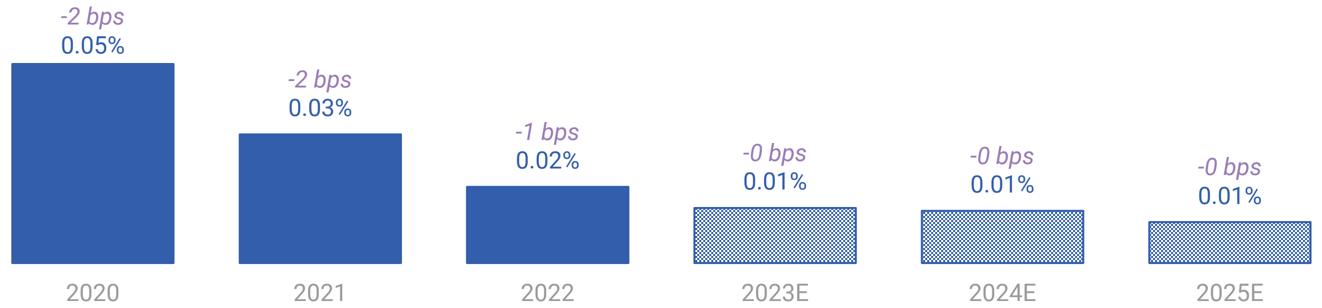
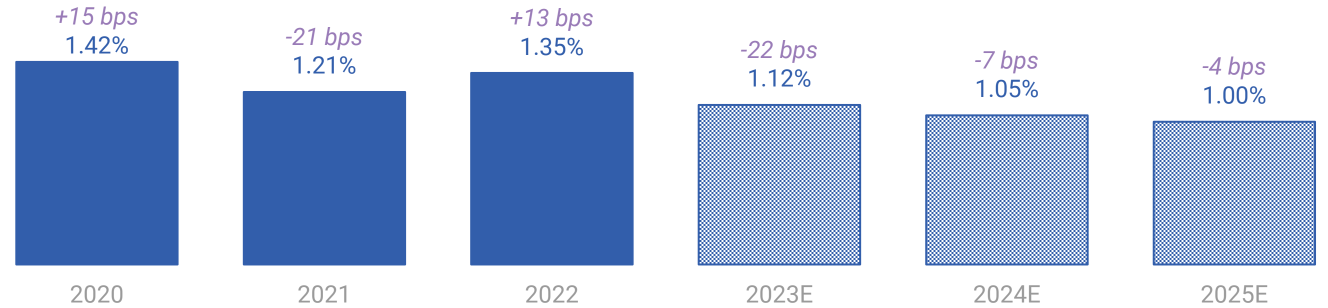
COMPANY RATIOS/MARGIN ANALYSIS

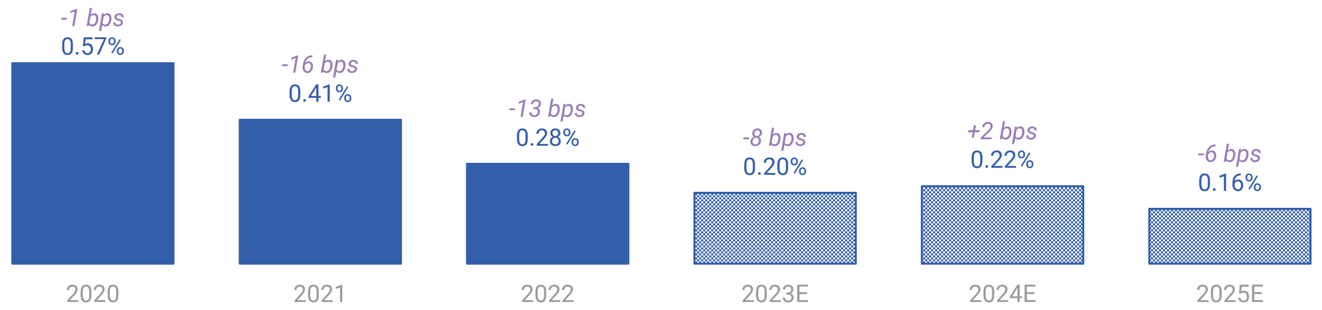
Institutional Take Rate



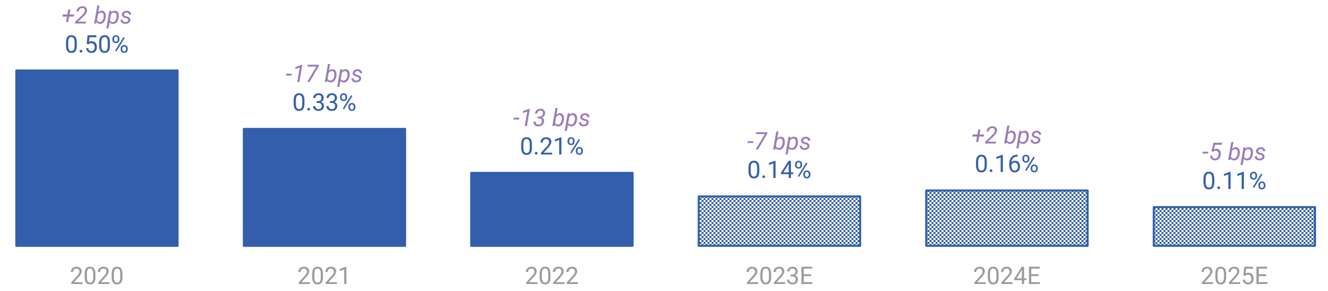
Retail Take Rate



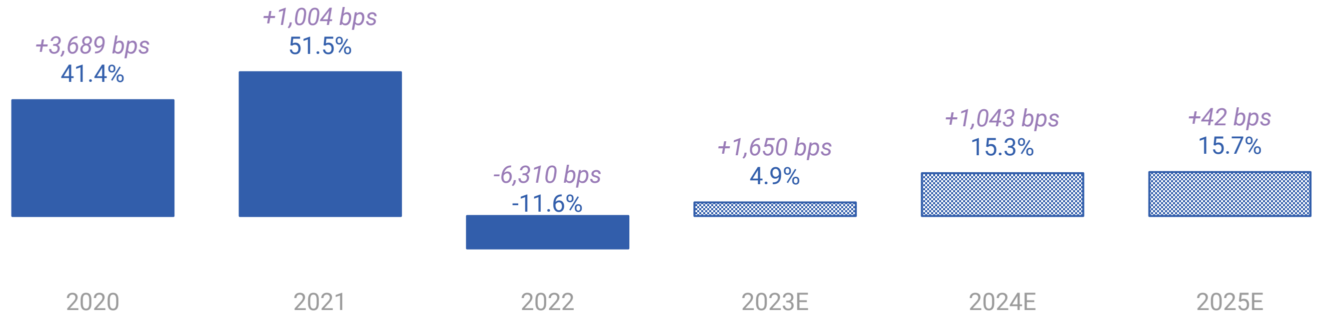
Gross Take Rate(1)



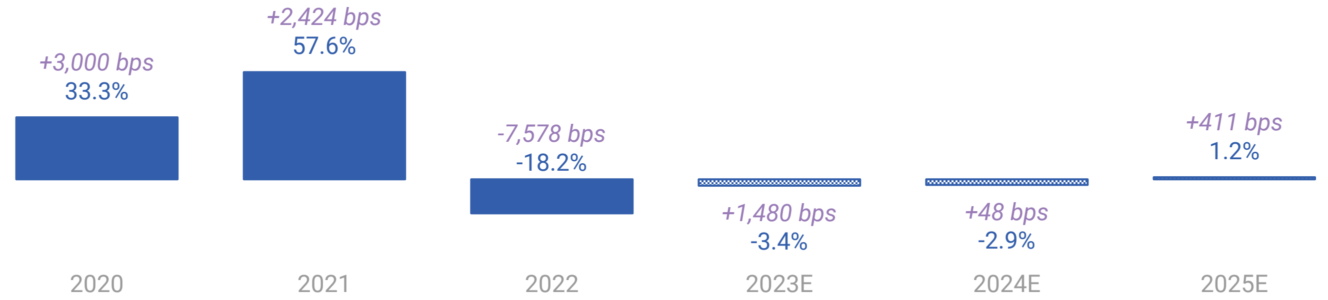
Net Take Rate(2)



Adjusted EBITDA Margin



Adjusted Net Income Margin



Source: Company filings
1) Transaction revenue yield on total trading volume
2) Transaction revenue less transaction expenses yield on total trading volume

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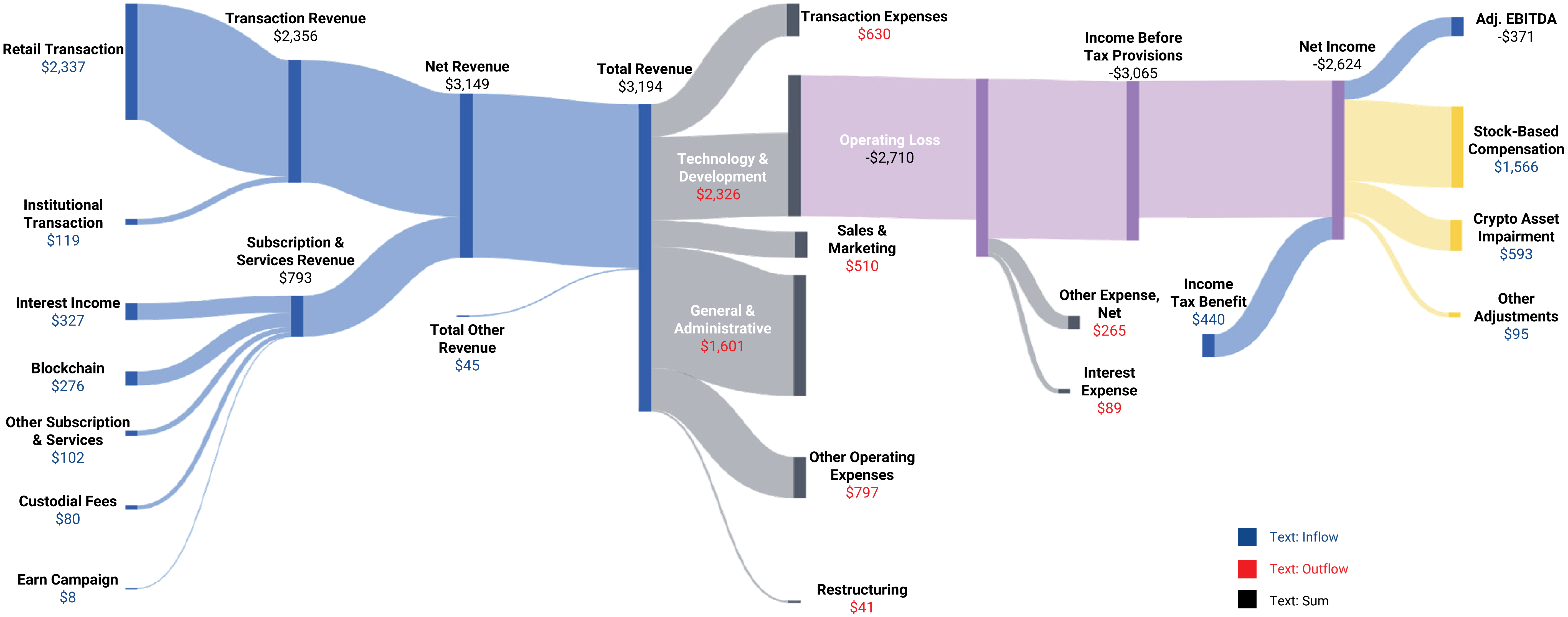
($ in millions)

P&L VISUALIZATION – TTM



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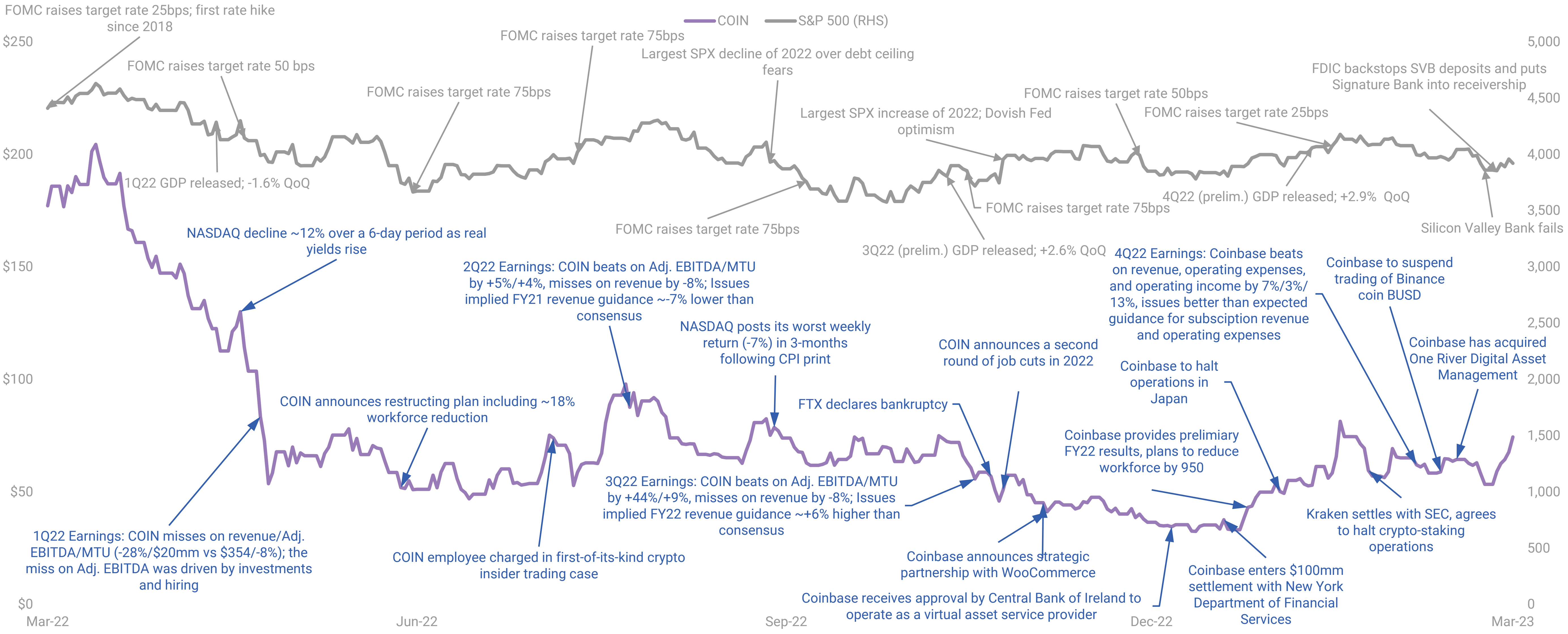
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



Source: Company filings; FactSet

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Expensify

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For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

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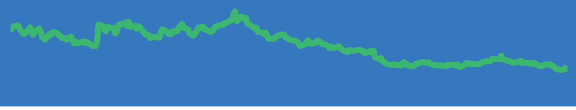
EXFY TTM Price Performance



Price as of 3/17/2023:	$7.48	**Shares Out (mm):**	68
Market Cap (mm):	$617	**Beta (Since IPO):**	1.1
52-Wk Range:	$7.01 - $25.39	**Avg. Daily Vol (mm):**	0.3

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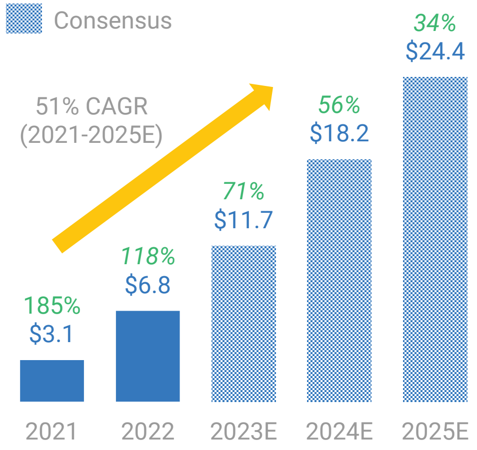
COMPANY OVERVIEW

Expensify offers a spend management platform that simplifies how employees submit expenses and vendors manage expenses, while easing pain points around payments. Its services include SmartScanning, guaranteed eReceipts, receipt forwarding, and receipt apps.

Expensify focuses on serving small and medium-sized businesses ("SMBs"). The platform is designed to be used at all levels of an organization, from entry-level employees to managers and owners. **Expensify operates predominately on an inbound customer acquisition model, driven by organic word-of-mouth advertising.**

Expensify also offers the Expensify card (which provides a discount on the subscription services) that is integrated with the Expensify platform. The company retains a portion of the interchange revenue generated with the card product.

TRANSACTION REVENUE



KEY DEBATES

1. **Pay-Per Use:** Expensify utilizes a pay-per-use model which, according to management, has led to significant levels of volatility in results. To offset this, management has shifted its priority to a subscription model. In the near-term, this is expected to weigh on ARPU as PPU is ~$18/PU, double the annual subscription contribution. However, over the long-term it is expected to create a stickier customer – particularly in quarters that experience low PPU usage (such as 4Q22). Diversifying revenue streams through products like the Expensify Card and associated transaction revenue should be helpful here.

2. **ARPU Headwinds:** Alongside the shift away from PPU, ARPU also faces headwinds from 1) scaling account managers (which impacts ARPU as managers help drive conversion from PPU to subscription) and 2) partnership programs. As of the 4Q22, substantially all of customers were actively managed by account managers and 50%+ of the accounting channel is overseen by a partner manager. Expensify is planning to scale these efforts further eventually reaching full coverage in the accounting channel. The scaling of these efforts will likely weigh on ARPU as these tend to bring preferred/bundled pricing (albeit on a larger customer base).

3. **Competitors:** Competition across SMB spend-management solutions is increasing. Notable competitors in the space include Divvy, Ramp, Brex, Airbase, etc. Several competitors have opted to provide the entire spend-management product for free while monetizing only the card volume. Expensify will need to show its value proposition to customers effectively as it remains in a highly competitive end-market.

REVENUE MODEL

Expensify generates revenue via two distinct business lines:

- **Subscription Revenue (96% of TTM adjusted revenue):** Expensify primarily generates revenue from annual subscriptions to its platform, driven by the number of paid members active on a monthly basis. Individuals or companies pay for subscriptions on behalf of themselves, their employees, and contractors (collectively referred to as members).
- **Transaction Fees (4% of TTM adjusted revenue):** With the launch of the Expensify Card in 2020, Expensify has started to monetize transactions by receiving a percentage of the interchange for all spend on the card. Expensify uses a third-party vendor to issue cards and process transactions. Due to the nature of Expensify's vendor agreement, Expensify does not recognize its portion of interchange as GAAP revenue and instead records it as a contra-expense to the cost of revenue line item. However, **Expensify has stated it is changing its existing Issuer-Processor agreement to become the program manager and recognize interchange revenue gross.**

PRODUCTS & PRICES

Free Plan

Expensify Card

The free plan offers the Expensify Card, earning Expensify interchange revenue while also aiding word of mouth advertising

Reimburse Expenses

Send Invoices

Pay Bills

Collect Plan

Annual Expensifying
$10/user/month

Per-Use Expensifying
$20/user/month

+ Card

Annual Expensifying
$5/user/month

Per-Use Expensifying
$10/user/month

Tax Tracking

Expense Approval

Smart Limits

Accounting Sync

Control Plan

Annual Expensifying
$18/user/month

Per-Use Expensifying
$36/user/month

+ Card

Annual Expensifying
$9/user/month

Per-Use Expensifying
$18/user/month

Custom Reporting

Access Control

Multi-level Approval

Expense Policies

Source: Company filings; FactSet, Visible Alpha

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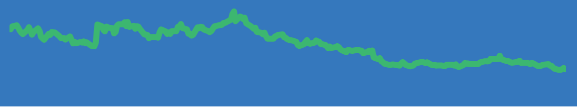
EXFY TTM Price Performance



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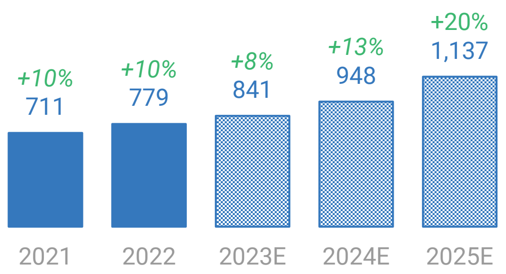
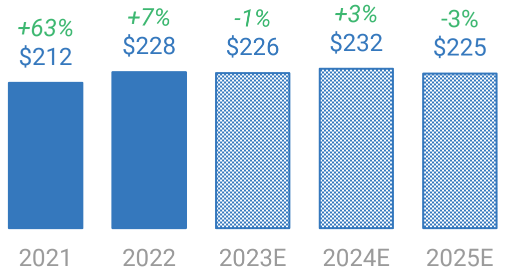
($ in millions, except per share amounts)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

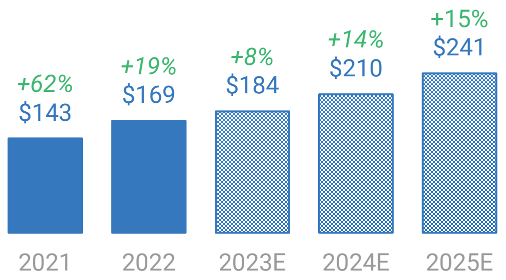
Paid Members (000)



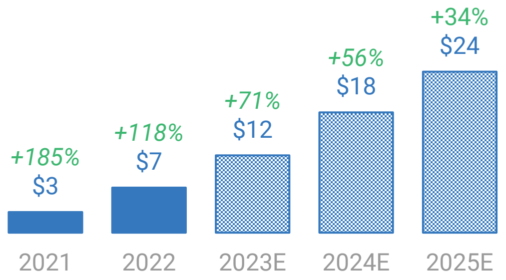
Annual ARPU



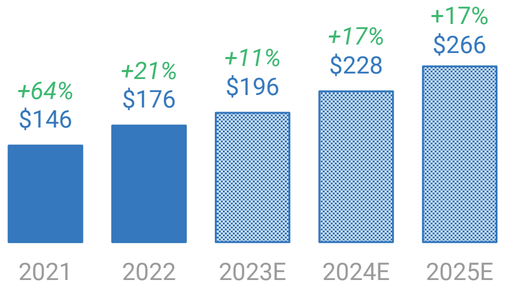
Subscription Revenue



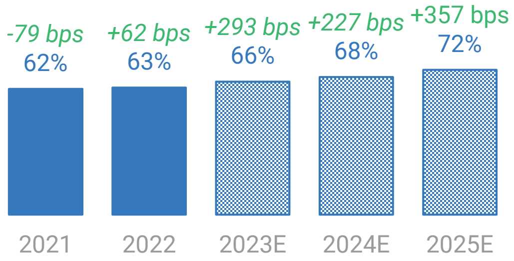
Interchange Earnings



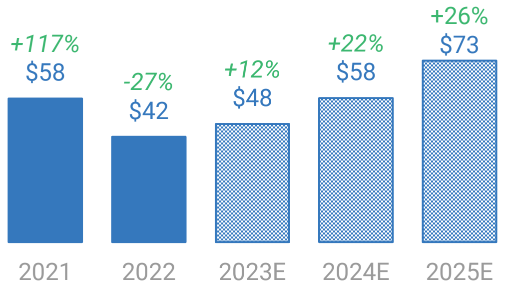
Total Revenue Incl. Interchange



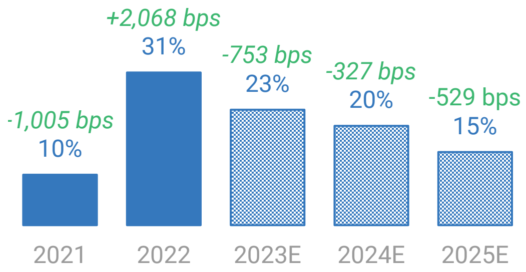
Gross Margin



Adjusted EBITDA



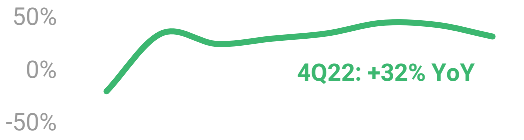
SBC as a % of Revenue



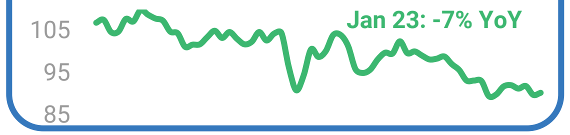
INDUSTRY KPIs

SMB Employment(000's)[2](Jan 18-Feb 23)

AXP SMB Spending [3] (1Q21-4Q22)

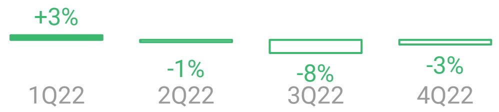


SMB Optimism Index[4] (Jan 18-Jan 23)

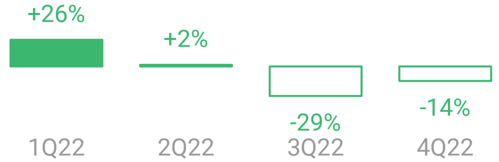


SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[1]

Total Revenue Incl. Interchange



Adjusted EBITDA



FY23

Number of Users	795	841	904
Total Revenue	$181	$184	$187
Gross Profit	$118	$121	$126
Adjusted EBITDA	$46	$48	$50

TOTAL ADDRESSABLE MARKET

$2.4 bn
VSB
(1-9 employees)

+

$12.0 bn
SMB
(10-499 employees)

+

$1.5 bn
Mid-Market
(500-999 employees)

$7.1 bn
Enterprise
(1,000+ employees)

Expensify
$16bn U.S. TAM

Source: Company filings
1) Visible Alpha
2) ADP Small Business Report
3) American Express Commercial Services U.S. SME Expensify Business
4) NFIB Research Foundation Small Business Optimism Index

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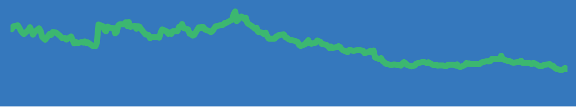
Expensify

EXFY TTM Price Performance



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VALUATION CONSIDERATIONS

Relative Valuation:

While Expensify is profitable on an adjusted EBITDA and adjusted Net Income basis, EV/GP is utilized for relative valuation to account for costs associated with the core operations of the business (such as interchange fees) while also providing a relatively standardized approach across peers. **If Expensify were to trade in-line with peers on a NTM EV/GP basis, it would imply a $16.95 price (127% upside).** Expensify currently trades at 4.1x NTM EV/GP which is 6x below its average multiple since IPO of 10.1x. Expensify also trades at a 0.9x premium to the NASDAQ vs. its historic premium since IPO of 6.7x. **Expensify has seen significant valuation compression due to 1) increased competition 2) optical headwinds with the strategic shift around PPU and interchange revenue recognition.** If Expensify can demonstrate market share gains, confusion surrounding decreasing ARPU should decrease as the revenue model becomes more stable.

DCF Scenarios:

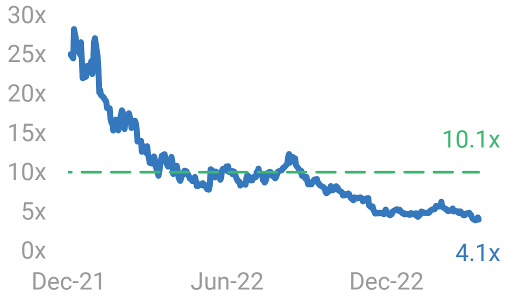
Scenario 1 – Current Price ($7.48, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price 12-months from now. This would require a combination of low double-digit revenue growth in FY23 followed by mid-teens growth through 2027 before gradually decelerating to the terminal growth rate, combined with operating margin expansion to 27% over the long-term. Were shares of Expensify to remain at the current price in 12-months, it would imply a 3.5x NTM EV/GP multiple (based on current STM gross profit of $157mm).

Scenario 2 – Higher Card Revenue ($11.17, 49% upside): This scenario assumes Expensify achieves a higher attach rate on the Expensify card for new and existing customers. As a result, revenue growth reaccelerates to high-teens through 2025 and long-term operating margins are 30%. Based on current STM consensus gross profit, this implies that shares of Expensify would be trading at 5.4x NTM EV/GP in 12-months.

Scenario 3 – Price Compression ($5.08, 32% downside): This third DCF scenario analyzes the impact of potential pricing pressure on Expensify's revenue growth and margins as the spend management market has become increasingly competitive. In this scenario, revenue growth decelerates to low-teens and stays there through FY24 before decelerating to the terminal rate. Long-term operating margins reach 25%. Based on current STM consensus gross profit, this implies that shares of Expensify would be trading at 2.2x NTM EV/GP in 12-months.

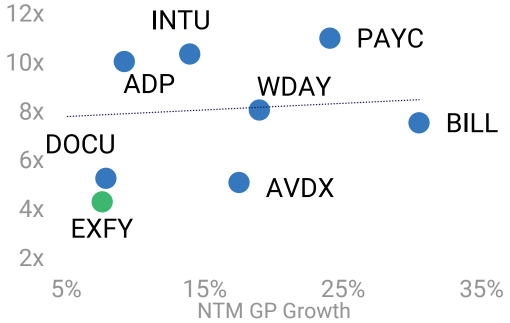
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM EV/GP Since IPO



NTM EV/GP Premium vs. NASDAQ

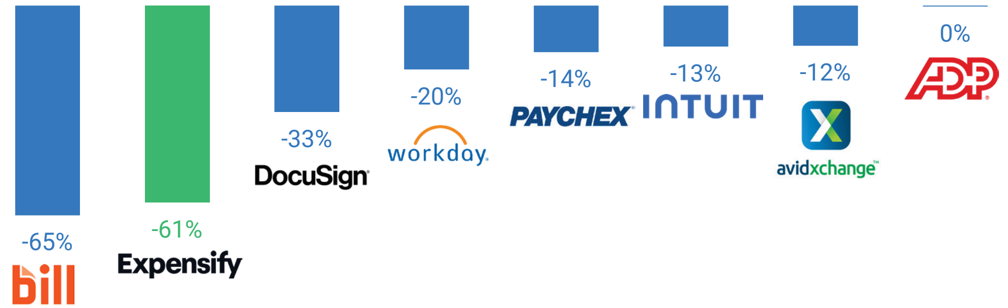
NTM EV/GP & Peer Avg. vs. GP Growth



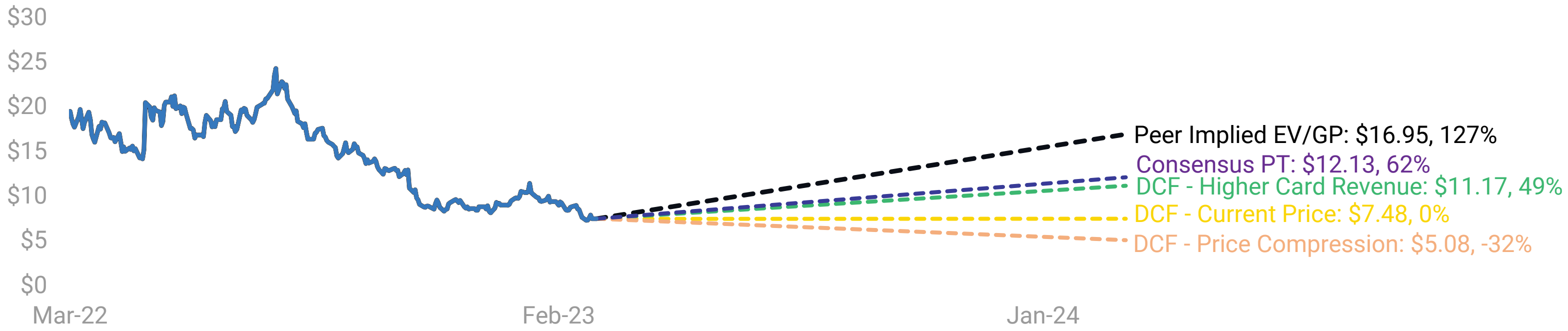
DCF Key Assumptions[2]

10-Yr RFR	**3.9%**
Cost of Equity	**10.0%**
Cost of Debt	**5.0%**
WACC	**9.4%**
Beta	**0.9**
DCF FCF Terminal Growth Rates	**3.0%**
SBC Terminal Growth Rates	**1.0%**
Equity Value Reduction from Present + Future SBC	**$658**

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet
1) Expensify EV/NTM GP less NASDAQ EV/Sales
2) SBC in millions

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Expensify

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DECISION TREE INPUTS

In order to evaluate potential outcomes and their valuation implications, this decision tree is built around 1) card TPV growth and 2) ARPU dynamics. While there are other drivers of Expensify's performance (customer growth, expense management), these represent the most likely area(s) of upside/downside relative to management's outlook/consensus.

Consensus Case:

The average consensus price target for Expensify is $12.13, with STM gross profit consensus of $157mm implying a 5.9x NTM EV/GP multiple, if shares of Expensify trade at the level in 12-months. The current consensus price target implies 62% upside relative to the current share price.

Upside Case(s):

(+) $10.80, 44% Upside: This scenario assumes Expensify is able to drive higher TPV (and implicitly interchange revenue) from the Expensify card by growing both the card attach rate for existing users and new users higher. This implies 12% gross profit growth and 44% upside to the current share price with a 5.0x NTM EV/GP multiple.

(-+) $8.18, 9% Upside: This scenario assumes lower TPV growth which is partially offset by ARPU expanding on the subscription side of the business. This implies 11% gross profit growth and 9% upside to the current share price with a 4.0x multiple.

(++) $13.65, 82% Upside: The best-case scenario assumes stronger TPV growth and that ARPU expands in FY23 vs. expectations for ARPU to remain flat. This implies 20% gross profit growth and 82% upside to the current share price with a 6.0x multiple.

Downside Case(s):

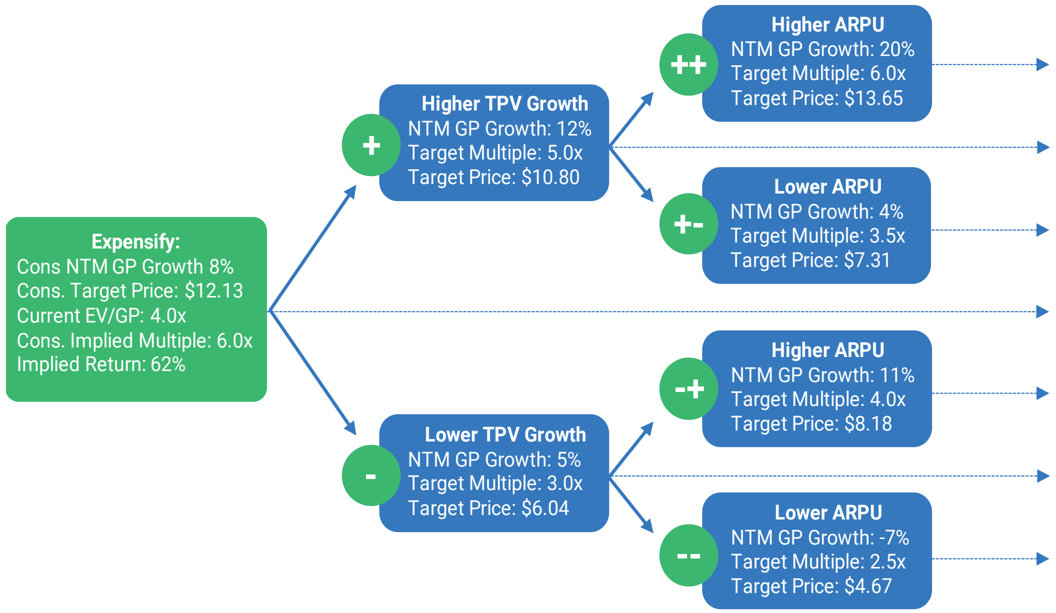
(-) $6.04, 19% Downside: This scenario assumes Expensify is unsuccessful at driving higher card adoption and the amount of churn on the card is increased as a result of changing the card issuer relationship and issuing new cards to customers. This implies 5% gross profit growth and 19% downside to the current share price with a 3.0x multiple.

(+-) $7.31, 2% Downside: This scenario assumes the stronger TPV growth, but forecasts ARPU continues to decline even as the shift away from PPU becomes mostly completed. In this scenario, a greater multiple decrease is applied to further ARPU declines as Expensify should be moving towards the back-half of its focus on converting PPU users to subscription, therefore, further downward shifts in ARPU are likely to result in a more negative multiple rerating since consensus already expects ARPU expansion in FY23. This implies 4% gross profit growth and 2% downside to the current share price with a 3.5x multiple.

(--) $4.67, 38% Downside: The worst-case scenario assumes slower TPV growth and ARPU. This implies -7% gross profit growth and 38% downside to the current share price with a 2.5x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Expensify:
Cons NTM GP Growth 8%
Cons. Target Price: $12.13
Current EV/GP: 4.0x
Cons. Implied Multiple: 6.0x
Implied Return: 62%

+ **Higher TPV Growth**
NTM GP Growth: 12%
Target Multiple: 5.0x
Target Price: $10.80

++ **Higher ARPU**
NTM GP Growth: 20%
Target Multiple: 6.0x
Target Price: $13.65

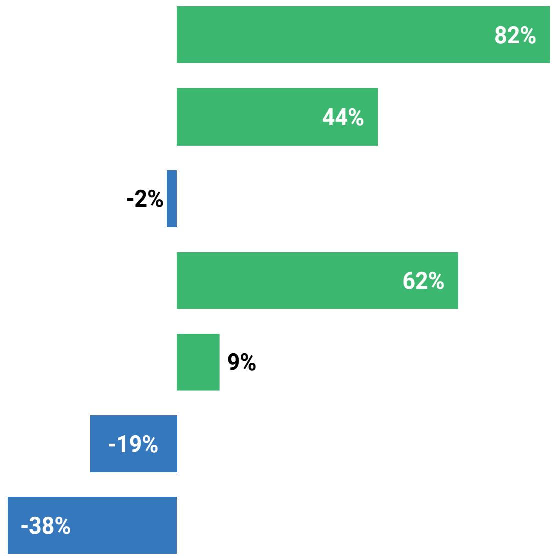
+- **Lower ARPU**
NTM GP Growth: 4%
Target Multiple: 3.5x
Target Price: $7.31

- **Lower TPV Growth**
NTM GP Growth: 5%
Target Multiple: 3.0x
Target Price: $6.04

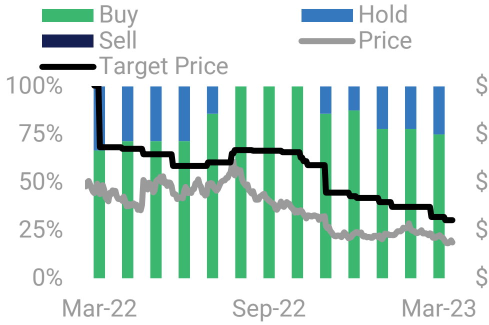
-+ **Higher ARPU**
NTM GP Growth: 11%
Target Multiple: 4.0x
Target Price: $8.18

-- **Lower ARPU**
NTM GP Growth: -7%
Target Multiple: 2.5x
Target Price: $4.67

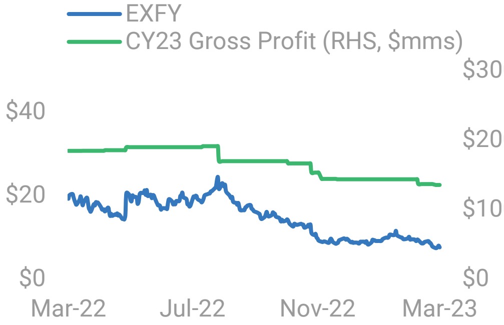
12-month Price Return



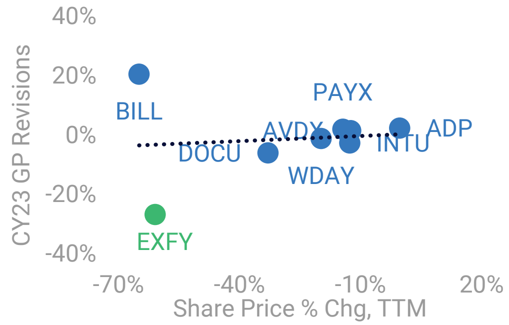
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



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Expensify

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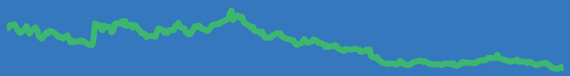

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($ in millions, except per share amounts)

4Q22 EARNINGS CALL RECAP

Takeaway: Following 4Q22 earnings, shares traded up 4% after hours before decreasing 4% leading into the start of the call. We believe an uncertain growth trajectory contributed to volatile aftermarket trading, with the company reaffirming a 25%-35% revenue growth over muti-year period despite ~21% growth YoY (when including interchange revenue) in FY22.

Results Recap: Paid members grew 2% QoQ to 779,000 vs. consensus of 788,000. Annualized ARPU (subscription revenue in the quarter divided by number of users and multiplied by four) was $223 vs. consensus of $226, 1% below consensus and mostly flat QoQ. Downward ARPU pressure was expected due to partner managers onboarding more accountants offering more favorable pricing. Adjusted total revenue of $45.5mm came in 3% below consensus. Interchange revenue grew to $2.0mm from $1.9mm in 3Q22. Operating expenses of $28.1mm (down 31% YoY) were 10% lower than consensus helping drive a 35% beat on net income. Adjusted EBITDA of $11.2mm (+25% YoY) missed consensus of $13.0mm.

Guidance Recap: Management reaffirmed its medium-term revenue growth target of 25%-35% over a multi year period. Management also provided guidance for FY23 stock-based compensation of $37.1mm - $45.1mm, with the midpoint 22% lower than pre-quarter consensus.

Incremental From the Call:

- **Guidance:** Management reiterated its expectations for revenue growth of 25%-35% over a multi-year period despite pre-quarter consensus of 8.1% and 17.2% YoY growth for FY23 and FY24. Management stated it expects to maintain a ~25% adjusted EBITDA margin throughout the year, in-line with consensus. SBC guidance of $37.1mm - $45.1mm was 22% better than the pre-quarter consensus of $53mm.
- **PPU to Subscription:** Management disclosed that paid per use users are ~35%, the lowest level seen so far which is expected to decrease revenue volatility. Expensify is targeting 20% PPU users over the long-term. With results, management disclosed it is seeing a typical seasonal decline in users in January, decreasing to 745,000 from the 779,000 reported with results.
- **Expensify Card:** Interchange revenue of $2mm was 7% below consensus and represents 8% growth QoQ, the slowest QoQ gross interchange revenue since the card was launched in 2020. In FY23 there is some risk of increased card user churn as Expensify switches its issuer-processor arrangement however, management has stated it has plans to mitigate this, likely through promotional pricing.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs.▲	%▲
Users (000's)	**779**	**788**	**-9.00**	**-1%**
growth (%, yoy)	10%	11%		
Annualized ARPU	**$223**	**$226**	**-$2.84**	**-1%**
growth (%, yoy)	-2%	0%		
Subscription Revenue	**$43.5**	**$44.5**	**-$1.06**	**-2%**
growth (%, yoy)	8%	10%		
Interchange Revenue	**$2.0**	**$2.2**	**-$0.16**	**-7%**
growth (%, yoy)	91%	107%		
Adj. Total Revenue	**$45.5**	**$46.7**	**-$1.22**	**-3%**
growth (%, yoy)	10%	13%		
Cost of Revenue	**$16.1**	**$15.6**	**$0.53**	**3%**
growth (%, yoy)	-19%	-22%		
Adjusted Gross Profit	**$31.5**	**$33.1**	**-$1.59**	**-5%**
growth (%, yoy)	6%	11%		
Adj. Gross Margin	**69.3%**	**70.7%**	**-147bps**	**NA**
growth (bps, yoy)	-258bps	-111bps		
Total Operating Expenses	**$28.1**	**$31.2**	**-$3.15**	**-10%**
growth (%, yoy)	-31%	-24%		
Adjusted EBITDA	**$11.2**	**$13.0**	**-$1.86**	**-14%**
Adj. EBITDA Margin (%)	25%	28%	-335bps	
Net Income	**-$3.40**	**-$5.26**	**$1.86**	**35%**
growth (%, yoy)	84%	76%		
Adjusted Net Income	**$7.14**	**$5.55**	**$1.59**	**29%**
Adj. Net Income Margin (%)	16%	12%	382bps	

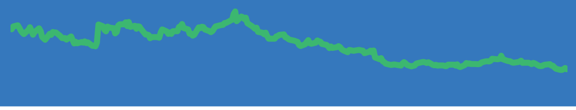
FY23 Guidance	Guide	Cons.	+/-
Stock Based Compensation	**$37.1-$45.1**	**$53**	**-22%**

Source: Company filings; FactSet; Visible Alpha

03/20/23 - Matthew O'Neill | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218 0540

Expensify

EXFY TTM Price Performance



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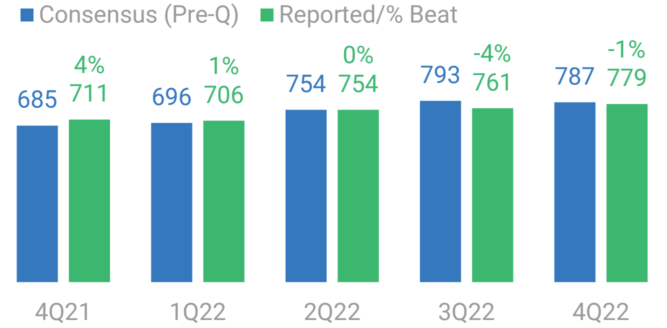
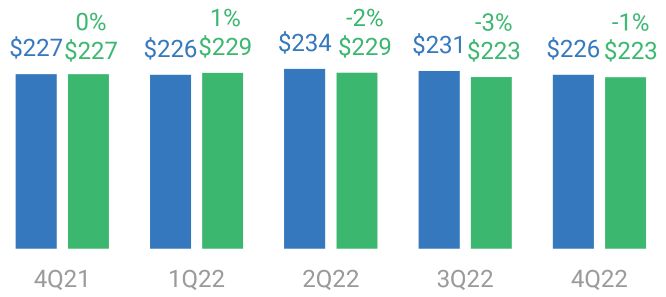
($ in millions, except per user amounts)

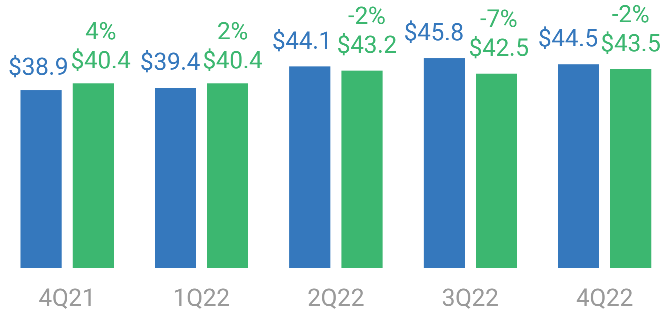
REPORTED VS. CONSENSUS



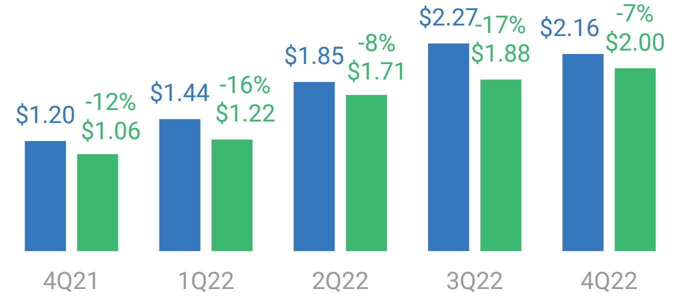
Users (000)



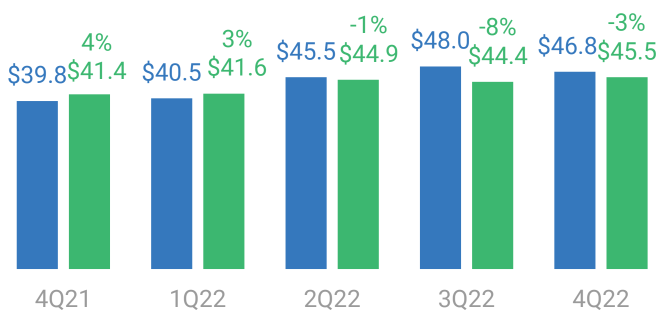
ARPU



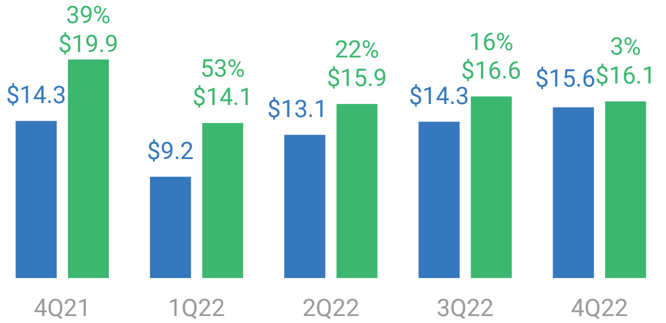
Subscription Revenue



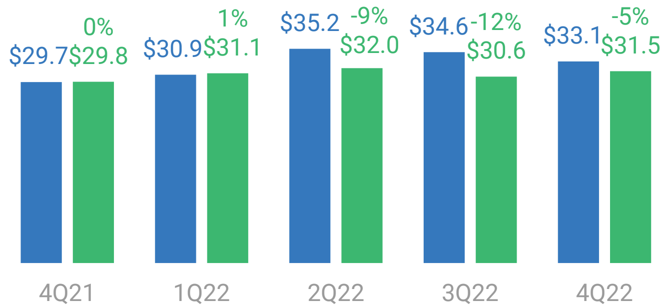
Interchange Revenue



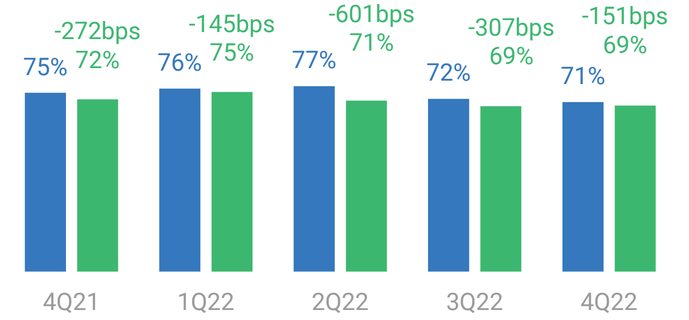
Adj. Total Revenue



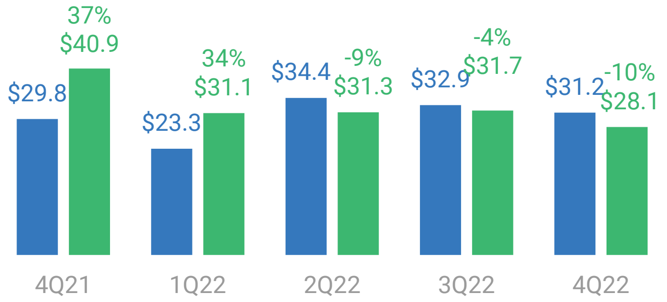
Cost of Revenue



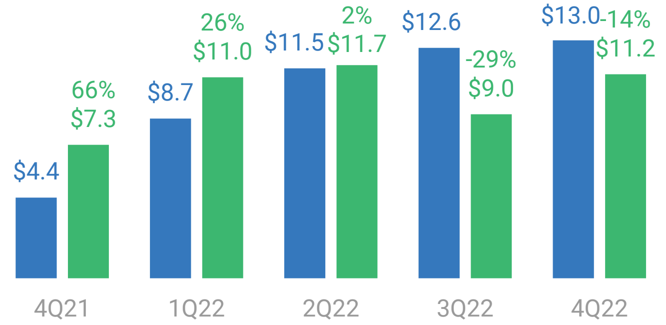
Adj. Gross Profit



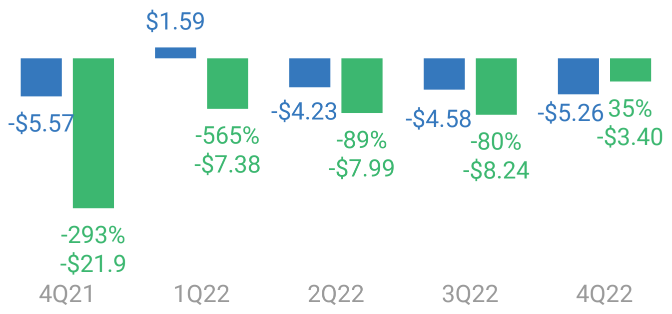
Adj. Gross Margin



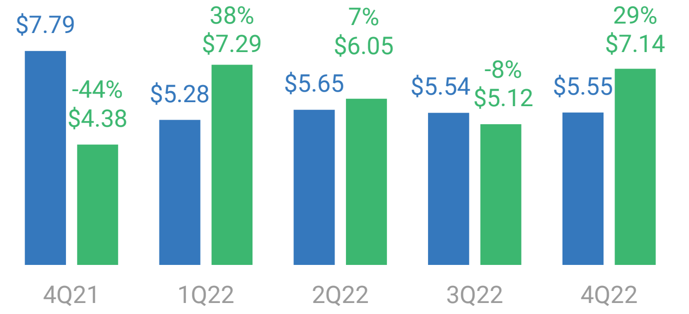
Total OpEx



Adj. EBITDA



GAAP Net Income

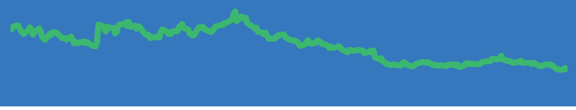


Adjusted Net Income

Source: Company filings; Visible Alpha

Expensify

EXFY TTM Price Performance



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($ in millions)

1Q23 EARNINGS OUTLOOK

Expensify is expected to report 1Q23 earnings on May 11th after the market close.

What's in Focus:

Focus going into 1Q23 is likely to be on the company's pay-per-use vs. subscription customer mix, and the impacts realized from seasonality in said cohorts. The company recently indicated that ~35% of its customer base is PPU, although management has outlined a target of ~20% over an unspecified timeframe. From a pricing perspective, these customers offer more-favorable unit economics (compared to subscription customers) however, replacing PPU customers with subscription customers will provide a stickier baseline and increase predictability in Expensify's top-line growth. During the 4Q22 call, management highlighted the typical 1Q22 seasonality surrounding PPU users, driving a decrease in the January user count. Current consensus for 1Q22 paid members is 776,000 implying 31,000 new adds from the January 745,000 number and a marginal decline from the 4Q 779,000 number.

Estimates:

- **KPI's:** Consensus for 1Q23 members has been revised down 2.7% to 776K since the 4Q22 call, implying 0.3% QoQ deceleration. Estimates for annualized ARPU in 1Q23 are $224. If estimates were to materialize, this would be the company's third consecutive quarter of YoY ARPU declines. 1Q23 interchange revenue estimates have been revised down to $2.3mm from $2.4mm. This would imply an increase of $0.3mm vs. the $0.1mm increase between 3Q22/4Q22.
- **Revenue:** 1Q23 subscription revenue consensus has decreased 3% from $44.9mm to $43.4mm (implying 7.5% growth YoY) since 4Q22 earnings. Consensus for total revenue has been revised down 3.9% to $45.8mm (vs. $47.6mm pre-4Q22 earnings).
- **Expenses:** Cost of revenue estimates for 1Q23 have decreased 0.7% to $15.3mm (+8% YoY). Consensus on research and development expenses has increased 13.6% to $3.7mm (now expected to be roughly flat YoY). Sales and marketing estimates have increased slightly to $12.7mm (a decrease from $13.4mm in 1Q22) , while general and administrative expense consensus decreased 10.4% to $12.9mm (-8% YoY). Consensus on total operating expenses has been revised down 3% to $29mm or 68% of total revenue.
- **Profitability:** Estimates for 1Q23 adjusted gross profit have decreased 4% to $32.4mm, implying an adjusted gross profit margin of 71% (+15bps vs. estimates prior to 4Q22 earnings). Adjusted operating income estimates have come down 4% to $9.8mm (vs. $10.2mm prior to 4Q22 earnings). Consensus for 1Q23 adjusted EBITDA has decreased 7.2% to $10.5mm which would represent a 4% decrease YoY.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

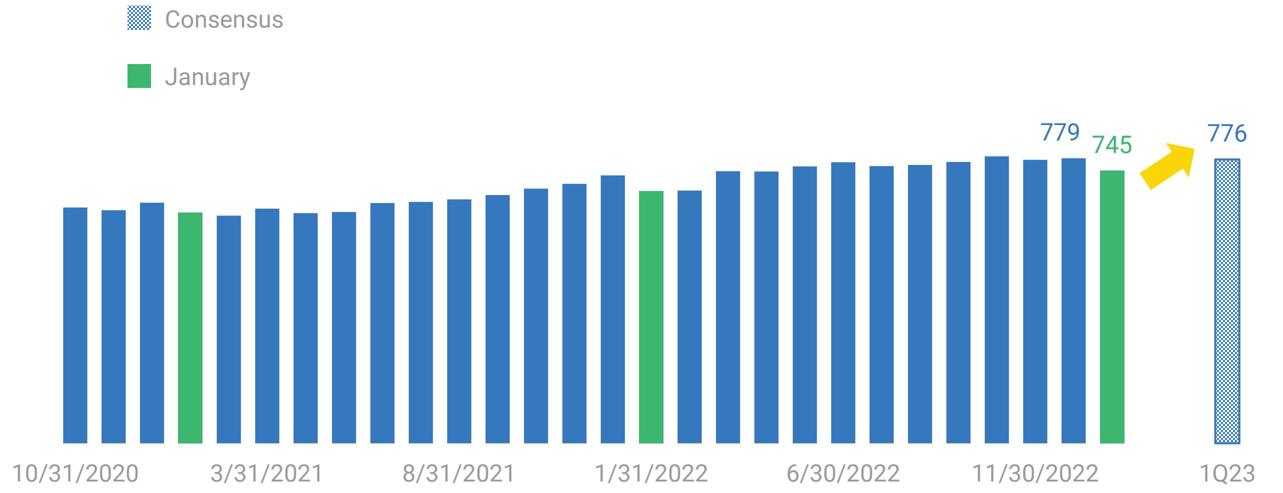
1Q22
- 2% beat on adjusted revenue
- Announced a $50mm share buyback program

2Q22
- Users in-line, 2% miss on adjusted revenue
- Reaffirmed long-term guidance of 25-35% revenue growth

3Q22
- 8%/29% miss on revenue/adj. EBITDA
- Reaffirmed long-term guidance of 25-35% revenue growth

4Q22
- 2%/18% miss on revenue/adjusted EBITDA
- Guidance for ~25% adj. EBITDA margin for FY23 (in-line with consensus)

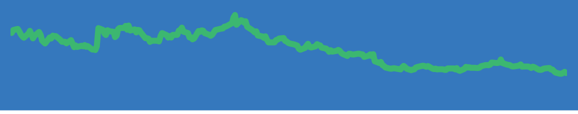
MONTHLY PAID MEMBERS/1Q23 CONSENSUS (000's)



Source: Company filings; FactSet

Expensify

EXFY TTM Price Performance



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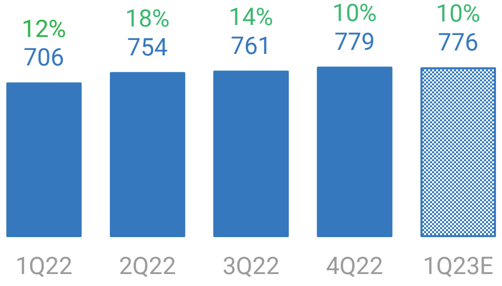
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

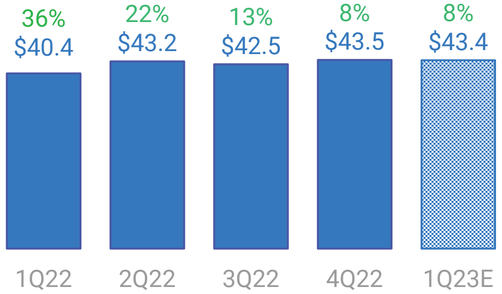
	Low	Average	High
Net New Adds (000's)	**-17**	**-3**	**18**
growth (%, qoq)	*-192%*	*-115%*	*0%*
Number of Users	**762**	**776**	**797**
growth (%, qoq)	*-2%*	*0%*	*2%*
Annual ARPU	**$213**	**$224**	**$231**
growth (%, yoy)	*-6%*	*0%*	*2%*
Subscription Revenue	**$43**	**$43**	**$44**
growth (%, yoy)	*6%*	*8%*	*9%*
Interchange Fees	**$2.1**	**$2.3**	**$2.6**
growth (%, yoy)	*72%*	*89%*	*114%*
Total Revenue	**$45.1**	**$45.8**	**$46.3**
growth (%, yoy)	*8%*	*10%*	*11%*
Cost of Revenue	**$14**	**$15**	**$16**
growth (%, yoy)	*-2%*	*8%*	*14%*
Gross Profit	**$27**	**$28**	**$29**
Gross Margin (%)	*61%*	*62%*	*64%*
Adjusted Operating Expenses	**$22**	**$23**	**$24**
growth (%, yoy)	*2%*	*6%*	*10%*
Adjusted EBITDA	**$9**	**$11**	**$12**
Adj. EBITDA Margin (%, yoy)	*21%*	*23%*	*25%*
Adjusted Net Income	**-$1.0**	**$5.8**	**$10.0**
Net Income Margin (% of Revenue)	*-2%*	*13%*	*21%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

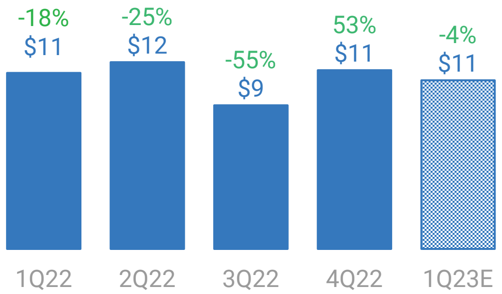
Users (000)/YoY Growth



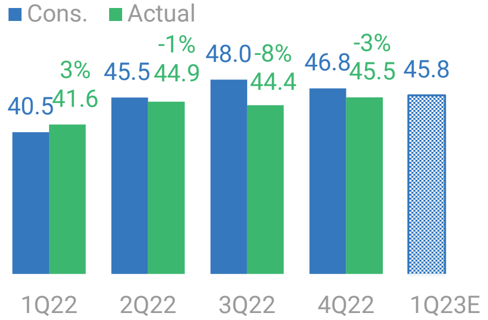
Subscription Revenue/YoY Growth



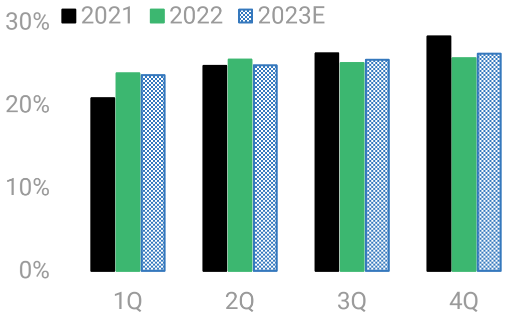
Adj. EBITDA/YoY Growth



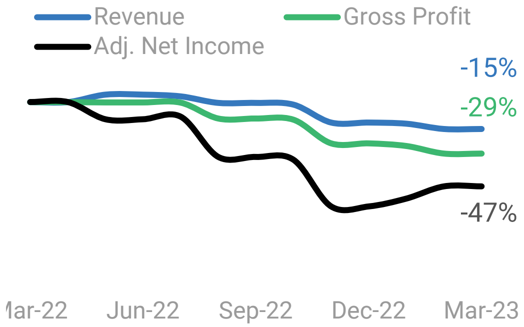
Adj. Revenue Estimates vs. Reported



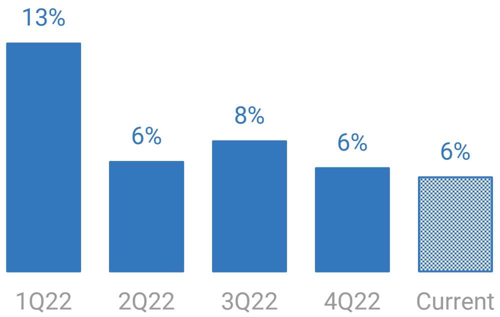
Revenue Seasonality



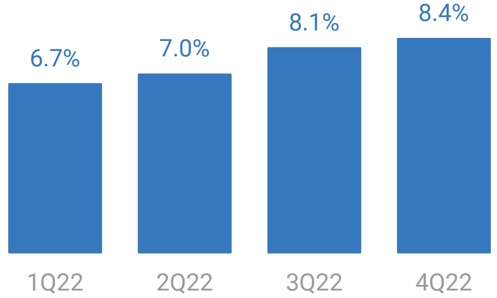
1Q23 Cons. Revisions



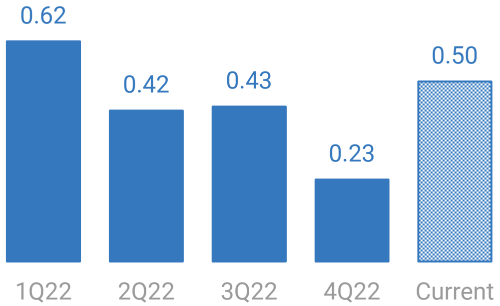
Short Interest (Pre-Print)



Hedge Fund Ownership as % of S/O



Pre-Earnings ADTV(1)

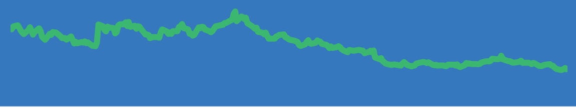


Source: Company filings; FactSet; Visible Alpha

1) Measured as ADTV over the prior 7-day period

Expensify

EXFY TTM Price Performance



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QUESTIONS FOR MANAGEMENT

General:

1) Given the macro environment, is management seeing any early indicators of reductions in T&E? Where does management expect the impact to be most pronounced either from a customer size or vertical perspective?
2) There are several competitors in the space who offer free expense management software with a free corporate card. How does Expensify's product offering differ from competitors and what is the incremental value-add?
3) Expensify's go-to-market has historically been based on a bottom-up acquisition strategy. However, Expensify now incorporates outbound inquiries. Is this a change in strategy and how have results been so far?
4) Stock-based compensation drives a meaningful portion of Expensify's non-GAAP adjustments. How does management think about the long-term balance of SBC?

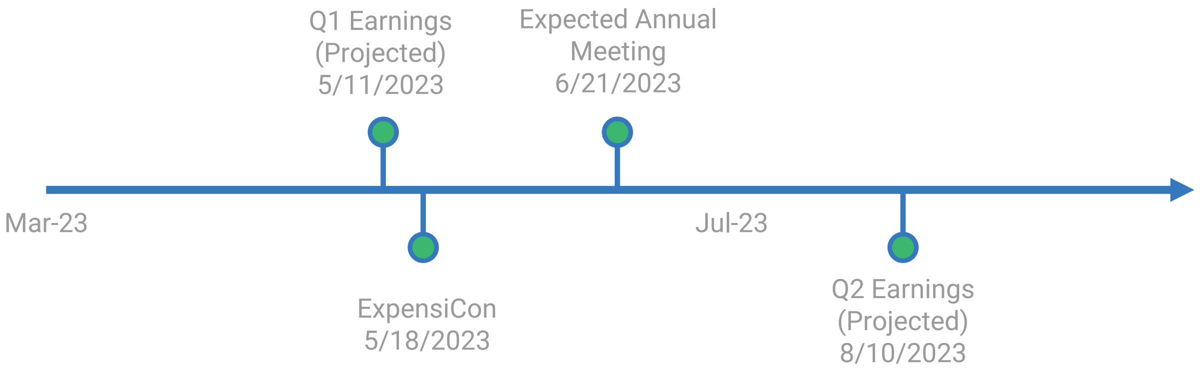
Expensify Card:

5) How is adoption of the Expensify Card trending? What is driving customers to adopt it vs. other SMB card spend products?
6) Are there any specific verticals that have seen higher levels of adoption with the Expensify card?
7) The default configuration on the Expensify Card is daily settlement, vs. the traditional monthly settlement. Can management discuss the benefits of daily settlement and the mix of Expensify users who prefer this option?

Growth Opportunities:

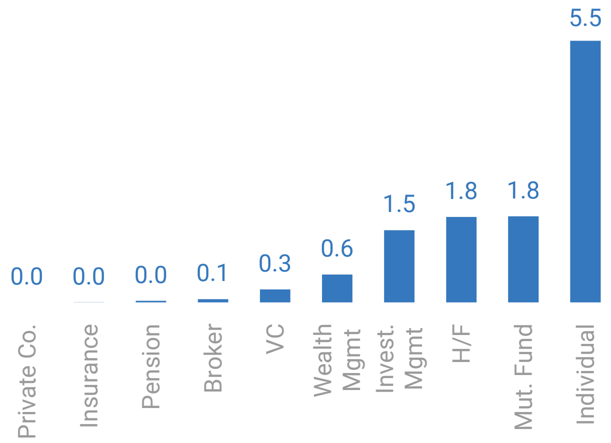
8) Management has communicated long-term revenue growth guidance of 25-35%. What are the key drivers of the growth, specifically as ARPU has stabilized in recent quarters?
9) Is there any update on the payroll product, what does the timeline for the product look like once Expensify has full regulatory approval?
9) What does the Expensify product roadmap look like?

POTENTIAL CATALYSTS

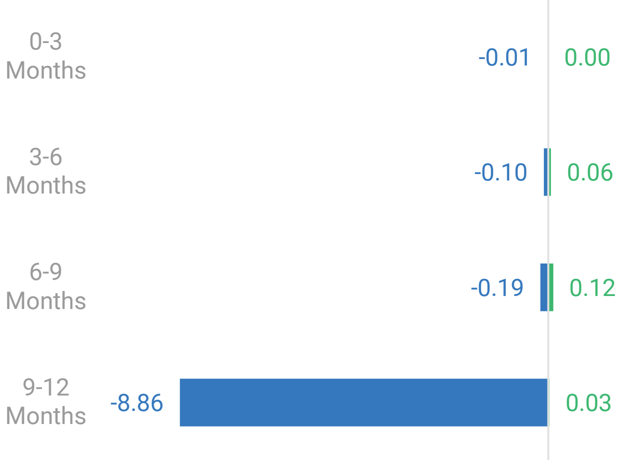


SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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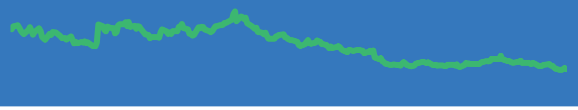

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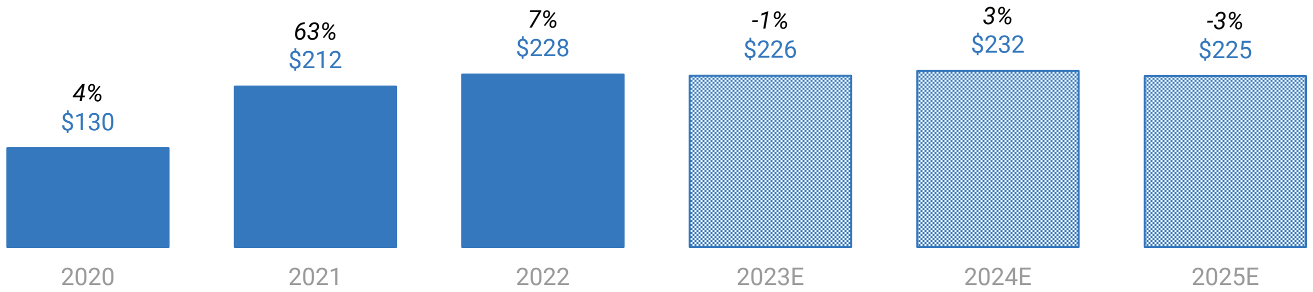
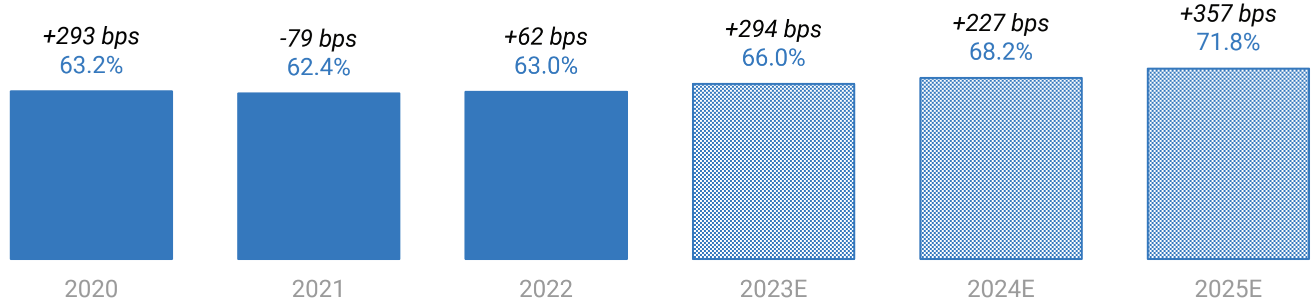
COMPANY RATIOS/MARGIN ANALYSIS

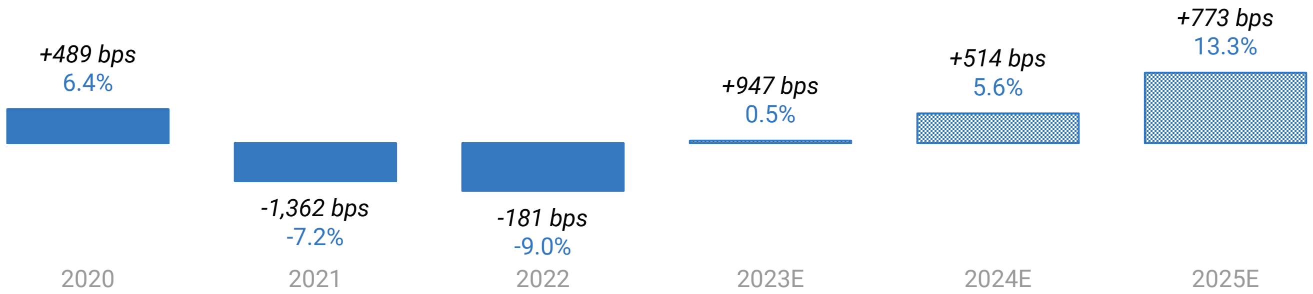
Average Revenue Per User



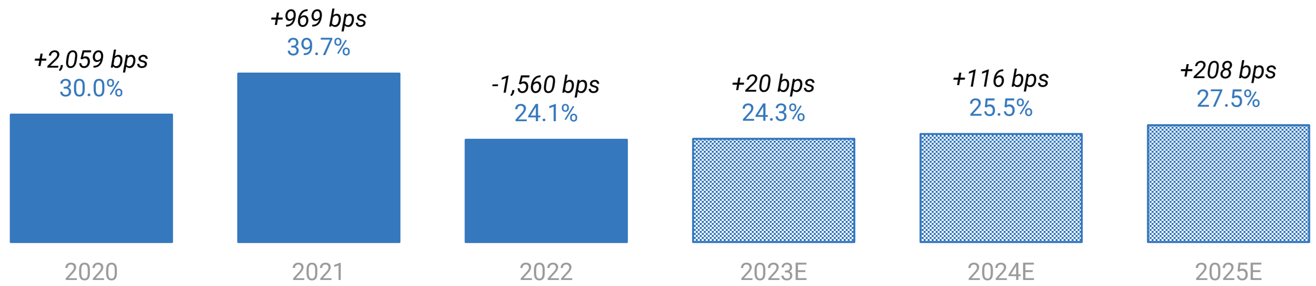
GAAP Gross Margin



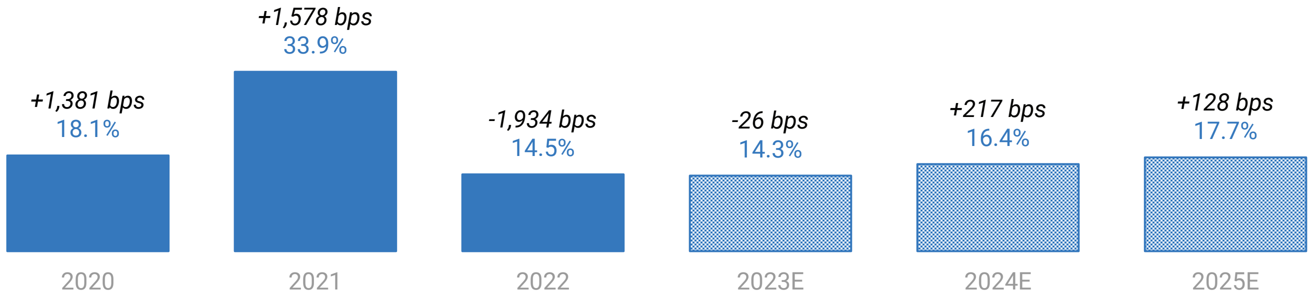
GAAP Operating Margin



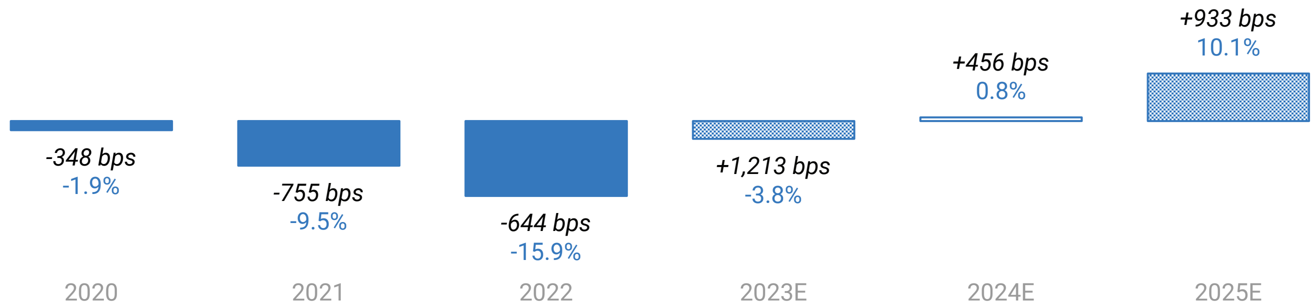
Adj. EBITDA Margin (% of Adjusted Revenue)



Adj. Net Income Margin (% of Adjusted Revenue)



GAAP Net Income Margin



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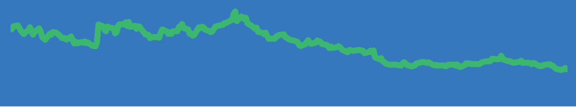

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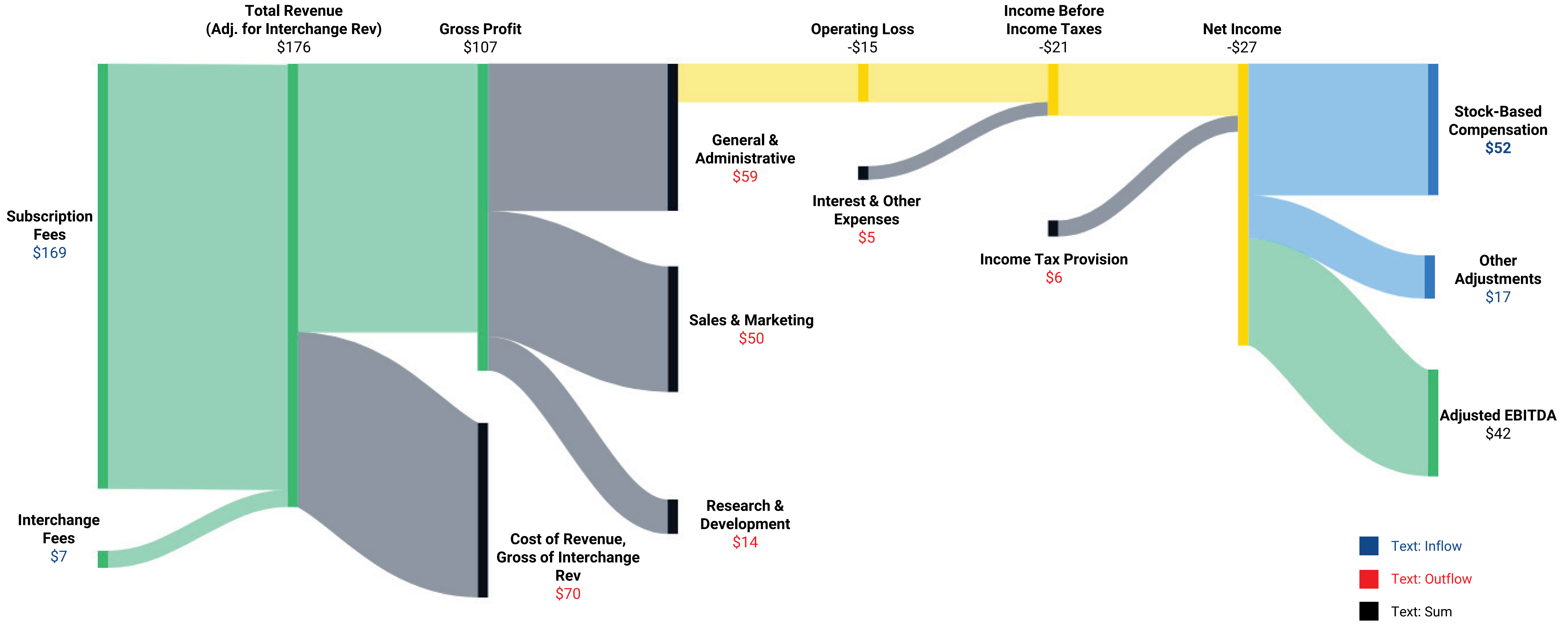
P&L VISUALIZATION – TTM



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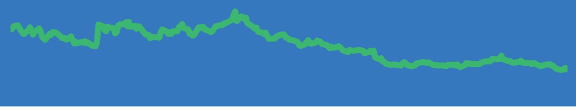

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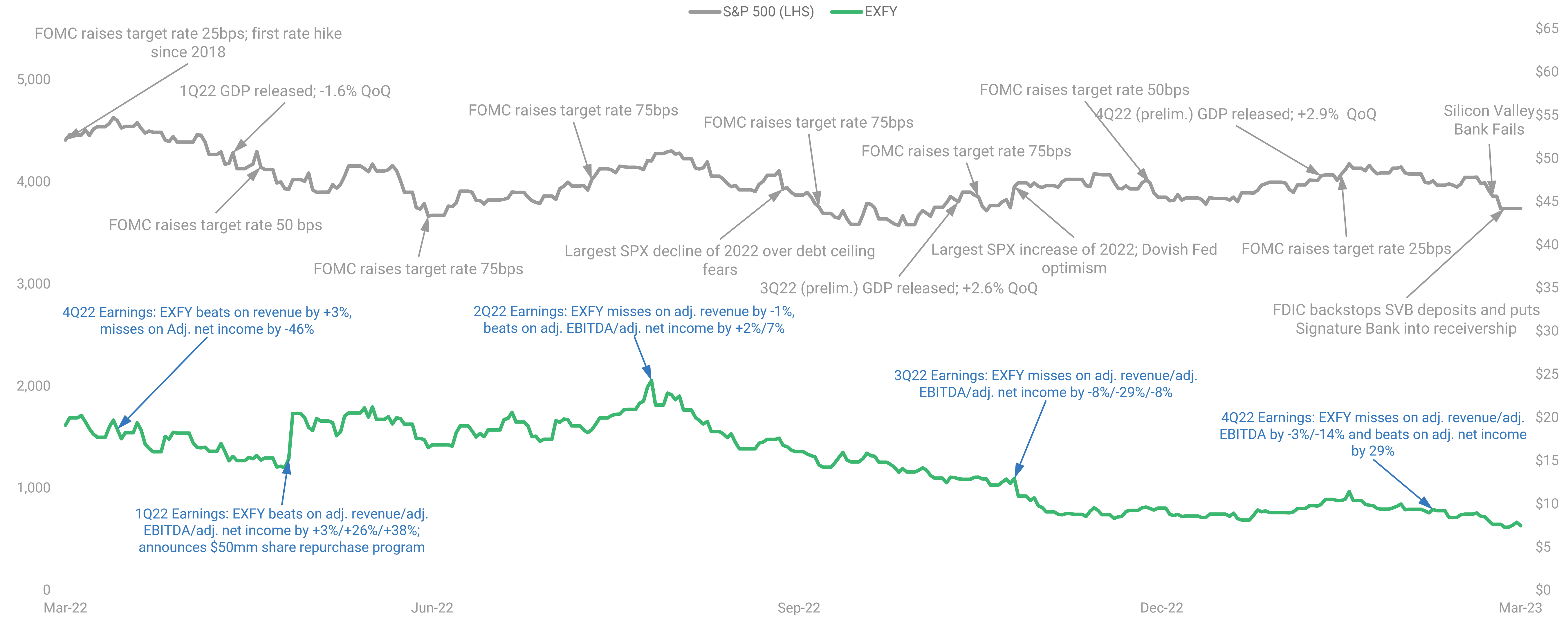
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

FOMC raises target rate 50bps

Largest SPX increase of 2022; Dovish Fed optimism

4Q22 (prelim.) GDP released; +2.9% QoQ

FOMC raises target rate 25bps

Silicon Valley Bank Fails

FDIC backstops SVB deposits and puts Signature Bank into receivership

4Q22 Earnings: EXFY beats on revenue by +3%, misses on Adj. net income by -46%

1Q22 Earnings: EXFY beats on adj. revenue/adj. EBITDA/adj. net income by +3%/+26%/+38%; announces $50mm share repurchase program

2Q22 Earnings: EXFY misses on adj. revenue by -1%, beats on adj. EBITDA/adj. net income by +2%/7%

3Q22 Earnings: EXFY misses on adj. revenue/adj. EBITDA/adj. net income by -8%/-29%/-8%

4Q22 Earnings: EXFY misses on adj. revenue/adj. EBITDA by -3%/-14% and beats on adj. net income by 29%

Source: FactSet

Financial Technology Partners LP & FTP Securities LLC

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FLYWIRE PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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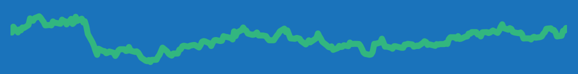
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

flywire

FLYW TTM Price Performance



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52-Wk Range:	$14.56 - $32.88	**Avg. Daily Vol (mm):**	0.8

FINANCIAL TECHNOLOGY PARTNERS

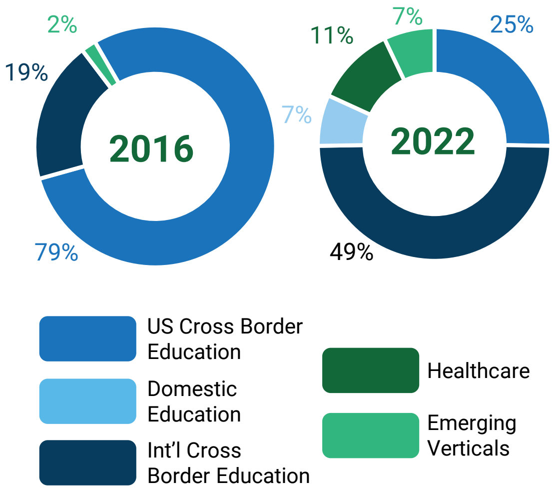
COMPANY OVERVIEW

Flywire is a global payments enablement and software company that serves the education, healthcare, travel, and B2B industries.

Flywire's core business provides invoicing, payment solutions, and payment reconciliation to universities, hospitals, etc. For example, through Flywire, a university can provide local payment methods (ex: AliPay in China) to international students. It can also facilitate domestic transactions allowing for universities' tuition payments to be centralized on one platform.

The company leverages its global payments network, platform, and software to help 3,100+ clients receive payments in more than 140 currencies across 240 countries. Flywire's business flows through three core elements: 1) payments platform; 2) global payment network; and 3) vertical-industry-specific software.

REVENUE SOURCES



KEY DEBATES

1. **Visas:** As of FY22 investor day, cross border education made up ~74% of Revenue Less Anc. Services (down from 98% in 2016). As a-result, **Flywire's growth prospects are directly a result of 1) a higher utilization rate by universities and 2) the number of students studying abroad**. In 3Q, FLYW experienced headwinds from declining U.S. educational Visas issued to Chinese students (partially offset by an increase in Indian Visas). As travel normalizes in Asia both Flywire's education and travel segment could see tailwinds. However, significant changes to Visa policy have an impact on results.

2. **Vertical Expansion:** Flywire has looked to expand its use cases and now attributes ~11% of its FY22 Revenue Less Ancillary Services to Healthcare and ~7% to Emerging Verticals. These represent significant greenfield opportunities and could be a significant driver of upside going forward. Additionally, **investors expect growth in Healthcare/Emerging Verticals to outpace the core business, driving further revenue diversification**.

3. **FX:** ~50% of Flywire's Revenue Less Ancillary Services is from non-U.S. clients and is likely not dollar-denominated. This, coupled with an expense base that is likely more dollar-denominated has led **to FX being a headwind on results (~8%+ YoY revenue less ancil. headwind in FY22). It is likely that a continued unfavorable FX environment could impact forward expectations.** However, as FX volatility has eased, prior year FX headwinds could drive easier YoY comps, particularly in 2Q/3Q.

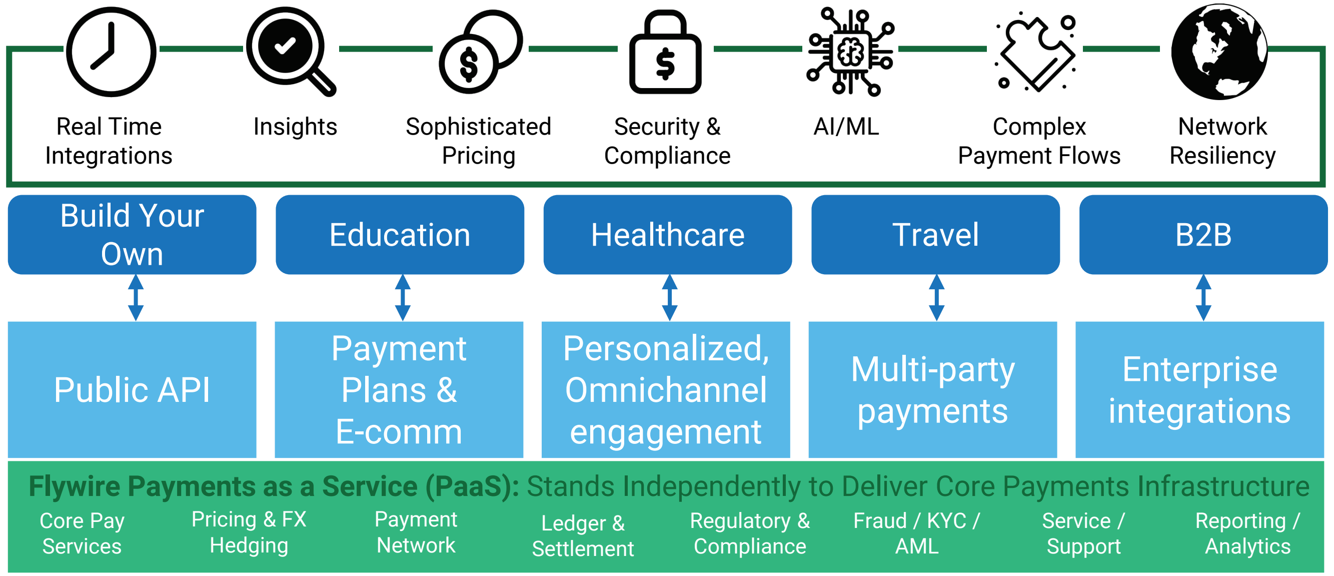
REVENUE MODEL

Flywire derives revenue through two business segments:

1) **Transactions (77% of TTM Gross Revenue):** Flywire generates revenue from payment processing services provided to clients. The fee earned on each transaction consists of a rate applied to the total payment value of the transaction, which can vary based on the payment method currency pair conversion and the geographic region in which the client and the client's customer resides. The company also earns revenue from marketing fees from credit card service providers for marketing arrangements in which Flywire considers itself to be ancillary to the solutions provided to clients.

2) **Platform and usage-based (23%):** Fee revenue from this segment includes:
    - Fees earned for the utilization of Flywire's payment platform to optimize cash collections
    - Fees collected on payment plans established by clients on the payment platform
    - Subscription fees
    - Fees related to printing and mailing services in which Flywire considers itself to be ancillary to the solutions provided to clients

PAYMENT FLOWS



Real Time Integrations | Insights | Sophisticated Pricing | Security & Compliance | AI/ML | Complex Payment Flows | Network Resiliency

Build Your Own	Education	Healthcare	Travel	B2B
Public API	Payment Plans & E-comm	Personalized, Omnichannel engagement	Multi-party payments	Enterprise integrations

Flywire Payments as a Service (PaaS): Stands Independently to Deliver Core Payments Infrastructure

Core Pay Services | Pricing & FX Hedging | Payment Network | Ledger & Settlement | Regulatory & Compliance | Fraud / KYC / AML | Service / Support | Reporting / Analytics

Source: Company filings

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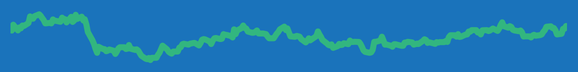
flywire

FLYW TTM Price Performance



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52-Wk Range:	$14.56 - $32.88	**Avg. Daily Vol (mm):**	0.8

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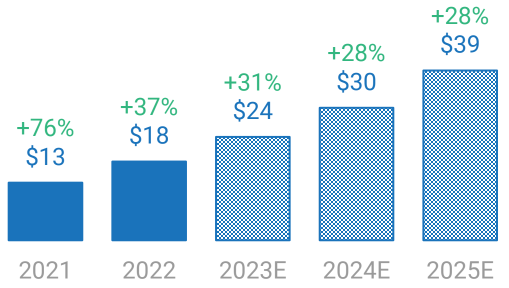
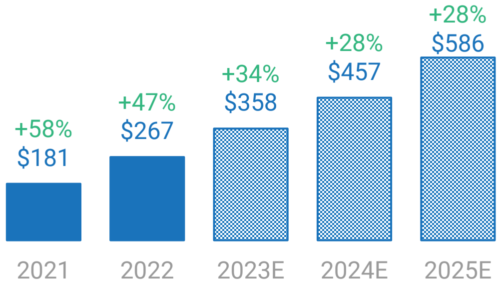
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

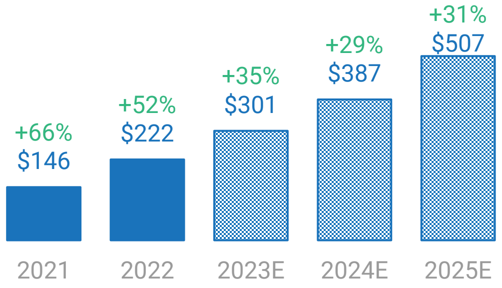
Total Payment Volume (bn)



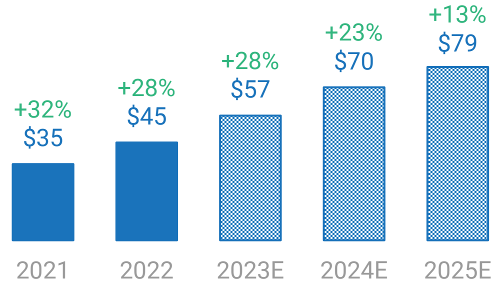
Revenue less Ancillary Services



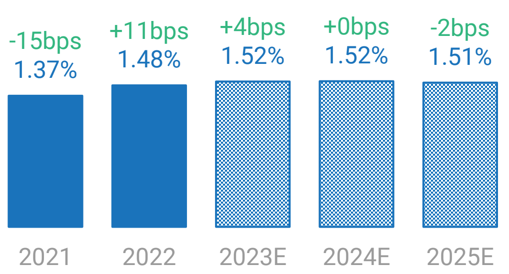
Net Transaction Revenue



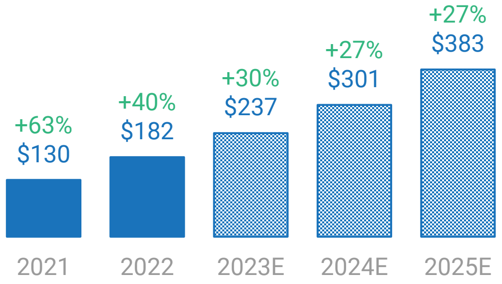
Net Platform Revenue



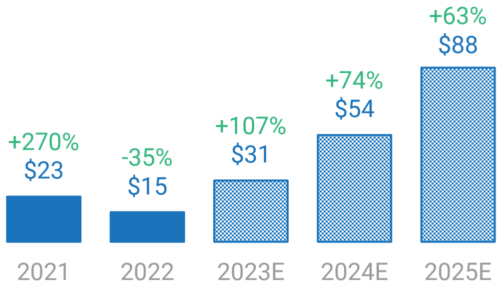
Monetization Rate[5]



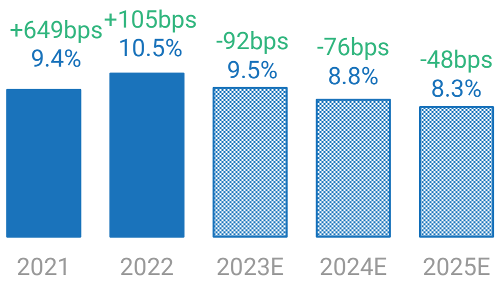
Adjusted Gross Profit



Adjusted EBITDA



SBC as % of Revenue



INDUSTRY KPIs

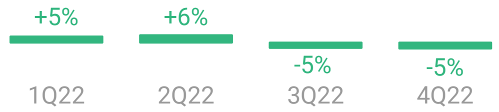
Cross Border Spend Growth[1] *(4Q20-4Q22)*

Domestic Revenue Growth for Education Services[2] *(1Q20-4Q22)*

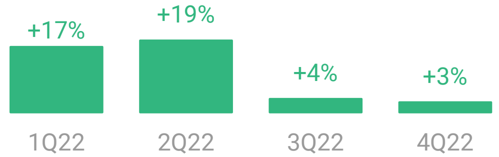
Domestic Revenue for Hospitals[2] *(1Q20-4Q22)*

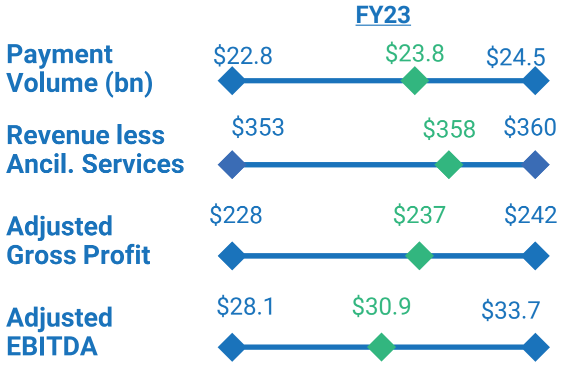
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[3]

Total Payment Volume



Revenue less Ancillary Services





TOTAL ADDRESSABLE MARKET

$11.7tn Total TAM[4]

Education	Healthcare	Travel	B2B
18k+ colleges & universities	7k+ US hospitals	2.5m global travel operators	15k+ tech companies
~7% FLYW coverage	<10% FLYW coverage	<1% FLYW coverage	<1% FLYW coverage
$660bn TAM	**$500bn TAM**	**$530bn TAM**	**$10tn TAM**

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Source: Company filings

1) Aggregate MA/V Cross-Border Volume
2) FRED Total Revenue for Educational Services, FRED Total Revenue for Hospitals
3) Visible Alpha Consensus Low/Average/High Range
4) Company filings
5) Rev. Less Ancil. Expenses/Total Volume

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FLYW TTM Price Performance

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FINANCIAL TECHNOLOGY PARTNERS

VALUATION CONSIDERATIONS

Relative Valuation:

For less mature FinTech companies that have yet to turn profitable, EV/GP is used for relative valuation to account for costs associated with the core operations of the business (such as pass-through printing and mailing costs for Flywire) while also providing a relatively standardized valuation approach across peers. As of March 20th, Flywire trades at a 11.3x NTM EV/GP multiple, 6.6x below its average multiple of 17.9x since its IPO. It trades at an 8.1x premium to the NASDAQ (measured on an EV/Sales basis). **If FLYW were to trade in-line with peers on a NTM EV/GP basis when adjusted for growth it would imply a 12-month price of $23.94 (15% downside).** FLYW remains a compelling story operating in relatively defensive verticals (education, healthcare), while only occupying a small portion of the market, leaving ample room for execution against the outlined TAM's. However, Flywire will comp over significant headwinds from 2022 (China/Visa restrictions, FX volatility), which could drive buy-side expectations higher, adding to execution risk when coupled with its premium valuation relative to the broader FinTech space.

DCF Valuation:

Scenario 1 – Current Price ($28.02, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires sustained 25%+ revenue growth through 2026 and 20%+ revenue growth through 2030. This compares to management guidance at its most recent investor day for 30% revenue less ancillary services growth over the medium to long-term. EBITDA margins in this scenario gradually expand, reaching managements long-term EBITDA margin in 2028 and eventually reaching a terminal rate of 55%. Were shares of Flywire to remain at the current price in 12-months, it would imply a 9x NTM EV/GP multiple (based on current STM consensus gross profit of $306mm).

Scenario 2 – TAM Capture ($35.78, 28% Upside): This DCF outlines a scenario where Flywire gains greater share across its more nascent verticals (B2B, travel, healthcare) while the core education business's growth continues. This scenario points to sustained 25% revenue growth through 2027 and remains at 20%+ through 2033 before gradually decelerating to the terminal growth rate of 3%. This scenario assumes that the mix shift has no significant impact on margins and as a result margin assumptions remain unchanged. This scenario points to a 12-month price of $35.78 (28% upside) which based on current STM consensus gross profit implies a 11x NTM EV/GP.

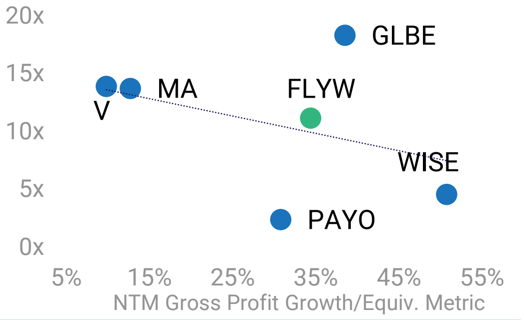
Scenario 3 – Low-end LT Guidance ($23.32, 17% Downside): The third DCF assumes Flywire achieves the low-end of its long-term guidance for 10% -20% adjusted EBITDA margin 2 – 4 years from its 2022 investor day and a 25%+ adjusted EBITDA margin 4 – 5 years from its 2022 investor day, which then expands to a 45% terminal margin (vs. 55% in scenario 1). This set of assumptions points towards a 12-month forward share price of $23 (18% downside) implying investors have already priced in the low-end of managements longer-term targets.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM EV/GP & Avg. Since IPO(1)

NTM EV/GP Premium vs. NASDAQ

Peer Avg. NTM EV/GP vs. GP Growth

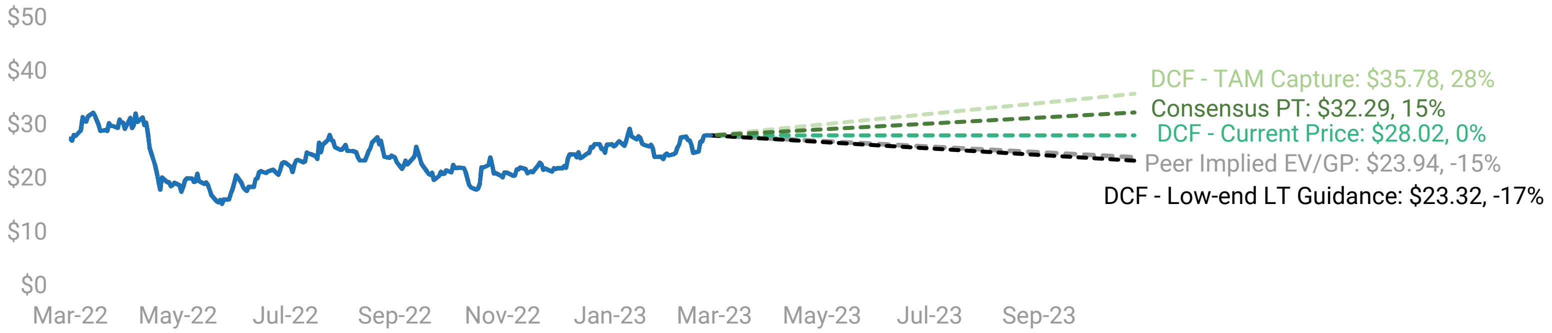


Key DCF Assumptions(2)

10-Yr RFR	**4.0%**
Cost of Equity	**17.2%**
Cost of Debt	**4.5%**
WACC	**17.2%**
Beta	**2.0**
FCF Terminal Growth Rates	**3.0%**
SBC Terminal Growth Rates	**1.0%**
Equity Value Reduction From Present + Future SBC	**$435**

Select Peer TTM Price Performance

Price Chart & 12M Forward Scenario Based Ranges



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Source: Company filings; FactSet
1) FLYW EV/NTM GP Less NASDAQ EV/NTM Sales
2) SBC in millions

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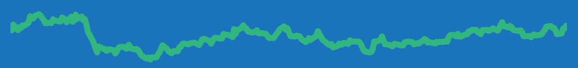

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FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) overall health of the macro environment and 2) headwind/tailwinds associated with FX rates. While there are other drivers of Flywire's valuation (vertical penetration, margin expansion, etc.) these represent the most likely area(s) of upside/downside relative to consensus.

Consensus Case:

The average consensus price target for Flywire is $32 with STM gross profit estimates of $306mm implying a 10x NTM EV/GP multiple in 12-months, a ~1x contraction relative to the current 11x multiple. The consensus price target implies 15% upside to the current share price.

Upside Case(s):

(+) $38, 34% Upside: This scenario assumes the macro backdrop remains strong. The scenario model reflects this by 1) increasing overall volume growth and 2) customer growth. While specific portions of Flywire are impacted by macro (particularly travel) the core portion is relatively defensive given the skew towards education. This implies 37% gross profit growth and 34% upside to the current share price with a 12x EV/GP multiple.

(+-) $35, 24% Upside: This scenario assumes a strong macro backdrop but forecasts further U.S. dollar strength relative to the elevated dollar in 2022. In 3Q22, FLYW announced it experienced a ~7% headwind to top-line revenue in a period where the U.S. dollar index gained ~9% YoY. As such, we estimate that a 5% move in FX rates would likely impact revenue (and flow through to gross profit) by 4%. This implies 33% gross profit growth and 24% upside to the current share price with a 10x EV/GP multiple.

(-+) $26, 1% Upside: This scenario assumes a weaker macro, but that Flywire experiences a 4% revenue tailwind from FX rates. This implies 32% gross profit growth and 1% upside to the current share price with a 9x EV/GP multiple.

(++) $41, 45% Upside: The best-case scenario assumes a strong macro backdrop and tailwinds from a weaker USD, particularly in 2Q/3Q. This implies 41% gross profit growth and 45% upside to the current share price with a 13x EV/GP multiple.

Downside Case(s):

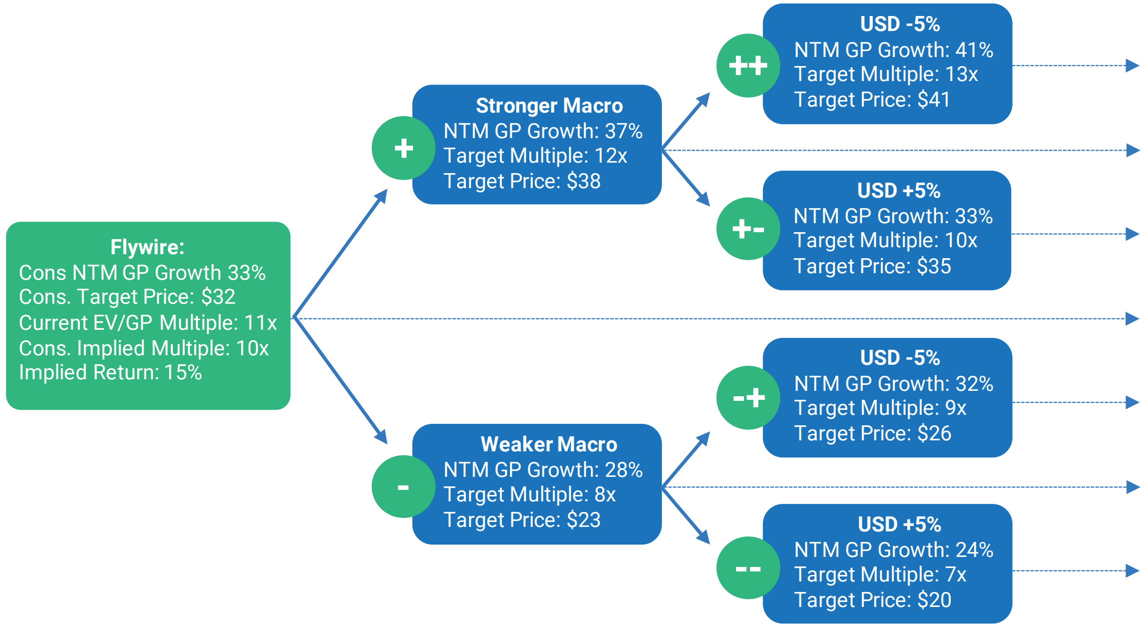
(-) $23, 12% Downside: This scenario assumes a weaker macro-backdrop which weighs on overall volume and customer growth. This would likely weigh more heavily on the multiple, as investors would be less likely to expect significant downside deviation in results due to the defensive nature of Flywire's business. This scenario points to 28% gross profit growth and 12% downside to the current share price with an 8x EV/GP multiple.

(--) $20, 24% Downside: The worst-case scenario assumes a weaker macro and a 4% revenue headwind from FX rates. This implies 24% gross profit growth and 24% downside to the current share price with a 7x EV/GP multiple.

Source: Company filings; FactSet

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Flywire:
Cons NTM GP Growth 33%
Cons. Target Price: $32
Current EV/GP Multiple: 11x
Cons. Implied Multiple: 10x
Implied Return: 15%

\+ **Stronger Macro**
NTM GP Growth: 37%
Target Multiple: 12x
Target Price: $38

++ **USD -5%**
NTM GP Growth: 41%
Target Multiple: 13x
Target Price: $41

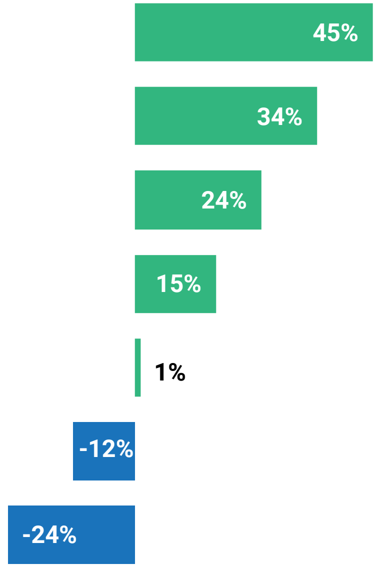
+- **USD +5%**
NTM GP Growth: 33%
Target Multiple: 10x
Target Price: $35

\- **Weaker Macro**
NTM GP Growth: 28%
Target Multiple: 8x
Target Price: $23

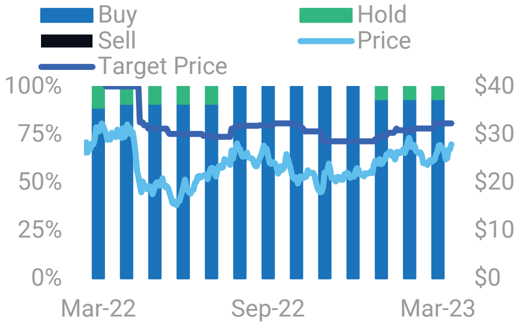
-+ **USD -5%**
NTM GP Growth: 32%
Target Multiple: 9x
Target Price: $26

-- **USD +5%**
NTM GP Growth: 24%
Target Multiple: 7x
Target Price: $20

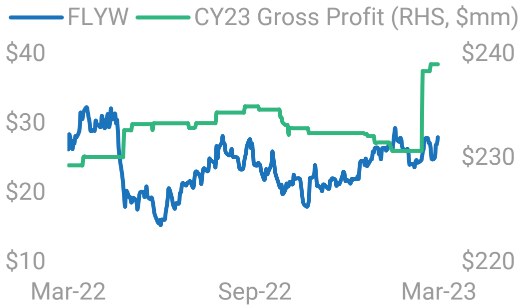
12-Month Price Return



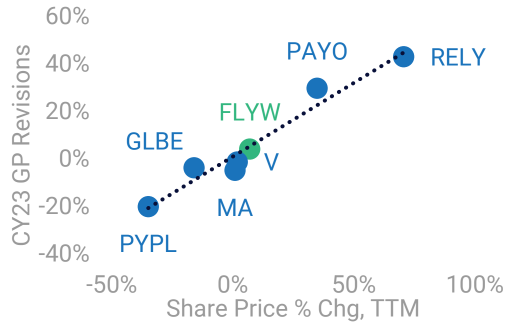
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



FLYW TTM Price Performance

Price as of 3/17/2023:	$28.02	**Shares Out (mm):**	104
Market Cap (mm):	$2,978	**Beta (Since IPO):**	2.0
52-Wk Range:	$14.56 - $32.88	**Avg. Daily Vol (mm):**	0.8

($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: Flywire hosted its 4Q22 earnings call, discussing management's optimism regarding recovery trends in the international higher-education channel, partnership and acquisition progress, and nascent channel development. Combined with top-line reported financials and guidance beats, investor optimism drove FLYW +6% post-market.

Results Recap: Total volume grew 29% YoY to $4.1bn, 5% below consensus. Lower than expected volumes were offset by a 16bps monetization rate increase to 1.64% compared to 1.48% in 4Q21 and 1.64% in 4Q20. Total revenue beat consensus by 2% coming in at $73.1mm vs. consensus of $71.5mm. Revenue less ancillary expenses was totaled $67.4mm, 3% above consensus of $65.6mm. Adjusted gross profit methodology has been revised beginning this quarter to exclude deprecation and amortization. With the change, adjusted gross margin for the quarter came in at 66%, ~25bps above consensus. GAAP net income was -$1.1mm, beating consensus of -$11.4mm.

Guidance Recap: 1Q23 guidance calls for revenue of $85mm to $91mm, 3% above consensus of $85.6mm at the midpoint. Additionally, 1Q23 revenue less ancillary services is guided to be between $81mm to $85mm, 5% above consensus of $79.3mm at the midpoint. Adjusted EBITDA is guided to $3mm to $5mm, in line with consensus. **FY23** guidance calls for revenue of between $373mm to $392mm, 3% above consensus of $372mm at the midpoint. FY23 revenue less ancillary services is expected to be between $353mm to $364mm, 4% above consensus of $346mm at the midpoint. Adjusted EBITDA is guided to $28mm-$34mm, 5% above consensus of $29.50 at the midpoint.

Incremental From The Call:

- **Reopening Tailwinds:** The tail-end of the COVID-19 re-opening has continued to benefit Flywire's core higher-ed and smaller travel channels, with management specifically identifying Australia, China, Japan, and the broader southeast Asian region as drivers during the quarter. According to management, student mobility is continuing to see positive trends, with Australia having issued more than 120k student visas to int'l students and student visa issuance from Jan. 2022 – Sept. 2022 coming in higher than 2019 levels. Trends in the United States are improving also, with international student enrollment for the 2021-2022 academic year increasing 80% YoY, now back at pre-pandemic levels.
- **Acquisitions & Partnerships:** Management also noted on the call progression across a series of acquisitions and partnerships. The WPM/Flywire combined solution added eight schools during 4Q22 to reach 41 cumulatively. The Cohort Go acquisition has enabled Flywire to reach an incremental 2,400 schools globally, with educations agents to Flywire's existing network having paid over 450 non-Flywire schools since the acquisition. Additionally, Flywire is on track with integration Cohort Go's insurance cross-sell platform for the beginning of 2023.
- **Guidance/Outlook:** FY23 expectations reflect an organic revenue growth rate of 31% and the annualization of Cohort Go representing the remainder. Foreign exchange rate assumptions are based on rates as of 12/31/2022. Management highlighted guidance assuming a rolling recovery for travel to destinations like Asia-Pacific is assumed, a potential area for revenue in excess of guidance as they have seen rapid growth in the region that has had a slow recovery. Adjusted EBITDA expansion is expected each quarter in 2023, with variance due to seasonality. A 300bps increase is forecasted for the full year of 2023. Run rate spend added is expected to be at least 60% less than FY22.
- **Revenue Diversification:** 65% increase in travel vertical with marketing sourced deals, further contributing to revenue diversification and increasing the growth rate of transaction revenues and the respective higher take rate. Q4 travel revenue in the Asia-Pacific region also exceeded 80% of 4Q21 travel revenue across all regions, reflecting the growth of emerging verticals that now represent 7% of revenues in FY22. Due to these trends, gross margins are expected to decline approximately 1% to 1.5% in 2023 due transaction revenue's outpacing platform and usage-based revenue growth. Current consensus for FY23 gross margin is 64%.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Cons.	Abs.▲	%▲
Total Payment Volume ($ in bns)	**$4.1**	**$4.3**	**-$0.22**	**-5%**
growth (%, yoy)	*29%*	*39%*		
Monetization Rate	**1.64%**	**1.53%**	11bps	
▲ in % (bps, yoy)	*16bps*	*5bps*		
Transaction Revenue	**$56.7**	**$54.2**	**$2.45**	**5%**
growth (%, yoy)	*50%*	*44%*		
Platform Revenue	**$16.4**	**$11.3**	**$5.05**	**45%**
growth (%, yoy)	*100%*	*38%*		
Revenue Less Ancillary Expenses	**$67.4**	**$65.6**	**$1.80**	**3%**
growth (%, yoy)	*47%*	*43%*		
Adjusted Gross Profit	**$44.5**	**$43.1**	**$1.36**	**3%**
Adjusted Gross Margin (%)	*66%*	*66%*	*25bps*	
Operating Income	**-$9.37**	**-$9.82**	**$0.45**	**5%**
Operating Margin (%)	*-14%*	*-15%*	*107bps*	
Adj. EBITDA	**$1.00**	**$1.44**	**-$0.44**	**-31%**
Adj. EBITDA Margin (%)	*1%*	*2%*	*-72bps*	
Net Income	**-$1.11**	**-$11.4**	**$10.3**	**90%**
Net Profit Margin (%)	*-2%*	*-16%*	*1,440bps*	

FY23 Guidance	Guide	Cons.	+/-
Revenue	**$373 - $392**	**$372**	**3%**
growth (%, yoy)	*~53%*	*49%*	*430bps*
Revenue Less Ancillary Expenses	**$353 - $364**	**$346**	**4%**
growth (%, yoy)	*~43%*	*38%*	*497bps*

1Q23 Guidance	Guide	Cons.	+/-
Revenue	**$85 - $91**	**$85.6**	**3%**
growth (%, yoy)	*~96%*	*90%*	*525bps*
Revenue Less Ancillary Expenses	**$81 - $85**	**$79.3**	**5%**
growth (%, yoy)	*~106%*	*97%*	*919bps*

Source: Company filings; FactSet; Visible Alpha

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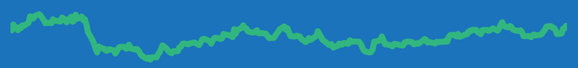
flywire

FLYW TTM Price Performance



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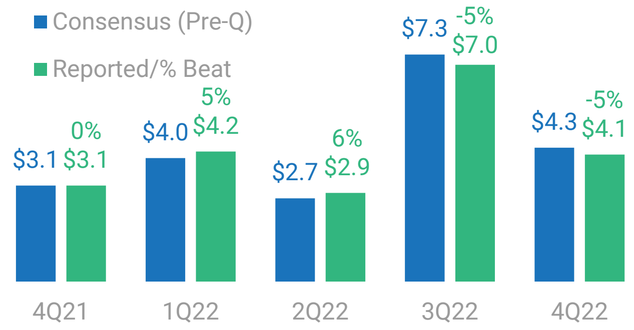
FINANCIAL TECHNOLOGY PARTNERS

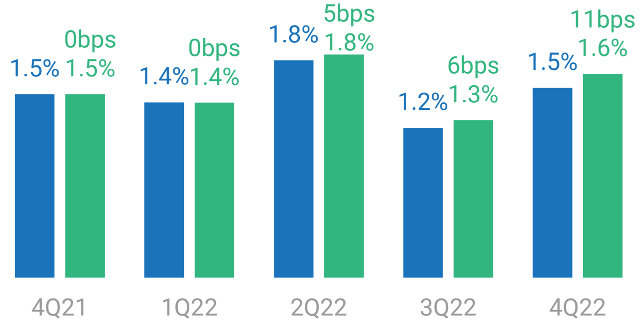
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

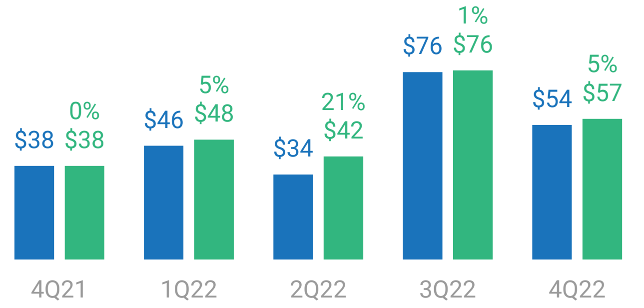
Total Payment Volume (bn)



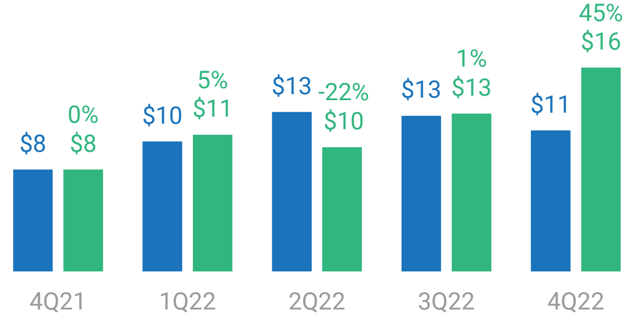
Monetization Rate



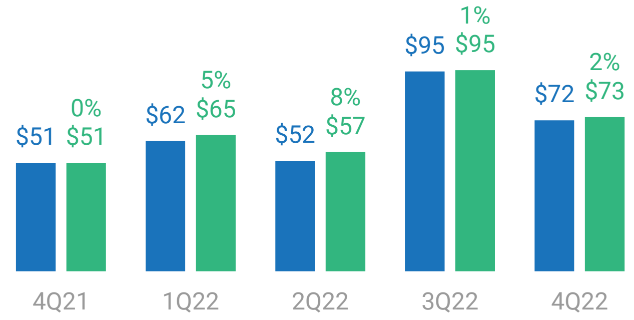
Transaction Revenue



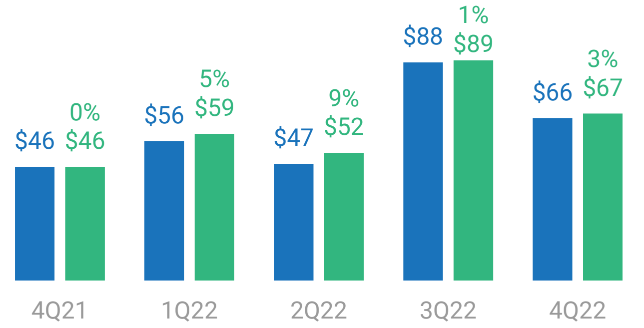
Platform Revenue



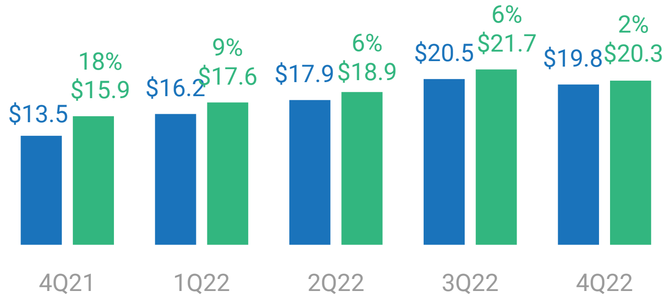
GAAP Revenue



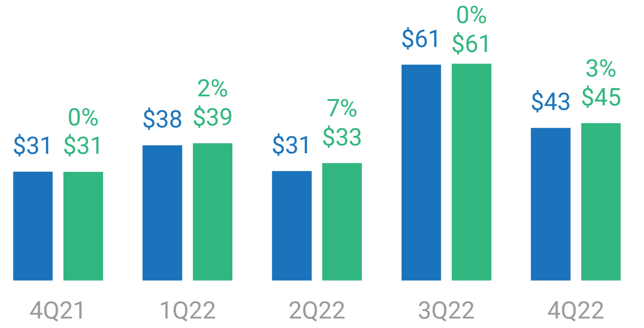
Revenue Less Ancillary Services



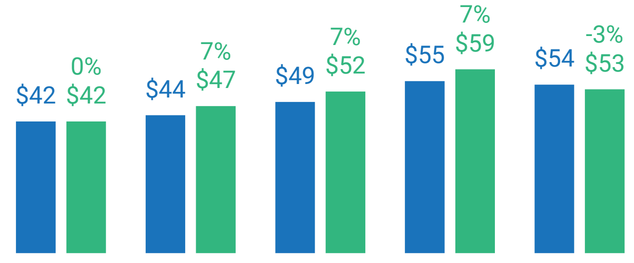
Selling and Marketing



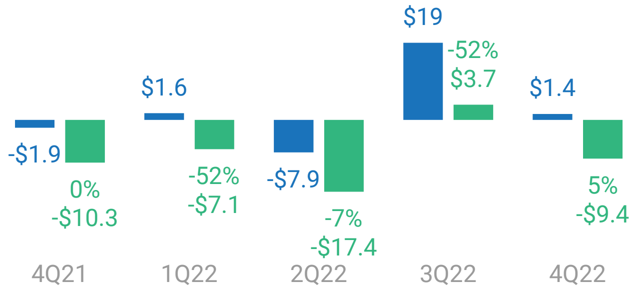
Adjusted Gross Profit(1)



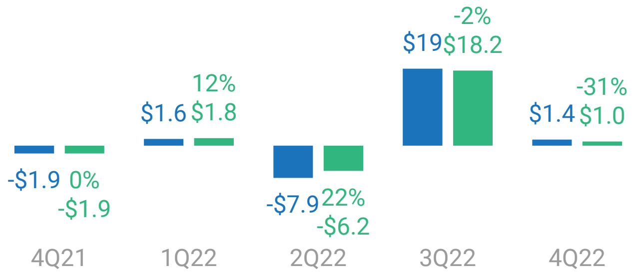
Operating Expenses



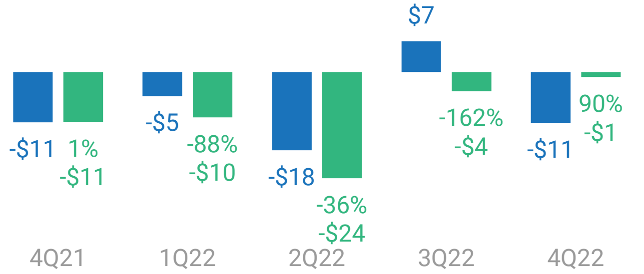
Operating Income



Adjusted EBITDA



Net Income



Source: Company filings; FactSet; Visible Alpha

1) In 4Q22, management adjusted its adjusted gross profit methodology, which may lead to variance in historic results

FLYW TTM Price Performance

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($ in millions, except where otherwise noted)

1Q23 EARNINGS OUTLOOK

Flywire is projected to report 1Q23 earnings on May 9th after market close.

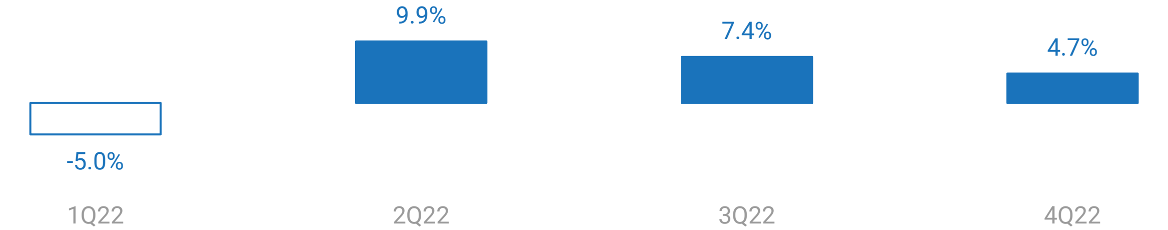
What's In Focus:

Following strong 4Q22 results, management has looked to refocus investors, stating on the latest earnings call Flywire is looking to drive adjusted gross profit dollars rather than adjusted gross profit margins. This represents an important distinction as some investors have looked at Flywire's gross margin as an indication of pricing dynamics/increasing competition. While cognizant of competitive concerns, changes in gross margin are more likely to be driven by mix shifts (with domestic, international, travel, etc. each having distinct unit economics) more so than price concessions. While estimates have shifted since 4Q, there is likely room for further revisions, as consensus is not yet accounting for the typical spread where the monetized rate (rev less acil. services/TPV) compresses more in the educational peak periods than the cost of sales as a percent of TPV. **While the spread on transaction volume has remained stable, this does represent an area where consensus appears to have yet to accounted for typical seasonal trends.**

Estimates:

- **KPIs:** Since 4Q22, estimates for total volume has been revised down 1% from $5.6bn to $5.5bn for 1Q23. This was primarily driven by a ~3% downward revision in platform volume from $2.2bn to $2.1bn (now implying ~24% YoY). Meanwhile expectations for transaction volume have remained largely unchanged at ~$3.4bn (~37% growth YoY). The lower TPV forecasts for 1Q22 have mostly offset by a higher expected take rate with consensus revising its estimate to 1.50% vs. 1.42% prior.
- **Fundamentals:** Since 4Q22, total revenue for 1Q22 has been revised upward by ~4% while revenue less ancil. expenses has been revised up ~5%. Additionally, consensus has revised its estimates for adjusted gross profit up ~3%, slightly below the magnitude of the revenue revision, implying a slight decrease in the expected gross profit margin from 66% to 65%. Expectations for GAAP operating income have modestly decreased from -$6.1mm to -$7.1mm while consensus for adjusted operating income have been revised down by ~0.5mm to $1.1mm from $1.6mm. Expectations around total share count are now slightly lower (108.8mm vs. 109.4mm prior).

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ



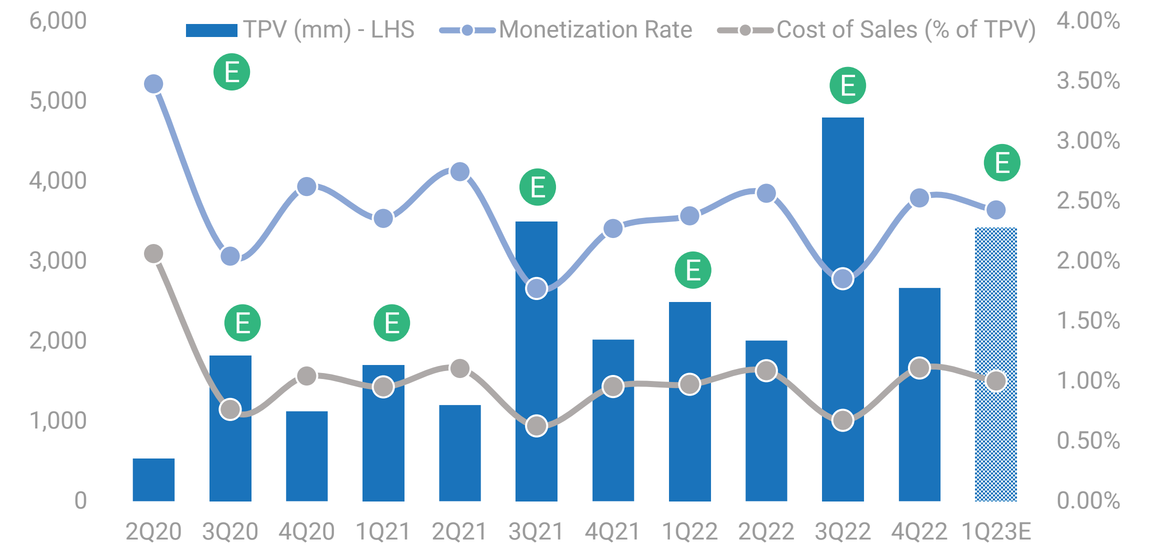
1Q22:
- 5% beat on TPV and revenue less ancillary services.
- FY22 guidance slightly increased with 2Q22 guidance in-line with consensus

2Q22:
- Revenue less ancillary expenses grew 53% YoY beating consensus estimates by 9%.
- FY22 revenue guidance raised by 5%

3Q22:
- 6% TPV beat/1% revenue less ancillary expenses beat
- FX served as $2m incremental headwinds to 3Q22 revenue

4Q22:
- Total volume grew 29% YoY to $4.1bn, 5% below consensus
- Revenue less ancillary expenses was totaled $67.4mm, 3% above consensus of $65.6mm.

MONETIZATION SPREAD ON TRANSACTION VOLUME



Source: Company filings
1) FactSet

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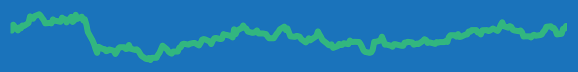
flywire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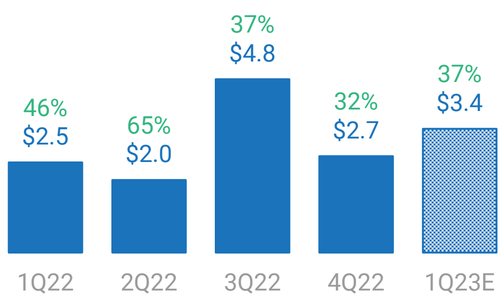
FINANCIAL TECHNOLOGY PARTNERS

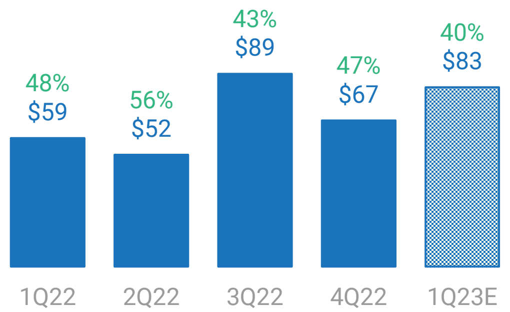
($ in millions)

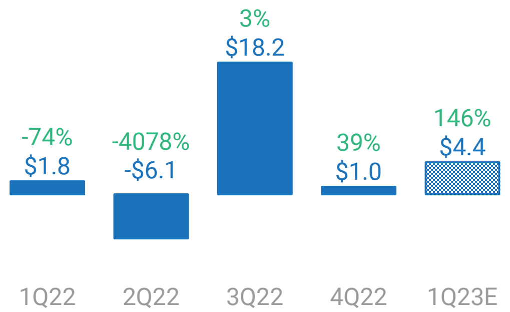
1Q23 CONSENSUS ESTIMATE RANGES

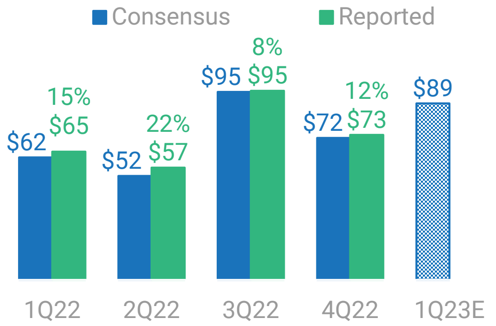
	Low	Average	High
Transaction Volume (bn)	**$3.1**	**$3.4**	**$3.6**
growth (%, yoy)	*24%*	*37%*	*46%*
Platform Volume (bn)	**$1.9**	**$2.1**	**$2.5**
growth (%, yoy)	*13%*	*25%*	*45%*
Total monetization rate	**1.44%**	**1.50%**	**1.61%**
▲ *in % (bps)*	*2bps*	*8bps*	*19bps*
Transaction Revenue	**$65.0**	**$68.3**	**$70.6**
growth (%, yoy)	*35%*	*42%*	*46%*
Platform Revenue	**$12.3**	**$14.6**	**$19.4**
growth (%, yoy)	*12%*	*33%*	*77%*
Revenue Less Ancillary Services	**$80.5**	**$82.9**	**$84.6**
growth (%, yoy)	*36%*	*40%*	*43%*
Cost of Revenue	**$27.7**	**$29.2**	**$31.8**
growth (%, yoy)	*37%*	*44%*	*57%*
Gross Profit	**$52.3**	**$53.9**	**$55.1**
growth (%, yoy)	*34%*	*38%*	*41%*
Total Operating Expenses	**$59.8**	**$61.7**	**$66.9**
growth (%, yoy)	*27%*	*31%*	*42%*
Operating Income	**-$10.1**	**-$7.1**	**-$4.8**
growth (%, yoy)	*-42%*	*1%*	*33%*
Adjusted EBITDA	**$3.9**	**$4.4**	**$5.4**
Adjusted EBITDA Margin (%)	*5%*	*5%*	*6%*
Net Income	**-$10.1**	**-$7.9**	**-$6.4**
Net Income Margin (%)	*-13%*	*-9%*	*-8%*

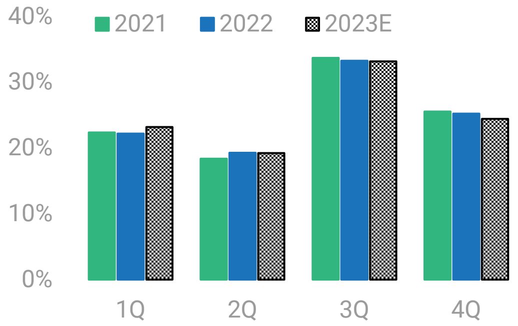
QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

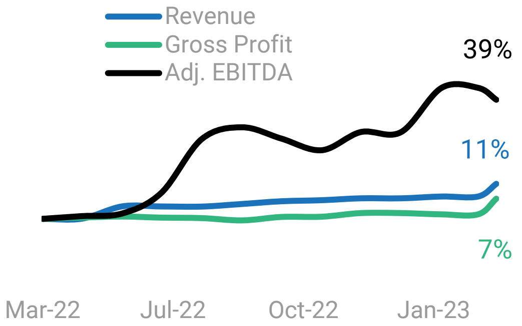

Transaction Volume (bn)/YoY Growth

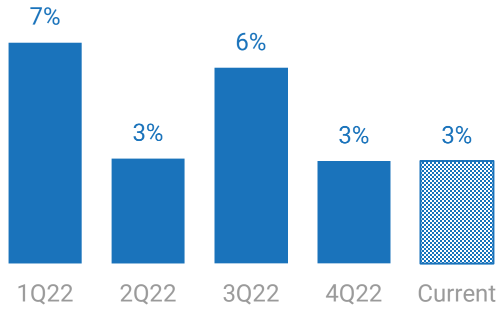

Revenue Less Ancillary Services/YoY Growth

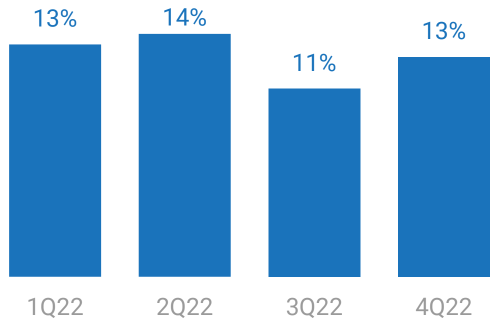

Adjusted EBITDA/YoY Growth

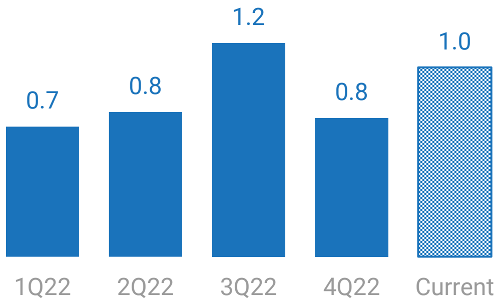

Revenue Cons. vs. Reported


Revenue Seasonality


1Q23 Cons. Revisions


Short Interest (Pre-Print)


Hedge Fund Ownership as % of S/O


Pre-Earnings ADTV[1]

Source: Company filings; FactSet

1) Measured as ADTV over the prior 7-day period

FT Partners | Equity Research

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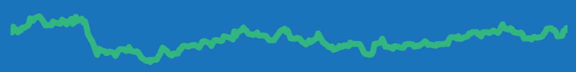

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QUESTIONS FOR MANAGEMENT

Macro:

1) Can management discuss the puts and takes in thinking about the various impacts the macro backdrop has on the business?
2) FX, particularly the stronger USD, has had an impact on the business especially in the education segment. How have FX dynamics impacted consumer payment flows?

Outlook:

3) In the 4Q22 earnings call, following remarks on FY23 adjusted EBITDA guidance, it was stated FY23 is expected to be a year in which Flywire shows scale. How should investors think about the cadence of EBITDA margin expansion going forward on the path to the long-term goal of 25%+?
4) Can management provide any context on what segments/verticals are expected to contribute the most to revenue growth in FY23?

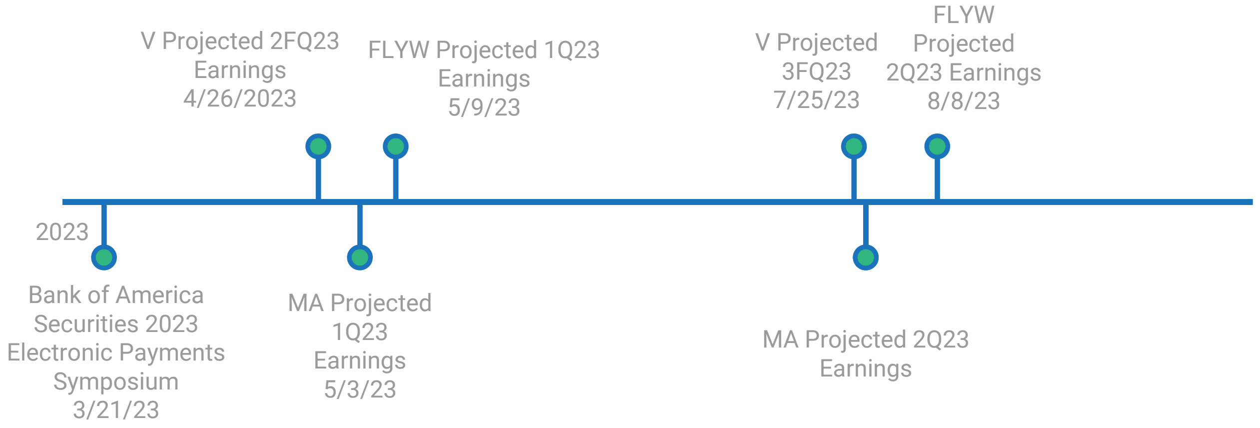
Segments:

5) In terms of Flywire's segments, is management seeing any different volume trends across education, travel, healthcare, etc.? Are there certain macro factors that impact certain segments to a greater degree?
6) Can management provide an update on the push into B2B and what momentum it is seeing in this segment?
7) At the investor day management disclosed that it is already in ~7% of the 18,000 colleges and universities. How many of the remaining have significant international student populations that could adopt the Flywire platform?
8) Most of the focus in healthcare has been on the U.S hospitals and U.S. healthcare systems. Is there a global opportunity there and what would it take to expand that offering internationally?

Capital Allocation:

9) With valuations coming down significantly, what does the M&A pipeline look like? Would management be more interested in acquiring assets that add new segments or bolt on acquisitions that expand the reach of existing segments?

POTENTIAL CATALYSTS



2023

Bank of America Securities 2023 Electronic Payments Symposium 3/21/23

V Projected 2FQ23 Earnings 4/26/2023

MA Projected 1Q23 Earnings 5/3/23

FLYW Projected 1Q23 Earnings 5/9/23

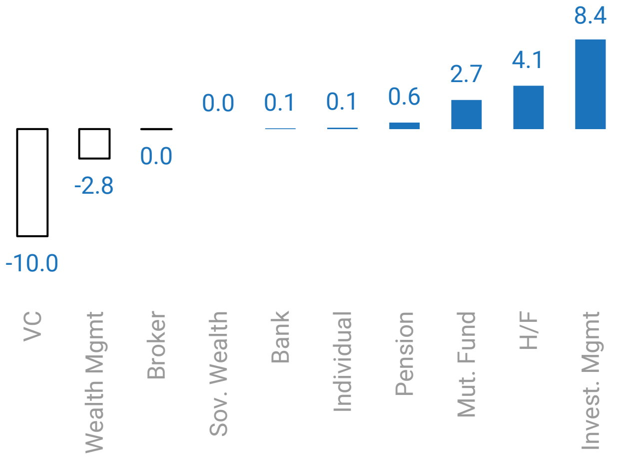
V Projected 3FQ23 7/25/23

MA Projected 2Q23 Earnings

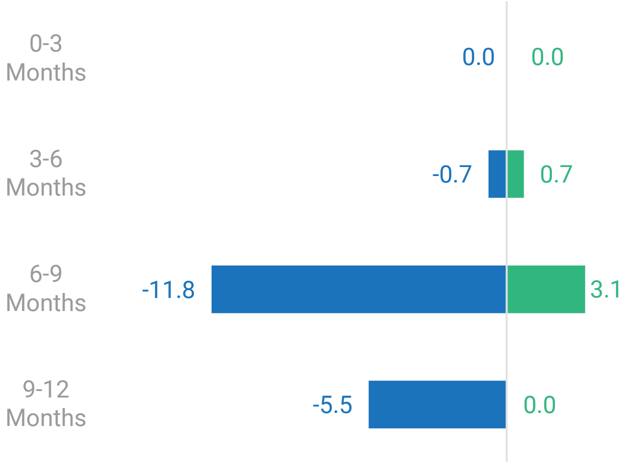
FLYW Projected 2Q23 Earnings 8/8/23

SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

FLYW TTM Price Performance

Price as of 3/17/2023:	$28.02	**Shares Out (mm):**	104
Market Cap (mm):	$2,978	**Beta (Since IPO):**	2.0
52-Wk Range:	$14.56 - $32.88	**Avg. Daily Vol (mm):**	0.8

FINANCIAL
TECHNOLOGY
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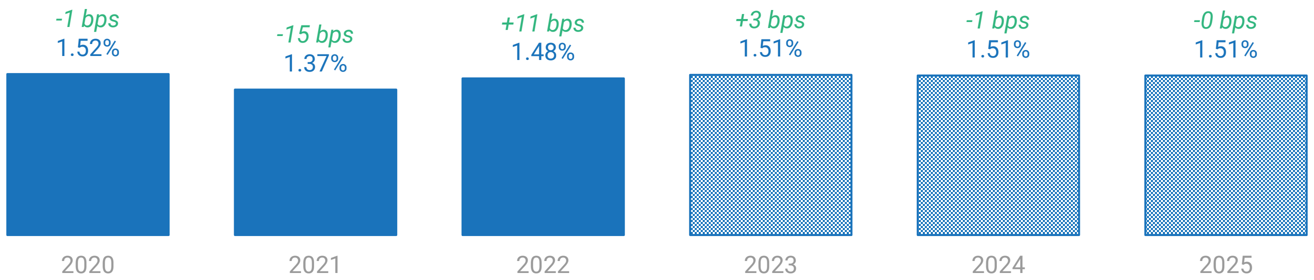
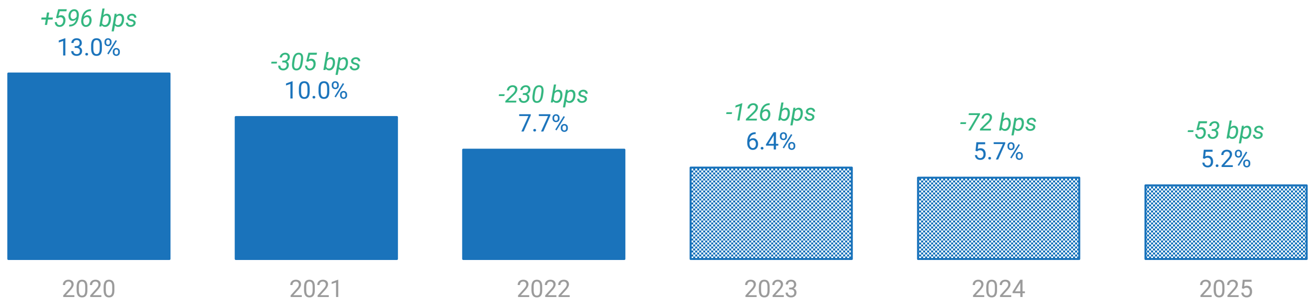
COMPANY RATIOS/MARGIN ANALYSIS[1]

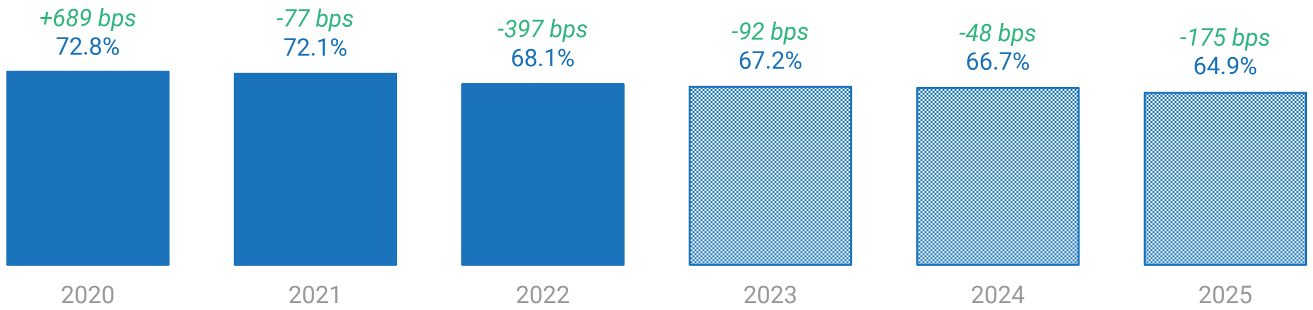
Monetization Rate[2]



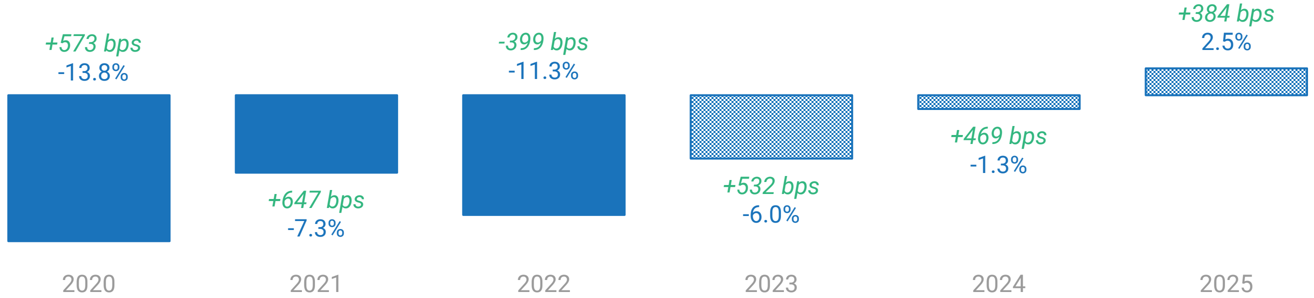
Revenue Less Ancillary (% Of Revenue)



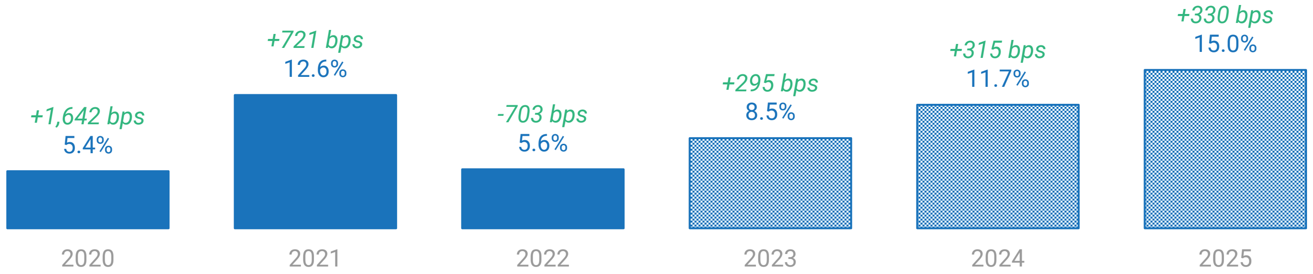
Adjusted Gross Margin



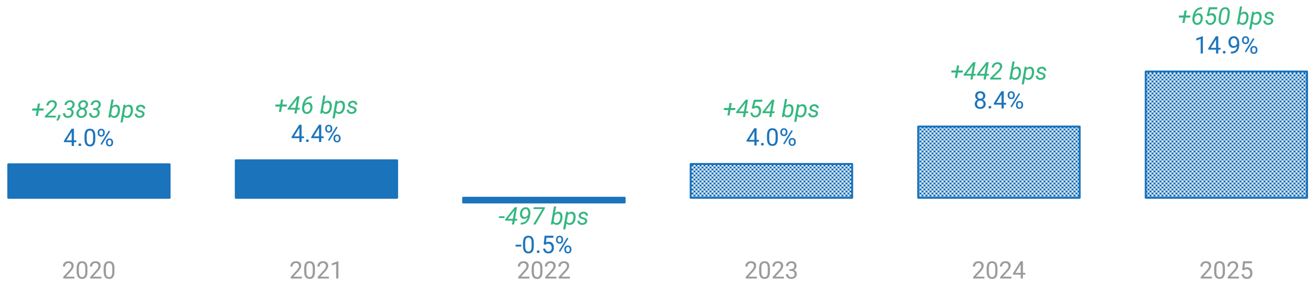
Operating Margin



Adjusted EBITDA Margin



Adjusted Net Income Margin



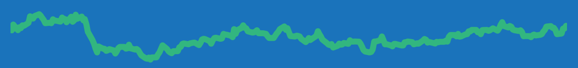
FT Partners | Equity Research

Source: Company filings

1) FactSet, Visible Alpha

2) Rev. Less Ancil. Expenses/Total Volume

FLYW TTM Price Performance



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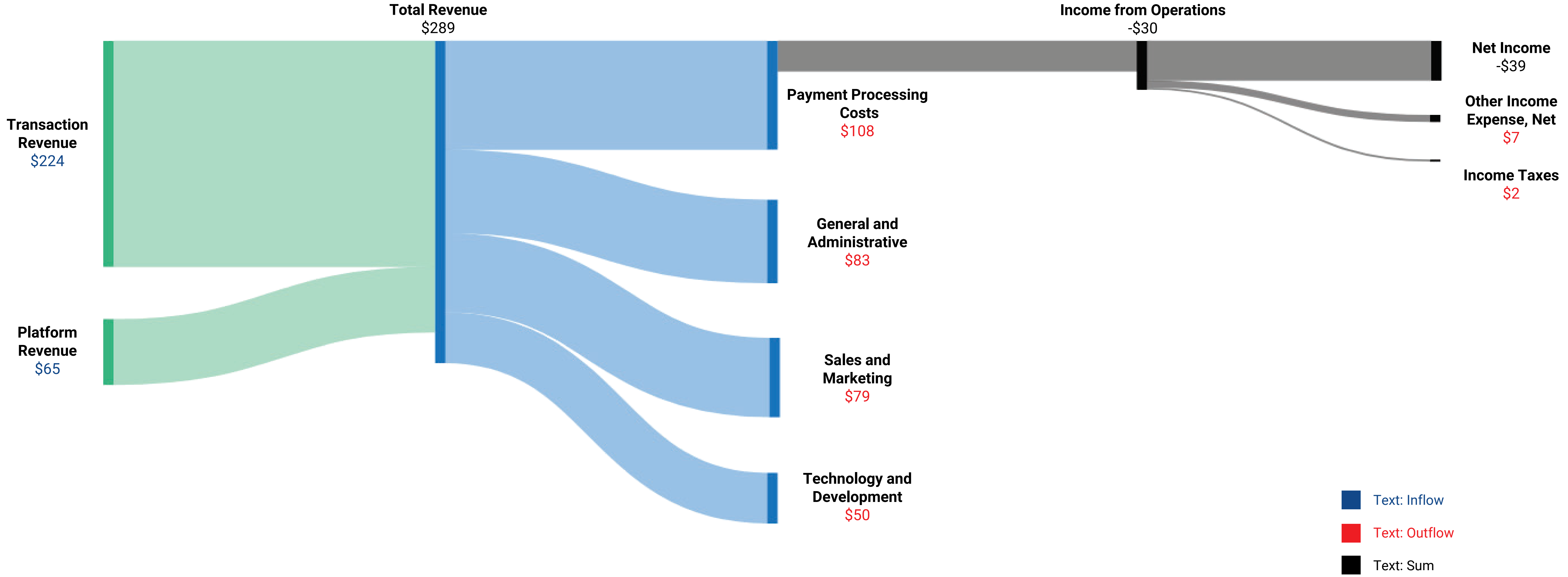
($ in millions)

P&L VISUALIZATION – TTM



Source: Company filings; FactSet

flywire

FLYW TTM Price Performance

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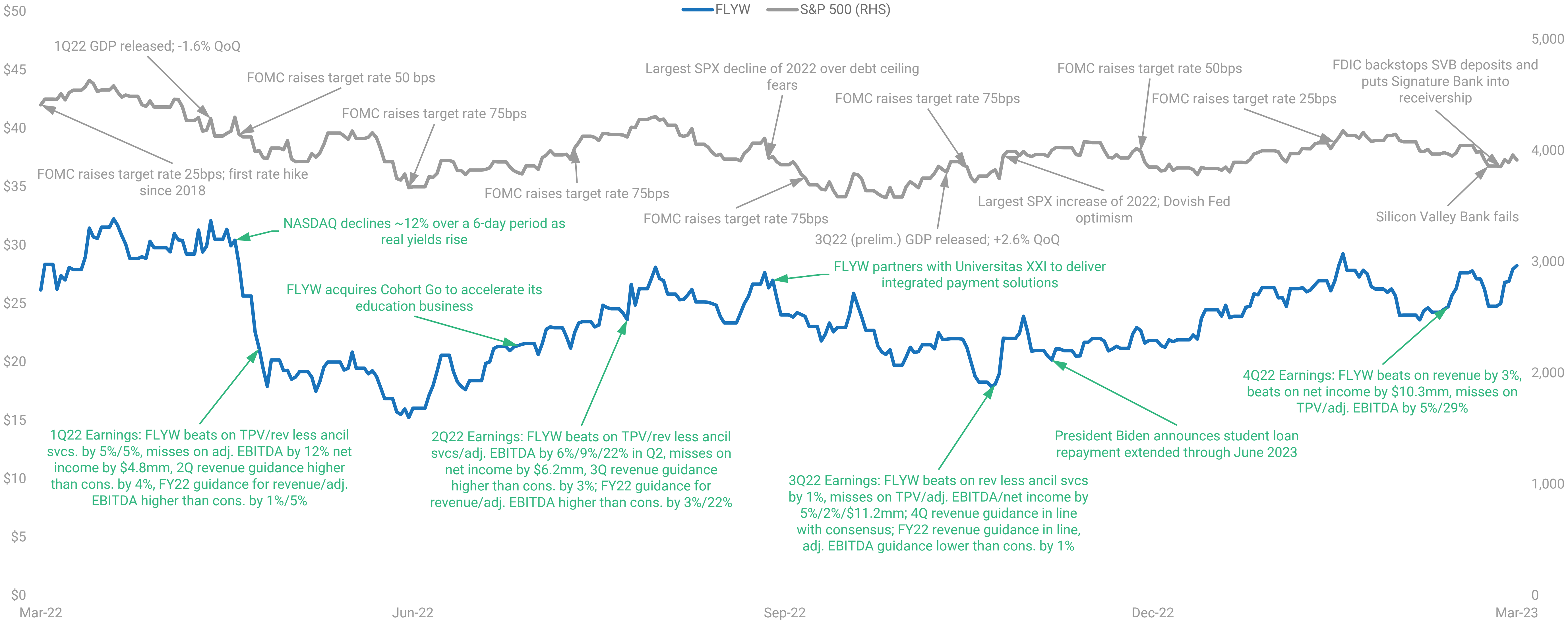
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

FOMC raises target rate 50bps

FOMC raises target rate 25bps

FDIC backstops SVB deposits and puts Signature Bank into receivership

FOMC raises target rate 25bps; first rate hike since 2018

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

3Q22 (prelim.) GDP released; +2.6% QoQ

Silicon Valley Bank fails

NASDAQ declines ~12% over a 6-day period as real yields rise

FLYW partners with Universitas XXI to deliver integrated payment solutions

FLYW acquires Cohort Go to accelerate its education business

4Q22 Earnings: FLYW beats on revenue by 3%, beats on net income by $10.3mm, misses on TPV/adj. EBITDA by 5%/29%

1Q22 Earnings: FLYW beats on TPV/rev less ancil svcs. by 5%/5%, misses on adj. EBITDA by 12% net income by $4.8mm, 2Q revenue guidance higher than cons. by 4%, FY22 guidance for revenue/adj. EBITDA higher than cons. by 1%/5%

2Q22 Earnings: FLYW beats on TPV/rev less ancil svcs/adj. EBITDA by 6%/9%/22% in Q2, misses on net income by $6.2mm, 3Q revenue guidance higher than cons. by 3%; FY22 guidance for revenue/adj. EBITDA higher than cons. by 3%/22%

President Biden announces student loan repayment extended through June 2023

3Q22 Earnings: FLYW beats on rev less ancil svcs by 1%, misses on TPV/adj. EBITDA/net income by 5%/2%/$11.2mm; 4Q revenue guidance in line with consensus; FY22 revenue guidance in line, adj. EBITDA guidance lower than cons. by 1%

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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GlobalE

GLOBAL-E PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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Craig Maurer | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516
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Please refer to page 144 for important disclosures.

Global-e


GLBE TTM Price Performance

Price as of 03/17/23	$28.74	**Shares Out (mm):**	156
Market Cap (mm):	$4,497	**Beta (since IPO):**	2.0
52-Wk Range:	$15.63 - $37.65	**Avg. Daily Vol (mm):**	1.1

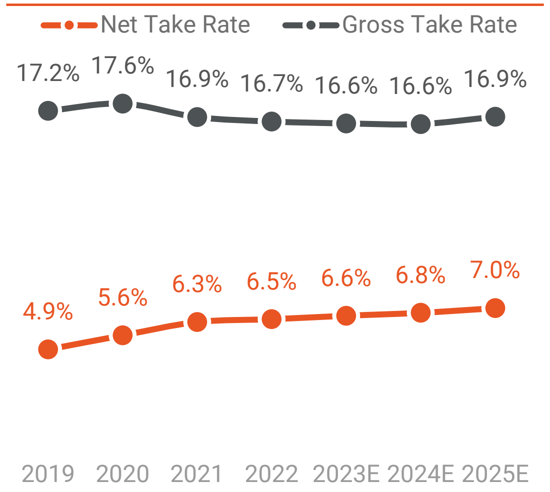
COMPANY OVERVIEW

Global-e provides a cross-border e-commerce platform for merchants and customers across many geographies. The company smooths logistical issues surrounding global e-commerce, such as currency conversion, product returns, and foreign-sales tax remittances.

Customers receive a localized online shopping experience with international merchants. Global-e accepts local shopper currency and ensures transparent pricing on orders.

Merchants receive appropriate sales tax and payments in their local currency while using Global-e's platform. The company also **mitigates fraud and foreign exchange risks** that make international e-commerce difficult for small and large merchants alike.

NET/GROSS TAKE RATE



KEY DEBATES

1. **Unit Economic Dynamics:** Global-e's gross take rate is uniquely high given the combination of its software, fulfillment, and payments services. While it has fallen modestly given various factors including mix, as the business scales, the net take rate benefits from improved fulfillment and payments costs. While the net take rate has increased 170bps since 2019, consensus implies less improvement in this metric going forward. If Global-e can achieve greater leverage as GMV grows, gross profit results could outperform.

2. **BorderFree Acquisition:** Since acquiring Borderfree in July 2022, management has been focused on integrating and leveraging the business. It has helped accelerate U.S. outbound sales, which grew 163% in 4Q22 given the high share of U.S. outbound activity at Borderfree. Further improvement is expected in FY23 as 1) Borderfree continues to weigh on gross margins and 2) there remains additional cross-sell opportunities with Borderfree customers. The speed and magnitude of realizing these incremental improvements could weigh on or drive upside to the consensus view.

3. **Shopify Partnership:** Global-e has continued to make good progress on its partnership with Shopify, with the number of Shopify merchants onboarding directly onto GLBE accelerating. The Shopify partnership represents a significant growth driver for Global-e. Continuing to expand the product offering, while signing new customers is critical to driving growth, and maintaining Global-e's premium relative valuation.

REVENUE MODEL

Global-e reports revenue in two segments:

- **Fulfillment Services (56% of TTM Revenue):** Fulfillment services revenue is earned when a merchant opts in to receive shipping and handling benefits from the company. These fees are fixed based on the level of customer or shipping service that is chosen by the merchant. Global-e recognizes revenue when goods are delivered to the customer on behalf of the merchant (reported on a gross basis).
- **Service Fees (44% of TTM Revenue):** Global-e earns a fixed percentage of the total value of each transaction processed. Services fees are dependent on the total value of the transaction and the inbound/ outbound geography. These fees are recognized as revenue when the transaction is processed over the platform and the merchant goods arrive at one of the company's fulfillment centers (reported on a net basis).

Global-e also recently acquired Borderfree (closed 07/01/22) from Pitney Bowes. Borderfree assists retailers in entering new global markets by localizing domestic websites in 200+ countries. The acquisition is expected to strengthen Global-e's offering for large enterprises. With 3Q22 results, Global-e disclosed Borderfree was expected to contribute between $125mm - $135mm (and confirmed in 4Q the contribution was in-line with previously provided guidance) in GMV for FY22 which represented 5% of FY22 volume at the midpoint.

PLATFORM OVERVIEW

Cross-border e-comm platform providing a localized experience for merchants and shoppers

Local messaging per market
25+ languages

Local pricing
100+ currencies

Local payment methods
150+ methods

Local import D&T calculated and guaranteed
170+ markets

Multiple shipping options
20+ providers

Easy local returns

Payment fraud management
Zero risk

Local market know-how and insights
Act local

Source: Company filings

03/20/23 - **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218 0540

Global e

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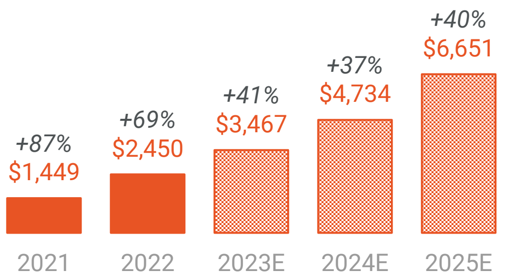
FINANCIAL TECHNOLOGY PARTNERS

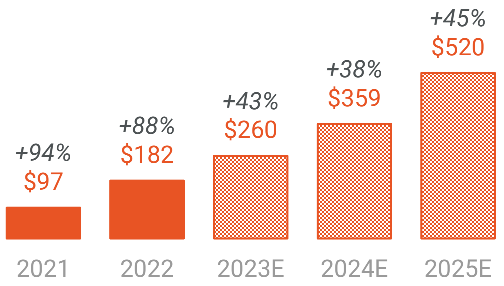
$ in millions, except per share amounts

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

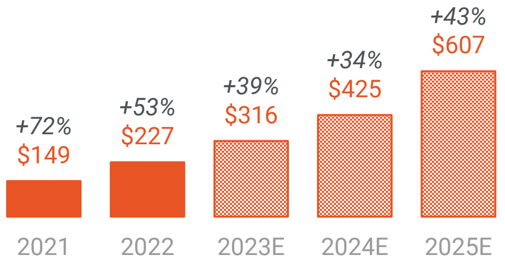
Gross Merchandise Value



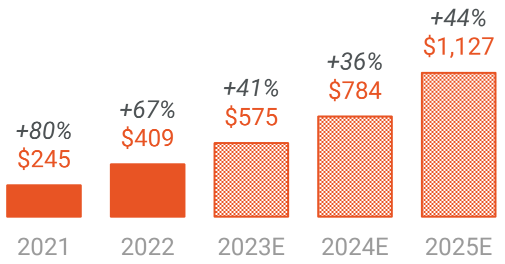
Service Fees Revenue



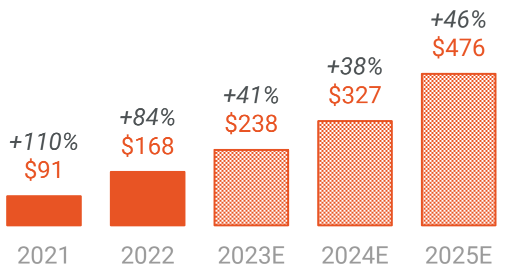
Fulfillment Services Revenue



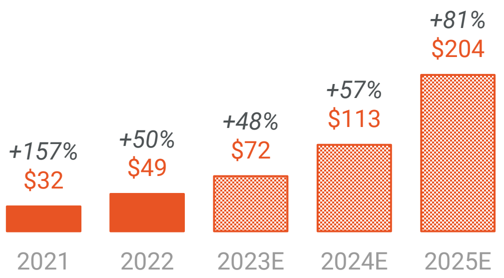
Total Revenue



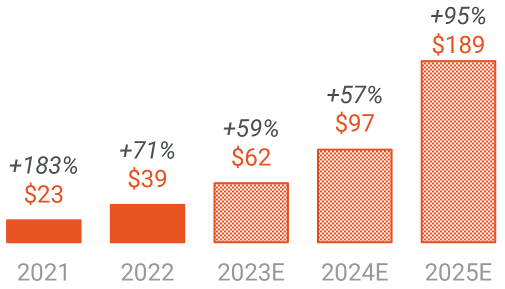
Adjusted Gross Profit



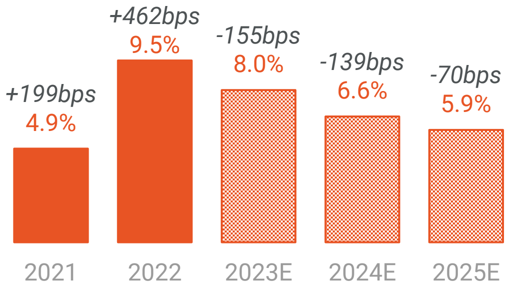
Adjusted EBITDA



Adjusted Net Income

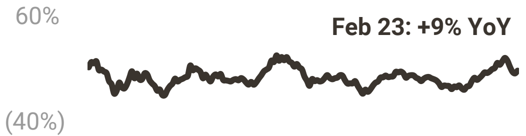


SBC as % of Revenue

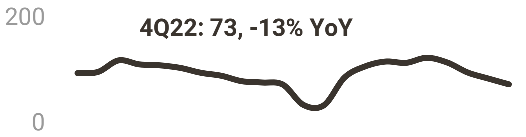


INDUSTRY KPIs

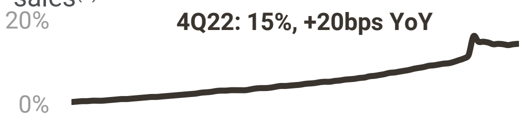
USD Index Growth *(Jan 09-Feb 23)*



CEO Outlook Index[2] *(2Q17-4Q22)*

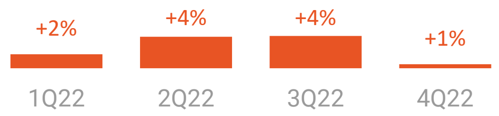


U.S. e-comm as % of retail sales[3] *(1Q00-4Q22)*

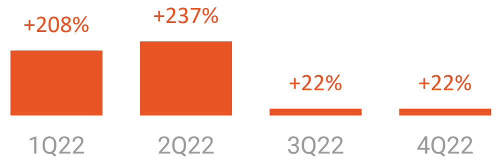


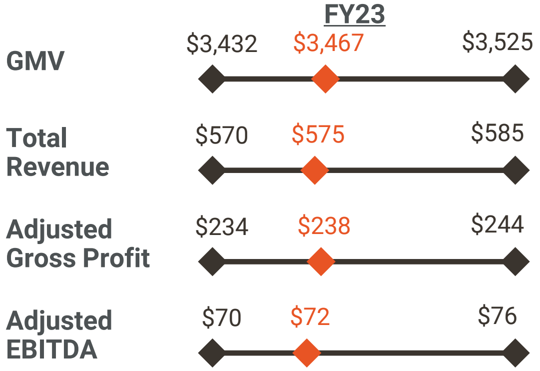
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES

Total Revenue



Adjusted EBITDA



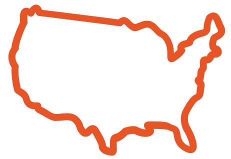


TOTAL ADDRESSABLE MARKET

Estimated 2023 Global E-Commerce Sales

Estimated 2023 Cross-Border E-Commerce

U.S. E-Commerce Retail Sales



$265bn

Source: Company filings
1) FactSet
2) Business Roundtable CEO Economic Outlook Index
3) FRED E-commerce Retail Sales, FRED Retail Trade

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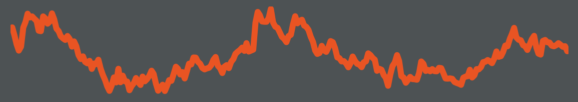
GLBE TTM Price Performance



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VALUATION CONSIDERATIONS

For many unprofitable FinTech companies, EV/GP is used for relative valuation to account for costs associated with the core operations of the business (such as payment acquiring fees or shipping and logistics costs for Global-e). Global-e trades at a 19x NTM EV/GP multiple, 16x below its average multiple of 35x since its IPO. It trades at a 16x premium relative to the NASDAQ (which is measured on an EV/Sales basis), 17x below its average premium of 33x. **When looking at the peer average NTM EV/GP and when adjusting for gross profit growth it implies a 12-month price of $21.87 (24% downside).** While trading at a relatively high valuation, Global-e remains a unique value proposition given its heavily localized offerings (insulating itself from the bulk of competition), strong top-line growth, while also looking to drive profitability in the business with a target of a 20%+ EBITDA margin over the medium-term.

DCF Valuation:

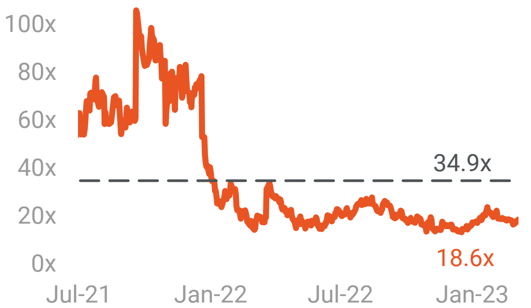
Scenario 1 – Current Price ($28.74, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of 41%/36%/34% in FY23/24/25, while maintaining 25%+ growth through 2027 before gradually decelerating to the terminal growth rate. EBITDA margins are expected to reach management's targeted 20% in FY25 and eventually scale to ~45% as a terminal margin level. Were shares of Global-e to remain at the current price in 12-months, it would imply a 14x NTM EV/GP multiple (based on current STM consensus gross profit consensus of $316mm).

Scenario 2 – Faster Shopify Adoption ($38.10, 33% Upside): This DCF outlines a scenario where Global-e is successful in scaling and expanding its relationship with Shopify, thereby onboarding more Shopify merchants. In this scenario, revenue growth in the near term is modestly accelerated and maintained at a higher level (42%/38%/37% in FY23/24/25) before gradually decelerating to the terminal growth rate. Terminal margins in this scenario are also increased to ~53%. This scenario points to a 12-month price of $38.10 (33% upside), which based on the current STM gross profit consensus, implies a 18x NTM EV/GP multiple.

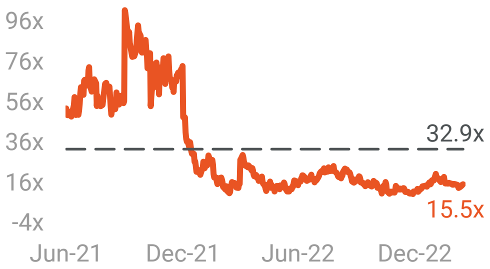
Scenario 3 – Slower E-Commerce Growth ($21.41, 26% Downside): This DCF assumes that overall E-commerce growth slows as a result of a significantly weaker macro environment. The model reflects this by assuming 1) lower consumer e-commerce spending and 2) fewer companies start/expand their relationship with Global-e. The near-term impacts of this would result in revenue growth of 36%/34%/30% in FY23/24/25. Margins are decreased in the near-term but eventually converge with the long-term base case of ~45%. This scenario points to a 12-month price of $21.41 (26% downside) which based on current STM gross profit consensus, implies a 10x NTM EV/GP multiple.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

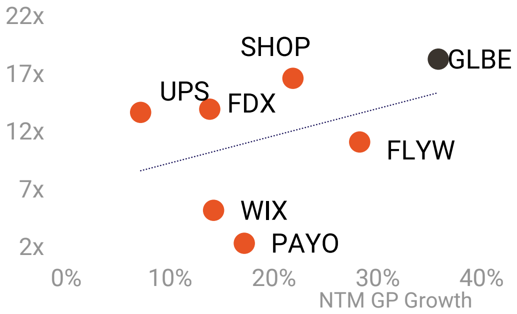
NTM EV/GP Since IPO



NTM EV/GP Premium vs. NASDAQ



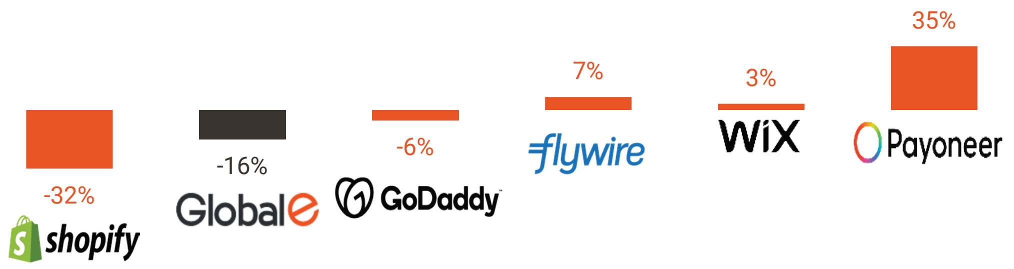
NTM EV/GP Peer Avg.[1] vs. GP Growth



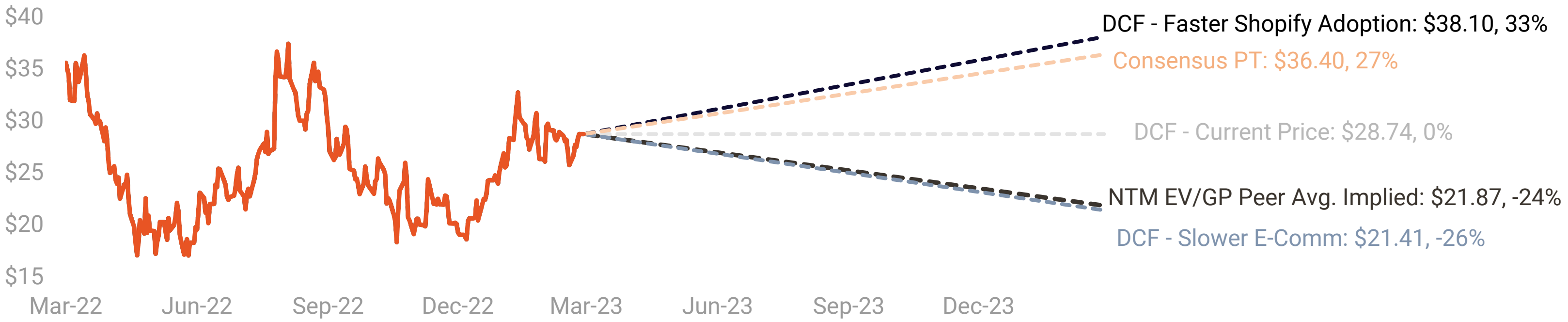
DCF Key Assumptions[2]

10-Yr RFR	3.7%
Cost of Equity	17.1%
Cost of Debt	5.0%
WACC	17.0%
Beta	2.0
FCF Terminal Growth Rate - All DCF's	3.0%
Terminal SBC Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$874

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

[1] Utilizing most comparable metric for companies without disclosed gross profit

[2] SBC in millions

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Global-e

Price as of 03/17/23	$28.74	**Shares Out (mm):**	156
Market Cap (mm):	$4,497	**Beta (since IPO):**	2.0
52-Wk Range:	$15.63 - $37.65	**Avg. Daily Vol (mm):**	1.1

FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluation potential outcomes and their valuation implications. This decision tree is built around 1) higher/lower Shopify penetration and 2) operating leverage. While there are other drivers of Global-e's performance (macro, FX rates, etc.) these represent the most likely area(s) of upside/downside relative to consensus.

Consensus Case:

The average consensus price target for Global-e is $36, with STM gross profit estimates of $316mm implying a 18x EV/GP multiple, a 1x contraction relative to its current 19x multiple. This 19x multiple is 16x below Global-e's average NTM EV/GP multiple of 35x since its IPO. The consensus gross profit/multiple forecast implies 27% upside relative to the current share price of $29.

Upside Case(s):

(+) $40, 40% Upside: This scenario assumes Global-e is successful at 1) onboarding more Shopify merchants and 2) delivering new products such as the Shopify Markets Pro solution, which is planned to launch in the U.S. in 2Q with other geographies to follow. This implies 41% gross profit growth and 40% upside to the current share price with a 19x multiple.

(+-) $38, 32% Upside: This scenario assumes better than expected execution on the Shopify agreement, but forecasts Adjusted EBITDA comes in at the bottom of managements guidance range of $66mm – $74mm. While this does not impact gross profit growth the multiple is handicapped to account for weak delivery relative to current expectations for $72mm. This implies 32% upside to the current share price with a 18x NTM EV/GP multiple.

(++) $42, 47% Upside: The best-case scenario assumes a higher Shopify penetration (through new products and onboarding merchants), while assuming EBITDA is at or above the high-end of managements guidance range. This implies 47% upside to the current share price with a 20x NTM EV/GP multiple.

Downside Case(s):

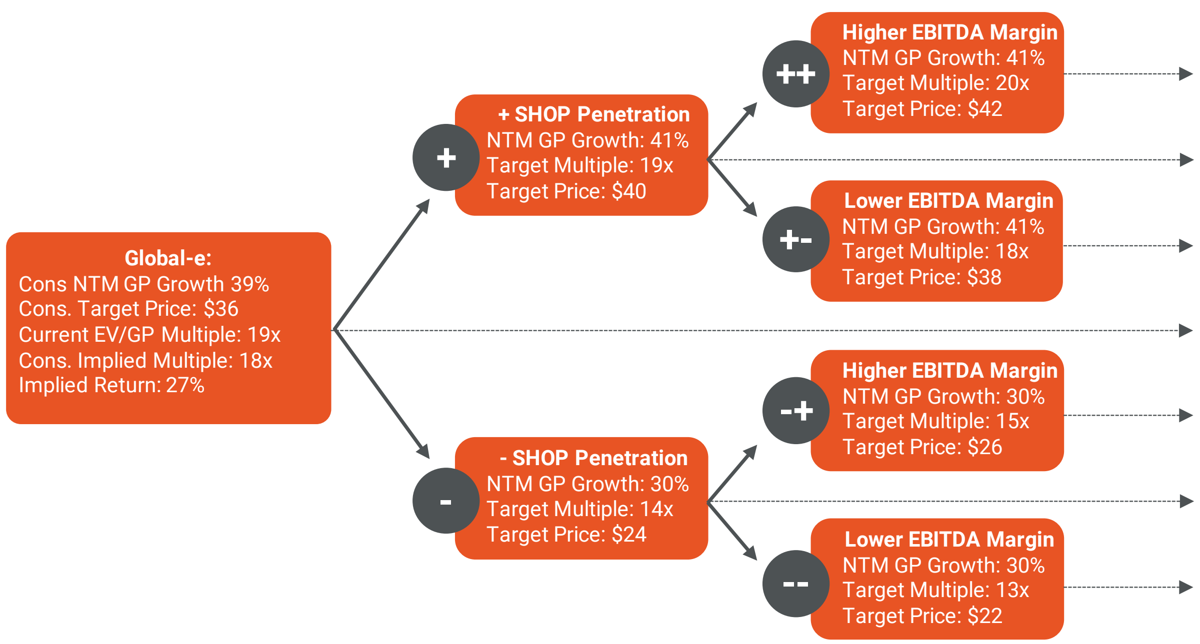
(-) $24, 17% Downside: This scenario assumes slower onboarding of Shopify merchants and that the rollout (and/or monetization) of new offerings such as the Shopify Markets Pro is delayed. In the downside case, multiples are skewed further from the base case to account for Global-e's premium valuation, which would likely see outsized negative multiple re-rating in the event of missed expectations. This implies 7% downside to the current share price with a 14x NTM EV/GP multiple.

(-+) $26, 11% Downside: This scenario assumes weaker Shopify penetration, but Global-e still delivers EBITDA at the high-end of its guidance range. This implies 1% downside to the current share price with a 15x NTM EV/GP multiple

(--) $22, 23% Downside: The worst-case scenario assumes weaker Shopify penetration and EBITDA at the low-end of managements targeted guide. This implies 14% downside to the current share price with a 13x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Global-e:
Cons NTM GP Growth 39%
Cons. Target Price: $36
Current EV/GP Multiple: 19x
Cons. Implied Multiple: 18x
Implied Return: 27%

+ **+ SHOP Penetration**
NTM GP Growth: 41%
Target Multiple: 19x
Target Price: $40

++ **Higher EBITDA Margin**
NTM GP Growth: 41%
Target Multiple: 20x
Target Price: $42

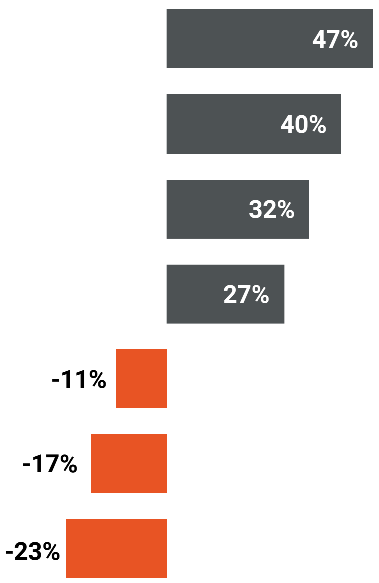
+- **Lower EBITDA Margin**
NTM GP Growth: 41%
Target Multiple: 18x
Target Price: $38

- **- SHOP Penetration**
NTM GP Growth: 30%
Target Multiple: 14x
Target Price: $24

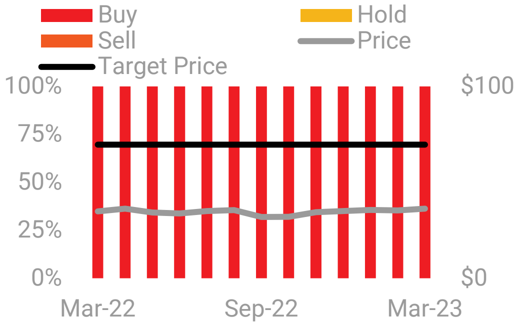
-+ **Higher EBITDA Margin**
NTM GP Growth: 30%
Target Multiple: 15x
Target Price: $26

-- **Lower EBITDA Margin**
NTM GP Growth: 30%
Target Multiple: 13x
Target Price: $22

12-month Price Return

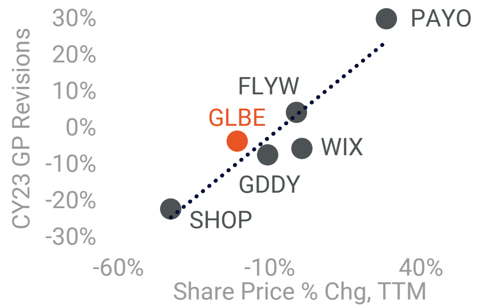


Sell-Side Ratings Distribution



Price Performance vs Est. Revisions

Est. Revisions vs Price Change, TTM



Source: Company filings; FactSet

FT Partners | Equity Research

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Global-e

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FINANCIAL TECHNOLOGY PARTNERS

$ in millions, except per share amounts

4Q22 EARNINGS CALL RECAP

Takeaway: Global-e hosted its 4Q22/FY22 earnings call pre-market on February 22nd. Shares traded up 3% after reporting, likely driven by FY23 revenue guidance and adjusted EBITDA guidance coming in above consensus expectations.

Results Recap: Global-e reported GMV of $839mm (+66% YoY) slightly ahead of consensus at $829mm, and 1% above the mid-point of guidance ($808mm - $848mm). Total revenue of $140mm was modestly above consensus of $139mm, and above the midpoint of guidance for the quarter of $135.5mm - $141.5mm. Adjusted EBITDA was $21.8mm, beating expectations of $17.9mm and coming in above the high-end of the guidance range of $16.5mm - $19.5mm.

Guidance/Recap: With results, Global-e provided its 1Q/FY23 guidance. For 1Q23, Global-e expects GMV of $645mm - $675mm (which represents 19% of the FY23 GMV guide at the mid-point, relative to 1Q22 which made up 18% of FY22 GMV). At the midpoint, this was 2% below consensus of $675mm. Revenue is expected to be $108mm - $114mm (growing 39% YoY at the midpoint) just shy of pre-print consensus of $112mm. Adjusted EBITDA is expected to be $9.5mm - $12.5mm vs. pre-print consensus of $9.3mm. Global-e provided FY23 guidance for GMV of $3,360mm - $3,520mm (2% above pre-print consensus of $3,388mm). FY23 revenue is also expected to be $557mm - $584mm (2% above pre-print consensus of $559mm) and guidance for adjusted EBITDA is $66mm - $74mm (5% above pre-print consensus of $67mm).

Incremental from the Call:

- **Guidance:** Management provided further details on the call with respect to KPIs such as GDR and NDR, which lay the basis for FY23 GMV guidance. Given NDR in 2022 (130%) was strong despite a fairly weak e-commerce backdrop, management shared it expects NDR to remain at 130%+ and GDR will be at 98%+ in FY23 (vs. 98% in FY22). This coupled with the company's discussion of a strong pipeline of new bookings into 2023 lays the foundation for FY23 GMV guidance of $3,360mm -$3,520mm (2% above pre-print consensus of $3,388mm at the midpoint).
- **Organic/Inorganic Growth:** Management shared that Borderfree GMV for FY22 was very close to previous guidance of $125mm - $135mm. Furthermore, it shared that Borderfree and Flow were strong contributors to US outbound revenue as well as increases in R&D expenses as a percent of revenue in FY22 (19.9% vs. 12.1% in FY21). Borderfree also served as a headwind for gross margins in FY22 (39% vs. 37% in FY21) as management continues to work to improve Borderfree's unit economics Going forward, the company "expects the Borderfree portfolio to grow a bit less than the general growth rate". However, it sees room for upside in the Borderfree portfolio, due to an uplift of sales from gradual Borderfree merchant integration into the Global-e platform, and from increasing Borderfree's gross margins up to the level of core Global-e.
- **Growth vs. overall e-commerce market:** In FY22, GLBE posted 66% GMV growth YoY, while the overall e-commerce market growth decelerated. Management attributed this to the large and fast growing direct to consumer global e-commerce opportunity coupled with Global-e's strong market position. Management believes Global-e will continue sustained GMV/revenue growth because of a strong pipeline of bookings into 2023 and GLBE's ability to maintain a GDR of over 98%. Given the macroeconomic uncertainty of FY23 and the headwinds of overall e-commerce growth, management will potentially look to diversify the overall revenue stream. The recent implementation of the Disney partnership proves that the company is capable of diversifying revenue streams to help mute headwinds such as a slowdown in overall e-commerce growth.

4Q22 REPORTED VS. CONSENSUS

Line Item	Reported	Cons.	Abs.▲	%▲
GMV	**$839**	**$829**	**$10.18**	**1%**
growth (%, yoy)	66%	64%		
Gross Take Rate	**16.66%**	**16.78%**		**-12bps**
▲ in % (bps)	28bps	40bps		
Net Take Rate	**6.65%**	**6.59%**	**$0.00**	**6bps**
growth (%, yoy)	18bps	12bps		
Service Fees	**$62.8**	**$63.4**	**-$0.58**	**-1%**
growth (%, yoy)	77%	79%		
Fulfillment Services Revenue	**$77.0**	**$75.7**	**$1.31**	**2%**
growth (%, yoy)	63%	60%		
Total Revenue	**$140**	**$139**	**$0.73**	**1%**
growth (%, yoy)	69%	68%		
Gross Profit	**$56**	**$55**	**$1.21**	**2%**
growth (%, yoy)	71%	67%		
Adjusted Costs of Revenue	**$82.1**	**$84.6**	**-$2.47**	**3%**
growth (%, yoy)	64%	69%		
Operating Expenses	**$90.9**	**$98.7**	**-$7.73**	**8%**
growth (%, yoy)	66%	80%		1,409bps
Adjusted EBITDA	**$21.8**	**$17.9**	**$3.88**	**22%**
Adj. EBITDA Margin (%)	16%	13%		271bps
Operating Income	**-$35.1**	**-$42.7**	**$7.63**	**18%**
Operating Income Margin (%)	-25%	-31%		562bps
Net Income	**-$28.5**	**-$45.8**	**$17.3**	**38%**
Net Income Margin (%)	-20%	-33%		1,256bps

FY23 Guidance	New	Mid.	Cons.	Mid +/-
Gross Merchandise Volume	**$3,360 - $3,520**	**$3,440**	**$3,389**	**2%**
growth (%, yoy)	*37% - 44%*	40%	38%	210bps
Revenue	**$557 - $584**	**$571**	**$559**	**2%**
growth (%, yoy)	*36% - 43%*	39%	37%	284bps
Adjusted EBITDA	**$66.0 - $74.0**	**$70.0**	**$66.9**	**5%**
Adj. EBITDA Margin (%)		12%	12%	30bps

Source: Company filings; FactSet

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Global-e


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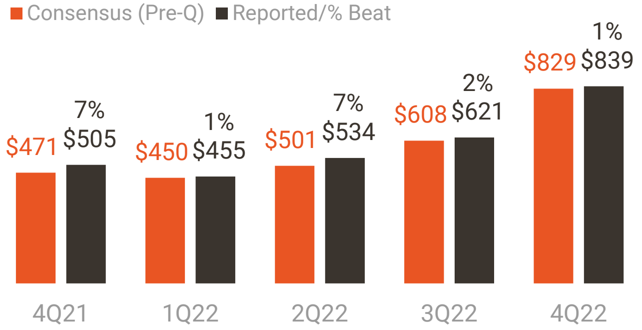
FINANCIAL TECHNOLOGY PARTNERS

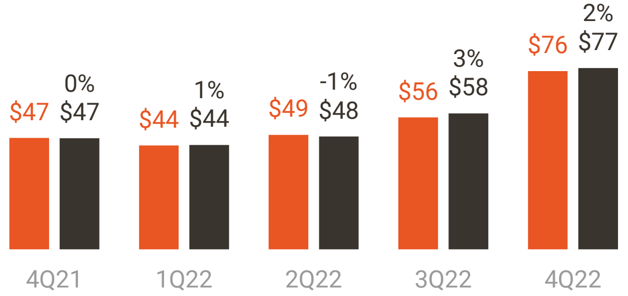
$ in millions, except per share amounts

REPORTED VS. CONSENSUS

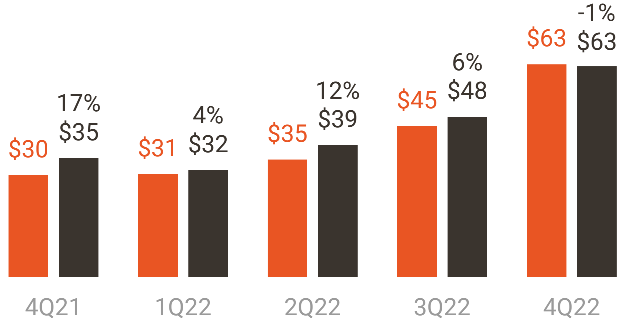
Gross Merchandise Volume



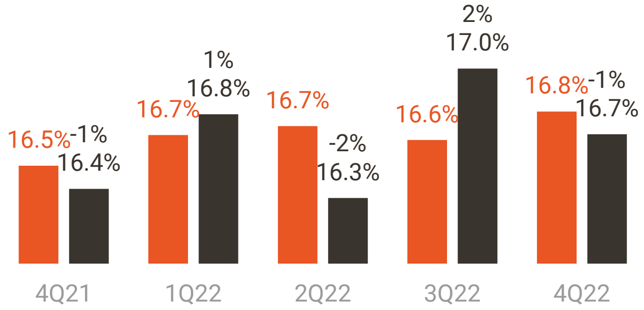
Fulfillment Revenue



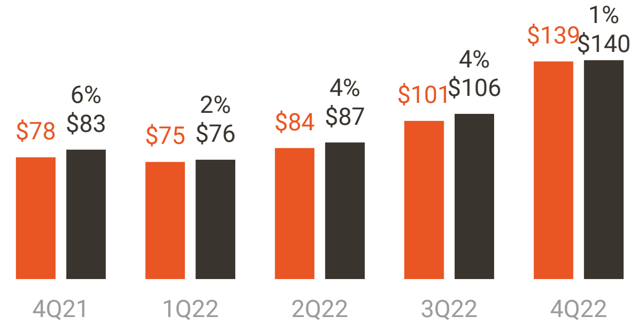
Service Fee Revenue



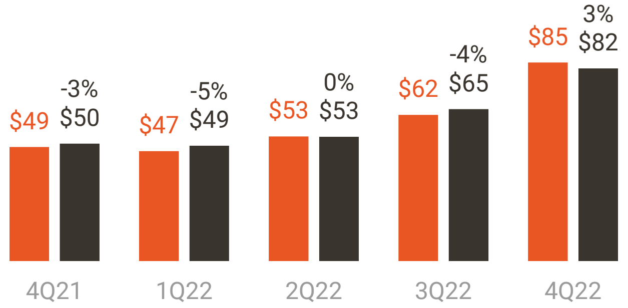
Gross Take Rate



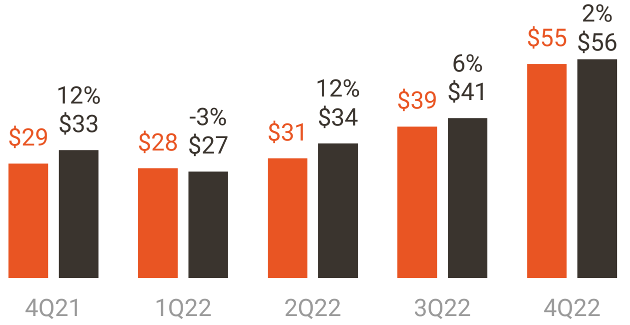
Total Revenue



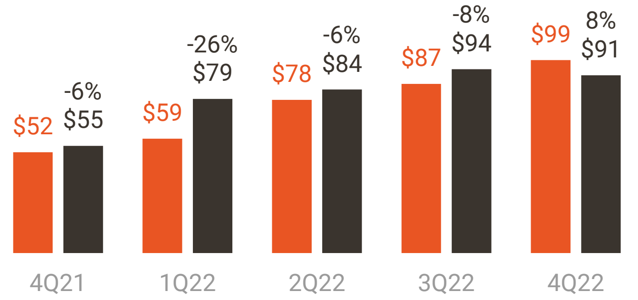
Cost of Revenue



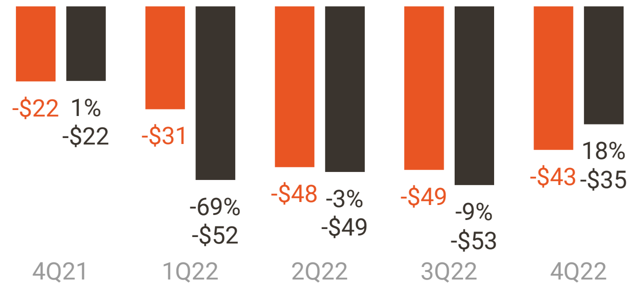
Gross Profit



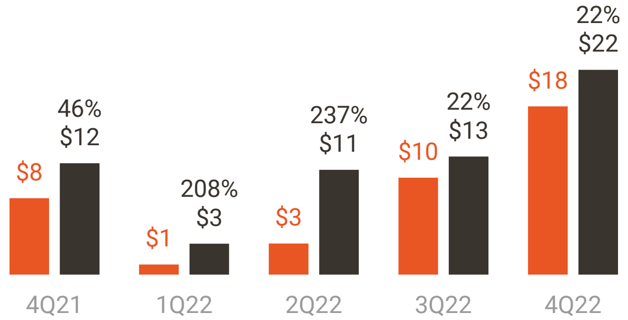
Operating Expenses



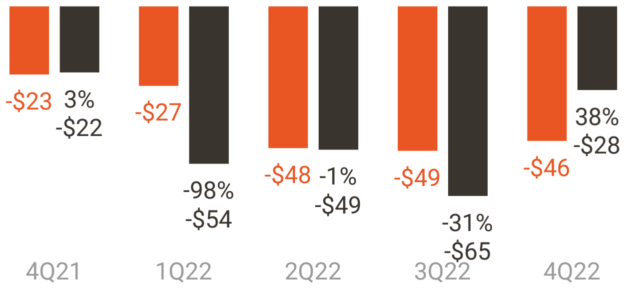
Operating Income



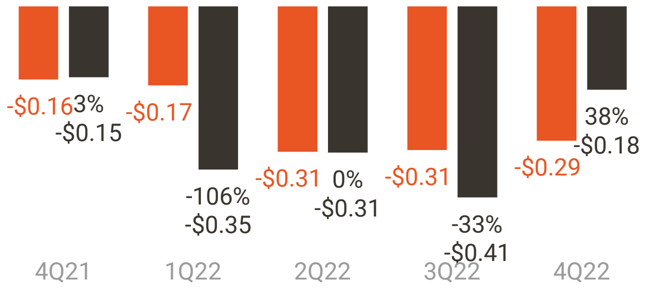
Adjusted EBITDA



Net Income



Diluted EPS



Source: Company filings; FactSet; Visible Alpha

Global e

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($ in millions)

1Q23 EARNINGS OUTLOOK

Global-e is expected to report 1Q23 earnings on June 1st after the market close.

What's In Focus:

On Global-e's 4Q22 earnings call, questions focused on how the Borderfree acquisition/portfolio was performing relative to the company's organic business. On the call, management shared that it expects Borderfree to grow slower than the rest of the business, in part because of its less favorable current unit economics. While management left room for upside based on the gradual onboarding of Borderfree merchants, this is expected to serve as a headwind to GLBE's GMV growth going forward (management provided 1Q23 GMV guidance of $645mm to $675mm, +45% YoY at the midpoint). Consensus now expects 1Q23 GMV of $665mm, which on the higher end of the guidance range. Additionally, consensus expects gross margins to increase to 41.2% in 1Q23, +200bps YoY or -10bps sequentially. Gross margin in the quarter is one of the key areas of potential upside/downside given mix dynamics between Shopify, Borderfree, Flow, etc.

Estimates:

- **KPI's:** Since 4Q22 results, consensus for 1Q23 GMV has been revised down by 2% to $665mm from $675mm, while FY estimates have been revised up by 2% to $3.47bn from $3.39bn, implying higher greater back half weighting. The consensus implied gross take rate for 1Q23 has increased by 15bps to 16.8% from 16.6%, while the FY23 consensus implied gross take rate increased by 11bps to 16.6% from 16.5%. Furthermore, the consensus implied net take rate for 1Q23 has increased by 17bps to 6.5% from 6.4% while the FY23 consensus implied net take rate increased by 9bps to 6.6% from 6.5%.
- **Revenue:** Service fees revenue estimates for 1Q23 have marginally decreased by 1% and FY estimates have increased 3% from $253mm to $260mm. 1Q23 estimates for fulfillment services revenue have decreased 1%, while FY estimates have increased 3% from $253mm to $260mm. As a result, total revenue estimates for 1Q23 have decreased 1% to $65.7mm from $66.3mm, while FY estimates have increased 2% to $575mm from $559mm.
- **Expenses:** Adjusted costs of revenue estimates for 1Q23 have decreased 1% , while FY estimates have increased 2% to $339mm from $333mm. Furthermore, adjusted operating expense estimates for 1Q23 have decreased significantly by 9% to $34mm from $37mm, while FY estimates have also decreased 2% to $165mm from $167mm.
- **Earnings:** Consensus for 1Q23 adjusted gross profit have marginally decreased by 1% and FY estimates have increased by 2% to $238mm from $233mm. Adjusted EBITDA estimates for 1Q23 have been meaningfully revised higher by 22% to $11mm from $9mm. Furthermore, FY estimates for adjusted EBITDA have increased 8% to $72mm from $67mm. 1Q23 estimates for net income have increased 10% to -$46mm from -$51mm, while FY estimates have similarly increased 10% to -$161mm from -$178mm.

POST-RESULTS ONE-DAY ALPHA VS. SP500

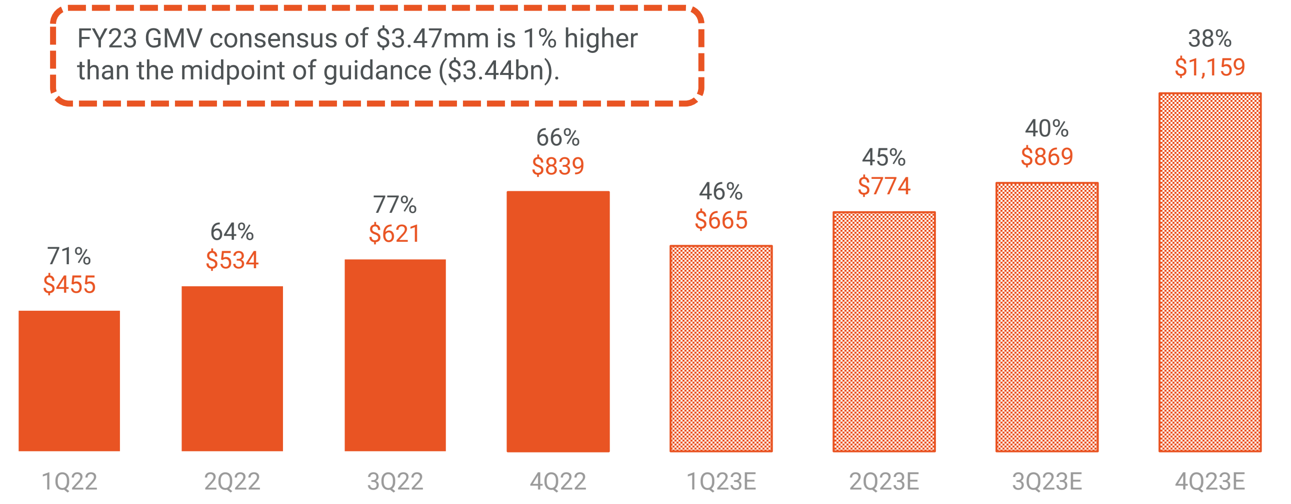
- Slight revenue and adj. EBITDA beat
- Q2 guidance below consensus
- Lowered FY22 revenue and GMV guidance on macro headwinds

- Adj. EBITDA of $11.1mm vs consensus $2.3mm
- Raised FY22 revenue/adj. EBITDA guidance 5.9%/8.8%, respectively, at the midpoint

- 5%/25% beat on revenue/adj. EBITDA
- Q4 revenue guidance 8% below the Street
- Lowered FY revenue and GMV guidance

- 1%/22% beat on revenue/adj. EBITDA
- Issued FY23 revenue guidance 2% above the Street

GMV (mm)/YoY GROWTH


FY23 GMV consensus of $3.47mm is 1% higher than the midpoint of guidance ($3.44bn).

Source: Company filings, FactSet

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FINANCIAL TECHNOLOGY PARTNERS

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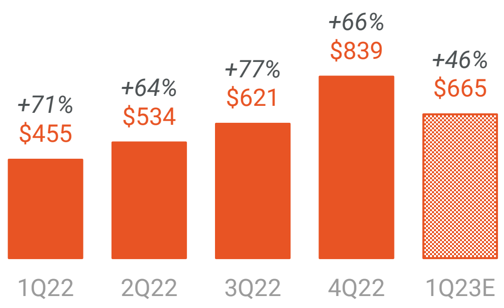
1Q23 CONSENSUS ESTIMATE RANGES

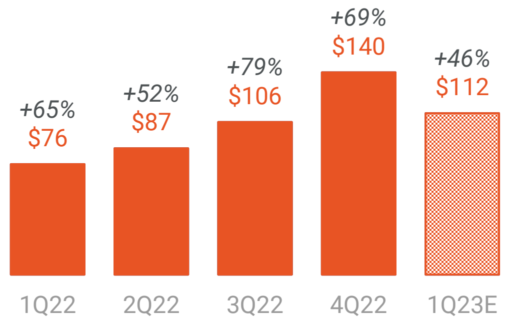
	Low	Average	High
GMV	**$660**	**$665**	**$674**
growth (%, yoy)	45%	46%	48%
Take Rate - Service Fees	**7.39%**	**7.51%**	**7.60%**
▲ *in % (bps)*	37bps	49bps	58bps
Service Fees	**$48.8**	**$49.9**	**$51.2**
growth (%, yoy)	53%	56%	60%
Fulfillment Services Revenue	**$61.0**	**$61.6**	**$62.3**
growth (%, yoy)	38%	39%	40%
Total Revenue	**$111**	**$112**	**$114**
growth (%, yoy)	45%	46%	49%
Adjusted Costs of Revenue	**$65.1**	**$65.7**	**$66.5**
growth (%, yoy)	40%	41%	43%
Adjusted Gross Profit	**$45.1**	**$46.0**	**$47.0**
Adj. Gross Margin (%)	41%	41%	41%
Adjusted EBITDA	**$10.8**	**$11.4**	**$12.5**
Adj. EBITDA Margin (%)	10%	10%	11%
Operating Income	**-$50.7**	**-$45.9**	**-$43.2**
Operating Income Margin (%)	-46%	-41%	-38%
Net Income	**-$52.3**	**-$46.0**	**-$35.2**
Net Income Margin (%)	-47%	-41%	-31%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

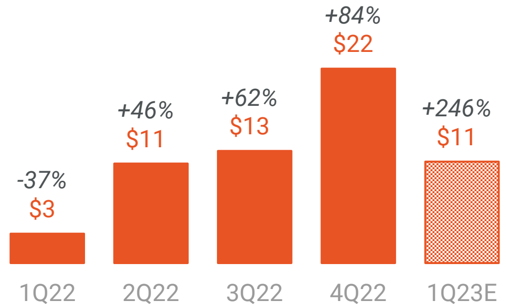
Gross Merchandise Value/YoY Growth



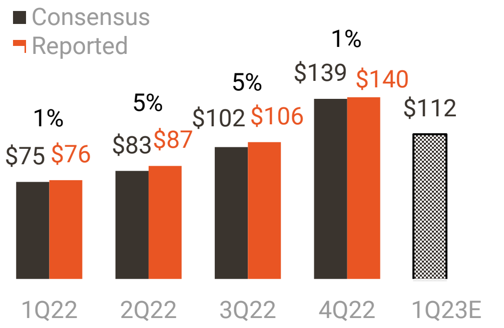
Revenue/YoY Growth



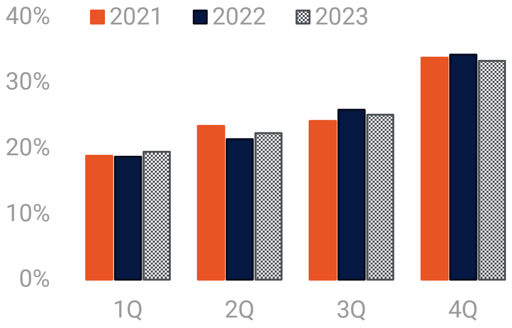
Adjusted EBITDA/YoY Growth



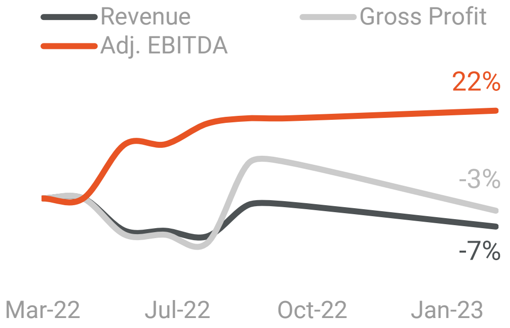
Revenue - Consensus vs. Reported



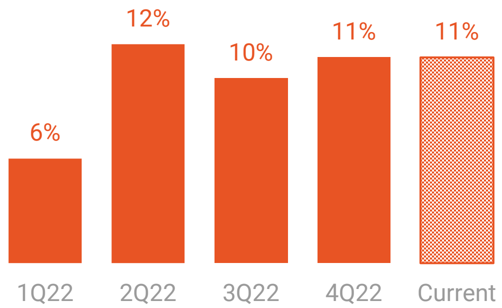
Revenue Seasonality



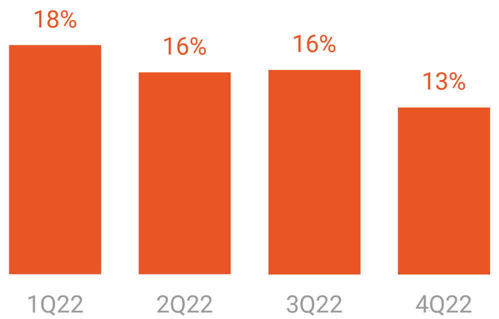
1Q23 Cons. Revisions



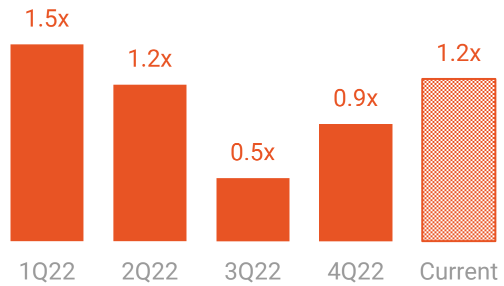
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio(1)



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Source: Company filings; FactSet

1) Put/Call Ratio over 7-days leading into earnings

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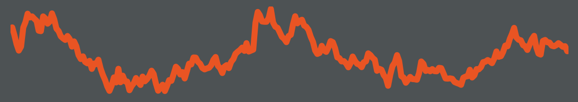
Global-e


GLBE TTM Price Performance

Price as of 03/17/23	$28.74	**Shares Out (mm):**	156
Market Cap (mm):	$4,497	**Beta (since IPO):**	2.0
52-Wk Range:	$15.63 - $37.65	**Avg. Daily Vol (mm):**	1.1

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QUESTIONS FOR MANAGEMENT

Macro/FX

1) How much of an impact is FX is having on the business? How much does FX impact top-line metrics vs. bottom-line?
2) What is management seeing in terms of consumer spending trends since the last earnings call? Any specific geographies or spend categories with notable acceleration or deceleration?
3) How does management expect e-commerce will fare in the event of a broader economic pullback? Will companies be less incentivized to expand into new geographies or possibly more so?
4) How is Global-e's market opportunity changing as the COVID-19 pandemic is further in the past?
5) Is there any change in new deal activity and the build up of the pipeline? Can management provide some insight into expectations regarding pipeline contribution from Global-e's recent investments in the APAC region?

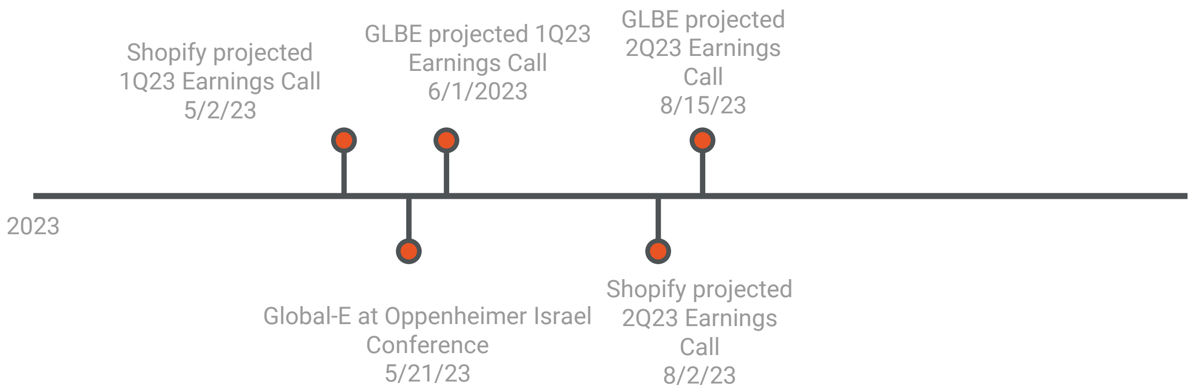
Borderfree

6) What does Borderfree add to the Global-e platform, what is the primary source of synergies to be realized?
7) What does the unit economic profile of Borderfree look like relative to core Global-e?
8) What factors of the Borderfree business model cause it to have less favorable gross margins vs. core Global-e?

General

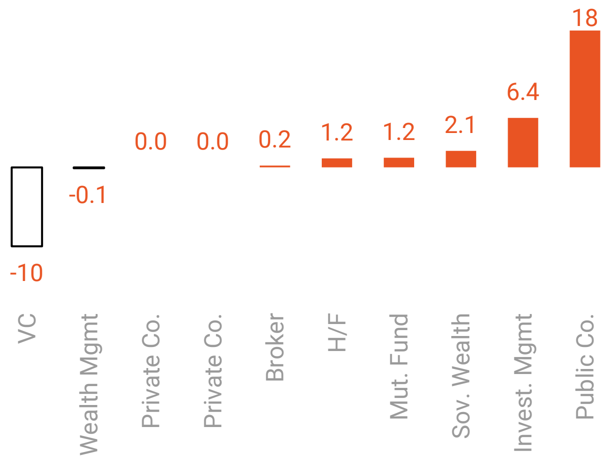
8) Can management discuss the Shopify agreement, what opportunities within that are most exciting going forward?
9) For FY23, current consensus estimates imply a gross take rate of 16.6%, 10bps higher than FY22 gross take rate of 16.5%, however this expected YoY increase is much more modest compared to recent years. What factors does management expect to materially effect gross take rate in FY23 and, given gross take rate compressed ~35bps in 4Q22, does it expect gross take rate to be relatively flat vs. last year as the street is estimating.
10) Since GLBE's IPO, net take rate has increased by 50bps YoY on average, yet consensus currently implies a net take rate of 6.6% in FY23, a modest 10bp increase vs. historical trends. Does Global-e expect to continue to realize operating efficiencies (e.g. cost of revenue as a % of GMV falls as GMV rises)?
11) The 4Q guide came in below consensus expectations largely due to a large customer moving their go-live date (due to a third-party), how common is timeline slippage?
12) How does management think about the long-term path towards profitability? What is the trajectory to get there?
13) Global-e's margins have been steadily improving. Is this expansion primarily attributable to mix-shift (faster growth in higher margin segments) or are there other underlying factors driving the improvement? What does management see as a sustainable run-rate margin over the long-term?
14) Global-e completed the Borderfree acquisition in July, what is the priority for capital allocation going forward?

POTENTIAL CATALYSTS

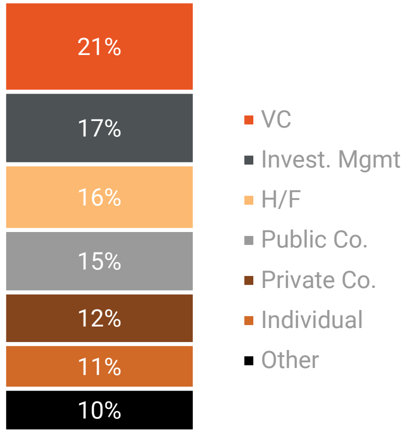


SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)

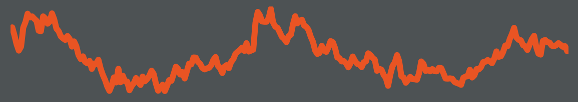


Ownership Breakdown



Source: Company filings; FactSet

GLBE TTM Price Performance



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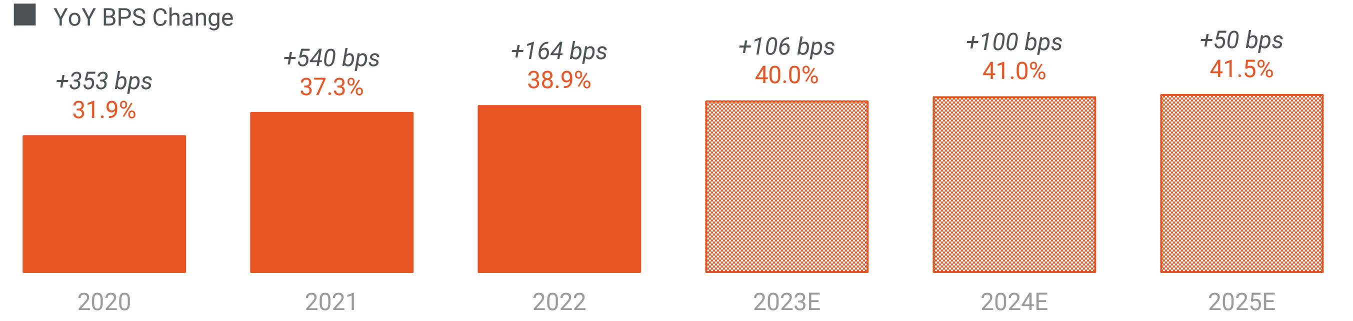
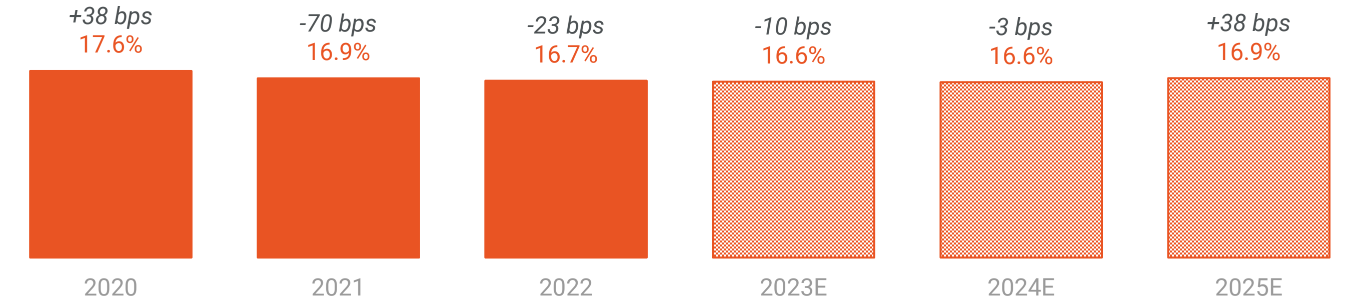
$ in millions, except per share amounts

COMPANY RATIOS/MARGIN ANALYSIS

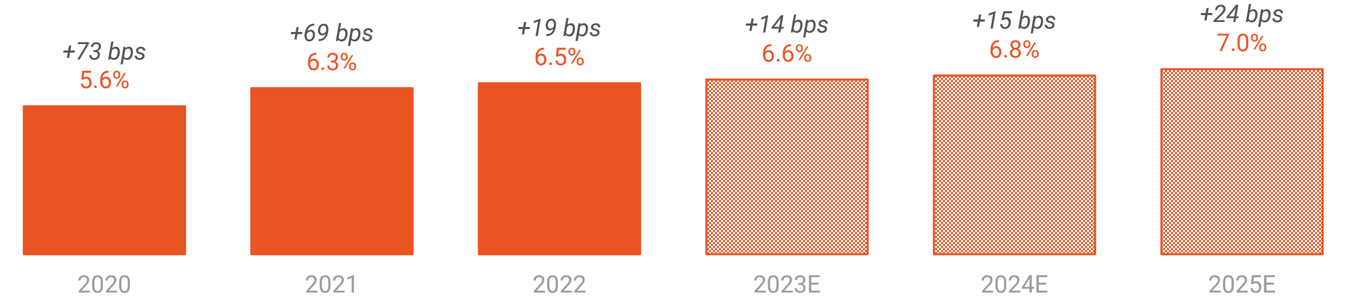
Gross Margin (% of Revenue)



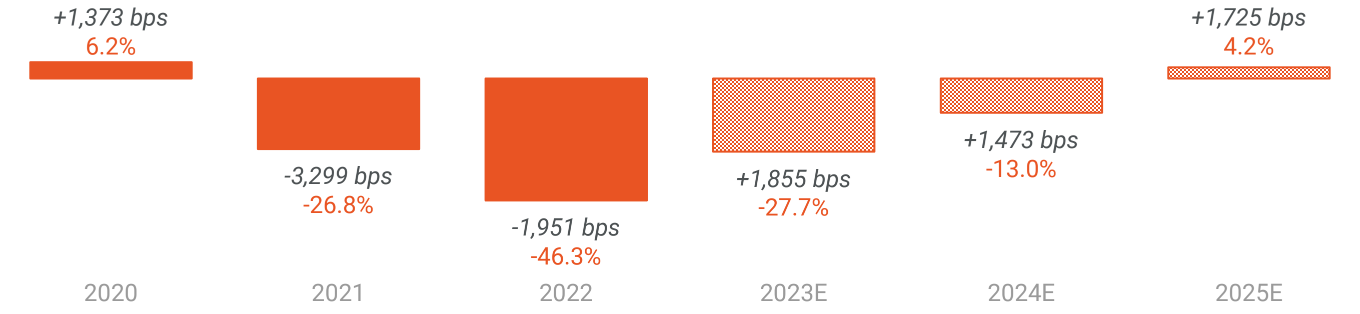
Gross Take Rate (% of GMV)



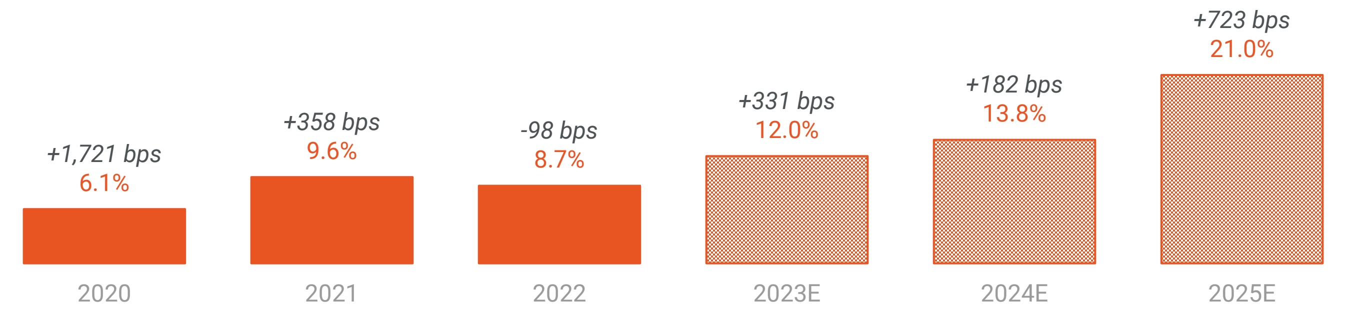
Net Take Rate (% of GMV)



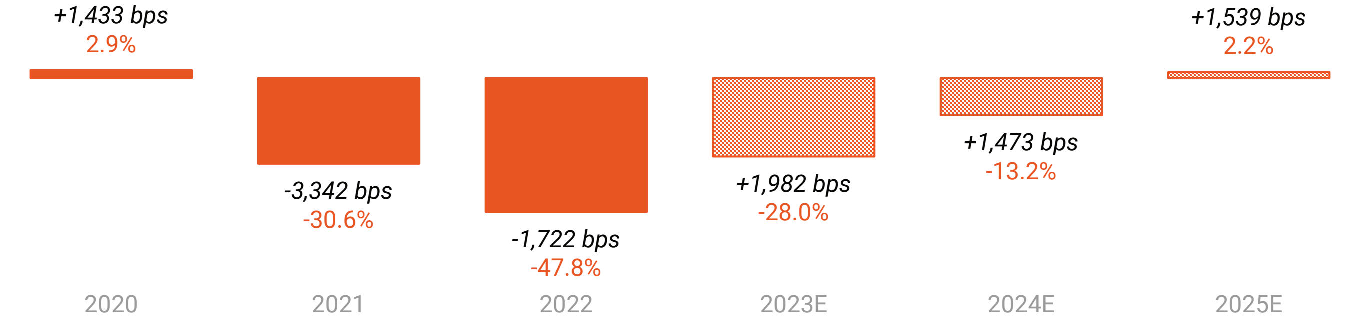
Operating Margin (% of Revenue)



Adjusted EBITDA Margin (% of Revenue)



Net Income Margin (% of Revenue)



Source: Company filings, FactSet

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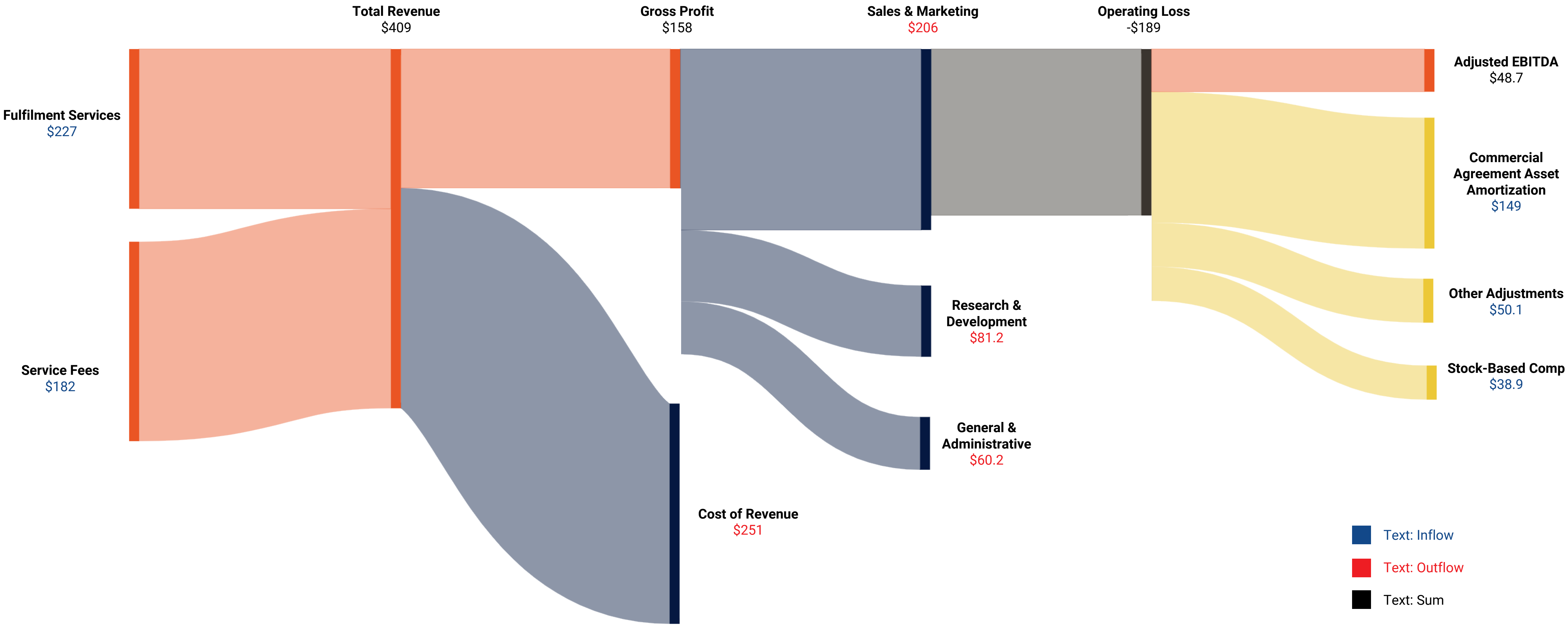
P&L VISUALIZATION – TTM



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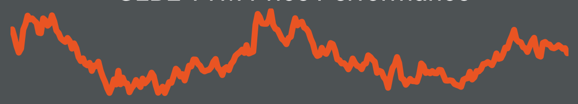
Source: Company filings; FactSet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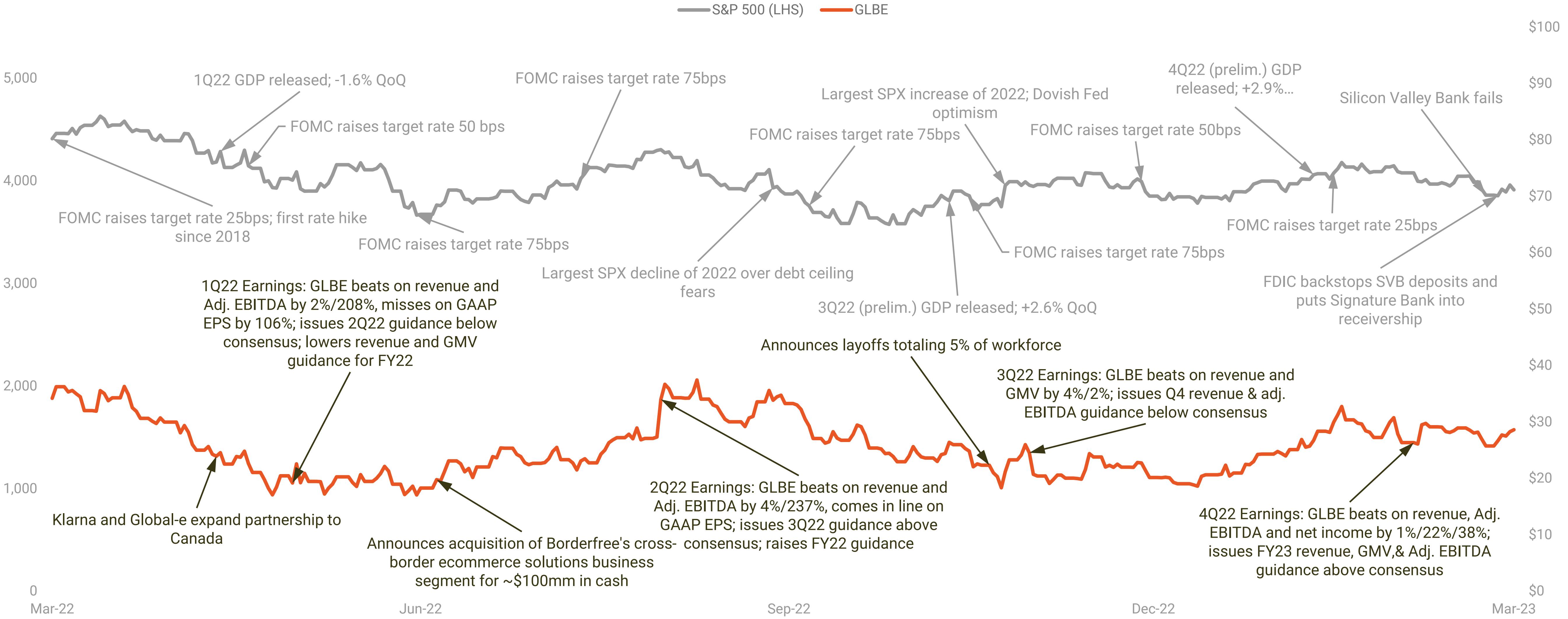
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

4Q22 (prelim.) GDP released; +2.9%...

Silicon Valley Bank fails

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 50bps

FOMC raises target rate 25bps; first rate hike since 2018

FOMC raises target rate 75bps

FOMC raises target rate 25bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

3Q22 (prelim.) GDP released; +2.6% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

1Q22 Earnings: GLBE beats on revenue and Adj. EBITDA by 2%/208%, misses on GAAP EPS by 106%; issues 2Q22 guidance below consensus; lowers revenue and GMV guidance for FY22

Announces layoffs totaling 5% of workforce

3Q22 Earnings: GLBE beats on revenue and GMV by 4%/2%; issues Q4 revenue & adj. EBITDA guidance below consensus

Klarna and Global-e expand partnership to Canada

Announces acquisition of Borderfree's cross-border ecommerce solutions business segment for ~$100mm in cash

2Q22 Earnings: GLBE beats on revenue and Adj. EBITDA by 4%/237%, comes in line on GAAP EPS; issues 3Q22 guidance above consensus; raises FY22 guidance

4Q22 Earnings: GLBE beats on revenue, Adj. EBITDA and net income by 1%/22%/38%; issues FY23 revenue, GMV,& Adj. EBITDA guidance above consensus

Source: Company filings; FactSet

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Lemonade

LEMONADE PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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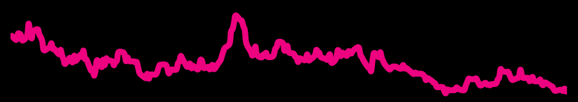
Zachary Gunn | Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

Lemonade

LMND TTM Price Performance



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Market Cap (mm):	$925	**Beta (Since IPO):**	2.3
52-Wk Range:	$12.75 - $32.97	**Avg. Daily Vol (mm):**	1.2

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COMPANY OVERVIEW

Lemonade is a digital insurance provider that was founded in 2015. The company specializes in renters, homeowners, pet, life, and car insurance. Lemonade leverages artificial intelligence and technology to streamline the process around receiving coverage and making insurance claims.

Lemonade's renters and homeowners insurance products are available throughout the U.S., as well as contents and liability insurance in Germany, Netherlands, France, and the U.K..

The company acquired digital auto insurance provider Metromile in July 2022. This acquisition expanded the company's car insurance by adding a flexible, pay-per-mile product.

PRICING

Home
FROM $5/MO

Car
FROM $30/MO

Renters
FROM $25/MO

Pet
FROM $10/MO

Term Life
FROM $9/MO

KEY DEBATES

1. **Cross Sell/Mix Shift:** Lemonade's ADR increased to a new high of 86% in 4Q22 implying customers are increasing the number of policies and premiums per policy with Lemonade. However, management has highlighted in Illinois, where all Lemonade products are offered the ADR is 95%. While increasing ADR is an important component of improved economics, there may be near-term headwinds on ADR as Lemonade parts way with mis-priced customers, particularly in an inflationary environment.

2. **Loss Ratios:** Lemonade's 4Q gross loss ratio was 89% however, excluding the impact of CATs in both 3Q and 4Q, there would have been an additional 9 ppt improvement between the periods. This remains well below managements long-term targets for a loss ratio of 75% or less. The overall loss ratio is a key driver of Lemonade's path towards profitability. Specifically, managements base-case scenario for profitability by mid-2026 requires a 70% gross loss ratio.

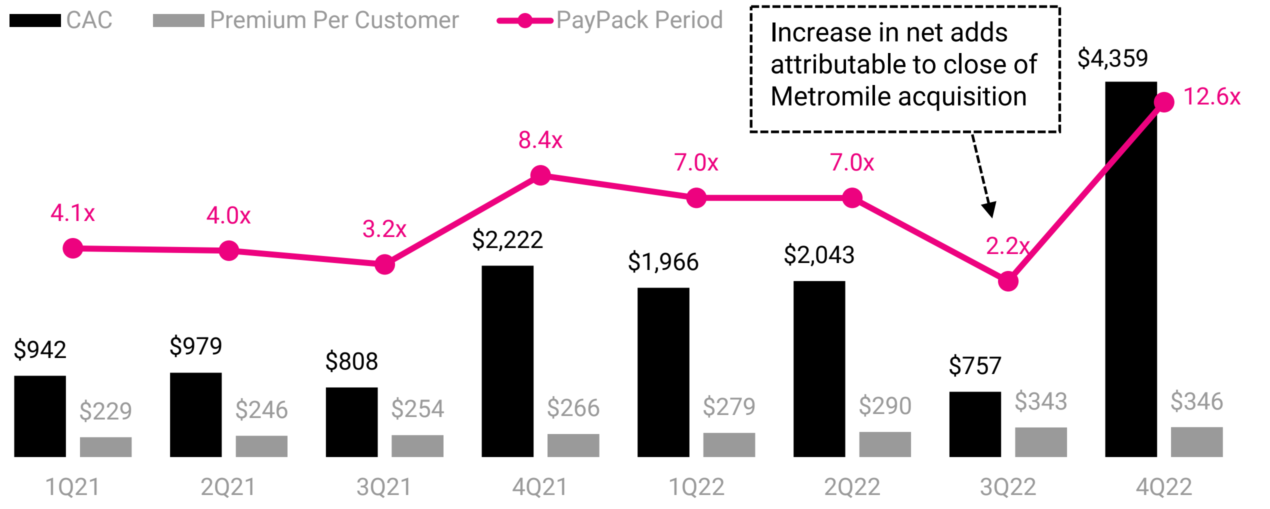
3. **Customer Acquisition Costs:** Sales and marketing costs made up 31% of 4Q22 revenue and 54% of FY22 revenue. The high level of CAC has been a key investor concern as there is relatively high confidence that loss ratios will come down over time, therefore improving the LTV/CAC for customers is of paramount importance. Particularly as Lemonade has yet to reach significant scale or offer its full product suite in several markets.

REVENUE MODEL

Lemonade reports revenue in the following 4 segments:

- **Net Earned Premium (67% of TTM Total Revenue):** Net earned premium is the earned portion of gross written premium less any premium ceded when the company shares the balance sheet risk with reinsurers. This represents the pro-rated portion of written premiums over an average one-year term for policies (six-month terms for products such as the pay-per-mile car insurance product).
- **Ceding Commission Income (25% of TTM Total Revenue):** Fees that the company receives for acquiring and underwriting insurance policies when the company cedes gross earned premium to reinsurers. This revenue stream is recognized on a pro-rated basis, based on the terms of the underlying policies written (on average 1 year).
- **Commission and Other Income (5% of TTM Total Revenue):** Lemonade earns commissions from insurance policies issued through third-party providers. This revenue segment is recognized at policy issuance.
- **Net Investment Income (3% of TTM Total Revenue):** Interest earned the company's investment portfolio, which consists of cash and cash equivalents, short-term investments, fixed-maturity securities, and equity securities. Investment fees are netted against the interest earned on the portfolio. The company's investment portfolio is measured by amortized cost.

GROSS LOSS RATIO BY PRODUCT



Source: Company filings

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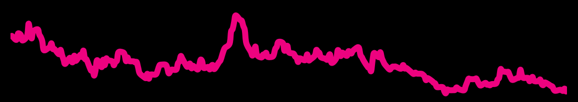
Lemonade

LMND TTM Price Performance



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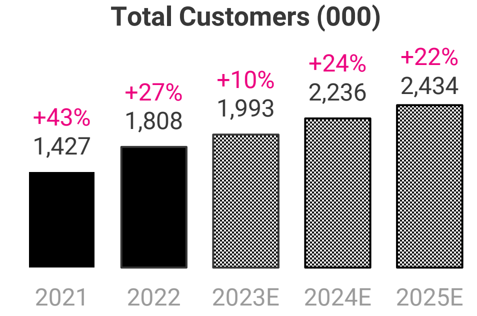
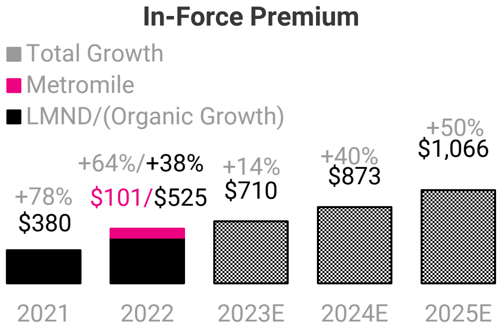
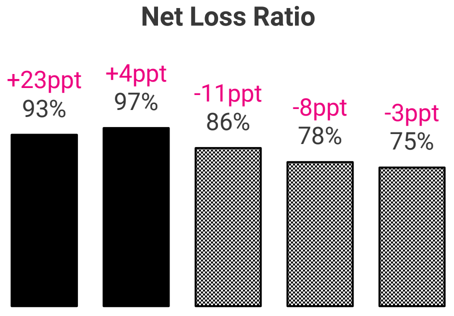
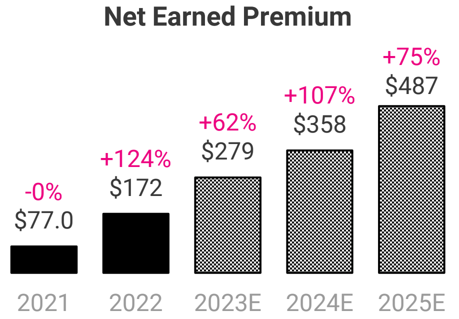
($ in millions, except where otherwise noted)

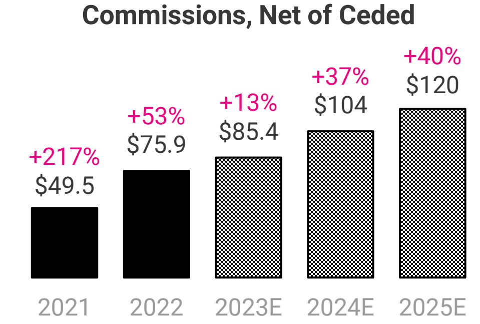
HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

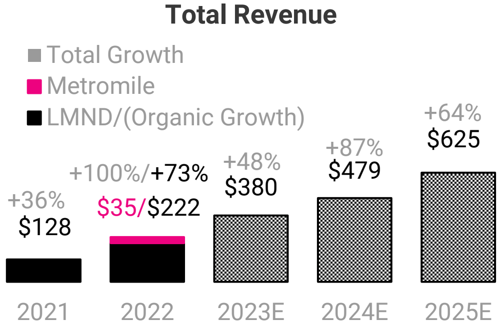

Total Customers (000)

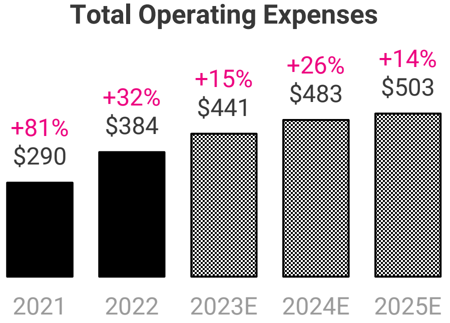

In-Force Premium

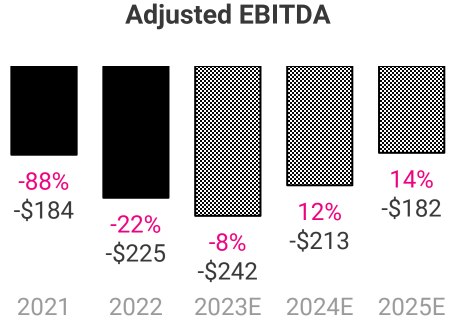

Net Loss Ratio


Net Earned Premium


Commissions, Net of Ceded

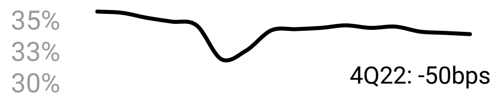

Total Revenue


Total Operating Expenses


Adjusted EBITDA

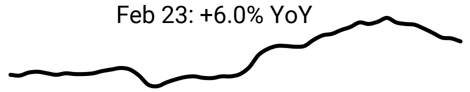
INDUSTRY KPIs

National Renter Rate [2] *(4Q18-4Q22)*

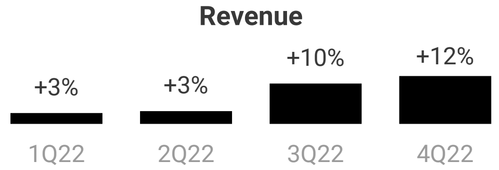


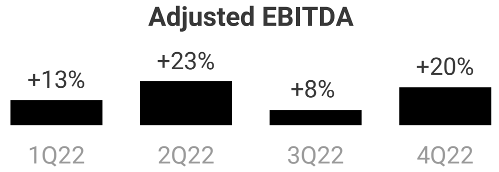
Household Estimates (mm) [2] *(Jan 19-Dec 22)*

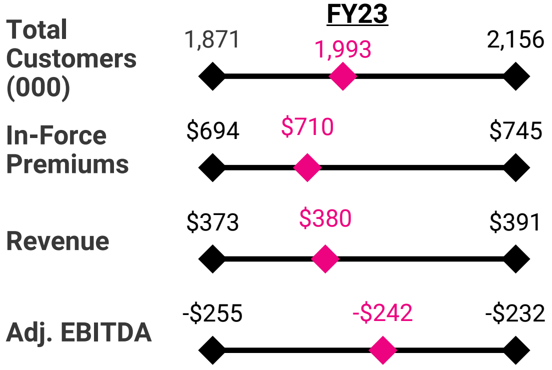
U.S. CPI, YoY [1] *(Jan 19-Feb 23)*



SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES


Revenue


Adjusted EBITDA



PATH TO PROFITABILITY

Worst-Case

IFP CAGR: 20%

Gross Loss Ratio: 78%

~$125mm Minimum Unrestricted Cash Deficit

Cash Deficit in 2027

Base-Case

IFP CAGR: 20%

Gross Loss Ratio: 70%

~$100mm Minimum Unrestricted Cash

Profitability by Mid ‘26

Best-Case

IFP CAGR: 20%

Gross Loss Ratio: 65%

~$175mm Minimum Unrestricted Cash

Profitability by 2025

FT Partners | Equity Research

Source: Company filings
1) FactSet
2) Federal Reserve Economic Data

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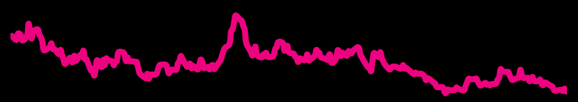
LMND TTM Price Performance



Price as of 03/17/23:	$13.35	Shares Out (mm):	69
Market Cap (mm):	$925	Beta (Since IPO):	2.3
52-Wk Range:	$12.75 - $32.97	Avg. Daily Vol (mm):	1.2

VALUATION CONSIDERATIONS

Relative Valuation:

Lemonade is a challenging stock to value given its growth story, lack of profitability and end-market. In order to balance Lemonade's top-line growth while also providing a more conventional valuation baseline both approaches are provided. Lemonade trades at a 6x NTM EV/GP multiple, 5x below its average multiple of 11x. **If Lemonade were to trade in-line with its peer group on a P/BV basis it would imply a $22 price (63% upside), assuming STM gross profit of ~$186mm.** Lemonade has succeeded in bringing tremendous value to customer but has yet to demonstrate its ability to bring loss ratios down closer to industry averages or acquire customers at lower costs, which has weighed on the stock.

DCF Valuation:

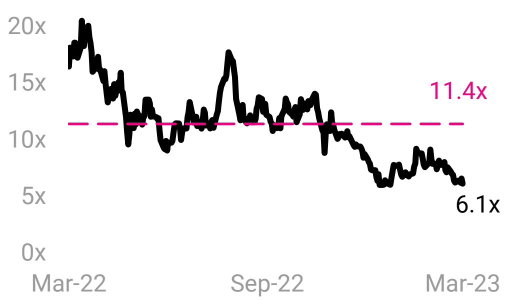
Scenario 1 – Current Price $13, 0% Upside: This DCF outlines a reasonable combination of revenue growth and margin expansion assumptions to justify a 12-month forward price target that matches the current share price. To achieve this price target, the company must grow the top-line revenue less loss and loss adjustment) by 98%/25%/37% in FY23/FY24/FY25. After this three-year period, revenue growth will decelerate before reaching a long-term growth of 3%. Operating margins are expected to remain negative through FY26, after which the company will approach operating margins of ~21% by the end of the forecast period. Assuming shares remain at the current price to date, this would imply an EV/GP multiple of 3.3x (based on current STM consensus gross profit of $186mm).

Scenario 2 – Lower CAC($23, 71% upside): This DCF scenario assumes Lemonade is able to reach consensus targets for total customers and total revenue (net of loss and loss adjustment) with lower-than-expected sales and marketing expenses. Total revenue growth remains at 98%/25%/37% in FY23/FY24/FY25, but operating profit is achieved by FY25, as opposed to FY27 in the base scenario. The underlying assumption implies that Lemonade can grow its customer base in-line with consensus, at a lower CAC. Long-term targets for operating profit margin remain the same at ~21%. All else equal, this scenario points to a 12-month price target of $23 (71% upside). Based on the current STM consensus gross profit, this implies an EV/GP multiple of 6.9x.

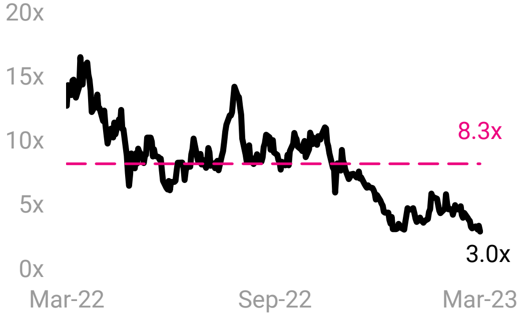
Scenario 3 – Loss Ratios ($10, 28% downside): This DCF scenario assumes Lemonade is unable to deliver on improved risk selection across insurance products excluding the renters book. Annual net revenue (total revenue less loss and loss adjustment expense) growth decelerates to 68%/41%/31% in FY23/FY24/FY25, before reaching a terminal growth rate of 3%. These assumptions point to a 12-month price target of $10 (28% downside). Based on the current STM consensus gross profit, this implies an EV/GP multiple of 2.4x.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

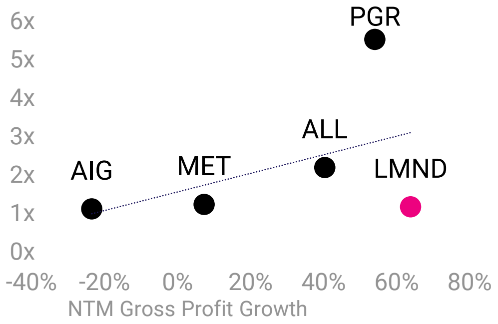
LMND NTM EV/GP & 1-Year Avg.



NTM EV/GP vs. NSDQ & 1-Year Avg.



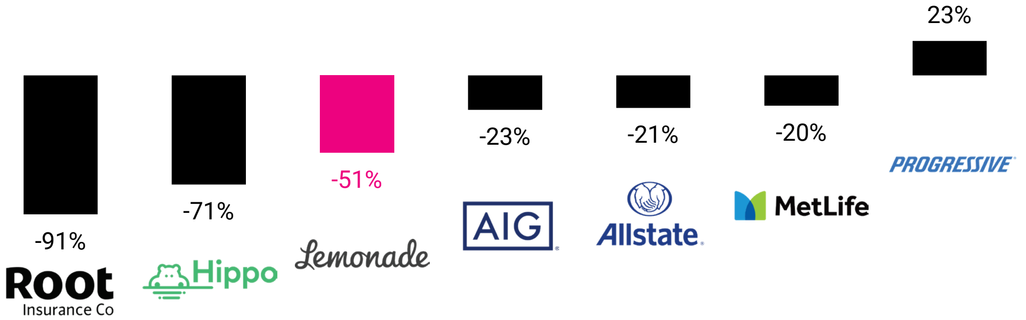
Price/Book Value vs. NTM GP Growth



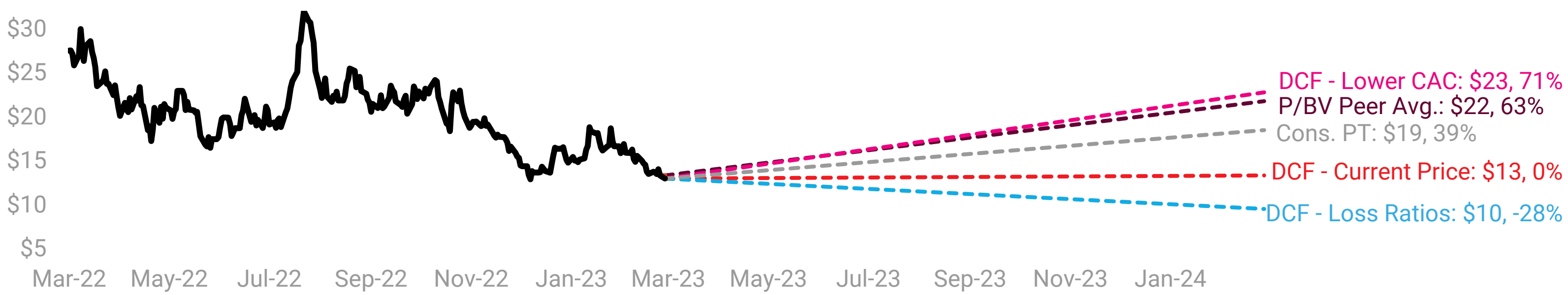
DCF Assumptions(1)

10-Yr RFR	**3.4%**
Cost of Equity	**21.1%**
Cost of Debt	**5.0%**
WACC	**20.5%**
Beta	**2.5**
DCF FCF Terminal Growth Rates	**3.0%**
SBC Terminal Growth Rates	**1.0%**
Equity Value Reduction from Present + Future SBC (mm)	**$522**

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges

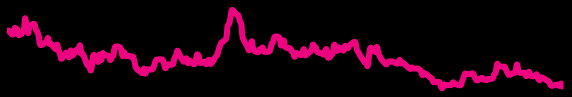


Source: Company filings; FactSet

1) SBC in millions

Lemonade

LMND TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) net loss outcomes and 2) customer acquisition costs. These two factors represent the primary drivers for Lemonade in the immediate-term.

Consensus Case:

The average consensus price target for Lemonade is $18.50 representing 39% upside. If Lemonade shares were to trade at this price in 12-months, it would imply a NTM EV/GP multiple of 5.2x.

Upside Cases:

(+) $22.28, 67% Upside: This scenario assumes faster premium growth vs. consensus and a 50bps improvement to consensus net loss ratios for FY23. This results in STM GP growth of 54%. As it stands, consensus is implying peak losses were realized in 3Q22. Net loss ratios are expected to remain between 89% - 80% throughout the year (vs. the company long-term goal of 75% - 70%). The scenario indicates incremental upside assuming Lemonade can lean more heavily on the renters book, while selecting more-favorable risk in the homeowners segment. This scenario implies 67% upside with a 7.0x NTM EV/GP multiple in 12-months.

(+-) $21.01, 57% Upside: This scenario assumes more favorable risk selection/lower-than expected net loss ratios, as well as higher-than expected CAC. In this case, Lemonade meets FY23 consensus estimates for total customer with lower-than-expected sales and marketing expenses. This scenario implies 57% upside with a 6.5x NTM EV/GP multiple in 12-months.

(-+) $13.75, 3% Upside: This scenario assumes sustained net loss ratios through FY23, slightly offset by improved CAC. This scenario assumes the multiple is better insulated by improved CAC, as investors will likely reward a greater focus on profitability. This implies 3% upside with a 6.0x NTM EV/GP multiple in 12-months.

(++) $23.55, 76% Upside: The best-case scenario assumes more favorable risk selection/ lower-than expected net loss ratios, as well as customer acquisition cost efficiencies. Although CAC doesn't impact gross profit, Lemonade would demand a higher multiple if it were to deliver on consensus total customers with lower-than-expected sales and marketing expenses. This scenario implies 76% upside with a 7.5x NTM EV/GP multiple in 12-months.

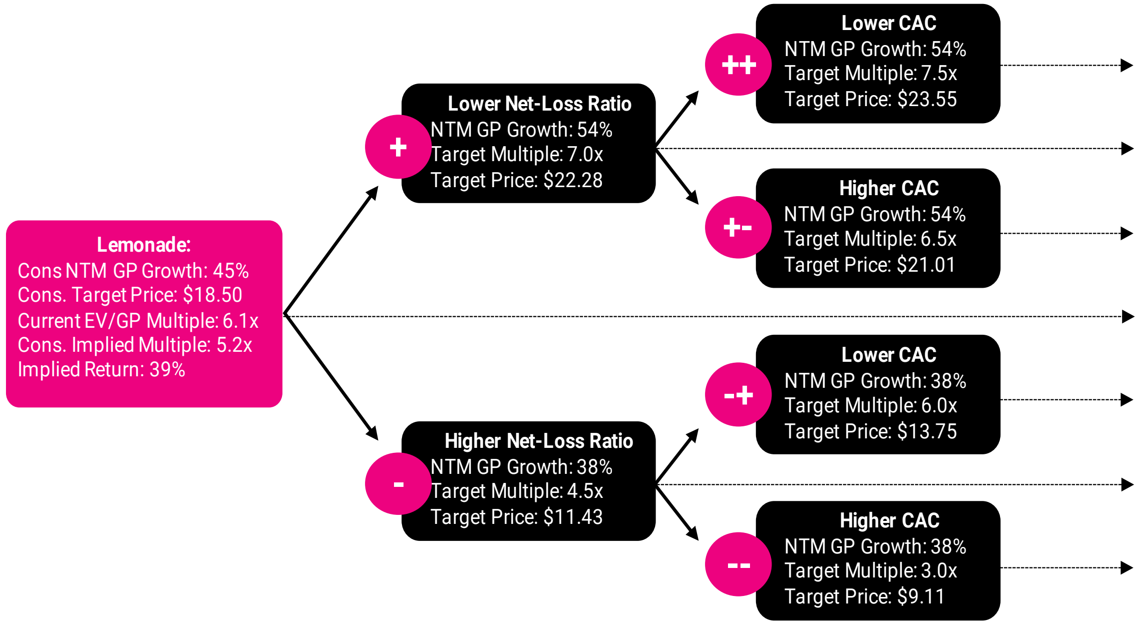
Downside Cases:

(-) $11.43, 14% Downside: This scenario assumes net loss ratios remain at FY22 levels (excl. the outsized CAT impact in 3Q22) through FY23. The scenario implies Lemonade cannot improve risk selection in the book (excluding renters), which materializes in NTM GP growth of 38% and NTM EV/GP multiple of 4.5x.

(--) $9.11, 32% Downside: The worst-case scenario assumes net loss ratios remain at FY22 levels, compounded by higher-than expected CAC. In this case, Lemonade is able to deliver on FY23 consensus estimates for total customers, with higher sales and marketing expenses relative to consensus. This implies 32% downside with a NTM EV/GP multiple of 3.0x in 12-months.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Lemonade:
Cons NTM GP Growth: 45%
Cons. Target Price: $18.50
Current EV/GP Multiple: 6.1x
Cons. Implied Multiple: 5.2x
Implied Return: 39%

+ **Lower Net-Loss Ratio**
NTM GP Growth: 54%
Target Multiple: 7.0x
Target Price: $22.28

++ **Lower CAC**
NTM GP Growth: 54%
Target Multiple: 7.5x
Target Price: $23.55

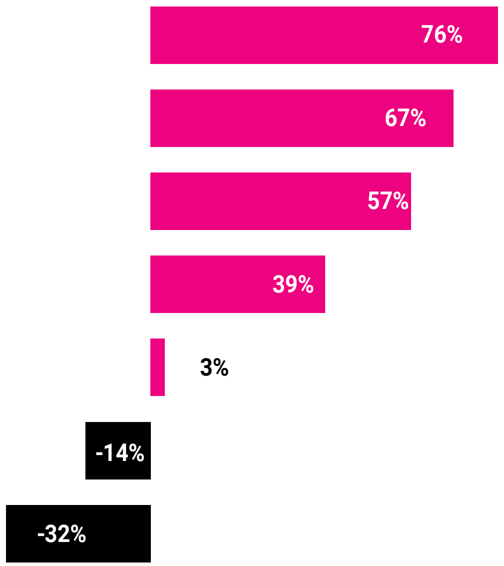
+- **Higher CAC**
NTM GP Growth: 54%
Target Multiple: 6.5x
Target Price: $21.01

- **Higher Net-Loss Ratio**
NTM GP Growth: 38%
Target Multiple: 4.5x
Target Price: $11.43

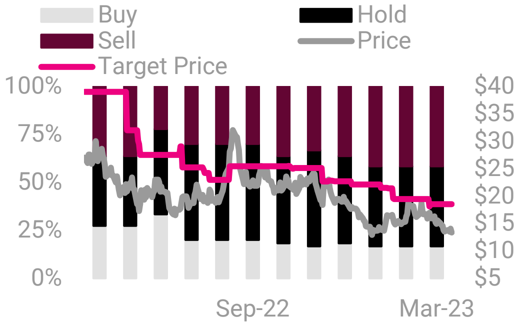
-+ **Lower CAC**
NTM GP Growth: 38%
Target Multiple: 6.0x
Target Price: $13.75

-- **Higher CAC**
NTM GP Growth: 38%
Target Multiple: 3.0x
Target Price: $9.11

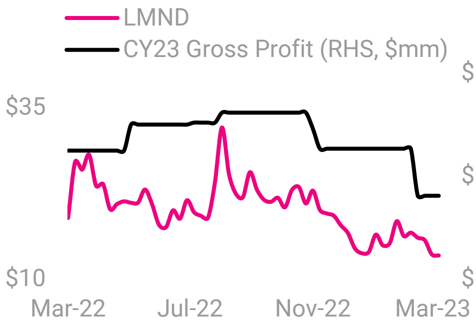
12-Month Price Return



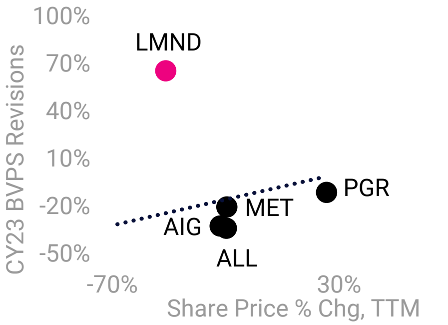
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

Lemonade

LMND TTM Price Performance

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FINANCIAL TECHNOLOGY PARTNERS

($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: The Lemonade 4Q22 earnings call highlighted mixed-results on KPIs with top-line beats. Net loss ratios declined, although they significantly missed consensus. 1Q23 total revenue guidance came in 3% above expectations, FY23 guidance was largely below consensus across all metrics. The stock increased 3.2% post earnings call.

Results Recap: Total customers grew 27% YoY to 1,808K total, coming in 2% below consensus. In-force premiums totaled $625mm, coming in just above consensus of $623mm. Premium per customer beat consensus by 2%, totaling $346 (up 30% YoY). Net earned premium increased 149% YoY to $63.2mm, representing a 12% beat over consensus. Commissions (net of ceded) and net investment income beat by 6% and 55%, respectively. As a result, total revenue increased 116% YoY to $88.4mm, also 12% better than consensus. Operating income came in at -$68.1mm, coming in far better than consensus of-$81.2mm. Adjusted EBITDA of -$51.7mm also beat consensus by 20%.

Guidance Recap: FY23 in-force premiums are expected to increase 12% to $695mm - $700mm at the midpoint, which came in 13% below pre-print consensus. Gross earned premiums are expected to total $632mm - $636mm (+30% YoY at the midpoint), 7% below pre-print consensus. Total revenue guidance of $375mm - $379mm came in 2% below pre-print consensus. Adjusted EBITDA is expected total negative $245mm – negative $240mm, approximately in line with consensus of -$243mm. **1Q23** guidance calls for in-force premiums to grow 52% YoY at the midpoint to $635mm - $637mm by the quarter's end (2% below pre-print consensus at the midpoint). Gross earned premiums are expected to total $148mm - $150mm (-2% vs. pre-print consensus at the midpoint). Total revenue guidance of $87mm - $89mm came 3% in above pre-print consensus of $86mm at the midpoint, while adjusted EBITDA is expected to total negative $65mm – negative $63mm (-4% vs. pre-print consensus at the midpoint).

Incremental From the Call:

- **Customer Acquisition Costs:** Sales and marketing expense fell 27% YoY vs. 62% YoY growth in 4Q21. Customer acquisition costs as a percentage of gross-earned premium declined to 18%, compared to 42% in 4Q21. Management disclosed the fact that the most recent quarter represents an accurate proxy for sales and marketing expenses moving forward. Assuming these expenses remain in line with this guidance, while considering the 1Q23 guide for GEP, sales and marketing expenses should total ~$27mm next quarter and $114mm for FY23. These results are 5.6%/10.2% better-than consensus coming into the quarter. While the operating efficiencies were well-received, the results also highlight the fact that customer acquisition spend is less efficient YoY. TTM sales and marketing expense per net add totaled $4,359 vs. $2,222 realized in 4Q21. Consensus expects total customers to increase 27%/19% YoY for 1Q23 and FY23, respectively. This dynamic, contextualized with the soft guidance surrounding sales and marketing expense, results in significant customer acquisition cost efficiencies. TTM sales and marketing/net add would decline 36%/7% YoY in 1Q23 and FY 23, respectively. This dynamic, in the context of conservative sales and marketing expense guidance, points to potential customer acquisition cost efficiencies. If this holds, TTM sales and marketing/net add would decline 36%/7% YoY in 1Q23 and FY23, respectively.
- **Loss Ratio:** Lemonade indicated that peak losses were realized in the third quarter, after reporting a 1% decline in its net loss ratio to 97.0% vs. consensus calling for 90.0% in 3Q22. Management disclosed that it is in the process of rolling-off existing customers that were unfavorably priced in an effort to reduce loss ratios. Long-term goal for gross loss ratios are below 70%-75% (vs. 89% in 4Q22). The company's loss ratios in its renters portfolio remains well below this target at 65% as of 3Q22. The company also highlighted the fact that it would shift mix towards renters insurance, while the homeowners product remains less profitable than the rest of the book.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs.▲	%▲
Total Customers (000's)	**1,808**	**1,846**	-38.3	-2%
growth (%, yoy)	*27%*	*29%*		
In-Force Premiums	**$625**	**$623**	$1.75	0%
growth (%, yoy)	*64%*	*64%*		
Premium per Customer	**$346**	**$338**	$7.82	2%
growth (%, yoy)	*30%*	*27%*		
Gross Loss Ratio	**89.0%**	**88.1%**		-88bps
growth (bps, yoy)	-103bps	-807bps		
Net Loss Ratio	**97.0%**	**90.0%**		-704bps
growth (bps, yoy)	-103bps	-807bps		
Net Earned Premium	**$63.2**	**$56.2**	$7.00	12%
growth (%, yoy)	*149%*	*121%*		
Commissions, Net of Ceded	**$21.5**	**$20.2**	$1.26	6%
growth (%, yoy)	*46%*	*38%*		
Net Investment Income	**$3.70**	**$2.39**	$1.31	55%
growth (%, yoy)	*311%*	*166%*		
Total Revenue	**$88.4**	**$78.8**	$9.57	12%
growth (%, yoy)	*116%*	*92%*		
Adjusted Gross Proft	**$17.9**	**$19.1**	-$1.20	-6%
Adjusted Gross Profit Margin (%)	*20%*	*24%*		-398bps
Total Operating Expenses	**$95.0**	**$109**	$14.4	15%
growth (%, yoy)	*12%*	*29%*		
Adjusted EBITDA	**-$51.7**	**-$64.4**	$12.7	20%
Adjusted EBITDA Margin (%)	*-58%*	*-82%*		2,317bps

FY23 Guidance	New	%▲	Cons.	%▲
In-Force Premiums	**$695 - $700**	**NA**	**$802**	-13%
growth (%, yoy)	*12%*		*28%*	
Gross Earned Premium	**$632 - $636**	**NA**	**$680**	-7%
growth (%, yoy)	*29%*		*39%*	
Total Revenue	**$375 - $379**	**NA**	**$385**	-2%
growth (%, yoy)	*47%*		*50%*	
Adjusted EBITDA	**($245) - ($240)**	**NA**	**($243)**	0%
Adjusted EBITDA Margin (%)	*-64%*		*-63%*	-107bps

Source: Company filings; FactSet; Visible Alpha

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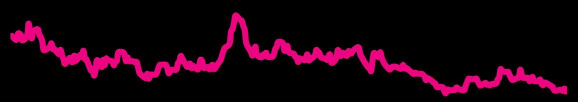
Lemonade

LMND TTM Price Performance



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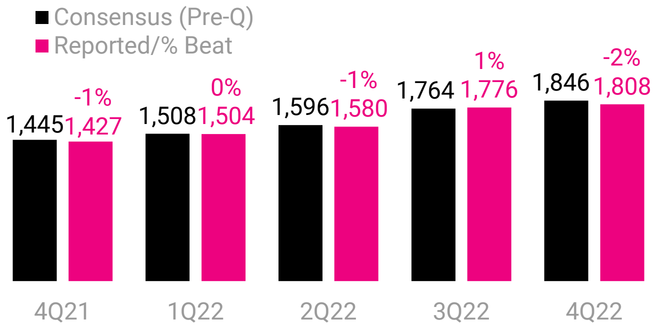
FINANCIAL TECHNOLOGY PARTNERS

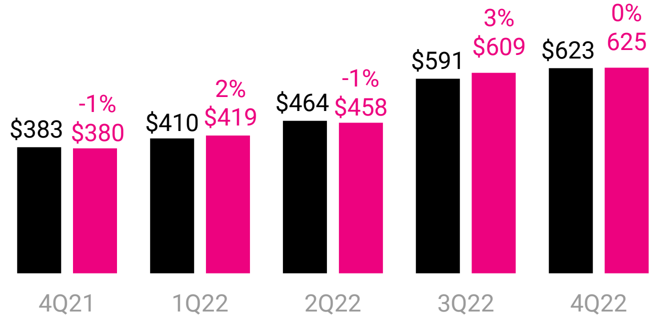
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

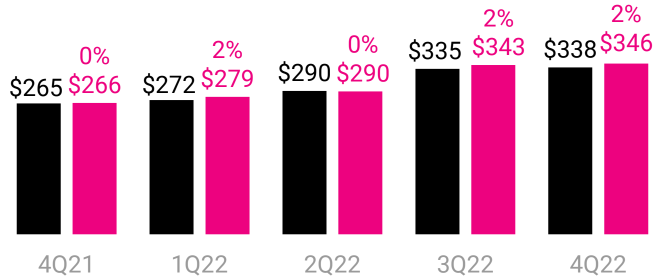
Total Customers (000's)



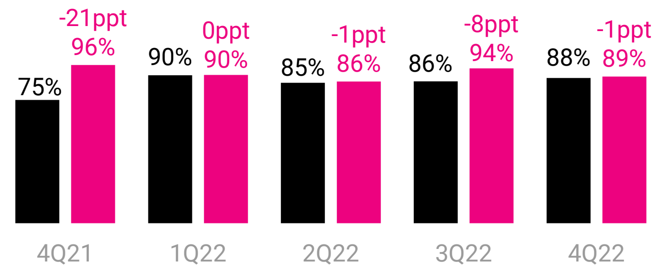
In-Force Premium



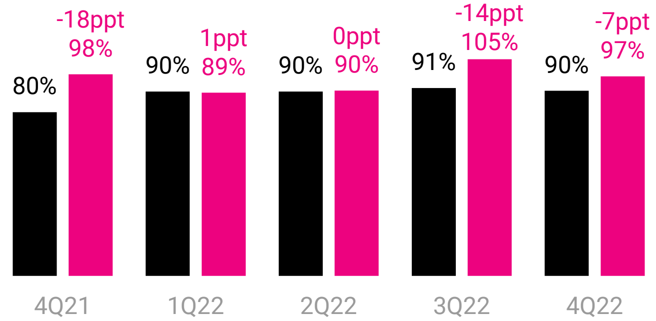
Premium per Customer



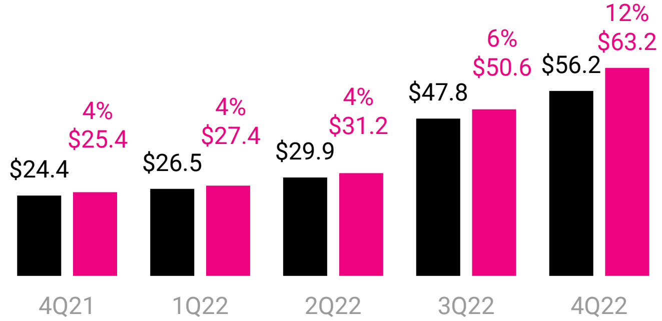
Gross Loss Ratio



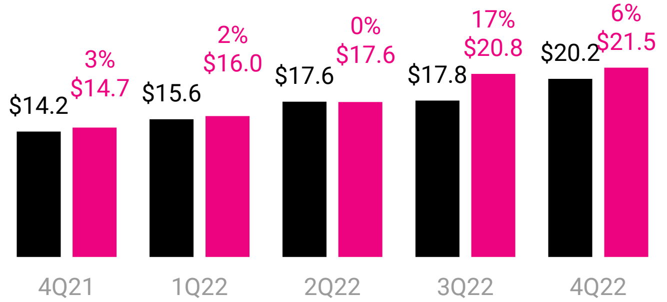
Net Loss Ratio



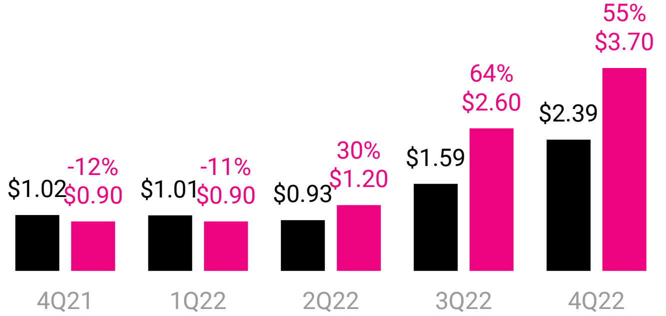
Net Earned Premium



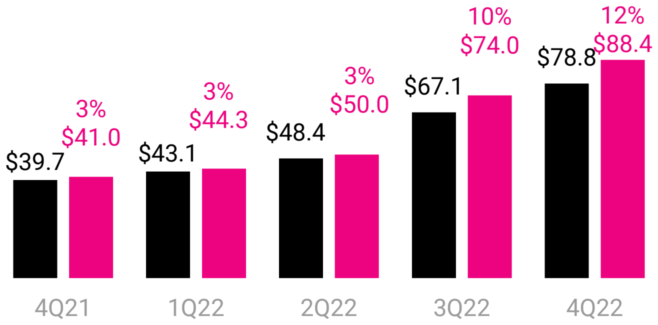
Commissions, Net of Ceded



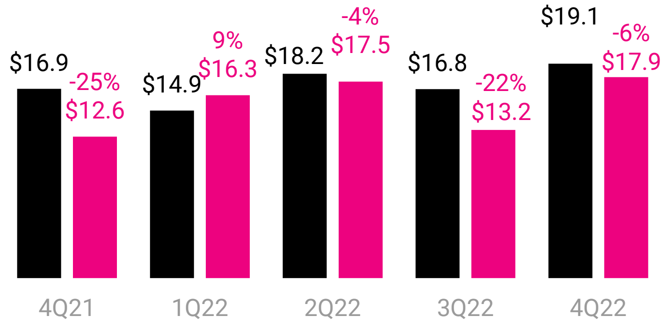
Net Investment Income



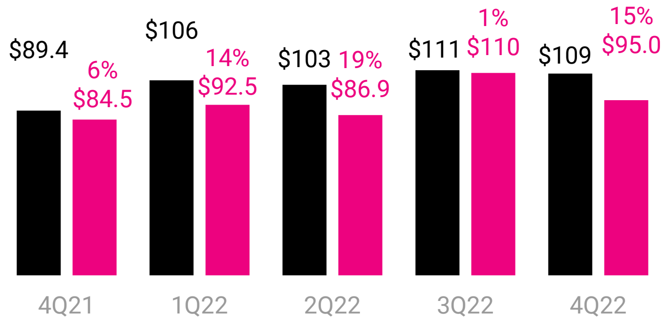
Total Revenue



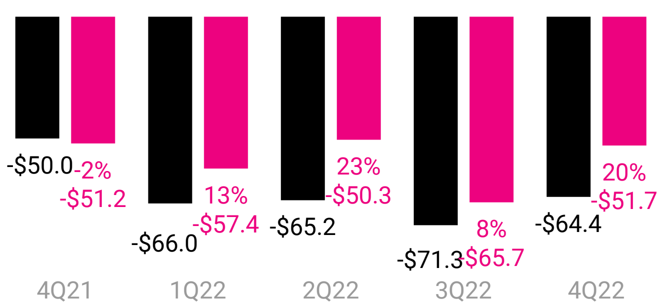
Adjusted Gross Profit



Total Operating Expenses



Adjusted EBITDA



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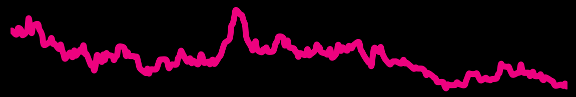

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1Q23 EARNINGS OUTLOOK

Lemonade is expected to report 1Q23 results on May 9th with a call following before the market open on May 10th

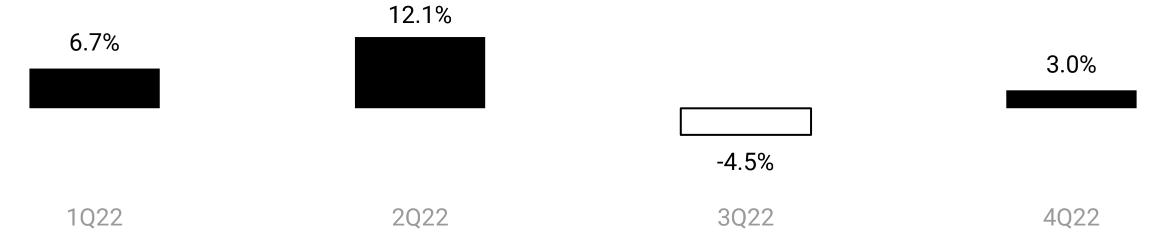
What's in Focus:

Focus for the quarter is likely to be on overall loss ratios and cost structure of the business. Consensus currently expects the gross loss ratio to decline to 88% in 1Q23, a 100bps improvement from 4Q22. However, we note that the 4Q22 gross loss ratio was impacted by 9ppt QoQ due to CAT losses. Consensus also currently expects gross loss ratio to remain at 75%+ through FY26 which is mostly in-line with managements worst-case for profitability. We also remain focused on Lemonade's ability to deliver IFP growth, as consensus is expecting 14% growth in FY23 and then stepping up to 23%/22% in FY24/FY25. If Lemonade was to fall short in delivering IFP growth in FY23, it could drive downward revisions in these longer-term estimates below management's target for 20% IFP CAGR required for Lemonade's path to profitability.

Estimates:

- **KPI's:** Since 4Q22 results, 1Q23 consensus on Lemonade's total customer count has decreased 1.9% to 1,858K. In-force premium consensus has been revised down 1.5% to $638mm. 1Q23 estimates on premium per customer have increased 0.3% to $344, as well. Estimates around Lemonades net loss ratio have increased from 86.7% to 89.4%, while the gross loss rose to 87.6% as well (from 85.3% prior to the 4Q22 earnings release).
- **Revenue:** Consensus on gross written premium for 1Q23 has increased 2.6% to $160mm, from $156mm prior to Lemonade's 4Q22 earnings release. Net written premium has increased 32% to $98.5mm, implying lower ceded premiums for the next quarter. Commissions (net of ceded) has been revised down 5.9% to $20.1mm as well. Net investment income estimates have increased 27.9% to $3.60mm.
- **Expenses:** Loss and loss adjustments for 1Q23 have increased 7.5% to $57.1mm, in line with the increases in estimates on Lemonade's net loss ratio. Consensus is forecasting lower sales and marketing expenses for the coming quarter, as estimates have come down 19.4% to $31.8mm (from $39.5mm prior to the 4Q22 earnings release). These downward revisions were slightly offset by an increase in tech development expenses (+11.3 %), although total operating expense estimates have come down 2.3% overall to $109mm from $111mm pre-print.
- **Profitability:** Adjusted EBITDA consensus for 1Q23 have been revised down 2.2% to -$62.9mm. Meanwhile, net income estimates have increased 1.3% to $79.5mm.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ



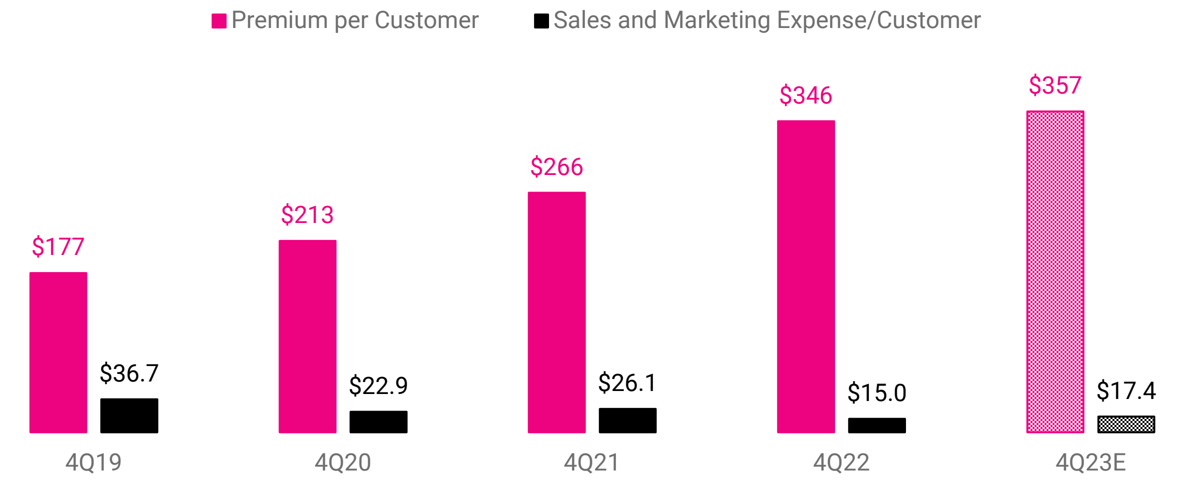
1Q22
- Beat on total revenue and adj. EBITDA by 3%/13%
- Q2 revenue guidance below consensus
- Raised FY revenue and adj. EBITDA guidance

2Q22
- 3% beat on total revenue, 23% beat on adj. EBITDA
- 3Q revenue and adj. EBITDA guidance ahead of consensus

3Q22
- 10% beat on total revenue
- Net loss ratio rose to 105%, up from 90% in Q2
- Raised FY revenue guidance 3.8% at the midpoint

4Q22
- Beat on total revenue and adj. EBITDA by 12%/20%
- Net loss ratio declined to 97% from 105% in 3Q22

PREMIUM PER CUSTOMER/SALES & MARKETING EXPENSE TREND

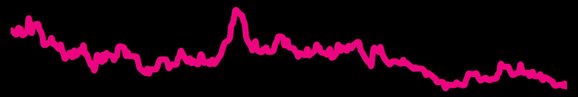


Source: Company filings
1) FactSet

03/20/23 - **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218 0540

Lemonade

LMND TTM Price Performance



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Market Cap (mm):	$925	**Beta (Since IPO):**	2.3
52-Wk Range:	$12.75 - $32.97	**Avg. Daily Vol (mm):**	1.2

FINANCIAL TECHNOLOGY PARTNERS

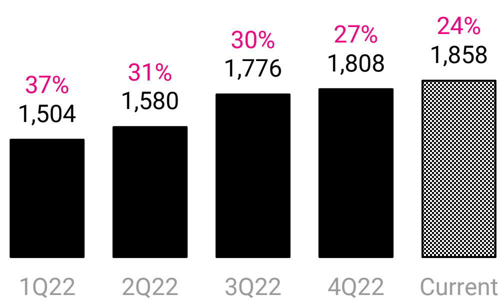
1Q23 CONSENSUS ESTIMATE RANGES

($ in millions)

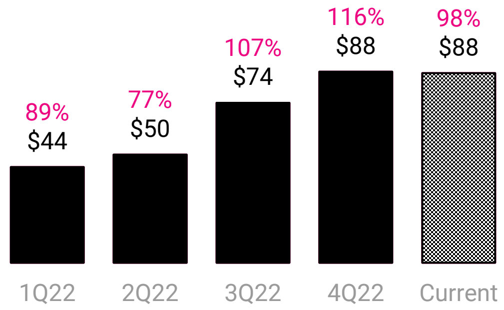
	Low	Average	High
Customers (000's)	**1,813**	**1,858**	**1,977**
growth (%, yoy)	*21%*	*24%*	*31%*
In-Force Premium	**$635**	**$638**	**$642**
growth (%, yoy)	*52%*	*52%*	*53%*
Premium per Customer	**325**	**343**	**351**
growth (%, yoy)	*16%*	*23%*	*26%*
Gross Loss Ratio	**84.0%**	**87.6%**	**91.0%**
growth (bps, yoy)	*-604bps*	*-242bps*	*+100bps*
Net Loss Ratio	**80.0%**	**89.4%**	**97.0%**
growth (bps, yoy)	*-903bps*	*+37bps*	*+797bps*
Net Earned Premium	**$59.6**	**$64.0**	**$67.5**
growth (%, yoy)	*117%*	*134%*	*146%*
Net Investment Income	**$13.5**	**$20.1**	**$25.6**
growth (%, yoy)	*-16%*	*26%*	*60%*
Commissions, net of ceded	**$2.70**	**$3.60**	**$4.41**
growth (%, yoy)	*200%*	*300%*	*390%*
Total Revenue	**$84.6**	**$87.7**	**$91.2**
growth (%, yoy)	*91%*	*98%*	*106%*
Adjusted Gross Profit	**$16.4**	**$20.6**	**$27.6**
Adj. Gross Profit Margin (%)	*19%*	*23%*	*30%*
Total Operating Expenses	**$104**	**$108**	**$121**
growth (%, yoy)	*12%*	*17%*	*31%*
Adjusted EBITDA	**-$64.0**	**-$62.9**	**-$60.9**
Adj. EBITDA Margin (%)	*-76%*	*-72%*	*-67%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

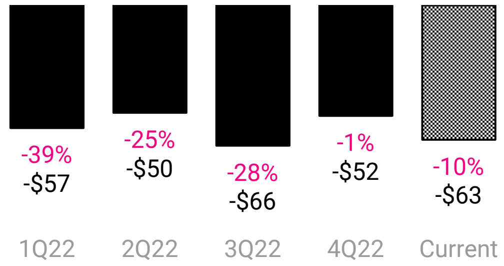
Customers (000)/YoY Growth



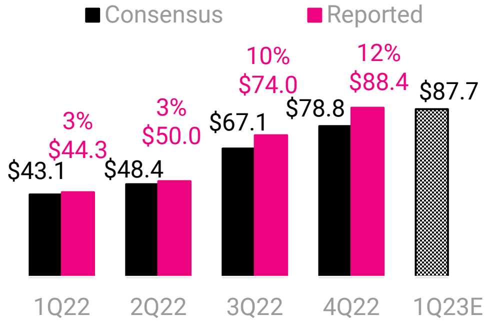
Revenue/YoY Growth



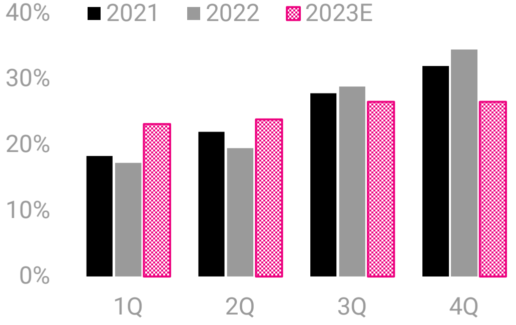
Adjusted EBITDA/YoY Growth



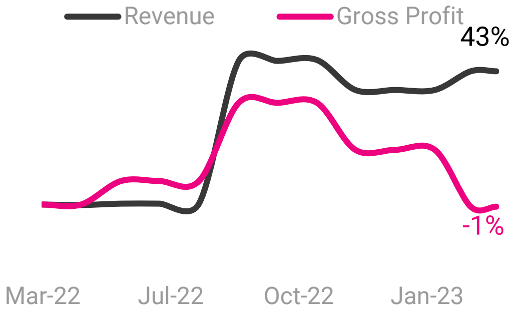
Revenue Cons vs. Reported



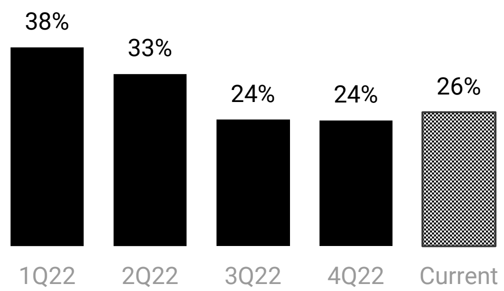
Revenue Contribution % of FY Sales



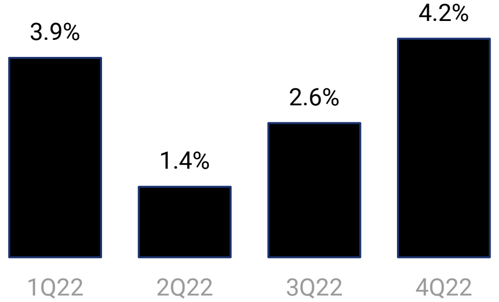
1Q23 Cons. Revisions



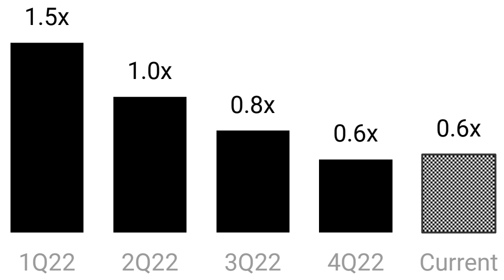
Short Interest (Pre-Print)



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio(2)



Source: Company filings
1) FactSet
2) Put/Call Ratio over 7-days leading into earnings

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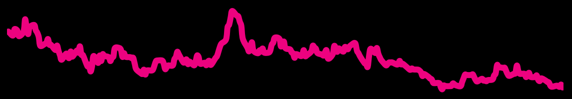
Lemonade

LMND TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

General:

1) What was the main driver of the lower S&M as a percentage of revenue in 4Q? Is the lower lever of CAC sustainable?
2) What are Lemonade's primary channels for acquiring customers?
3) Can management comment on how inflation has impacted the business? If inflation stays higher than expected, what steps would be taken to mitigate the impact?

Product:

4) What states have all Lemonade products been offered vs. how many states don't yet have all Lemonade products offered?
5) Over the long-term, does management expect to offer a broader suite of insurance lines? What additional products could this eventually encompass.

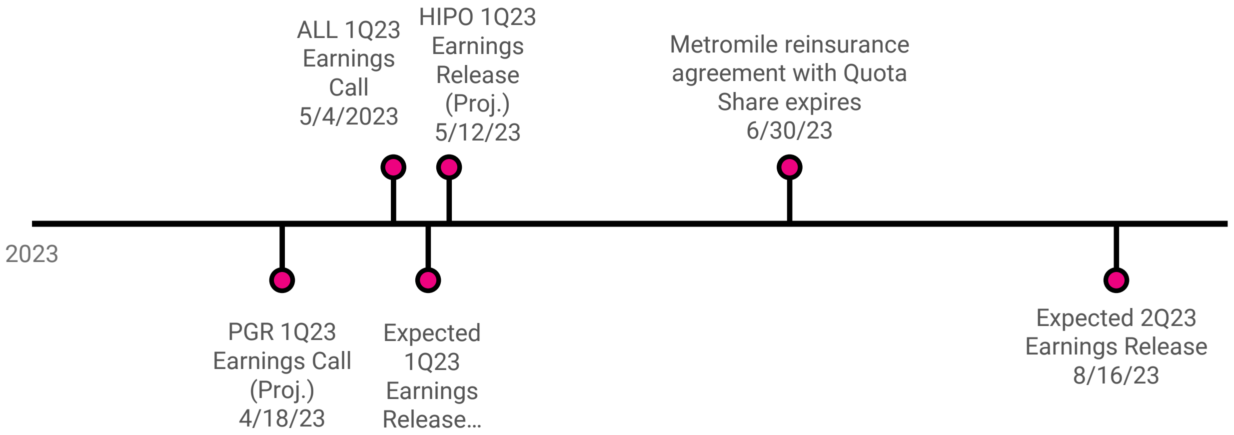
Profitability:

6) At Lemonade's investor day there was an adjusted growth scenario that laid out how intentionally slowing growth to manage margins would lead to profitability in 2026 while retaining unrestricted cash surplus. How likely is this scenario? Is this something management would consider?

Loss Ratios:

7) Has there been any change to the per-product gross loss ratio? In order to reach managements target of a gross loss ratio of less than 75% which product is expected to drive the most improvement?
8) How does management think about its current reinsurance agreement(s)? What are the typical terms of these agreements?

POTENTIAL CATALYSTS



2023

ALL 1Q23 Earnings Call 5/4/2023

HIPO 1Q23 Earnings Release (Proj.) 5/12/23

Metromile reinsurance agreement with Quota Share expires 6/30/23

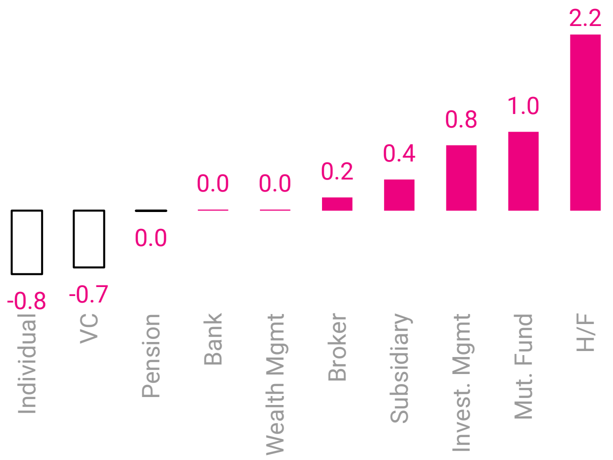
PGR 1Q23 Earnings Call (Proj.) 4/18/23

Expected 1Q23 Earnings Release...

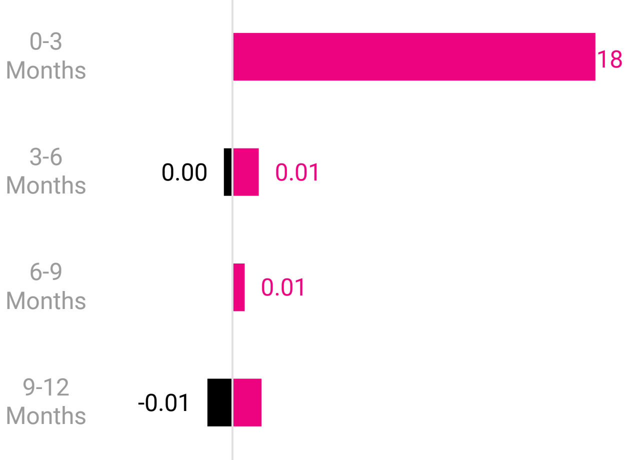
Expected 2Q23 Earnings Release 8/16/23

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)

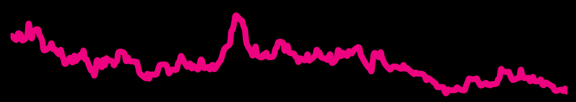


Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

LMND TTM Price Performance



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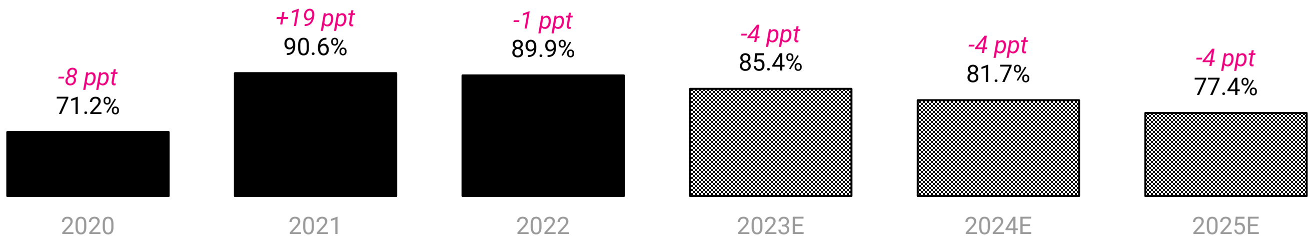
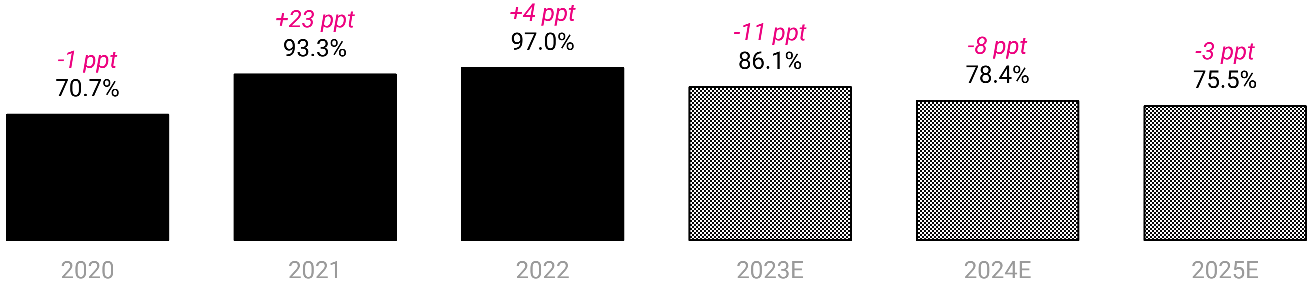
COMPANY RATIOS/MARGIN ANALYSIS

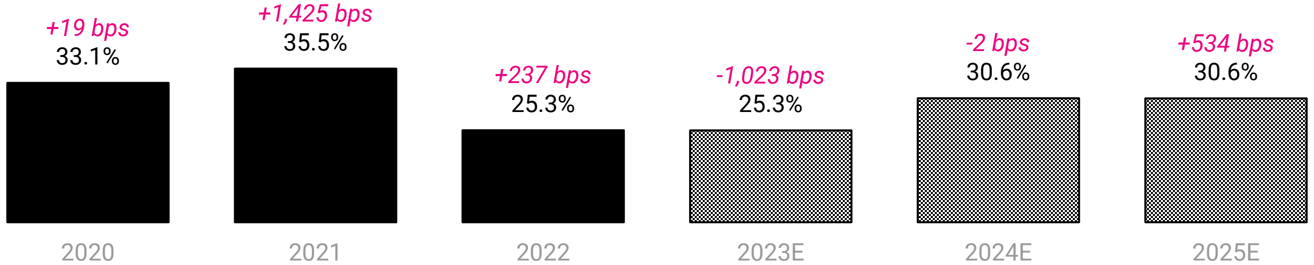
Gross Loss Ratio



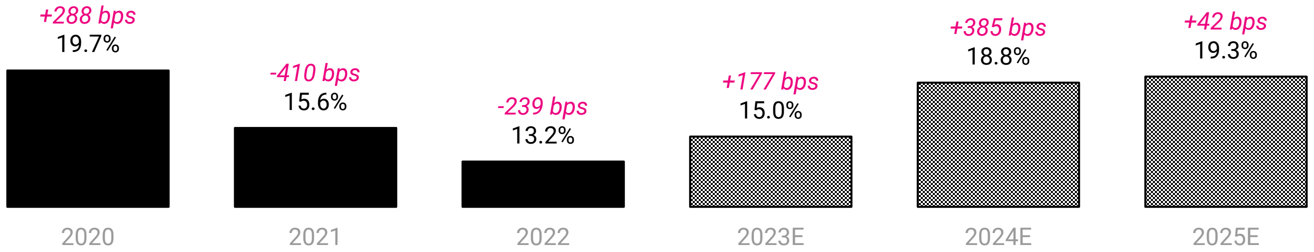
Net Loss Ratio



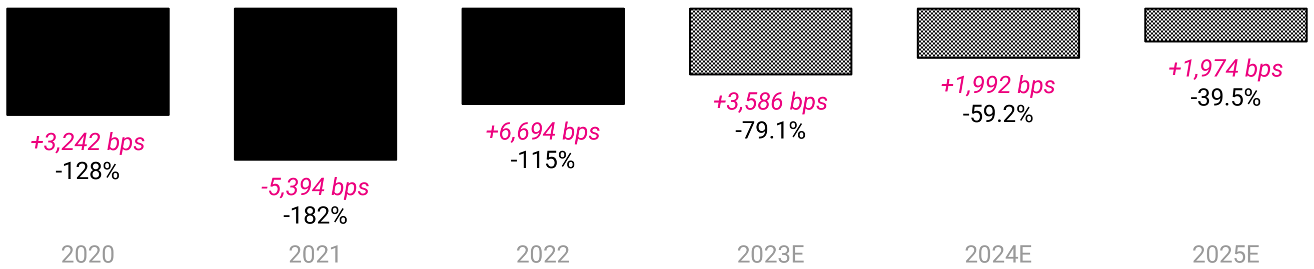
Adjusted Gross Profit Margin



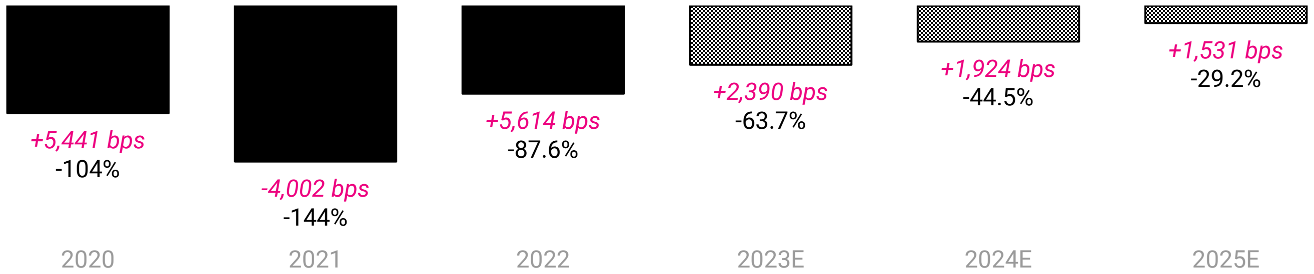
Adjusted Gross Profit (% of Gross Earned Premium)



Operating Income Margin



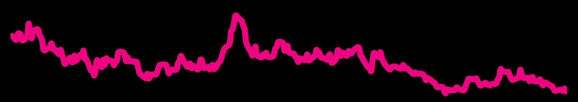
Adjusted EBITDA Margin



Source: Company filings
FactSet

Lemonade

LMND TTM Price Performance



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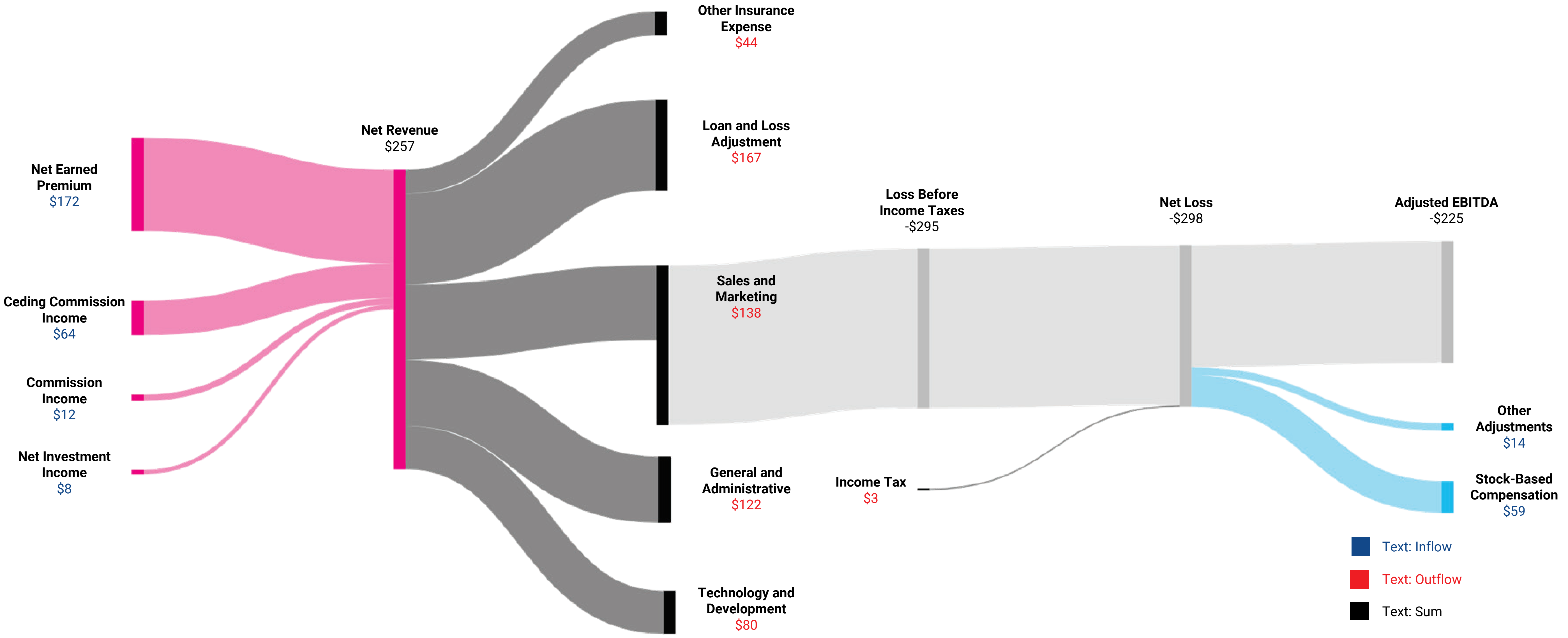
($ in millions)

P&L VISUALIZATION – TTM

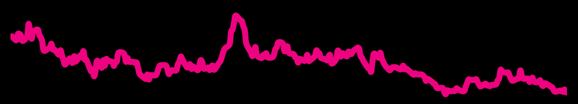


FT Partners | Equity Research

Source: Company filings; FactSet

Lemonade

LMND TTM Price Performance



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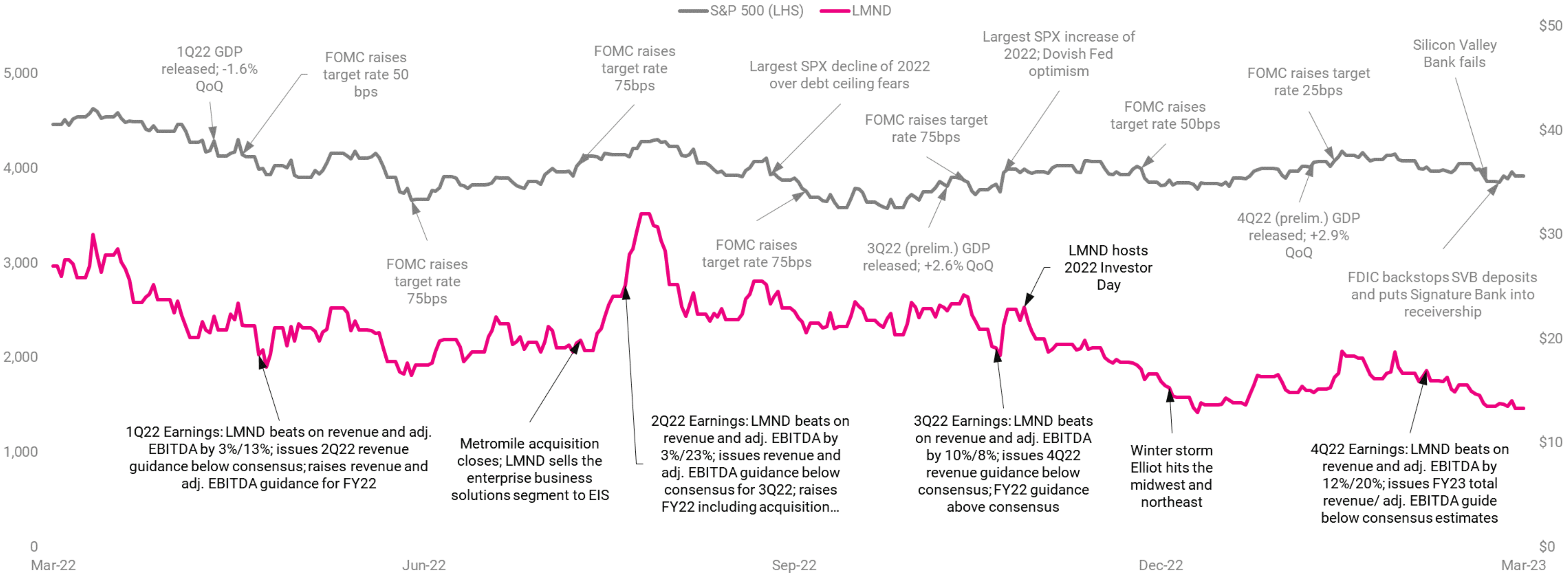
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

FOMC raises target rate 25bps

Silicon Valley Bank fails

FOMC raises target rate 75bps

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

LMND hosts 2022 Investor Day

4Q22 (prelim.) GDP released; +2.9% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

1Q22 Earnings: LMND beats on revenue and adj. EBITDA by 3%/13%; issues 2Q22 revenue guidance below consensus; raises revenue and adj. EBITDA guidance for FY22

Metromile acquisition closes; LMND sells the enterprise business solutions segment to EIS

2Q22 Earnings: LMND beats on revenue and adj. EBITDA by 3%/23%; issues revenue and adj. EBITDA guidance below consensus for 3Q22; raises FY22 including acquisition…

3Q22 Earnings: LMND beats on revenue and adj. EBITDA by 10%/8%; issues 4Q22 revenue guidance below consensus; FY22 guidance above consensus

Winter storm Elliot hits the midwest and northeast

4Q22 Earnings: LMND beats on revenue and adj. EBITDA by 12%/20%; issues FY23 total revenue/ adj. EBITDA guide below consensus estimates

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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MARQETA

MARQETA PROPRIETARY COMPANY PROFILE

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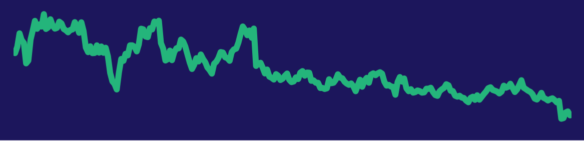
Matthew O'Neill | Co-Director of Research –Matthew.O'Neill@ftpartners.com – (347) 614-2481
Zachary Gunn | Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

Craig.Maurer@ftpartners.com (929) 286-9516 *(AC) | FTP Securities LLC is a FINRA registered broker dealer (www.finra.org) and member SIPC (www.sipc.org). The firm and its reps can be found here: FTP SECURITIES LLC - BrokerCheck (finra.org) | March 20, 2023
Please refer to page 172 for important disclosures.

MARQETA

MQ TTM Price Performance



Price as of 03/17/23	$4.01	**Shares Out (mm):**	545
Market Cap (mm):	$2,186	**Beta (since IPO):**	1.4
52-Wk Range:	$3.93 - $12.41	**Avg. Daily Vol (mm):**	6.1

FINANCIAL
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COMPANY OVERVIEW

Marqeta is a modern card issuer-processor, offering the full suite of card issuing and transaction processing services primarily to mid-market and enterprise customers. Prior to Marqeta and other modern card issuer-processors like i2c, the industry had become commoditized and dominated by a few large legacy players.

Marqeta's open APIs enable developers to create customized credit and debit card products, allowing FinTech companies and non-FIs (Financial Institutions) to issue card products at an accelerated pace, expanding their reach and monetizing spend volume over their platform. The Marqeta platform delivers domain expertise, scale, and reliability, as well as balance sheet partners to companies that otherwise may not issue card products or offer financial services as a core business operation.

Marqeta's primary verticals include consumer FinTech, on-demand delivery, and corporate card programs.

KEY CUSTOMERS

Cash App
Uber Eats
Square
Klarna.
affirm
DOORDASH
coinbase
Expensify
instacart

KEY DEBATES

1. **Block Renewal:** Block accounted for 74% of net revenue in 4Q22 and investors have been highly focused on whether the Block contract will be renewed and, if so, what impact it may have on unit economics. On the 4Q22 earnings call, management appeared confident that the contract would be renewed. Given that Block continues to grow as a percentage of Marqeta's revenue, it seems likely that the company will be a price taker in the renegotiation, serving as a further headwind to Marqeta's overall take-rate. However, Marqeta is also a key partner for Block and it would be difficult for Block to walk away from the relationship without significant disruption.

2. **Non-Block Growth:** Revenue growth from non-Block customers in 4Q22 decreased 7% YoY, a significant deceleration from the 92%/69%/25% growth in the prior three quarters. Management attributed this to several things, including weak bookings and BNPL. BNPL negatively contributed to 4Q22 net revenue growth, with management stating that "Q4 net revenue outside of Block and BNPL is growing several points faster than total company growth", which was 31% YoY in Q4. In order to successfully diversify revenue and continue to scale the business, Marqeta must reaccelerate revenue from other customers

3. **Embedded Finance/Power Acquisition:** Marqeta management admitted that it has been slow to adapt in an evolving market, which in late 2021started shifting from FinTech companies to more established brands looking to bring embedded finance to their user base. This unforced error contributed to the slowdown in non-Block growth. To address this, Marqeta acquired Power, which adds significant program management capability focused on credit, where Marqeta is weak versus debit.

REVENUE MODEL

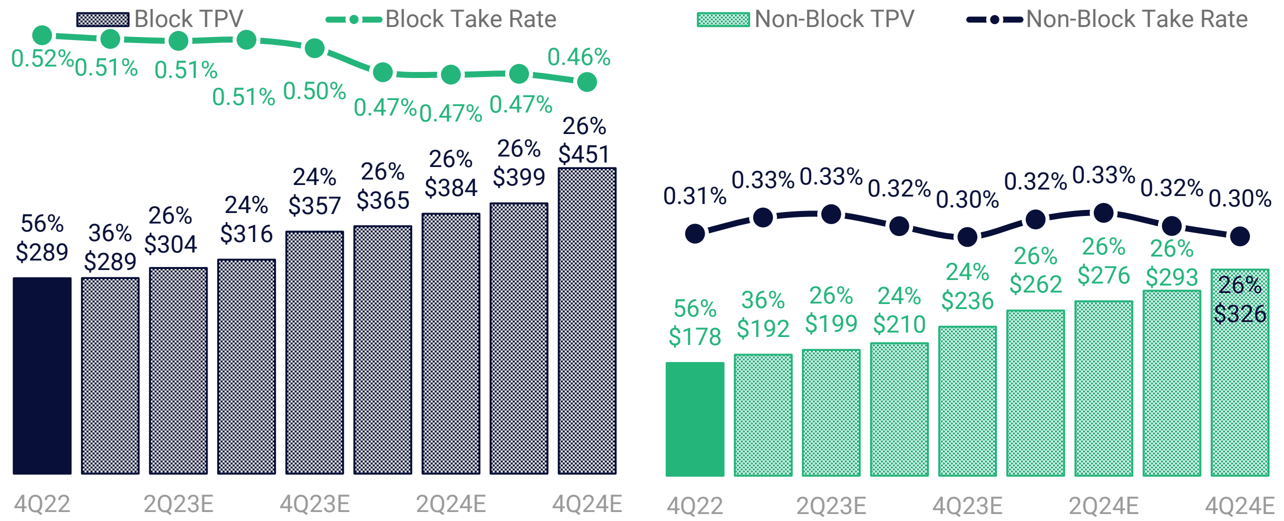
Marqeta reports two revenue lines, Platform Services and Other Services.

Platform Services Revenue (97% of TTM Revenue): Platform services revenue includes interchange fees, net of revenue sharing with issuing partners and other service-level payments to customers. Platform services revenue also includes processing and other fees. Interchange fees are based on a percentage of the transaction amount, plus a fixed amount per transaction, and are recognized when the associated transactions are settled. Revenue share payments are incentives to customers to increase processing volumes on the platform. Revenue share is generally computed as a percentage of interchange fees or processing volume and is paid to issuing partners monthly. Revenue share payments are netted from revenue. Issuing partners may earn an increasing revenue share percentage as processing volume grows. Processing and other fees include fees earned when end users take cash out at ATMs, and minimum processing fees if an issuing partner's processing volume falls below a certain threshold.

Other Services Revenue (3%): Other services revenue primarily consists of revenue earned for card fulfillment services. Card fulfillment fees are generally billed to issuing partners upon ordering card inventory and recognized as revenue when the cards are shipped to the customers.

BLOCK VS. NON-BLOCK TPV (bn) & TAKE RATE

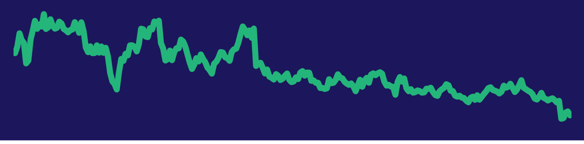
***Represent analyst estimates – Marqeta does not disclose volume by customer**



Source: Company filings; FactSet

MARQETA

MQ TTM Price Performance



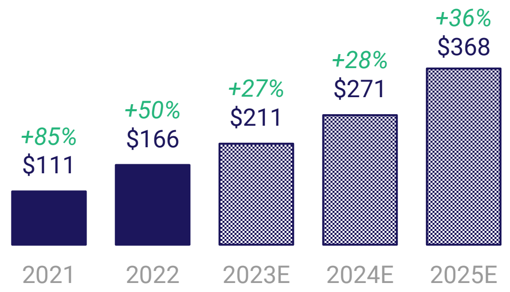
Price as of 03/17/23	$4.01	**Shares Out (mm):**	545
Market Cap (mm):	$2,186	**Beta (since IPO):**	1.4
52-Wk Range:	$3.93 - $12.41	**Avg. Daily Vol (mm):**	6.1

FINANCIAL TECHNOLOGY PARTNERS

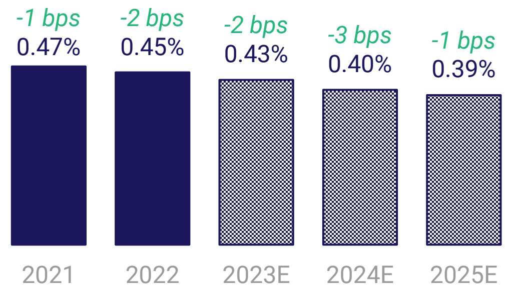
$ in millions, except where otherwise noted

HISTORICAL RESULTS & CONSENSUS FORECASTS

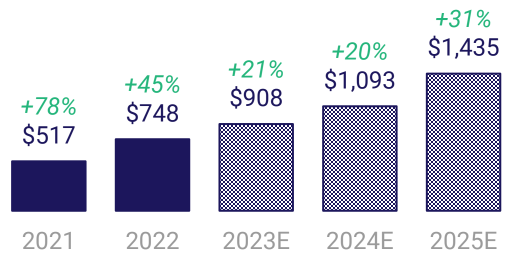
TPV ($ in billions)



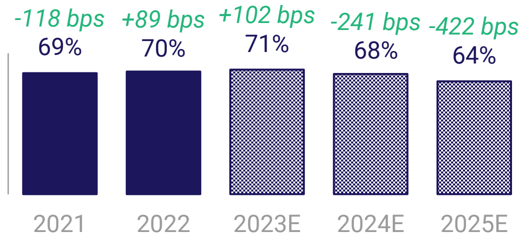
Take Rate



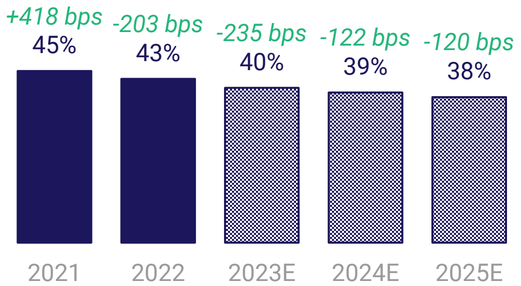
Revenue



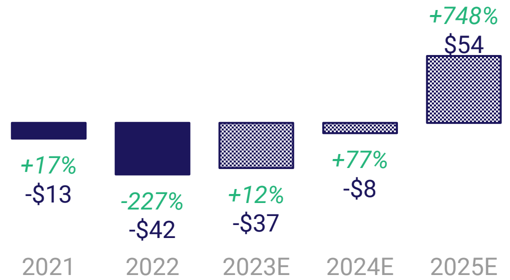
% of Revenue from Block



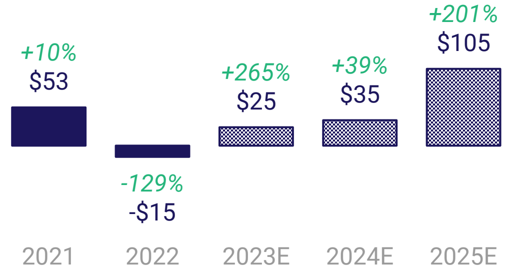
Gross Margin



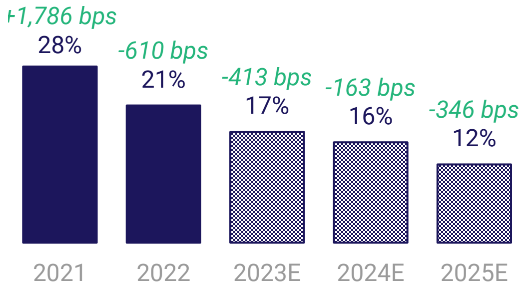
Adjusted EBITDA



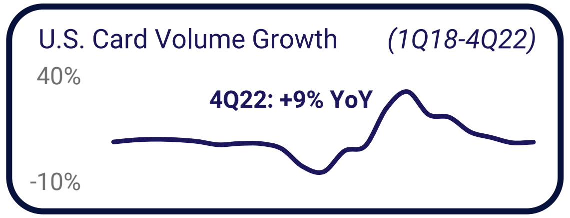
Free Cash Flow

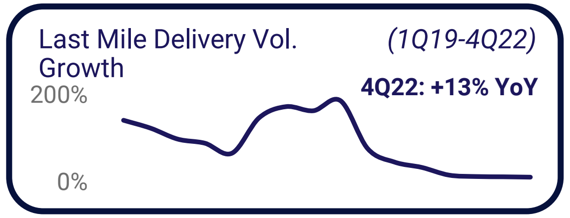


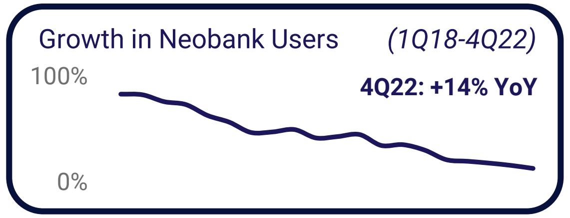
SBC as a % of Revenue



INDUSTRY KPIs

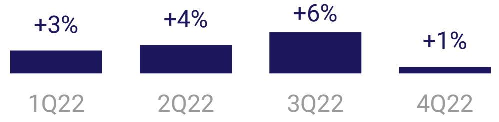

U.S. Card Volume Growth *(1Q18-4Q22)*


Last Mile Delivery Vol. Growth *(1Q19-4Q22)*

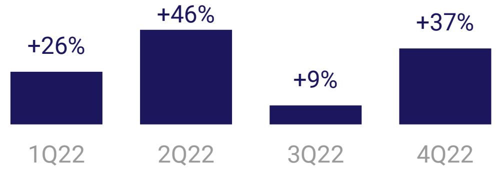

Growth in Neobank Users *(1Q18-4Q22)*

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[4]

Revenue



Adjusted EBITDA



FY23

TOTAL ADDRESSABLE MARKET

Gig Economy[1]

Payment solutions for food and grocery delivery, etc.

$99bn TAM

Consumer FinTech[2]

Consumer debit spend, ex. gig economy payments
X
Neobank usage (23%)

$780bn TAM

Enterprise FinTech[3]

Commercial card spend

$788bn TAM

Traditional Banks

Traditional bank spend
X
Assumed capture rate (5%)

$150bn TAM

FT Partners | Equity Research

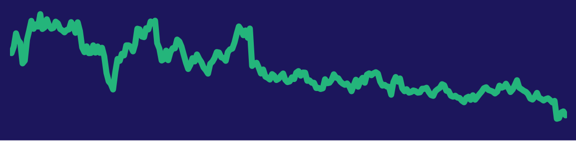
Source: Company filings

1) McKinsey & Company "Ordering in: The rapid evolution of food delivery"
2) Statista: Share of Consumers with Neobank Accounts
3) Accenture: "US Commercial Card Spend Expected to Exceed $1 Trillion by 2024"
4) FactSet Consensus Low/Average/High Range

03/20/23 - **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

MARQETA

MQ TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

VALUATION CONSIDERATIONS

Relative Valuation:

For less mature FinTech companies that have yet to turn profitable, EV/GP is used for relative valuation to account for costs associated with the core operations of the business (such as card network costs, issuing bank costs, etc.), while also providing a relatively standardized valuation approach across peers. As of March 20th, Marqeta trades at a 1.6 NTM EV/GP multiple, significantly below its average of 23x since its IPO. It also trades at a 1.6x discount relative to the NASDAQ. **When looking at the peer average NTM EV/GP multiple, and adjusting for consensus gross profit growth, it implies a 12-month price of $12.00 (199% upside).** While Marqeta has seen significant valuation compression alongside the broader market and FinTech companies specifically, its relative weakness is largely attributed to the overhang of the upcoming Block contract renewal. Marqeta represents one of the most binary stories in the space and 2023 is a pivotal year for the company. If management renews the Block contract with only a manageable hit to unit economics, while continuing to push into embedded finance, the multiple should recover significantly. Speculation around the Block contract not being renewed has been de-risked significantly based on management commentary during the 4Q22 call.

DCF Valuation:

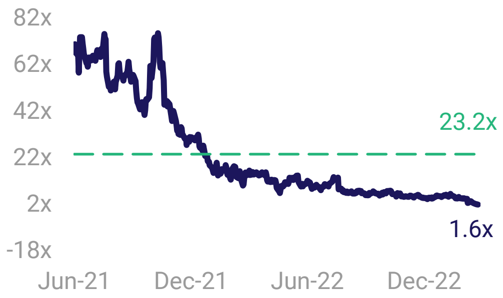
Scenario 1 – Current Price ($4.01, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of 20%+ sustained through 2026 before gradually decelerating towards the terminal growth rate. Operating margins are expected to break-even in 2026, reaching a terminal level of ~40%. Were shares of Marqeta to remain at the current price in 12-months it would imply a ~1x NTM EV/GP multiple based on current STM consensus gross profit estimates of $416mm.

Scenario 2 – Embedded Finance ($7.73, 93% Upside): This DCF outlines a scenario where Marqeta captures embedded finance market share by successfully leveraging assets from the Power acquisition, while also expanding its suite of products to drive a longer tail of revenue and margin opportunity. This DCF has revenue growth sustained at 20%+ through 2028 and long-term operating margins of 45%+, pointing to a 12-month price of $7.73 (93% upside). Based on current STM consensus gross profit, this price would imply a 6x NTM EV/GP multiple in 12-months.

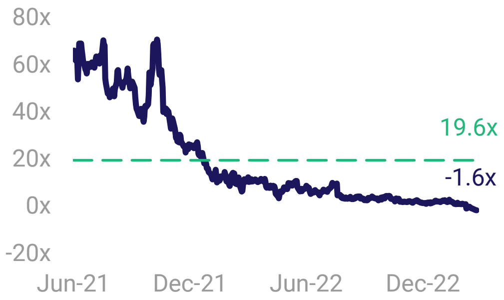
Scenario 3 – Lower Block Economics ($2.52, 37% downside): This DCF outlines a scenario where Marqeta renews its existing agreement with Block at materially worse unit economics. In this scenario, revenue growth is sustained at 20%+ only through 2024 before decelerating towards the mid-teens. Long-term operating margins are also lowered to ~35%. This scenario points to a 12-month price of $2.52 (37% downside).

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

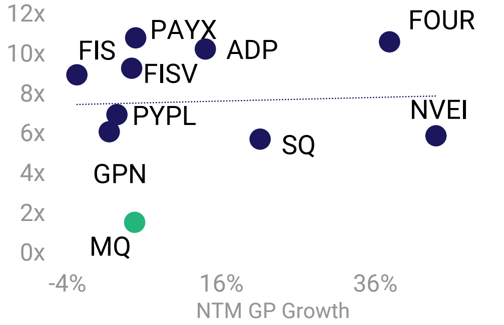
NTM EV/GP & Average Since IPO



NTM EV/GP Premium vs. NASDAQ[1]



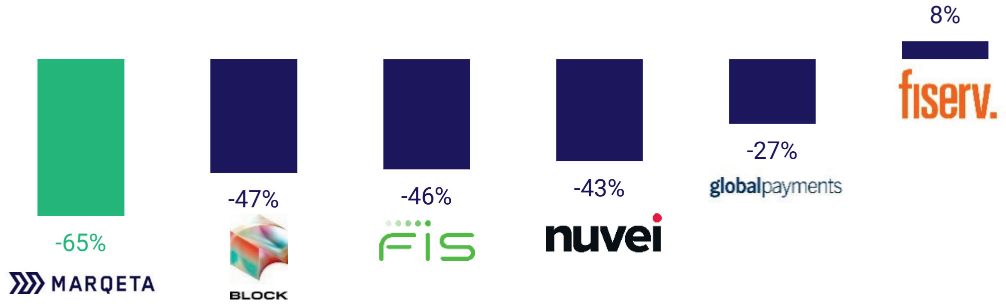
Peer NTM EV/GP vs. NTM GP Growth



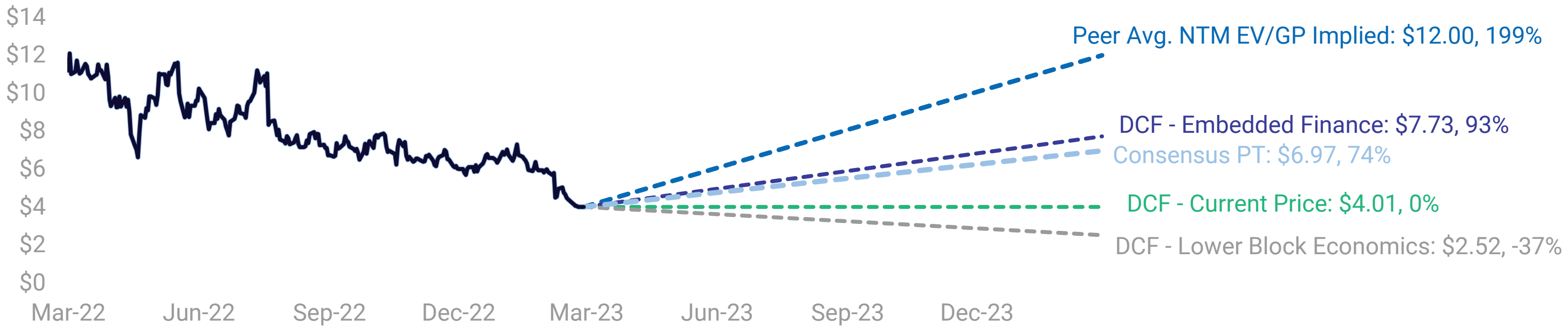
Key DCF Assumptions[2]

10-Yr RFR	4.0%
Cost of Debt	5.0%
Cost of Equity	12.4%
WACC	12.3%
Beta	1.29
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC (mm)	$1,688

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



FT Partners | Equity Research

Source: Company filings, Factset

1) MQ EV/NTM GP Less NASDAQ EV/Sales

2) SBC in millions

MARQETA

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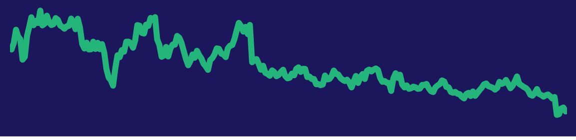

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FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. Scenarios for Marqeta are built around 1) TPV growth and 2) the unit economic impact of the anticipated contract renewals between Block and Marqeta. While there are other drivers of Marqeta's performance (embedded finance, BNPL trends, debit mix, etc.) these represent the most likely area(s) of upside/downside relative to consensus.

Consensus Case:

The average consensus price target for Marqeta is $6.97 (74% upside), with STM consensus gross profit of $416mm implying a 5x NTM EV/GP multiple, if shares of MQ trade at this price in 12-months. Marqeta currently trades at a 1.6x NTM EV/GP multiple.

Upside Cases:

(+) $4.58, 14% Upside: This scenario assumes Marqeta is able to grow TPV faster than current consensus of 27%. In this scenario, the assumed TPV stacked growth rate is maintained at 80%+ through the first three quarters of FY23, which translates to ~30% TPV growth implying 20% gross profit growth. This scenario points to 14% upside to the current share price with a 2.0x NTM EV/GP multiple.

(+-) $4.17, 4% Upside: This scenario assumes the stronger TPV growth but forecasts the Block relationship is renewed at worse unit economics that would weigh on the take rate. While this would not impact FY23 numbers, the multiple is handicapped to account for the impact. This scenario points to 4% upside to the current share price with a 1.5x NTM EV/GP multiple.

(-+) $5.71, 42% Upside: This scenario assumes the lower TPV growth but assumes the Block relationship is renewed at somewhat similar economics. This scenario points to 42% upside to the current share price with a 4.0x NTM EV/GP multiple.

(++) $7.79, 94% Upside: The best-case scenario assumes stronger TPV growth and the Block relationship renewed at somewhat similar economics compared to the current relationship. This scenario points to 94% upside to the current share price with a 6.0x NTM EV/GP multiple.

Downside Cases:

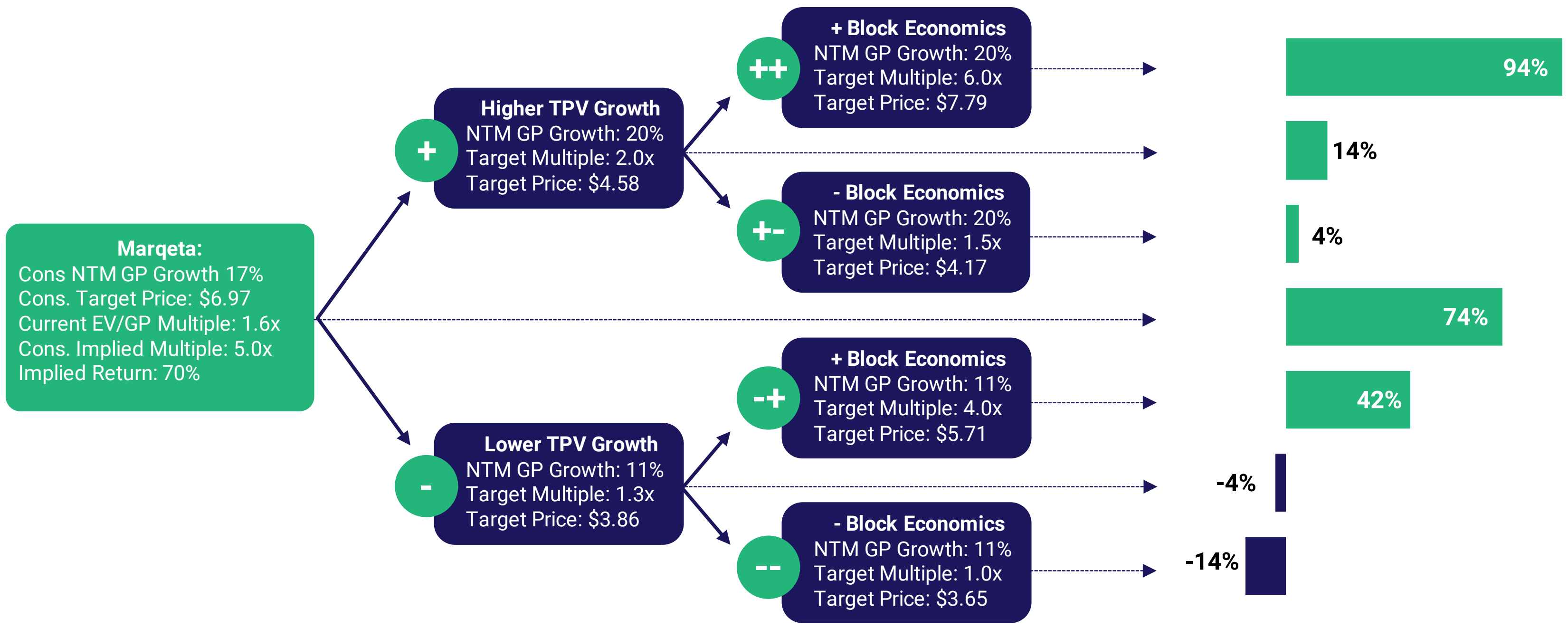
(-) $3.86, 4% Downside: This scenario assumes TPV growth falls short of consensus with a stacked growth rate of ~70% through the first three quarters of FY23. This would imply ~21% TPV growth and flow through to 11% gross profit growth. This scenario points to 4% downside to the current share price with a 1.3x NTM EV/GP multiple.

(--) $3.65, 14% Downside: The worst-case scenario assumes lower TPV growth and compressed unit economics from Block following the relationship renewal. This scenario points to 14% downside to the share price with a 1.0x NTM EV/GP multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk

12-month Price Return



Marqeta:
Cons NTM GP Growth 17%
Cons. Target Price: $6.97
Current EV/GP Multiple: 1.6x
Cons. Implied Multiple: 5.0x
Implied Return: 70%

+ **Higher TPV Growth**
NTM GP Growth: 20%
Target Multiple: 2.0x
Target Price: $4.58

++ **+ Block Economics**
NTM GP Growth: 20%
Target Multiple: 6.0x
Target Price: $7.79

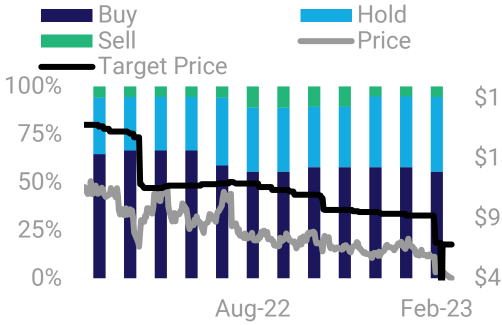
+- **- Block Economics**
NTM GP Growth: 20%
Target Multiple: 1.5x
Target Price: $4.17

- **Lower TPV Growth**
NTM GP Growth: 11%
Target Multiple: 1.3x
Target Price: $3.86

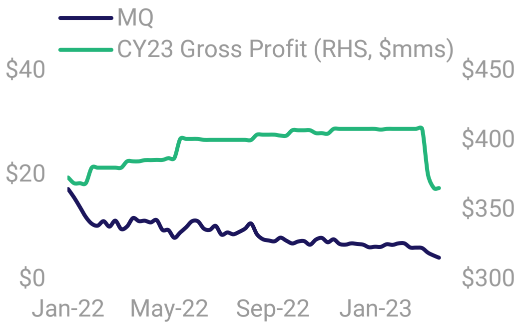
-+ **+ Block Economics**
NTM GP Growth: 11%
Target Multiple: 4.0x
Target Price: $5.71

-- **- Block Economics**
NTM GP Growth: 11%
Target Multiple: 1.0x
Target Price: $3.65

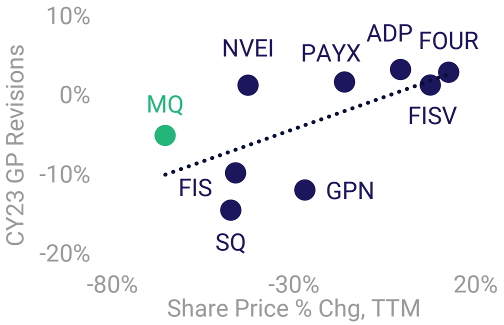
Sell-Side Ratings Distribution



Price Performance vs Est. Revisions



Est. Revisions vs Price Change, TTM



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MARQETA

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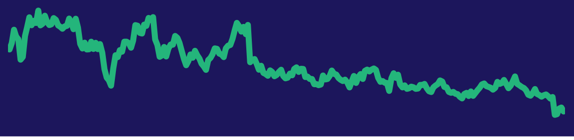

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FINANCIAL TECHNOLOGY PARTNERS

$ in millions, except per share amounts

4Q22 EARNINGS CALL RECAP

Takeaway: Marqeta hosted its 4Q22 conference call after the market closed on February 28th delivering a largely underwhelming message as shares traded down 18% after-hours. Driving the negative reaction was a myriad of issues, including Block's higher-than-expected revenue concentration, admission that the company had missed a shift in the market, take-rate pressure, and the 1Q23 guide coming in below consensus estimates. Marqeta's 4Q22 earnings report and associated call added significant concern that goes beyond the renewal of Block. Primarily, considering management's admission that they largely missed a tectonic shift in the drivers of new business, investors will likely question how quickly the new CEO can pivot to reaccelerate growth, especially with other headwinds and possibly aggressive guidance complicating matters.

Incremental From the Call:

- **Block Renewal/Concentration:** Block net revenue concentration was 74% in 4Q22, ~400bps above consensus, implying revenue attributable to Block of ~$151mm, 7% higher than consensus. Revenue attributable to Block grew 54% YoY compared to MQ's overall net revenue growth of 31%, implying non-Block revenue contracted roughly -8% YoY. Furthermore, its concentration of net revenue grew by ~11ppt YoY. Management noted that while Block's concentration of net revenue grew, its gross profit concentration remained unchanged in Q4 due to a less favorable volume mix from Block. The company also shared that various Block contracts run into 2024 and Marqeta cannot speculate on a potential impact to financial performance until a renewal is done, which management was confident would happen in 2023. Renewal of this contract would certainly alleviate concerns around losing Block and its significant contribution to the business, however it will refocus investors on the potential pricing pressures surrounding a renewal. Given Block continues to grow as a percentage of Marqeta's revenue, it seems likely that the company will be a price taker in the renegotiation, serving as a further headwind to Marqeta's overall take-rate. That said, the reliance of Block on Marqeta could mean that realized pricing pressure is less than the most draconian estimates.
- **Bookings Growth:** Management noted that new bookings from late 2021 through 3Q22 did not meet internal expectations because Marqeta was slow to adapt to the evolving market, which in late 2021 started shifting from FinTechs to more established brands looking to bring embedded finance solutions to their existing user base. Management added some color behind these struggles, noting that these sales challenges have only just started to impact Marqeta's financial performance, as it takes roughly 12-18 months for customers to onboard and ramp card programs. Management believes that most of the financial impact will be felt in 2023 and was likely a factor in 1Q23 guidance. Marqeta noted that Q4 bookings totaled more than the first three quarters of 2022 combined, hoping that this trend will continue.
- **Network Incentives:** Marqeta earns network incentives based on the scale of volume it directs over a particular network but does not earn incentives when Marqeta's clients are managing the relationship with the card network. Management shared that many (including two of its largest) partners are taking greater control of their programs, resulting in significantly lower network incentive revenue for Marqeta. The company expects this will hurt FY23 gross profit growth by 4-5ppt and will lower FY23 gross margins by 2ppt. Applying this to pre-earnings consensus drove a $14mm shortfall versus the pre-earnings gross profit consensus of $411mm and gross margin to fall ~200bps short of the 43% consensus. Although management indicated FY23 would see the peak of this impact, it's possible this remains an ongoing problem as more of Marqeta's fastest growing clients become large enough to negotiate their own favorable contracts with card networks.
- **Buy Now, Pay Later:** BNPL headwinds played a significant role in Marqeta's 4Q22 results, as management pointed to a difficult 4Q21 comp. 4Q21 BNPL TPV grew 50% QoQ, driven by strong holiday spending trends. This dynamic was highlighted in the company's 3Q22 earnings call, as well. Management highlighted the fact that net revenue growth ex Block and BNPL is significantly outpacing total net revenue (+31% YoY in 4Q22). Management shared that BNPL contributed relatively less to 4Q22 gross margin profile, leading to gross margin compression (43% vs. 48% in 4Q21). Additionally, gross profit ex Block and BNPL increased 3x the +36% YoY result for total gross profit. Although the 4Q22 results were largely driven by a difficult 4Q21 comp, BNPL contribution and macroeconomic headwinds has the potential to drag results through FY23.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs ▲	% ▲
Total Processing Volume (bns)	**$46.7**	**$45.0**	**$1.67**	**4%**
growth (%, yoy)	41%	36%		
Take Rate (%)	**0.44%**	**0.45%**		**-1bps**
growth (%, yoy)	-3bps	-2bps		
Revenue Attributable to Block	**$151**	**$141**	**$9.97**	**7%**
growth (%, yoy)	54%	44%		
Net Revenue	**$204**	**$202**	**$1.86**	**1%**
growth (%, yoy)	31%	30%		
Costs of Revenue	**$117**	**$116**	**$0.32**	**0%**
growth (%, yoy)	47%	46%		
Gross Profit	**$87.1**	**$85.6**	**$1.54**	**2%**
Gross Margin (%)	43%	42%		37bps
Compensation Expenses	**$111**	**$107**	**$4.06**	**-4%**
growth (%, yoy)	25%	20%		
Other Expenses	**$30.5**	**$30.4**	**$0.09**	**0%**
growth (%, yoy)	24%	24%		
Total Operating Expenses	**$141**	**$137**	**$4.14**	**-3%**
growth (%, yoy)	25%	21%		
Operating Income	**-$54.3**	**-$51.7**	**-$2.60**	**-5%**
Operating Income Margin (%)	-27%	-26%		-104bps
Adj. EBITDA	**-$7.49**	**-$11.9**	**$4.44**	**37%**
Adj. EBITDA Margin (%)	-4%	-6%		223bps
Net Income	**-$26.3**	**-$50.6**	**$24.3**	**48%**
Net Income Margin (%)	-13%	-25%		1,215bps

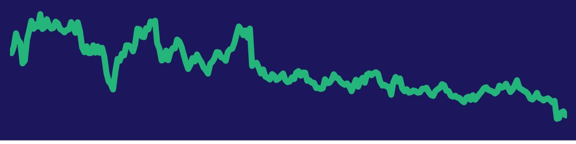
1Q23 Guidance	New	Consensus	Abs ▲	% ▲
Net Revenue	**$209 - $213**	**$212**	**-$0.90**	**0%**
growth (%, yoy)	*26% - 28%*	*28%*		
Gross Profit	**$85 - $87**	**$94.5**	**-$8.54**	**-9%**
Gross Margin (%)	*41% - 41%*	*45%*		*-383bps*
Adj. EBITDA	**-$13 - -$11**	**-$6.33**	**-$5.67**	**-83%**
Adj. EBITDA Margin (%)	*-6% - -5%*	*-3%*		*-251bps*

Source: Company filings; FactSet

03/20/23 - **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

MARQETA

MQ TTM Price Performance



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Market Cap (mm):	$2,186	**Beta (since IPO):**	1.4
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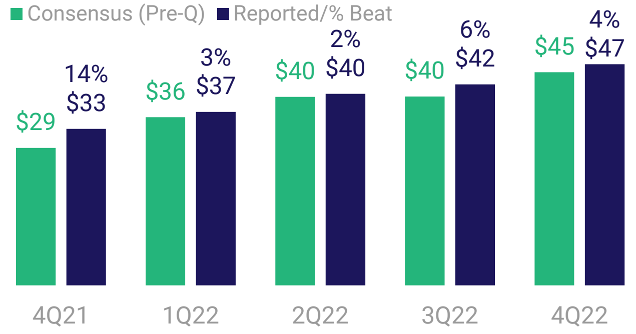
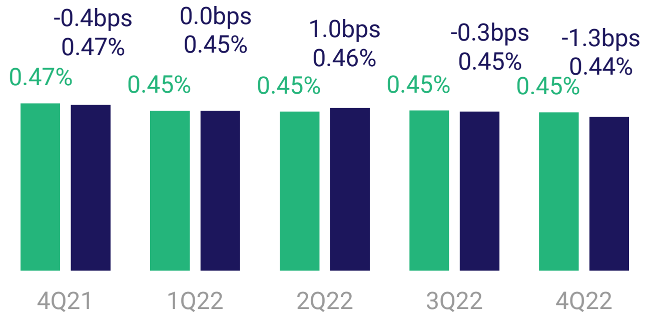
$ in millions, except per share amounts

REPORTED VS. CONSENSUS

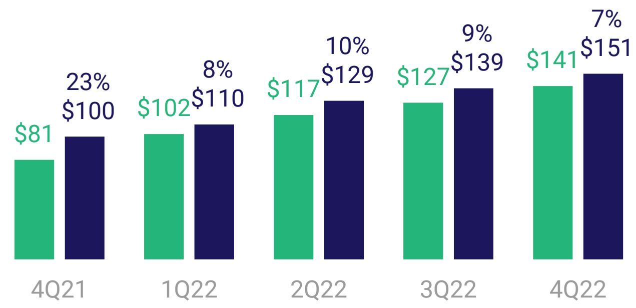
Total Processing Volume (bn)



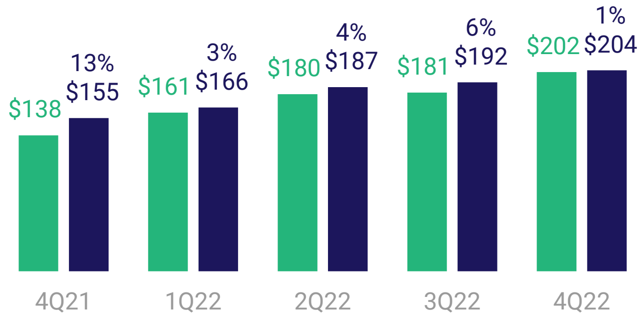
Take Rate



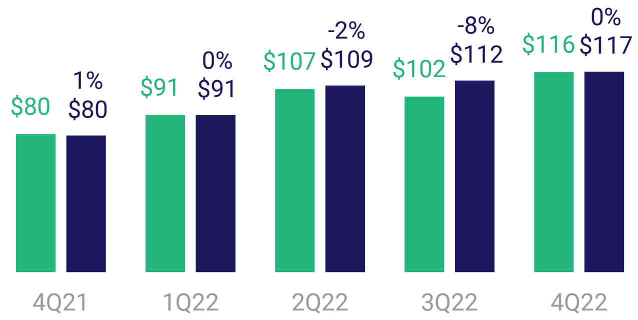
Revenue Attributable to Block



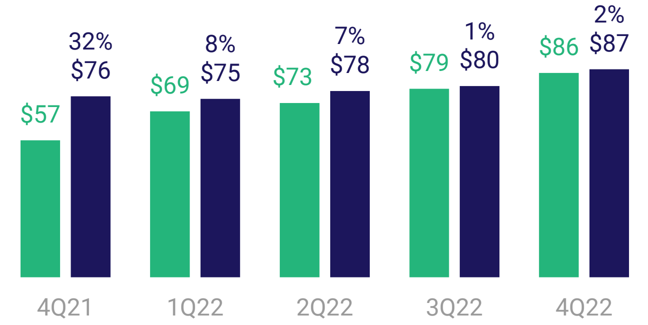
Net Revenue



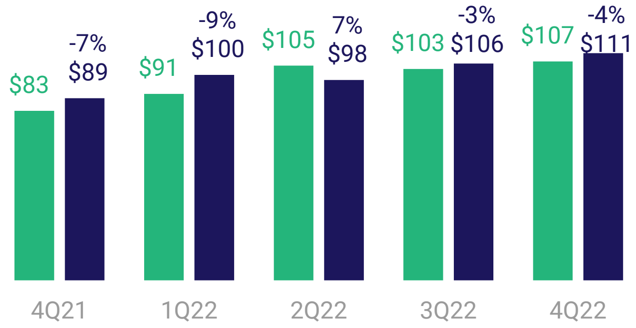
Costs of Revenue



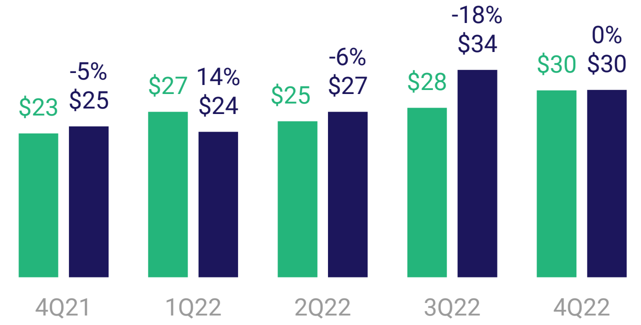
Gross Profit



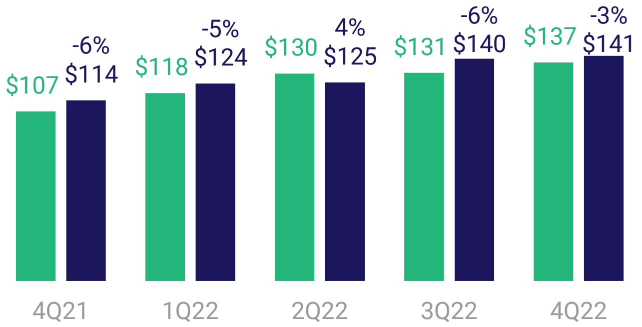
Compensation Expenses



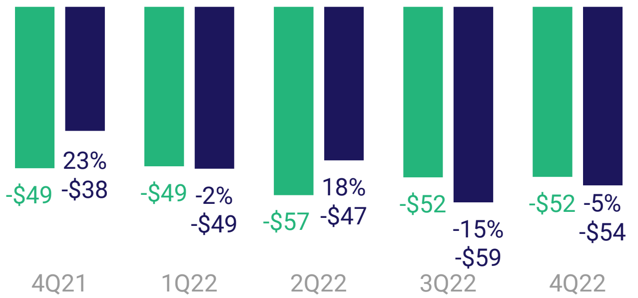
Total Other Operating Expenses



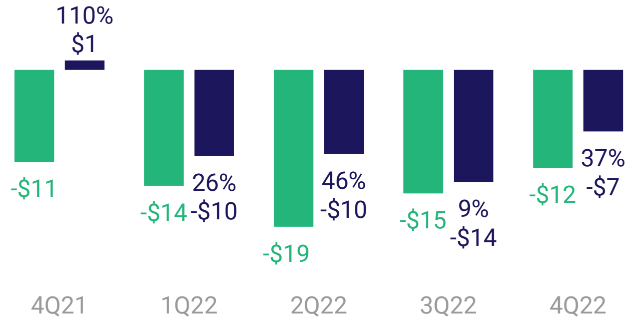
Total Operating Expenses



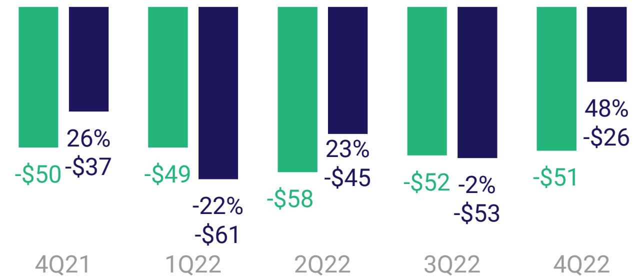
Operating Income



Adjusted EBITDA



Net Income



Source: Company filings; FactSet

MARQETA

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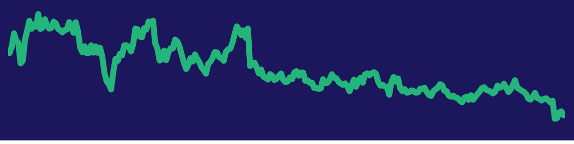

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1Q23 EARNINGS OUTLOOK

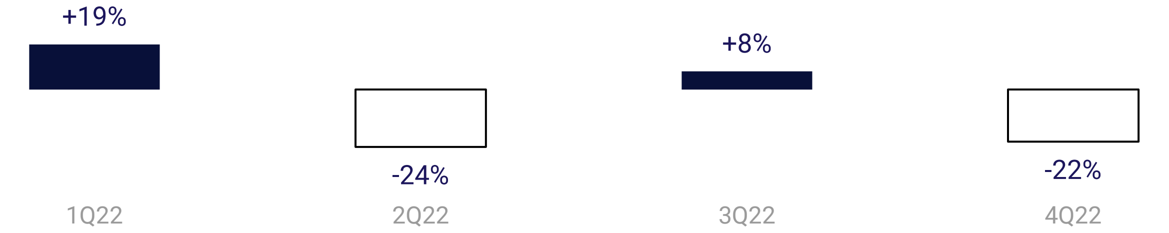
Marqeta is projected to report 1Q23 earnings on May 2nd after the market close.

What's In Focus: On Marqeta's 4Q22 earnings call, investors/analysts were focused on the revenue mix, particularly Block's contribution that was higher than expected (74%, +400bps vs. consensus). At the same time, management appeared to "de-risk" the likelihood of Block not renewing the contract saying a deal should get done in 2023. However, investor focus now shifts to how unit economics will differ following a renegotiation. This, coupled with revenue excluding block that actually declined YoY in 4Q22, continues to weigh on the stock. Since the 4Q22 earnings call, estimates for percentage of revenue from Block for 1Q23 have been revised up 200bps and FY23 estimates have been revised up by 300bps from 68% to 71%.

Estimates:

- **KPIs:** Since MQ's 4Q22 earnings call, estimates for 1Q23 TPV have been revised up slightly by 1%, while FY23 estimates have been revised downward by 2% from $215.2bn to $210.9bn. Estimates for take rate have remained constant for 1Q23 at 0.44% and slightly revised downward for FY23 by 100bps from 0.44% to 0.43%. 1Q23 estimates for number of transactions have declined by 1% while FY23 estimates have decreased by 3% from 4.55bn to 4.43bn. Furthermore, estimates for revenue from Block for 1Q23 have increased by 2% from $145mm to $148mm, while estimates for the FY23 were revised modestly lower by 1% from $648mm to $642mm.
- **Revenue:** Interchange fee revenue estimates for 1Q23 have declined 2% and FY23 estimates have been revised down by 5% from $750mm to $712mm. Meanwhile, platform fee revenue estimates for 1Q23 have stayed relatively constant at $206mm while FY23 estimates were trimmed by 5%. Estimates for processing and other fees for 1Q23 have decreased 3% while estimates for the FY23 were revised downward by 5% from $179mm to $170mm. These metrics, combined with other services, led to 1Q23 net revenue consensus being trimmed from $212mm to $211mm and FY23 consensus falling 4%.
- **Expenses:** Since 4Q22 earnings, estimates for 1Q23 cost of revenue had been revised upward by 6%, while FY23 estimates have ticked up 1% from $537mm to $541mm. On the other hand, 1Q23 estimates for total operating expenses were revised lower by 2% and FY23 estimates were down 5% from $602mm to $569mm.
- **Earnings:** Consensus for 1Q23 gross profit has been revised significantly lower since the 4Q22 earnings report, by 9% from $95mm to $86mm. Similarly, FY23 gross profit estimates declined by 11% from $411mm to $367mm. 1Q23 operating income estimates have declined substantially, by 12%, while FY23 estimates were revised lower by 6% from -$191mm to -$202mm. These changes led to 1Q23 net income consensus being revised downward by 5% from -$46mm to -$48mm, while FY23 estimates increased 2% from -$188mm to -$185mm.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ



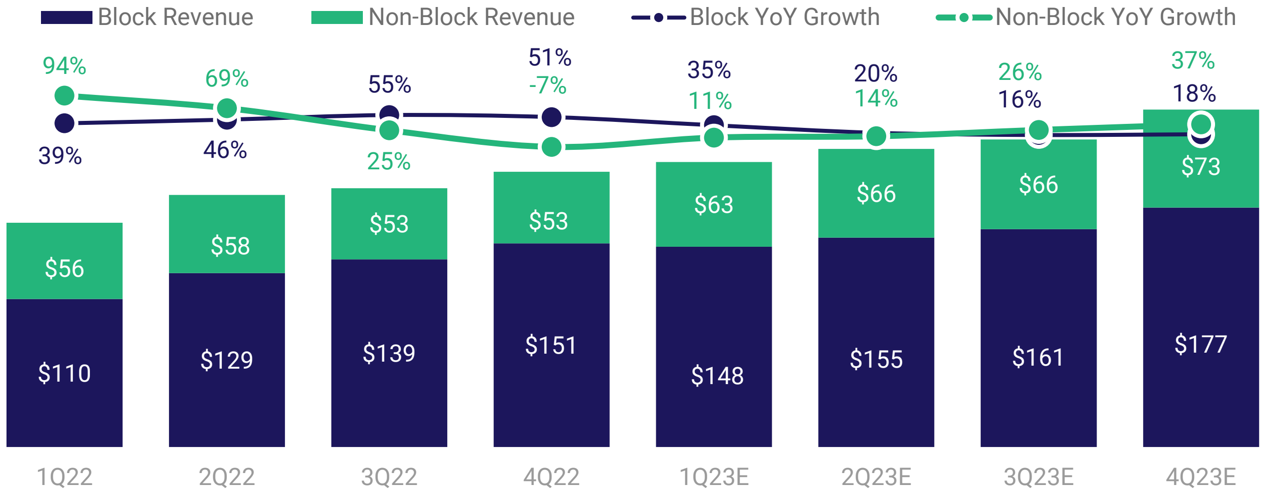
1Q22:
- Net revenue exceeds consensus; up 54% YoY
- Provided FY22 revenue growth guidance of 46-48% versus consensus at 36%

2Q22:
- CEO and COO announced departures from the company
- 3Q guidance in-line with consensus

3Q22:
- Reported EPS in line with consensus, with revenue and EBITDA ahead of expectations
- Guided 4Q revenue growth ahead of the Street

4Q22:
- Reported TPV and net revenue beat by 4%/1%
- 1Q guidance below consensus across the board

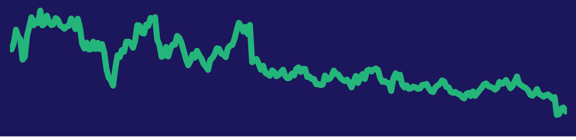
BLOCK VS. NON-BLOCK REVENUE (mm) & YOY GROWTH



Source: Company filings; FactSet

MARQETA

MQ TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

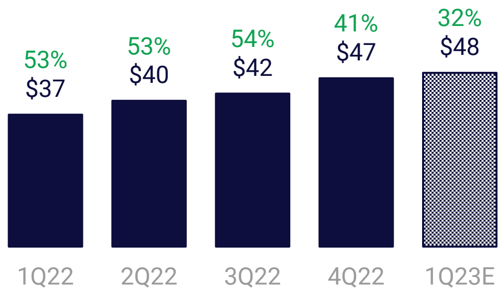
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

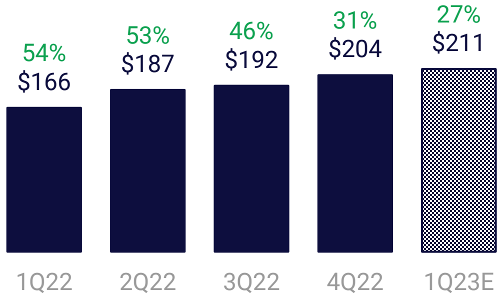
	Low	Average	High
Total Processing Volume (bns)	**$47**	**$48**	**$49**
growth (%, yoy)	27%	32%	35%
Take Rate (%)	**0.43%**	**0.44%**	**0.45%**
▲ *in % (bps)*	-3bps	-2bps	0bps
Revenue Attributable to Block	**$136**	**$148**	**$163**
% of Net Revenue	66%	70%	77%
Net Revenue	**$207**	**$211**	**$213**
growth (%, yoy)	25%	27%	28%
Costs of Revenue	**$122**	**$126**	**$134**
growth (%, yoy)	34%	38%	47%
Gross Profit	**$79**	**$85**	**$87**
Gross Margin (%)	38%	40%	41%
Compensation Expenses	**$96**	**$107**	**$115**
growth (%, yoy)	-5%	7%	15%
Other Expenses	**$27**	**$30**	**$35**
growth (%, yoy)	9%	20%	43%
Total Operating Expenses	**$125**	**$137**	**$145**
growth (%, yoy)	0%	9%	16%
Operating Income	**-$59**	**-$52**	**-$44**
Operating Margin (%)	-29%	-24%	-20%
Adj. EBITDA	**-$16**	**-$11**	**-$4**
Adj. EBITDA Margin (%)	-13%	-9%	-3%
Net Income	**-$61**	**-$48**	**-$25**
Net Income Margin (%)	-29%	-23%	-12%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

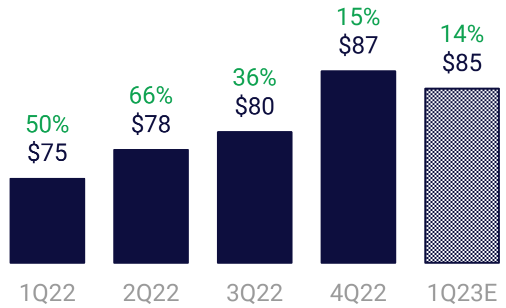
TPV (bns)/YoY Growth



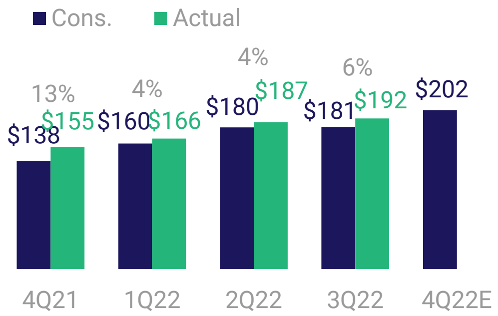
Net Revenue/YoY Growth



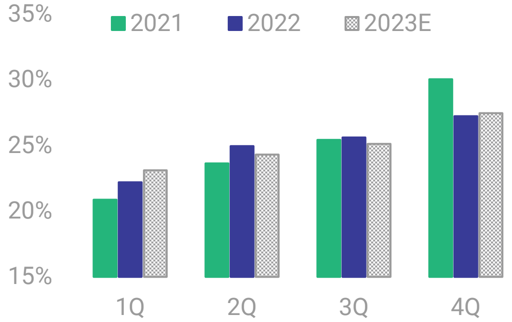
Gross Profit/YoY Growth



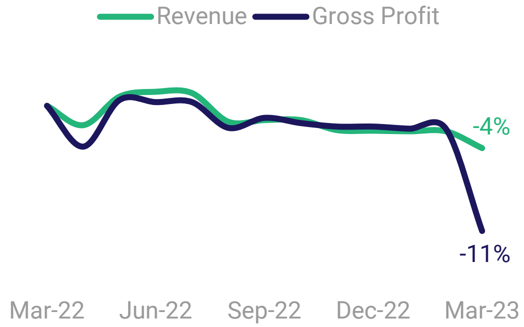
Revenue Guidance/Cons Vs. Reported



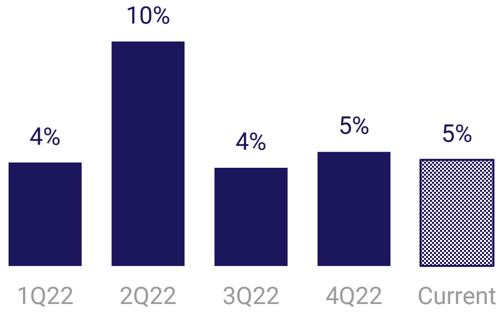
Revenue Seasonality



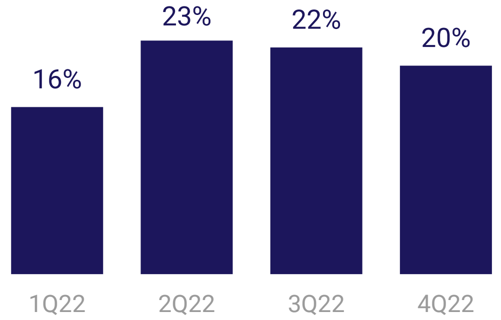
1Q23 Cons. Revisions



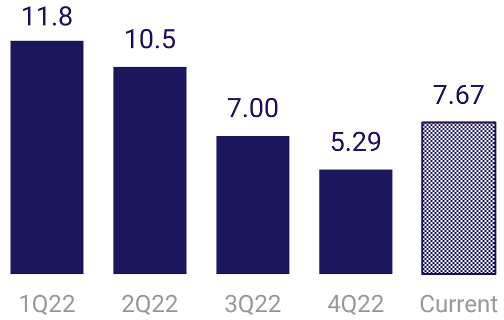
Short Interest (Pre-Print)



Hedge Fund Ownership as % of S/O



Pre-Earnings ADTV(1)

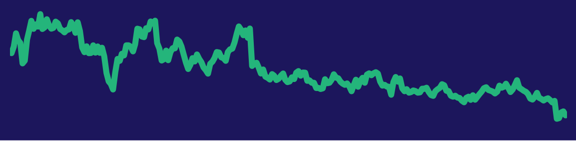


Source: Company filings

1) Measured as ADTV over the prior 7-day period

MARQETA

MQ TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

General:

1) BNPL had a heavy impact on growth and gross margins in 4Q22. How is BNPL trending thus far in 1Q23 and should investors expect 4Q22 QoQ growth in BNPL to be more indicative of normal seasonality going forward?
2) Can management provide an update on the continued improvement of the credit card issuing platform, including the integration of capability from Power and any notable customer wins?
3) While management has suggested the decline in network incentive payments should be most impactful in FY23, is it possible this remains a headwind over the long-term as more of Marqeta's clients mature to the point where they can take over these network relationships?
4) What are the general circumstances that allow Marqeta to win a traditional bank contract, particularly from legacy providers? How does management think about competing against bundled issuing + core processing contracts?
5) Considering current guidance includes no change to the macro, how have more recent macro developments impacted forecasting since management's last update?
6) Has the delivery business stabilized to the point where it won't be a drag on YoY growth?
7) Consensus is currently expecting non-block growth to accelerate to 37% YoY by 4Q23, up from -7% in 4Q22, which seems to imply significant progress in a refocused selling strategy. Is this achievable in only 12 months?

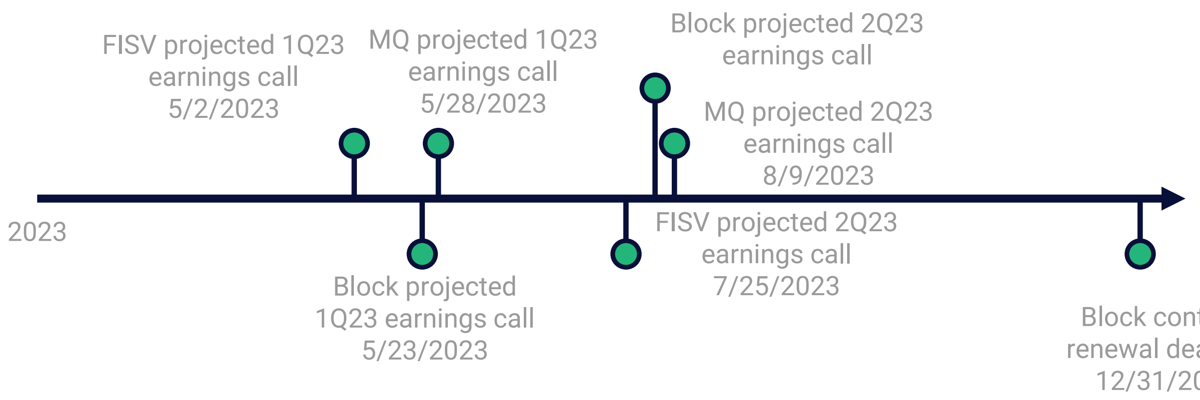
Marqeta For Banking:

7) Can management discuss about the roadmap for Marqeta For Banking? What challenges in the market that this is aiming to solve?
8) Is Marqeta For Banking expected to be a material revenue contributor or an ancillary product that helps drive wins for the core business?

Block Concentration:

9) What is management's long-term goal for Block's contribution to revenue? What's a reasonable timeline to get there?
10) Considering the services Marqeta currently offers Block, does management think investor expectations regarding take rate degradation in a renegotiation are reasonable?
11) Was Block's decision to go with i2c for its new American Express small business credit card the result of differentiated capability in credit, or was Block seeking to diversify its vendor relationships/reliance?

POTENTIAL CATALYSTS



2023

FISV projected 1Q23 earnings call 5/2/2023

MQ projected 1Q23 earnings call 5/28/2023

Block projected 2Q23 earnings call

MQ projected 2Q23 earnings call 8/9/2023

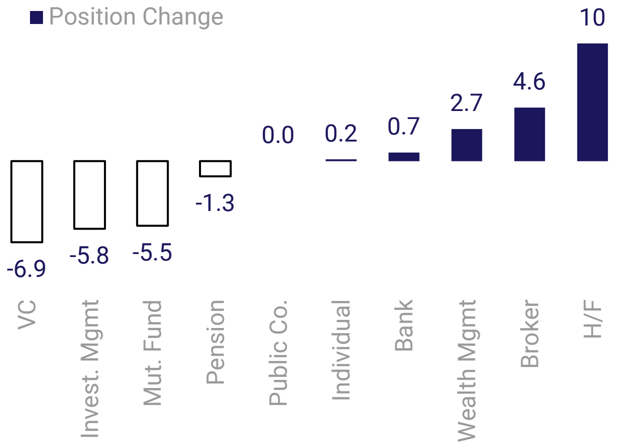
Block projected 1Q23 earnings call 5/23/2023

FISV projected 2Q23 earnings call 7/25/2023

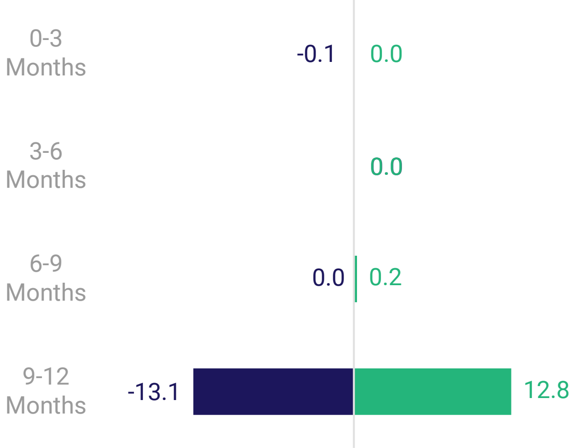
Block contract renewal deadline 12/31/2023

SHAREHOLDER ANALYSIS

Six-Month Position Change (in mm's)



Insider Shares Sold/Bought (in mm's)



Source: Company filings; FactSet

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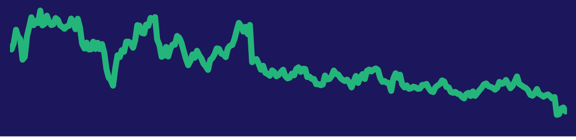
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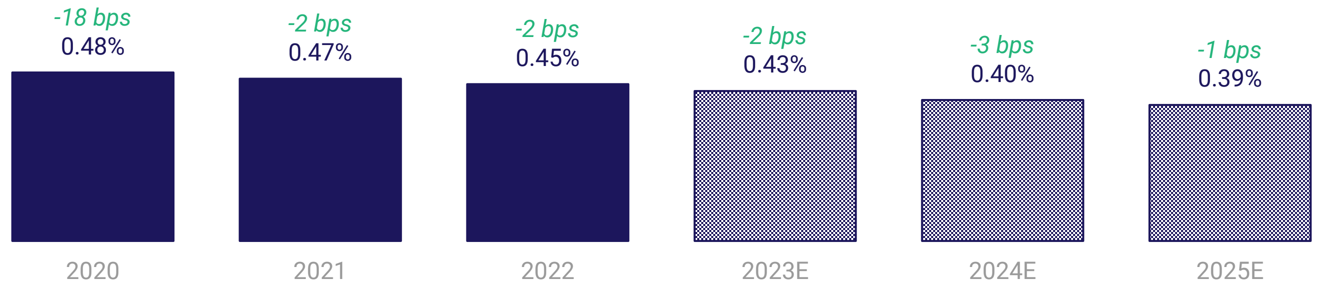
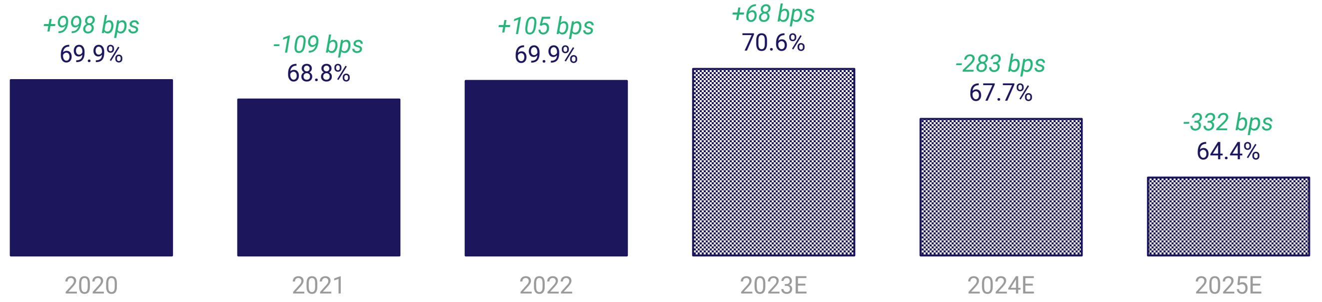
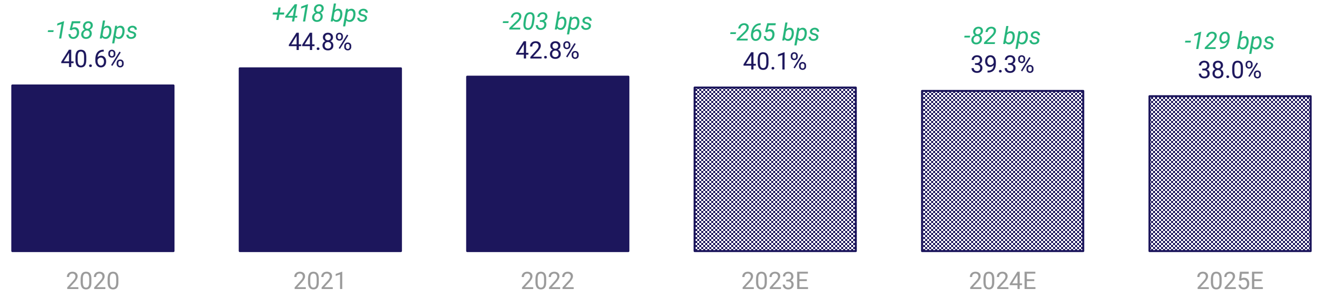
FINANCIAL TECHNOLOGY PARTNERS

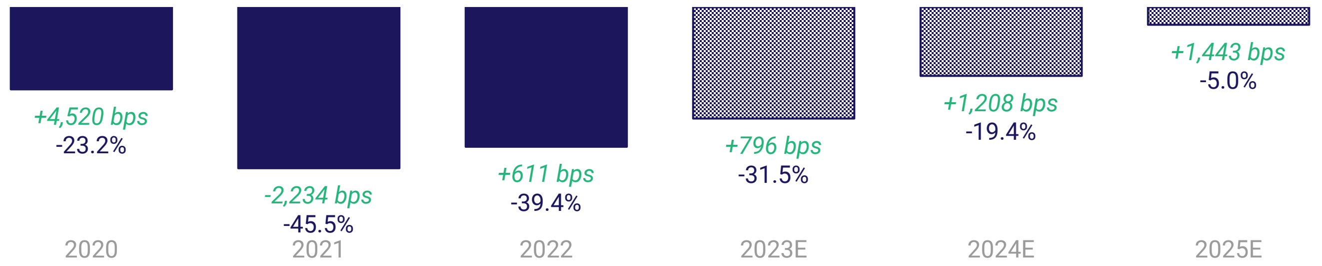
$ in millions, except per share amounts

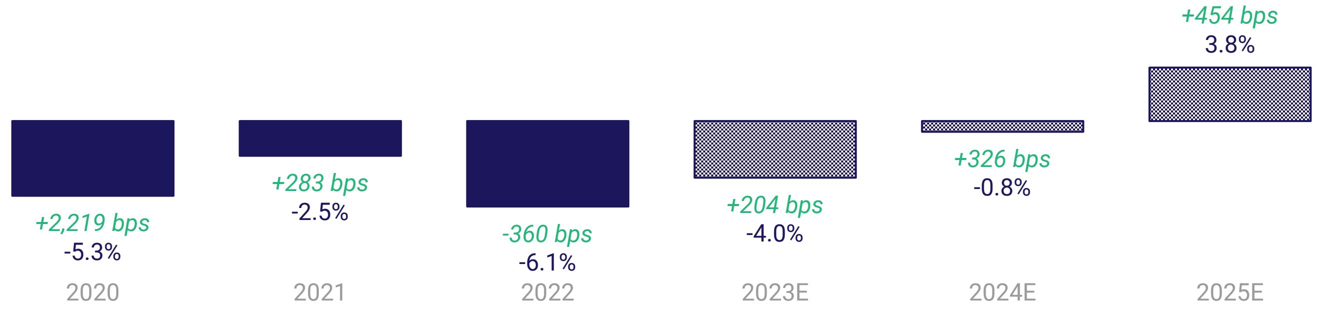
COMPANY RATIOS/MARGIN ANALYSIS

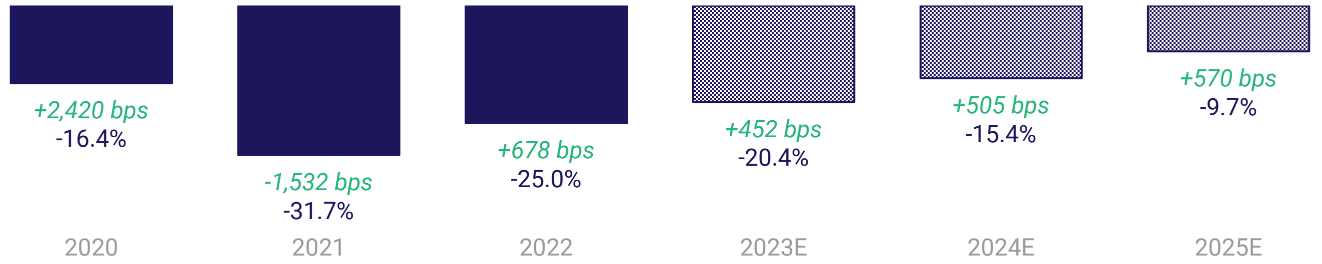

Net Take Rate (% of Purchase Volume)


% of Net Revenue from Block


Gross Profit Margin (% of Net Revenue)


Operating Margin (% of Net Revenue)


Adjusted EBITDA Margin (% of Net Revenue)


Net Income Margin (% of Net Revenue)

Source: Company filings
1) FactSet

MARQETA

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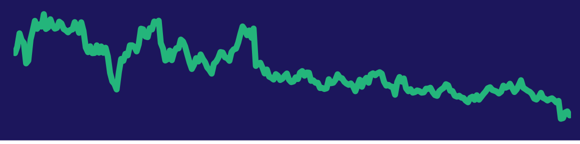

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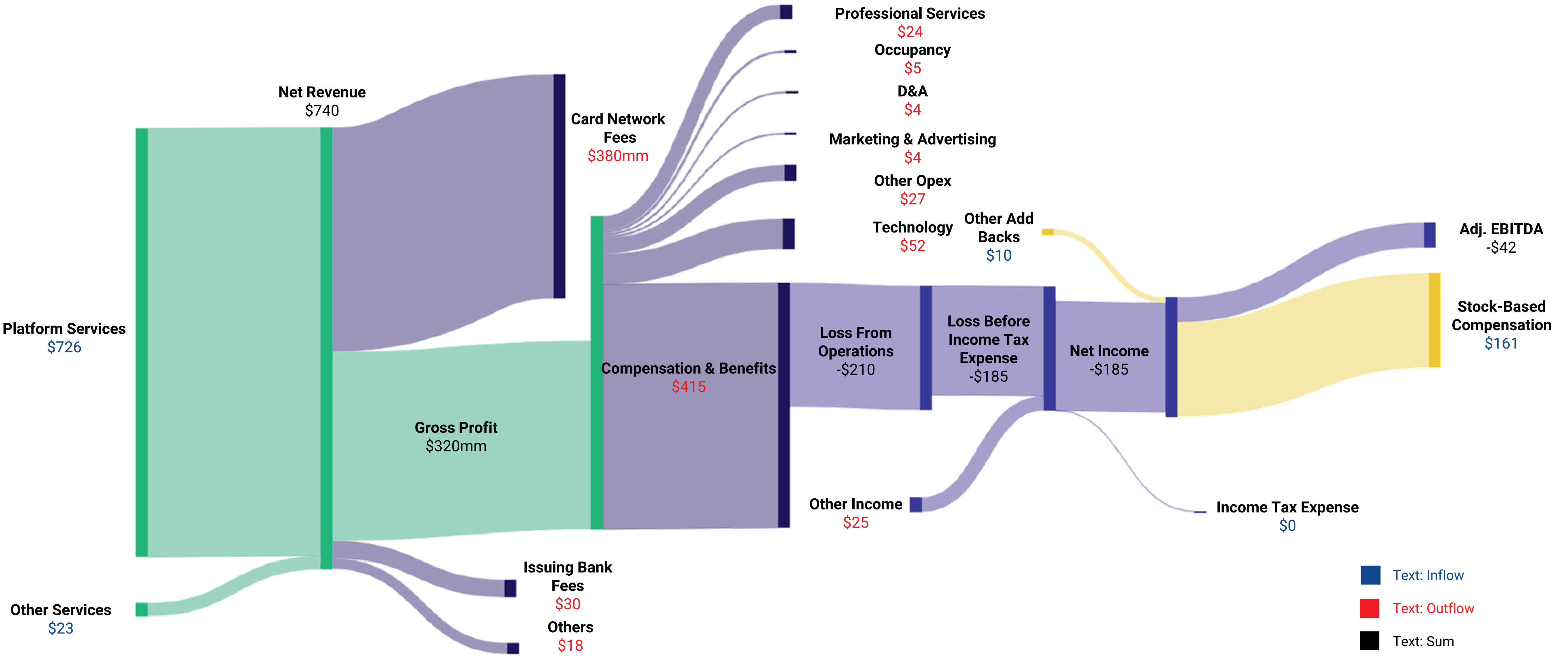
($ in millions)

P&L VISUALIZATION – TTM



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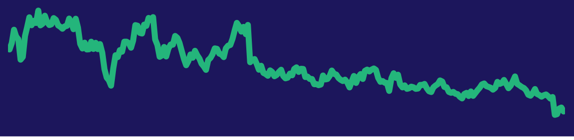

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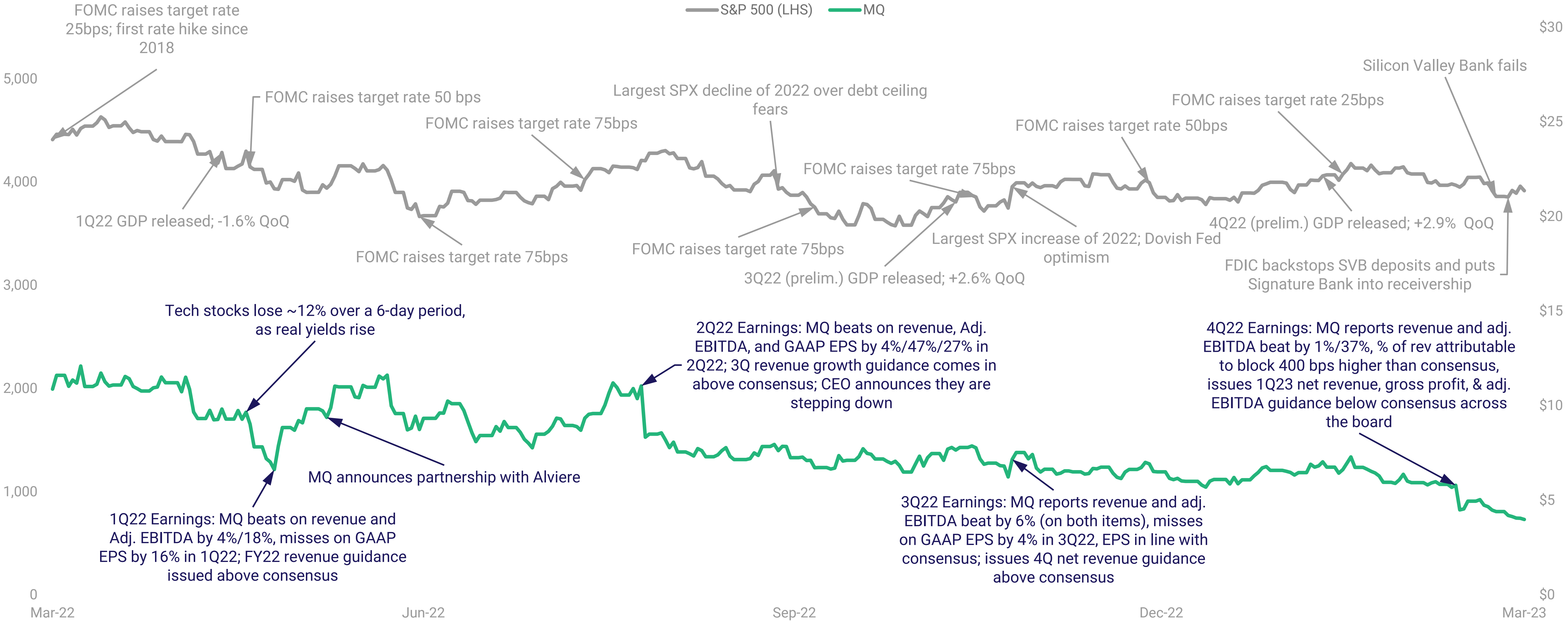
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

FOMC raises target rate 50bps

FOMC raises target rate 25bps

Silicon Valley Bank fails

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 75bps

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

Largest SPX increase of 2022; Dovish Fed optimism

4Q22 (prelim.) GDP released; +2.9% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

Tech stocks lose ~12% over a 6-day period, as real yields rise

2Q22 Earnings: MQ beats on revenue, Adj. EBITDA, and GAAP EPS by 4%/47%/27% in 2Q22; 3Q revenue growth guidance comes in above consensus; CEO announces they are stepping down

4Q22 Earnings: MQ reports revenue and adj. EBITDA beat by 1%/37%, % of rev attributable to block 400 bps higher than consensus, issues 1Q23 net revenue, gross profit, & adj. EBITDA guidance below consensus across the board

MQ announces partnership with Alviere

1Q22 Earnings: MQ beats on revenue and Adj. EBITDA by 4%/18%, misses on GAAP EPS by 16% in 1Q22; FY22 revenue guidance issued above consensus

3Q22 Earnings: MQ reports revenue and adj. EBITDA beat by 6% (on both items), misses on GAAP EPS by 4% in 3Q22, EPS in line with consensus; issues 4Q net revenue guidance above consensus

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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The Only Global Investment Bank Focused Exclusively On FinTech

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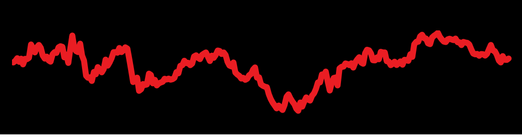
Matthew O'Neill | Co-Director of Research –Matthew.O'Neill@ftpartners.com – (347) 614-2481
Zachary Gunn | Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

MA TTM Price Performance



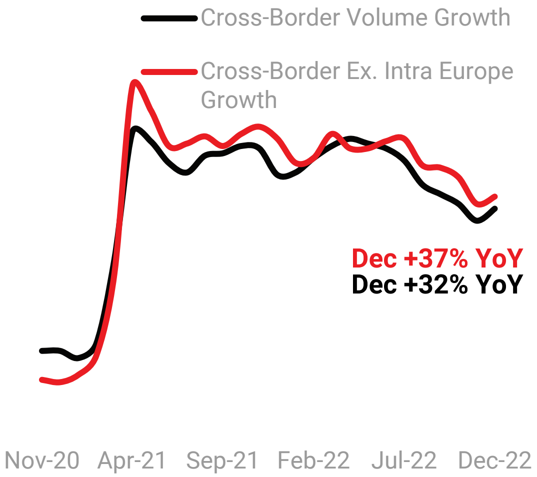
Price as of 03/17/23:	$349.66	**Shares Out (mm):**	954
Market Cap (bn):	$333	**Beta (2 Year Avg.):**	1.0
52-Wk Range:	$276.87 - $390.00	**Avg. Daily Vol (mm):**	2.9

COMPANY OVERVIEW

Mastercard is a technology company in the global payments industry that connects consumers, financial institutions, merchants, governments, and other organizations worldwide, enabling them to use electronic forms of payment instead of cash and checks. Mastercard provides a wide range of payment solutions and services underneath its brands which includes Mastercard®, Maestro®, and Cirrus®.

Mastercard operates a multi-rail payments network that switches (authorize, clear, and settle) payment transactions. It has additional payment capabilities that include automated clearing house ("ACH") transactions (both batch and real-time account-based payments). Using these capabilities, Mastercard offers integrated payment products and services to capture new payment flows. Mastercard's value-added services include, among others, cyber and intelligence solutions.

CROSS-BORDER VOLUME



KEY DEBATES

1. **Macro Outlook:** With 4Q22 results Mastercard provided its FY23 guidance, expecting adjusted net revenue growth (currency neutral, excl. acquisitions) to be at the high-end of low double digits. However, with these expectations, management also provided commentary that it is monitoring several positive and negative economic factors and that it expects consumer spending to hold up relatively well. Meanwhile consensus for FY23 purchase volume growth is 10%. In the event of the macroeconomic environment deteriorating more than expected, it would likely result in a more negatively revised outlook.

2. **Cross-Border:** Cross-border transactions provide a 2x-3x unit economic uplift on revenue compared to domestic volume. As a result, cross-border spending, and more specifically, cross-border travel, significantly impacts top-line revenue. As travel has mostly rebounded in other geographies, investor focus has shifted towards China which represented 1%/2% of inbound/outbound volumes in 2019. The rate at which China travel volumes recover will have a significant impact on FY23 results.

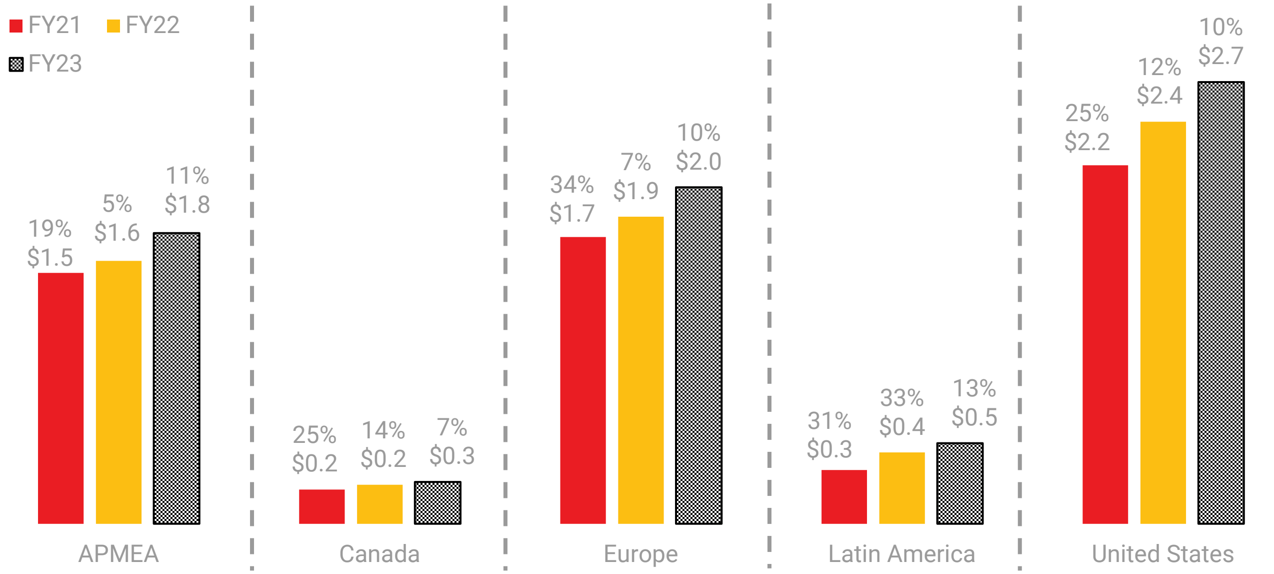
3. **New Flows:** Mastercard has targeted ~$115tn in new flows, primarily made up of B2B/G2B ($50tn) and P2M ($45tn). These new flows represent the next phase of Mastercard's growth, however, sizing the potential revenue contribution has proven challenging as these new flows represent a larger volume opportunity but imply a lower unit economic profile.

REVENUE MODEL

Mastercard drives revenue through four different line items, partially offset by rebates & incentives (a contra-revenue line item) However, on February 14th Mastercard announced a change in the presentation of net revenues that adjusts the disaggregation of revenue to Payment network (65% of revenue) and Value-added services (35%). That said, Mastercard has historically reported revenue as follows:

- **Domestic Assessments (25% of TTM Gross Revenue):** Revenue is primarily generated by charging fees to issuers, acquirers, and other stakeholders based on the dollar volume of activity, or GDV, on the products that carry Mastercard's brands.
- **Cross-Border Volume Fees (19%):** Transaction-related and currency conversion fees charged to issuers and acquirers based on the dollar volume of activity on cards and other devices where the merchant country and the country of issuance are different.
- **Transaction Processing (36%):** Includes revenue generated from switched transactions (authorization, clearing, and settlement) and connectivity fees. These fees are in addition to domestic/cross-border volume fees.
- **Other Revenue (20%):** Revenue generated from value-added services, including cyber & intelligence, data analytics and consulting, loyalty and rewards solutions, program management services, batch and real-time account-based payment services (ACH), open-banking, and crypto.
- **Rebates & Incentives (-37%):** Mastercard pays rebates and incentives when predominately issuing banks' card portfolios meet certain volume and/or growth thresholds. Rebates and incentives are recorded as a reduction to gross revenue (contra-revenue) based on estimates for transactions and card volume.

PURCHASE VOLUME/GROWTH BY GEOGRAPHY (TRILLIONS)



Source: Company Filings; FactSet

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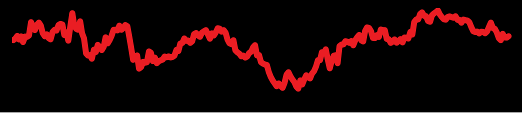
MA TTM Price Performance



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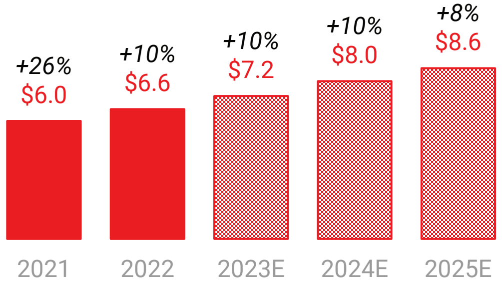
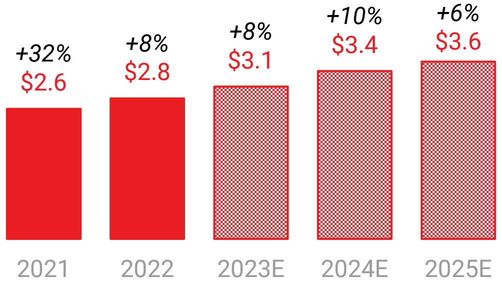
($ in billions, except per share amounts)

HISTORICAL RESULTS & CONSENSUS FORECASTS(1)

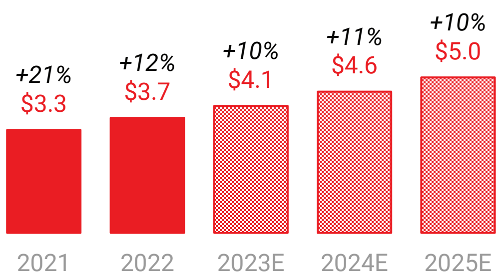
Total Payment Volume (tn)



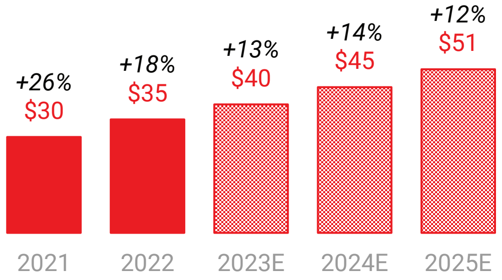
Debit & Prepaid Volume (tn)



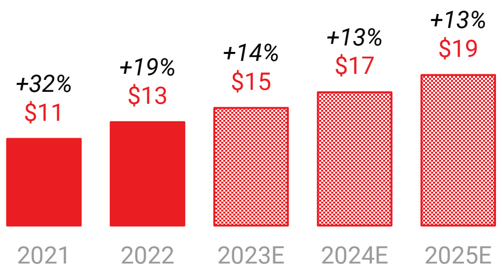
Credit & Charge Volume (tn)



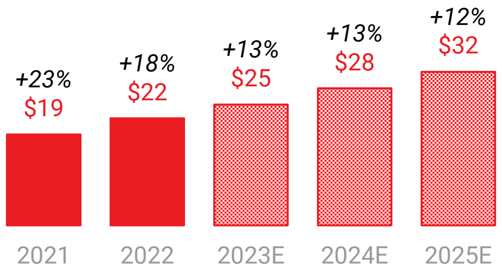
Gross Revenue



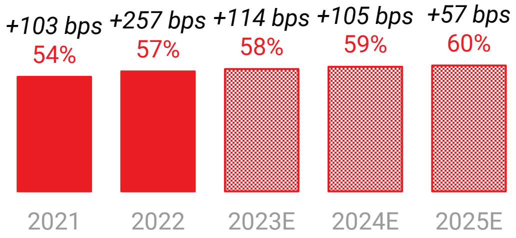
Rebates & Incentives



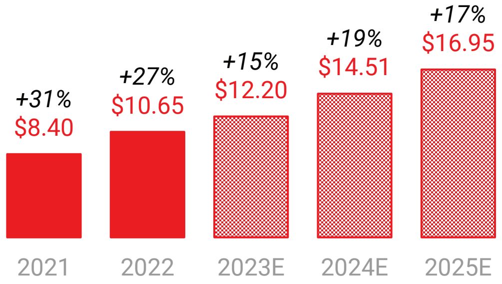
Net Revenue



Adjusted Operating Margin

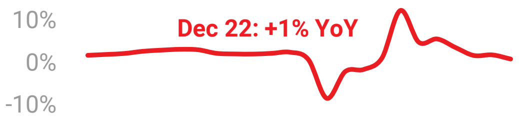


Adjusted Diluted EPS



INDUSTRY KPIs

U.S. GDP Growth(2) *(Jan 17-Dec 22)*

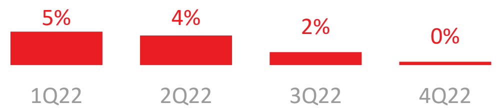


Consumer Sentiment(3) *(Jan 19-Feb 23)*

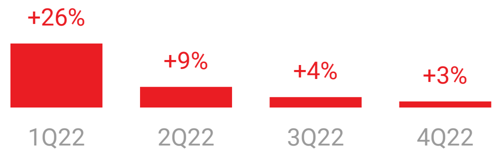
U.S Cross-Border Travel(4) *(Dec 19-Feb 23)*

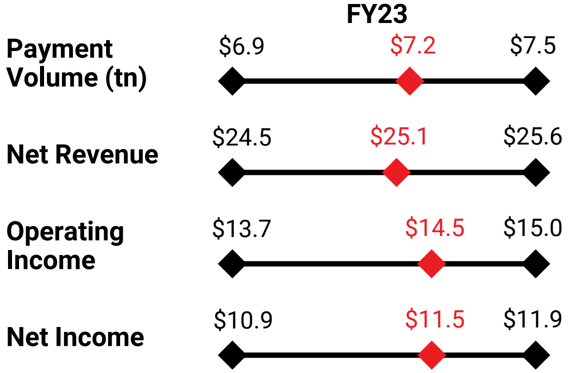
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES(5)

Net Revenue



Net Income

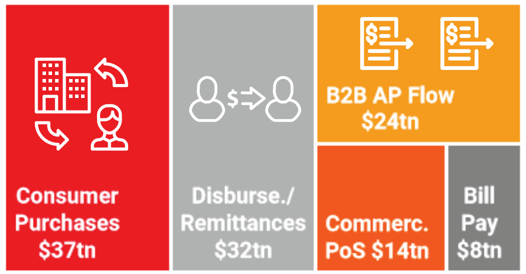




TOTAL ADDRESSABLE MARKET – GLOBAL

Total Opportunity

New Flow Opportunity(6)



FT Partners | Equity Research

Source: Company filings
1) FactSet
2) Bureau of Economic Activity GDP
3) Michigan Consumer Sentiment Index
4) International Trade Administration APIS/I-92 Monitor, in millions
5) FactSet Consensus Low/Average/High Range
6) Mastercard 2021 Investor Day

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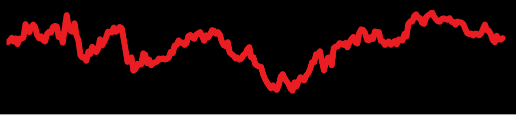

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FINANCIAL TECHNOLOGY PARTNERS

VALUATION CONSIDERATIONS

Relative Valuation:

Mastercard trades at a 29x NTM P/E multiple, 6x below its average 5-year multiple of 35x. It currently trades at a 11x premium to the S&P500, 5x below its 5-year average premium of 16x. **If Mastercard's P/E multiple were to return to its 5-year average premium to the market in 12-months it would trade at $492 (41% upside) based on current STM consensus EPS of $14.56.** Mastercard also trades at a 3.6x premium to Visa compared to its 5-year average premium of 4.6x. Mastercard's premium to Visa is primarily attributed to Mastercard's higher expected top-line growth rate as a result of its greater exposure to higher growth geographies and more diverse revenue streams. **Mastercard remains one of the most structurally sound stories in the space capable of delivering consistent top and bottom-line growth regardless of the underlying economic environment. Though there are nearer term catalysts (such as consumer spending and China's reopening) that could drive revisions to near-term results, which are outlined on the following page.**

DCF Scenarios:

Scenario 1 – Current Price ($350, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires a combination of low double-digit revenue growth through 2026 before gradually decelerating to the terminal growth rate of 3%, combined with operating margin expansion of ~150 bps over the next three years. Comparatively, managements medium-term targets provided at the most recent investor day called for high-teens Revenue CAGR and a minimum operating margin of 50%. **Were shares of Mastercard to remain at the current price in 12-months, it would imply a 24x P/E multiple (based on current STM consensus EPS of $14.56).**

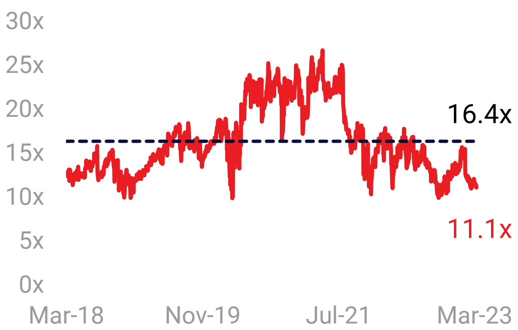
Scenario 2 – B2B Upside ($448, 28% upside): The second DCF outlines a scenario where Mastercard captures (and monetizes) a greater portion of the B2B Payments TAM. In this scenario, revenue growth assumptions are moderately accelerated to mid-teens through 2026 before gradually decelerating to the 3% terminal growth rate, while margin expectations are modestly decreased through 2026 before increasing them back to the longer-term average to account for potential lower unit economic profiles of these transactions. **This scenario points to a 12-month price of $448 (28% upside), which based on the current STM consensus EPS implies a 31x P/E multiple.**

Scenario 3 – Incremental Regulation ($296, 15% downside): The third DCF scenario estimates the impact of adding incremental credit interchange regulation to the Durbin amendment. In this scenario, revenue growth expectations are decreased to MSD through 2026, while margin expectations as incremental margin pressure would be spread across all participants in the payments value chain. **This scenario points to a 12-month price of $296 (15% downside) which based on the current STM consensus EPS implies a 20x P/E multiple.**

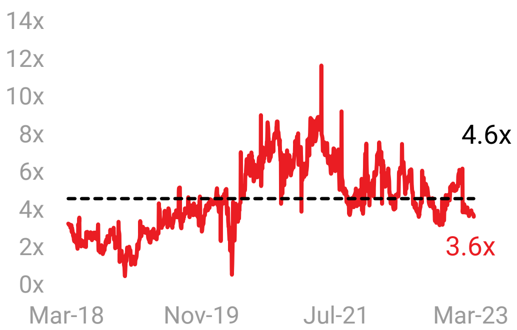
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

MA NTM P/E & 5-Year Avg.

NTM P/E Premium Relative to S&P500



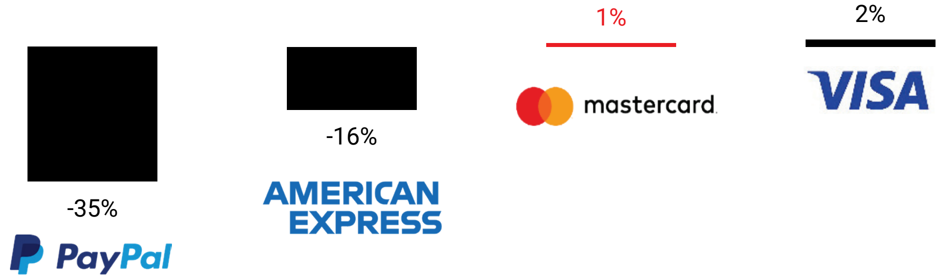
NTM P/E Premium Relative to V



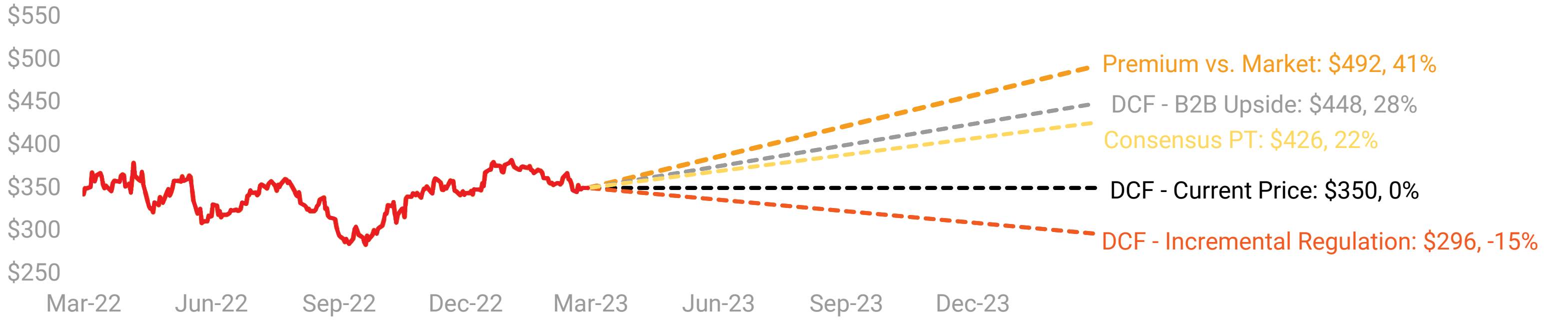
DCF Assumptions[1]

10-Yr RFR	3.9%
Cost of Equity	10.6%
Cost of Debt	5.0%
WACC	10.3%
Beta	1.0
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1%
Equity Value Reduction from Present + Future SBC	$5,394

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) SBC in millions

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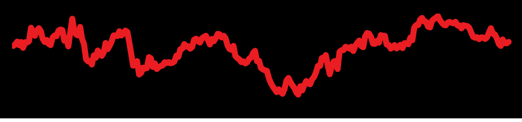

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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) potential for recession and 2) rebound in APMEA volume. While there are other drivers of Mastercard's performance (B2B penetration, regulation, etc.) these represent the most likely area(s) of upside/downside relative to management's outlook and the consensus view over the short-to-medium term.

Consensus Case:

The average consensus price target for Mastercard is $426, with STM EPS estimates of $14.56, implying a 29x NTM P/E multiple, if shares traded were trading here in 12-months. The consensus price target implies 22% upside relative to the current share price of $349.66.

Upside Case(s):

(+) $478, 37% Upside: This scenario assumes the global economy avoids a recession and PCE trends remain strong. The scenario model reflects this by 1) assuming no deceleration in the stacked growth rate of purchase volume relative to 4Q22 and 2) marginally improved gross margins driven by a faster rebound in international travel and a mix shift towards credit. This implies 20% EPS growth and 37% upside to the current share price with a 30x multiple.

(+-) $447, 28% Upside: This scenario assumes no recession, but forecasts continued weakness in APAC purchase volume (primarily driven by a slower rebound in China than expected). The model reflects this by assuming no acceleration in the stacked growth rate of APAC purchase volume and modestly weaker international transactions revenue. This implies 18% EPS growth and 28% upside to the current share price with a 29x multiple.

(++) $519, 48% Upside: This best-case assumes no recession and forecasts a quicker rebound in APAC purchase volume and modestly stronger international transactions revenue. This implies 23% NTM EPS growth and 48% upside to the current share price with a 31x multiple.

Downside Case(s):

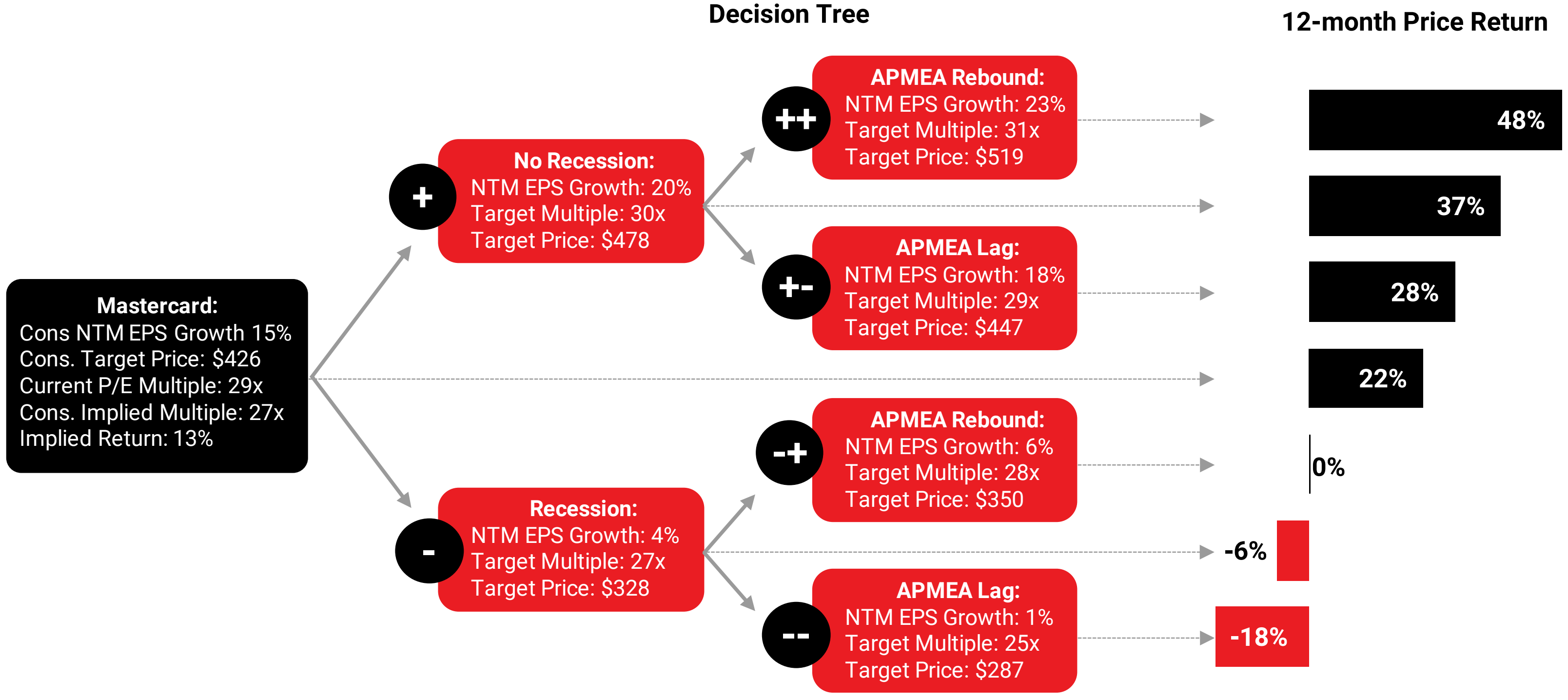
(-) $328, 6% Downside: This scenario assumes a global recession, weighing on overall volume. The model reflects this by assuming purchase volume declines to the YoY growth trough of PCE during the GFC. It also assumes moderate contraction in gross margin due to weaker international travel and a mix shift to debit. This implies 4% EPS growth and 6% downside to the current share price with a 27x multiple.

(-+) $350, 0% Downside: This scenario assumes a global recession and the previously mentioned stronger rebound in APAC purchase volume/international transaction revenue. This implies 6% EPS growth and 0% downside to the current share price with a 28x multiple.

(--) $287, 18% Downside: The worst-case scenario assumes a global recession and the previously mentioned slower rebound in in APAC purchase volume/international transaction revenue. This implies 1% EPS growth and 18% downside to the current share price with a 25x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Decision Tree



Mastercard:
Cons NTM EPS Growth 15%
Cons. Target Price: $426
Current P/E Multiple: 29x
Cons. Implied Multiple: 27x
Implied Return: 13%

\+ **No Recession:**
NTM EPS Growth: 20%
Target Multiple: 30x
Target Price: $478

\- **Recession:**
NTM EPS Growth: 4%
Target Multiple: 27x
Target Price: $328

++ **APMEA Rebound:**
NTM EPS Growth: 23%
Target Multiple: 31x
Target Price: $519

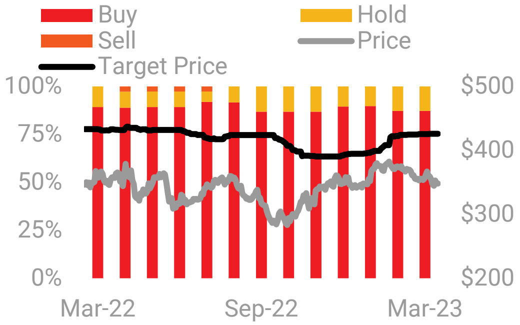
+- **APMEA Lag:**
NTM EPS Growth: 18%
Target Multiple: 29x
Target Price: $447

-+ **APMEA Rebound:**
NTM EPS Growth: 6%
Target Multiple: 28x
Target Price: $350

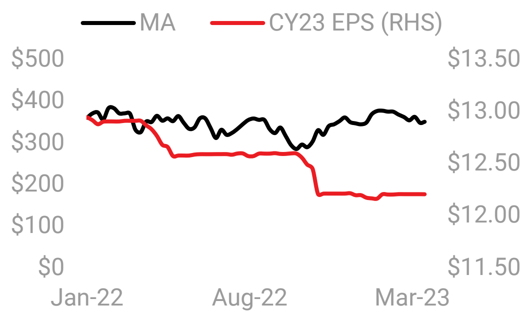
-- **APMEA Lag:**
NTM EPS Growth: 1%
Target Multiple: 25x
Target Price: $287

12-month Price Return

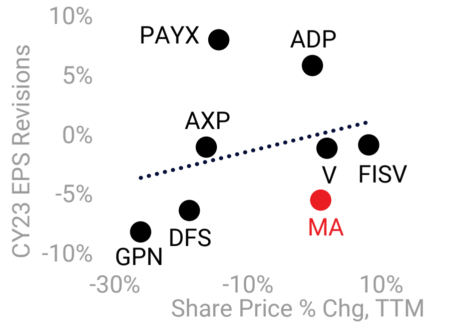
Sell-Side Ratings Distribution



Price Performance vs Est. Revisions



Est. Revisions vs Price Change, TTM



Source: Company filings; FactSet

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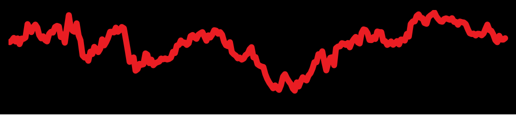
MA TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

($ in billions, except per share amounts)

4Q22 EARNINGS CALL RECAP

Takeaway: Management hosted its 4Q22 call with a moderately positive tone outlining the puts and takes in the implied FY23 and providing significant detail on the expected rebound in outbound/inbound China volume. **Shares traded down ~2% following results, likely driven by no implied upside in the guide relative to consensus.** We expect estimates for FY23 revenue will remain largely unchanged with a modest increase in forecasted expenses.

Results Recap: Mastercard reported TPV of $1.73tn and switched transactions of 33.9bn (+8% YoY, +5% QoQ). Total TPV came in 3% below consensus, while switched transactions were in-line with expectations. Net revenue growth modestly beat expectations, driven by stronger-than-expected cross-border volume fees and transaction processing fees, which beat expectations by 3%/1%, respectively. This was partially offset by lower-than-expected domestic assessments (-2% relative to consensus). Mastercard reported diluted earnings per share of $2.65, 3% above consensus estimates with 6¢ added from buybacks.

Guidance Recap: FY23 guidance includes adjusted net revenue growth (currency neutral, excl. acquisitions) to be at the high-end of low double digits (LDD) with adjusted operating expenses at the high-end of high single digits (HSD). This compares to consensus expectations of 12%/9% growth for adjusted revenue/expenses. We note that on operating expenses, litigation provisions, and special items are expected to impact growth by ~5% while currency is expected to offset expense growth by ~1%. **1Q23 guidance includes adjusted net revenue growth to be at the low end of LDD (pre-q consensus was forecasting +10.5%) YoY.** Additionally, management expects adjusted OpEx growth to be at the low end of HSD vs. cons. estimates of 10%.

Incremental From the Call:

- **Guidance/Outlook:** Management also expects cross-border volume growth in 1Q23 to benefit from easier comps related to Omicron in 1Q22. On the call, management provided volume trends, citing January MTD switched volumes/cross-border volumes were up 26%/48% (excl. Russia) representing an acceleration over the 4Q22 growth rates of 20%/37%, respectively. **While January trends could make management guidance for 1Q appear conservative, commentary on the call indicated that the impact from Russia would worsen as the quarter progresses.**
- **Cross-Border Opportunity:** Management stated that all regions have recovered well above 2019 levels except for Asia, driven by the slow reopening in China. Management provided detail on the historic contribution of China, stating that it represented ~1% of inbound cross-border volume and ~2% of outbound cross-border volume in 2019. In 4Q22, the contribution from China was at 20%/50% of 4Q19 levels of inbound/outbound volumes. Regarding contribution to guidance, **management stated it did build in some recovery in China's volume for FY23 guidance but did not quantify the expected contribution**. The volume contribution from Asia, particularly with respect to cross-border volume recovery, will likely be a significant driver of potential outperformance/underperformance in FY23.
- **B2B Update:** Mastercard provided an update on the B2B opportunity, citing the $14tn POS payments TAM and discussed the success that Mastercard has had with its vertical-specific go-to-market approach. Mastercard is using its RTP assets to attack this B2B opportunity, in addition to both physical and virtual cards, as evidenced by management's discussion of several new partnerships on the earnings call. While the overall targeted B2B opportunity of $50tn (provided at the 2021 investor day) is large, it is important to caveat that these new flows will likely come at a lower yields versus consumer payments.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs.▲	%▲
Total Purchase Volume (trillions)	**$1.73**	**$1.78**	-$0.1	-3%
growth (%, yoy)	*4%*	*7%*		
Switched Transactions (millions)	**34.0**	**33.9**	0.06	0%
growth (%, yoy)	*8%*	*8%*		
Domestic Assessments	**$2.25**	**$2.29**	-$0.04	-2%
growth (%, yoy)	*5%*	*7%*		
Cross Border Volume Fees	**$1.80**	**$1.74**	$0.06	3%
growth (%, yoy)	*30%*	*26%*		
Transaction Processing Fees	**$3.33**	**$3.30**	$0.04	1%
growth (%, yoy)	*32%*	*31%*		
Other Revenue	**$2.05**	**$2.05**	$0.00	0%
growth (%, yoy)	*19%*	*19%*		
Rebates and Incentives (Contra Revenue)	**$3.61**	**$3.58**	$0.02	1%
growth (%, yoy)	*14%*	*14%*		
Net Revenue	**$5.82**	**$5.79**	$0.03	0%
growth (%, yoy)	*12%*	*11%*		
Adj. Operating Expenses	**$2.62**	**$2.63**	-$0.01	0%
growth (%, yoy)	*10%*	*10%*		
Adj. Operating Income	**$3.20**	**$3.16**	$0.04	1%
Adj. Operating Income Margin (%)	*55%*	*55%*		*36bps*
Adj. Net Income	**$2.55**	**$2.47**	$0.07	3%
Adj. Net Income Margin (%)	*44%*	*43%*		*108bps*
Adj. Diluted EPS	**$2.65**	**$2.58**	$0.07	3%
growth (%, yoy)	*13%*	*10%*		

FY23 Guidance	New	Pre-Q Cons.
Adj. Net Revenue Growth	**"High-end of low-double-digits"**	**12%**
Operating Expense Growth	**"High-end of high-single-digits"**	**9%**

Source: Company filings; FactSet; Visible Alpha

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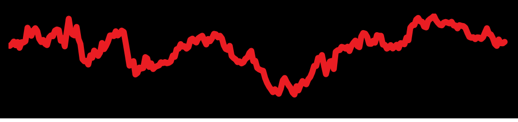

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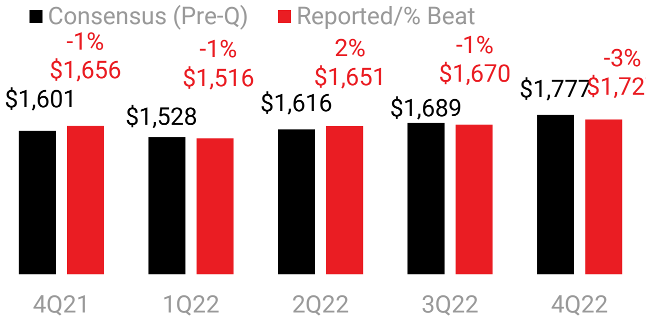
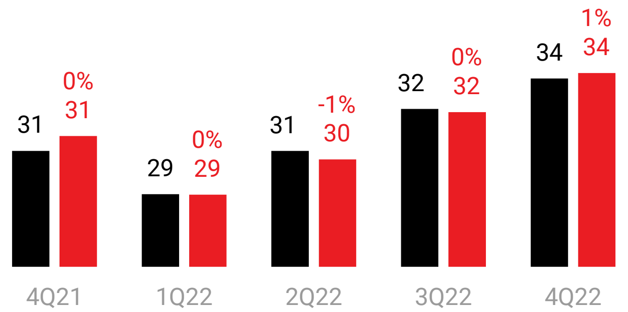
($ in billions, except per share amounts)

REPORTED VS. CONSENSUS

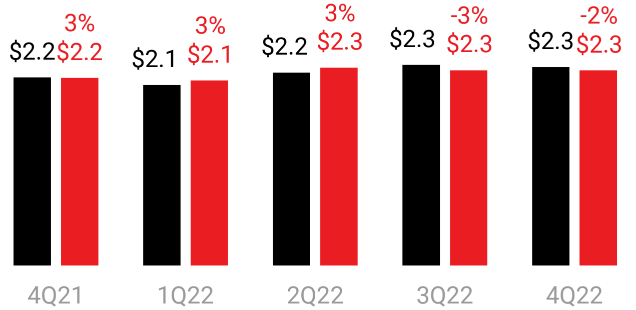
TPV



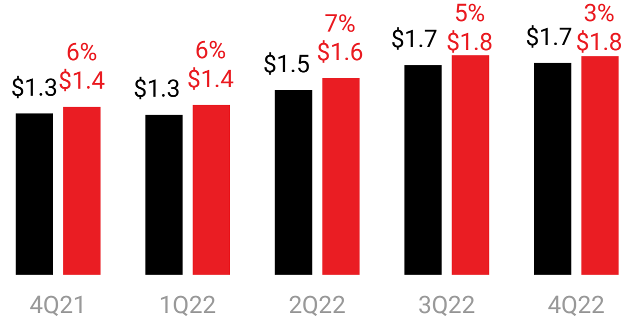
Switched Transactions (bn)



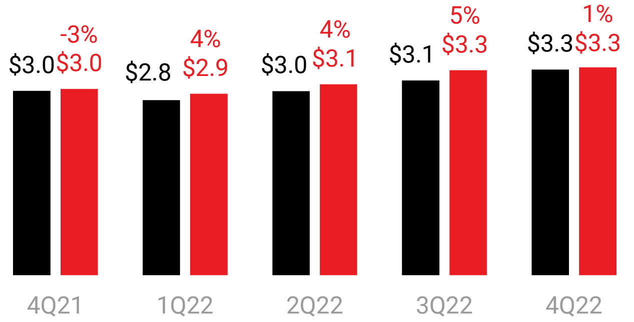
Domestic Assessments



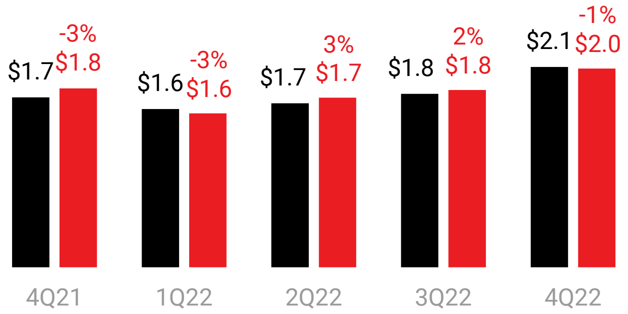
Cross-Border Volume Fees



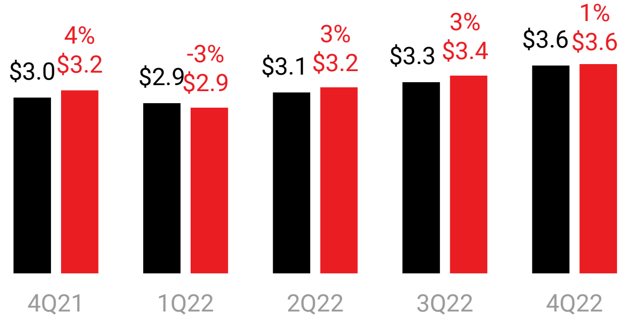
Transaction Processing Revenue



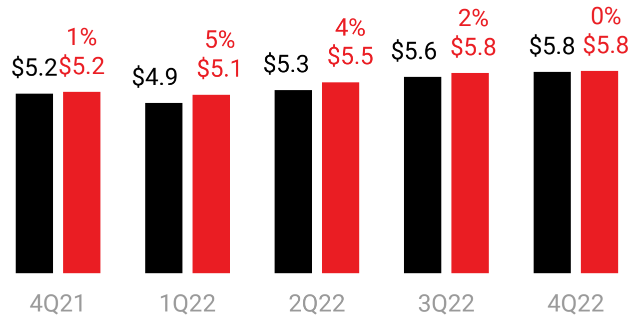
Other Revenue



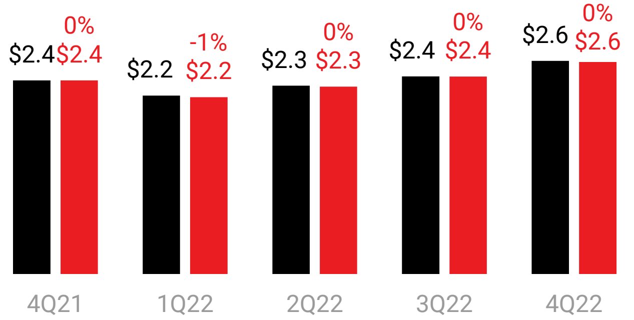
Rebates and Incentives



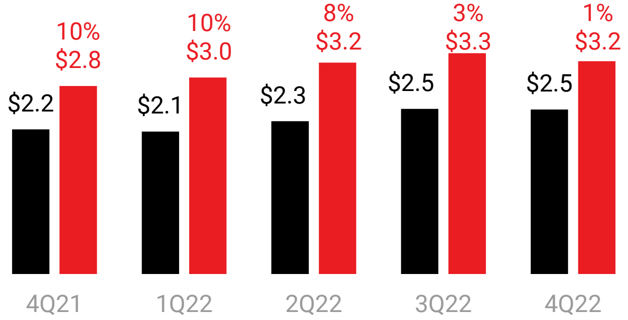
Net Revenue



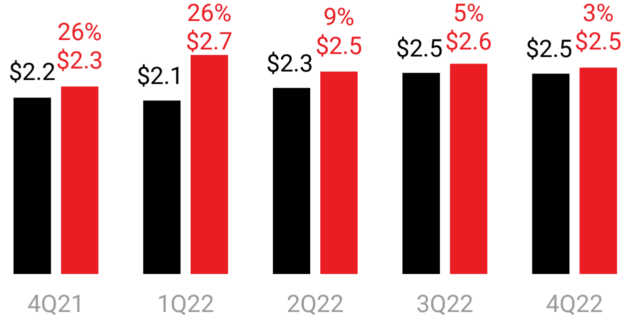
Adjusted Operating Expenses



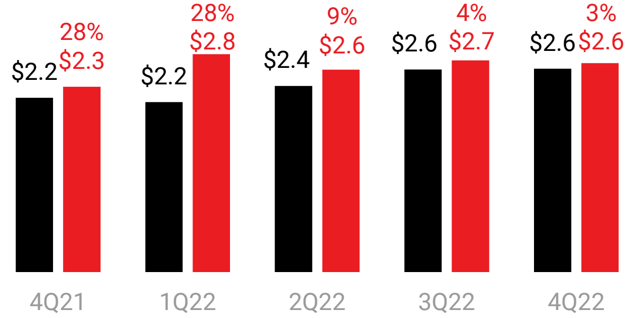
Adjusted Operating Income



Adjusted Net Income



Adjusted Diluted EPS



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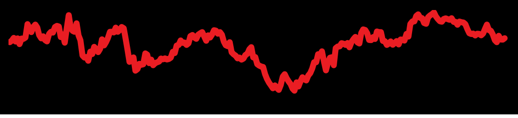

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($ in billions)

1Q23 EARNINGS OUTLOOK

Mastercard is expected to report 1Q23 earnings on May 3rd before market open. While Mastercard's outlook already reflects "generally resilient consumer spending", overall consumer spending has remained strong despite the puts and takes caused by inflation, higher borrowing costs, etc. Specifically, PCE in the U.S was up 5.4% in January. We believe this, coupled with opportunity for lower expenses than consensus currently reflects, could imply upside to current estimates.

What's In Focus:

Throughout 1Q23, China cross-border trends and overall consumer health have remained top of mind for investors. With 4Q22 results, management stated it is expecting a "pretty sizable" recovery of both inbound and outbound China volume throughout FY23. That said, OAG's international travel index shows international travel trends have modestly improved throughout March with total international seats still down ~18% on average relative to 2019 levels, though this is a marginal improvement from -22% in 4Q22. In China specifically, international capacity is now sitting at 25% of March 2019 levels. Overall, the number of seats between China and its largest international corridors remains well below 2019 levels, as seen in the graphic to the bottom right.

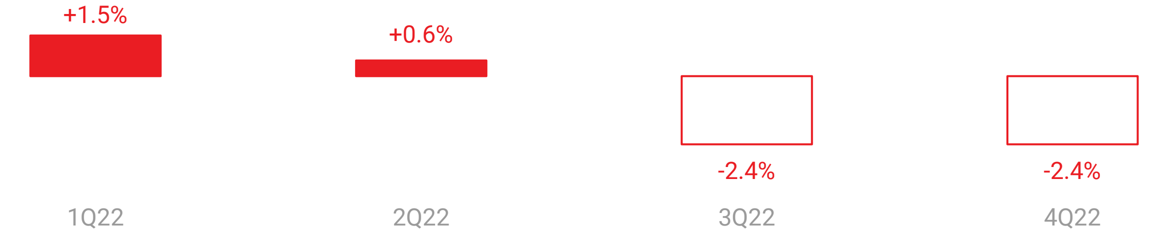
Estimates:

Since Mastercard reported on January 26th purchase volume estimates have been modestly revised lower from $1.65tn to $1.64tn implying 9% YoY growth. This remains modestly ahead of Mastercard SpendingPulse trends, which showed January U.S. retail spend at 8.8% YoY growth. We believe there may be room for further downward revisions as January is likely to be the strongest month in the quarter given the lapping of Omicron. FY23 Purchase GDV estimates are $7.2tn, implying 10% YoY growth.

Net revenue estimates for 1Q23 stand at $5.63bn implying 9% growth YoY. This would represent the slowest revenue growth of the year as its comping over a strong 1Q22 result of 24% growth. Management's outlook for net revenue growth is "at the low end of a low double-digit range while acquisitions will add 2 ppt and FX will be a 1ppt headwind". Consensus expectations for top-line growth are in-line with management guidance. 2Q/3Q/4Q are expected to grow 13%/14%/15% YoY, respectively. On a segment level basis in 1Q23, consensus is forecasting the slowest level of growth in domestic assessments at 7%, while cross-border volume fees are expected to grow the fastest at 24% YoY. This would represent a ~600bps deceleration in the YoY growth rate for cross-border volume fees.

However, for FY adjusted operating expenses, consensus is currently forecasting 10% growth relative to management guidance for the high-end of HSD growth. Adjusted EPS estimates for 1Q have remained relatively unchanged at $2.72 as Mastercard has reiterated its focus on investing in growth.

POST-RESULTS ONE-DAY ALPHA VS. SP500



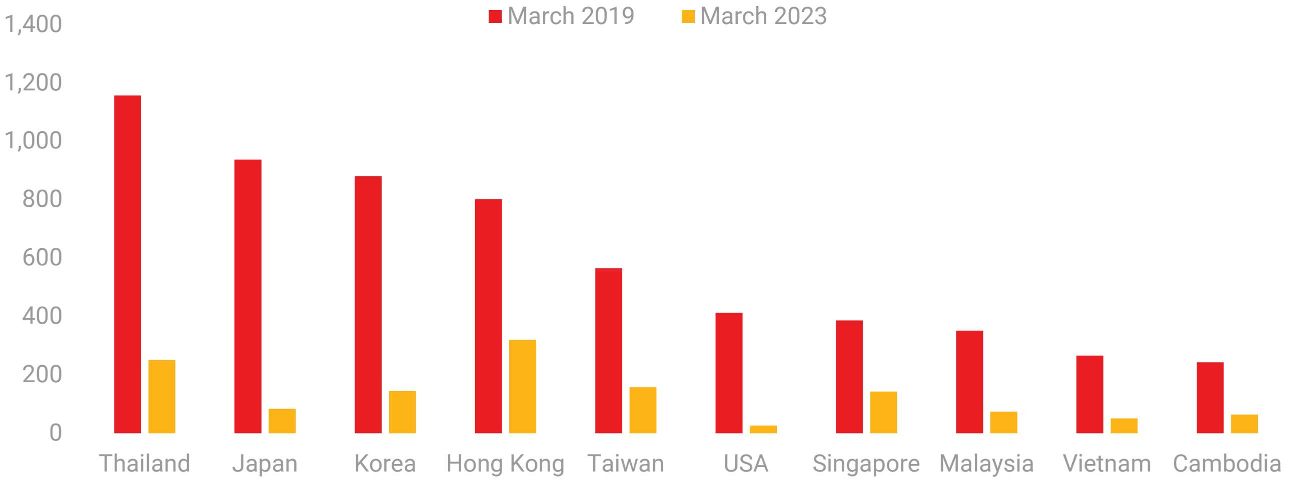
1Q22
- 5%/28% revenue/EPS beat
- Reiterated FY22 revenue guide despite Russia exit; reduced opex guidance

2Q22
- 4%/9% revenue/EPS beat
- Raised FY22 net revenue growth guide to low 20's%
- Repurchased $2.4bn of stock during the quarter

3Q22
- 2%/4% revenue/EPS beat
- October MTD metrics slowed modestly but remained solid, particularly switched volume

4Q22
- Revenue in-line, 3% EPS beat
- Provided updated guidance with no implied upside in the guide relative to consensus

CHINA'S TOP 10 INTERNATIONAL MARKETS – AIR TRAVEL SEATS(1)



Source: Company filings; FactSet
1) OAG Data

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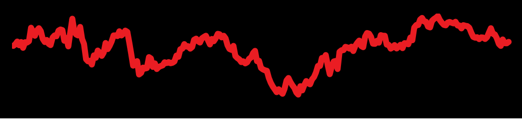
MA TTM Price Performance



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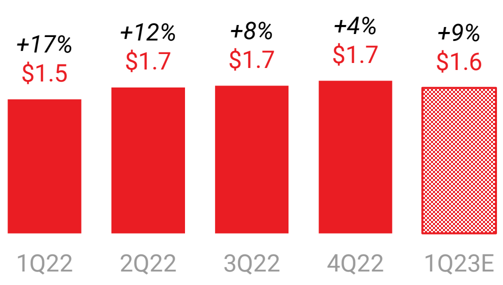
($ in billions)

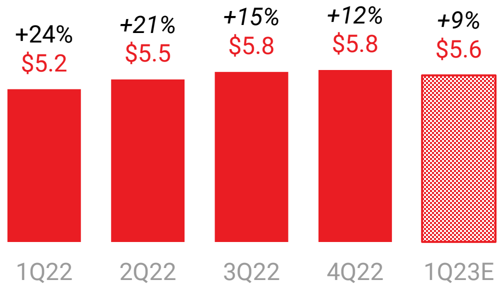
1Q23 CONSENSUS ESTIMATE RANGES

	Low	Average	High
Total Purchase Volume (trillions)	$1.58	$1.65	$1.69
growth (%, yoy)	4%	9%	11%
Switched Transactions (millions)	$29.6	$31.3	$32.4
growth (%, yoy)	2%	8%	12%
Domestic Assessments	$2.14	$2.26	$2.38
growth (%, yoy)	1%	6%	12%
Cross Border Volume Fees	$1.60	$1.73	$1.90
growth (%, yoy)	14%	24%	36%
Transaction Processing Fees	$2.56	$3.06	$3.30
growth (%, yoy)	-9%	9%	17%
Other Revenue	$0.18	$0.18	$0.19
growth (%, yoy)	7%	9%	11%
Rebates and Incentives (Contra Revenue)	$3.48	$3.31	$3.13
growth (%, yoy)	21%	15%	9%
Net Revenue	$5.56	$5.64	$5.71
growth (%, yoy)	8%	9%	11%
Adj. Operating Expenses	$2.30	$2.37	$2.44
growth (%, yoy)	5%	9%	12%
Adj. Operating Income	$3.20	$3.27	$3.38
Operating Margin (%)	58%	58%	59%
Adj. Net Income	$2.47	$2.60	$2.75
Net Income Margin (%)	45%	46%	48%
Adj. Diluted EPS	$2.58	$2.72	$2.87
growth (%, yoy)	-6%	-1%	4%

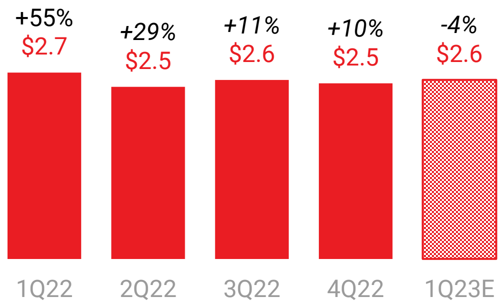
QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY



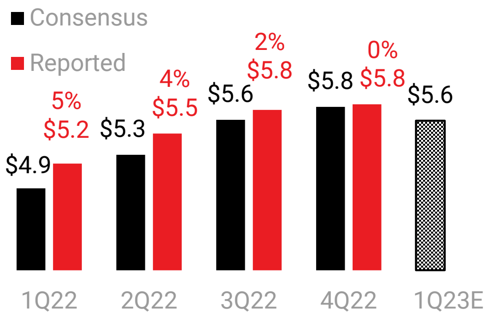
Purchase GDV (tn) /YoY Growth



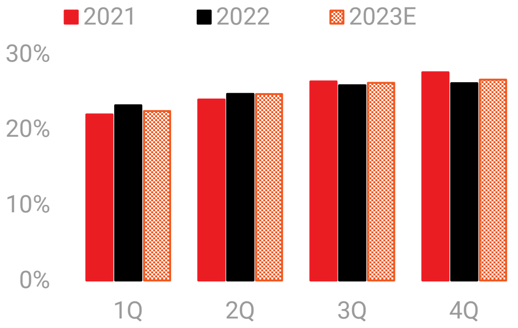
Revenue/YoY Growth



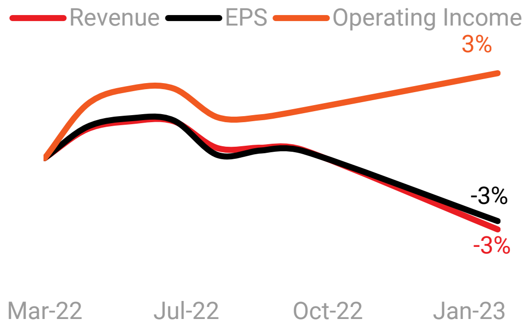
Adjusted Net Income/YoY Growth



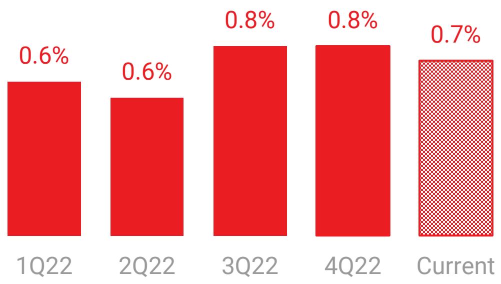
Revenue - Consensus vs. Reported



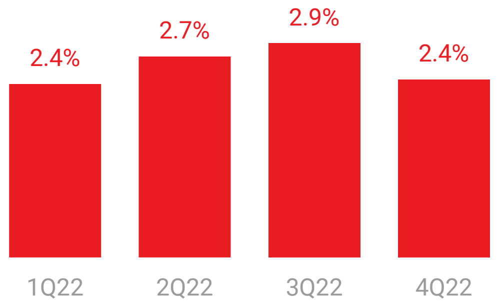
Revenue Seasonality



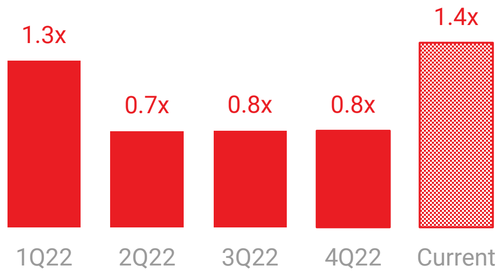
1Q23 Cons. Revisions



Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio(1)

Source: Company filings; FactSet

1) Put/Call Ratio over 7-days leading into earnings

FT Partners | Equity Research

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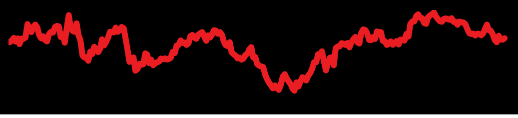

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QUESTIONS FOR MANAGEMENT

General:

1) Does management expect there to be any material impacts on the business due to the Federal Reserve's enforcement of utilizing two unaffiliated networks for online debit transactions?
2) With valuations at a more reasonable level compared to the last ~2 years it is fair to expect Mastercard to be actively pursing M&A and what type of assets are most desirable?
3) Can management discuss the value of Mastercard Direct, what it enables, and how it fits into the broader strategy?
4) Was there any disruption in settlement for cards issues by Silicon Valley Bank or Signature Bank and how does Mastercard safeguard the system against a bank failure?

Macro:

5) Some of the greatest areas of inflation are in primarily non-carded segments like energy or housing, is there any sign that a greater portion of the consumers wallet share is moving away from cards as a result?
6) So far, the consumer has appeared to remain relatively strong but the net percentage of banks tightening standards for credit cards has increased, what impact may this have volume growth?

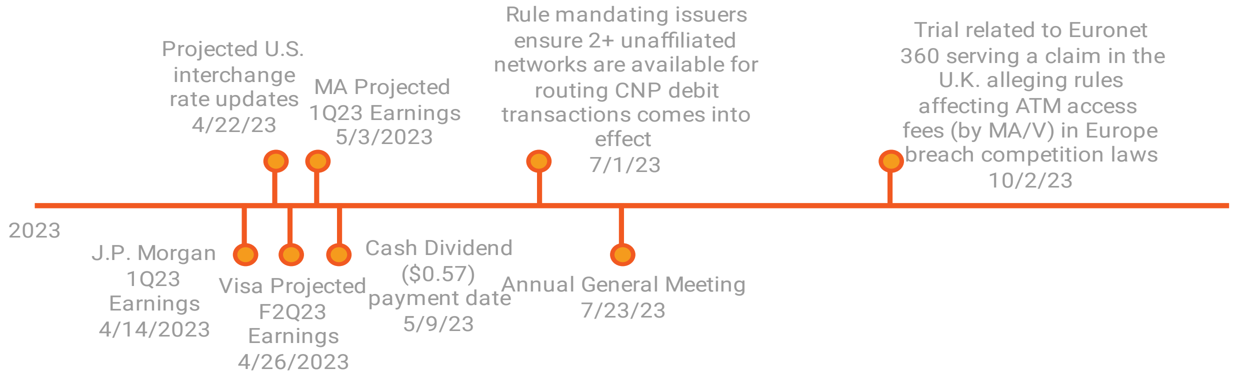
Other Revenues:

7) Volume-based revenue is typically hedged from inflation impacts, but with value-added services representing a greater portion of net revenues, is a growing portion of revenues negatively correlated to inflation?
8) Can management discuss some of its value-added services, ones that are resonating the most with customers, and perhaps the ones on the horizon that management is most excited to deploy or grow significantly?

Geographies:

9) How much of a difference has there been in the strength of consumer spending in Europe compared to other markets?
10) What corridors are still below pre-COVID levels for travel and is the expectation for most of these regions to be at 100%+ by the end of 2023?
11) Has management seen any meaningful improvement in outbound/inbound travel volumes with China?

POTENTIAL CATALYSTS



2023

J.P. Morgan 1Q23 Earnings 4/14/2023

Projected U.S. interchange rate updates 4/22/23

Visa Projected F2Q23 Earnings 4/26/2023

MA Projected 1Q23 Earnings 5/3/2023

Cash Dividend ($0.57) payment date 5/9/23

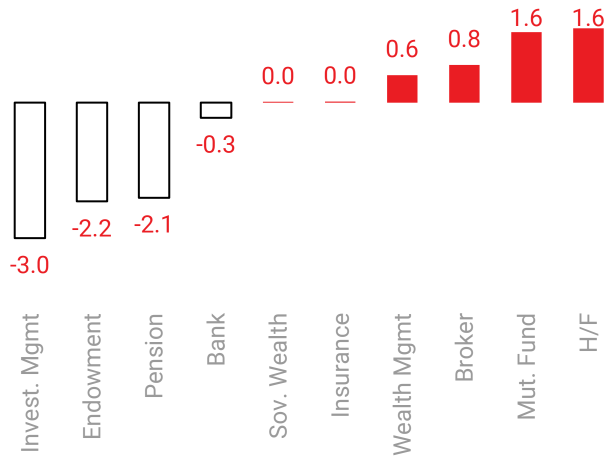
Rule mandating issuers ensure 2+ unaffiliated networks are available for routing CNP debit transactions comes into effect 7/1/23

Annual General Meeting 7/23/23

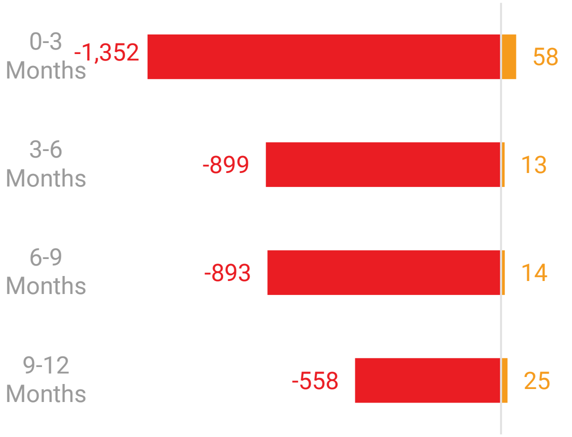
Trial related to Euronet 360 serving a claim in the U.K. alleging rules affecting ATM access fees (by MA/V) in Europe breach competition laws 10/2/23

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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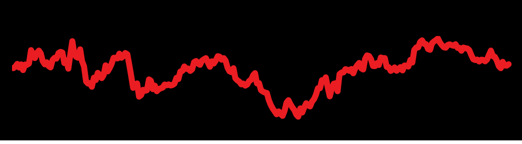
mastercard


MA TTM Price Performance

Price as of 03/17/23:	$349.66	**Shares Out (mm):**	954
Market Cap (bn):	$333	**Beta (2 Year Avg.):**	1.0
52-Wk Range:	$276.87 - $390.00	**Avg. Daily Vol (mm):**	2.9

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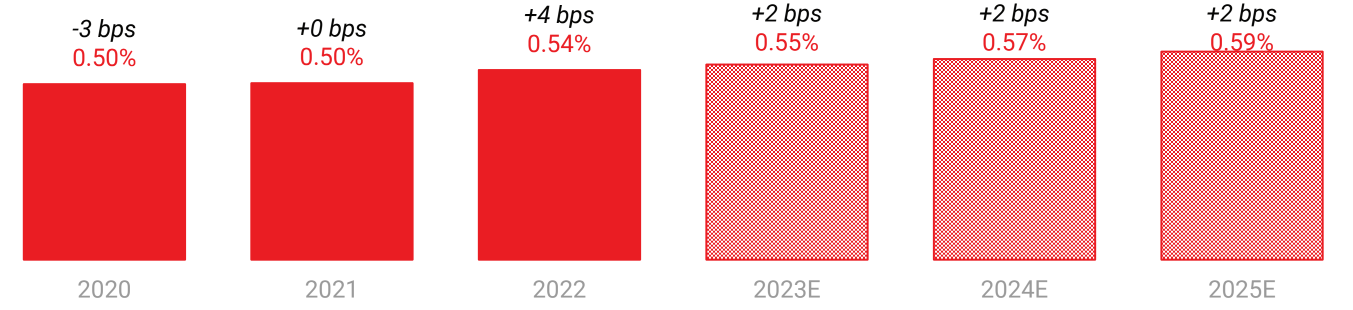
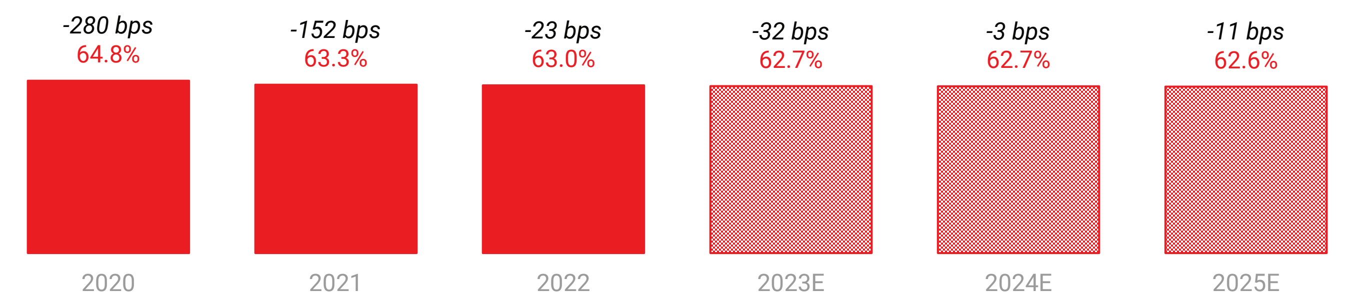
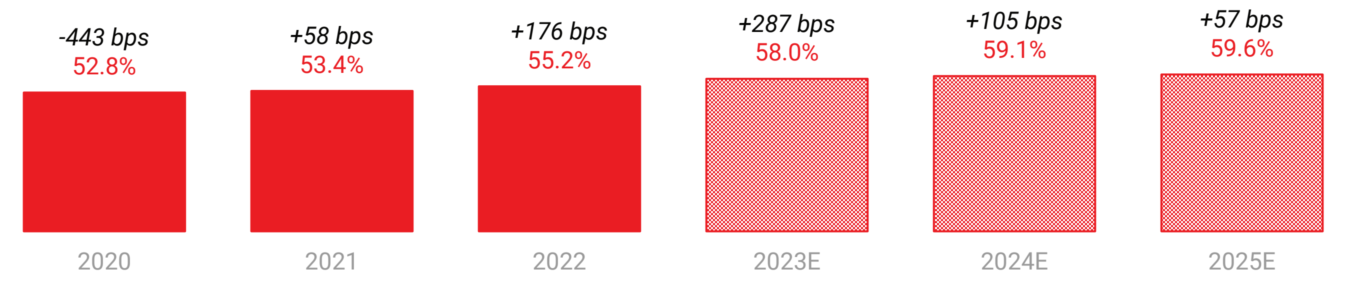
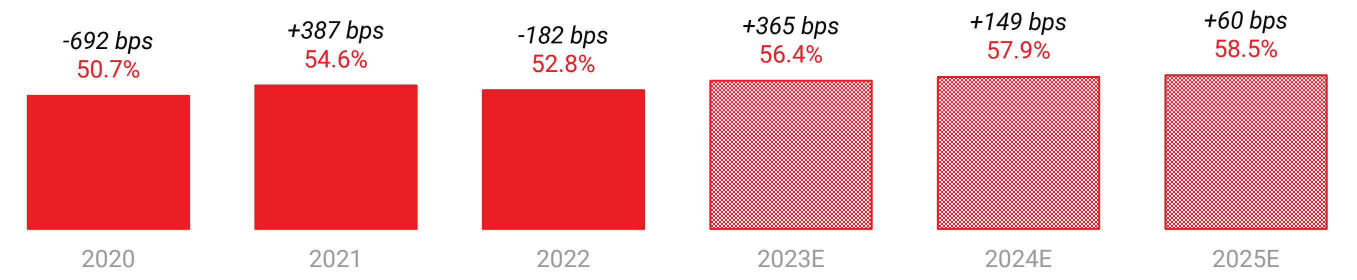
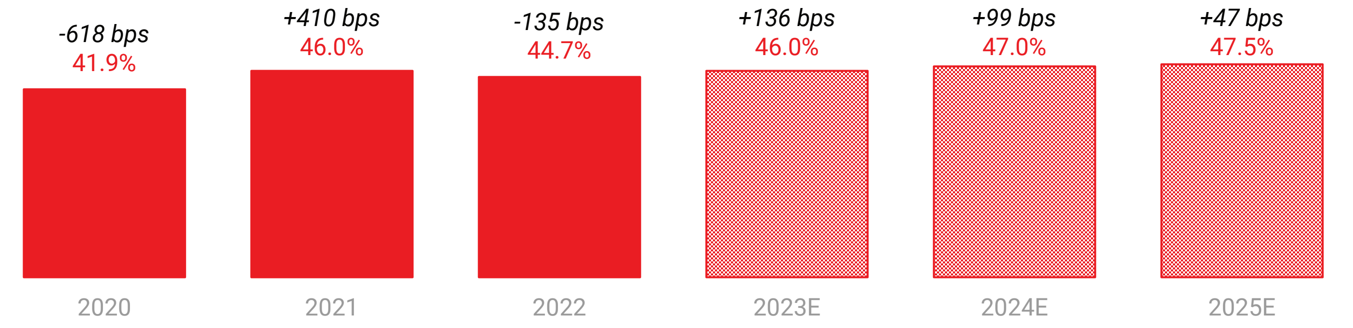
COMPANY RATIOS/MARGIN ANALYSIS

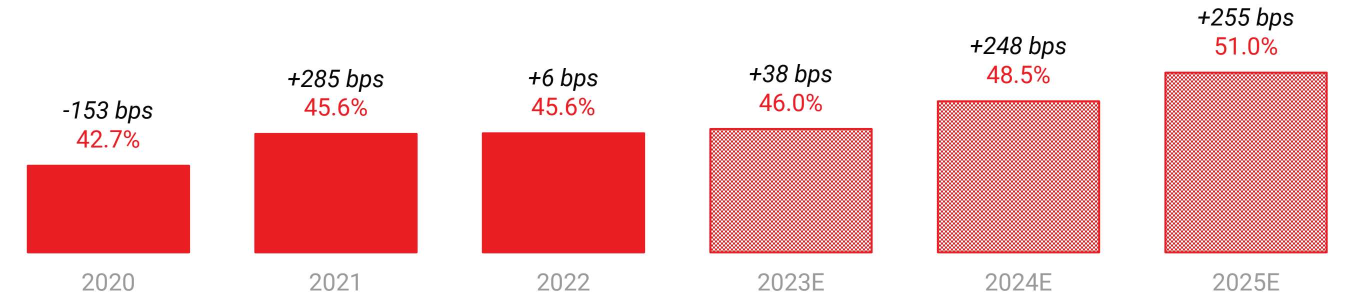

Gross Volume Yield (% of Purchase Volume)


Net Revenue (% of Gross Revenue)


Operating Margin (% of Net Revenue)

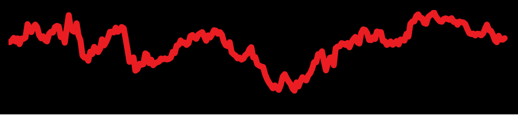

Pre-Tax Margin (% of Net Revenue)


Net Income Margin (% of Net Revenue)


Free Cash Flow Margin (% of Net Revenue)

Source: Company filings, Visible Alpha, FactSet

MA TTM Price Performance



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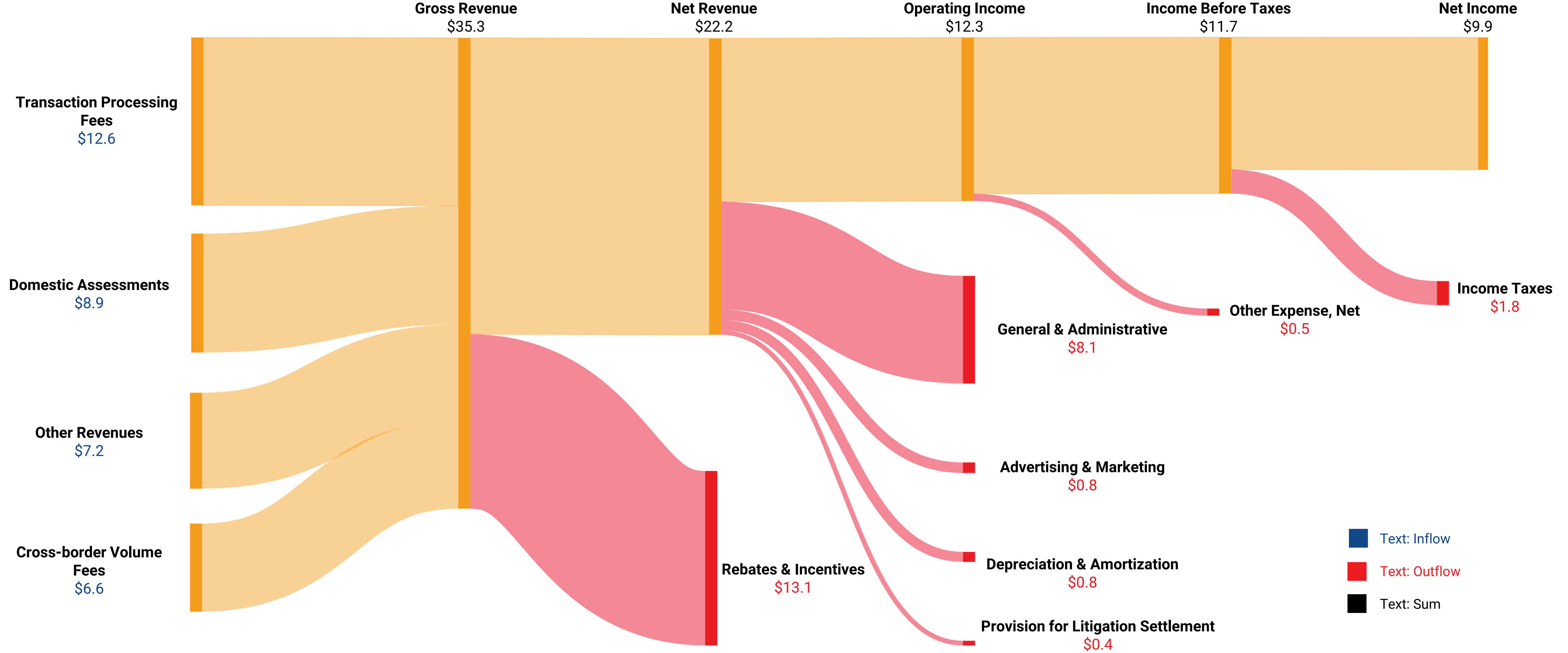
($ in billions)

P&L VISUALIZATION – TTM



Source: Company filings; FactSet

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mastercard

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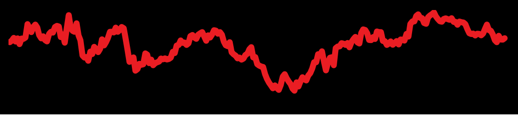

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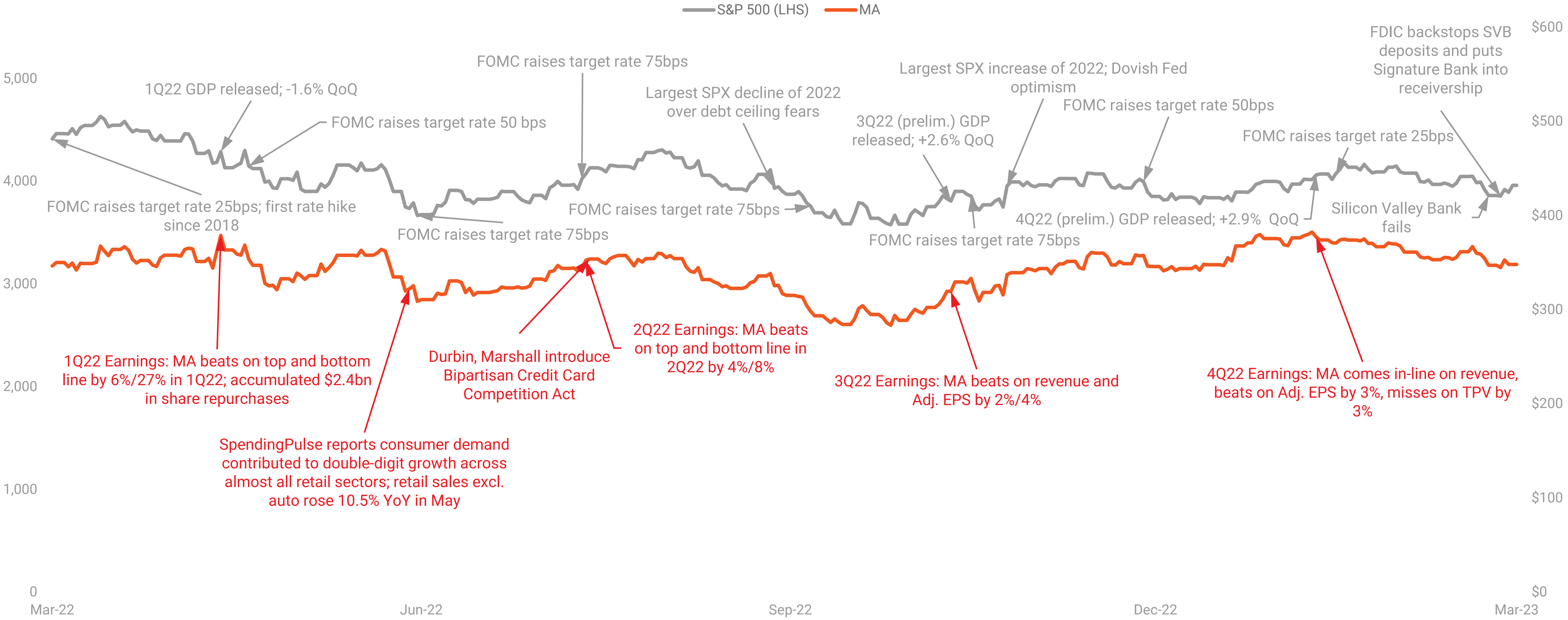
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

3Q22 (prelim.) GDP released; +2.6% QoQ

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FOMC raises target rate 25bps

FDIC backstops SVB deposits and puts Signature Bank into receivership

Silicon Valley Bank fails

1Q22 Earnings: MA beats on top and bottom line by 6%/27% in 1Q22; accumulated $2.4bn in share repurchases

SpendingPulse reports consumer demand contributed to double-digit growth across almost all retail sectors; retail sales excl. auto rose 10.5% YoY in May

Durbin, Marshall introduce Bipartisan Credit Card Competition Act

2Q22 Earnings: MA beats on top and bottom line in 2Q22 by 4%/8%

3Q22 Earnings: MA beats on revenue and Adj. EPS by 2%/4%

4Q22 Earnings: MA comes in-line on revenue, beats on Adj. EPS by 3%, misses on TPV by 3%

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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NU HOLDINGS PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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NU TTM Price Performance

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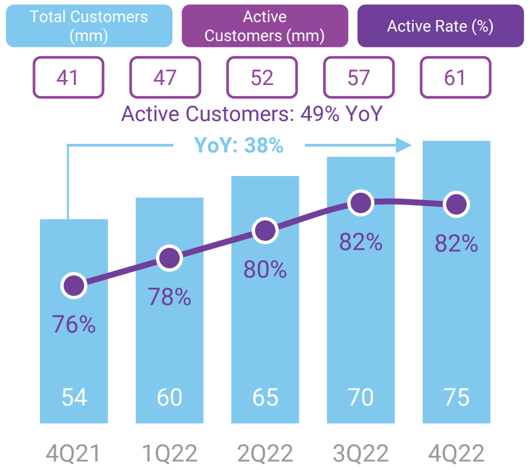
COMPANY OVERVIEW

Nu is one of the world's largest digital banking platforms and easily the largest in Brazil, offering financial services across five main verticals: *Spending (credit, debit, digital), Saving (personal, business), Investing (digital), Borrowing (credit cards, personal loans), and Protecting (insurance).*

Nu has broadened its ecosystem by adding products and services from marketplace partners to its platform, such as insurance, mobile phone top-ups, collateralized loans, and foreign remittances. The company has been able to recover CAC with cumulative contribution margins in fewer than 12 months on average**. Approximately 80%-90% of customers are acquired organically**, while also receiving an NPS score of 90/94 in Brazil and Mexico, respectively. Nu serves as the primary banking relationship for ~58% of its active customers.

CUSTOMER METRICS



KEY DEBATES

1. **Asset Quality:** Brazil's macro environment has caused concern for investors as 1) NPL's are running at historically high levels, 2) consumer credit card volumes are growing, and 3) Nu is perceived to serve a younger population relative to traditional providers. These dynamics have weighed on the perception of Nu's asset quality. Nu's 90+ NPL ratio totaled 5.2% in 4Q22, vs. 3.0% across the broader Brazilian banking industry. That said, this comparison is somewhat misleading, as unlike traditional providers, Nu does not sell off delinquent loans which would decrease the NPL ratio.

2. **Geographic Expansion:** In 2020, Nu launched its card product in Mexico/Columbia. The expansion into Mexico has proven more successful so far, reaching 3.2mm customers vs. 0.6mm in Columbia. However, there are several catalysts that could impact the business, including 1) recent approval for NuConta (checking accounts) in Mexico, 2) the acquisition of Akala (Mexican SME lender), and 3) progress toward acquiring a Colombian banking license, which is expected in FY23.

3. **Expanding ARPAC:** In LATAM, Nu pioneered the model of using card products as an entry point with consumers, followed by expanding the customer relationship to other forms of financial products. As of 4Q22, Nu's monthly ARPAC (Average Revenue per Active Customer) totaled $8.20 (+37%YoY FXN), with some mature cohorts reaching ~$23. Continuing to expand customer relationships is vital to meeting investor expectations of future profitability.

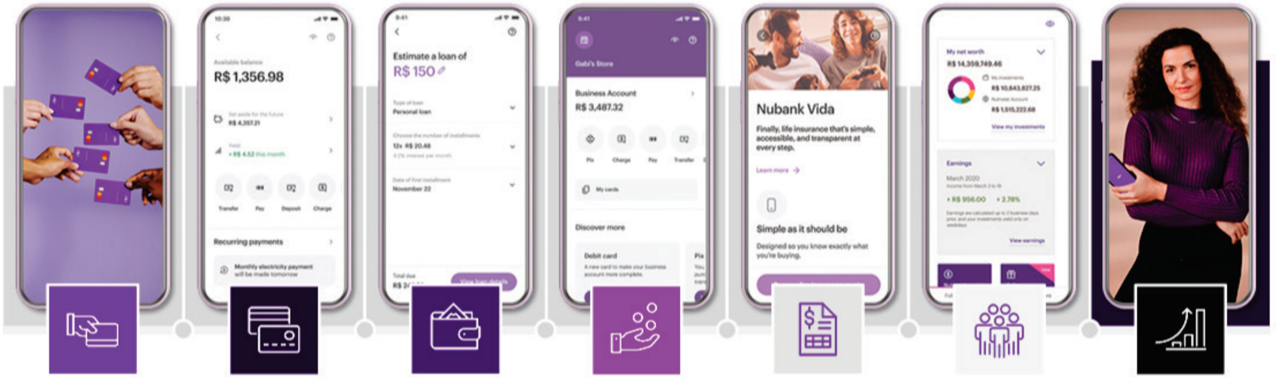
REVENUE MODEL

Nu Holdings derives revenue through two business segments:

- **Interest Income and Gains/Losses on Financial Instruments (74% of TTM Revenue):** Nu earns interest income from revolving and refinanced credit card balances and personal loans, as well as cash. The company primarily invests in highly liquid government bonds, and recognizes gains or losses related to fair value changes in these instruments.
- **Fee and Commission Income (26%):** The majority of fee-based revenue comes from interchange fees that are earned when customers make purchases using Nu credit or debit cards. Nu does not charge any annual fees for its card products. In addition, Nu earns revenue from customer subscriptions to loyalty programs, late payment fees, prepaid mobile phone top-ups, and commissions from partners for the distribution of certain financial products and services such as investments (brokerage and asset management), insurance, and international remittance.

In FY22 Nu generated 94% of its revenue in Brazil vs. just 6% in Mexico and Colombia. Revenue contribution from Brazil might be slightly overstated, as Mexican consumer funds invested in Brazilian securities generate interest that would be recognized as revenue from Brazil.

PRODUCT OFFERINGS



34mm	53mm	5mm	1mm	1mm	~7mm	1mm
Active Credit Card Customers	**Active NUAccounts**	**Customers have a Personal Loan (out of >11mm eligible)**	**Active SME Accounts**	**Active Insurance Policies**	**NuInvest Active Customers**	**NuCripto Active Customers**

Source: Company filings

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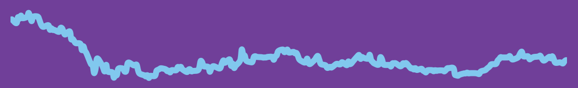
NU TTM Price Performance



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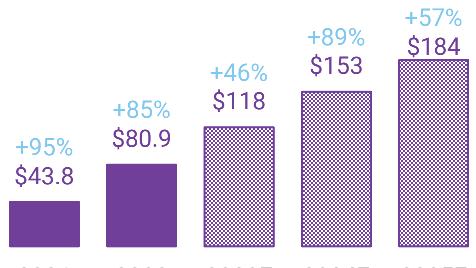
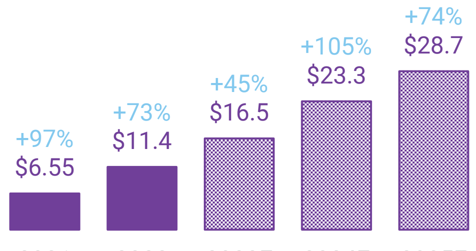
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

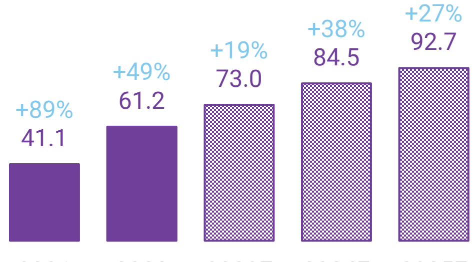
Purchase Volume (bn)



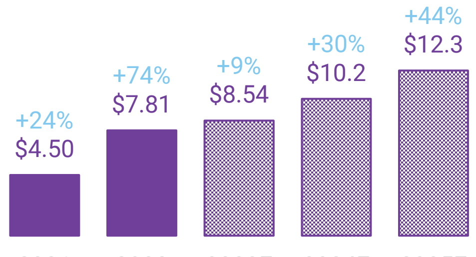
Gross Loans (EOP, bn)



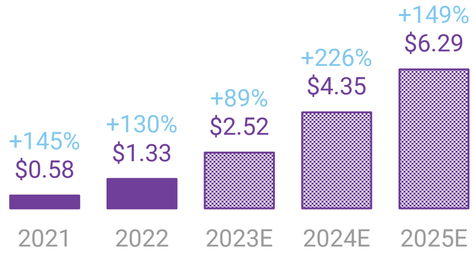
Active Customers (000)



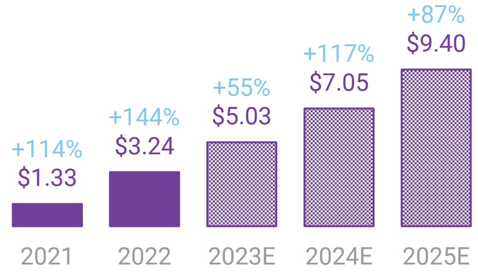
Monthly ARPAC



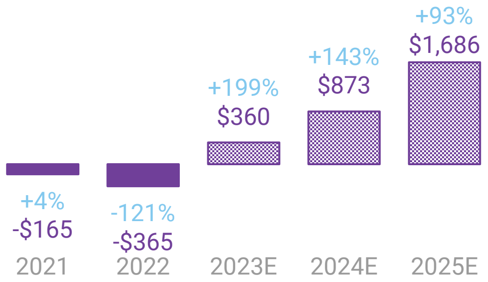
Allowance for Loan Losses (bn)



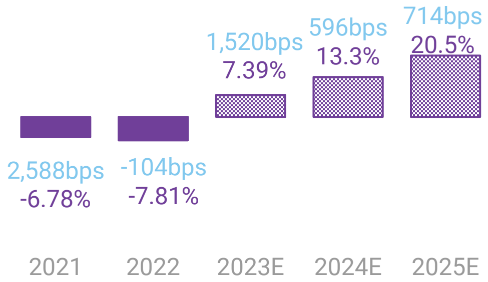
Net Revenue (bn)



Net Income

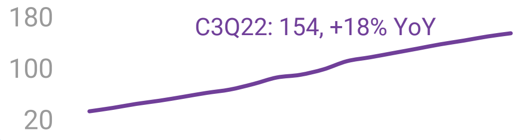


Return on Equity

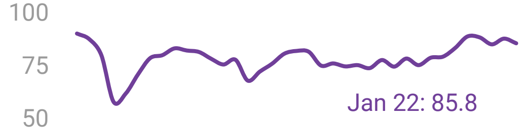


INDUSTRY KPIs

NeoBank User Total (mm)[2] *(1Q18-3Q22)*



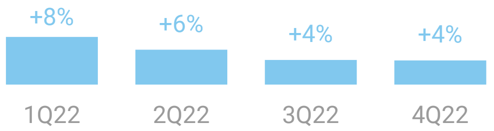
Brazil Consumer Conf.[3] *(2019-Present)*



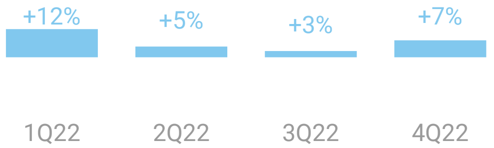
Brazil GDP [4] ($ in bn) *(2000-2021)*

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[5]

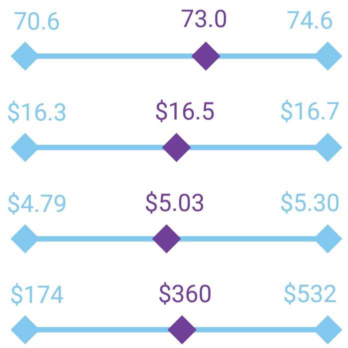
Active Customers



Net Revenue



FY23



Active Customer (000's)	70.6	73.0	74.6
Gross Loans (bn)	$16.3	$16.5	$16.7
Net Revenue (bn)	$4.79	$5.03	$5.30
Net Income	$174	$360	$532

TOTAL ADDRESSABLE MARKET – BRAZIL & LATAM[6]

Brazil Retail Financial Services

$99bn SAM

Projected 2025 Retail Financial Services

$126bn SAM

LatAm Retail Financial Services

$186bn TAM

Projected 2025 LatAm Retail Financial Services

$269bn TAM

Brazil Total Customers % of Adult Population

33.0%

Brazil Active Customers % of Adult Population

25.9%

Source: Company filings
1) FactSet
2) Aggregate number of users from Venmo, CashApp, SoFi
3) FRED Brazilian Consumer Confidence
4) The World Bank
5) Visible Alpha Consensus Low/Average/High Range
6) Company Filings; SAM = Serviceable Addressable Market

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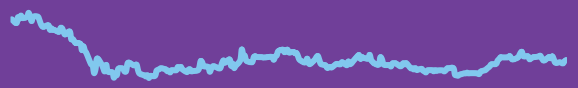

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VALUATION CONSIDERATIONS

Relative Valuation:

Given Nu's strong top-line sales growth, it is helpful to adjust book value based valuation for difference in top-line growth rates among peers. Nu trades at a 4.5x P/BV multiple, 0.9x below its average multiple of 5.4x since its IPO. **If Nu were to trade in-line with its peer group on a P/BV basis, it would imply a $6.11 price (30% upside).** While the narrative around Nu has focused on the broader macro (primarily credit concerns), the company has so far been able to successfully manage default rates at levels in-line, if not better than peers. Notable is that Nu does not sell off delinquent loans, which is a departure from peers, distorting the NPL ratio in comparison.

Nu represents a truly unique asset, with a growing addressable TAM, while also delivering profit to shareholders.

DCF Valuation:

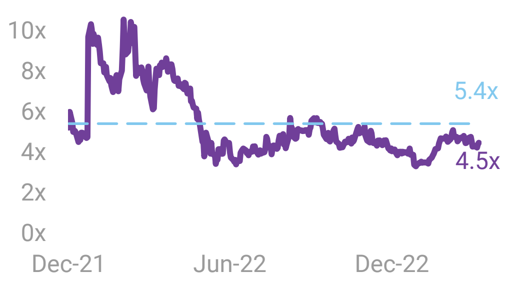
Scenario 1 – Current Price ($4.69, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires annual top-line growth of 63%/31%/30% for FY23/FY24/FY25 before gradually decelerating to the terminal growth rate of 2%. This scenario implies Nu will deliver operating income profitability in FY23, with margins reaching a terminal rate of 45%.

Scenario 2 – Margin Expansion ($7.12, 52% upside): Assumes Nu is able to expand margins above the current expected ~45%, similar to other expense-light, digitally focused banks. Coupling this with Nu's market-leading CAC efficiency, and ample room to grow ARPAC, allows for long-term operating margins of 60%. Top-line growth assumptions remain unchanged from the current price scenario. This scenario points to a 12-month price of $7.12 implying 52% upside to the current share price.

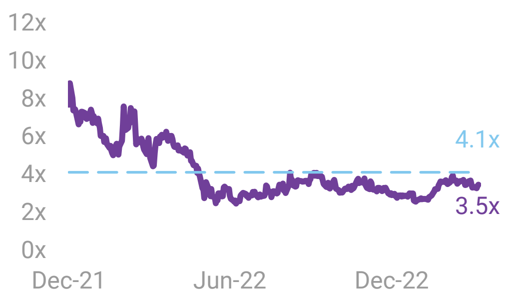
Scenario 3 – Slower Asset Growth ($2.62, 44% downside): Assume an extended period of slower growth in the overall loan portfolio, primarily driven by sustained concerns over consumer credit quality that materialize in slower personal loan originations. In this scenario revenue growth is decreased to 50%/25%/22% for FY23/FY24/FY25. Operating margins remain unchanged from the current price scenario.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

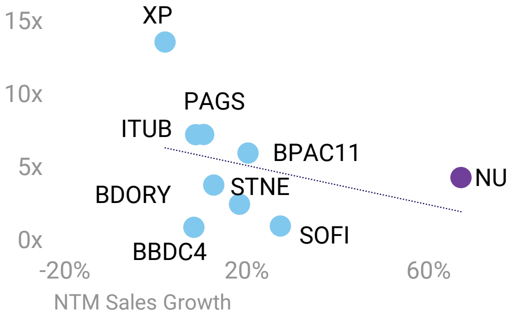
Price/Book Value



NTM Price/Sales



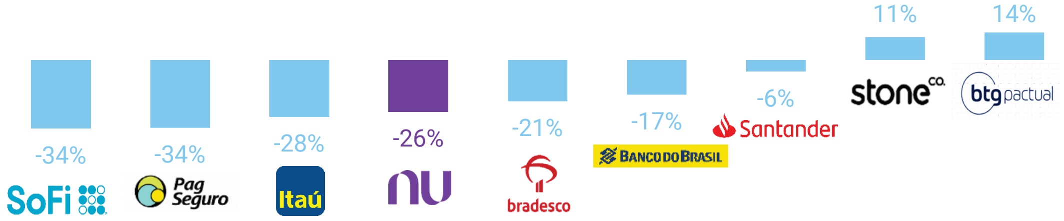
Peer P/BV vs. Revenue Growth



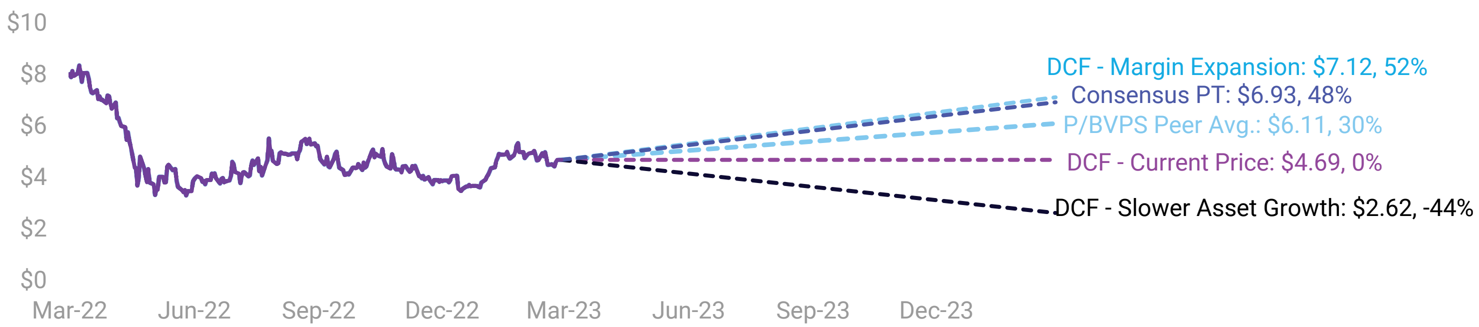
DCF Key Assumptions[1]

10-Yr RF	13.0%
Cost of Equity	19.9%
Cost of Debt	6.0%
WACC	19.5%
Beta	1.39
FCF Terminal Growth Rate	2.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$7,139

Select Peer TTM Price Performance



Price Chart & 12M Forward Based Ranges



Source: Company filings; FactSet

1) SBC in millions

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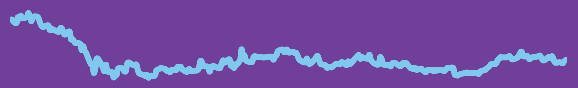
NU TTM Price Performance



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DECISION TREE INPUTS

In order to evaluate the potential outcomes and their valuation implications, the following decision tree is built around 1) potential for recession and 2) higher/lower cost to serve active customers (CSAC). While there are other drivers of Nu's performance (new customer adds, funding costs, etc.) we believe these represent the most likely area(s) of near-term upside/downside relative to management's outlook/consensus.

Consensus Case:

The average consensus price target for Nu Holdings is $6.93, which if shares were to reach this price, would imply a 3.4X P/S multiple in 12-months.

Upside Case(s):

(+) $7.21, 54% Upside: This scenario assumes the Brazilian economy avoids a recession and consumer spending remains strong. The scenario model reflects this by 1) assuming no deceleration in the stacked growth rate of card purchase volume relative to 4Q22, 2) faster loan book growth, and 3) lower loan loss provisions. This implies 52% sales growth and 54% upside to the current share price with a 4.5x multiple.

(+-) $6.41, 37% Upside: This scenario assumes no recession but forecasts the cost to serve active customers increases faster than expected. While this would not impact sales estimates, we account for the impact in the multiple, implying 37% upside to the current share price with a 4.0x multiple.

(++) $8.01, 71% Upside: The best-case assumes no recession and that cost to serve active customers decreases through FY23, providing 71% upside to the current share price with a 5.0x multiple.

Downside Case(s):

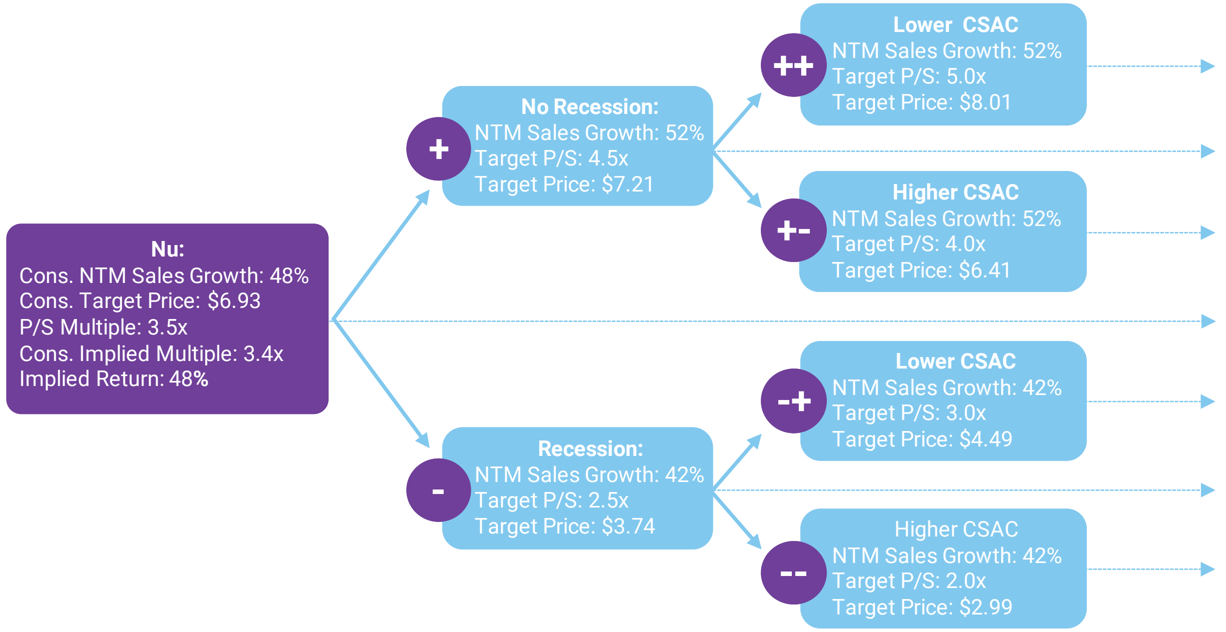
(-) $3.74, 20% Downside: This scenario assumes a recession in Brazil, weighing on purchase volume, loan book growth and loan delinquencies. This scenario implies 42% sales growth and 20% downside to the current share price with a 2.5x multiple.

(-+) $4.49, 4% Downside: This scenario assumes recession and the previously mentioned lower CSAC. This implies 4% downside to the current share price with a 3.0x multiple.

(--) $2.99, 36% Downside: The worst-case scenario assumes a recession and higher CSAC. This implies 36% downside to the current share price with a 2.0x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Nu:
Cons. NTM Sales Growth: 48%
Cons. Target Price: $6.93
P/S Multiple: 3.5x
Cons. Implied Multiple: 3.4x
Implied Return: 48%

\+ **No Recession:**
NTM Sales Growth: 52%
Target P/S: 4.5x
Target Price: $7.21

\- **Recession:**
NTM Sales Growth: 42%
Target P/S: 2.5x
Target Price: $3.74

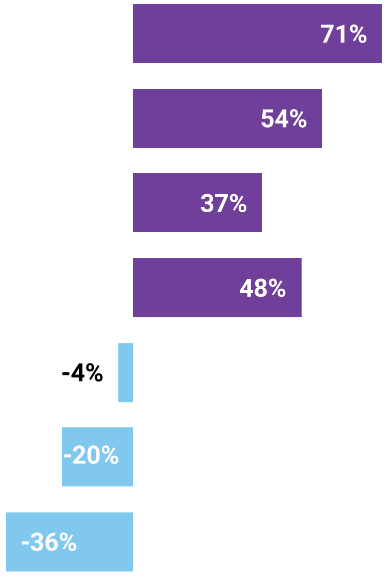
++ **Lower CSAC**
NTM Sales Growth: 52%
Target P/S: 5.0x
Target Price: $8.01

+- **Higher CSAC**
NTM Sales Growth: 52%
Target P/S: 4.0x
Target Price: $6.41

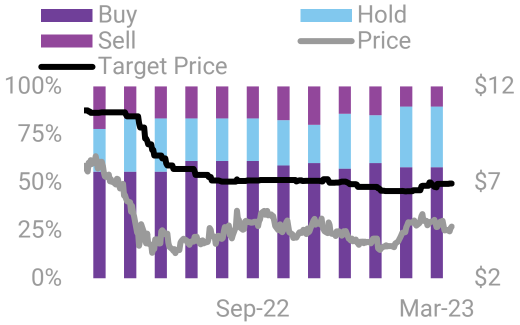
-+ **Lower CSAC**
NTM Sales Growth: 42%
Target P/S: 3.0x
Target Price: $4.49

-- Higher CSAC
NTM Sales Growth: 42%
Target P/S: 2.0x
Target Price: $2.99

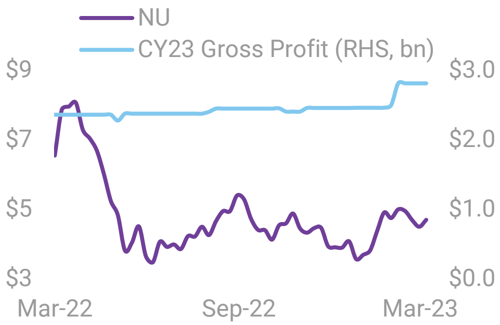
12-Month Price Return



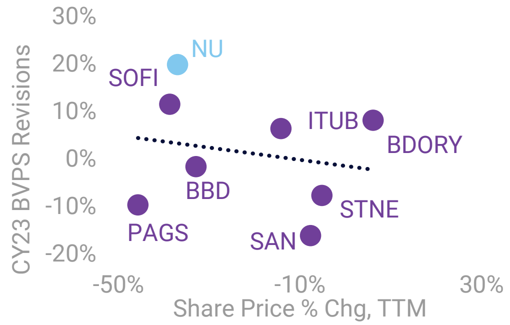
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

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4Q22 EARNINGS CALL RECAP

Takeaway: Management's tone on the 4Q22 earnings call was positive, with shares trading up by 4.8% following the announcement. This was attributed to two primary factors: 1) the company significantly reduced its funding costs over the prior quarter, suggesting room for NIM expansion in the future, and 2) the credit environment throughout Brazil seemingly improved, as Nu's 15-90 day NPL ratio ticked down 50bps. We believe these dynamics, along with Nu's geographic expansion, will ultimately drive the stock in the coming quarters.

Results Recap: Nu grew its gross loan book 72% YoY to $11.3bn vs. consensus of $11bn. Total customers increased by 38% YoY to 74.6mm (vs. consensus of 75.4mm). Active customers grew 49% YoY to 61.2mm (in line with consensus). Nu reported net interest income of $688mm, up 162% YoY, representing a 12% beat vs. consensus. The total revenue beat of 7% was primarily driven by outperformance in NII. Net income of $58mm beat consensus of -$162mm. This is Nu's second quarter of profitability (after adjusting for the CSA termination adjustment). We identify the following as key call-outs from management's earnings call.

Incremental from the Call:

- **Cost of Funding/NIM Expansion:** Nu Holdings beat consensus on NII by 12%, largely driven by lower-than-expected funding costs. Management cited the fact that funding costs were 78% of the Brazilian Interbank Deposit Rate (CDI), declining significantly from 95% in F3Q22. This was attributed to the progressive rollout of the Money Box product in July 2022, as impacts were not fully realized until the fourth quarter. This product offers customizable savings accounts tailored to specific objectives, whereby customers can earn up to 100% of the CDI if balances are held for more than 30 days. This dynamic, compounded by seasonally lower funding costs in the fourth calendar quarter, led to the 240bps QoQ expansion in NIM to 13.5%. We expect this trend to continue as the company aims to keep funding costs at similar levels (accounting for seasonality), with potential for incremental improvement toward the traditional FI average of ~60% of CDI. Management highlighted additional benefit from deposit expansion in Colombia and Mexico as well. These regions are relatively capital intensive, although digital banking expansion and deposit growth are expected to improve funding costs there as well. NIM expansion and funding cost efficiencies are realized through the benefits of scale and maturation.
- **Lending Mix Shift and Provisioning:** Nu has historically been able to tighten and loosen its personal loan book through credit/macroeconomic cycles. As NPLs ticked up through 2022, the company began tapering originations to levels that would keep the loan book relatively flat. Although the 15-90 day NPL ratio declined 50bps QoQ to 3.7%, management reiterated that delinquencies typically trough by the end of the calendar year, before worsening in the next quarter. With that said, the company is expected to prioritize secured and unsecured personal loan growth in FY23, relative to credit card receivables. Personal loans offer more attractive unit economics that result in net interest income expansion. We expect the business to drive long-term profitability through more aggressive deployment of the bank's growing deposit balances, though this might be delayed due to seasonality of delinquencies in the first quarter.
- **Growth Outlook:** Management highlighted two avenues for growth over the short and long term. First, the company will look to scale its digital banking presence in Mexico and Colombia. Although these are relatively capital-intensive geographies, they are expected to achieve profitability sooner than the company's Brazilian segment (9-10 years at the latest). This will accelerate NIM expansion and GAAP profitability by driving product adoption and ARPAC, while also achieving lower cost of funds through a scaled deposit base. In the short-term, Nu will look to broaden its product offerings. In addition to the existing personal loan acceleration expected in 2023, the company also announced that it would begin offering secured loans. Secured loans represent the third-largest profit pool in Brazil and represents another means for diversifying the interest-earning portfolio towards NIM accretive products.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs.▲	%▲
Gross Loans	**$11,300**	**$10,992**	**$308**	**3%**
growth (%, yoy)	*72%*	*68%*		
Purchase Volumes (bn)	**$23.8**	**$23.5**	**$0.26**	**1%**
growth (%, yoy)	*66%*	*65%*		
Active Customers (000)	**61.2**	**61.2**	**-0.01**	**0%**
growth (%, yoy)	*49%*	*49%*		
Monthly ARPAC	**$8.20**	**$8.15**	**$0.05**	**1%**
growth (%, yoy)	*48%*	*47%*		
Net Interest Income	**$688**	**$614**	**$74.3**	**12%**
growth (%, yoy)	*162%*	*134%*		
Fee and commission income	**$355**	**$358**	**-$2.89**	**-1%**
growth (%, yoy)	*81%*	*82%*		
Revenue Net of Interest Income	**$1,043**	**$972**	**$71.4**	**7%**
growth (%, yoy)	*127%*	*112%*		
Gross Profit	**$578**	**$499**	**$79.0**	**16%**
Gross Profit Margin (%)	*55%*	*51%*		406bps
Total Operating Expense	**$800**	**$636**	**-$164**	**-26%**
growth (%, yoy)	*154%*	*102%*		
Operating Income	**-$222**	**-$158**	**-$64.2**	**-41%**
Operating Margin (%)	*-21%*	*-16%*		-505bps
Net Income	**$58.0**	**-$162**	**$220**	**136%**
Net Income Margin (%)	*6%*	*-17%*		2,219bps
Adj. Net Income	**$114**	**$64.5**	**$49.3**	**77%**
Adj. Net Income Margin (%)	*11%*	*7%*		428bps

Key Trends	1Q22	2Q22	3Q22	4Q22
ARPAC	$6.70	$7.80	$7.90	$8.20
Net Interest Margin	8.50%	9.70%	11.1%	13.5%
15-90 Day NPL Ratio	3.70%	3.70%	4.20%	3.70%
Avg. Funding Cost (% of CDI)	NA	NA	95.0%	78.0%
Monthly Avg. Cost to Serve/Customer	$0.70	$0.80	$0.80	$0.90

Source: Company filings; FactSet; Visible Alpha

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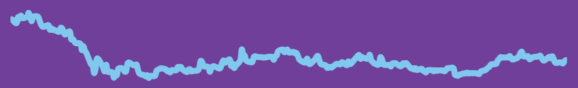
NU TTM Price Performance



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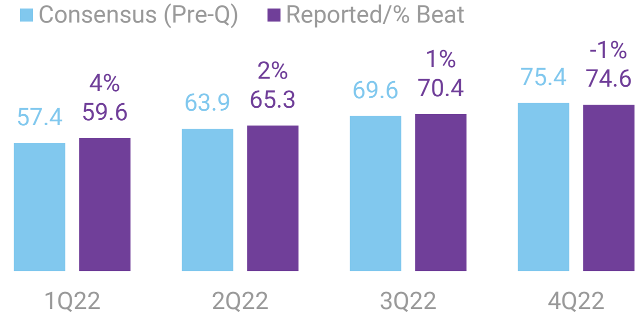
FINANCIAL TECHNOLOGY PARTNERS

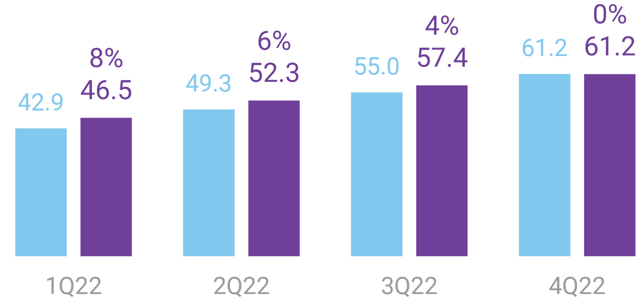
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

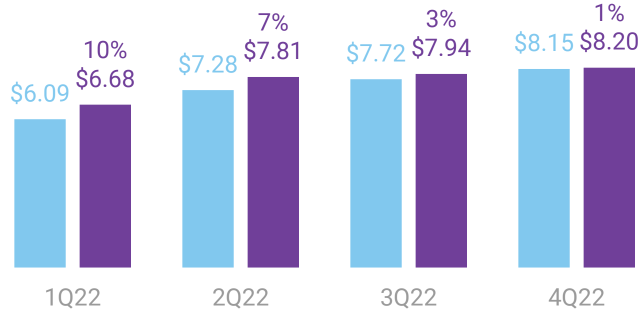
Number of Customers (mm)



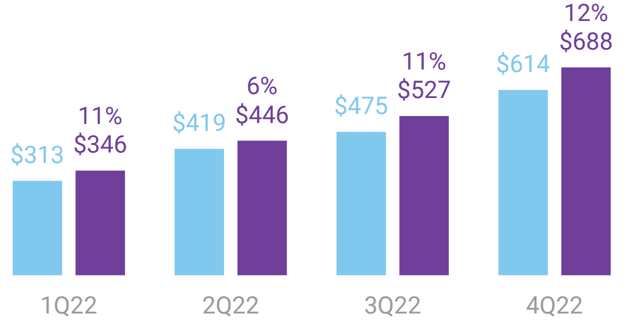
Active Customers (mm)



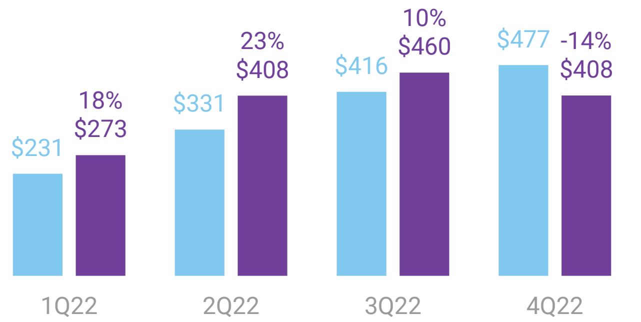
Monthly ARPC



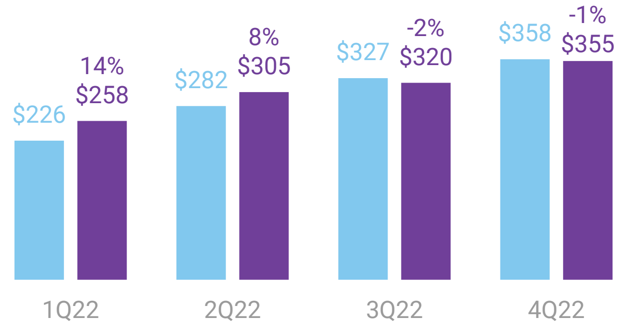
Net Interest Income



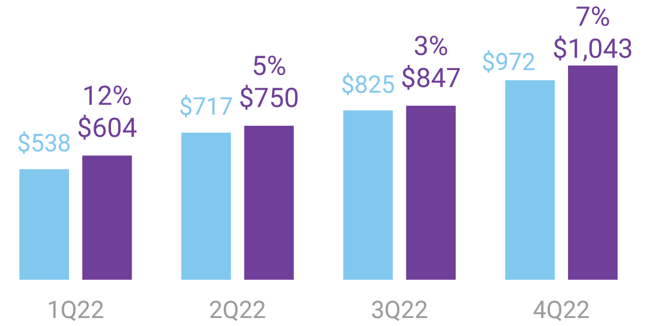
Interest Expense



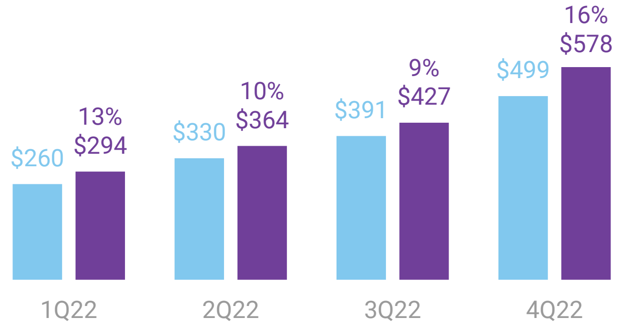
Fee and Commission Income



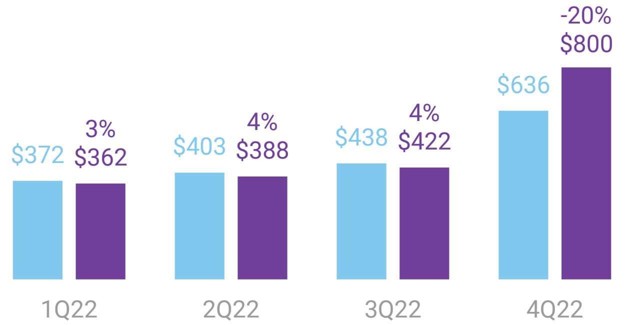
Net Revenue



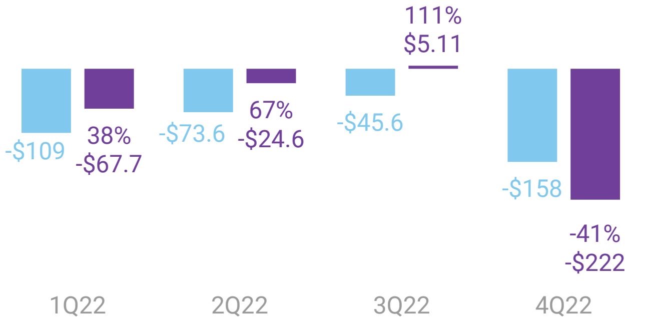
Gross Profit



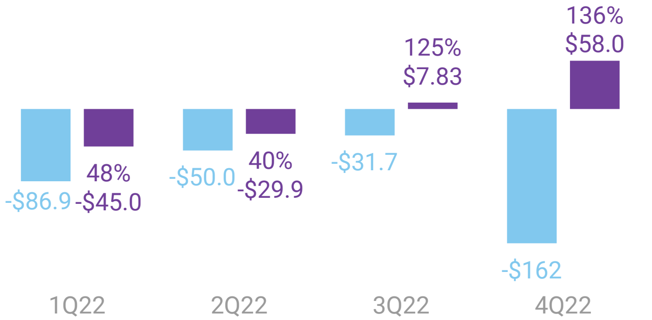
Total Operating Expense



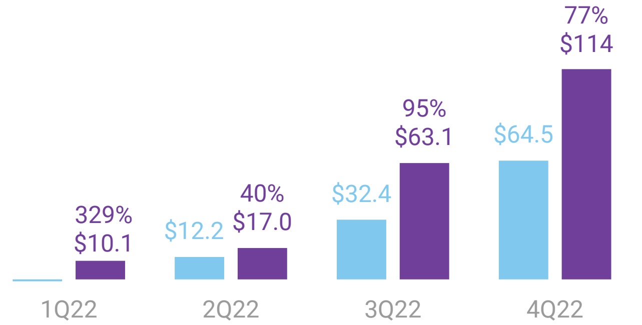
Operating Income



Net Income



Adjusted Net Income



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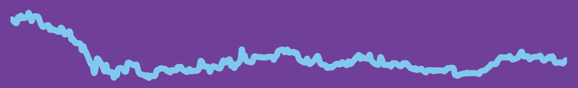

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FINANCIAL TECHNOLOGY PARTNERS

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1Q23 EARNINGS OUTLOOK

Nu Holdings is expected to report 1Q23 earnings on May 15th after the market close.

What's in Focus:

Credit quality is the primary concern for investors going into the next quarter. Nu has reiterated its patience in personal loan originations, contingent on improving macroeconomic conditions in Brazil. For the time being, the company has kept originations at levels that sustain consistent balances on the personal loan book. If credit conditions improve, we anticipate a mix shift from credit card receivables to personal loans. In 4Q22, Nu's 15-90 day NPL rate declined 50bps QoQ to 3.7%. Additionally, cost of funding and NIM expansion remain in-focus. The company's 12% beat on net interest income in 4Q22 was primarily driven by lower-than-expected interest expense. Funding costs came in at 78% of the Brazilian Interbank Deposit Rate (CDI), down from 95% in 3Q22. We expect this to continue to fuel NIM expansion, as funding costs move closer to the traditional FI average of 60%-65% of CDI.

Estimates:

- **KPI's/Credit:** Since 4Q22, consensus has revised 1Q23 gross loan forecasts up 6.2%. This implies 11% QoQ growth from the prior quarter. Credit card receivables estimates for 1Q23 have increased 5.8%, while consensus for personal loans have been revised up 7.9% as well. Estimates for total customers have increased 1.1% to 79.5mm. Active customer consensus has decline 0.3% to 64.9mm. Purchase volume forecasts for 1Q23 have risen 4%. Monthly ARPAC forecasts have increased 2.2% to $8.40.
- **Revenue:** Consensus for gross interest income in 1Q23 has risen 3.7% to $1,186mm since the 4Q22 earnings release, largely reflecting the uptick in forecasts for Nu's gross loan book. Consensus has revised estimates on fee and commission income down slightly (-0.6%) to $390.5mm.
- **Expenses:** Interest expenses for 1Q23 have been revised down 4.9% to $454mm since the 4Q22 earnings release, largely reflecting Nu's ability to lower funding costs significantly last quarter (78% of CDI vs. 95% of CDI in 3Q22). Estimates for loan loss provision has increased 1.4% to $458mm, as consensus takes a more conservative stance considering the macro backdrop.
- **Earnings:** Net income consensus increased 52.6%. We note that the upward revision on GAAP net income is potentially baking in the benefits of the one-time CSA adjustment recognized in 4Q22.

Brazil Economic Data Releases:

- March 29th: Central Bank Monetary and Credit Statistics
- March 30th: Central Bank Inflation report

POST-RESULTS ONE-DAY ALPHA VS. BOVESPA

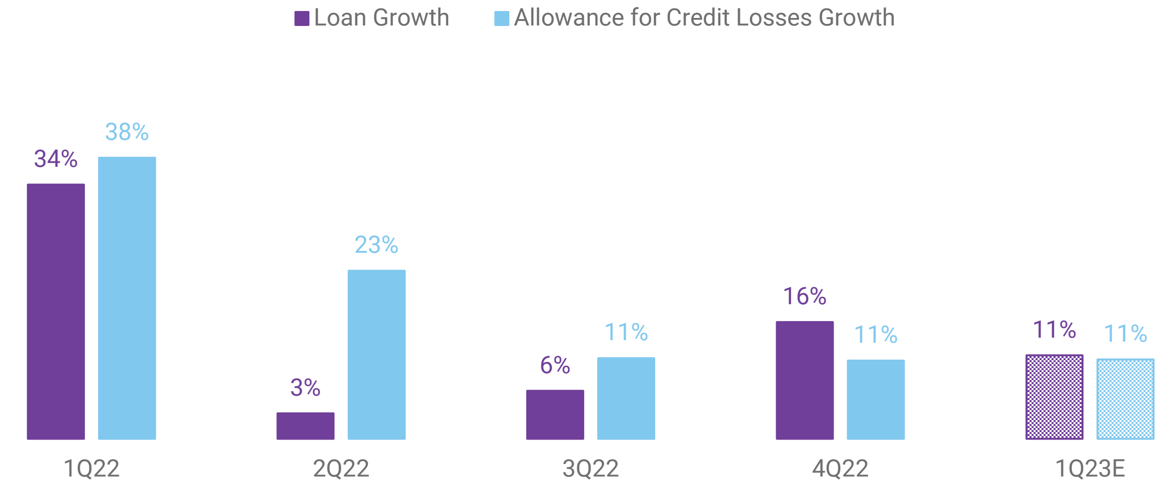
- ~12% top-line beat and a beat on opex, drove bottom-line beat
- Credit quality declined: 15-90 NPL of 3.7% /90+ NPL of 4.2%

- ~5%/~10% beat on revenue (net of int. income)/gross profit
- Reached 65.3mm customers, up 57% YoY

- ~3%/~9% beat on revenue (net of int. income)/gross profit
- Recorded its first GAAP profit ($8mm vs. cons. -$32mm)

- Net interest income beat by 12%, driven by lower-than-expected funding costs (78% of CDI vs. 95% in 3Q22)
- 15-90 NPL fell 50bps to 3.7%,

GROSS LOAN GROWTH VS. ALLOWANCE GROWTH



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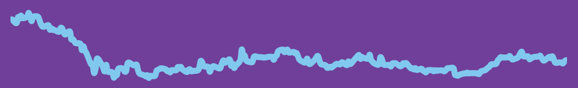

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FINANCIAL TECHNOLOGY PARTNERS

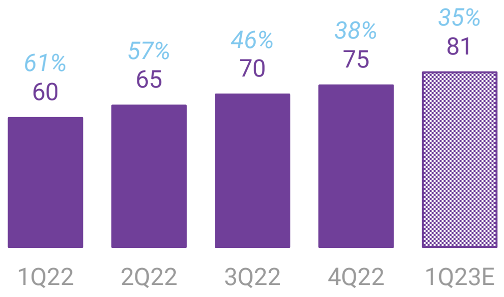
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

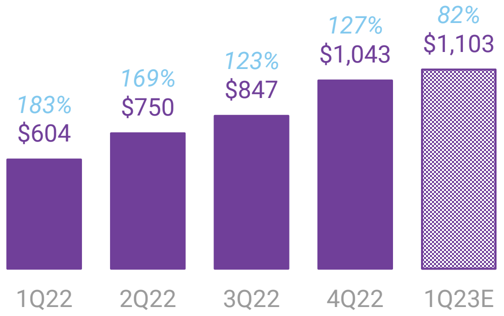
	Low	Average	High
Gross Loans	**$11,602**	**$12,514**	**$13,612**
growth (%, yoy)	32%	42%	54%
Purchase Volumes (bn)	**$24.2**	**$25.7**	**$27.8**
growth (%, yoy)	52%	61%	75%
Active Customers (000)	**63.7**	**64.9**	**69.6**
growth (%, yoy)	37%	40%	50%
Monthly ARPC	**$7.86**	**$8.40**	**$8.55**
growth (%, yoy)	18%	26%	28%
Net Interest Income	**$651**	**$737**	**$782**
growth (%, yoy)	88%	113%	126%
Fee and commission income	**$370**	**$391**	**$414**
growth (%, yoy)	43%	52%	60%
Revenue Net of Interest Income	**$1,020**	**$1,129**	**$1,181**
growth (%, yoy)	69%	87%	95%
Gross Profit	**$547**	**$615**	**$664**
Gross Profit Margin (%)	54%	54%	56%
Total Operating Expense	**$440**	**$505**	**$590**
growth (%, yoy)	22%	40%	63%
Operating Income	**$22**	**$106**	**$224**
Operating Margin (%)	3%	14%	29%
Net Income	**$15**	**$64**	**$115**
Net Income Margin (%)	2%	9%	15%
Adj. Net Income	**$97**	**$143**	**$230**
Adj. Net Income Margin (%)	9%	13%	19%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

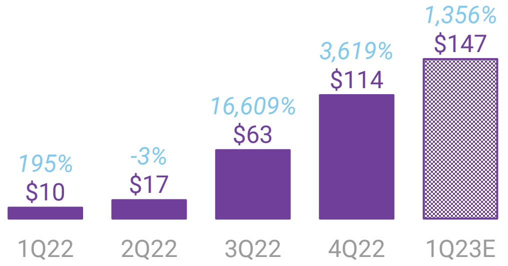
Total Customers/YoY Growth



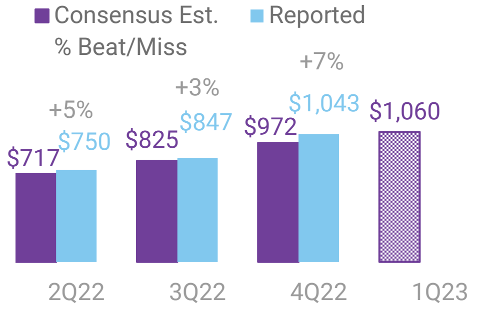
Net Revenue/YoY Growth[1]



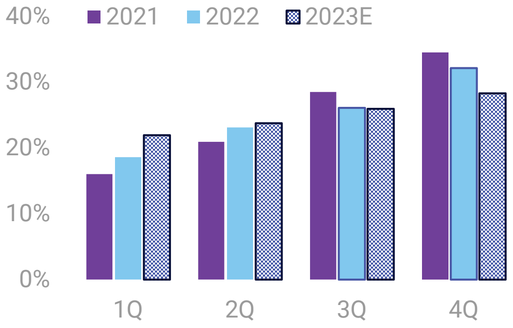
Adjusted Net Income/YoY Growth



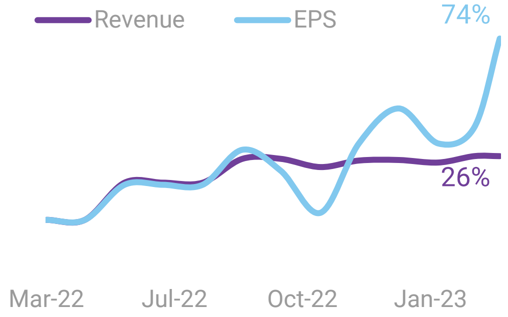
Net Revenue Estimates vs. Reported



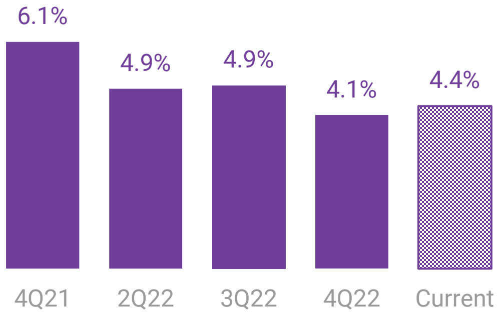
Revenue Seasonality



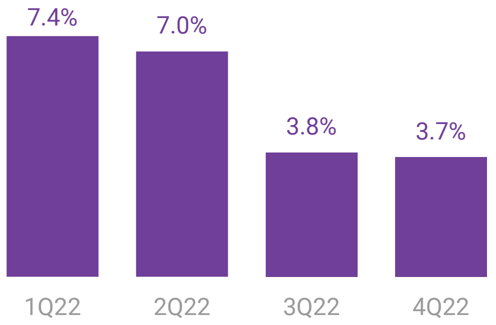
1Q23 Cons. Revisions



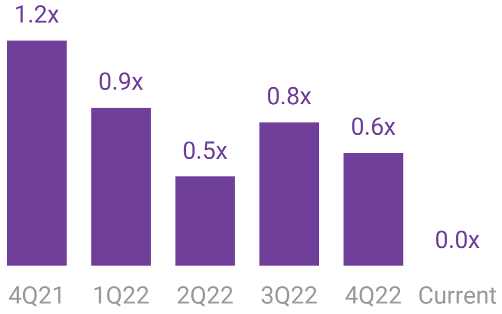
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio[2]



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Source: Company filings; FactSet

1) Revenue after interest expense and provision for losses

2) Put/Call Ratio over 7-days leading into earnings

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NU TTM Price Performance

Price as of 03/17/23:	$4.69	**Shares Out (mm):**	4,579
Market Cap (mm):	$21,477	**Beta (Since IPO):**	1.3
52-Wk Range:	$3.26 - $8.48	**Avg. Daily Vol (mm):**	27.3

FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

Asset Quality:

1) Is the reserve coverage at an adequate level currently for the macro environment and pace of loan growth? How should investors think about a long-term target coverage rate?
2) Can management explain what drove the decrease in NPL's? Is the trend sustainable and how is Nu's customer base performing relative to the broader Brazil economy?
3) How should investors expect the focus on personal loans vs. credit card loans to impact credit quality trends?
4) What are the macro indicators that management follows most closely when thinking about managing loan originations?

Geography:

5) How do product offerings/consumer preferences differ between Brazil/Mexico/Columbia?
6) Can management comment on the unique regulatory challenges of the markets Nu operates in?
7) Who are Nu's top digital bank competitors in each market?
8) Management had previously mentioned Colombia and Mexico as potentially reaching profitability faster when compared to Brazil (9-10 years). Does this hold true today, and can management comment on the progress made in those geographies relative to this expectations?

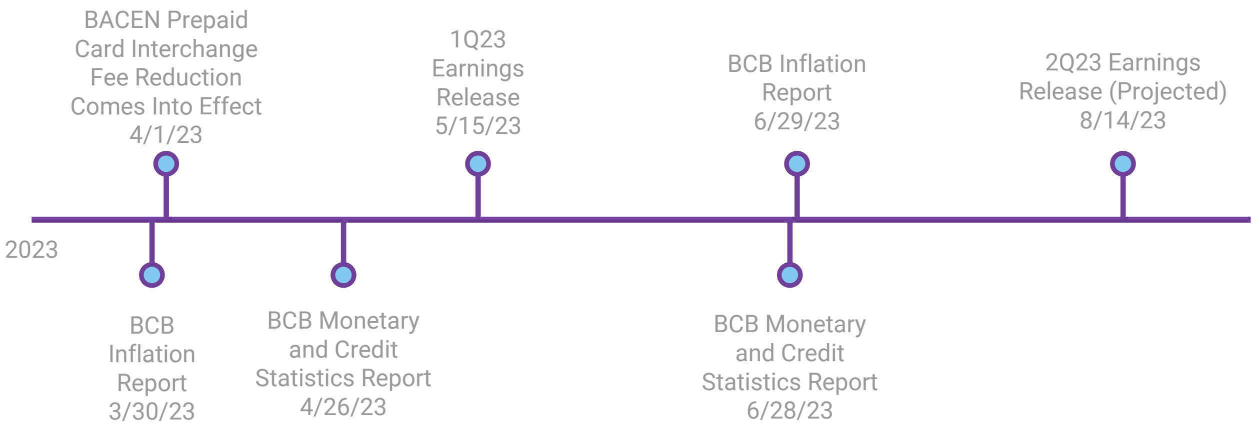
Products:

9) Why does a customer choose Nu's credit card offering vs. others in the market? Has it become more about the financial ecosystem Nu can offer vs. leading simply with the credit card?
10) Can management comment on the rollout of Nu's secured lending product? Last quarter management mentioned this being the third largest profit pool in Brazil, but how much of this market has Nu been able to capture in the early stages?
11) What are the drivers of NII growth, balanced against the outlook for more conservative lending practices? How much of the delta is being driven by higher rates vs. new products (such as payroll in Mexico)?

General:

12) How sustainable is the viral word-of-mouth/direct referrals "advertising" that helps drive Nu's lower CAC relative to competitors? To what degree is this repeatable in markets outside of Brazil?
13) The Central Bank of Brazil announced a cap on interchange fees for prepaid cards coming in April 2023. How is this expected to impact the business?

POTENTIAL CATALYSTS



2023

BCB Inflation Report 3/30/23

BACEN Prepaid Card Interchange Fee Reduction Comes Into Effect 4/1/23

BCB Monetary and Credit Statistics Report 4/26/23

1Q23 Earnings Release 5/15/23

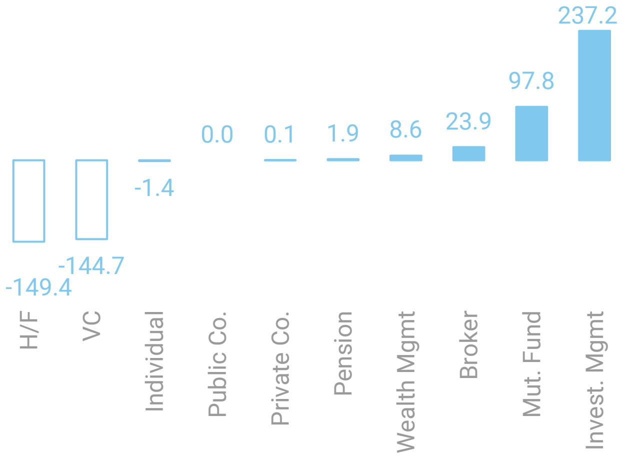
BCB Monetary and Credit Statistics Report 6/28/23

BCB Inflation Report 6/29/23

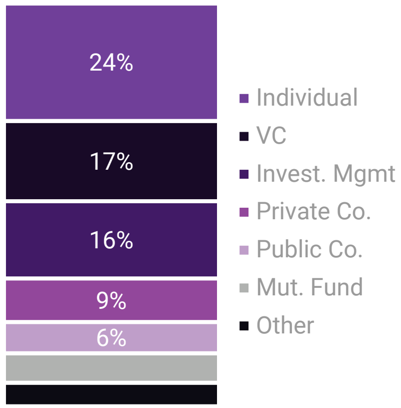
2Q23 Earnings Release (Projected) 8/14/23

SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Ownership Summary



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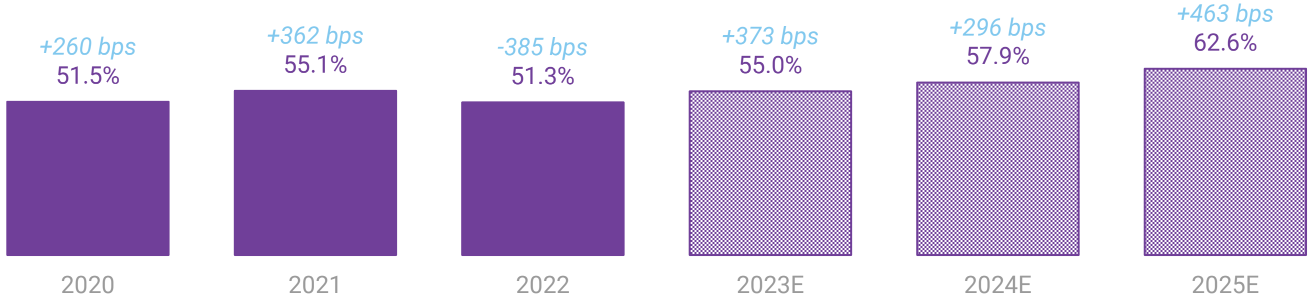
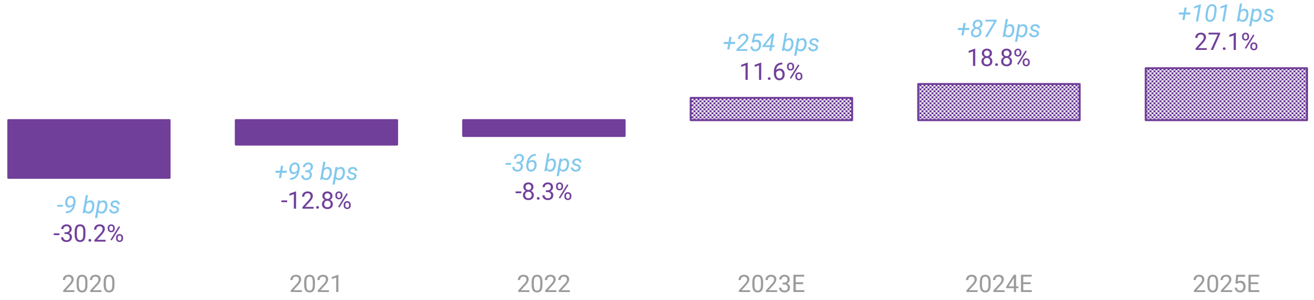
FINANCIAL TECHNOLOGY PARTNERS

COMPANY RATIOS/MARGIN ANALYSIS

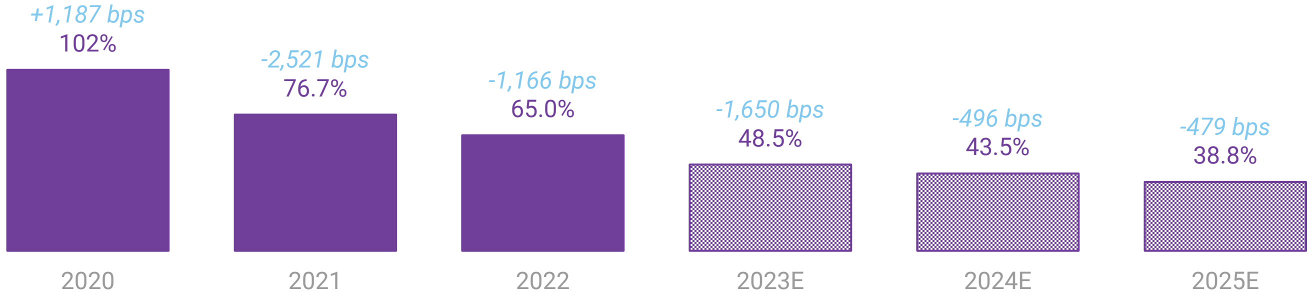
Gross Margin



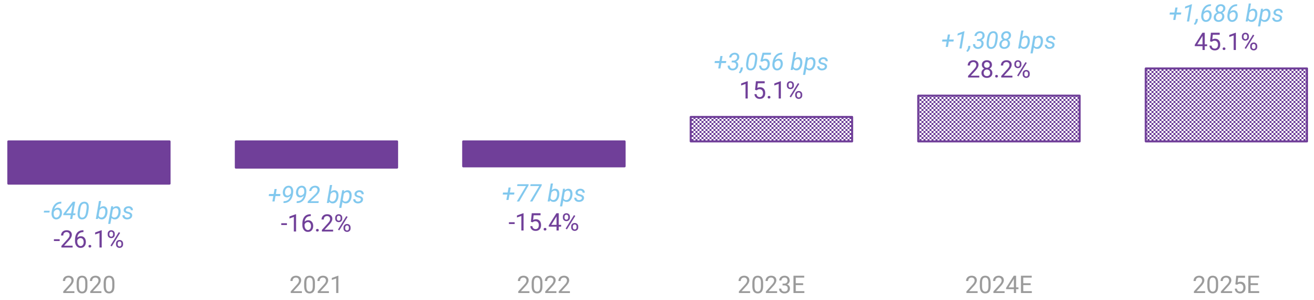
Operating Margin



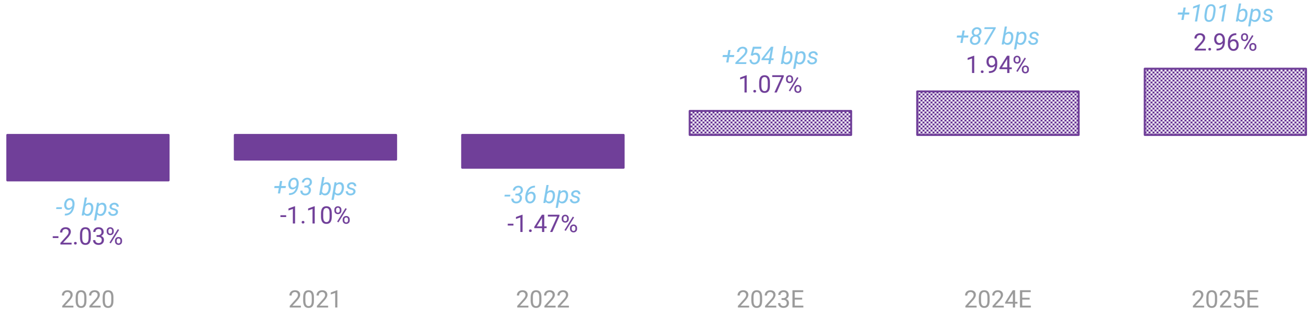
Efficiency Ratio



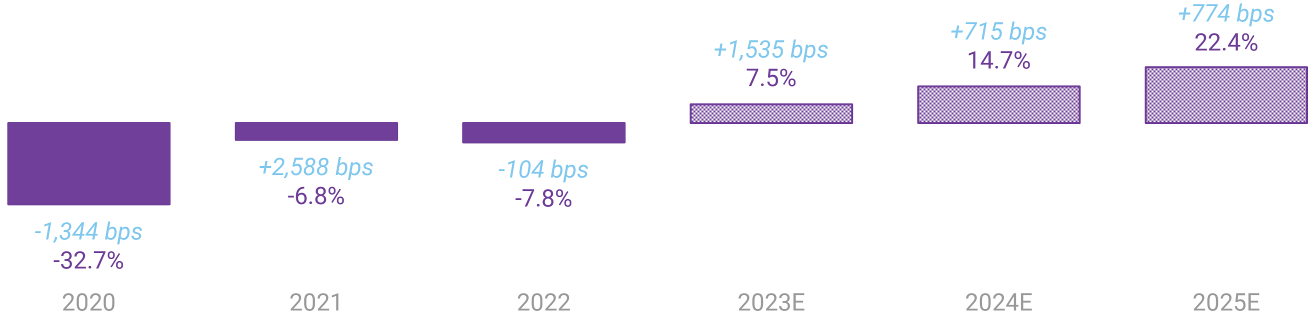
Net Income Margin



Return on Assets



Return on Equity



Source: Company filings; FactSet

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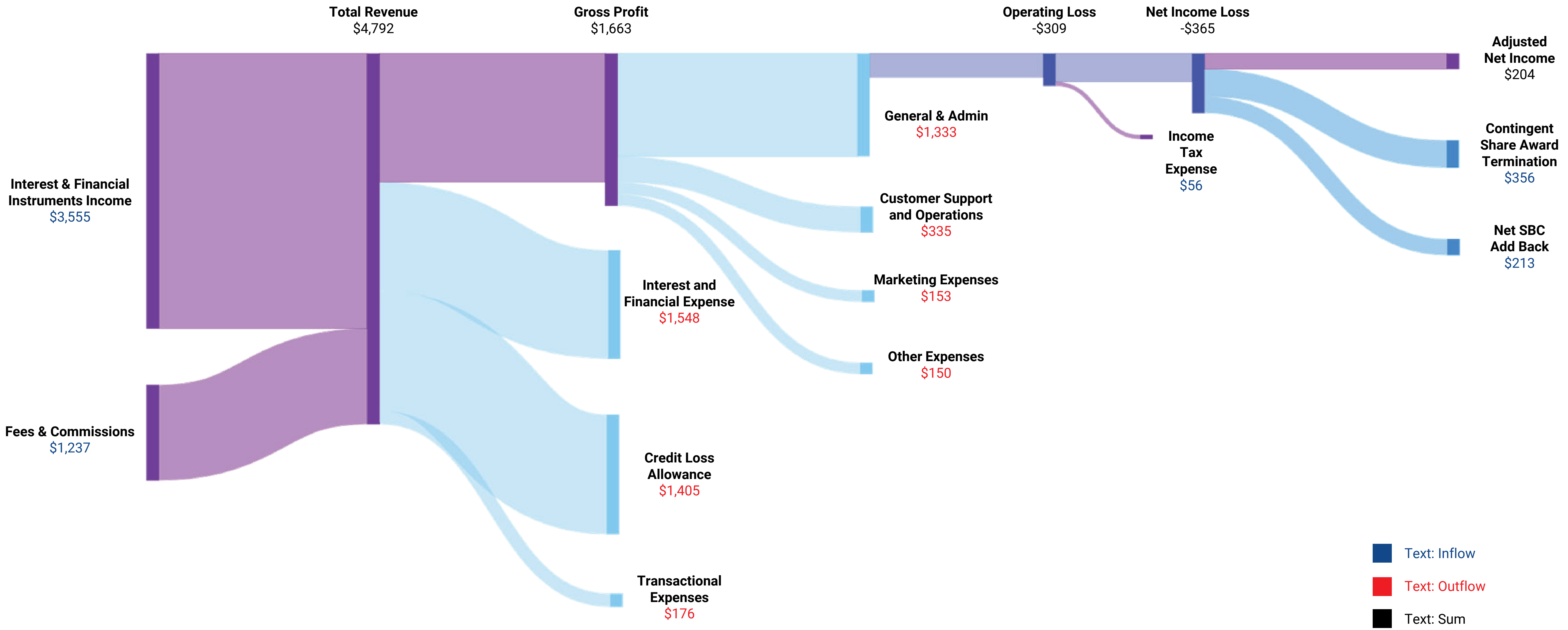
FINANCIAL TECHNOLOGY PARTNERS

($ in millions)

P&L VISUALIZATION – TTM



🟦 Text: Inflow

🟥 Text: Outflow

⬛ Text: Sum

Source: Company filings; FactSet

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NU TTM Price Performance

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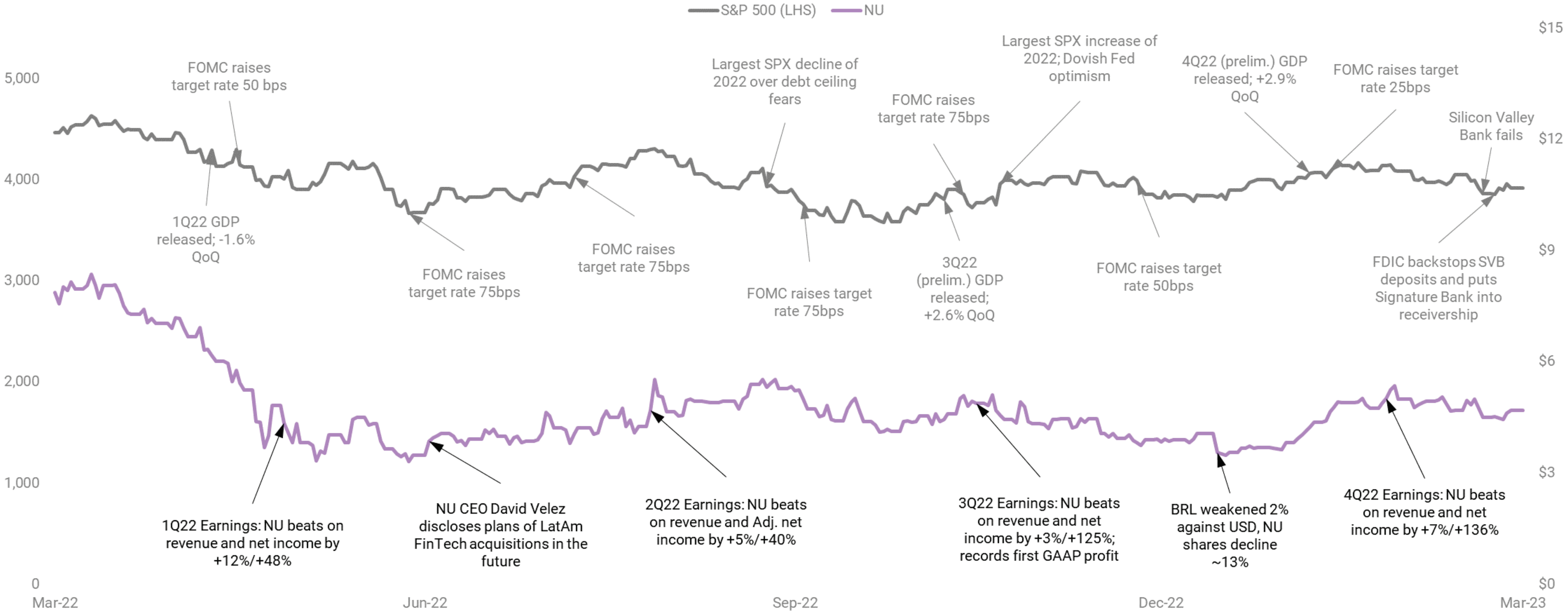
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



Source: Company filings; FactSet

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PagSeguro

PAGSEGURO PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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Matthew O'Neill | Co-Director of Research –Matthew.O'Neill@ftpartners.com – (347) 614-2481
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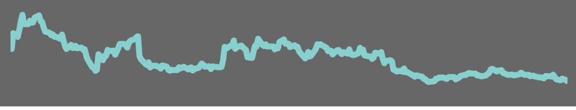
Craig.Maurer@ftpartners.com (929) 286-9516 *(AC) | FTP Securities LLC is a FINRA registered broker dealer (www.finra.org) and member SIPC (www.sipc.org). The firm and its reps can be found here: FTP SECURITIES LLC - BrokerCheck (finra.org) | March 20, 2023
Please refer to page 214 for important disclosures.

PagSeguro


PAGS TTM Price Performance

Price as of 3/17/23	$7.91	Shares Out (mm):	204
Market Cap (mm):	$2,565	Beta (3Y Avg.):	1.9
52-Wk Range:	$7.51 - $22.28	Avg. Daily Vol (mm):	3.3

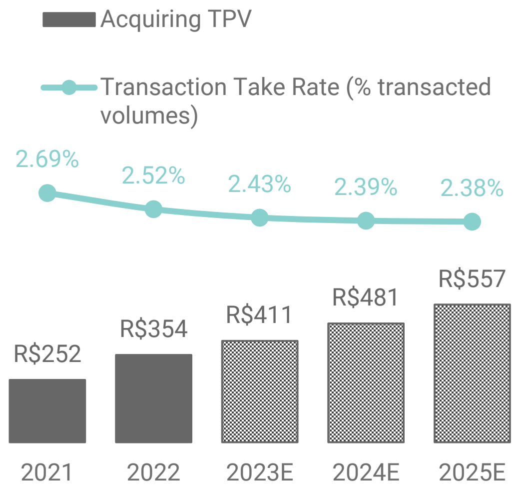
FINANCIAL TECHNOLOGY PARTNERS

COMPANY OVERVIEW

PagSeguro, already the leading merchant acquirer to small businesses in Brazil at the time of its 2018 IPO (spun out of UOL Group), with the May 2019 launch of PagBank, has morphed into a leading digital financial services ecosystem. Serving primarily small businesses and un/under-banked consumers in Brazil, PagSeguro is the most profitable merchant acquirer in the country, and PagBank is now the second-largest digital bank in Brazil behind Nu.

Focusing primarily on Brazilian entrepreneurs, micro-merchants and SMEs, PagSeguro offers a wide range of PoS and mPoS devices that provide **access to an end-to-end FinTech ecosystem,** recently adding payroll processing to its menu of services. PagSeguro was essentially the first merchant acquirer in Brazil to introduce the idea of a digital account where all receivables flowed and included spend capability in the form of a debit card, which later evolved into PagBank, now serving both consumers and small business with the extensive and growing suite of capabilities seen on the bottom right of this slide.

PROFIT / TAKE RATE COMPS



KEY DEBATES

1. **Market Share:** PagSeguro has historically focused its acquiring business on micro-merchants, but in 2020 began rolling out a Hub strategy to focus on SMEs. Nano-merchants (<R$2k per month) have been allowed to roll off, who are unlikely to utilize additional offerings. Management is focused on cohorts with strong PagBank cross-sell potential, like SMEs. While this has resulted in decreased market share (merchant count), the fact that PagSeguro has been able to hold pricing in the long-tail since 2016, despite competition increasing, speaks to the breadth and quality of the offering.

2. **PagBank:** PagBank is attacking the unbanked and underbanked population, both on the consumer and merchant front, and is now the 2nd largest digital bank in Brazil behind Nu. PAGS is well positioned to continue winning users, leveraging its strong technology platform, pre-existing relationships with micro-merchants, and its nationally know brand to drive higher share within consumer wallets. Having paused lending during the pandemic, the recent shift toward secured lending products will keep losses in check while adding to the bottom line. Management expects PagBank to comprise 30% of total revenue by 4Q24.

3. **Regulation**: Brazil's financial sector has been subject to an ever-evolving regulatory landscape, which could be challenging. That said, the Brazilian Central Bank has been careful to craft regulatory changes that don't disrupt the growth of the country's vibrant FinTech industry. Recently, the Central Bank of Brazil implemented an interchange cap on prepaid and debit cards (April 1, 2023, implementation). While this legislation is expected to have a minimal impact on PagSeguro (losses in PagBank revs are recovered as cost savings for PagSeguro), risk of future regulation, especially on pre-payment, is an ongoing discussion.

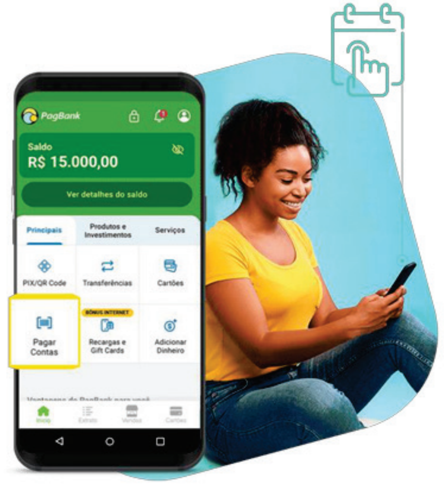
REVENUE MODEL

PagSeguro parses revenue into two lines on the income statement:

- **Transaction Activities and Other Services (58% of TTM Revenue):** The largest source of revenue in this line is gross discount revenue from PagSeguro merchant acquiring activities. PagSeguro's merchant discount rate (MDR) for debit is effectively capped by regulation, but the MDR on credit can vary based on how quickly the merchant wants settlement. PagSeguro, like all acquirers in Brazil, offers pre-payment of credit card receivables to help merchants with working capital needs during the 30-day settlement period of credit card sales, as well as the wide usage of zero percent consumer installment programs (both unique to Brazil). Pre-payment revenue included in this line represents the material premium paid by merchants to receive same-day settlement for both regular credit transactions and the first installment payment of a longer installment plan. PagBank also contributes to this line via two sources, including gross interest income and fee revenue, the latter of which includes interchange income on PagBank cards.
- **Sales, Financial Income, and Other Financial Income (42% of TTM Revenue)**: While this line includes small contributors to revenue like one-time membership fees for PoS devices, interest generated by bank deposits, as well as FX, the primary driver of revenue is pre-payment. Pre-payment revenue hitting this line is related to the ~33% of PagSeguro TPV that is driven by processing payments 2-18 of installment programs up to 18 months in length. Revenue from processing the first payment in these installment plans is captured in Transaction Activities as discussed above.

PagSeguro books these revenues on a gross basis. Interchange and network fees are accounted for in **Transaction Costs**, while interest expense on deposits and pre-payment funding are booked in **Financial Expenses**.

PRODUCTS & SERVICES OVERVIEW



Source: Company filings

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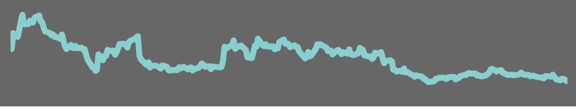
PagSeguro

PAGS TTM Price Performance



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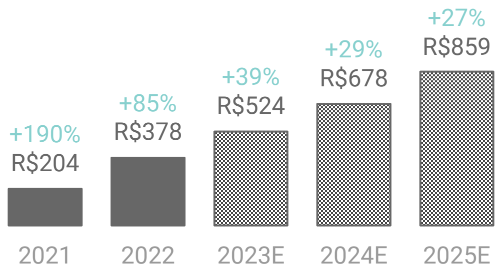
FINANCIAL TECHNOLOGY PARTNERS

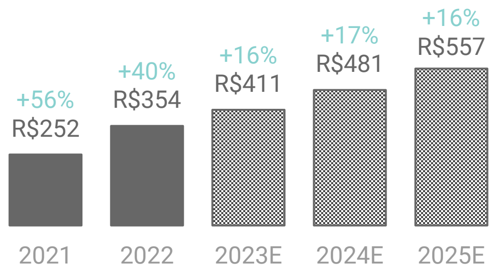
(R$ in billions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

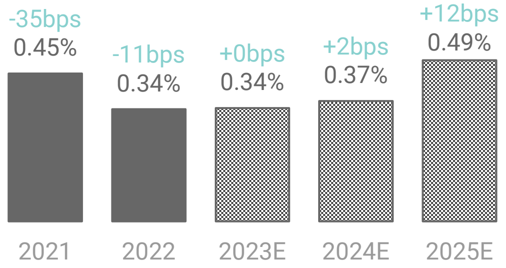
PagBank TPV



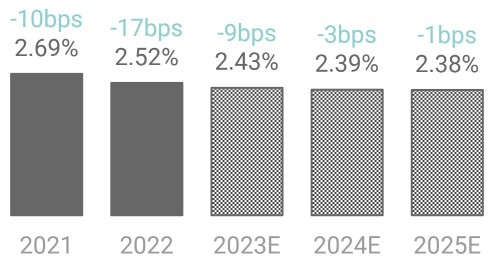
PagSeguro TPV



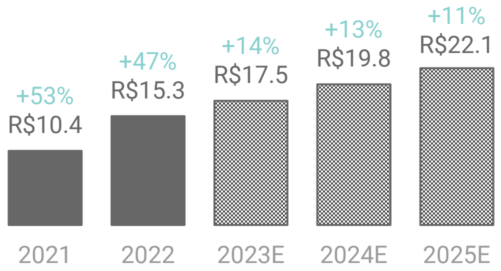
PagBank Net Take Rate



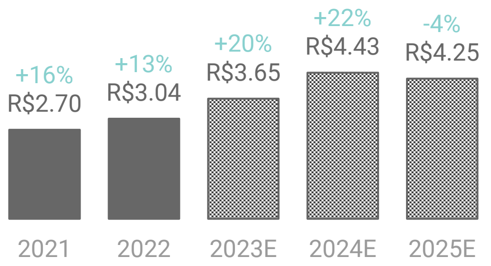
PagSeguro Net Take Rate



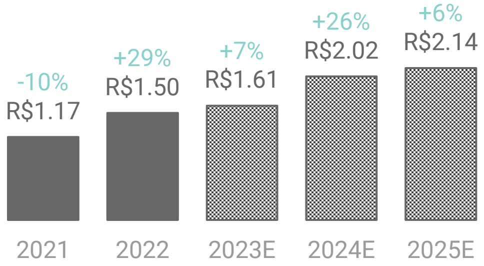
Revenue



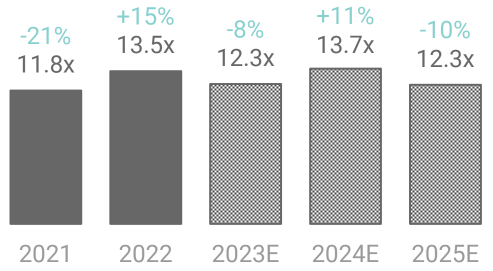
Adjusted EBITDA



Net Income



Return on Equity



INDUSTRY KPIs

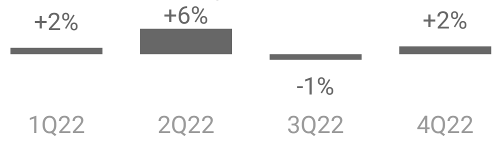
LATAM CPI [2] *(Jan 19-Feb 23)*

V/MA LATAM Card Volume [3] *(1Q19-4Q22)*

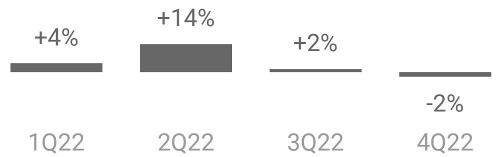
BR Consumer Sentiment [4] *(Jan 19-Jan 23)*

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[5]

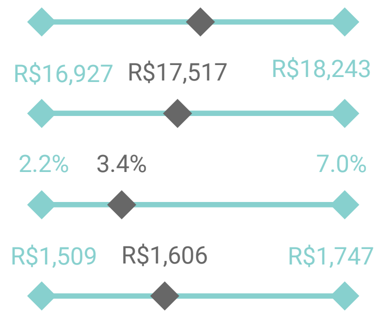
Total Payment Volume



Revenue



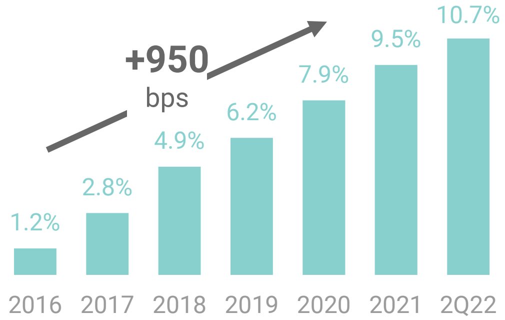
FY23



PagSeguro TPV (bn)	R$395	R$411	R$425
Revenue	R$16,927	R$17,517	R$18,243
Net Take Rate	2.2%	3.4%	7.0%
Net Income	R$1,509	R$1,606	R$1,747

TOTAL ADDRESSABLE MARKET

PAGS Payment Market Share



Payment Market Opportunity

36.6mm businesses

19.5mm Self-Employed

13.3mm Micro-Merchants

3.7mm SMEs

Source: Company filings
1) FactSet
2) FactSet Brazilian, Mexican, Colombian and Chilean CPI
3) V/MA Company filings
4) FRED Consumer Opinion Surveys: National Indicator for Brazil
5) FactSet Consensus Low/Average/High Range

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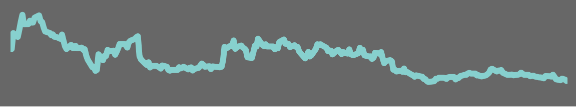
PAGS TTM Price Performance



Price as of 3/17/23	$7.91	Shares Out (mm):	204
Market Cap (mm):	$2,565	Beta (3Y Avg.):	1.9
52-Wk Range:	$7.51 - $22.28	Avg. Daily Vol (mm):	3.3

VALUATION CONSIDERATIONS

Like many FinTech stocks that found new highs in 2021, PagSeguro's shares have fallen materially, exacerbated by the impact macro challenges have had on investments in emerging markets. PagSeguro's stock is down 87% from its 2021 peak, despite strong growth and profitability. During its earlier years as a public company, PagSeguro's stock suffered from concerns over its parent company UOL, lack of transparency, as well as guidance issues, problems which have largely been solved over the past three years.

PagSeguro currently trades at a 7.9x NTM P/E, 21.7x below its 3-year average P/E of 29.6x. It also trades at a 1.3x premium to the BOVESPA, 9x below its average premium of 10.3x. Surprisingly given recent performance and profitability of the two Brazilian merchant acquirers, PagSeguro also trades at an 8x discount to Stone.

Should interest in emerging markets reaccelerate, PagSeguro's combination of growth and profitability could stand out likely driving positive multiple rerating.

DCF Valuation:

Scenario 1 – Current Price ($7.91, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires low double-digit revenue growth through FY24 before gradually decelerating to the terminal growth rate. Operating margins in this scenario gradually expand, reaching a terminal rate of 35%. Were PagSeguro to remain at the current price in 12-months, it would imply a 6x NTM P/E multiple (based on current STM consensus EPS of $1.26).

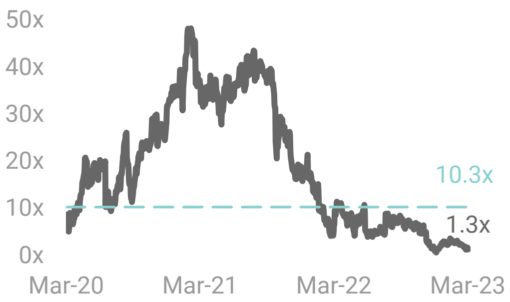
Scenario 2 – PagBank Monetization ($11.37, 44% Upside): The second DCF assumes that PagBank's ARPU increases to be more in line with competitors by expanding its credit underwriting and fee-based offerings (like investing and insurance). In this scenario, revenue growth is accelerated to 14%/14% in FY23/24 while margins are increased to 40% over the long-term. This scenario points to a 12-month price of $11.37 (44% upside), which based on current STM consensus EPS implies a 9x NTM P/E multiple in 12-months.

Scenario 3 – Price Compression ($6.49, 18% downside): The third DCF outlines a scenario where PagSeguro sees take rate compression driven by competitive pricing actions by the likes of Stone, Getnet, or Mercado Libre's Mercado Pago, particularly in the long-tail market. This scenario points to 10% revenue growth in FY23/24 before decelerating to the terminal growth rate. It also assumes terminal operating margins of 32%. This scenario points to a 12-month price of $6.49 (18% downside), which based on current STM consensus EPS implies a 5x NTM P/E multiple in 12-months.

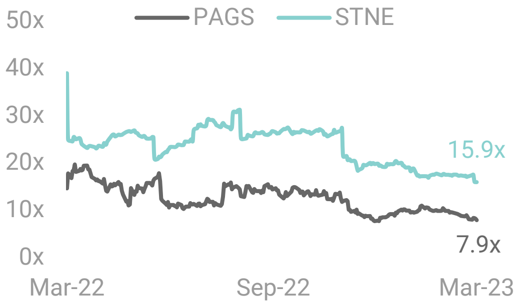
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM P/E & 3-Year Average

NTM P/E Premium vs. BOVESPA



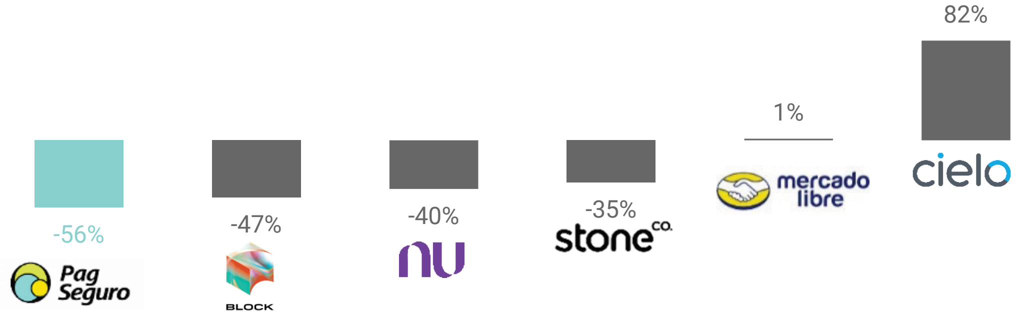
Peer NTM EV/GP Avg.



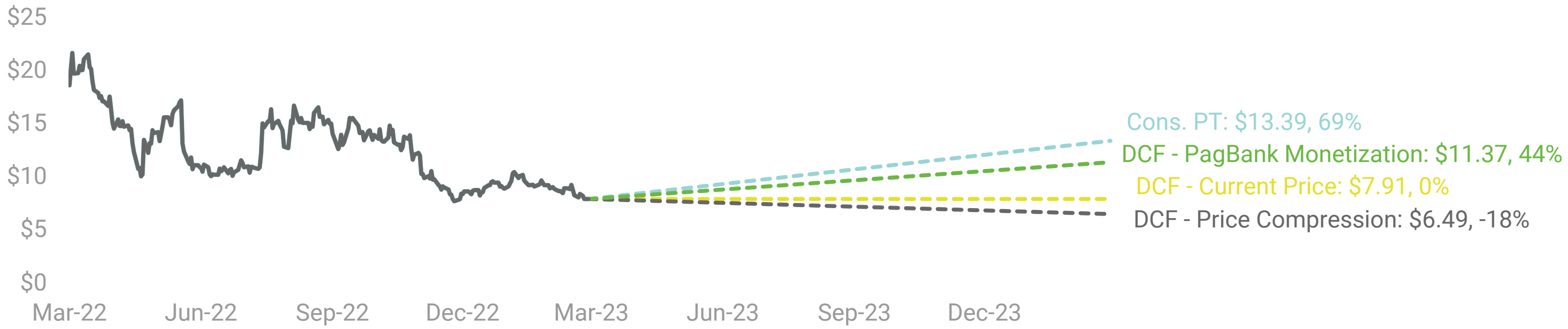
DCF Key Assumptions[1]

10-Yr RFR	3.6%
Cost of Debt	6.0%
Cost of Equity	19.0%
WACC	9.9%
Beta	1.64
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Reduction From Present + Future SBC	R$5,323

Select Peer TTM Price Performance



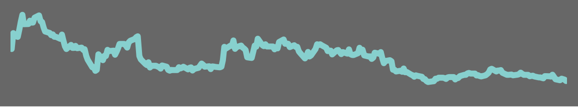
Price Chart & 12-month Forward Scenario Based Ranges



Source: Company filings; FactSet

1) SBC in millions

PagSeguro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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. These scenarios are built around 1) PagSeguro market share and 2) the take rate associated with the acquiring business. While there are other drivers of PagSeguro's valuation (macro, PagBank monetization, etc.), these represent the most likely area(s) of near-term upside/downside relative to consensus.

Consensus Case:

Versus other companies under coverage, the consensus target price for PagSeguro is far more aggressive, and similarly only two of the six modeled scenarios producing a lower one-year return. The average consensus price target for PagSeguro is $13.45, with STM P/E estimates of $1.26 implying a 11x NTM P/E multiple if shares trade at this level in 12-months. This would represent a 3x expansion relative to the current 8x multiple, implying 70% upside to the current share price.

Upside Case(s):

(+) $12.14, 46% Upside: This scenario assumes PagSeguro market share is stable across SMEs (still decreasing modestly across nano-merchants) and that TPV is higher than the consensus base case, implying 11% EPS growth, driving 46% upside to the current share price with a 9x multiple.

(+-) $10.71, 28% Upside: This scenario assumes PagSeguro market share is stable but there is greater take rate compression on the acquiring side of the business, implying 10% EPS growth and 28% upside to the current share price with an 8x multiple. The scenario assumes there is less EPS and multiple downside in the event of a lower take rate, given the significant take rate compression already priced into consensus (FY22 ~2.15% vs. FY23E of 1.99%).

(-+) $9.55, 14% Upside: This scenario assumes greater market share with the overall take rate remaining closer to FY22 levels, implying 7% EPS growth and 14% upside to the current share price with an 8x multiple.

(++) $15.06, 82% Upside: The best-case scenario assumes PagSeguro market share holds consistent and that there is minimal take rate compression due to competitor pricing initiatives, implying 14% EPS growth and 82% upside to the current share price with an 11x multiple. This 11x multiple is still 19x below PagSeguro's average 3-year multiple of 30x.

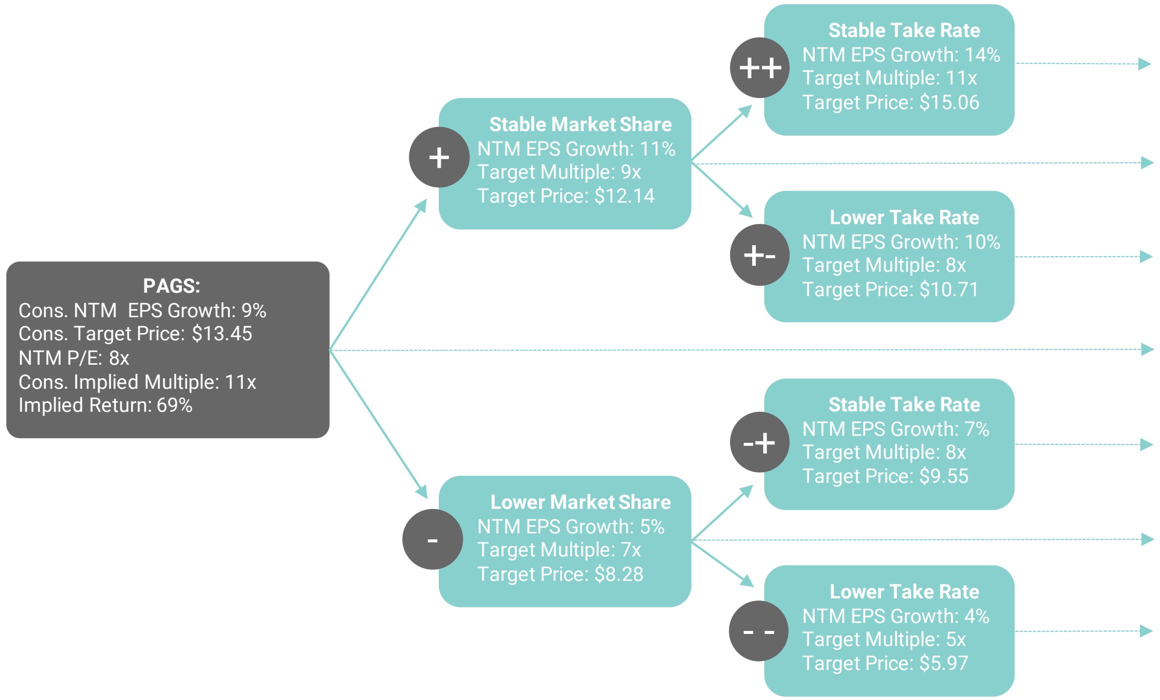
Downside Case(s):

(-) $8.28, 2% Downside: This scenario assumes PagSeguro loses more market share than expected which is reflected in a lower TPV forecasts, implying 5% EPS growth and 2% downside to the current share price with a 7x multiple.

(--) $5.97, 31% Downside The worst-case scenario assumes PagSeguro cedes a greater portion of market share and is forced to cut the acquiring take rate. This implies 4% EPS growth and 31% downside to the current share price with a 5x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



PAGS:
Cons. NTM EPS Growth: 9%
Cons. Target Price: $13.45
NTM P/E: 8x
Cons. Implied Multiple: 11x
Implied Return: 69%

+ **Stable Market Share**
NTM EPS Growth: 11%
Target Multiple: 9x
Target Price: $12.14

++ **Stable Take Rate**
NTM EPS Growth: 14%
Target Multiple: 11x
Target Price: $15.06

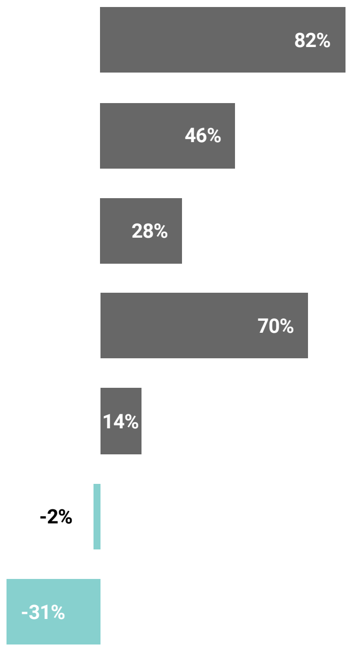
+- **Lower Take Rate**
NTM EPS Growth: 10%
Target Multiple: 8x
Target Price: $10.71

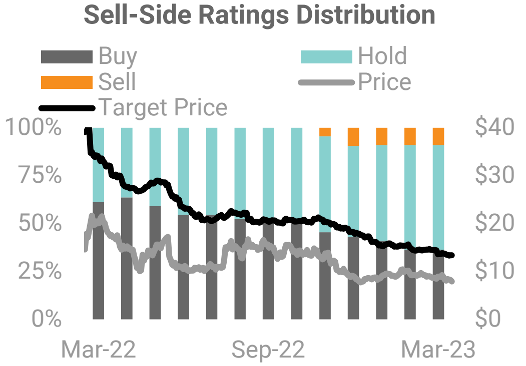
\- **Lower Market Share**
NTM EPS Growth: 5%
Target Multiple: 7x
Target Price: $8.28

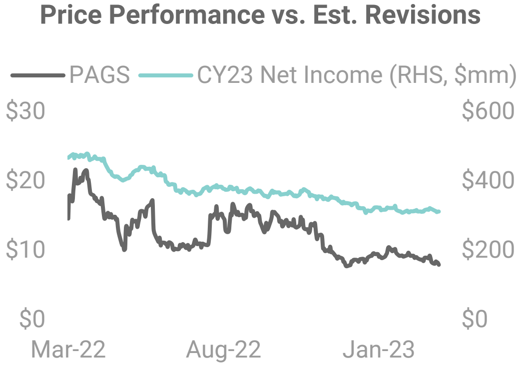
-+ **Stable Take Rate**
NTM EPS Growth: 7%
Target Multiple: 8x
Target Price: $9.55

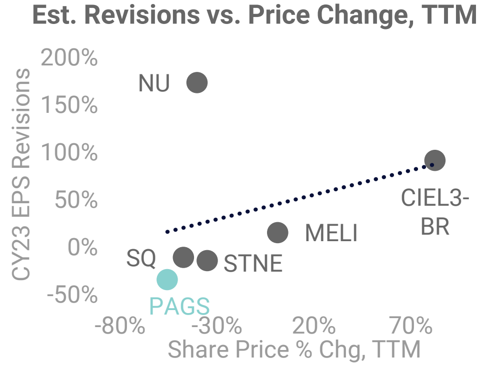
-- **Lower Take Rate**
NTM EPS Growth: 4%
Target Multiple: 5x
Target Price: $5.97

12-month Price Return









Source: Company filings; FactSet

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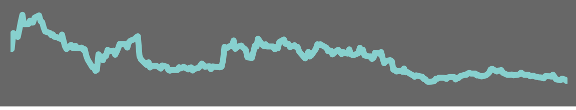
PagSeguro

PAGS TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

(R$ in billions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: Shares traded up 6% after reporting, attributable to both strong results, especially the trajectory of PagBank, and the improved profitability outlook. Profitability is benefitting from a significant reduction in credit losses and additional lower-cost funding, both of which could prove sticky as secured credit grows and deposit inflows continue. While not providing specific guidance for 1Q23 or 2023, management continued to emphasize the smart decisions that have driven steady, profitable growth since the company's IPO, as well as continued margin expansion.

Results Recap: PagSeguro reported active merchants of 7.1mm, 2% below consensus, falling 2.7% or roughly 200k merchants, similar to the rate of contraction seen in the prior two quarters. Total revenue and income of R$3.96bn fell 2% short of consensus, up 22.4% YoY. Transaction (PagSeguro) TPV was R$94.3bn, growing 19.5% YoY, 2% ahead of consensus. The transaction take rate was 2.59%, 6bps above consensus, down from 2.84% in 3Q22 due to higher mix of Hub (SME) and debit card volume. PagBank TPV was R$115bn, up 68.2% YoY and 20% better than consensus. Adjusted net income of R$411mm grew 23% and was 3% above consensus.

Incremental From The Call:

- **PagBank:** Account balance portion of total deposits grew to 42% from 35%, representing R$1.9bn growth QoQ. In addition to five fewer working days in the quarter, this helped lower funding costs leading to a 7% decline in financial expenses after growing nearly 98% over the preceding three quarters. Despite 43% YoY growth in the credit portfolio, credit costs improved, as the book is now 40% secured credit vs. 35% and 23% in Q3 and Q2, respectively. Management expects secured products to rise to 60% of total credit in the coming quarters. Total revenue and income declined 2% QoQ, driven by the lower APY and longer duration associated with secure loans, as well as reduced credit lines leading to adverse mix shift in TPV. PagBank gross profit was up 71% YoY to R$131mm in 4Q22, an all-time high.
- **PagSeguro:** Active merchant decline is largely due to nano-merchants (below R$2k per month in TPV), representing less than 3% of TPV. Management is fine letting this cohort roll off, choosing instead to focus on cohorts with strong PagBank cross-sell potential. Net revenue from transaction activities was hindered by seasonally higher debit card mix (exacerbated by card issuing banks lowering credit lines), which also contributed to reduced financial expense due to lower pre-payment demand allowing for improved operating margin. Seasonal shopping patterns favoring large merchants also impacted the take rate negatively. While the increase mix from the Hubs continued to drag on take-rate, the fact that PagSeguro has been able to hold pricing unchanged in the long-tail since 2016, despite competition increasing, speaks to the quality of the overall offering. PagSeguro grew TPV 19% YoY in 4Q22. ABECS currently expects the market to grow 14-18% in 2023 and management will continue emphasizing profitable growth over market share.
- **Regulatory Changes:** Regarding regulatory changes around the processing of pre-paid cards in Brazil, changes will take effect on April 1. PagSeguro is expecting a largely neutral impact, as the cost to process for PagSeguro will fall, but the interchange income for PagBank will also drop. Pre-paid cards represent about 7% of TPV in Brazil.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs.▲	%▲
Active merchants (mm)	**7.10**	**7.25**	**-0.15**	**-2%**
growth (%, yoy)	*-8%*	*-6%*		
Transaction TPV	**$94.3**	**$92.5**	**$1.78**	**2%**
growth (%, yoy)	*20%*	*17%*		
Transaction Take Rate	**2.59%**	**2.53%**	**6bps**	
▲ in % (yoy, bps)	*-2bps*	*-8bps*		
PagBank TPV	**$115**	**$95.8**	**$19.0**	**20%**
growth (%, yoy)	*68%*	*40%*		
PagBank Credit Portfolio	**$2.70**	**$2.83**	**-$0.13**	**-5%**
growth (%, yoy)	*42%*	*48%*		
Net Transaction Revenue	**$2.30**	**$2.34**	**-$0.04**	**-2%**
growth (%, yoy)	*12%*	*14%*		
Net PagBank Revenue ($R mm)	**$329**	**$408**	**-$79.0**	**-19%**
growth (%, yoy)	*7%*	*32%*		
Total Revenue and Income	**$3.96**	**$4.05**	**-$0.09**	**-2%**
growth (%, yoy)	*22%*	*25%*		
Total Cost of Sales and Services	**$1.97**	**$1.89**	**-$0.08**	**4%**
growth (%, yoy)	*8%*	*3%*		
Adjusted EBITDA ($R mm)	**$788**	**$795**	**-$7.20**	**-1%**
Adj. EBITDA Margin (%)	*20%*	*20%*	*27bps*	
Net Income ($R mm)	**$408**	**$364**	**$43.9**	**12%**
Net Income Margin (%)	*10%*	*9%*	*132bps*	
Adjusted Net Income ($R mm)	**$411**	**$397**	**$13.6**	**3%**
Adj. Net Income Margin (%)	*10%*	*10%*	*57bps*	

Source: Company filings; FactSet; Visible Alpha

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PagSeguro

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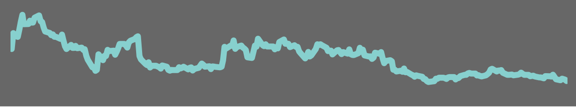

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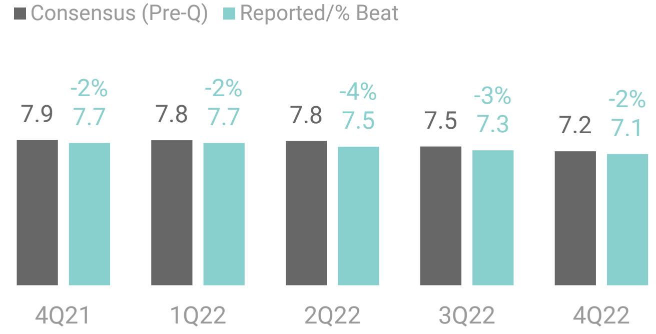
FINANCIAL TECHNOLOGY PARTNERS

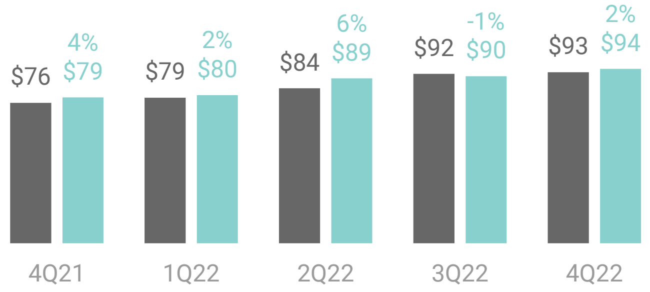
(R$ in billions, except where otherwise noted)

REPORTED VS. CONSENSUS

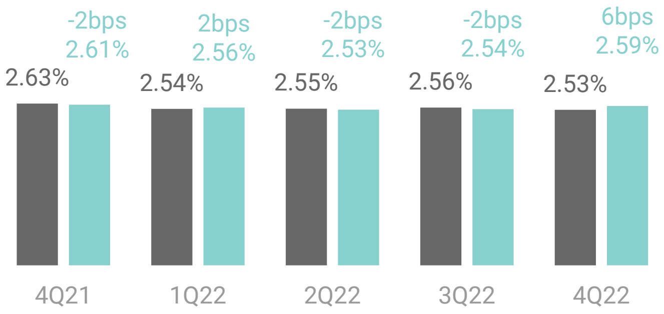
Active Merchants (mm)



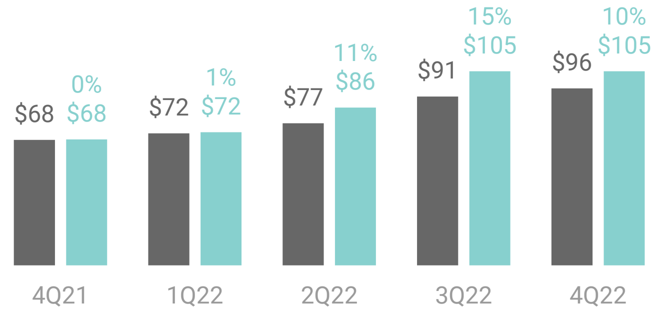
TPV



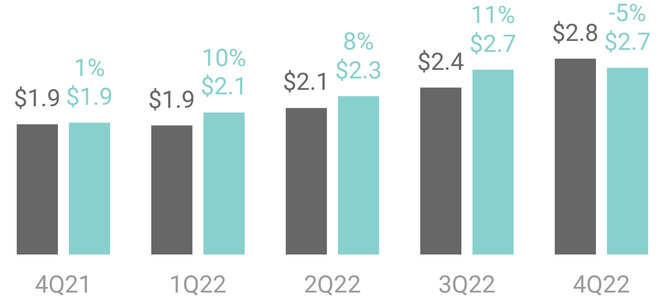
Transaction Take Rate



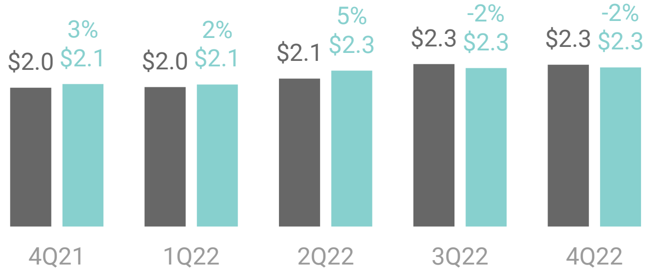
PagBank TPV



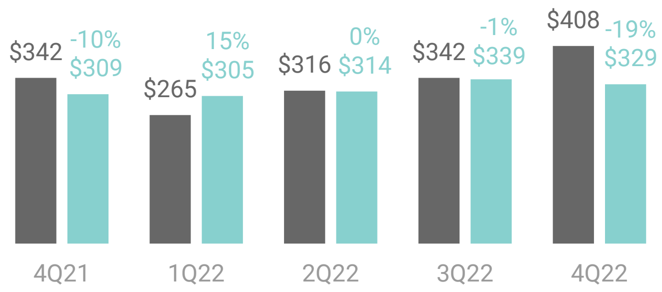
PagBank Credit Portfolio



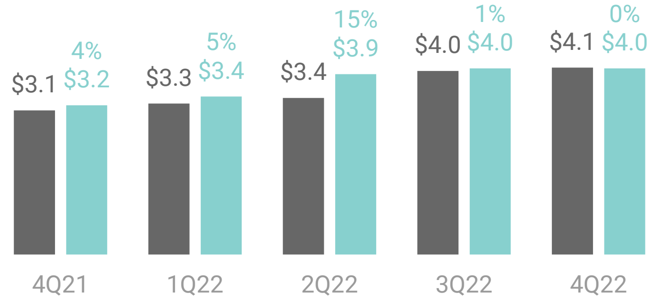
Net Revenue from Transaction and Other Services



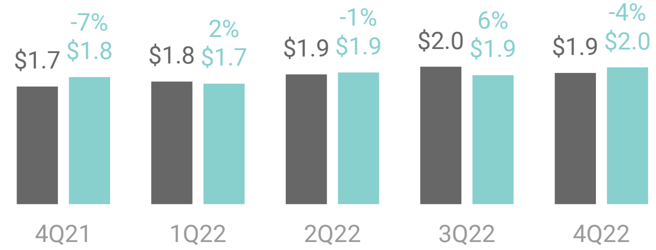
Net Revenue from PagBank (R$ mm)



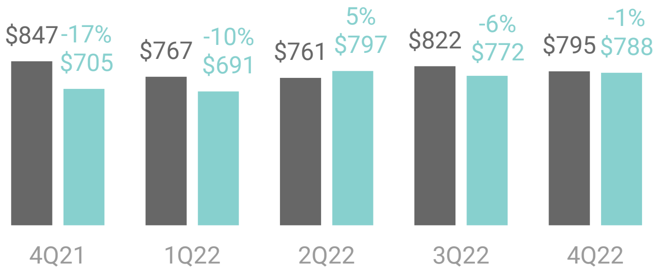
Total Revenue and Income



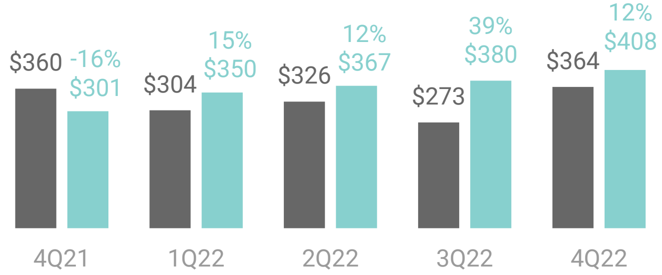
Costs of Sales and Services



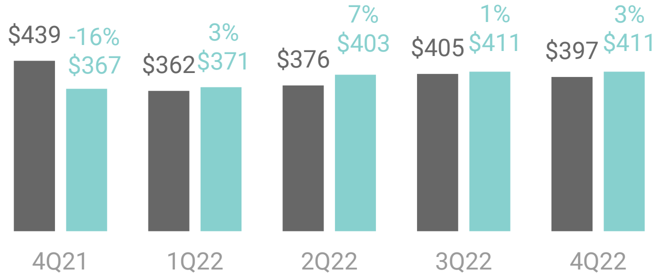
Adjusted EBITDA (R$ mm)



GAAP Net Income (R$ mm)



Adjusted Net Income (R$ mm)



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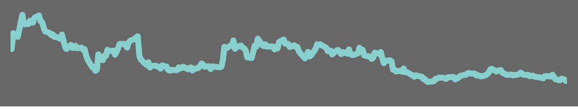

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1Q23 EARNINGS OUTLOOK

PagSeguro is expected to report 1Q23 earnings on May 31st after the market close.

What's In Focus:

PagSeguro will report 1Q23 earnings at a time when the macro is still quite uncertain, and the company is also going through somewhat of a metamorphosis as well. Higher interest rates will continue to weigh on comparisons to the prior year's results, while the health of the consumer in Brazil remains an ongoing concern.

With this backdrop, investors will look for several indicators of continued success. On the acquiring side, merchant count will likely continue to contract due to the shedding of nano-merchants, but continued share gains in SME acquiring can drive strong TPV growth that would somewhat offset take rate compression from going up-market. Additionally, growth in PagBank deposits can continue expanding a cheap source of funding, extremely helpful against elevated interest rates. Lastly, progress in growing the mix of secured credit will result in a lower APY for the portfolio but should have the more important benefit of lower credit losses and more stable credit quality.

Lastly, investors will look for management to reiterate its view that April 1st regulatory changes to interchange on pre-paid cards (7% of overall TPV in Brazil) will be neutral to the overall business. While interchange income on some PagBank card volume will be impacted, the company expects this to be offset by lower costs to process on the merchant acquiring of PagSeguro.

Estimates:

KPI's: Since reporting 4Q22 results, estimates for 1Q23 transacted volumes have been revised down 1% from R$93.7bn to R$92.4bn, representing ~15% YoY growth. Consensus for Active merchant count in 1Q23 has also been revised down by ~4% to 7.1mm, 8% decline YoY, representative of management commentary that it will continue to shed nano-merchants and focus on SME's. For 1Q23, consensus for the overall transaction take rate have been revised 6bps lower from 2.51% to 2.45% compared to 2.57% in 1Q22, driven by downward revisions of 3bps in the PagBank take rate and 4bps on the acquiring take rate.

Revenue: Consensus for total revenue in 1Q23 have decreased 5% from R$4,086mm to R$3,885mm since reporting 4Q22 earnings, representing 13% YoY growth. Meanwhile, estimates for FY23 revenue have been revised lower by ~3%, from R$17,982mm to R$17,344mm, representing 13% YoY growth as well. PagBank has seen the largest revisions, with 1Q23 revenue estimates being revised down by 11% to R$331.5mm, representing 9% YoY growth.

Expenses/Profitability: Following 4Q22, consensus for total operating expenses decreased 7% to R$1,620 and representing a 27% YoY growth, while consensus for net income/EPS have remained relatively unchanged.

POST-RESULTS ONE-DAY ALPHA VS. BOVESPA

1Q22
- 2% beat on revenue
- Revenue growth accelerated to 66% YoY, from +55% YoY in Q4
- Outlook implies improving profitability

2Q22
- 8% beat on revenue
- Take rate expanded 16bps sequentially on increased pricing and favorable mix shift
- Q3 revenue guidance above the Street

3Q22
- TPV below guidance midpoint due to deflation and lower credit to consumers

4Q22
- 2% miss on revenue,
- 12% beat on net income

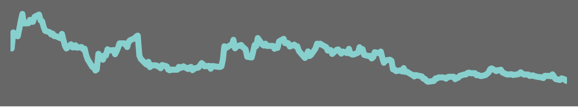
MANAGEMENT COMMENTS/WHAT'S PRICED IN

- Secured products to rise to 60% of total credit in coming quarters
- Management letting nano-merchants roll-off, instead focusing on cohorts with cross-sell potential in PagBank.
- No rush to grow credit portfolio in the short term given macro uncertainties
- Ongoing improvements in credit model, process, collections, and client risk assessment will potentially accelerate appetite for credit portfolio expansion in the future
- No current plans to raise prices in the future based on interest rates
- Higher financial expenses in 2023 from volume growth in prepayment business and average interest rates in Brazil (rates didn't hit current levels until August of 2022)
- ABECS is currently assuming 14-18% growth in card payment volume for 2023 which management did not push back on even if not offering formal guidance
- Management expects opex growth less than revenue growth in 2023

Source: Company filings; FactSet

PagSeguro

PAGS TTM Price Performance



Price as of 3/17/23	$7.91	**Shares Out (mm):**	204
Market Cap (mm):	$2,565	**Beta (3Y Avg.):**	1.9
52-Wk Range:	$7.51 - $22.28	**Avg. Daily Vol (mm):**	3.3

FINANCIAL
TECHNOLOGY
PARTNERS

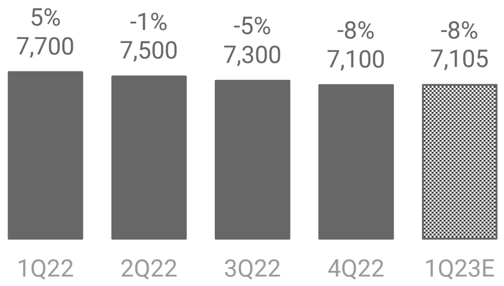
(R$ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

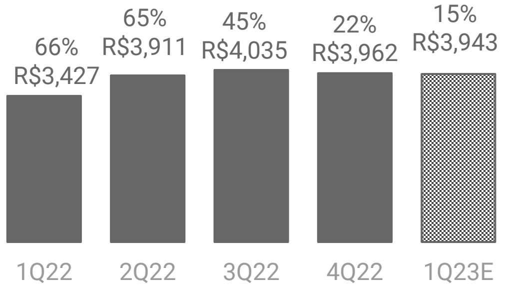
	Low	Average	High
Active Merchants (000's)	**6,900**	**7,105**	**7,508**
growth (%, yoy)	*-10%*	*-8%*	*-3%*
Average Spend per active merchant ($R)	**R$ 11,989**	**R$ 13,008**	**R$ 14,207**
growth (%, yoy)	*15%*	*25%*	*37%*
Transacted Volumes	**R$ 86,320**	**R$ 92,382**	**R$ 101,119**
growth (%, yoy)	*8%*	*15%*	*26%*
Transaction Take Rate	**2.28%**	**2.45%**	**2.52%**
▲ *in % (bps)*	*-28bps*	*-11bps*	*-5bps*
Total Revenue	**R$ 3,774**	**R$ 3,943**	**R$ 4,183**
growth (%, yoy)	*10%*	*15%*	*22%*
Total Expenses	**R$ 3,348**	**R$ 3,542**	**R$ 3,749**
growth (%, yoy)	*11%*	*18%*	*25%*
Operating Income Before Taxes	**R$ 413**	**R$ 430**	**R$ 460**
Operating Margin (%)	*11%*	*11%*	*11%*
EBITDA	**R$ 735**	**R$ 770**	**R$ 808**
EBITDA Margin (%)	*19%*	*20%*	*19%*
Adjusted EBITDA	**R$ 693**	**R$ 803**	**R$ 913**
Adjusted EBITDA Margin (%)	*18%*	*20%*	*22%*
Net Income	**R$ 302**	**R$ 353**	**R$ 391**
Net Income Margin (%)	*8%*	*9%*	*9%*
Adjusted Net Income	**R$ 327**	**R$ 369**	**R$ 420**
Net Income Margin (%)	*9%*	*9%*	*10%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

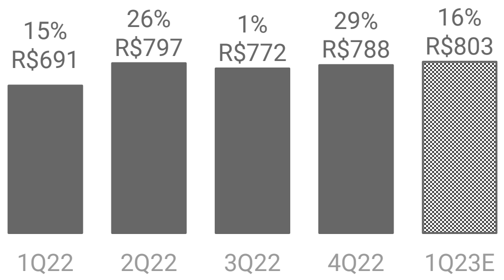
Active Merchants (000)/YoY Growth



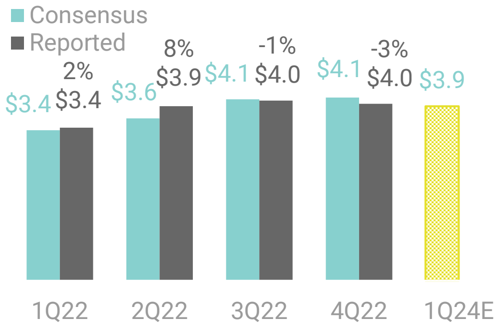
Revenue ($R bn)/YoY Growth



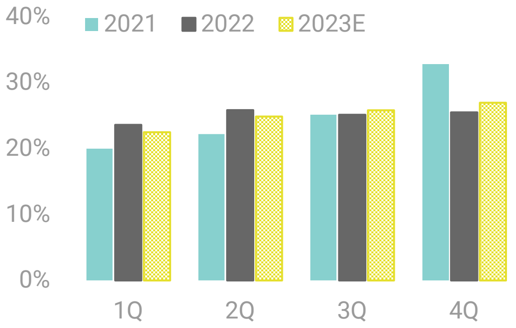
Adjusted EBITDA/YoY Growth



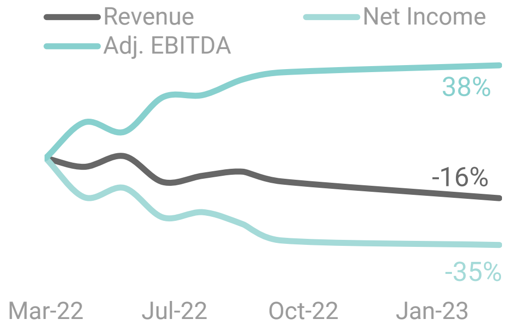
Revenue Consensus vs. Reported



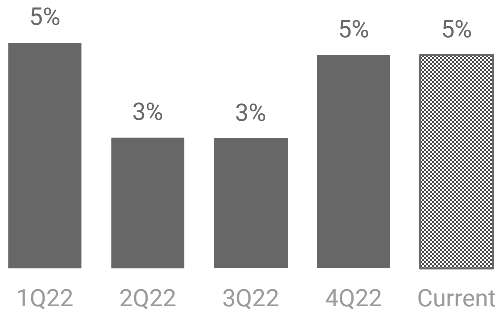
Revenue Seasonality



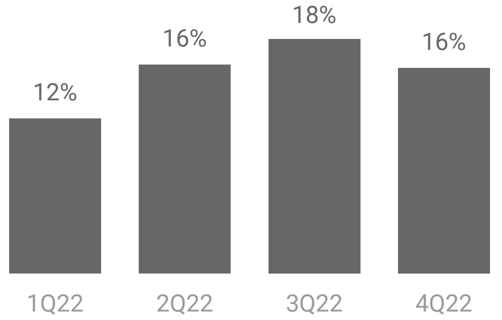
1Q23 Consensus Revisions



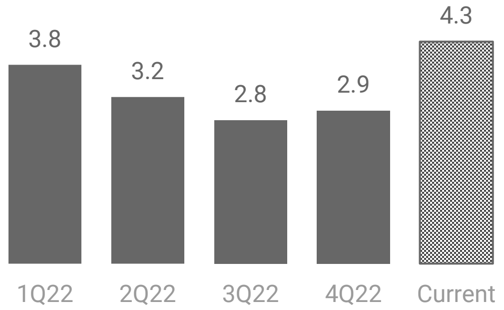
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings ADTV[(1)]



Source: Company filings
1) Measured as ADTV over the prior 7-day period

FT Partners | Equity Research

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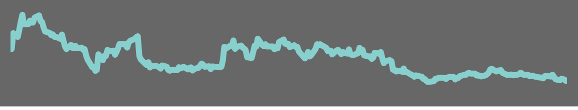
PagSeguro

PAGS TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

General

1) Does management have any updated thoughts on the competitive environment and how that might impact pricing decisions?

2) Relative to ABECS forecasted growth for the Brazilian card industry of 14-18% in 2023, can PagSeguro's move up-market into larger merchants allow TPV to grow faster than the market?

3) Will the new guidelines on interchange rates coming in April 2023 impact PagSeguro's bottom-line or just shift profitability between segments?

4) How has PIX been evolving as a payment method in Brazil? Has PIX adoption impact the business at all?

Strategy

5) How long does management expect to shed nano-merchants? Simply through attrition over time? When should investors expect the merchant count to stabilize and/or resume growth?

6) Is PagSeguro's take rate in a perpetual state of compression as SME volume through the Hubs continues to expand its share of total TPV?

7) What is the target for average number of fee-generating products per PagBank customer at maturity?

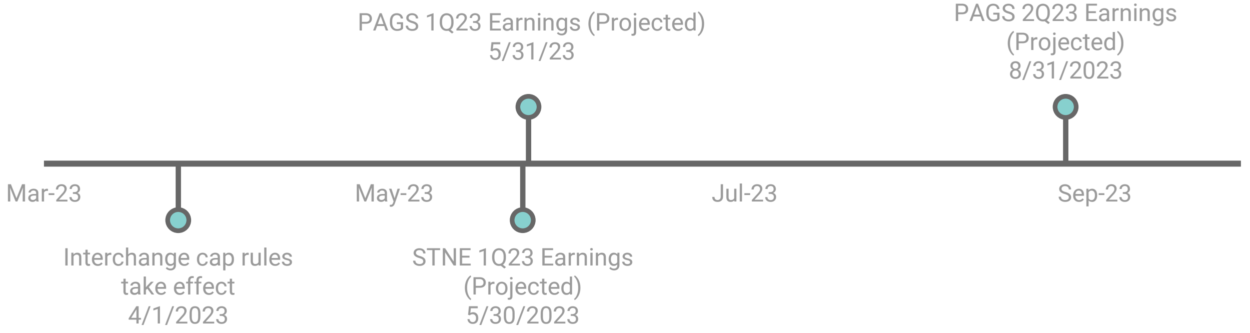
8) With investment in new Hubs coming to a conclusion, to what degree have these Hubs already penetrated their target markets?

9) How does management expect to flex the mix of the credit portfolio with respect to unsecured vs. secured, or by product, in response to changing macro conditions over time?

10) What strategies can be used to accelerate awareness of additional fee-generating PagBank products and drive ARPU?

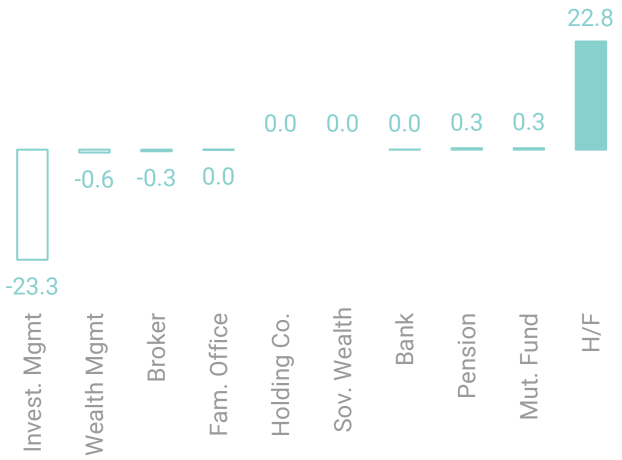
11) Considering both Nu and PagBank pursue the underbanked, how should we define the differences in target demographic?

POTENTIAL CATALYSTS

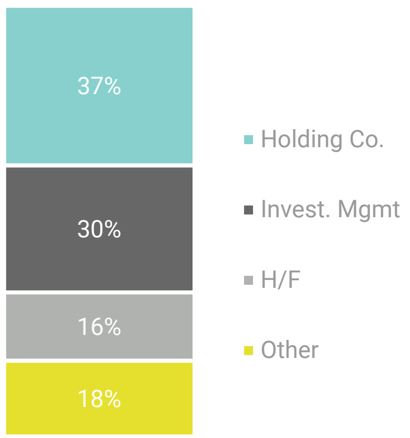


SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)

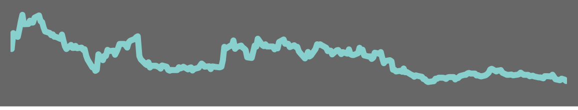


Ownership Summary



Source: Company filings; FactSet

PagSeguro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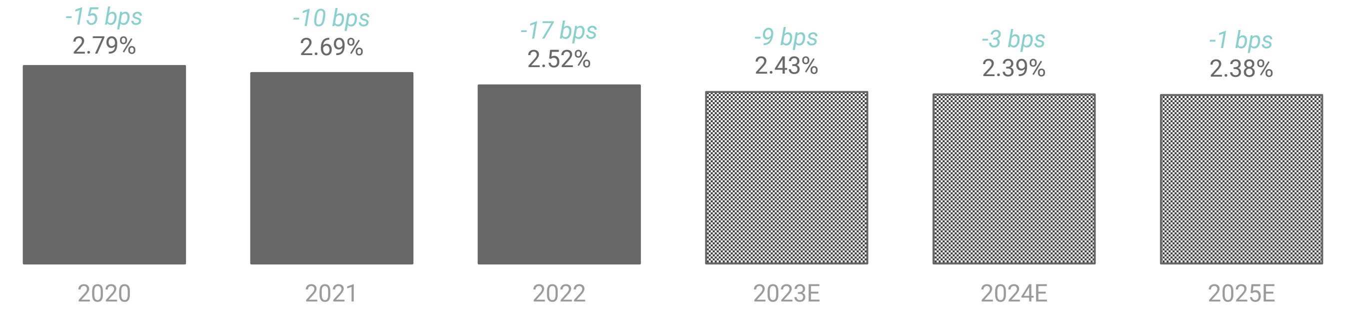
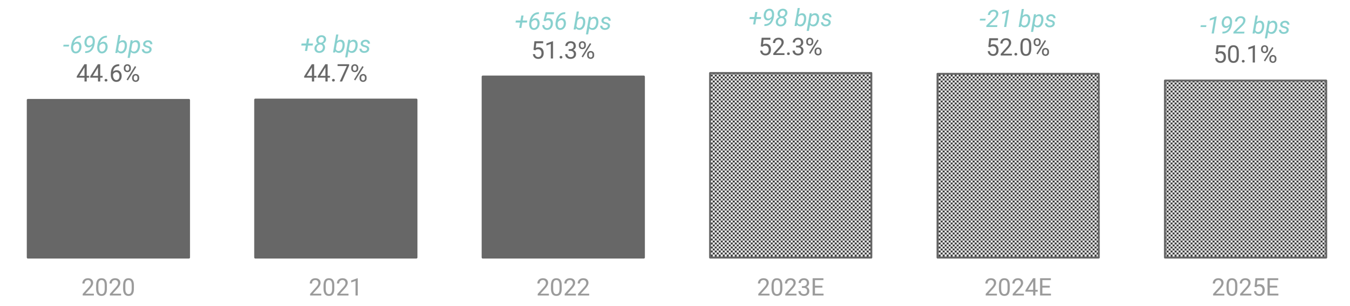
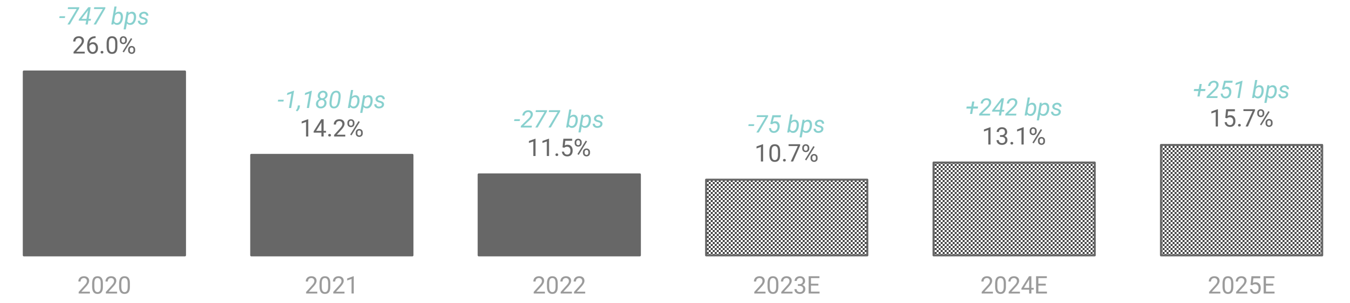
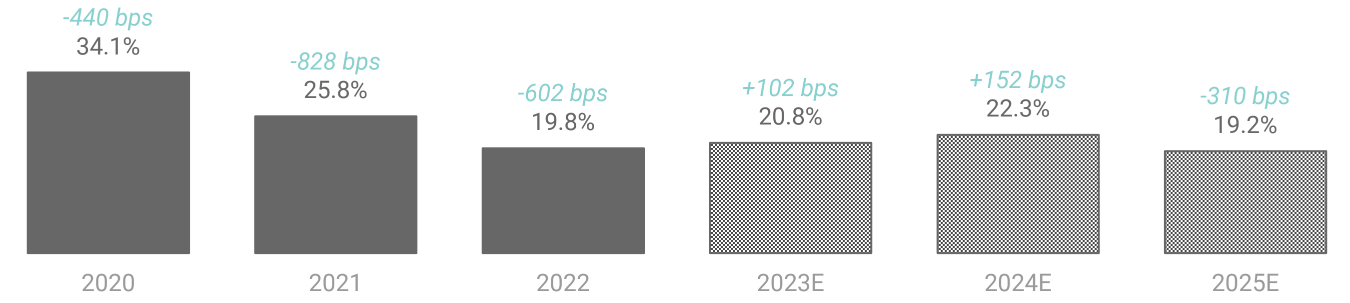
FINANCIAL TECHNOLOGY PARTNERS

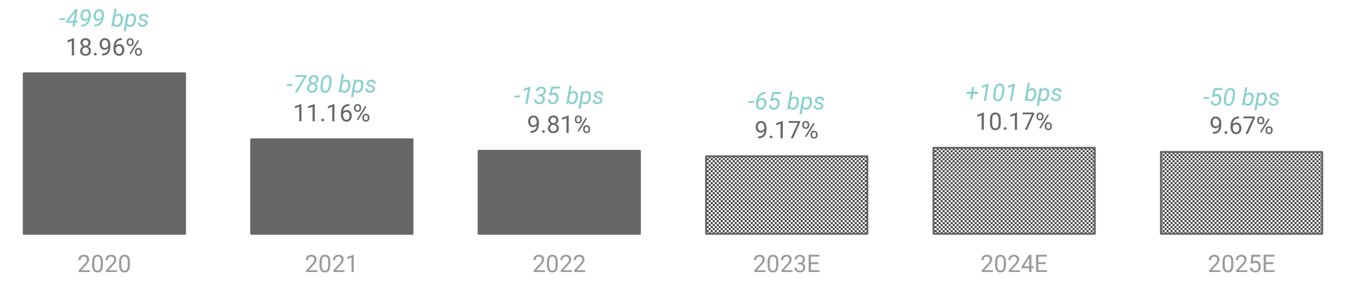
COMPANY RATIOS/MARGIN ANALYSIS

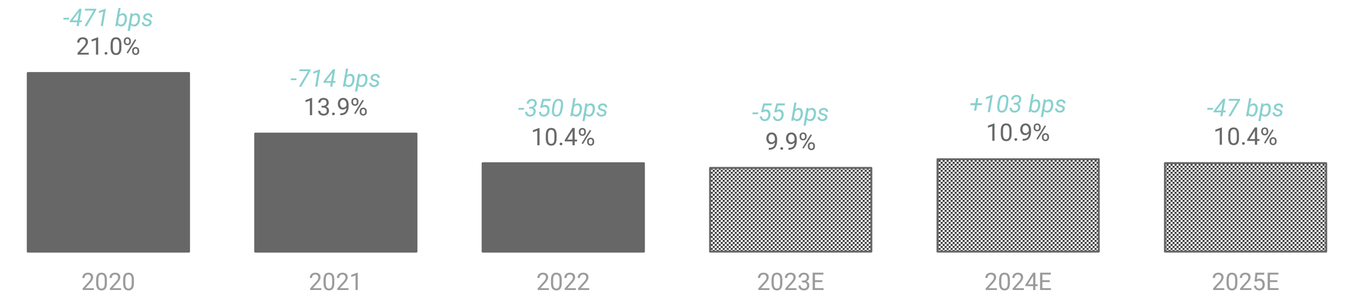

Transaction Take Rate


Gross Profit Margin


Operating Margin


Adjusted EBITDA Margin

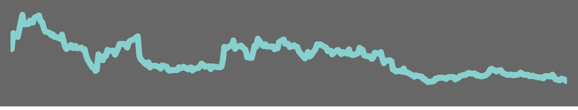

Net Income Margin


Adjusted Net Income Margin

Source: Company filings
FactSet

PagSeguro

PAGS TTM Price Performance



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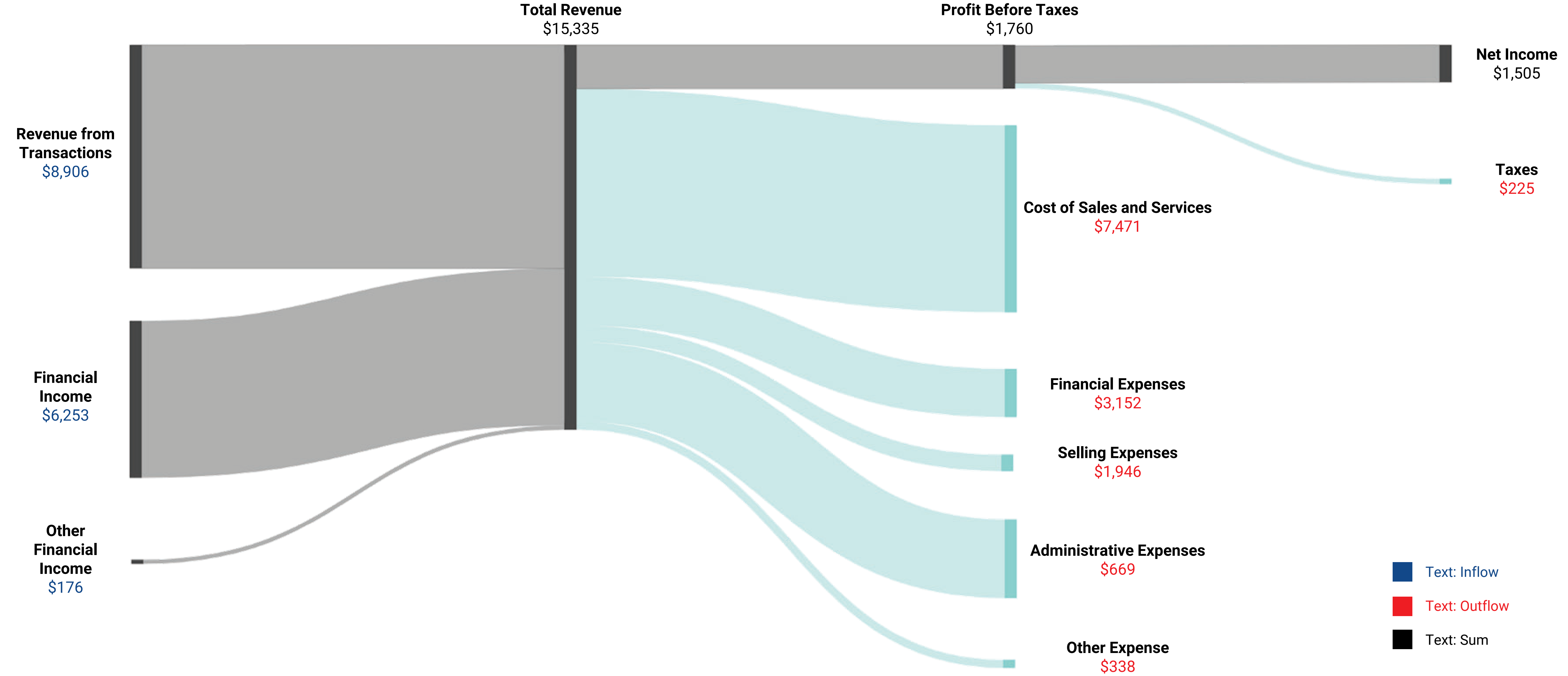
FINANCIAL TECHNOLOGY PARTNERS

(R$ in millions)

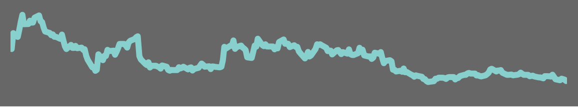
P&L VISUALIZATION – TTM



Source: Company filings; FactSet

PagSeguro

PAGS TTM Price Performance



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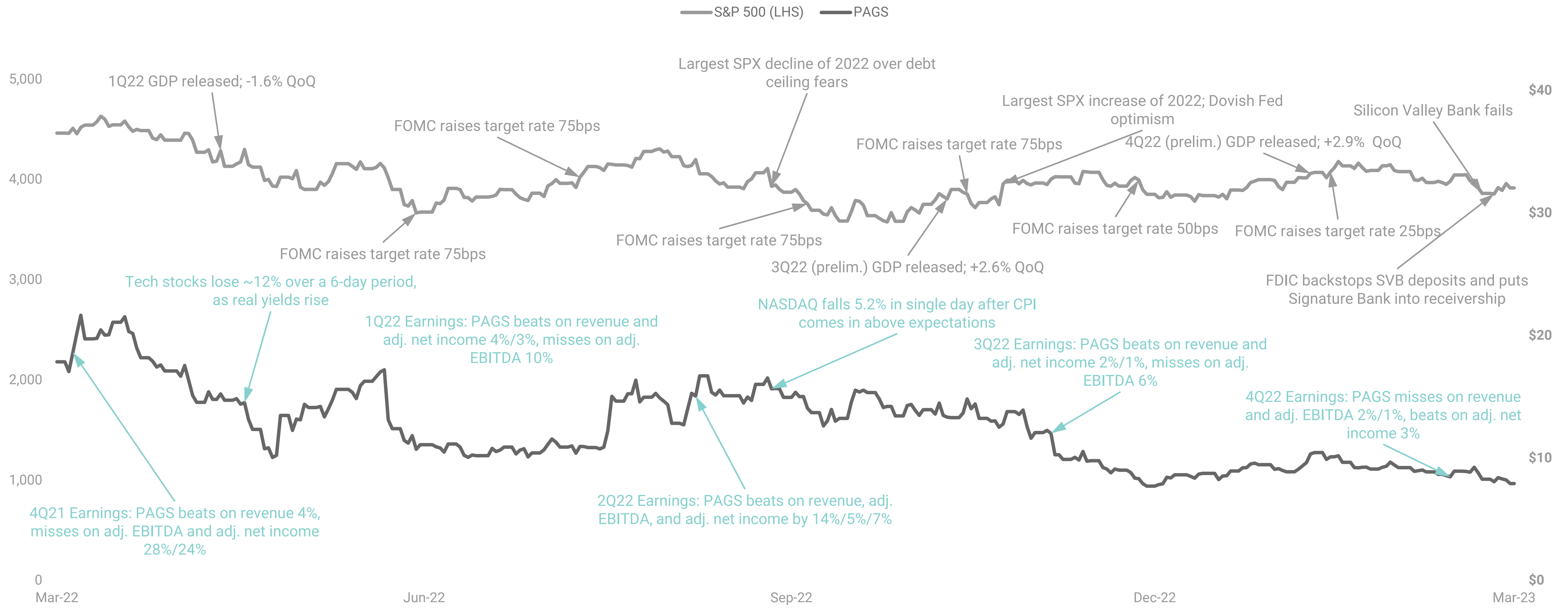
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

Largest SPX increase of 2022; Dovish Fed optimism

Silicon Valley Bank fails

FOMC raises target rate 75bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 50bps

FOMC raises target rate 25bps

3Q22 (prelim.) GDP released; +2.6% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

Tech stocks lose ~12% over a 6-day period, as real yields rise

1Q22 Earnings: PAGS beats on revenue and adj. net income 4%/3%, misses on adj. EBITDA 10%

NASDAQ falls 5.2% in single day after CPI comes in above expectations

3Q22 Earnings: PAGS beats on revenue and adj. net income 2%/1%, misses on adj. EBITDA 6%

4Q22 Earnings: PAGS misses on revenue and adj. EBITDA 2%/1%, beats on adj. net income 3%

4Q21 Earnings: PAGS beats on revenue 4%, misses on adj. EBITDA and adj. net income 28%/24%

2Q22 Earnings: PAGS beats on revenue, adj. EBITDA, and adj. net income by 14%/5%/7%

Source: FactSet

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Paymentus

PAYMENTUS PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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Zachary Gunn | Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

Paymentus

PAY TTM Price Performance

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Market Cap (mm):	$942	Beta (2 Year Avg.):	1.6
52-Wk Range:	$6.75 - $22.45	Avg. Daily Vol (mm):	0.1

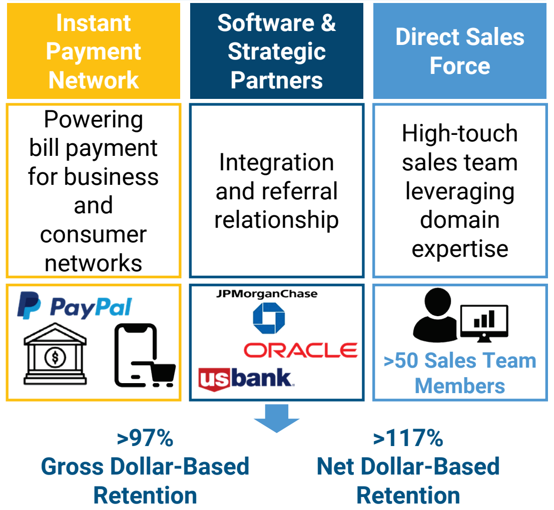
FINANCIAL TECHNOLOGY PARTNERS

COMPANY OVERVIEW

Paymentus provides bill payment technology and solutions to various billers, primarily focusing on payments for utilities, financial services, insurance, government, telecom, and healthcare industries. **Paymentus enables easier bill payment for consumers by providing omnichannel payment infrastructure (mobile, desktop, etc.), while also providing integration with APMs (Alternative Payment Methods) such as Venmo or Cash App.**

Paymentus has also been scaling its Instant Payment Network (IPN), which provides single-vendor bill payment solutions with its platform. Through IPN, a client (bank, FinTech, etc.) can integrate with other billers and enable consumers to make payments through Amazon Pay, PayPal, Walmart, etc.

MARKET STRATEGY



Instant Payment Network	Software & Strategic Partners	Direct Sales Force
Powering bill payment for business and consumer networks	Integration and referral relationship	High-touch sales team leveraging domain expertise
PayPal	JPMorganChase ORACLE usbank	>50 Sales Team Members

>97%
Gross Dollar-Based Retention

>117%
Net Dollar-Based Retention

KEY DEBATES

1. **New Products:** Paymentus has invested heavily in IPN and more recently its Bill Center platform (powered by IPN). Since the IPO, investors have remained somewhat ambivalent towards IPN as there is some skepticism around consumer demand for a centralized bill payment platform. However, as of 4Q22, IPN spanned ~3mm+ payees (including SMBs). Investors have continued to debate how Paymentus will monetize IPN as it scales.

2. **Investment & Margins**: To drive growth in IPN and Bill Center, Paymentus has invested heavily in Research and Development and Sales and Marketing. These investments have weighed on margins, with adjusted EBITDA margin (calculated against Contribution Profit) declining from 19% in FY21 to 14% in FY22, with FY23 guidance implying adjusted EBITDA margins of 14% - 16%. As a potential area of upside, management has started to outline the potential to monetize interchange in the SMB offering, which tends to be highly margin accretive.

3. **Profitability:** Current market conditions have pulled investor focus away from growth and towards profitability. Interestingly, at the time of Paymentus's IPO it was profitable and now with management prioritizing investments, consensus expects FY23 net income to be $5.5mm compared to FY22 net income of negative $0.5mm. As a result, investors are focused on the path to returning to meaningful probability.

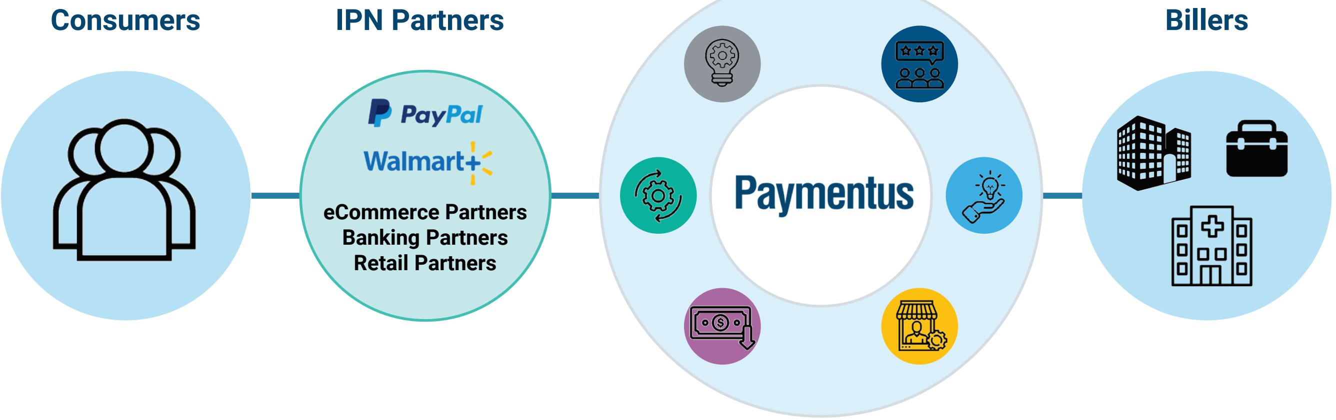
REVENUE MODEL

Paymentus reports revenue in two segments:

- **Payment Transaction Processing Revenue (99% of TTM Revenue):** Paymentus primarily receives a fixed fee based on the number of payments made through the company's platform. These fees can be paid by the biller, consumer (in the form of a convenience fee), or through some combination of both. Additionally, Paymentus shares a portion of the fees derived from customers that are referred to their platform by strategic partners. Paymentus has a high-level of visibility into its future payment transaction processing revenue as a large portion of the payments are highly recurring in nature (energy, gas, internet, etc.). However, due to the typically fixed pricing of transactions, Paymentus does not see the same benefits from inflation that other payment facilitators do.

- **Other Revenue (1% of TTM Revenue):** Maintenance and subscription revenues comprise a relatively small portion of the company's top line.

IPN INTEGRATION



Source: Company filings

Paymentus

PAY TTM Price Performance

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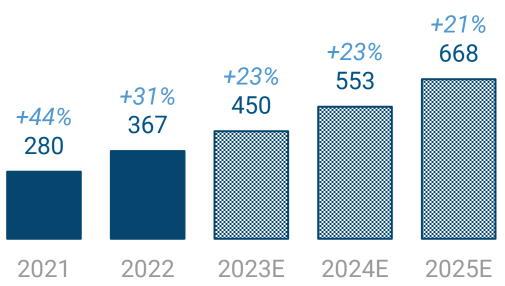
52-Wk Range:	$6.75 - $22.45	Avg. Daily Vol (mm):	0.1

FINANCIAL TECHNOLOGY PARTNERS

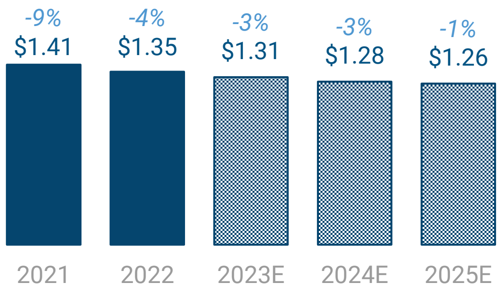
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS(1)

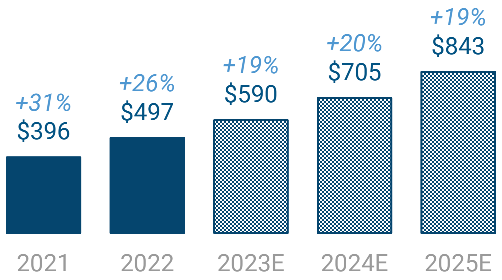
Number of Transactions (mm)



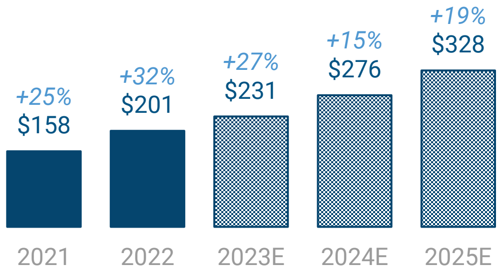
Revenue per Transaction ($)



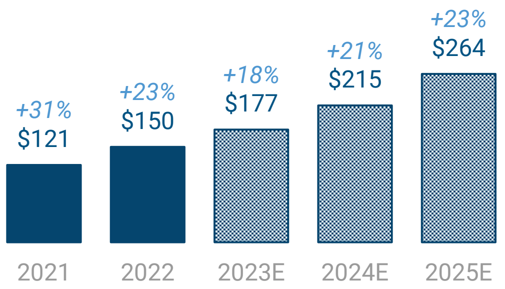
Total Revenue



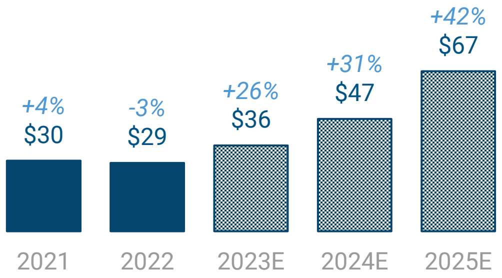
Contribution Profit(5)



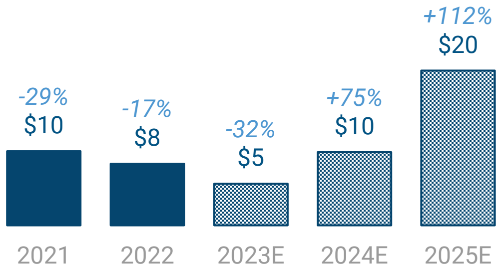
Gross Profit



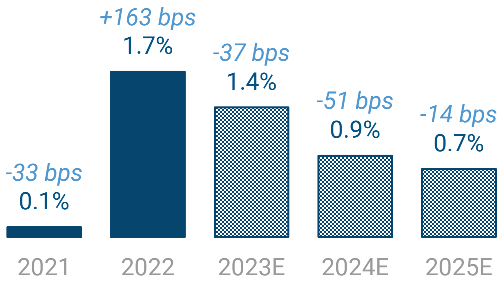
Adjusted EBITDA



Adjusted Net Income

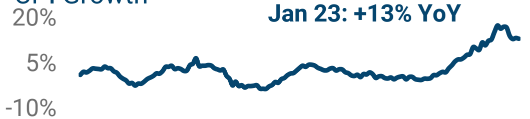


SBC as % of Revenue

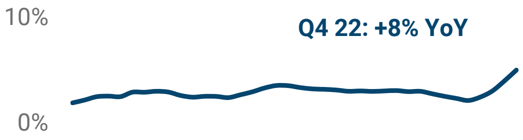


INDUSTRY KPIs

Monthly Utilities CPI Growth(2) *(Jan 11-Jan 23)*



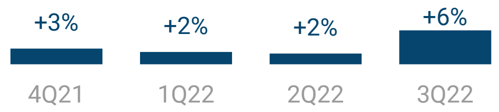
Monthly PCE Growth(2) *(1Q13-4Q22)*



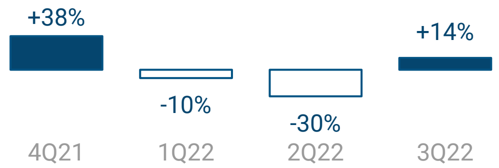
Number of U.S. Households (mm)(2) *(Jan 11-Dec 22)*

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES(3)

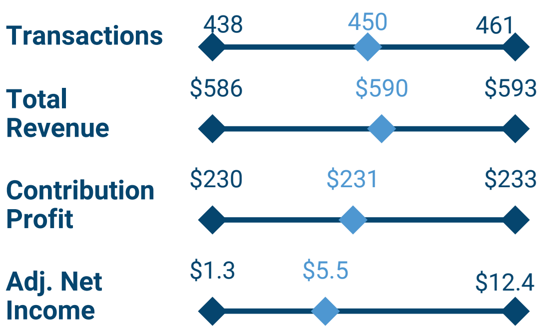
Total Revenue



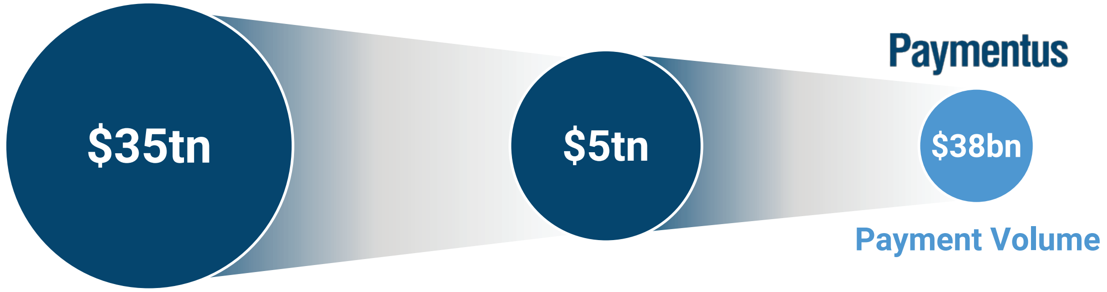
Adjusted Net Income



FY23



TOTAL ADDRESSABLE MARKET(4)



$35tn

Global Electronic Payments TAM

$5tn

U.S. Bill Payments TAM

Paymentus

$38bn

Payment Volume

(<1% of U.S. Bill Payment Market)

58%

of U.S. adult consumers' monthly expenditures is on bill payments.

10

Average number of bills paid per month per U.S. household.

FT Partners | Equity Research

Source: Company filings
1) FactSet, Visible Alpha
2) FRED CPI, FRED PCE, FRED Total Households
3) FactSet Consensus Low/Average/High Range
4) Paymentus: Powering the Next Generation of Bill Payments
5) Contribution profit is equivalent to gross profit plus other cost of revenue such as interchange

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Paymentus

PAY TTM Price Performance

Price as of 03/17/23:	$7.66	Shares Out (mm):	20
Market Cap (mm):	$942	Beta (2 Year Avg.):	1.6
52-Wk Range:	$6.75 - $22.45	Avg. Daily Vol (mm):	0.1

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VALUATION CONSIDERATIONS

While Paymentus is profitable on an adjusted EBITDA basis, EV/GP is utilized for relative valuation to account for costs associated with the core operations of the business while also providing a relatively standardized approach across peers. **If Paymentus were to trade in-line with its peer average, it would imply a 12-month price of $19.21 ($151% upside).** However, this is typically attributed to there being a lack of solid business model comps for Paymentus rather than significant mispricing by the market. Paymentus has seen significant valuation compression as a result of the broader macro backdrop and the optics of investments weighing on margins, with the adjusted EBITDA margin (calculated against Contribution Profit) declining from 24% in FY20 to 19% in FY21, and with FY22 guidance implying adjusted EBITDA margins of 14% - 16%. As of 4Q22, Paymentus has not monetized or earned interchange revenue from IPN. If Paymentus can drive incremental revenue growth from IPN, it would support positive multiple rerating over time.

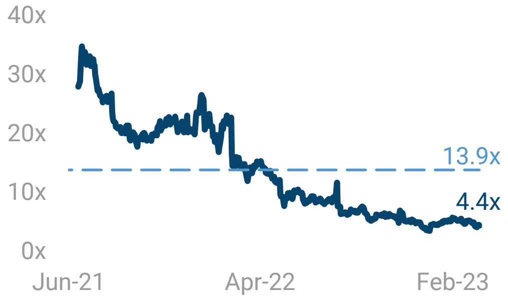
Scenario 1 – Current Price ($7.66, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires a combination of high-teens growth in FY23/24 followed by a sharp deceleration towards the terminal growth rate. Operating margins in this scenario gradually improve reaching a terminal rate of 20%. On an EBITDA basis, this would be modestly below management's long-term guidance of "Mid-20s". This represents just one combination of factors that would lead to the current share price in 12-months, and a similar result could be achieved through various revenue growth and margin expansion scenarios.

Scenario 2 – Higher IPN Monetization ($10.39, 36% Upside): This scenario assumes a higher rate of sustained revenue growth to account for IPN monetization while also expanding operating margins to 25%+ over the long-term. The model does not account for any incremental revenue from IPN until 2024 due to the lack of a clear timeline surrounding monetization. Based on current STM consensus gross profit, this implies that shares of Paymentus would be trading at 5x NTM EV/GP multiple in 12-months

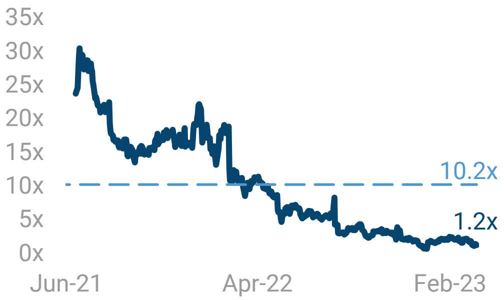
Scenario 3 – Slower IPN Monetization ($6.21, 19% Downside): The third DCF sees lower monetization of IPN (again with minimal impact until 2024). In this scenario, revenue growth remains in-line with the base case, but margins are decreased by ~3% through 2026 to account for IPN investment. Based on current STM consensus gross profit, this implies that shares of Paymentus would be trading at a 3x NTM EV/GP multiple in 12-months.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

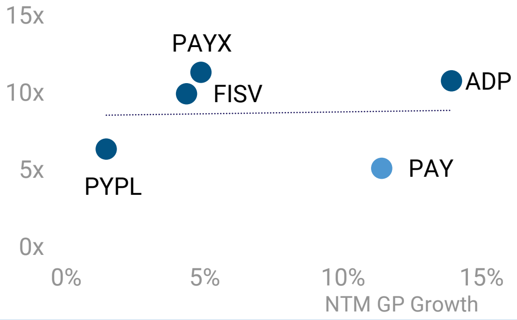
PAY NTM EV/GP & Average Since IPO



PAY EV/GP Premium vs. NASDAQ



Peer Avg. NTM EV/GP

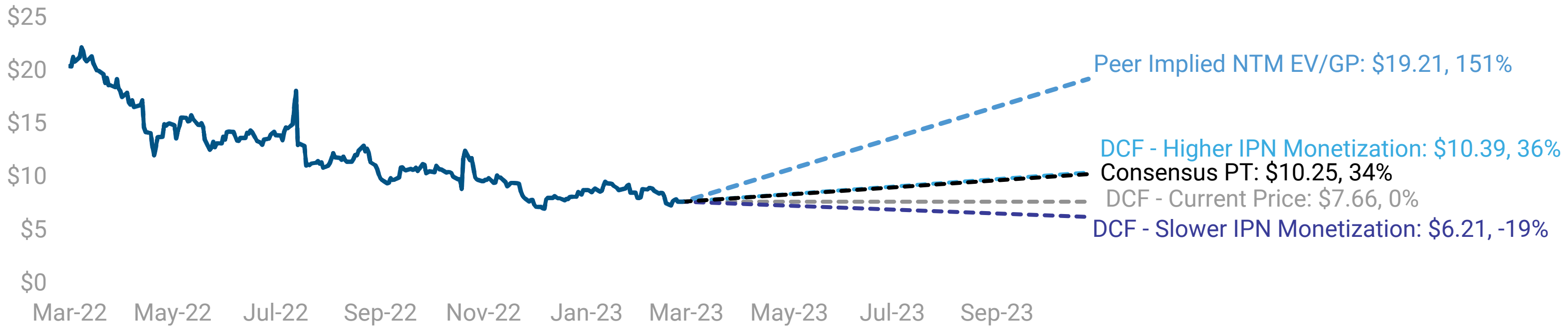


DCF Key Assumptions(2)

10-Yr RFR	4.0%
Cost of Equity	12.0%
Cost of Debt	4.5%
WACC	11.4%
Beta	1.2
FCF Terminal Growth Rate	3.0%
Terminal Growth Rate of SBC (All DCF's)	1.0%
Equity Value Reduction from Present + Future SBC	$167

Select Peer TTM Price Performance

Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings
1) Paymentus Contribution Profit vs. Competitor Gross Profit
2) SBC in millions

Paymentus

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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) inflation outcomes and 2) adjusted EBITDA margin expansion/contraction. While there are other drivers of Paymentus's valuation these represent the most likely area(s) of upside/downside relative to consensus expectations. Given Paymentus's fixed (per-transaction) pricing structure higher inflation could squeeze gross profit margins as the costs of facilitating transactions increase.

Consensus Case:

The average consensus price target for Paymentus is $10.25, with STM gross profit estimates of $224mm implying a 5.0x EV/GP multiple, if shares of PAY trade at this price in 12-months. The consensus price target implies 34% upside to the current share price.

Upside Case(s):

(+) $9.40, 23% Upside: This scenario assumes that inflation returns to the Fed target of 2% YoY CPI at the end of FY23, driving a 1% increase in gross profit growth as a result of lower inflation (which is unbalanced compared to the downside case) as Paymentus's RPT model does not experience economic benefits from lower inflation, just less pressure on its existing margins. This implies 23% upside to the current share price with a 4.5x multiple.

(+-) $8.48, 11% Upside: This scenario assumes the same lower inflation rate but has EBITDA margins contracting below FY22's 14% EBITDA margin as a result of continued investments in IPN. This would also be worse than management's FY23 guidance for EBITDA margins of 14% - 16% in 2023. This implies 11% upside to the current share price at a 4.0x EV/GP multiple

(-+) $8.26, 8% Upside: This scenario assumes the higher rate of inflation, but models Paymentus being successful in scaling and monetizing IPN, driving higher than expected EBITDA margins. This implies 8% upside to the current price at a 4.5x EV/GP multiple.

(++): $11.23, 47% Upside: The best-case scenario assumes lower levels of inflation and EBITDA margin expansion at the high-end of management's FY23 guidance. This implies 47% upside to the current share price at a 5.5x EV/GP multiple

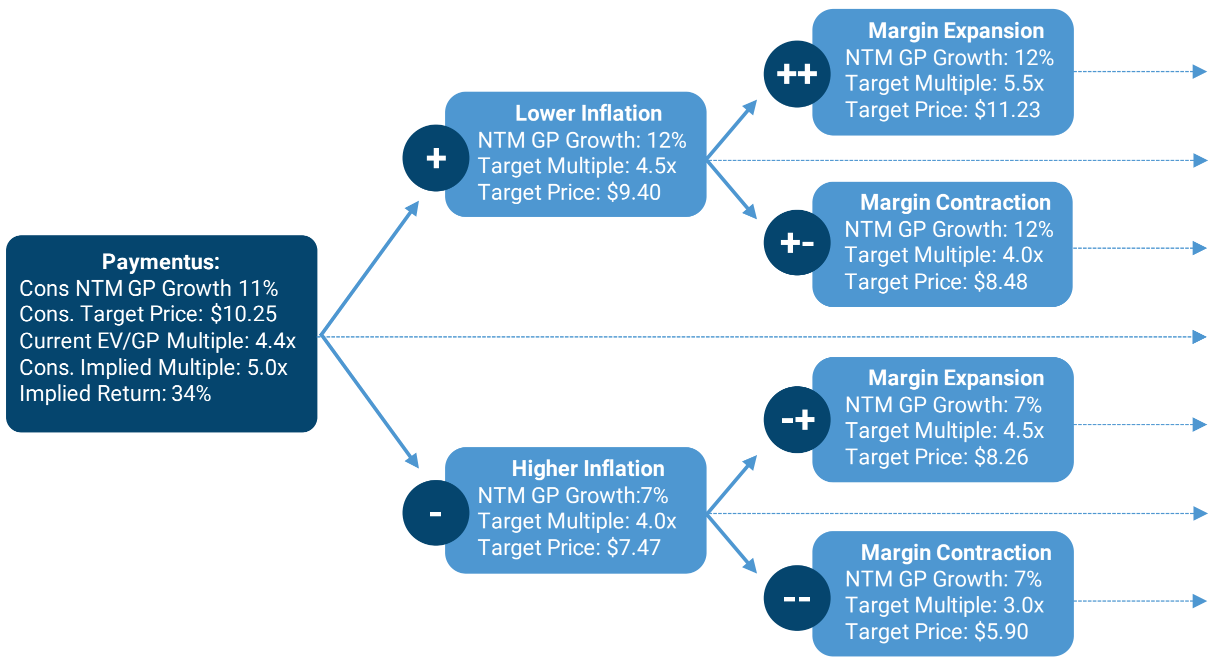
Downside Case(s):

(-) $7.47, 2% Downside: This scenario assumes that inflation comes in above current economic forecasts of 4% and Paymentus does not take additional pricing actions. This implies 2% downside to the current price at a 4.0x EV/GP multiple.

(--) $5.90, 23% Downside: The worst-case scenario assumes inflation comes in higher than expectations and has lower margins than managements expectations for 14% - 16% in 2023. This implies 23% downside to the current share price at a 3.0x EV/GP multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Paymentus:
Cons NTM GP Growth 11%
Cons. Target Price: $10.25
Current EV/GP Multiple: 4.4x
Cons. Implied Multiple: 5.0x
Implied Return: 34%

\+ **Lower Inflation**
NTM GP Growth: 12%
Target Multiple: 4.5x
Target Price: $9.40

\- **Higher Inflation**
NTM GP Growth:7%
Target Multiple: 4.0x
Target Price: $7.47

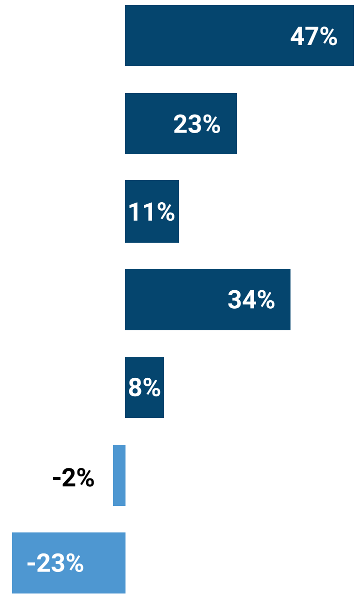
++ **Margin Expansion**
NTM GP Growth: 12%
Target Multiple: 5.5x
Target Price: $11.23

+- **Margin Contraction**
NTM GP Growth: 12%
Target Multiple: 4.0x
Target Price: $8.48

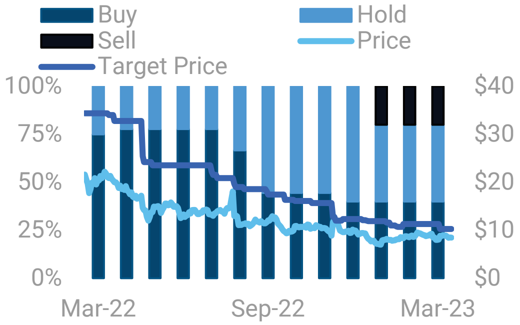
-+ **Margin Expansion**
NTM GP Growth: 7%
Target Multiple: 4.5x
Target Price: $8.26

-- **Margin Contraction**
NTM GP Growth: 7%
Target Multiple: 3.0x
Target Price: $5.90

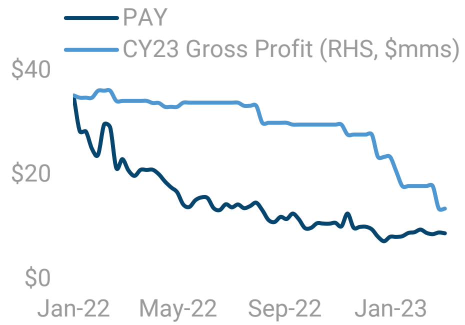
12-Month Price Return



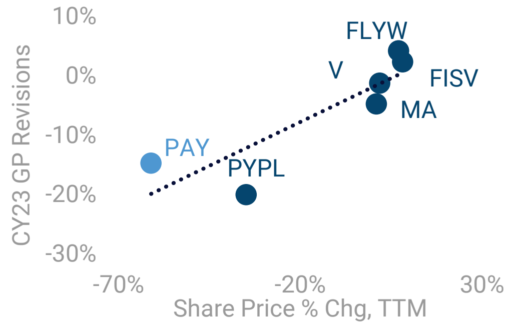
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

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($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: Management tone on the 4Q22 call with relatively positive tone following a beat on top and bottom-lines. Despite these beats, shares traded off slightly after hours (-0.5%). The lack of share price appreciate following results was likely the result of weaker than expected guidance across the board. Revenue, Adj EBITDA, and contribution profit guidance came in 2%, 9%, and 7% below consensus versus each respective midpoint. Guidance for adjusted EBITDA margins was 51bps below consensus, and guidance for contribution profit growth was 950bps below consensus at the midpoints.

Results Recap: Paymentus reported 4Q22 earnings after the market close on February 23rd. The company reported 97.2mm transactions during the quarter, coming in 2% below consensus of 98.8mm. Despite missing on number of transactions, Paymentus beat on revenue per transaction by 7%, reporting $1.37 compared to consensus of $1.28. Contribution margin contracted during the quarter to 40.9%, 203bps worse than consensus of 42.9%, while also contracting 97bps YoY. The company beat on gross margins, coming in 31.1%, 241bps better than consensus of 28.7%. Paymentus beat on total revenue coming in at $132mm, 5% above consensus of $126mm representing a 22%YoY growth.

FY Guidance Recap: Management issued guidance for revenue with a range of $575mm - $600mm (representing growth of 16% - 21% YoY), 2% less than consensus of $600mm at the midpoint. Contribution profit is expected to be in the range of $224mm - $237mm (representing growth of 11% - 18%), 7% below consensus of $249mm at the midpoint. Adjusted EBITDA is expected to be in the range of $32mm - $38mm representing an adjusted EBITDA margin of 14% - 16%, which was 857bps above pre-print consensus.

1Q23 Guidance Recap: The company issued guidance for revenue of $136mm - $140mm representing growth of 17% - 20% YoY, but below consensus of $141mm by 2% at the midpoint. Contribution profit for the quarter is expected to grow 8% - 12% YoY and expected to be in the range of $51mm - $53mm, which was 10% below consensus expectations of $57.6mm, while adjusted EBITDA is expected to be between $7mm - $8mm and represent a margin of 13% - 15% and ~$1.5mm below consensus.

Incremental From the Call:

- **Guidance/Outlook:** Management stated that the guidance range for adjusted EBITDA is relatively large ($32mm - $38mm), however, given the inflationary macro environment guidance is harder to pinpoint. It was also noted that management feels the company can hit the high-end of the guidance ranges without adding a single new client in 2023, and that focus needs to be on implementing the existing backlog of clients.
- **Pricing Actions:** Paymentus has been having discussions with clients about raising prices because of the inflationary environment. These conversations were said to be going well and some of those higher prices have been implemented and are reflected in current guidance, while some will take longer to be implemented. The company has focused on where inflationary pressures have been the worst and prioritizing renegotiations with those clients.
- **Inflation:** Inflation has had a material impact on the business's margins. Management stated that if inflation were not a factor, adjusted EBITDA margins would be several points higher. Overall management believes that inflation is having a roughly 5% impact to both contribution profit and EBITDA. As inflation eases management feels its ability to expand margins will ease significantly. The company noted that utilities specifically experienced particularly higher inflation on average versus overall inflation, which is impacting margins in particular.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Cons.	Abs.▲	%▲
Number of Transactions	**97.2**	**98.8**	**-$1.61**	**-2%**
growth (%, yoy)	*17%*	*19%*		
Revenue Per Transaction	**$1.37**	**$1.28**	**$0.09**	**7%**
growth (%, yoy)	*6%*	*-1%*		
Contribution Margin	**40.9%**	**42.9%**	**-203bps**	
growth (bps, yoy)	*-97bps*	*105bps*		
Gross Margin	**31.1%**	**28.7%**	**241bps**	
growth (bps, yoy)	*-8bps*	*-249bps*		
Total Revenue	**$132**	**$126**	**$6.06**	**5%**
growth (%, yoy)	*22%*	*17%*		
Cost of Revenue	**$91.0**	**$89.9**	**$1.14**	**-1%**
growth (%, yoy)	*22%*	*21%*		
Gross Profit	**$41.1**	**$36.2**	**$4.92**	**14%**
growth (%, yoy)	*22%*	*7%*		
Contribution Profit	**$54.1**	**$54.1**	**-$0.08**	**0%**
growth (%, yoy)	*19%*	*20%*		
Operating Expenses	**$39.6**	**$38.2**	**$1.38**	**-3%**
growth (%, yoy)	*18%*	*14%*		
Operating Income	**$1.54**	**-$2.00**	**$3.54**	**177%**
Operating Margin (%)	*1%*	*-2%*	275bps	
Adjusted EBITDA	**$10.2**	**$8.30**	**$1.89**	**23%**
Adj. EBITDA Margin(%)	*19%*	*15%*	352bps	
Net Income	**$0.96**	**-$1.58**	**$2.54**	**161%**
Net Income Margin (%)	*1%*	*-1%*	198bps	
Adjusted Net Income	**$2.96**	**-$0.83**	**$3.79**	**458%**
Adj. Net Income Margin (%)	*2%*	*-1%*	290bps	

FY23 Guidance	New	Cons.	%▲
Revenue	**$575mm-$600mm**	**$600mm**	*-2%*
Contribution Profit	**$224mm-$237mm**	**$249mm**	*-7%*
Adjusted EBITDA	**$32mm-$38mm**	**$39mm**	*-10%*

Source: Company filings; FactSet; Visible Alpha

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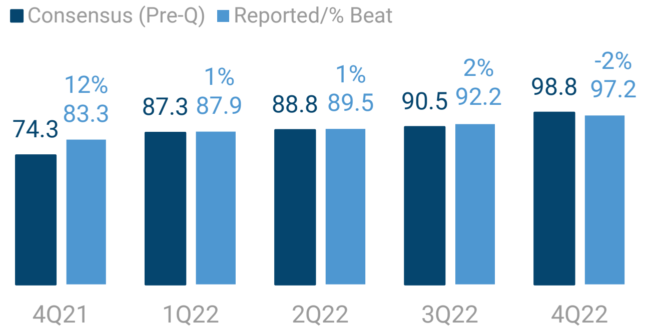
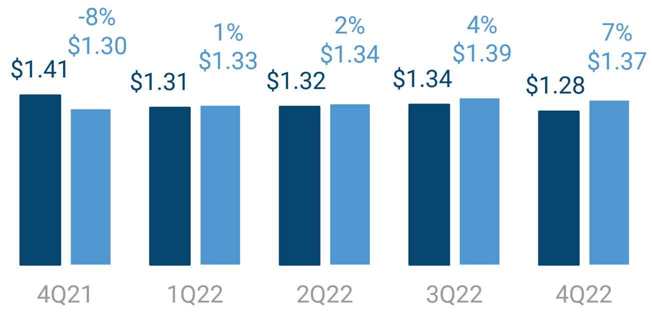
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS[1]

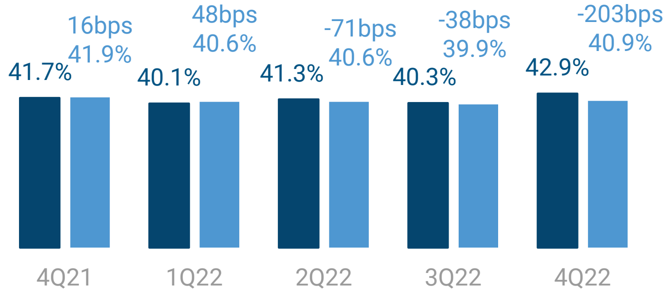
Number of Transactions (mm)



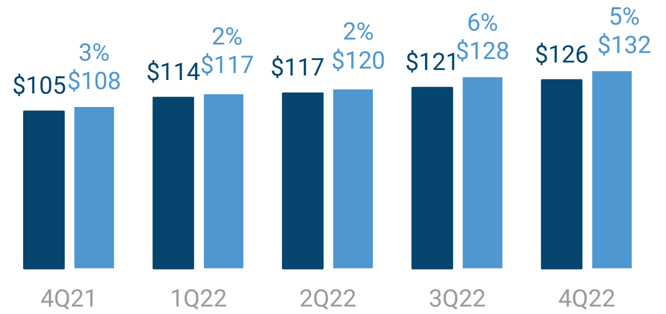
Revenue Per Transaction ($)



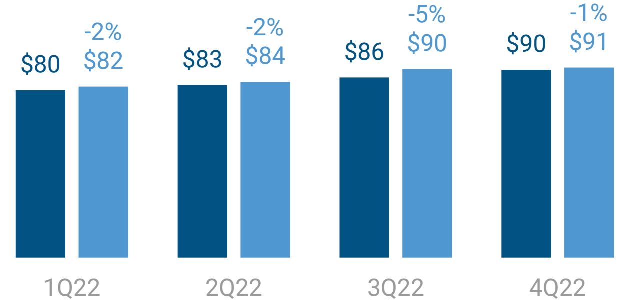
Contribution Margin



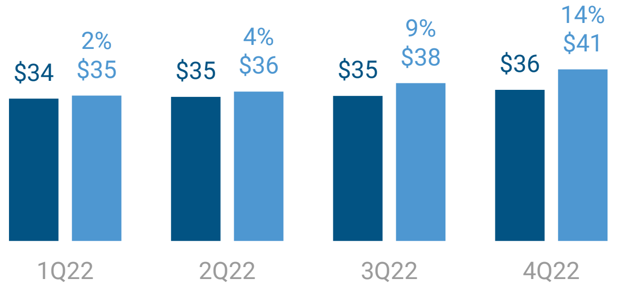
Total Revenue



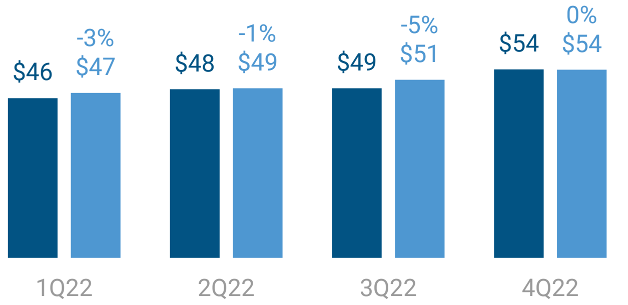
Cost of Revenue



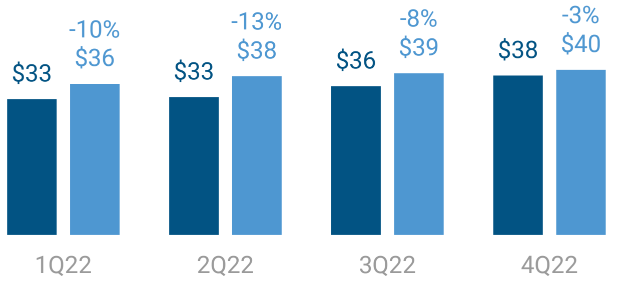
Gross Profit



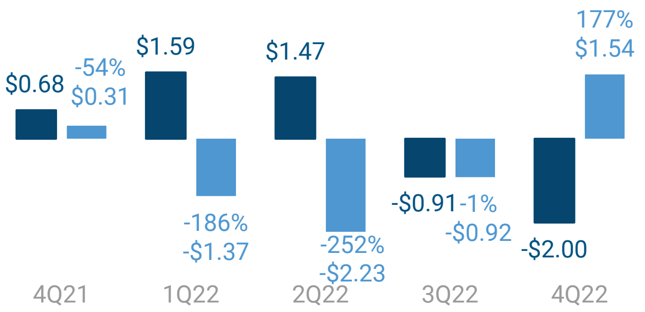
Contribution Profit[2]



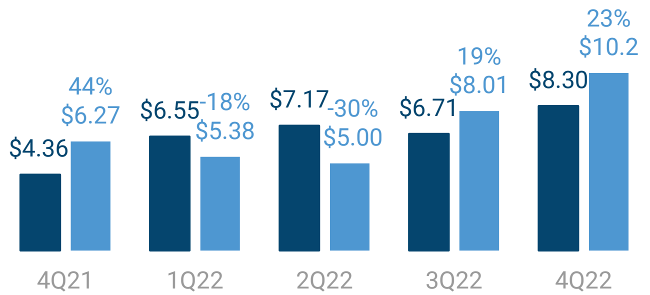
Operating Expenses



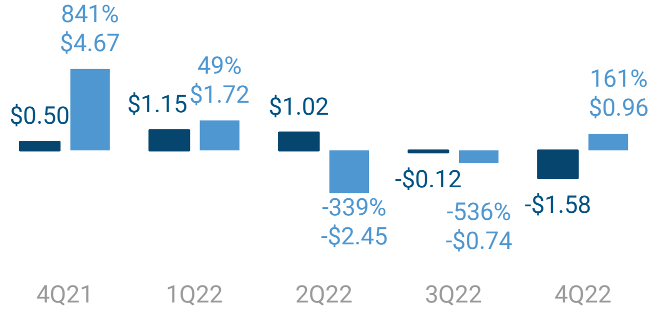
Operating Income



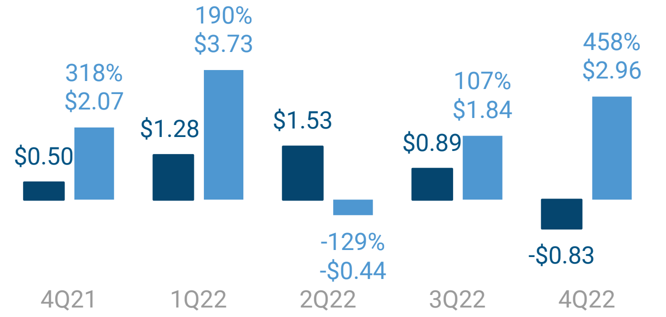
Adjusted EBITDA



Net Income



Adjusted Net Income



Source: Company filings

1) FactSet, Visible Alpha

2) Contribution profit is equivalent to gross profit plus other cost of revenue such as interchange

Paymentus

PAY TTM Price Performance

Price as of 03/17/23:	$7.66	**Shares Out (mm):**	20
Market Cap (mm):	$942	**Beta (2 Year Avg.):**	1.6
52-Wk Range:	$6.75 - $22.45	**Avg. Daily Vol (mm):**	0.1

FINANCIAL TECHNOLOGY PARTNERS

($ in millions, except where otherwise noted)

1Q23 EARNINGS OUTLOOK

Paymentus is projected to report 1Q23 earnings on May 3rd after the market close.

What's in Focus:

Inflation has had a material impact on Paymentus, as utility inflation has hit multi-year highs. Inflation has negatively impacted take rates because transactions are monetized on an RPT basis, with prices rising this means less revenue per dollar transacted. There will be two separate releases of the U.S. CPI on March 14th and April 12th, each reporting the prior months data. These CPI reports will provide key insight into how take rates will trend going forward, a significant cooling of utility inflation could prove a strong catalyst for the stock, whereas stickier inflation, which there have been more and more signs of lately, is likely to continue the drag on margins.

Guidance:

The company issued weaker than consensus guidance across the board for FY23 during their 4Q22 earnings call. Guidance for revenue was ~2% below consensus at the midpoint, with contribution profit and Adj. EBITDA margins down more significantly ~7%/9% at their respective midpoints.

Pricing Increases:

With utility prices increasing significantly on a YoY basis, Paymentus has begun going to its clients and asking for price increases. Management has stated that some of these price increases have already taken place and to expect more on the way, however some clients will take a longer period to convert to the higher prices.

Estimates:

After reporting earnings estimates for number of transactions have decreased ~4%. Estimates for total revenue are down ~2%, with contribution profit estimates down ~9% and Adj gross profit estimates down ~5%. The company is expecting positive operating cash flow during the quarter, although estimates have been revised down ~31% from $18.4mm to $12.6mm. Net income is expected to be positive again for the third quarter in a row, but estimates have been revised downward from ~$1.5mm to $0.6mm.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

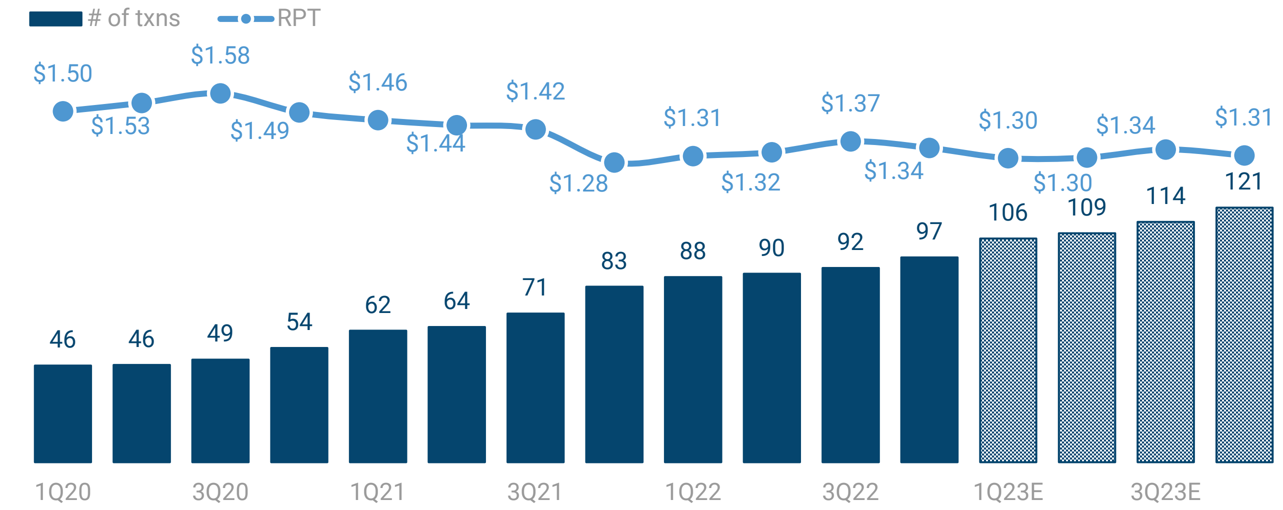
- ~2% beat on revenue with ~13% miss on adj. EBITDA
- Raised FY revenue and adj. EBITDA guidance by 0.4%/3.3%, respectively

- ~30% miss on adj. EBITDA despite revenue slightly ahead of consensus; Margin headwinds from inflation and implementation delays

- ~6%/9% beat on revenue/adj. EBITDA
- Adj. EBITDA margin of ~16% is the highest level since the IPO
- Reaffirmed FY guidance

- 5%/16% beat on revenue/gross profit, net income beat of $2.5mm
- Revenue and contribution margin guidance issued for FY23 2% and 7% below consensus

TRANSACTION COUNT (mm) & REVENUE PER TRANSACTION ($)



Source: Company filings; FactSet, Visible Alpha

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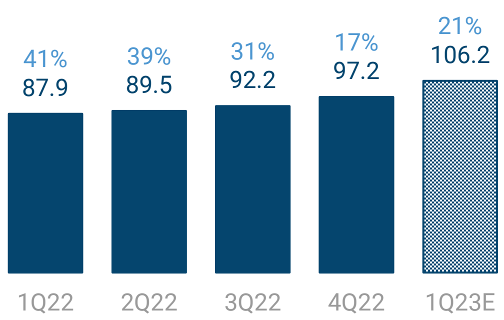
($ in millions) 1Q23 CONSENSUS ESTIMATE RANGES[(1)]

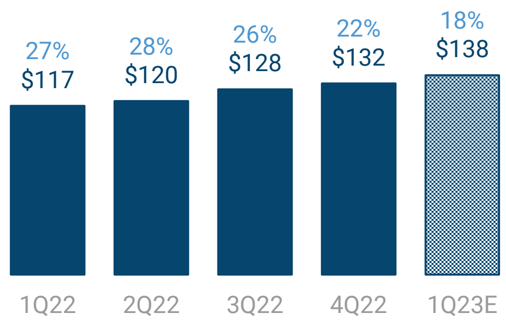
	Low	Average	High
Transactions (mm)	**103**	**106**	**109**
growth (%, yoy)	17%	21%	25%
Revenue Per Transaction ($)	**$1.26**	**$1.30**	**$1.33**
growth (%, yoy)	-5%	-2%	0%
Total Revenue	**$137**	**$138**	**$139**
growth (%, yoy)	17%	18%	19%
Total Cost of Revenue	**$92**	**$98**	**$100**
growth (%, yoy)	13%	20%	23%
Gross Profit	**$38**	**$40**	**$44**
growth (%, yoy)	8%	15%	28%
Contribution Profit	**$52**	**$52**	**$53**
growth (%, yoy)	9%	10%	11%
Total Operating Expenses	**$39**	**$40**	**$42**
growth (%, yoy)	6%	11%	16%
Operating Income	**-$1.4**	**-$0.2**	**$2.3**
growth (%, yoy)	-5%	85%	269%
EBITDA	**$3.9**	**$5.1**	**$6.1**
EBITDA Margin (%)	3%	4%	4%
Net Income	**-$0.9**	**$0.2**	**$1.7**
Net Income Margin (%)	-1%	0%	1%
Adjusted Net Income	**-$0.2**	**$0.7**	**$1.7**
Adj. Net Income Margin (%)	-1%	2%	4%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

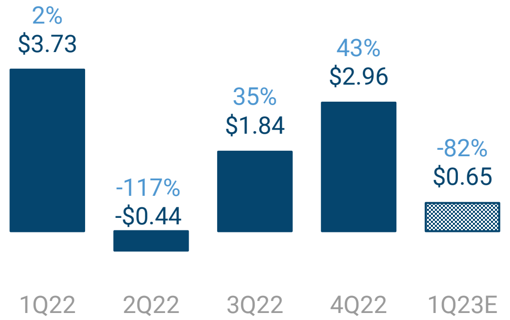
Transactions (mm)



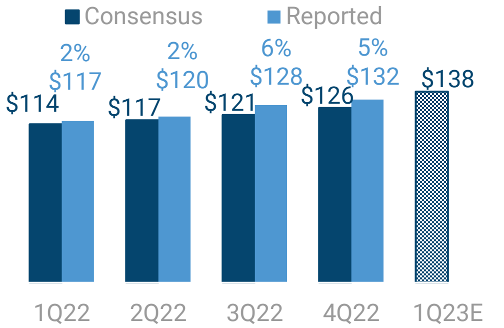
Revenue



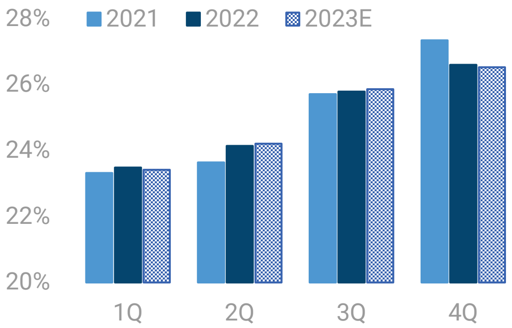
Adjusted Net Income



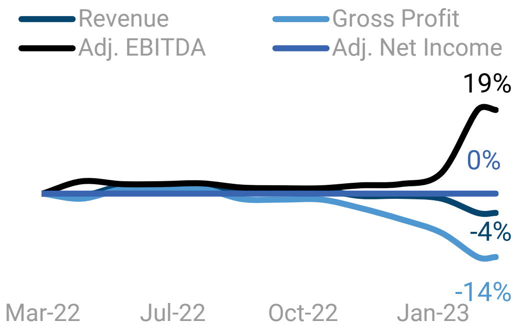
Revenue Cons. vs. Reported



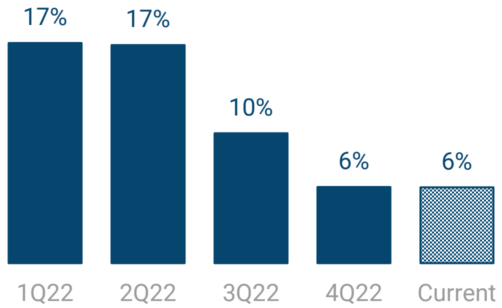
Revenue Seasonality



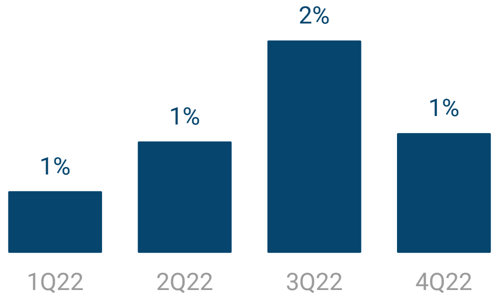
1Q23 Cons. Revisions



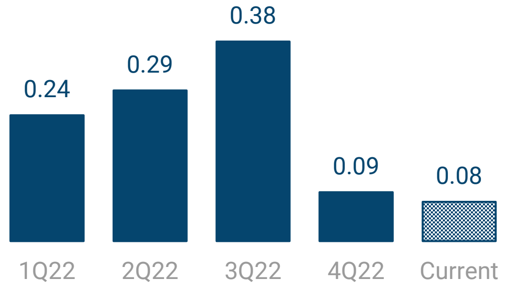
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings ADTV[(2)]



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Source: Company filings
1) FactSet, Visible Alpha
2) Measured as ADTV over the prior 7-day period

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PAY TTM Price Performance

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QUESTIONS FOR MANAGEMENT

General:

1) What is management seeing in terms of customer appetite to adopt digital bill payment solutions as the economic backdrop has weakened?
2) Can management help us understand what, if any, impact J.P. Morgan's new push into direct bill payments means for Paymentus or the space broadly?
3) What impact is inflation having on the business? Can management discuss the pressures given the largely fixed RPT model and how clients are responding to price renegotiations?
4) What's the current investment strategy? Is there an opportunity for M&A in the current environment?
5) Can management discuss the product road map?

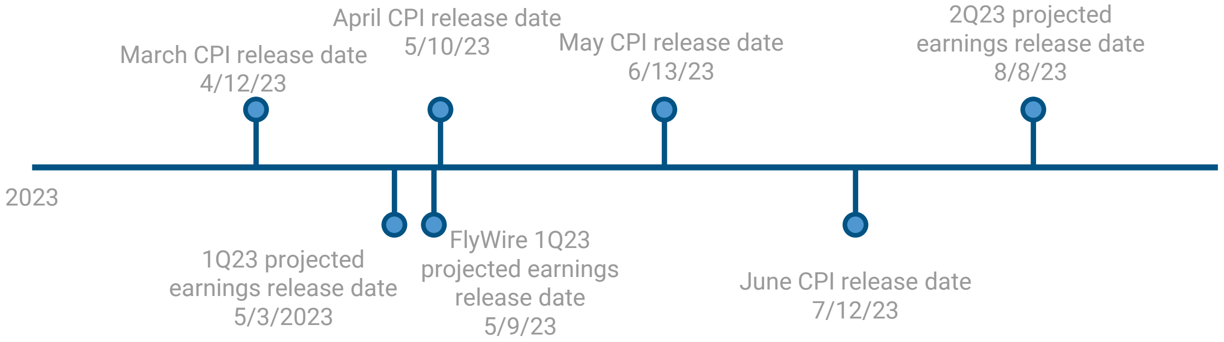
IPN:

6) Can management provide context on how much IPN currently contributes to the top-line and what are long-term targets?
7) What has been the reception to IPN in the marketplace?
8) What is the path to monetize IPN?

Fundamentals:

8) Have there been any material changes to the trends at year end based on market dynamics through 1Q23?
9) Adjusted EBITDA margin declined in FY22, FY23 guidance is implying a stabilization in the range of 14-16%. Is there any change to the long-term Adj. EBITDA outlook for the business?

POTENTIAL CATALYSTS



2023

March CPI release date 4/12/23

1Q23 projected earnings release date 5/3/2023

FlyWire 1Q23 projected earnings release date 5/9/23

April CPI release date 5/10/23

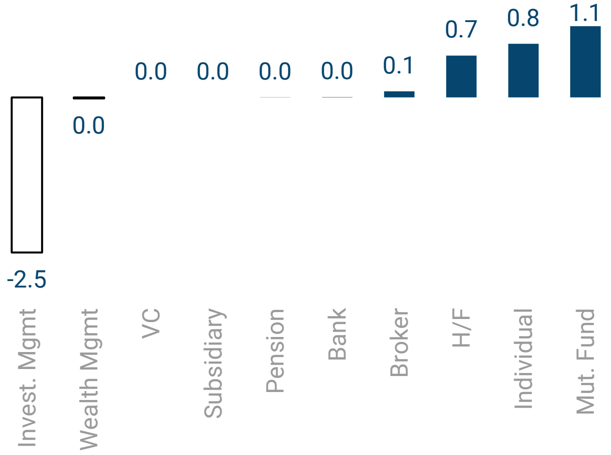
May CPI release date 6/13/23

June CPI release date 7/12/23

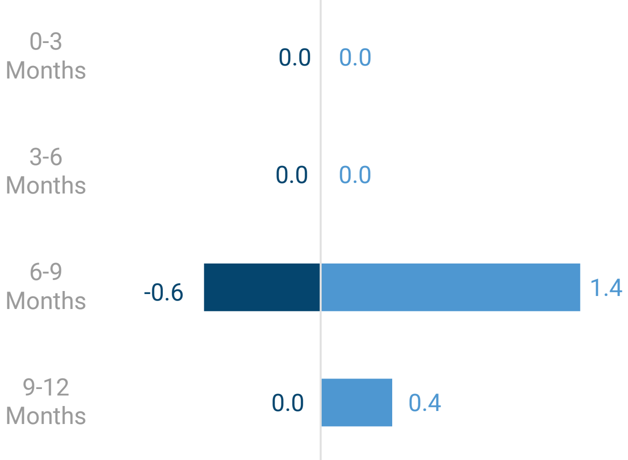
2Q23 projected earnings release date 8/8/23

SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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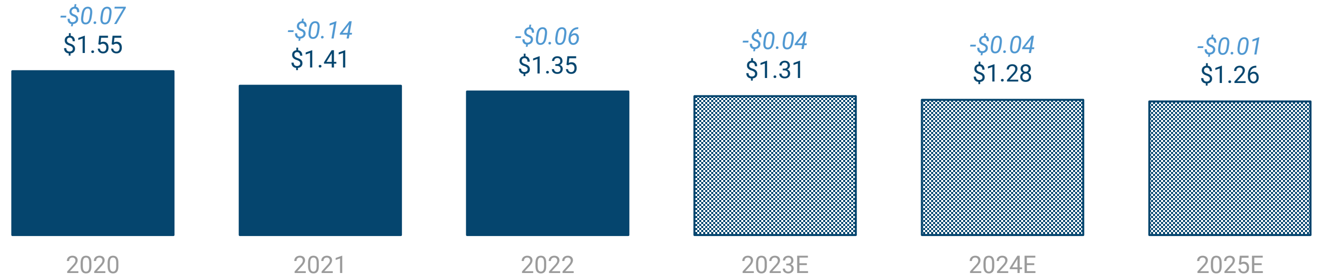
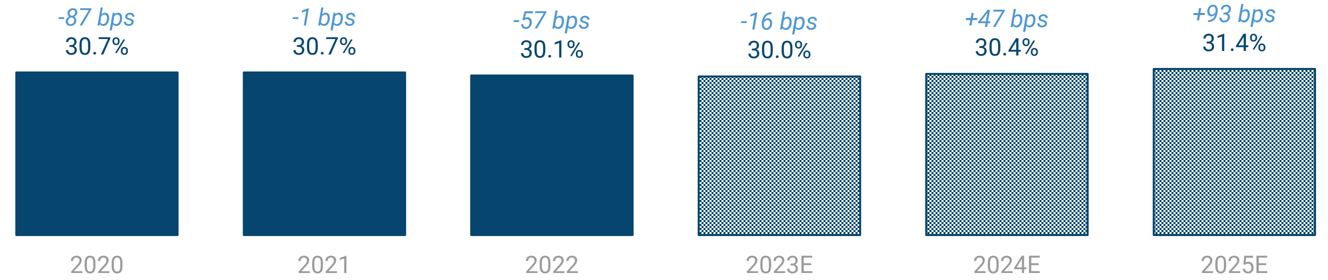
COMPANY RATIOS/MARGIN ANALYSIS

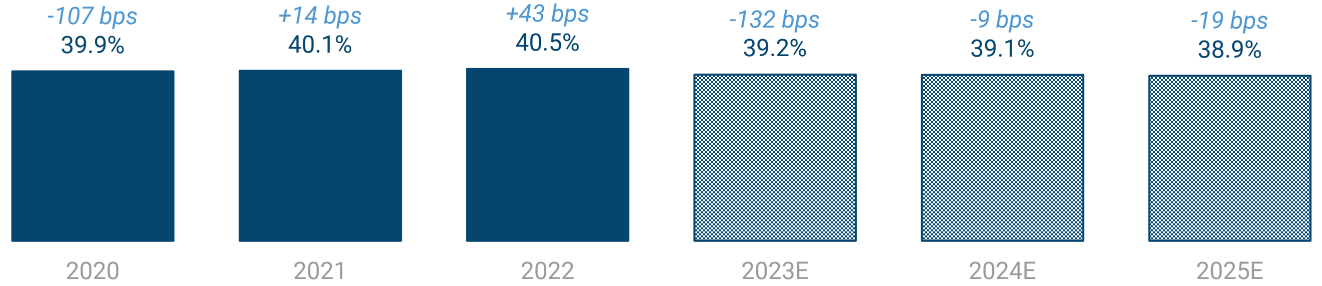
Gross Revenue Per Transaction



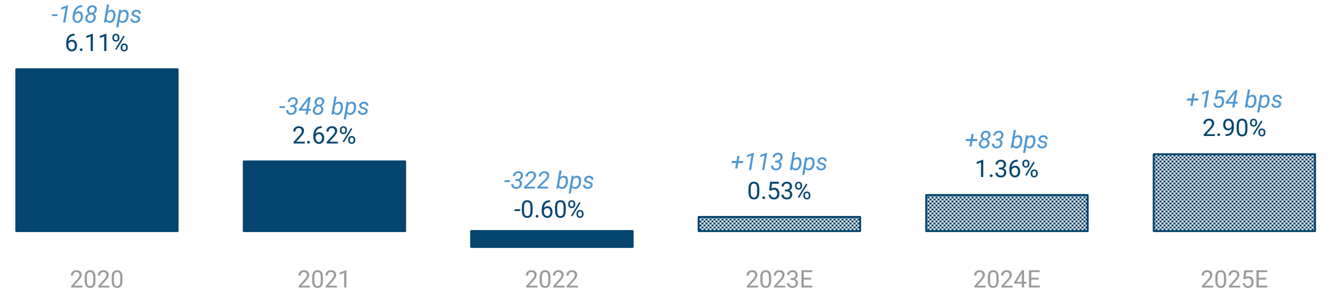
Gross Margin



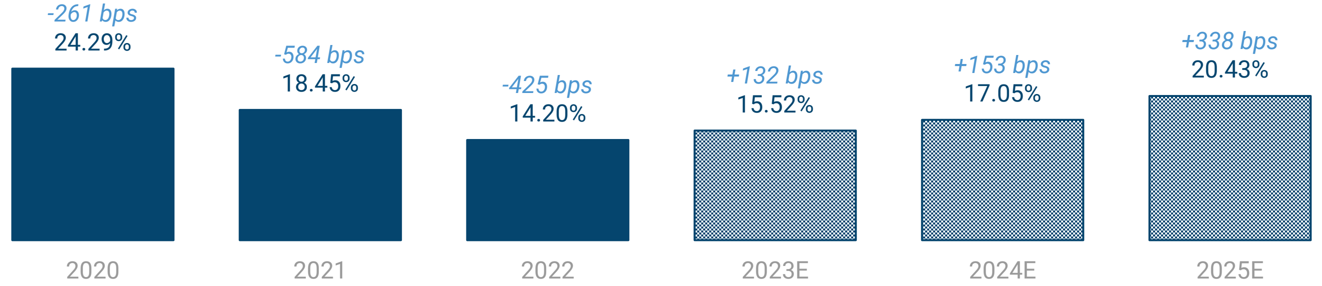
Contribution Margin



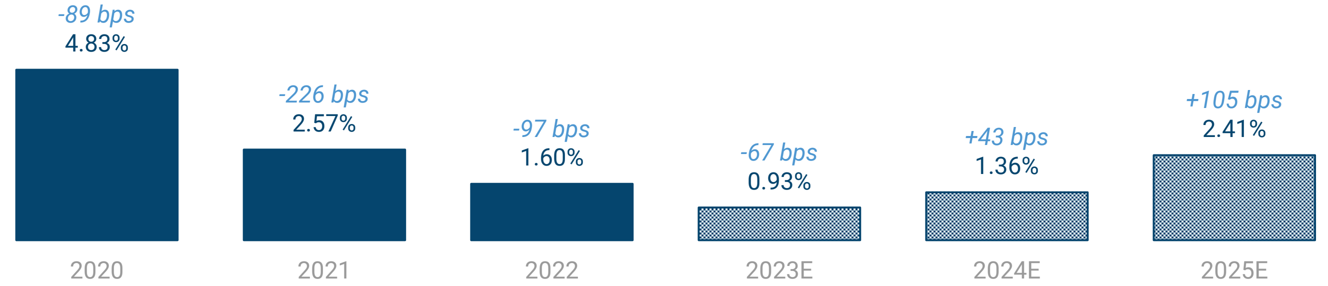
Operating Margin



Adjusted EBITDA



Adjusted Net Income Margin



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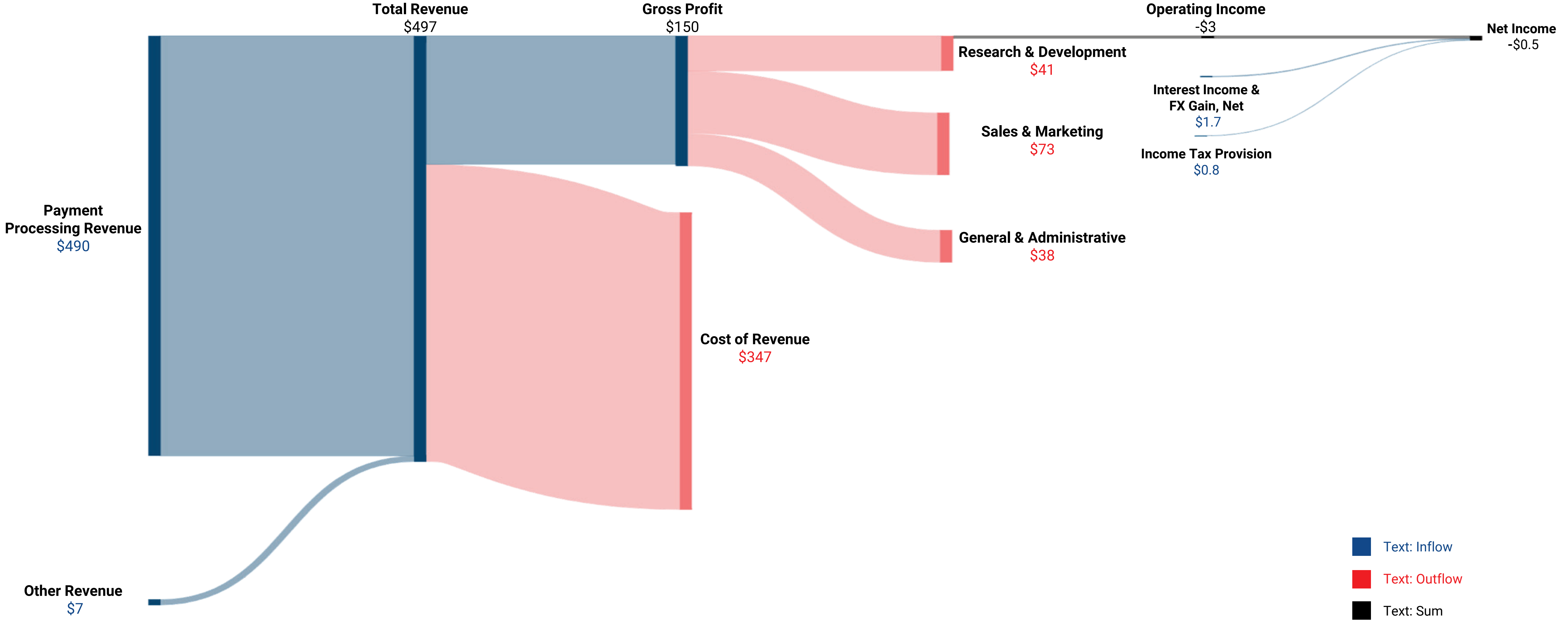
FINANCIAL TECHNOLOGY PARTNERS

($ in millions)

P&L VISUALIZATION – TTM



Source: Company filings; FactSet

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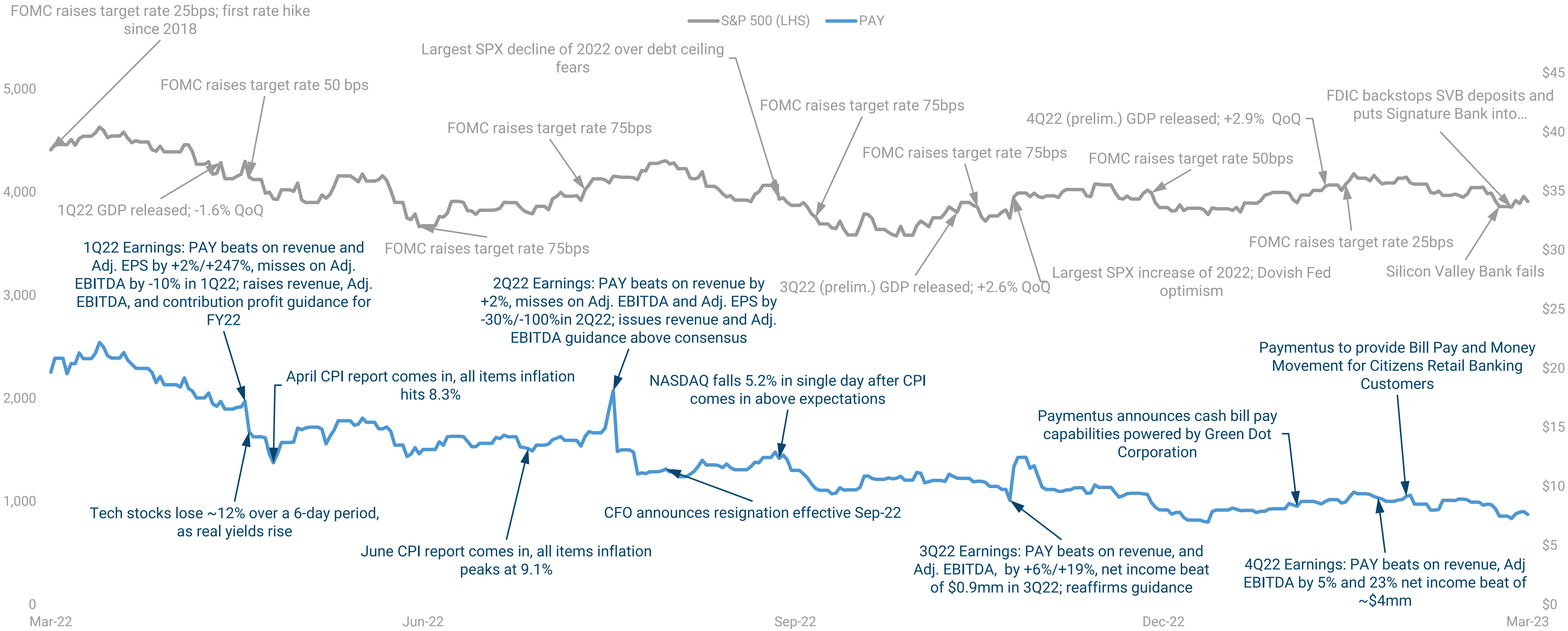
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

FOMC raises target rate 50 bps

1Q22 GDP released; -1.6% QoQ

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

Largest SPX increase of 2022; Dovish Fed optimism

4Q22 (prelim.) GDP released; +2.9% QoQ

FOMC raises target rate 50bps

FOMC raises target rate 25bps

FDIC backstops SVB deposits and puts Signature Bank into…

Silicon Valley Bank fails

1Q22 Earnings: PAY beats on revenue and Adj. EPS by +2%/+247%, misses on Adj. EBITDA by -10% in 1Q22; raises revenue, Adj. EBITDA, and contribution profit guidance for FY22

Tech stocks lose ~12% over a 6-day period, as real yields rise

April CPI report comes in, all items inflation hits 8.3%

June CPI report comes in, all items inflation peaks at 9.1%

2Q22 Earnings: PAY beats on revenue by +2%, misses on Adj. EBITDA and Adj. EPS by -30%/-100%in 2Q22; issues revenue and Adj. EBITDA guidance above consensus

CFO announces resignation effective Sep-22

NASDAQ falls 5.2% in single day after CPI comes in above expectations

3Q22 Earnings: PAY beats on revenue, and Adj. EBITDA, by +6%/+19%, net income beat of $0.9mm in 3Q22; reaffirms guidance

Paymentus announces cash bill pay capabilities powered by Green Dot Corporation

Paymentus to provide Bill Pay and Money Movement for Citizens Retail Banking Customers

4Q22 Earnings: PAY beats on revenue, Adj EBITDA by 5% and 23% net income beat of ~$4mm

Source: Company filings; FactSet

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Director: *No employee, executive officer or director of FTP Securities LLC is a director and/or officer of Paymentus*

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PayPal

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Please refer to page 242 for important disclosures.

PYPL TTM Price Performance

Price as of 03/17/23:	$72.99	**Shares Out (mm):**	1,131
Market Cap (mm):	$82,579	**Beta (2 Year Avg.):**	1.5
52-Wk Range:	$66.39 - $122.92	**Avg. Daily Vol (mm):**	13.5

FINANCIAL TECHNOLOGY PARTNERS

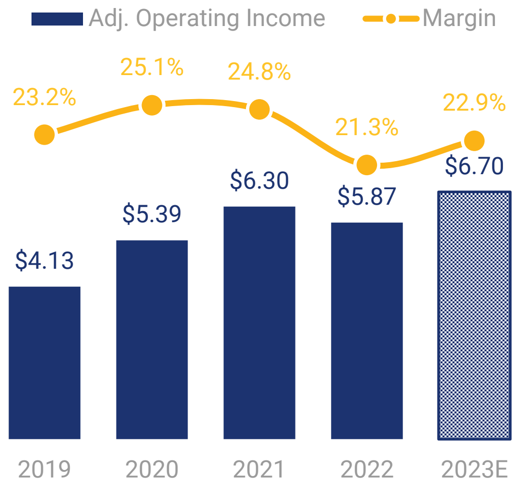
COMPANY OVERVIEW

PayPal provides global payment solutions to merchants and consumers through the company's two-sided network. PayPal's payment solutions, including its digital wallet and "buy button", were originally conceived to underwrite small online merchants, but their capabilities now span almost the entire spectrum of C2B and P2P payments.

PayPal allows a variety of transaction funding sources, including debit cards, credit cards, available PayPal/Venmo balances, PayPal/Venmo credit products, cryptocurrencies, and other stored-value products.

Merchants receive an end-to-end payments solution for both domestic and cross-border transactions, as well as **instant access to their funds** when they partner with PayPal. Consumers can purchase goods/services and send/receive funds using PayPal.

OPERATING INCOME[2]



KEY DEBATES

1. **Operating Leverage:** PayPal has been focused on delivering margin expansion, setting expectations for non-transaction operating expense growth to be negative in FY23 (vs. high-teens growth over past two years). Management has stated it sees an incremental $600mm in cost savings on top of the $1.3bn it previously identified for FY23. We expect operating leverage to be the key driver of PayPal's 18% EPS growth guidance target in FY23. With PayPal's technology overhaul nearing completion, we see the pathway to delivering cost savings as reasonable, and execution as the primary risk.

2. **Macro Headwinds:** Macro headwinds, specifically decelerating e-commerce growth in core markets and inflationary pressures on discretionary spend patterns, continue to challenge PayPal's TPV growth. Ex-cost cutting initiatives, the macro recovery will likely be a large driver of operating leverage growth over the next twelve months.

3. **Digital Wallet Monetization:** As the pace of net new adds has slowed post-pandemic (largely due to difficult e-commerce comps), focus has shifted to increasing the monetization of consumers through Venmo and the PayPal-branded "Super App". In order to drive higher revenue per customer, PayPal is expected to continue to expand its suite of services. As a result, investors remain highly focused on overall product adoption.

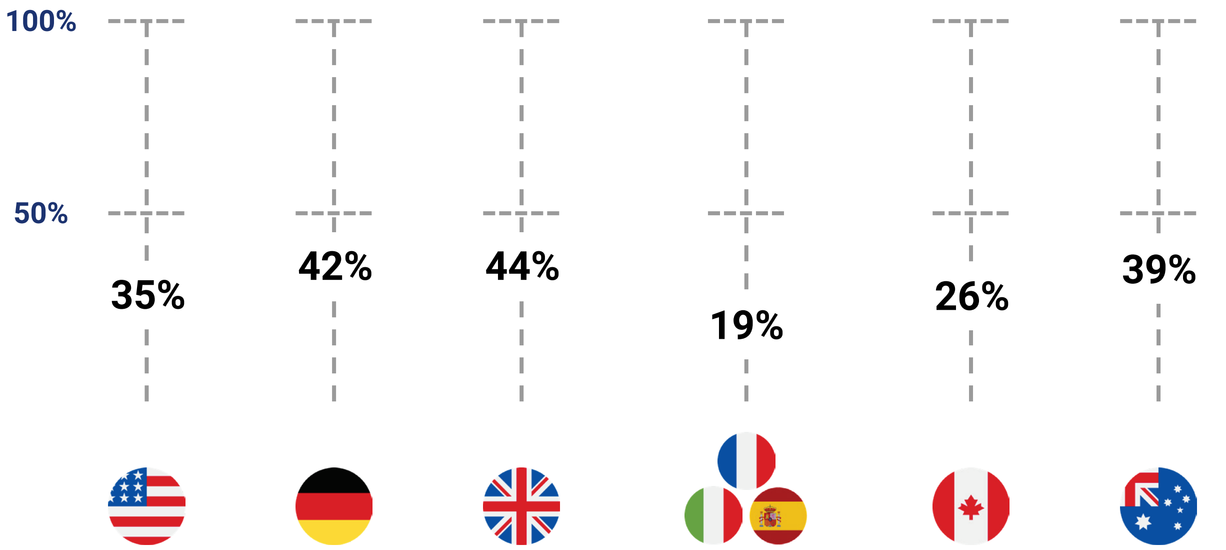
REVENUE MODEL

PayPal reports revenue in two segments:

Transaction Revenue (92% of TTM Net Revenue): Customers receive payments through the PayPal network and pay transaction fees to the company. A portion of this fee is fixed based on the value of the transaction. The variable portion is dependent on whether the transaction is refundable. In the event of a transaction being refunded, the variable portion is reimbursable. Transaction revenue also includes additional fees from currency conversion, cross-border transactions, instant transfers between PayPal/Venmo and customer bank accounts, and cryptocurrency transactions. PayPal's take rate can be highly variable depending on platform, geography, unbranded vs. branded, among other variables.

Other Value-Added Services (8% of TTM Net Revenue): Includes revenue from partnerships, referral fees, subscription fees, gateway fees, and other services that are provided to merchants and customers. Additionally, PayPal earns interest and fees from their loan portfolio, as well as interest from customer balances.

CONSUMER USER PENETRATION BY GEOGRAPHY[1]



Source: Company filings
1) 2Q22 Earnings Presentation
2) Visible Alpha Consensus Estimates

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PayPal

PYPL TTM Price Performance

Price as of 03/17/23:	$72.99	**Shares Out (mm):**	1,131
Market Cap (mm):	$82,579	**Beta (2 Year Avg.):**	1.5
52-Wk Range:	$66.39 - $122.92	**Avg. Daily Vol (mm):**	13.5

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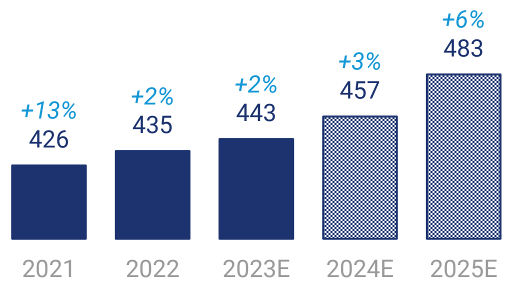
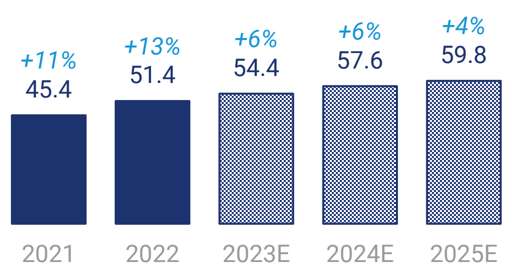
HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

($ in billions, except where otherwise noted)

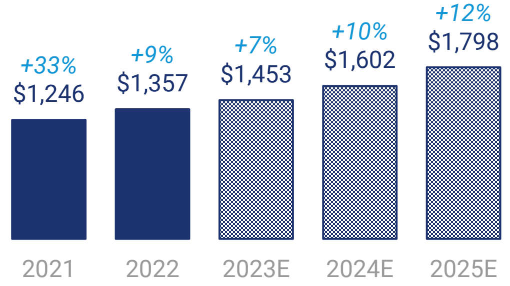
Active Customers (in millions)



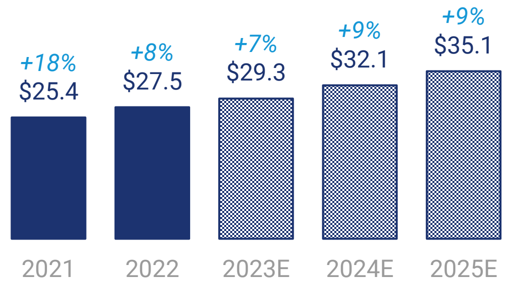
Annual Txns. Per Customer (Actual)



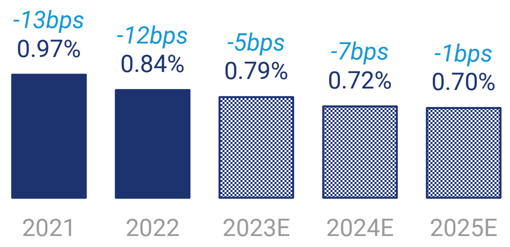
TPV



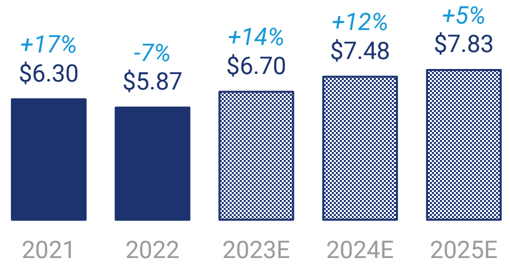
Net Revenue



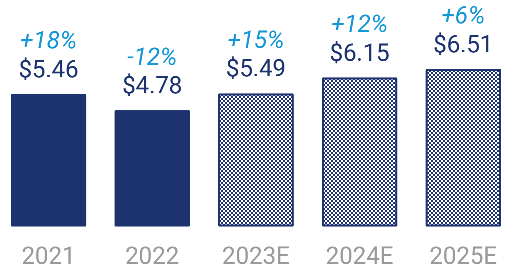
Net Take Rate (Less Transaction Costs)



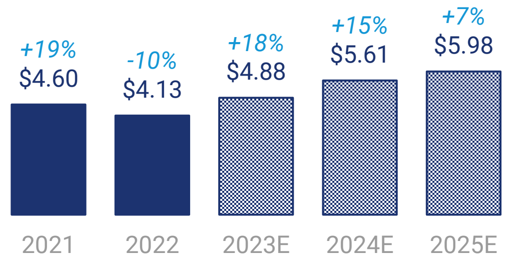
Adj. Operating Income



Adj. Net Income



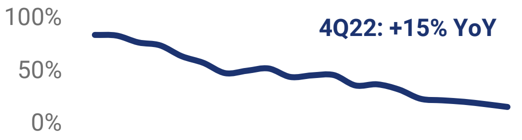
Adj. Diluted EPS



INDUSTRY KPIs

E-Commerce as % of Total Retail Spend[2] *(1Q18-4Q22)*

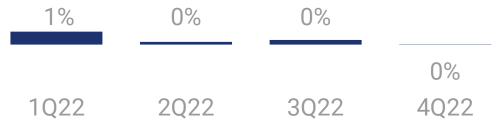
Neobank User Growth[3] *(1Q18-4Q22)*



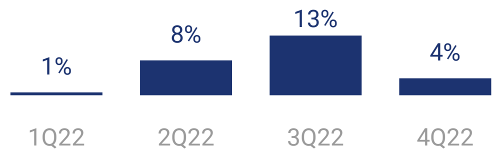
Consumer Spending[4] *(Jan 18-Jan 23)*

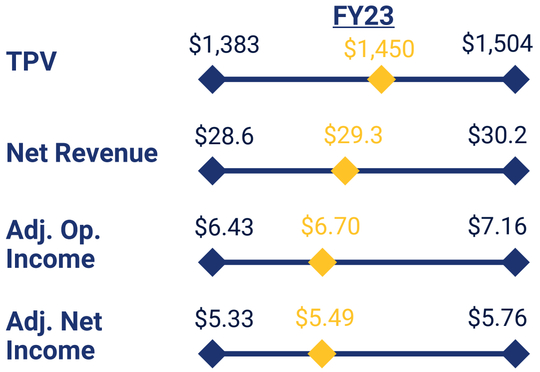
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[5]

Net Revenue



Adjusted Diluted EPS





TOTAL ADDRESSABLE MARKET – GLOBAL

Total Opportunity ~$100tn

Online Retail

P2P and Remittances

Bill Pay

In-Person Services

B2C

In-Store Retail

Digital Services

Emerging Markets Payments

Government Payments

Asset Trading

B2B and Other Non-Cash Payments

Source: Company filings

1) FactSet
2) FRED E-commerce Retail Sales, FRED Retail Trade
3) Aggregate number of users from Venmo, CashApp, SoFi, MoneyLion, and Dave
4) Personal Consumption Expenditures Index
5) FactSet, Visible Alpha Consensus Low/Average/High Range

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VALUATION CONSIDERATIONS

Relative Valuation:

As of 03/17 PayPal trades at a 14.9x NTM P/E multiple, 21.4x below its average 5-year P/E of 36.3x. It currently trades at a -2.6x discount to the S&P500, relative to its 5-year average premium of 17.8x. PayPal's multiple over the past three years benefited from the pull-forward in e-commerce trends during the COVID-19 pandemic but has since suffered from the rerating of growth and much of FinTech. Although PayPal has no true publicly traded peer, it is in-line or at a discount to its comp group even with faster expected EPS growth. Despite valuation falling by nearly three fourths from its peak, there remains risk in the stock, including questions around branded checkout share, ability to drive margin expansion, threats from more streamlined digital wallet competitors, and a management team in flux. That said, PayPal is hotly debated considering the above-average growth that could still be in the company's future. **Based on peer average P/E and when adjusting for earnings growth, it implies a 12-month price target of $96.05 (32% upside).**

DCF Scenarios:

Scenario 1 – Current Price ($72.99, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12 months from now, it requires a combination of revenue growth of low-to-mid-single digits through 2026 and adjusted EBIT margins gradually expanding to ~23%, implying the market does not expect significant margin expansion over the long-term. Were shares of PayPal to remain at the current price in 12-months, it would imply a 13x P/E multiple (based on current STM consensus EPS of $5.64).

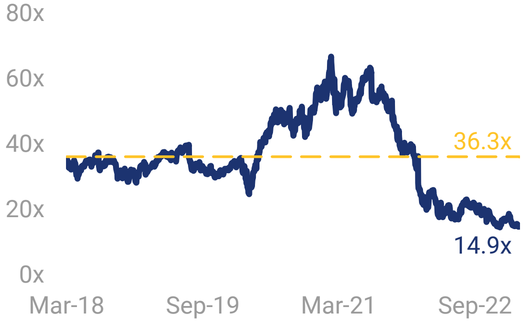
Scenario 2 – Lower Growth/Higher Margin ($60.00, 18% Downside): The second DCF outlines a scenario where PayPal can drive incremental long-term operating margin improvement but has slower revenue growth as a result. The DCF forecasts operating margin expansion to 23% in 2025 and long-term operating margins of 25%. Revenue growth stays at high-single digits through 2025 before decelerating to low-single digits and eventually matching the terminal FCF growth rate of 3%. This scenario points to a 12-month price of $60.00 (18% downside), which based on the current STM consensus EPS implies a 11x NTM P/E multiple.

Scenario 3 – Higher Growth/Margin ($78.75, 8% Upside): Following the previous scenario, this DCF scenario estimates the impact of PayPal maintaining higher levels of revenue growth (high-single digits through 2028) while also improving margins to 25%+. This scenario points to a 12-month price of $78.75 (17% upside), which based on the current STM consensus EPS implies a 14x P/E multiple.

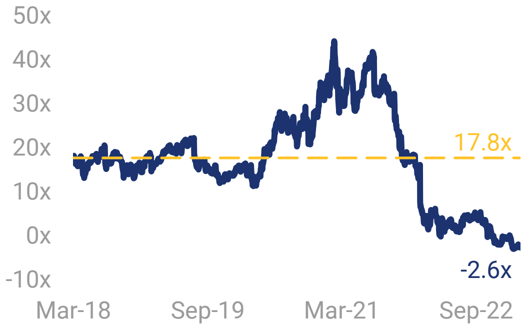
Scenario 4 – Venmo Monetization ($86.89, 19% Upside): This DCF assumes PayPal drives higher sustained levels of revenue growth through monetizing Venmo (or the PayPal App). With this set of assumptions, revenue growth is accelerated to low-double-digits through 2026 while margins are held constant vs. the base case. This scenario points to a 12-month price of $86.89 (19% upside), which based on the current STM consensus EPS implies a 15x P/E multiple.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

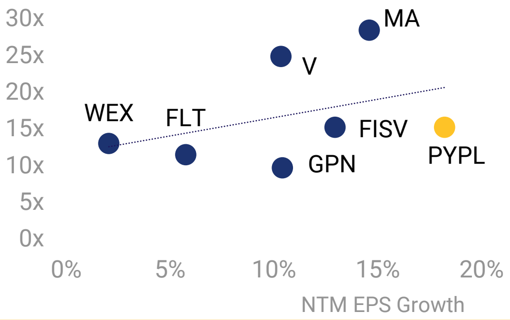
NTM P/E & 5-Year Average



NTM P/E Premium vs. S&P500



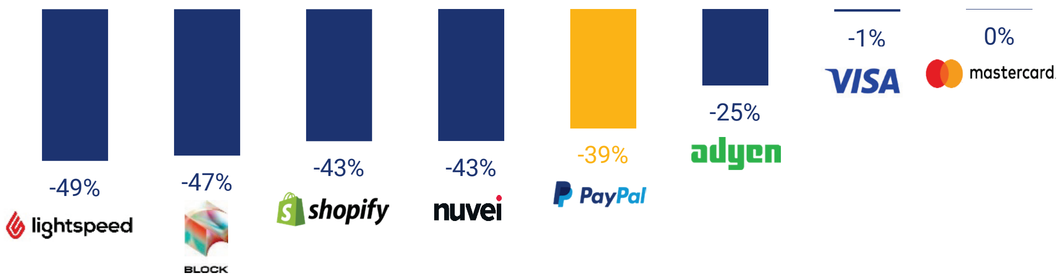
NTM P/E vs. NTM EPS Growth



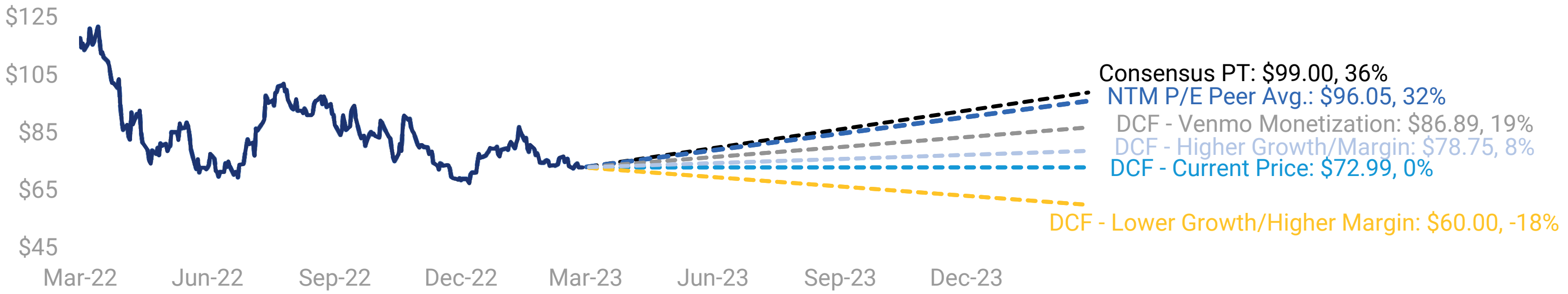
DCF Key Assumptions[1]

10-Yr RFR	**3.9%**
Cost of Equity	**15.2%**
Cost of Debt	**4.5%**
WACC	**13.8%**
Beta	**1.7**
FCF Terminal Growth Rate	**3.0%**
SBC Terminal Growth Rate	**1.0%**
Equity Value Reduction from Present + Future SBC	**$13,540**

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) SBC in millions

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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) non-transaction operating expense cuts and 2) volume monetization in digital wallets. While there are other drivers of PayPal's performance, these represent the most likely area(s) of upside/downside relative to management's outlook/consensus over the short-to-medium term.

Consensus Case:

The average consensus target price for PayPal is $99, with STM consensus EPS of $5.64 implying a 17.5x NTM P/E multiple, if shares of PYPL trade at this price in 12-months. The consensus price target implies 32% upside relative to the current share price of $72.99.

Upside Case(s):

(+) $90, 23% Upside: This scenario assumes lower non-transaction expenses as a percentage of revenue, declining faster than consensus expectations. Consensus currently expects non-transaction related expenses as a percentage of revenue to decline to 26% in FY23 from 28%. This model assumes an incremental 100bps improvement, pulling forward the expected 100bps of improvement expected in FY24. This implies 21% EPS growth and 23% upside to the current share price in 12-months with a 16x NTM P/E multiple.

(+-) $85, 17% Upside: This scenario assumes the lower level of non-transaction expenses as a percentage of revenue mentioned in the prior scenarios, but also a lower level of monetized volume through digital wallets. This implies 19% EPS growth and 17% upside to the current share price with a 15x NTM P/E multiple in 12-months.

(++) $105, 44% Upside: The best-case scenario assumes lower non-transaction expenses as a percentage of revenue and a higher level of monetized volume through digital wallets. While the EPS upside provided by digital wallet monetization is limited, the opportunity for longer-term revenue and margin expansion as a result would drive significant multiple rerating. This implies 23% EPS growth and 44% upside to the current share price with a 18x NTM P/E multiple in 12-months.

Downside Case(s):

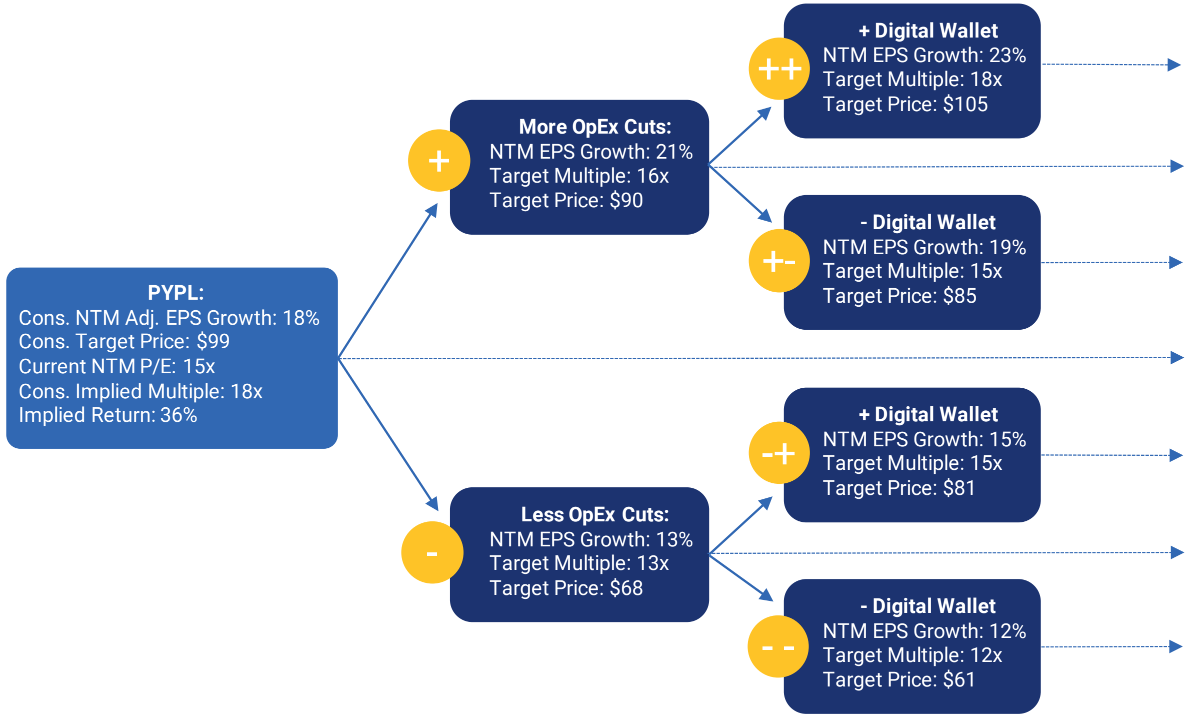
(-) $68, 7% Downside: This scenario assumes only 100bps improvement of non-transaction expenses as a percentage of revenue compared to consensus of 200bps, leading to 13% EPS growth and 7% downside to the current share price with a 13x multiple.

(-+) $81, 11% Upside: This scenario assumes the same 100bps of improvement of non-transaction expenses, partially offset by forecasting a higher level of digital wallet monetization, implying 16% EPS growth and 11% upside to the current share price with a 15x multiple.

(--) $61, 16% Downside: The worst-case scenario assumes the same 100bps of improvement of non-transaction expenses as a percentage of revenue, while also monetizing a lower amount of digital wallet volume, implying 12% EPS growth and 16% downside to the current share price with a 12x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Decision Tree



PYPL:
Cons. NTM Adj. EPS Growth: 18%
Cons. Target Price: $99
Current NTM P/E: 15x
Cons. Implied Multiple: 18x
Implied Return: 36%

\+ **More OpEx Cuts:**
NTM EPS Growth: 21%
Target Multiple: 16x
Target Price: $90

\++ **+ Digital Wallet**
NTM EPS Growth: 23%
Target Multiple: 18x
Target Price: $105

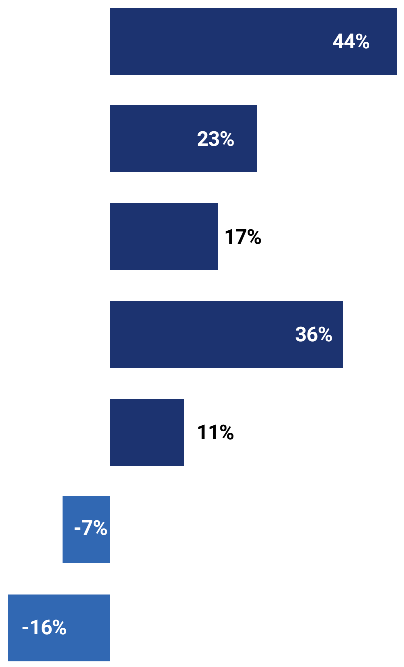
+- **- Digital Wallet**
NTM EPS Growth: 19%
Target Multiple: 15x
Target Price: $85

\- **Less OpEx Cuts:**
NTM EPS Growth: 13%
Target Multiple: 13x
Target Price: $68

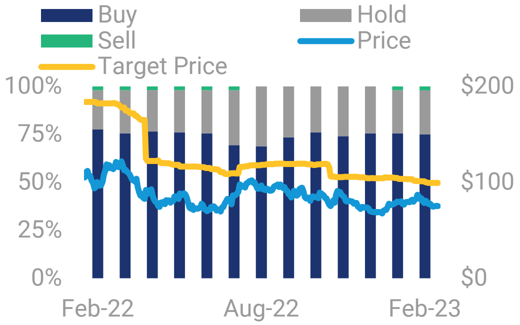
-+ **+ Digital Wallet**
NTM EPS Growth: 15%
Target Multiple: 15x
Target Price: $81

-- **- Digital Wallet**
NTM EPS Growth: 12%
Target Multiple: 12x
Target Price: $61

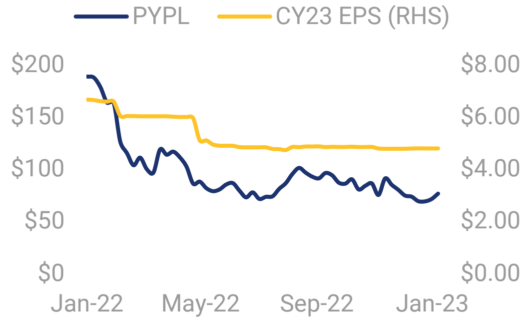
12-Month Price Return



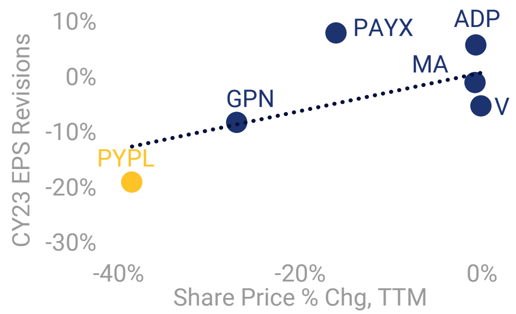
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

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FINANCIAL TECHNOLOGY PARTNERS

($ in billions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: In addition to discussing results and the outlook, it was also announced on PayPal's 4Q22 earnings call that CEO Dan Schulman intends to retire by year-end, believing now that PayPal is back on solid footing for long-term growth. PayPal's board will commence a search for his replacement, with Mr. Schulman suggesting he will delay his transition to non-executive Chairman should his replacement not be in place by year-end. Despite limited upside to numbers, **the stock reacted well, possibly due in part to the news of a CEO transition.**

Results Recap: PayPal reported TPV growth of 5% YoY (+9% FX neutral) to $357.4bn, which came in below consensus by 1%. Venmo TPV grew 3% YoY to $62.5bn and represented 17% of total TPV. The company reported 2.9mm net new adds, missing consensus of 3.7mm. FY22 net new adds were 8.6mm vs. guidance of 8-10mm and a meaningful deceleration compared to FY21. With TPV and take rate largely in line with expectations, PayPal reported transaction revenue of $6.7bn (+5% YoY), 1% lower than consensus. Net revenue grew 7% YoY to $7.4bn, virtually in line with guidance and consensus. Adjusted operating margin improved 115bps YoY to 22.9%, ahead of company guidance of 22.5% and consensus of 22.3%. Adjusted EPS of $1.24 (+11% YoY) beat consensus of $1.19 by 4%, coming in above the high-end of management's guidance range of $1.18-$1.20. 4Q22 free cash flow was $1.4bn, 19% of net revenue, missing consensus of $1.7bn.

Incremental from the call:

- **FY23 Guidance and Margins:** With net revenue in-line, **the quarter's adjusted operating and net income margin improvements were primarily attributable to a 422bps reduction in GAAP non-transaction-related expenses** as a percentage of net revenue, offset by a 255bps increase in transaction-related expenses. In addition to the $1.3bn in cost savings previously targeted for FY23, management has identified an incremental $600mm in cost savings it intends to pursue through layoffs, reduction in real estate, and external vendor spend. Management consequently expects non-transaction opex to decline in the high-single-digit range in FY23 vs. consensus expectations of flat growth YoY. Without providing FY23 revenue guidance, **management is guiding for FY23 EPS growth of 18% to $4.87, 2% above pre-print consensus and 3% above 3Q22's preliminary guidance.** As transaction expense contributed 511bps of pressure on GAAP operating margins during FY22 due to an increase in share of unbranded transactions, management noted a focus to improve Braintree's lower-margin profile through both ancillary products, including Risk-as-a-Service and payouts, as well as targeting small to mid-sized businesses where pricing is more favorable. Further bolstering EPS growth is management's goal of committing **75% of FY23's expected $5bn in free cash flow to share repurchases**.
- **1Q23 Guide:** Management outlined a few baseline assumptions underpinning 1Q23 net revenue growth guidance of 7.5% (9% FXN) and non-GAAP EPS growth of 23%-25% to $1.08-$1.10, including expectations for **slight growth in e-commerce YoY and discretionary spend to remain under pressure**. That said, management is currently seeing reasons for potential upside to full-year guidance, including easing inflation and a stronger start to 1Q23 branded checkout volumes.
- **Product Development:** With management stating it expects **no growth in active accounts in FY23, PayPal has prioritized the product roadmap and maximizing revenue per user**, highlighting optimism surrounding product development and adoption centered on growth in digital wallet offerings with BNPL and other capabilities. These solutions are in addition to checkout solution improvements. With regards to BNPL, management noted that the solution has drastically increased in scale since 2020, originating upwards of 200mm loans to 30mm consumers, with ~300k merchants having offered the product upstream on their product pages. Other solutions being integrated include new international remittance methods, new card-spend rewards, bill-pay, and savings. Furthermore, management called out **the complete re-platforming of the tech stack (to be completed in Q1)**, which had enabled upgraded checkout flows for one-third of the merchant base by the end of 4Q22 (targeting 50% by the end of FY23), driving a 3-10% conversion lift at those merchants. These efforts in modernizing and streamlining the merchant and consumer experiences are critical given the decline in PayPal's share of holiday-spend in 4Q22 (Source: Salesforce Data), which management discussed but admitted to less than perfect data.

4Q22 REPORTED VS. CONSENSUS

Line Item	Reported	Cons.	$ ▲	% ▲
Total Payment Volume	**$357**	**$361**	**-$4.06**	**-1%**
growth (%, yoy)	*5%*	*6%*		
Net New Adds (mm)	**2.90**	**3.66**	**-0.76**	**-21%**
growth (%, yoy)	*-71%*	*-63%*		
Total Transactions	**6.03**	**5.85**	**0.19**	**3%**
growth (%, yoy)	*13%*	*9%*		
Transaction Take Rate	**1.88%**	**1.88%**	**0bps**	**0%**
growth (bps, yoy)	*0bps*	*0bps*		
Transaction Revenue	**$6.70**	**$6.78**	**-$0.08**	**-1%**
growth (%, yoy)	*5%*	*6%*		
Other Value-Added Services	**$0.68**	**$0.62**	**$0.06**	**9%**
growth (%, yoy)	*26%*	*15%*		
Net Revenue	**$7.38**	**$7.39**	**$0.00**	**0%**
growth (%, yoy)	*7%*	*7%*		
Total Operating Expenses	**$6.14**	**$6.22**	**-$0.08**	**-1%**
growth (%, yoy)	*13%*	*15%*		
Operating Income	**$1.24**	**$1.17**	**$0.08**	**6%**
Operating Margin (%)	*17%*	*16%*		
Adjusted Operating Income	**$1.69**	**$1.65**	**$0.04**	**3%**
Adjusted Operating Margin (%)	*23%*	*22%*		
Diluted EPS	**$1.24**	**$1.19**	**$0.05**	**4%**
growth (%, yoy)	*11%*	*7%*		
Free Cash Flow	**$1.43**	**$1.68**	**-$0.25**	**-15%**
growth (%, yoy)	*0%*	*18%*		

FY23 Guidance	Old	New	% ▲	Cons.	% ▲
Adjusted EPS	**$4.75**	**$4.87**	**3%**	**$4.77**	**2%**
growth (%, yoy)	*>15%*	*18%*		*16%*	

Source: Company filings; FactSet; Visible Alpha

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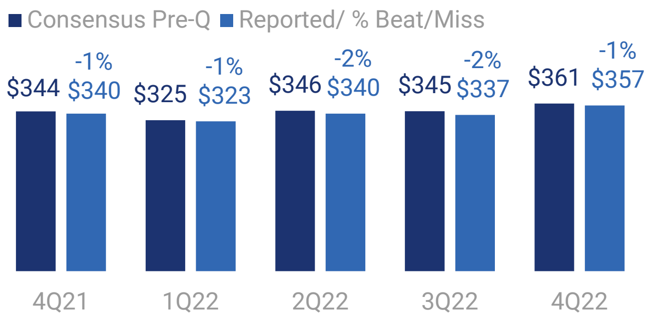
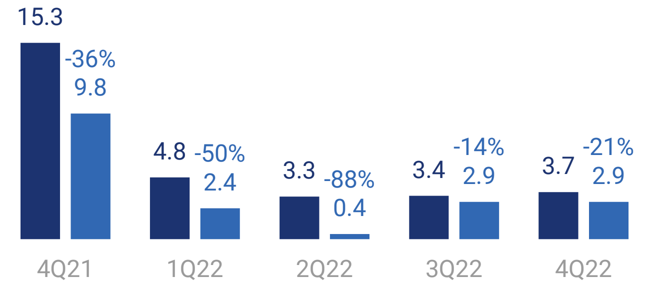
REPORTED VS. CONSENSUS

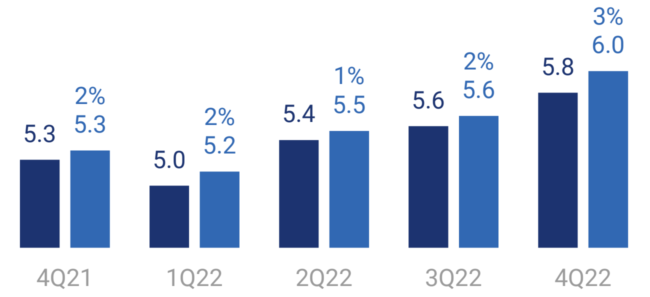
Total Payment Volume



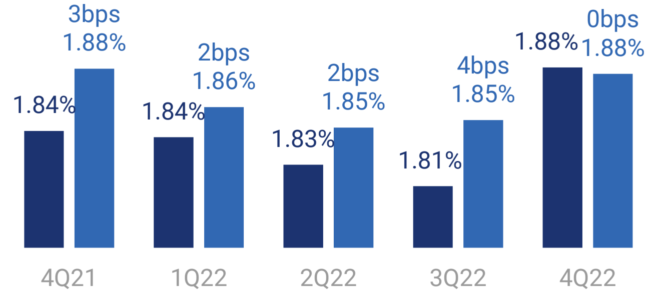
Net New Adds (mm)



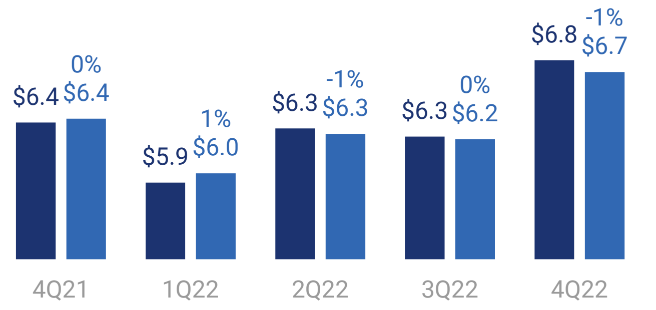
Total Transactions (bn)



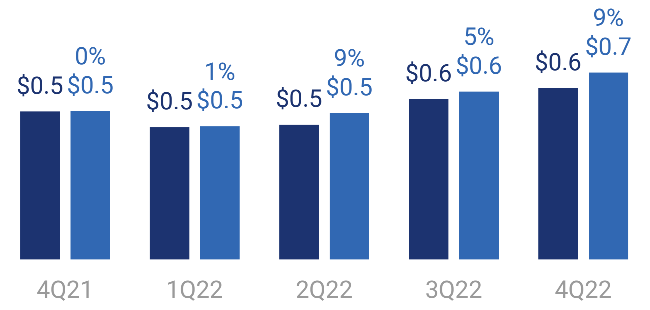
Transaction Take Rate



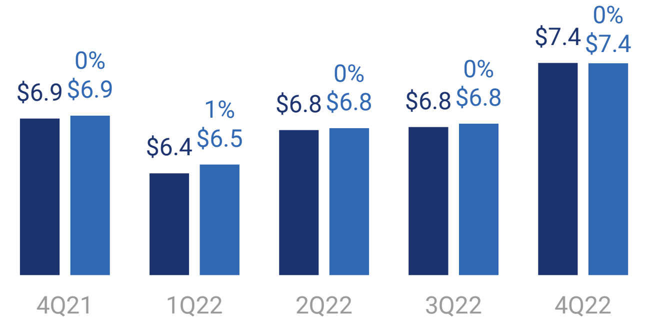
Transaction Revenue



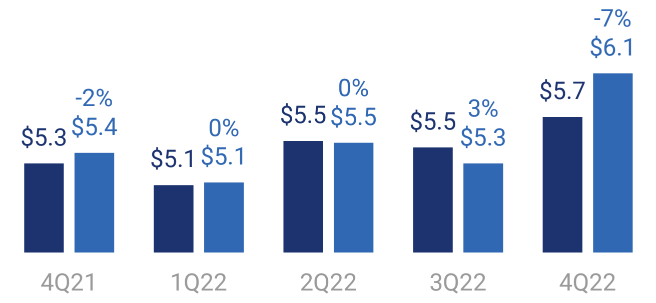
Other Value-Added Services Revenue



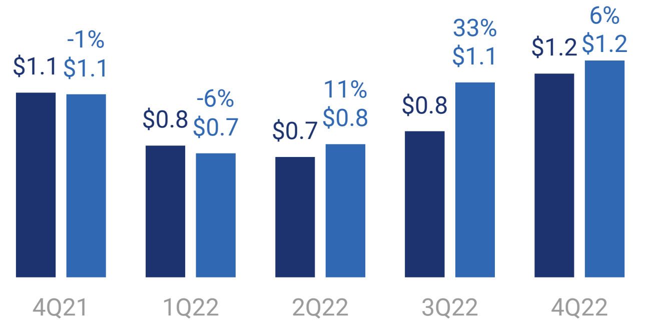
Net Revenue



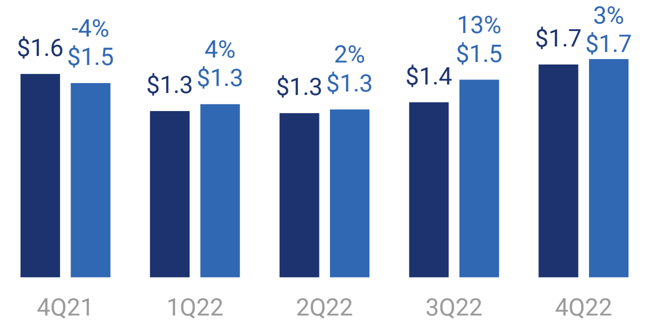
Total Operating Expenses



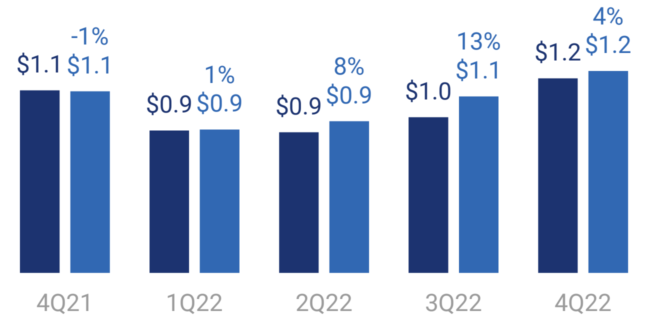
Operating Income



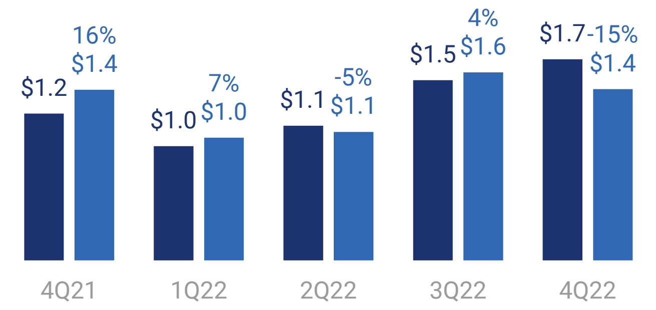
Adjusted Operating Income



Diluted EPS



Free Cash Flow



Source: Company filings; FactSet; Visible Alpha

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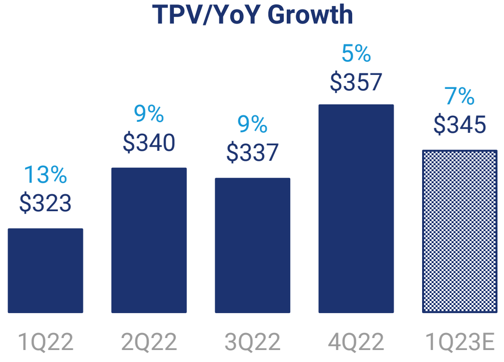
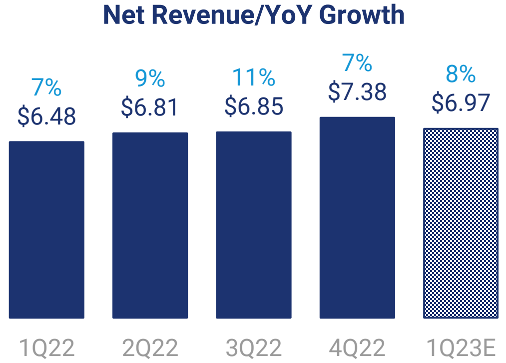
1Q23 CONSENSUS ESTIMATE RANGES

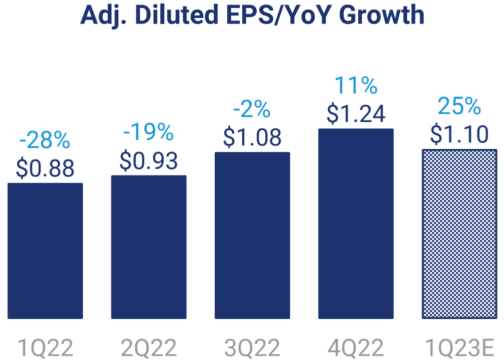
($ in billions)

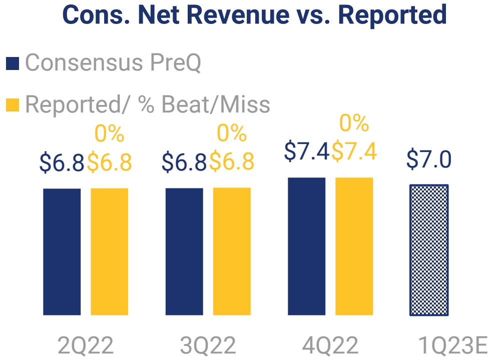
	Low	Average	High
Total Payment Volume	**$336**	**$345**	**$354**
growth (%, yoy)	*4%*	*7%*	*10%*
Net New Adds (mm)	**-1.71**	**3.32**	**8.00**
growth (%, yoy)	*-171%*	*38%*	*233%*
Total Transactions	**5.14**	**5.64**	**5.93**
growth (%, yoy)	*0%*	*9%*	*15%*
Transaction Take Rate	**1.74%**	**1.84%**	**1.88%**
growth (bps, yoy)	*-11bps*	*-1bps*	*2bps*
Transaction Revenue	**$6.13**	**$6.35**	**$6.45**
growth (%, yoy)	*2%*	*6%*	*8%*
Other Value-Added Services	**$0.51**	**$0.63**	**$0.84**
growth (%, yoy)	*6%*	*29%*	*73%*
Net Revenue	**$6.94**	**$6.97**	**$7.05**
growth (%, yoy)	*7%*	*8%*	*9%*
Total Operating Expenses	**$5.32**	**$5.43**	**$5.52**
growth (%, yoy)	*3%*	*6%*	*7%*
Operating Income	**$0.89**	**$1.01**	**$1.27**
Operating Margin (%)	*13%*	*14%*	*18%*
Adjusted Operating Income	**$1.47**	**$1.54**	**$1.70**
Adjusted Operating Margin (%)	*21%*	*22%*	*24%*
Adjusted Diluted EPS	**$1.08**	**$1.10**	**$1.20**
growth (%, yoy)	*23%*	*25%*	*37%*
Free Cash Flow	**$0.08**	**$1.19**	**$2.08**
growth (%, yoy)	*-92%*	*16%*	*102%*

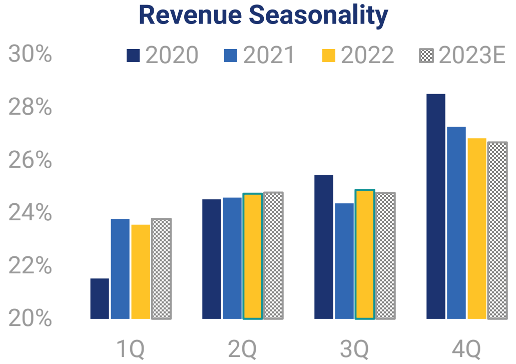
QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

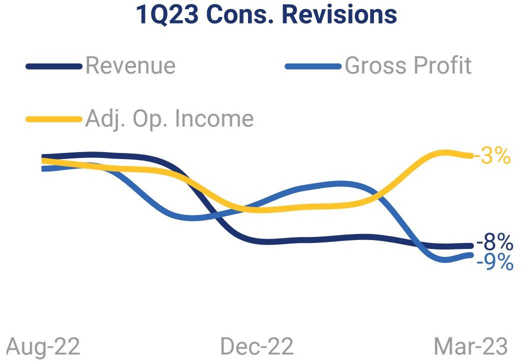

TPV/YoY Growth

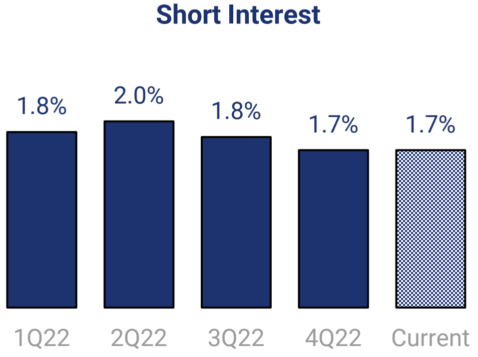

Net Revenue/YoY Growth

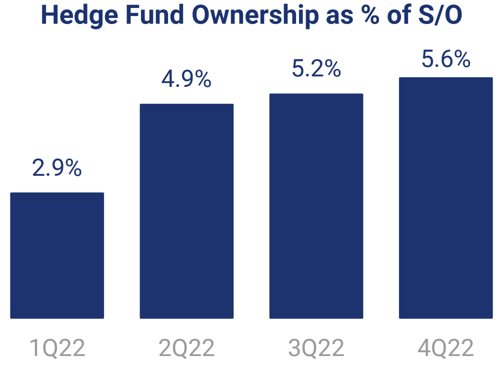

Adj. Diluted EPS/YoY Growth

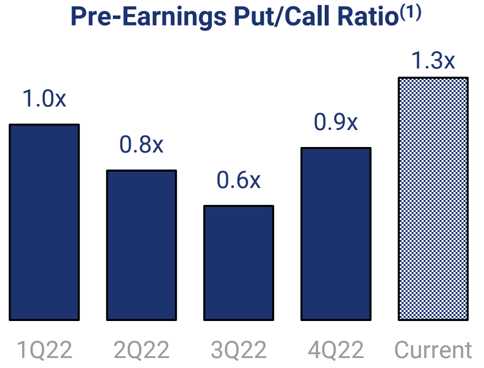

Cons. Net Revenue vs. Reported


Revenue Seasonality


1Q23 Cons. Revisions


Short Interest


Hedge Fund Ownership as % of S/O


Pre-Earnings Put/Call Ratio(1)

FT Partners | Equity Research

Source: Company filings; FactSet

1) Put/Call Ratio over 7-days leading into earnings

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1Q23 EARNINGS OUTLOOK

PayPal is projected to report 1Q23 earnings on May 3rd after the market close.

What's In Focus:

On the 4Q22 call, management outlined its plan to deliver $1.3bn in cost savings, while also identifying an incremental $600mm of cost-savings it would pursue through layoffs, reduction in real estate, and external vendor spend. As a result, management expects non-transaction operating expenses to decline high-single-digits in FY23. Despite this, consensus currently expects non-transaction related operating expenses to decline only 4% YoY in both FY23 and 1Q23. We note that management did not provide insight on the cadence of expense savings throughout FY23 but did cite a strong start to the year on the revenue side, pointing to branded checkout volumes in 1Q23 as a reason to be optimistic.

Estimates:

- **KPI's:** Since 4Q22 results, estimates for 1Q23 TPV have remained unchanged at $344.8mm, while FY23 estimates have been revised down by 2% to $1,453mm from $1,484mm. The total number of active customer accounts at the end of 1Q23 have been revised marginally lower to 436.7mm from 438.8mm.
- **Revenue:** Net revenue estimates for 1Q23 have remained unchanged at $6,977mm, while FY23 estimates have been revised down by 2% to $29.3bn vs. $29.9bn previously. This would imply a net transaction yield of 2.0%, representing significant expansion vs. 1.86% in 1Q22 and 1.88% in 4Q22.
- **Expenses:** Since 4Q22 results, estimates for 1Q23 transaction-based expenses has modestly increased by 1% to $3,567mm while consensus for adj. non-transaction expenses decreased by 5% from $1,957mm to $$1,868mm. Overall adjusted operating income estimates have been revised 3% higher to $1,544mm for 1Q23 but remained flat for FY23 at $6,698mm. This would imply an adjusted operating income margin of 22.1% relative to 20.7% in 1Q22. For FY23 this implies an adjusted operating income margin of 22.8% relative to FY22 of 21.3%.
- **Earnings:** Estimates for 1Q23 adjusted diluted EPS have been revised higher since 4Q22 results by 4% to $1.10 from $1.06, a 24% increase from $0.88 in 1Q22. The $1.10 estimate implies $0.41 in non-GAAP adjustments or 59% of consensus GAAP diluted EPS of $0.69.

POST-RESULTS ONE-DAY ALPHA VS. S&P 500

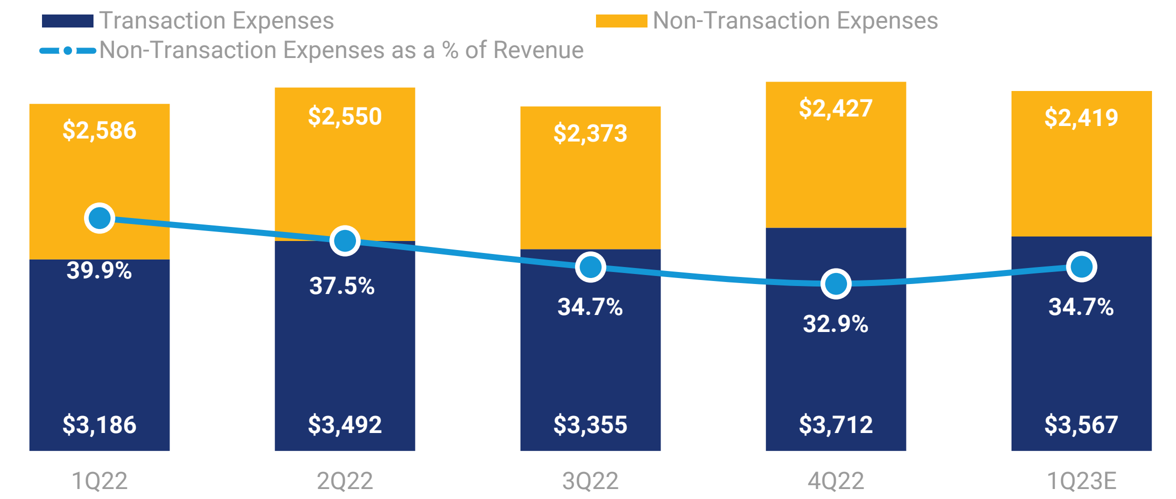
1Q22
- 4% beat on adj. operating income, 1% beat on adj. EPS
- Cut FY revenue and volume growth guidance due to inflation and supply chain headwinds
- TPV growth guidance of 13-15%

2Q22
- 2% beat on adj. operating income, 8% beat on adj. EPS
- FY EPS guidance raised by 1% at midpoint of range
- Announced a new $15bn share buyback program and cost reduction plan

3Q22
- ~13% beat on adj. operating income and adj. EPS
- Q4 EPS guidance in line with consensus, revenue guided 4.6% below
- FY22 guidance raised on EPS 3%, top-line lowered 1%

4Q22
- 3% adj. operating income beat, ~4% adj. EPS beat
- CEO announces intention to retired at the end of FY23
- Guidance represents limited upside to consensus

OPERATING EXPENSE MIX



Source: Company filings; FactSet

PayPal

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QUESTIONS FOR MANAGEMENT

Macro:

1) Given the macro environment, what has management seen in terms of discretionary spend since the 4Q call? Is e-commerce trending in-line with management's previous expectations for low single-digit growth in US?
2) Where there any notable changes to holiday season spending patterns that management believes would carry forward?
3) How are geopolitical tensions impacting business, if at all, with a focus on Europe?

Fundamentals:

3) Has the relative strength in 1Q23 branded checkout volume alluded to on the 4Q22 earnings call continued to hold throughout the quarter?
4) How have credit metrics trended since the end of Q4?
5) Given the guidance for an incremental $600mm in cost savings on top of the previously identified $1.3bn for FY23, how can investors think about the growth in non-transaction OpEx in 2024 and beyond? What will influence the pace of expansion?
6) What is the breakdown of the per-region dynamics for 2023 e-commerce growth expectations given the slight decline forecast relative to 2022?
7) Given the focus on increasing Braintree's transaction margins, how should investors expect these efforts to impact net transaction yield in FY23?

Market Share:

6) Management stated that in November it held market share in the U.S. What is the international market share and how that has developed?
7) How should investors think about the importance of market share overall considering the drive for ARPU growth rather than NNA's?
8) In what parts of the business have market share gains and losses been most acute?

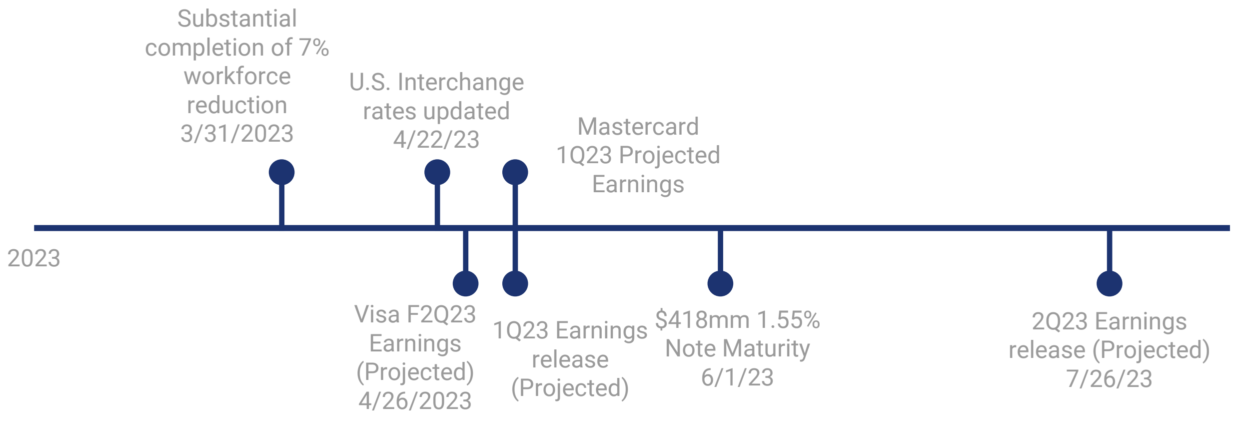
Products:

8) Given that management identified P2P as a critical capital inflow point for digital wallets, does management see other inflow points showing signs of growth, such as direct deposit or external bank transfer?
9) How should investors think about the new Apple acceptance partnership and its impact on transaction margins relative to iZettle or other POS transactions?

Capital Allocation:

10) Share repurchases for FY22 are expected to reach ~75% of FCF. What is the outlook for capital allocation beyond FY23?

POTENTIAL CATALYSTS



2023

Substantial completion of 7% workforce reduction 3/31/2023

U.S. Interchange rates updated 4/22/23

Visa F2Q23 Earnings (Projected) 4/26/2023

Mastercard 1Q23 Projected Earnings

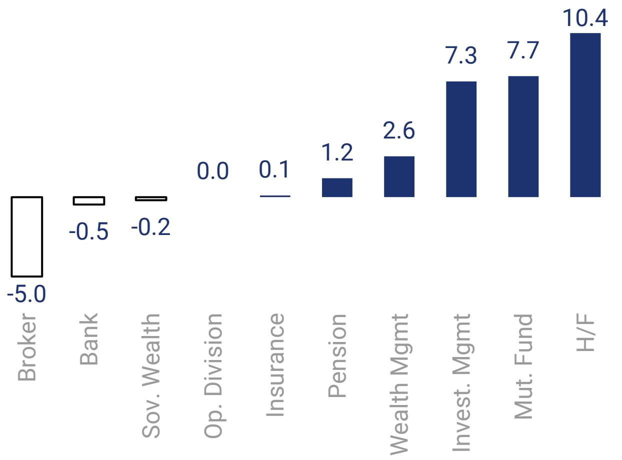
1Q23 Earnings release (Projected)

$418mm 1.55% Note Maturity 6/1/23

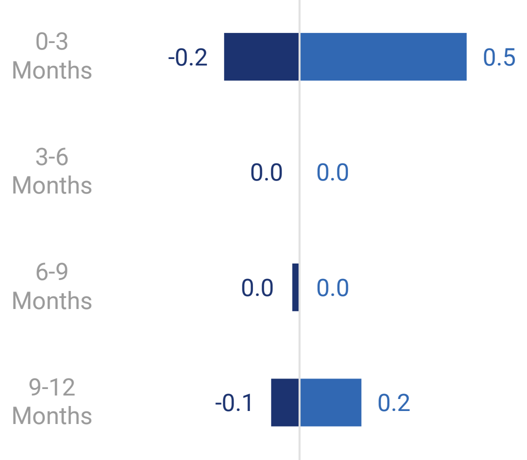
2Q23 Earnings release (Projected) 7/26/23

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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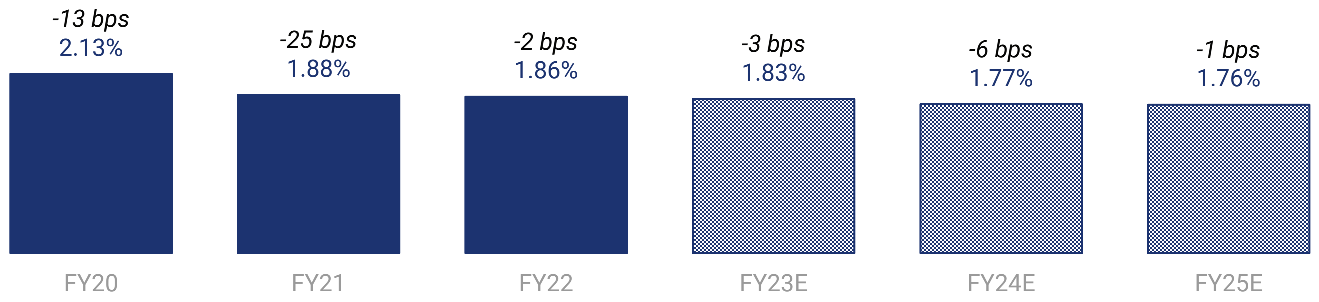
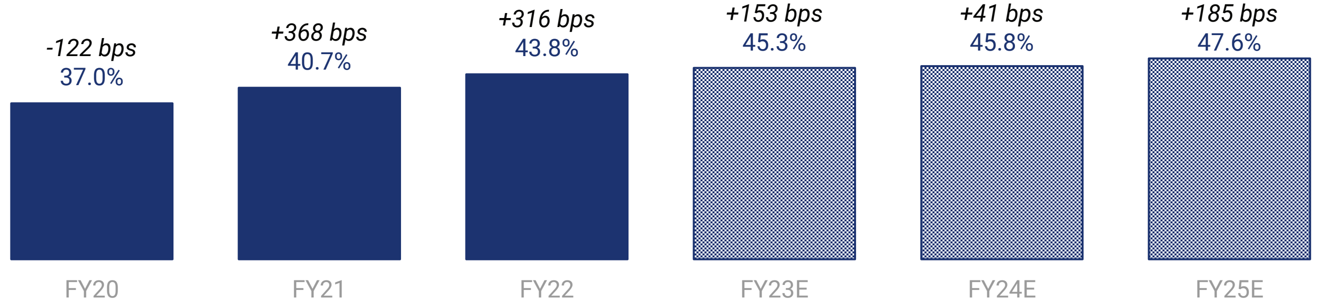
COMPANY RATIOS/MARGIN ANALYSIS

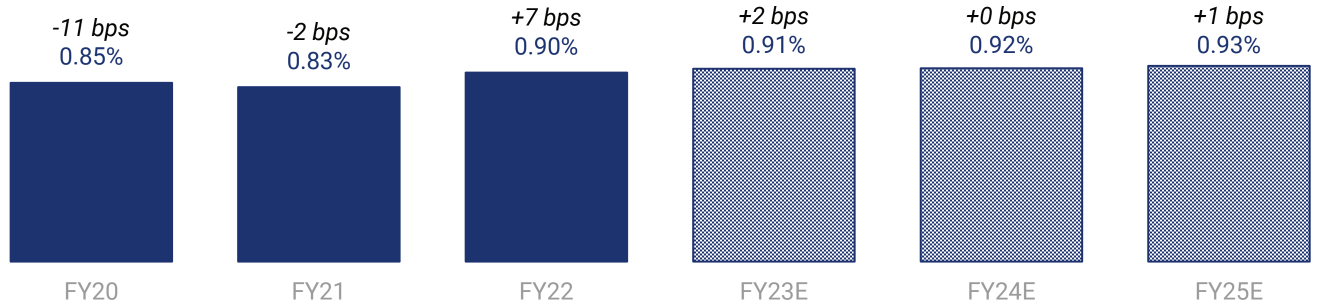
Transaction Revenue Yield (% of TPV)



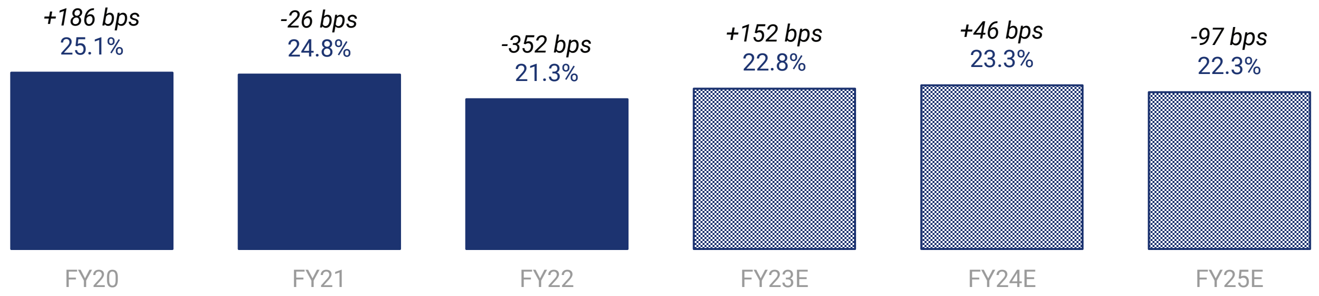
Transaction Expense (% of Net Revenue)



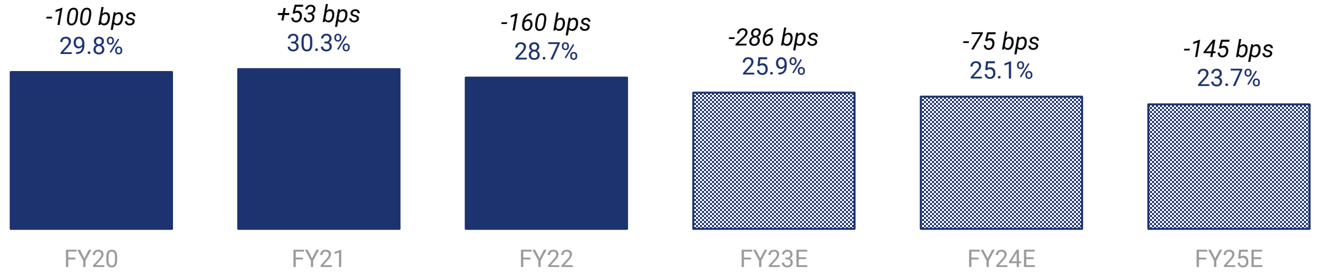
Transaction Expense Rate (% of TPV)(1)



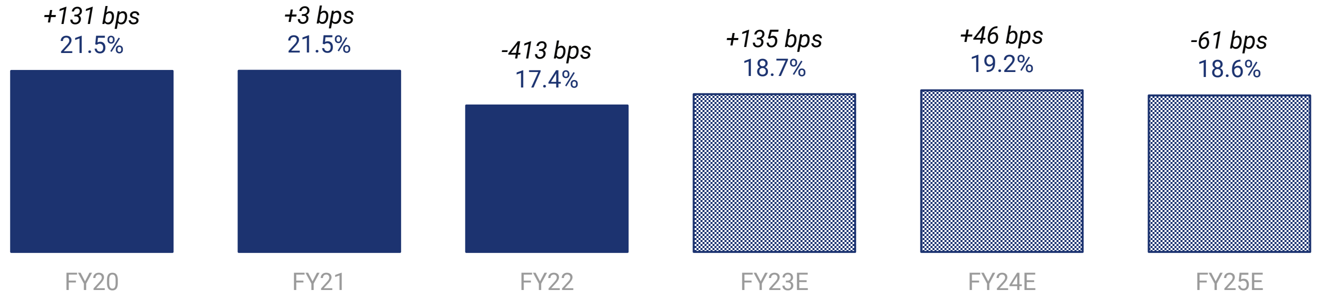
Adj. Operating Margin (% of Net Revenue)



Non-Transaction Expenses (% of Net Revenue) (1)



Adj. Net Income Margin (% of Net Revenue)



Source: Company filings; FactSet
1) Non-GAAP

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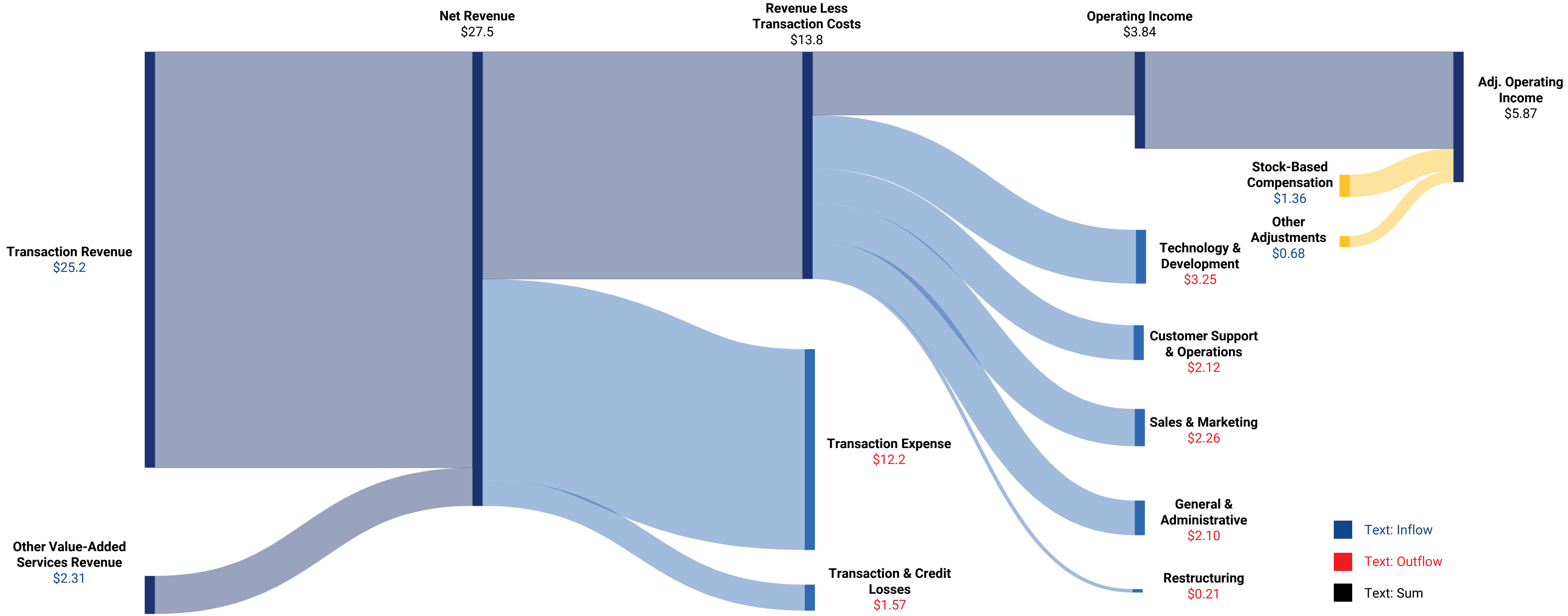
FINANCIAL TECHNOLOGY PARTNERS

($ in billions, except where otherwise noted)

P&L VISUALIZATION – TTM



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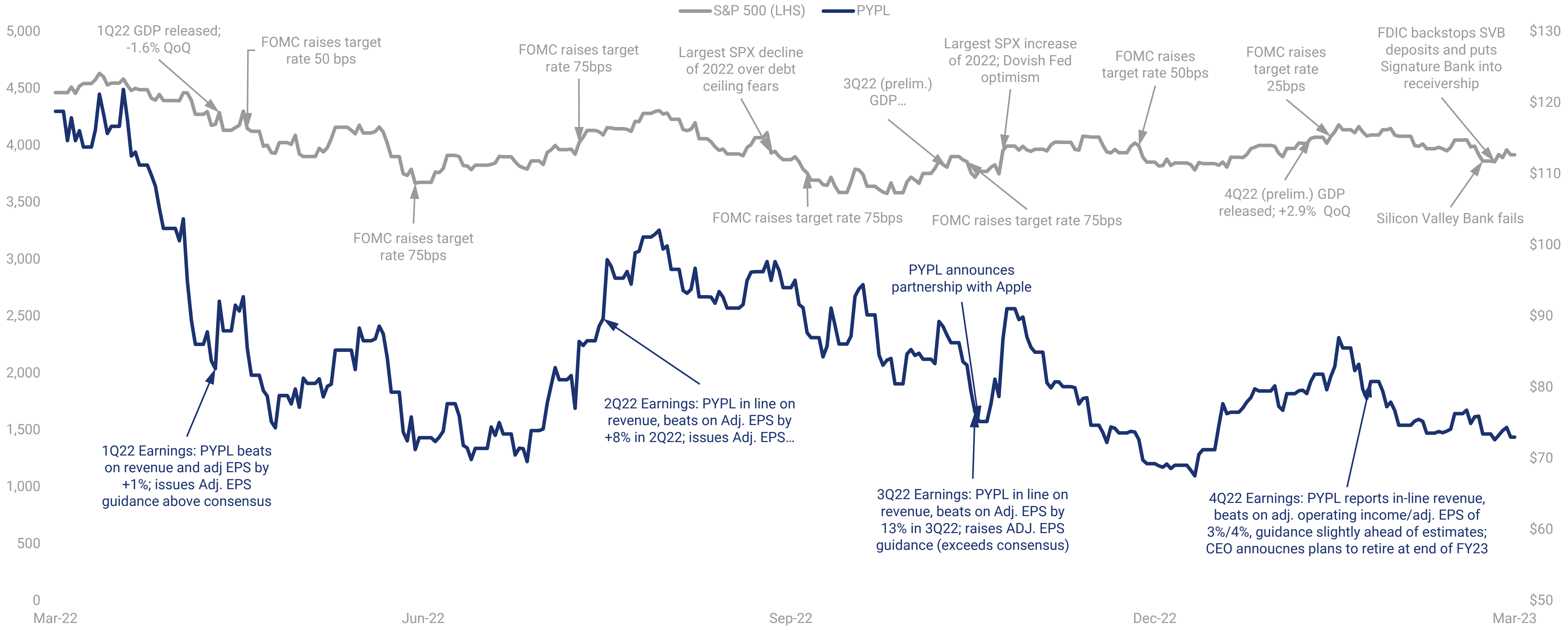
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

3Q22 (prelim.) GDP...

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

FOMC raises target rate 25bps

FDIC backstops SVB deposits and puts Signature Bank into receivership

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

4Q22 (prelim.) GDP released; +2.9% QoQ

Silicon Valley Bank fails

PYPL announces partnership with Apple

1Q22 Earnings: PYPL beats on revenue and adj EPS by +1%; issues Adj. EPS guidance above consensus

2Q22 Earnings: PYPL in line on revenue, beats on Adj. EPS by +8% in 2Q22; issues Adj. EPS...

3Q22 Earnings: PYPL in line on revenue, beats on Adj. EPS by 13% in 3Q22; raises ADJ. EPS guidance (exceeds consensus)

4Q22 Earnings: PYPL reports in-line revenue, beats on adj. operating income/adj. EPS of 3%/4%, guidance slightly ahead of estimates; CEO annoucnes plans to retire at end of FY23

Source: Company filings; FactSet

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Zachary Gunn | Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

Remitly

Price as of 3/17/2023:	$16.00	**Shares Out (mm):**	174
Market Cap (mm):	$2,787	**Beta (Since IPO):**	1.4
52-Wk Range:	$6.66 - $16.26	**Avg. Daily Vol (mm):**	1.1

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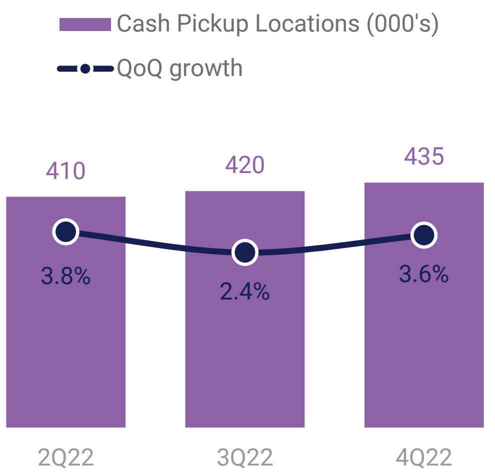
COMPANY OVERVIEW

Remitly is a digital financial services provider that primarily facilitates cross-border consumer payments. Remitly differentiates itself from legacy remittance competitors through its digital-first approach focused on engaging with customers via the Remitly mobile app or its website. **According to the company, 90% of its customers engage with the company over the mobile app**, compared to what has traditionally been an overwhelmingly in-person and highly cash-centric business.

On the receiving end of transactions, customers can access funds in various ways, including ACH or cash pickup, the latter of which remains the most prominent form of remittance disbursement. **Remitly's disbursement options span ~4 billion bank accounts** (leveraging network-to-network services), **~1.1 billion mobile wallets and alternative payment methods, and ~435,000 cash pickup locations globally** (including partner retail outlets and banks).

CASH PICKUP LOCATIONS



KEY DEBATES

1. **Competition:** Over the past decade the remittance space has seen the rapid growth of digitally-native providers (Wise, Remitly, WorldRemit), while incumbent providers (Western Union, Ria, MoneyGram) have made significant investments in digital solutions and price concession. Given the low-switching costs of the industry (assuming distribution overlap), digitally-native providers are expected to continue to gain market share, however, product commoditization and pricing pressures represent a longer-term concern.

2. **Financial Services Expansion:** Remitly has looked to expand its product offerings with complimentary financial service products intended to drive higher retention and customer engagement. That said, on the 4Q22 earnings call management announced that it was sunsetting its Passbook product, since it didn't see high overlap with existing Remitly customers. This strategy will allow management to focus on expanding the core business, however, investors will want to understand how management's strategy will alternatively evolve to improve LTV to CAC absent this initiative.

3. **Investments:** Remitly has committed to scaling its investments to drive growth in categories such as new customer acquisition, geographic expansion, product enhancements, and launching complementary products. This will likely negatively impact expenses, particularly fraud costs and marketing. Over the past year Remitly has successfully driven significant operating efficiencies, with fourth quarter marketing expenses as a percentage of revenue declining to 23% (vs. 28% in 4Q21 and 26% in 3Q22). Management has also provided FY23 guidance for positive adjusted EBITDA, and delivering here will likely be critical.

REVENUE MODEL

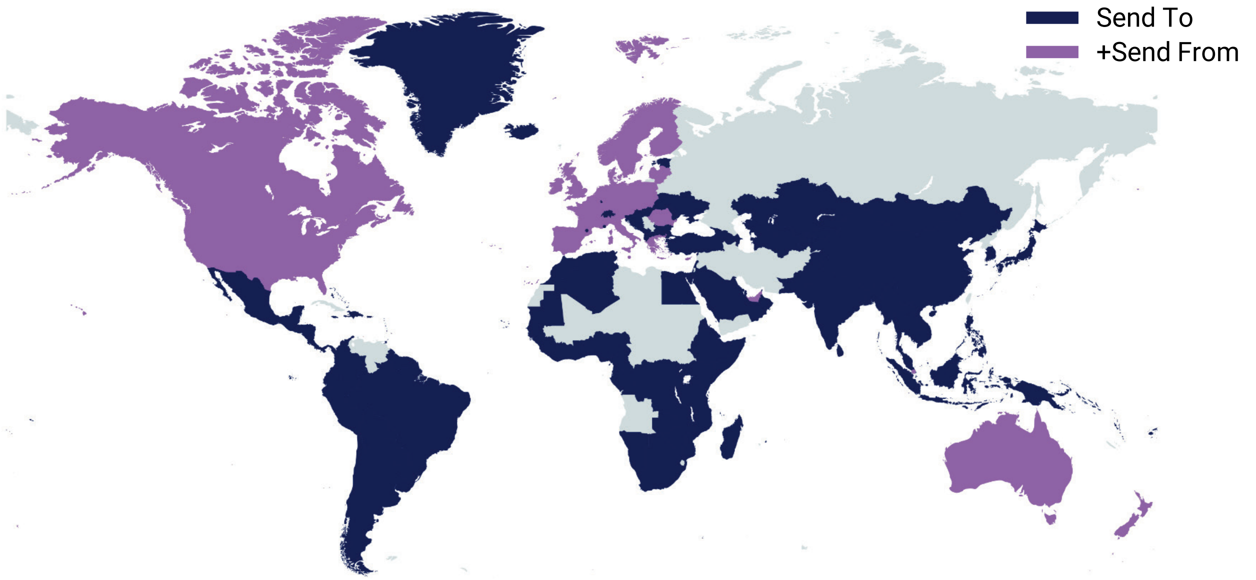
Remitly generates the majority of its revenue through its remittance business, which earns revenue from transaction fees and foreign exchange spreads. The following are the most critical metrics in driving revenue growth for Remitly:

- **Active Customers:** Defined as the number of distinct customers that have completed at least one transaction using Remitly during a given calendar quarter.
- **Send Volume:** The sum of all customer's principal, measured in U.S. dollars, related to transactions completed during a given period. The customer's principal is net of cancellations, does not include transaction fees from customers, and excludes any credits, offers, or bonuses applied to the transaction.

While nascent, Remitly is working to develop a broader portfolio of financial services to diversify its revenue streams. These products do not currently contribute materially to revenue but include:

- *Remitly for Developers/Digital Banking Services:* Offers remittance-as-a-service to businesses and developers who integrate the network into existing applications and websites through APIs.
- *Digital Banking Services:* Partnership with Sunrise Banks N.A. for the *Passbook* product. This mobile banking service is designed for immigrants with no account fees or international transaction fees and comes with a Visa Debit card. However, on the 4Q22 earnings call, Remitly announced its intention to sunset the Passbook product.

SUPPORT COVERAGE[1]

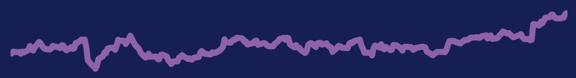


Source: Company filings, company website

1) As of March 1st, 2023

Remitly

RELY TTM Price Performance



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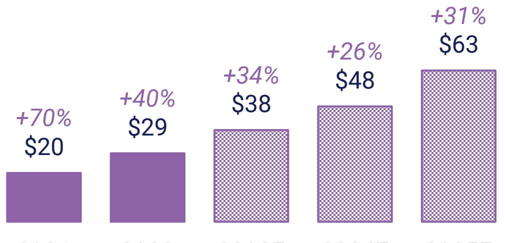
Market Cap (mm):	$2,787	**Beta (Since IPO):**	1.4
52-Wk Range:	$6.66 - $16.26	**Avg. Daily Vol (mm):**	1.1

FINANCIAL TECHNOLOGY PARTNERS

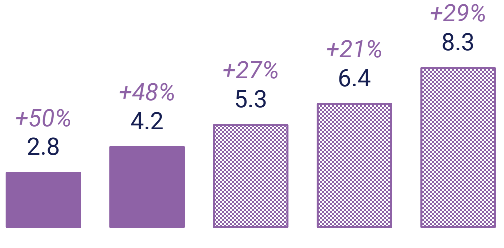
($ in millions, except per active customer or otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

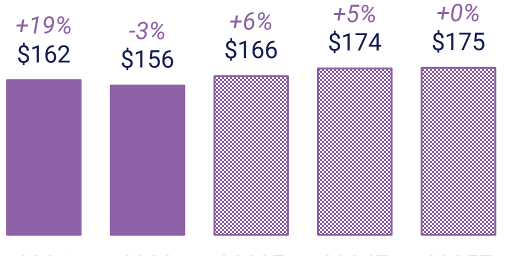
Send Volume (billions)



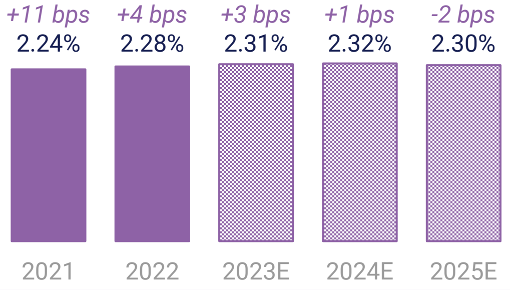
Number of Active Customers (mm)



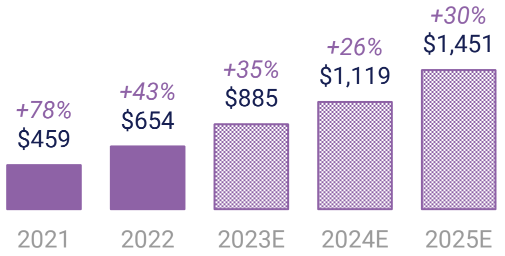
Revenue Per Active Customer[4]



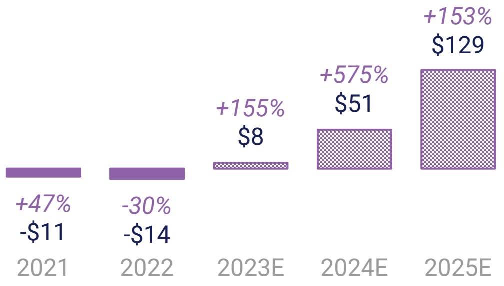
Revenue Yield on Send Volume



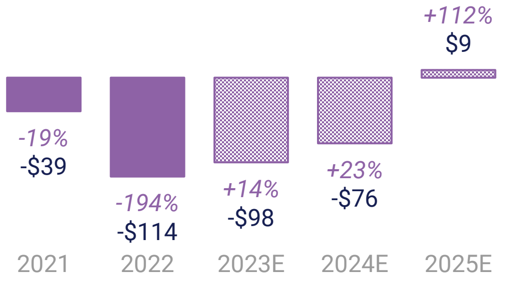
Total Revenue



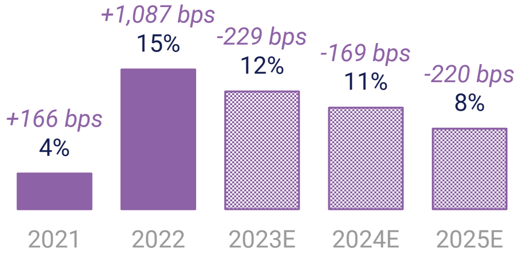
Adjusted EBITDA



Net Income



SBC as a % of Revenue



INDUSTRY KPIs

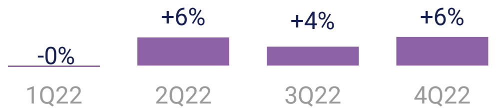
Mexico Remittance Transactions[2] *(Jan 17-Jan 23)*

Mexico Remittance Volume[2] *(Jan 17-Jan 23)*

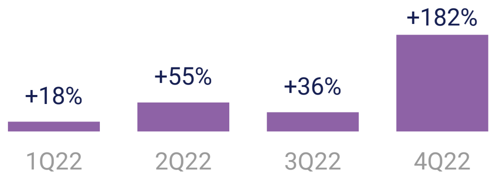
Philippines' Overseas Volume[3] *(Jan 17-Dec 22)*

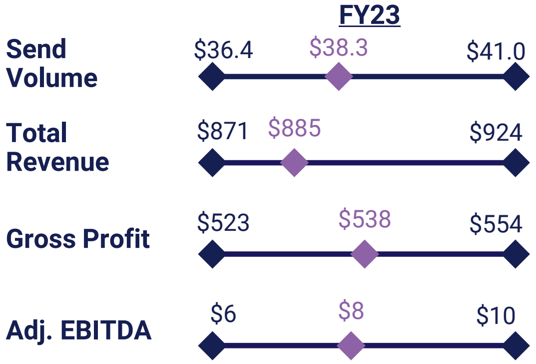
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[1]

Total Revenue



Adj. EBITDA





TOTAL ADDRESSABLE MARKET – GLOBAL

Remittances TAM

Global remittances through both formal and informal channels

$1.6tn

Remitly SAM[5]

2021 World Bank estimate of remittance flows to low and middle-income areas

$589bn

Global Immigrants

Digital remittances currently account for ~15-25% of TAM, but is expected to increase

280mm

FT Partners | Equity Research

Source: Company filings

1) Visible Alpha
2) Mexico: Banxico Economic Information System Workers' Remittances, volume in mms of USD
3) Bangko Sentral NG Pilipinas: Overseas Filipinos' Remittances, in 000's of USD
4) Calculated as FY revenue divided by EOP users
5) Serviceable Addressable Market

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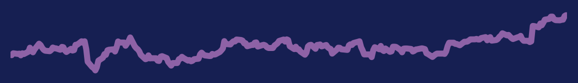
Remitly

RELY TTM Price Performance



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VALUATION CONSIDERATIONS

Relative Valuation:

For less mature FinTech companies that have yet to turn profitable, EV/GP is used for relative valuation to account for costs associated with the core operations of the business (such as fees paid to disbursement partners for Remitly), while also providing a relatively standardized valuation approach across peers. As of March 17th, Remitly trades at a 4.3x NTM EV/GP multiple, identical to its average multiple of 4.3x since its IPO. It trades at a 1.0x premium to the NASDAQ (which is measured on an EV/Sales basis), broadly in-line with this average premium of 0.9x. Relative to peers, Remitly is growing slower than Wise and trades at a modest discount while still growing significantly faster than legacy providers. **If Remitly were to trade in-line with peers when adjusted for growth, it would imply a $19.21 price ($20% upside).** Remittance businesses are often underappreciated, as their volume flows tend to be highly sticky and recurring. That said, the industry has been undergoing a fundamental shift and investors remain uncertain of the long-term operating margins of digitally native remittance providers at-scale. Therefore, Remitly is likely a "show-me" story where positive multiple rerating over time will likely follow consistent outperformance versus consensus expectations.

DCF Valuation:

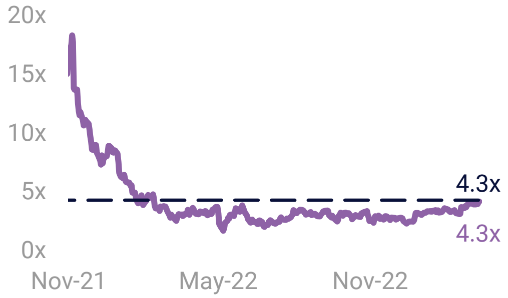
Scenario 1 – Current Price ($16.00, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of 35% in FY23 followed by revenue growth of 26%/22% in FY24/25, respectively. Operating margins are expected to improve 500bps in FY23, reaching profitability in FY26 and over the long-term reaching ~40%. Were shares of Remitly to remain at the current price in 12-months, it would imply a 3x NTM EV/GP based on current consensus estimates of $737mm.

Scenario 2 – Share Gains ($23.07, 44% upside): The second DCF outlines a scenario where Remitly continues to gain share from legacy remittance providers, driving faster customer and revenue growth. In this scenario revenue growth decelerates at a slower rate growing 35%/26%/22% in FY23/24/25, while margin assumptions are held constant (reaching ~45% long-term). This scenario points to a 12-month price of $23 (44% upside) which based on current STM consensus gross profit implies a 5.0x NTM EV/GP multiple.

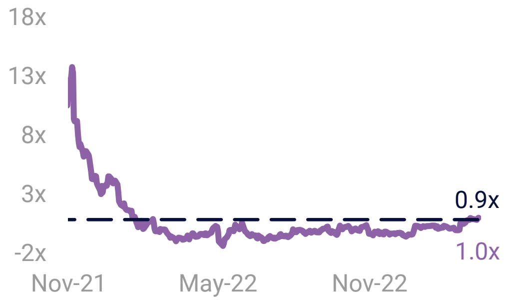
Scenario 3 – Pricing Pressure ($12.04, 25% downside): The third DCF decreases revenue and margin expectations to account for a scenario where the legacy providers offer significant price concessions to retain business. Given the industry's relatively low switching costs, this would negatively impact margins across the industry. This scenario points to a 12-month price of $12 (25% downside), which based on current STM consensus gross profit implies a 2.3x NTM EV/GP multiple in 12-months.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

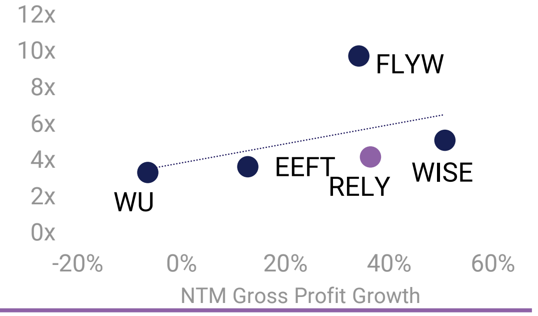
NTM EV/GP & Avg. Since IPO



NTM EV/GP Premium vs. NASDAQ



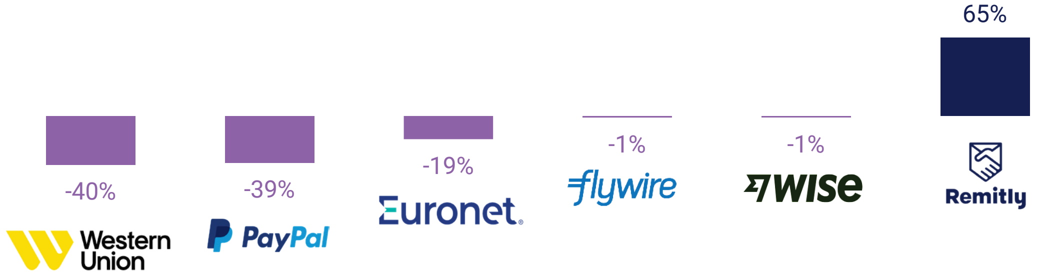
Peer Avg. NTM EV/GP vs. GP Growth



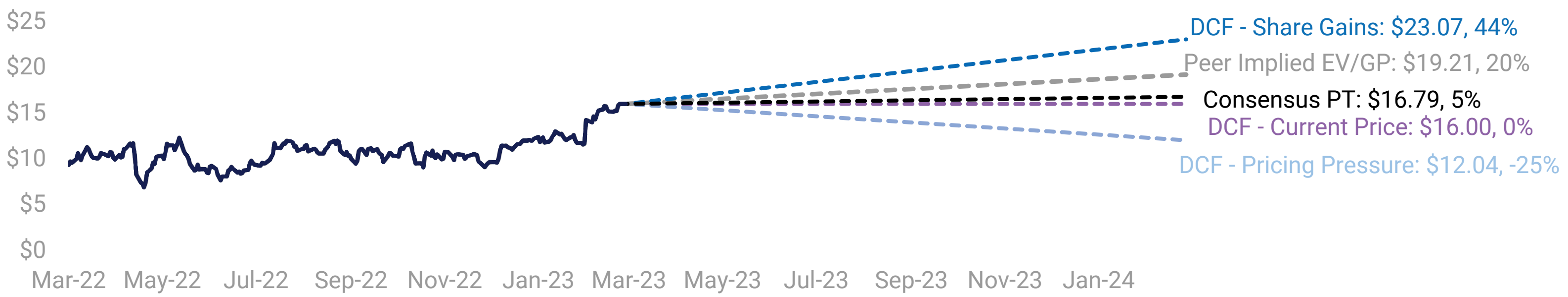
DCF Key Assumptions(2)

10-Yr RFR	4.0%
Cost of Equity	12.5%
Cost of Debt	5.0%
WACC	12.5%
Beta	1.3
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$1,213

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings, FactSet

1) RELY EV/NTM Gross Profit vs. NASDAQ EV/Sales

2) SBC in millions

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Remitly

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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) stronger/weaker send volume driven by either share gains or a stronger macro backdrop and 2) lower CAC driving non-transaction expenses as a percentage of revenue lower. While there are other drivers of Remitly's performance, these represent the most likely area(s) of upside/downside relative to consensus.

Consensus Case:

The average consensus price target for Remitly is $16.79. If shares of Remitly were to trade at this price in 12-months it would imply a 3.6x EV/GP multiple, based on consensus STM gross profit estimates of $737mm. The consensus price target implies 5% upside relative to the current share price.

Upside Case(s):

(+) $22.53, 41% Upside: This scenario assumes that Remitly can grow send volume at a rate quicker than consensus expectations driven by market share gains and a more favorable macroeconomic environment. This implies 39% gross profit growth and 41% upside to the current share price with a 5x NTM EV/GP multiple.

(+-) $20.53, 28% Upside: This scenario assumes the faster send volume growth but also assumes that non-transaction expenses increase as a percentage of revenue relative to expectations of 61%. While this does not impact gross profit growth, the impact is reflected in the lower multiple. This implies 28% upside to the current share price with a 4.5x NTM EV/GP multiple.

(-+) $16.75, 5% Upside: This scenario assumes slower send volume growth but better than expected non-transaction expenses as a percentage of total revenue. This implies 5% upside with a 4.0x NTM EV/GP multiple.

(++) $24.59, 54% Upside: This best-case scenario assumes faster send volume growth and lower non-transaction expenses as a percentage of revenue. This implies 54% upside to the current share price with a 5.5x NTM EV/GP multiple.

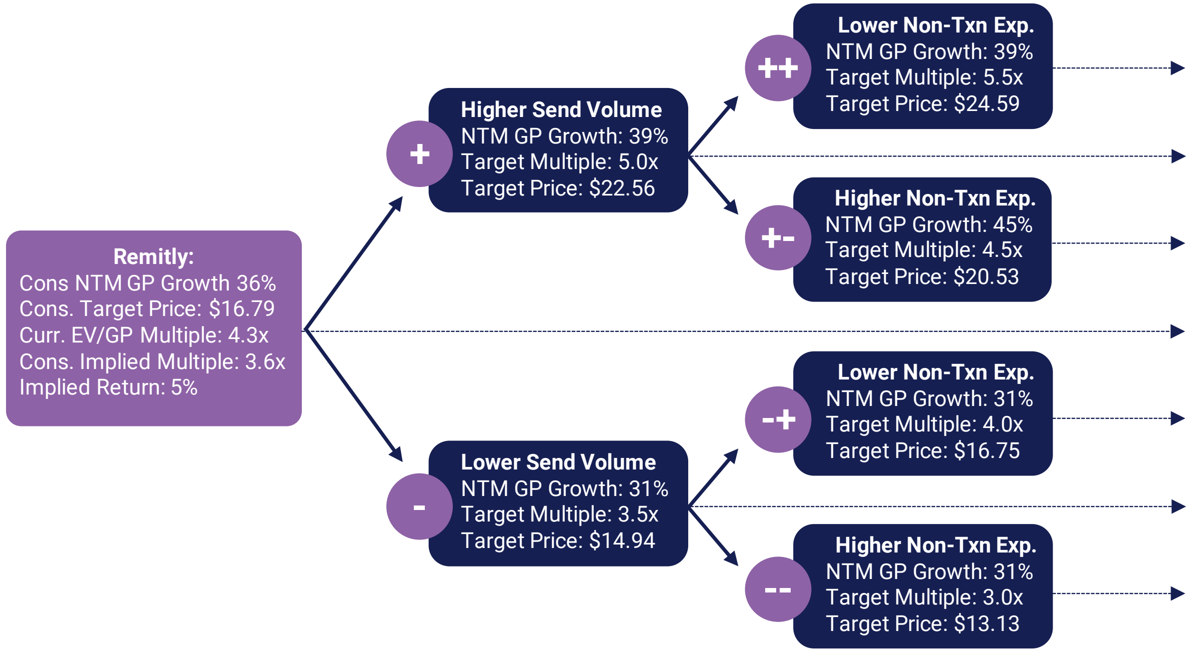
Downside Case(s):

(-) $14.94, 7% Downside: This scenario assumes Remitly grows send volume at a slower rate than consensus expectations, driven by a more competitive environment and decreased send volume per customer. This implies 35% gross profit growth and 7% downside with a 3.5x NTM EV/GP multiple.

(--) $13.13, 18% Downside: This worst-case scenario assumes slower send volume growth and higher non-transaction expenses as a percentage of revenue. This implies 18% downside with a 3.0x NTM EV/GP multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Remitly:
Cons NTM GP Growth 36%
Cons. Target Price: $16.79
Curr. EV/GP Multiple: 4.3x
Cons. Implied Multiple: 3.6x
Implied Return: 5%

\+ **Higher Send Volume**
NTM GP Growth: 39%
Target Multiple: 5.0x
Target Price: $22.56

\- **Lower Send Volume**
NTM GP Growth: 31%
Target Multiple: 3.5x
Target Price: $14.94

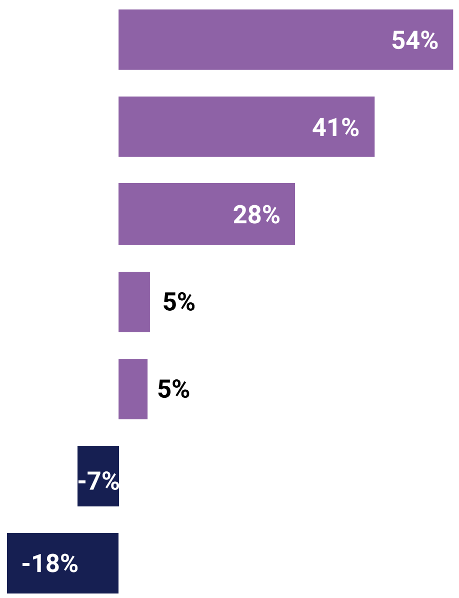
++ **Lower Non-Txn Exp.**
NTM GP Growth: 39%
Target Multiple: 5.5x
Target Price: $24.59

+- **Higher Non-Txn Exp.**
NTM GP Growth: 45%
Target Multiple: 4.5x
Target Price: $20.53

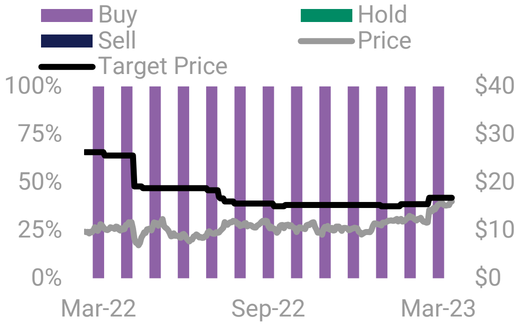
-+ **Lower Non-Txn Exp.**
NTM GP Growth: 31%
Target Multiple: 4.0x
Target Price: $16.75

-- **Higher Non-Txn Exp.**
NTM GP Growth: 31%
Target Multiple: 3.0x
Target Price: $13.13

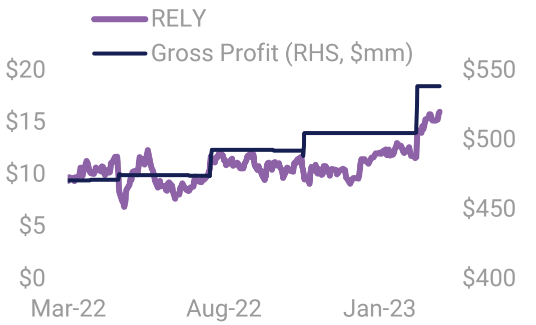
12-Month Price Return



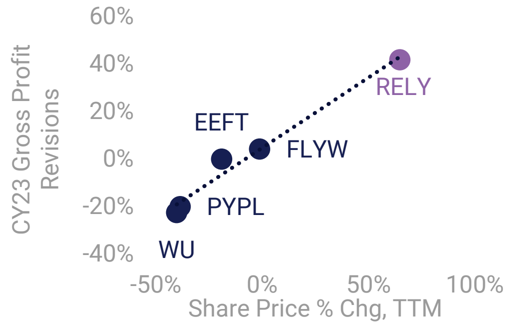
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



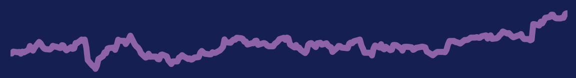
Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

Remitly

RELY TTM Price Performance



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($ in millions, except per share amounts)

4Q22 EARNINGS CALL RECAP

Takeaway: Management hosted its 4Q22 call after delivering top and bottom-line beats. This, coupled with higher-than-expected FY23 guidance, drove shares up 9% after hours. Remitly has benefited from a less competitive advertising environment helping to drive strong net adds and operating leverage. If Remitly can drive scale, while maintaining its healthy LTV/CAC, it should drive positive multiple rerating over time.

Results Recap: Remitly reported 4Q22 total revenue of $191mm (+41% YoY), 6% above consensus, driven by stronger than expected net adds and a higher take rate. Transaction expenses were $72mm, decreasing 410bps as a percentage of revenue YoY, while non-GAAP marketing expenses of $40mm decreased 660bps as a percentage of revenue YoY. Other non-GAAP operating expenses increased to 38% of revenue from 36% in 4Q21, primarily driven by higher T&D, which was 270bps higher as a percentage of revenue YoY. Adjusted EBITDA totaled $7.48mm (vs. consensus calling for a loss of -$9.09mm), its first quarter of adjusted EBITDA profitability since 3Q21. Net income of -$19.4mm came in better than consensus of -$34.7mm but was slightly worse YoY vs. net income of -$16.6mm in 4Q21. SBC compensation grew to $27.4mm (representing 14% of revenue in 4Q22 up from 6% in 4Q21), increasing by ~$19mm YoY and ~$1.7mm QoQ.

Guidance Recap: Remitly provided FY23 guidance for total revenue of $860mm - $880mm (3% above the consensus $848mm at the midpoint) and for adjusted EBITDA to be between $0mm and $10mm compared to consensus of -$1.1mm, with management expecting to report a GAAP net loss for FY23. Management provided detail that its FY23 guidance implies a stable macro and FX environment (relative to 4Q22), sustained marketing efficiencies in a relatively stable advertising market, and improved scale efficiencies (while continuing to make investments in product enhancements).

Incremental From The Call:

- **Transaction related expense:** Transaction related expenses in the quarter dropped to 38% of revenue, a 400bps improvement YoY and 300bps improvement sequentially. Management attributed this decline to significantly lower fraud loss rates in the fourth quarter. Over the medium to long-term management expects transaction related expense leverage will be driven by more favorable partner integration costs and better payment processing terms as well as improvements in risks and fraud management systems. When comparing this across peers, transaction expenses + customer support and operations accounts for 48% of RELY revenue vs. WU where costs of services made up 62% of revenue in 4Q22. Separately, transaction expenses at 38% of revenue at Remitly was more comparable with Wise (cost of sales were 36% of F2Q revenue). This fundamental difference in economic structure between digital remittance providers vs. legacy providers will likely continue to drive share gains.
- **Non-transaction related:** Non-transaction expenses also saw significant improvement, with adjusted marketing expense as a percentage of revenue declining 660bps YoY and adjusted G&A declining 150bps YoY, though these decreases were partially offset by an increase in T&D of 270bps as a percentage of revenue. According the management, the lower marketing expenses were attributed to CAC efficiencies and localized marketing, while also benefiting from a less competitive advertising market. Underlying managements FY23 expectations is the expectation for sustained marketing efficiencies and a relatively stable advertising market.
- **Narrowed Product Focus:** On the call, Remitly announced it would be sunsetting its Passbook product despite the product gaining traction and overall usage increasing. This was being done to redeploy resources to higher returning investments targeted at its core remittance customer. Over the long-term, this is likely to be a prove to be a prudent redeployment of capital as it will allow Remitly to broaden its financial services offering at a lower cost of acquisition through cross-selling products across the core customer base.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Cons.	Abs.▲	%▲
Send Volume (billion)	**$8.1**	**$8.2**	**-$0.06**	**-1%**
growth (%, yoy)	*35%*	*37%*		
Active Users	**4.2**	**4.0**	**$0.20**	**5%**
growth (%, yoy)	48%	42%		
Send Volume per Active User (Actual)	**$1,929**	**$2,040**	**-$111**	**-5%**
growth (%, yoy)	-9%	-4%		
Total Revenue	**$191**	**$180**	**$11.5**	**6%**
growth (%, yoy)	*41%*	*33%*		
Revenue Less Transaction Expenses	**$119**	**$104**	**$14.8**	**14%**
growth (%, yoy)	*51%*	*32%*		
Marketing Expenses	**$43.2**	**$50.4**	**-$7.2**	**-14%**
growth (%, yoy)	13%	32%		
Operating Expenses	**$214**	**$215**	**-$1.3**	**-1%**
growth (%, yoy)	*41%*	*42%*		
Operating Income	**-$22.9**	**-$35.6**	**$12.7**	**36%**
growth (%, yoy)	*-38%*	*-115%*		
Adj. EBITDA	**$7.48**	**-$9.09**	**$16.6**	**NA**
Adj. EBITDA margin (%)	*4%*	*-5%*	898bps	
Net Income	**-$19.4**	**-$34.7**	**$15.3**	**44%**
Net income margin (%)	*-10%*	*-19%*	915bps	

FY23 Guidance	New	Cons.	+/-
Total revenue	**$860-$880**	**$848**	**3%**
% growth	*32%-35%*	*30%*	
Adjusted EBITDA	**$0-$10**	**-$1.1**	
Adj. EBITDA margin (%)	*0%-1.1%*	*NA*	

Source: Company filings; FactSet

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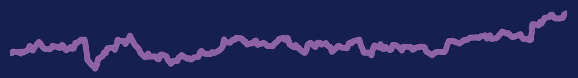
Remitly

RELY TTM Price Performance



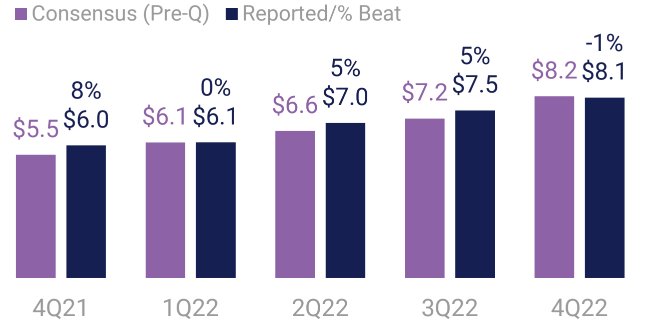
Price as of 3/17/2023:	$16.00	**Shares Out (mm):**	174
Market Cap (mm):	$2,787	**Beta (Since IPO):**	1.4
52-Wk Range:	$6.66 - $16.26	**Avg. Daily Vol (mm):**	1.1

FINANCIAL TECHNOLOGY PARTNERS

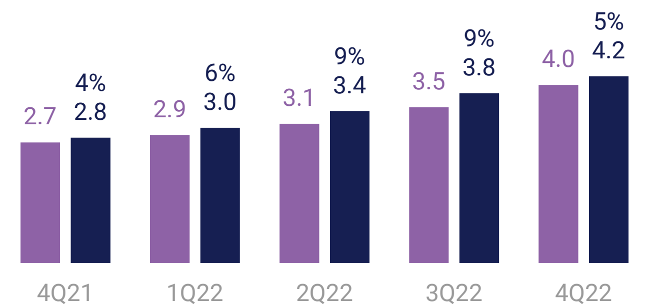
($ in millions, except per active user or otherwise noted)

REPORTED VS. CONSENSUS

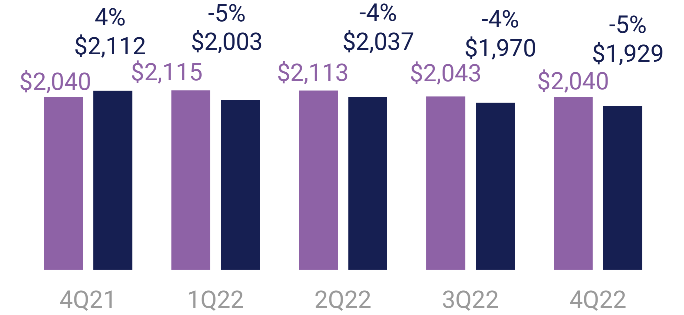
Send Volume ($bn)



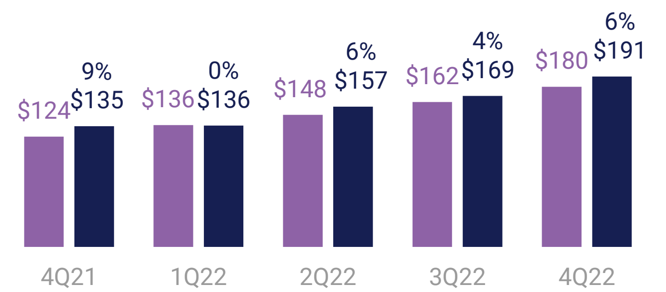
Active Users (mm)



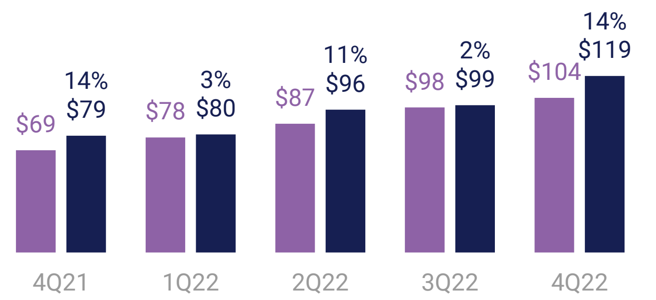
Send Volume per Active User



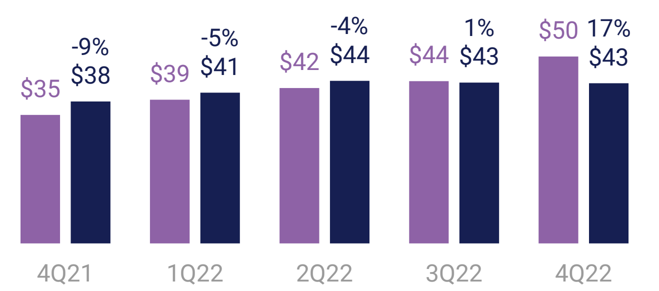
Total Revenue



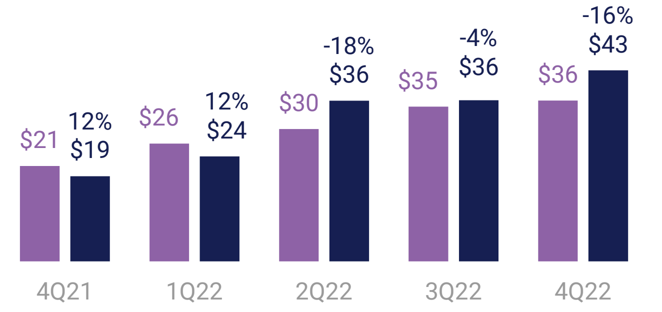
Revenue Less Transaction Expenses



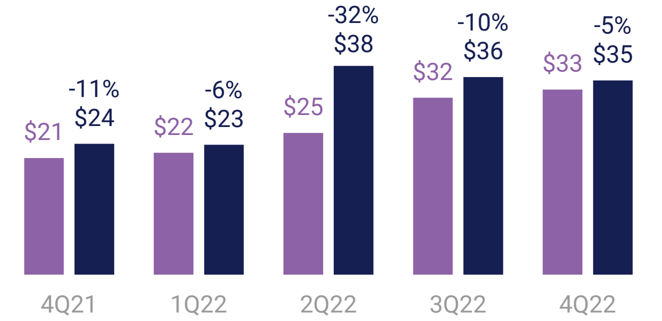
Marketing Expense



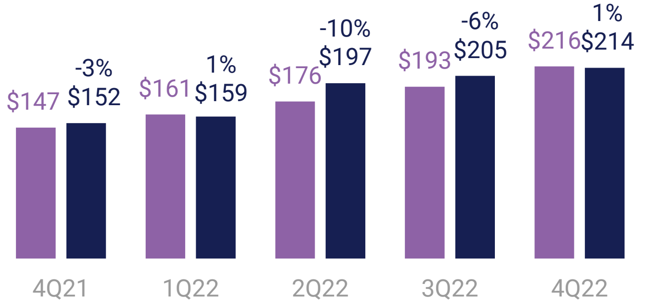
Technology and Development Expense



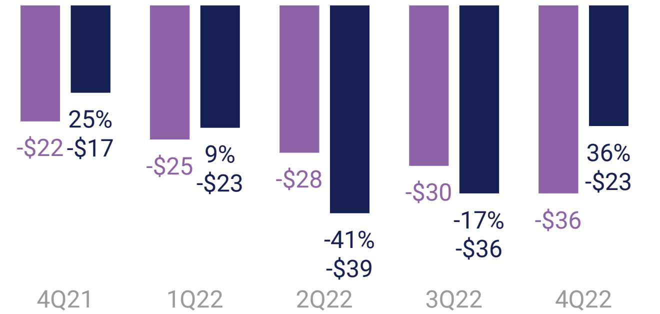
General & Administrative Expense



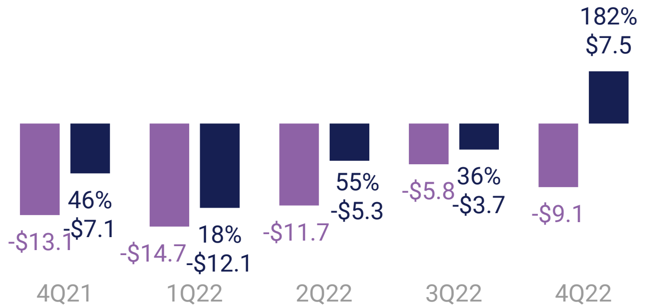
Operating Expense



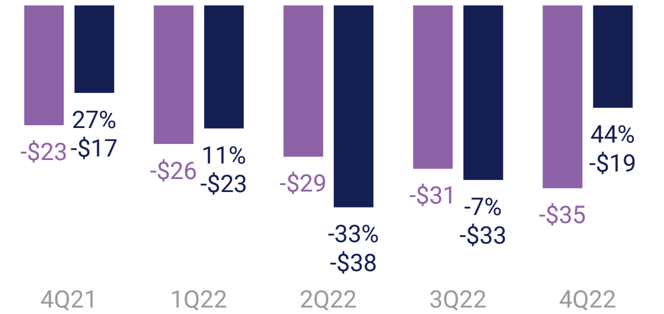
Operating Income



Adjusted EBITDA



Net Income



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FT Partners | Equity Research

Remitly

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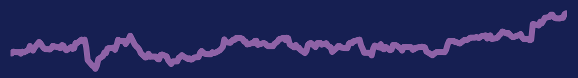

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FINANCIAL TECHNOLOGY PARTNERS

($ in millions)

1Q23 EARNINGS OUTLOOK

Remitly is expected to report 1Q23 earnings May 4th after market close.

What's In Focus:

The areas of focus going into 1Q23 for Remitly are unlikely to change vs. 4Q22. Predominately investors have remained focused on macro-environment/top-line growth and expenses (particularly CAC). On the macro front, FX rates across Remitly's primary corridors have remained relatively stable. On a corridor basis, remittance inflows to Mexico were up 12% YoY in January. Volume inflows to Bangladesh were up 15%/4% YoY in January/February, respectively. Remittance inflows to Pakistan in January declined 9% YoY. Note that revenue from remittances sent to India, Philippines and Mexico represented 65% of revenue for FY22 however, data from India and the Philippines through 1Q are not yet available. While Remitly is subject to the broader volume trends in the remittance market, results in the quarter are more likely to be driven by market share gains and expense management.

Estimates:

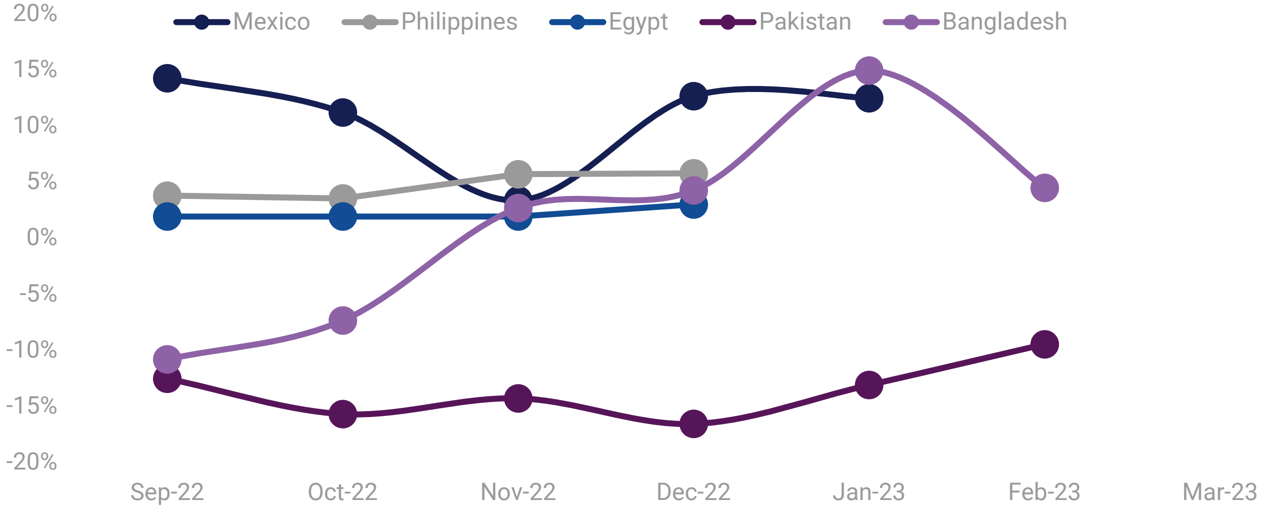
- **KPI's:** Consensus has revised 1Q23 active customer expectations up 2% to 4.3mm customers (vs. 4.2mm prior to 4Q22 earnings). Meanwhile consensus for send volume has also increased 1% to $8,391mm vs. 8,299mm pre-print. Consensus for send volume per customer declined to $1,957 (from $1,977 pre-print), modestly above 4Q22 send volume per customer of $1,929.
- **Revenue:** Consensus for 1Q23 total revenue has been revised up 3% to $193mm, implying 42% YoY growth (a modest acceleration from 41% YoY growth in 4Q22 vs. a 19% easier comp). The volume/revenue forecasts implies a take rate of 2.30%, 7bps lower than 4Q22 but 7bps higher than 1Q22.
- **Expenses:** Consensus for transaction expenses calls for transaction expenses as a percentage of total revenue to be 40%, an increase from 38% in 4Q22 but a ~100bps decrease from 41% in 1Q22. There is likely room for further revision on transaction expenses given that 1Q has typically represents the high-water mark for transaction expenses as a percentage of revenue. On a sequential basis 1Q transaction expenses as a percentage of sales has tended to be in-line with 4Q (45% in both 4Q20/1Q21, 42%/41% in 4Q21/1Q22). Therefore, the consensus implied ~250bps sequential step up in transaction expenses as a percentage of revenue may prove overly conservative and may represent an area of outperformance in the quarter.
- **Bottom-Line:** Expectations for adjusted EBITDA in the quarter have been revised up to -$0.78mm from -$3.37mm. FY23 estimates for adjusted EBITDA are now $7.54mm, which is towards the high-end of management's guide for $0mm – $10mm.

We note that consensus for Remitly does have a significant higher skew as the highest estimate to FY total revenue is $923mm, 6% above the midpoint of management's guidance. When excluding this high-end estimate, consensus for FY total revenue would be $875mm (vs. $885mm) which is towards the high-end of guidance for $860mm – $880mm.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

1Q22	2Q22	3Q22	4Q22
• Revenue in line with consensus; ~21% beat on adj. EBITDA • Raised FY revenue guidance 0.8% at the midpoint, reaffirmed EBITDA guide	• ~6% beat on revenue with ~53% beat on adj. EBITDA • Raised FY revenue/adj. EBITDA guide ~2%/7% at the midpoints	• ~4% beat on revenue • Active customers +49% YoY • Raised FY revenue guidance 1.6% at the midpoint, reaffirmed EBITDA guide	• ~6% beat on revenue • Active customers +48% YoY, a 5% consensus beat • Revenue less transaction expenses margin improved to a record ~62%

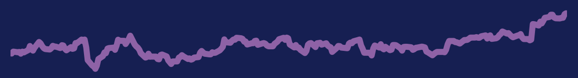
REMITTANCE INFLOWS VOLUME CHANGE TO SELECT CORRIDORS



Source: Company filings

Remitly

RELY TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

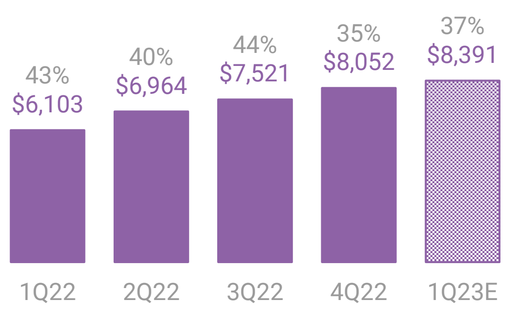
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

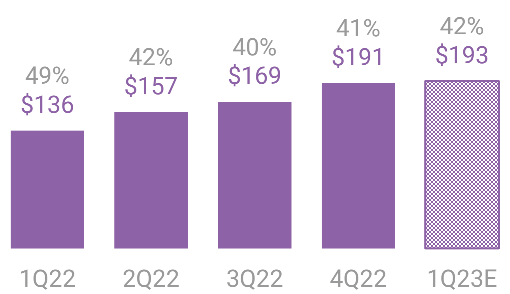
	Low	Average	High
Send Volume ($bn)	**$8.0**	**$8.4**	**$9.1**
growth (%, yoy)	*31%*	*37%*	*49%*
Send Volume Per Active User (actual $'s)	**$1,863**	**$1,957**	**$2,062**
growth (%, yoy)	*-7%*	*-3%*	*2%*
Active Users	**3.9**	**4.3**	**4.6**
growth (%, yoy)	*28%*	*41%*	*50%*
Total Revenue	**$187**	**$193**	**$204**
growth (%, yoy)	*37%*	*42%*	*50%*
Total Cost of Revenue	**$74.0**	**$77.6**	**$81.7**
growth (%, yoy)	*32%*	*38%*	*45%*
Revenue Less Transaction Costs	**$112**	**$117**	**$122**
growth (%, yoy)	*41%*	*47%*	*54%*
Operating Expenses	**$217**	**222.3**	**$231**
growth (%, yoy)	*36%*	*40%*	*45%*
Operating Income	**-$35.0**	**-$29.0**	**-$25.6**
Operating Margin (%)	*-19%*	*-15%*	*-13%*
Adjusted EBITDA	**-$4.34**	**-$0.78**	**$2.99**
Adjusted EBITDA Margin (%)	*-2%*	*0%*	*1%*
Net Income	**-$34.0**	**-$27.1**	**-$22.1**
Net Income Margin (%)	*-18%*	*-14%*	*-11%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

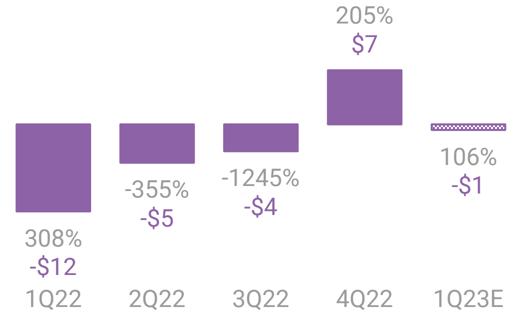
Send Volume



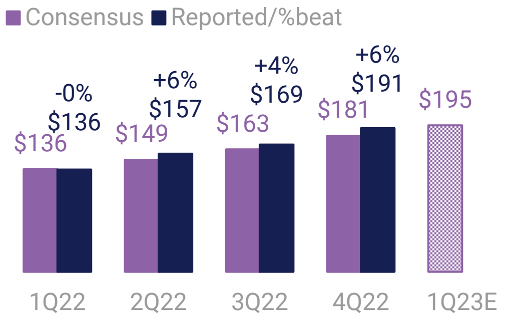
Revenue



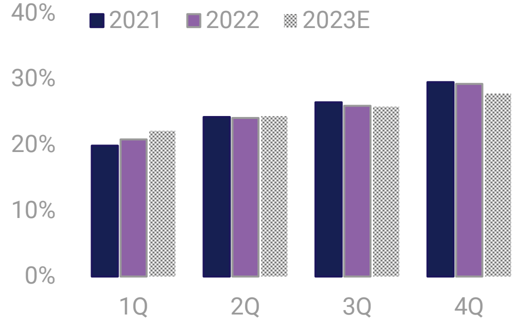
Adjusted EBITDA



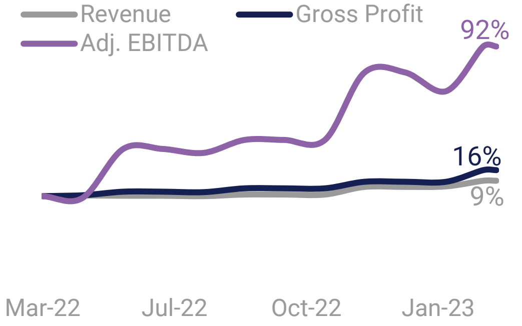
Revenue Cons. vs. Reported



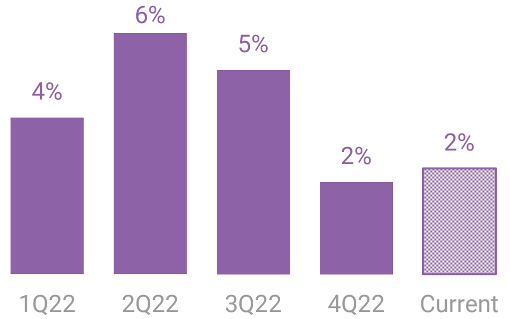
Revenue Seasonality



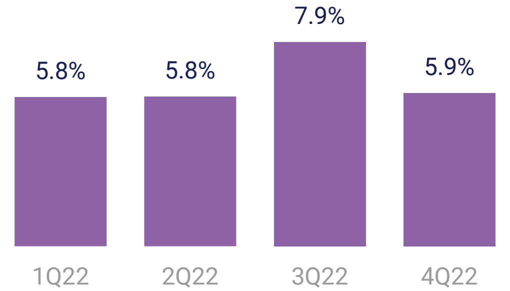
1Q23 Cons. Revisions



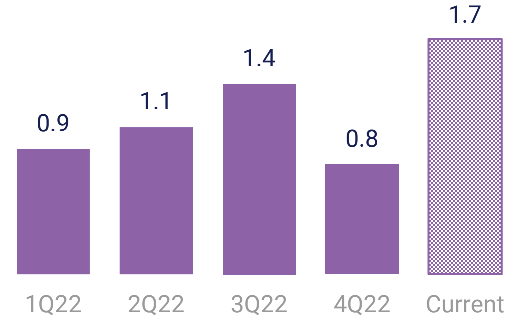
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings ADTV(1)



Source: Company filings, Factset

1) Measured as ADTV over the prior 7-day period

Remitly

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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

Corridors:

1) Can management discuss trend differences between Remitly's largest markets (Mexico, Philippines, India)?
2) Remitly has reached 4,300 corridors. Adding corridors has helped drive new customer growth. Is there a point where adding incremental corridors is no longer a significant source of customer acquisition, and how long until Remitly reaches that limit?

Customers:

3) How much of consumer behavior is impact by FX rates? Is comping over the strong U.S. dollar in FY23 expected to be a tailwind?
4) Who is Remitly primarily taking share from? Are these customers largely coming from legacy channels or other digital channels?

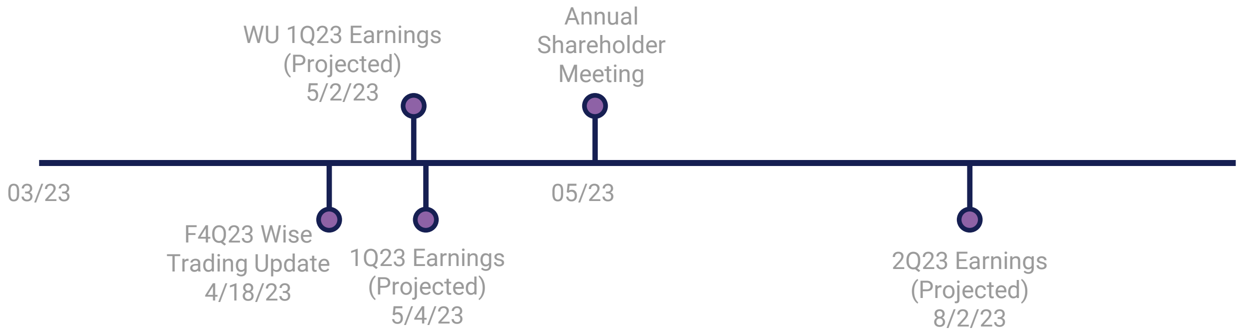
Products:

5) How does the unit economic profile of transactions differ based on funding or disbursement method?
6) The acquisition of Rewire represents diversification of the business considering Rewire had previously driven revenue through stored value products. Is there a plan here to roll-out more traditional financial products?
7) Can management talk about sunsetting Passbook and what the new product strategy looks like?

Fundamentals:

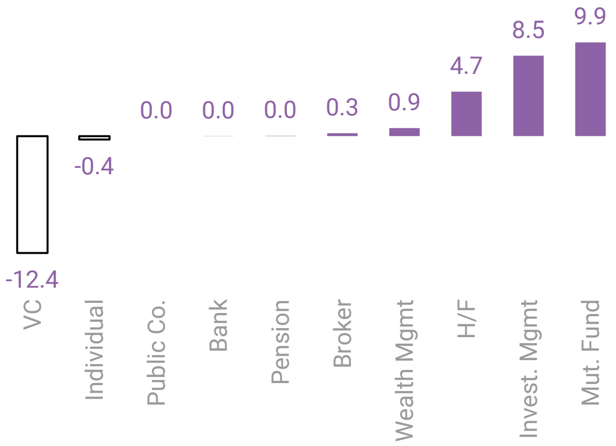
8) Remitly has been able to reduce CAC while simultaneously delivering record customer growth. Are these lower CAC levels sustainable while continuing to drive strong net adds?
9) How much of the improvement in S&M has been driven by the less competitive advertising market vs. marketing efficiencies?
10) Are there any updates on long-term EBITDA margins? What factors are expected to drive margin expansion?

POTENTIAL CATALYSTS

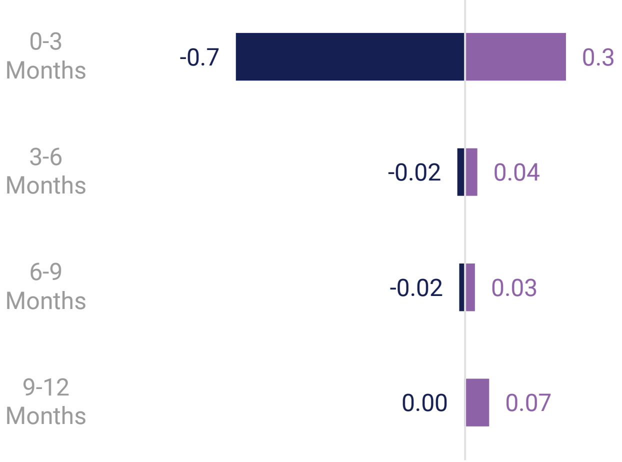


SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



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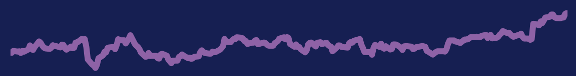

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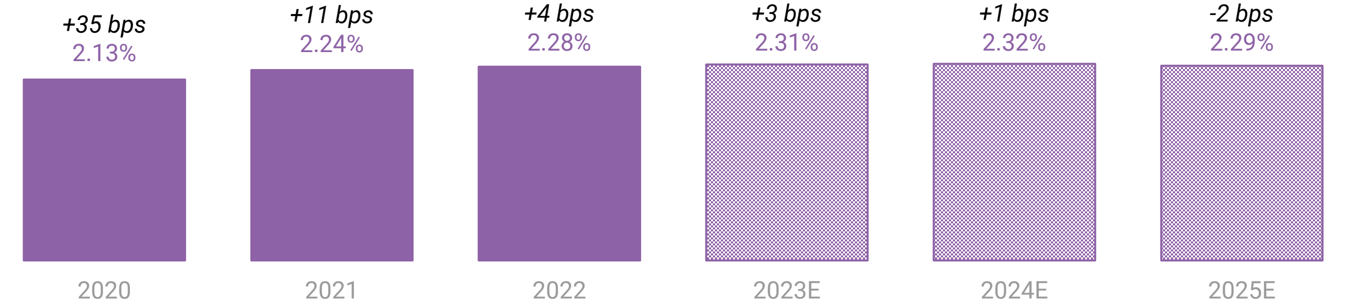
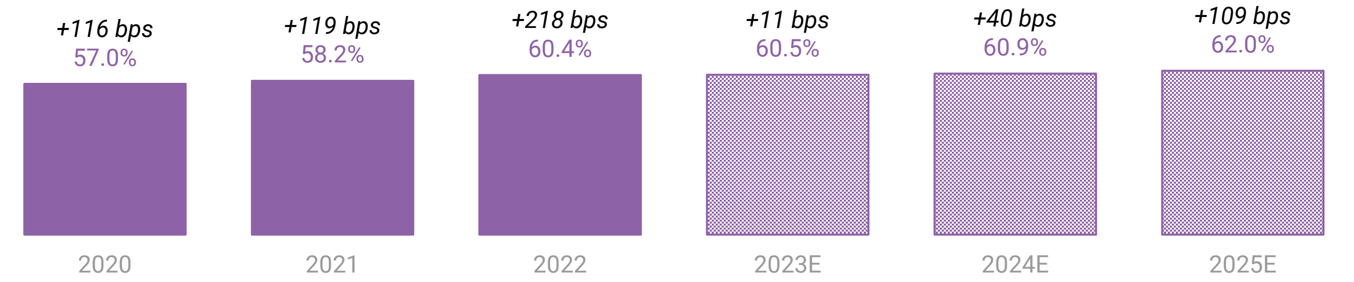
COMPANY RATIOS/MARGIN ANALYSIS

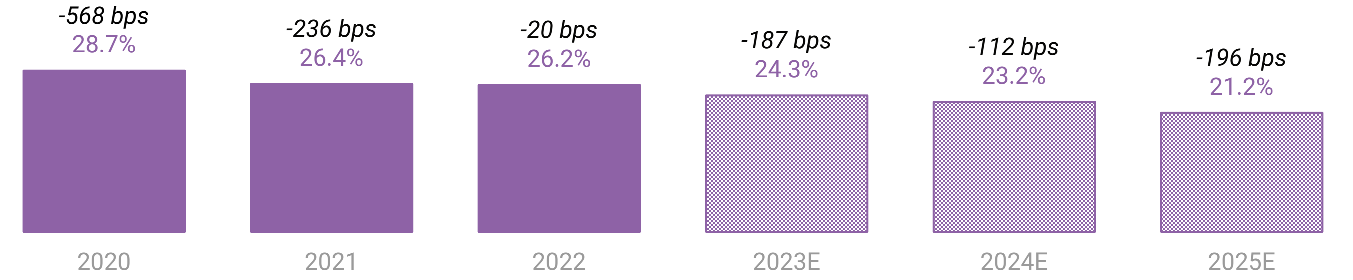
Revenue Yield on Send Volume (% of volume)



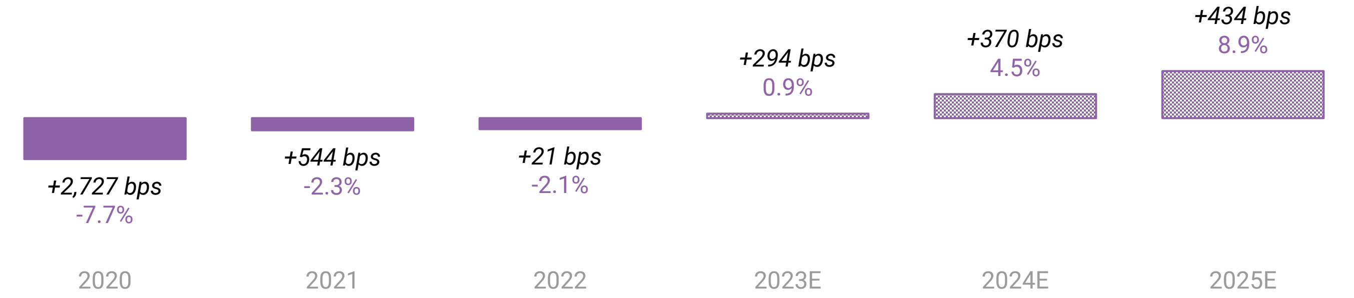
Revenue Less Transaction Costs Margin



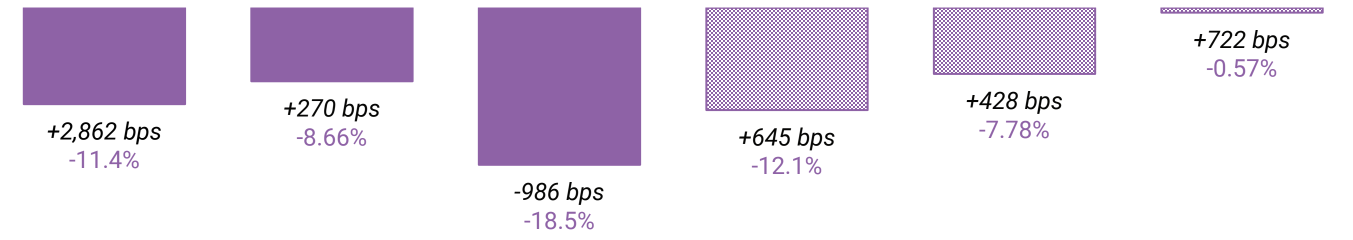
Marketing Expenses (% of Revenue)



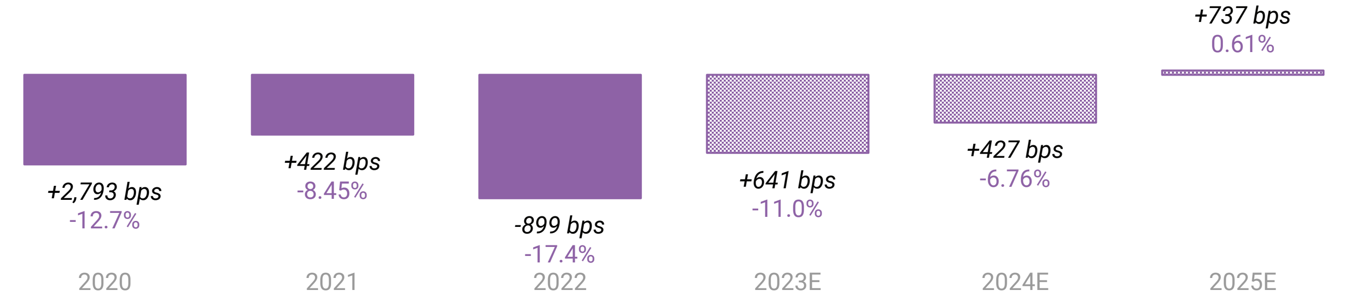
Adj. EBITDA



Operating Margin



Net Income Margin



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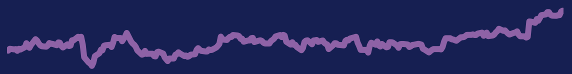

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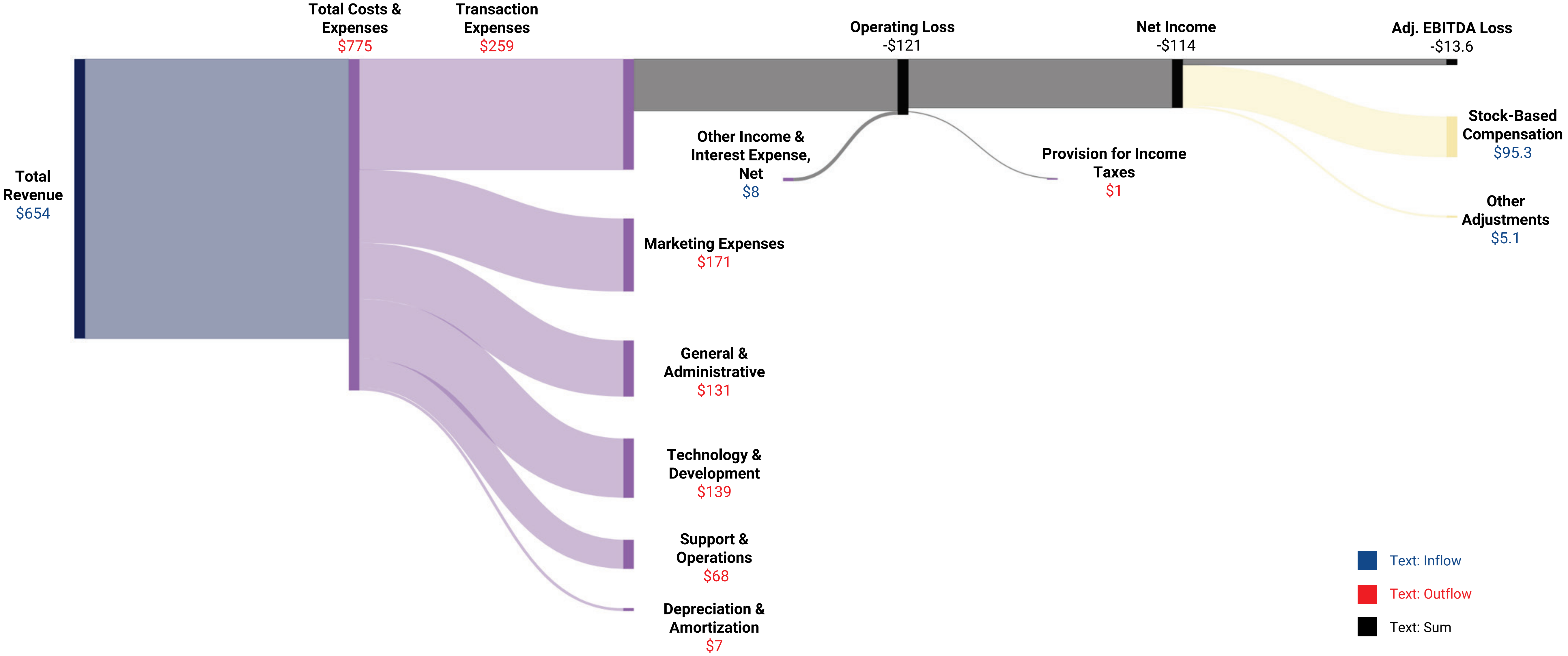
FINANCIAL
TECHNOLOGY
PARTNERS

($ in millions)

P&L VISUALIZATION – TTM



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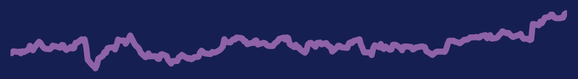

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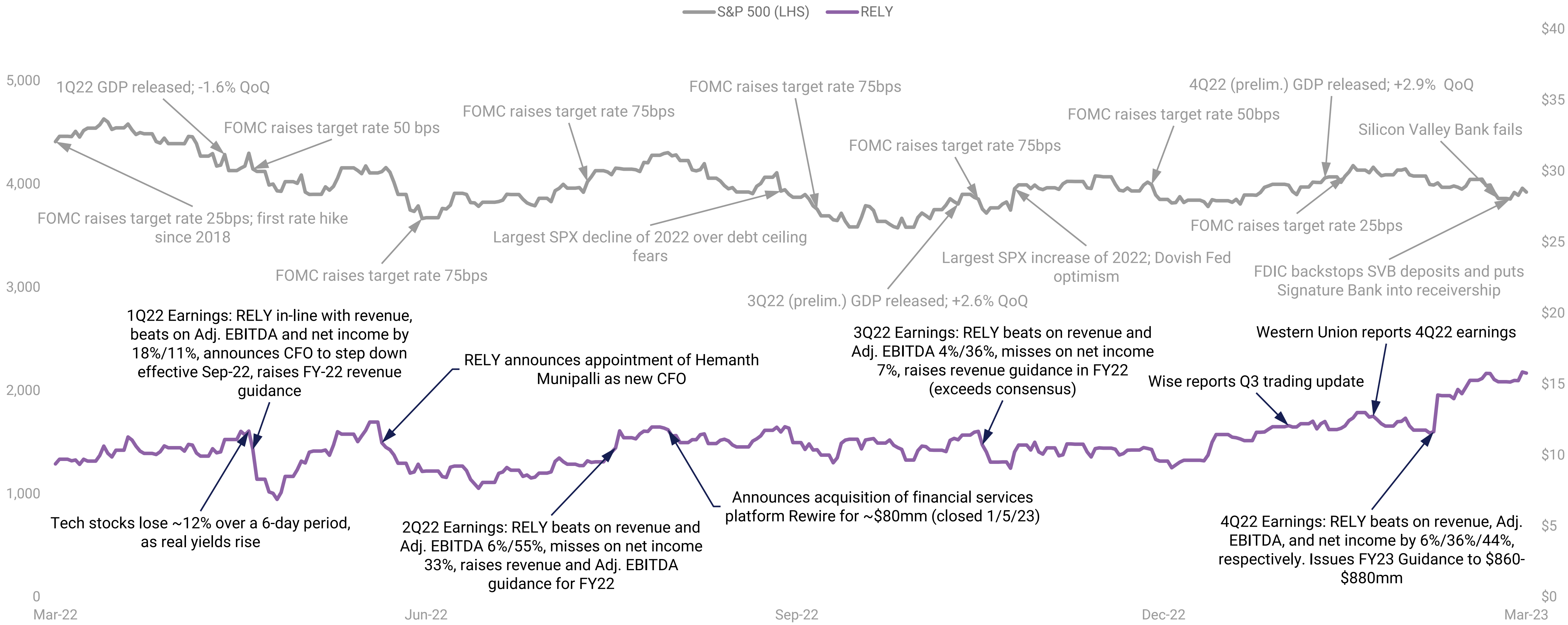
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 25bps; first rate hike since 2018

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

4Q22 (prelim.) GDP released; +2.9% QoQ

Silicon Valley Bank fails

FOMC raises target rate 25bps

FDIC backstops SVB deposits and puts Signature Bank into receivership

1Q22 Earnings: RELY in-line with revenue, beats on Adj. EBITDA and net income by 18%/11%, announces CFO to step down effective Sep-22, raises FY-22 revenue guidance

Tech stocks lose ~12% over a 6-day period, as real yields rise

RELY announces appointment of Hemanth Munipalli as new CFO

2Q22 Earnings: RELY beats on revenue and Adj. EBITDA 6%/55%, misses on net income 33%, raises revenue and Adj. EBITDA guidance for FY22

Announces acquisition of financial services platform Rewire for ~$80mm (closed 1/5/23)

3Q22 Earnings: RELY beats on revenue and Adj. EBITDA 4%/36%, misses on net income 7%, raises revenue guidance in FY22 (exceeds consensus)

Wise reports Q3 trading update

Western Union reports 4Q22 earnings

4Q22 Earnings: RELY beats on revenue, Adj. EBITDA, and net income by 6%/36%/44%, respectively. Issues FY23 Guidance to $860-$880mm

Source: Company filings; Factset

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Non-Securities Related Client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as non securities related clients: Remitly*

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FT Partners Equity Research

Robinhood

ROBINHOOD PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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Matthew.O'Neill@ftpartners.com (347) 614-2481 *(AC) | FTP Securities LLC is a FINRA registered broker dealer (www.finra.org) and member SIPC (www.sipc.org). The firm and its reps can be found here: FTP SECURITIES LLC - BrokerCheck (finra.org) | March 20, 2023
Please refer to page 270 for important disclosures.

Robinhood


HOOD TTM Price Performance

Price as of 03/17/23:	$9.19	**Shares Out (mm):**	896
Market Cap (mm):	$8,236	**Beta (Since IPO):**	1.6
52-Wk Range:	$6.81 - $16.49	**Avg. Daily Vol (mm):**	7.3

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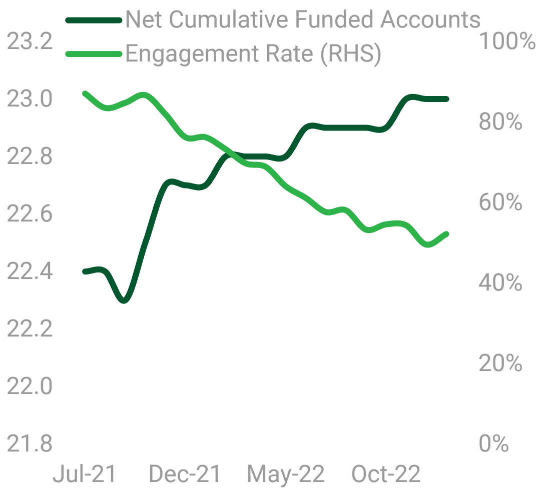
COMPANY OVERVIEW

Founded in 2013, Robinhood's goal is democratizing investing with a user-friendly, mobile first approach. Robinhood originally differed from incumbent brokerages by providing commission-free services, allowing users to purchase stocks at no cost. Robinhood instead monetized through payment for order flow (PFOF) a system of compensation based on directing orders to particular market makers. Robinhood also generates revenue through subscription tiers, and interest on client assets.

While the market is now more competitive, Robinhood has expanded its suite of products offered including crypto, retirement accounts, stock lending, savings accounts, etc.

NCFA & ENGAGEMENT(1)



KEY DEBATES

1. **Crypto Winter:** The ongoing crypto winter/FTX fallout could have several implications as 1) consensus expects ~9% of HOOD's revenue to come from Crypto trading in FY23 and 2) the potential liquidation of HOOD shares that were owned by FTX (~7.4% of S/O), though Robinhood's board has cleared the company to pursue said shares. However, we see opportunity with the current crypto environment, as recent events may drive consumers towards more regulated exchanges – despite higher costs. Notably, on February 27th Robinhood announced the SEC issued a subpoena related to its crypto operations.

2. **Active Accounts:** HOOD has seen moderation in account growth in 2022 with funded accounts growing ~1% YoY in 4Q22. Additionally, activity rates have dropped, with MAU as a percent of EOP accounts declining to 50% in 4Q22. The current crypto/equities market has been a headwind to account growth/activity rate. There are concerns that further deterioration in market conditions could drive a greater portion of HOOD's client base to be inactive, further impacting ARPU. Additionally, there are concerns that while Robinhood is managing expenses, this is impacting customer acquisition.

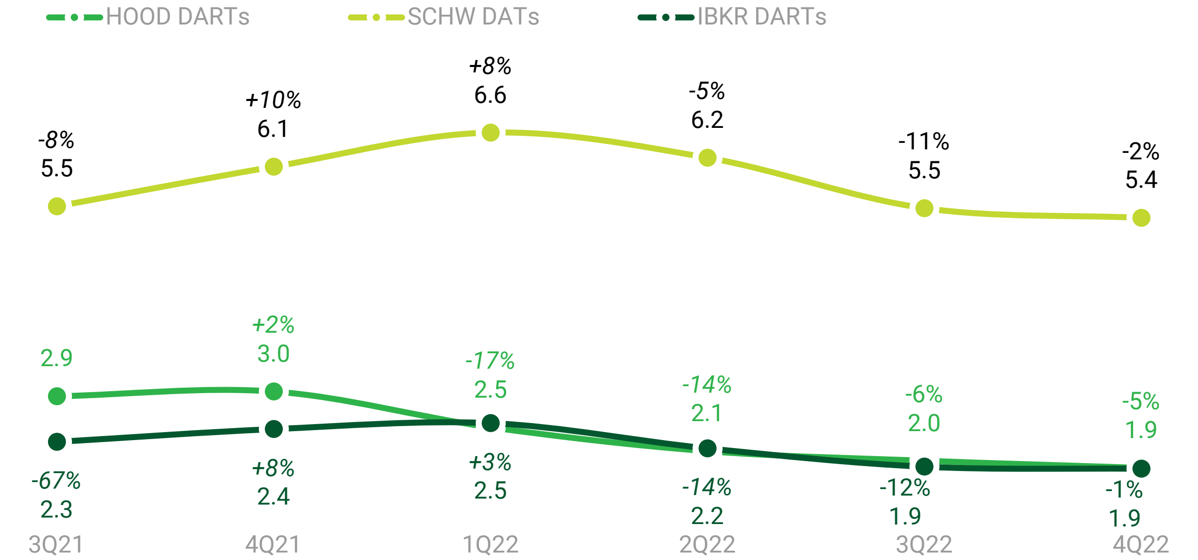
3. **Expenses:** Robinhood has committed to decreasing its expense base as activity levels and account growth has slowed. These costs cuts have primarily come in the form of reducing headcount with employees decreasing from 3,900 in 1Q22 vs. 2,300 in 4Q22. Management has provided guidance for total OpEx to decrease 3% (at the mid-point of its guidance) in FY23. Investors will likely remain keenly focused on the expense outlook for FY23 and the flow through of the announced headcount reductions.

REVENUE MODEL

Robinhood's revenue model consists of the following:

- **Transaction-based Revenue (60% of TTM revenue):** Revenue earned from routing customer orders for options, cryptocurrencies, and equities to market makers. When customers place orders for an asset, Robinhood routes these orders to market makers and receives compensation. With respect to equities and options trading, this is commonly known as payment for order flow ("PFOF"). For equities, the fees Robinhood receives are typically based on the size of the publicly quoted bid-ask spread for the security being traded. For options, Robinhood's fee is on a per contract basis based on the underlying security. In the case of cryptocurrencies, Robinhood's rebate is a fixed percentage of the notional order value. With respect to cryptocurrency trading, Robinhood receives a "transaction rebate" based on a fixed percentage of the notional order value.
- **Net Interest Income (31% of TTM revenue):** Robinhood earns and incurs interest revenues/expenses on securities lending transactions by lending shares that are held as collateral for margin loans extended to users. Robinhood also earn interest revenues on margin loans to users, as well as on segregated cash, cash and cash equivalents, cash sweep, and deposits with clearing organizations. Robinhood incurs interest expenses in connection with its revolving credit facilities.
- **Other Revenue (9% of TTM revenue):** Consisting primarily of Robinhood Gold subscriptions, proxy rebate revenues and Automated Customer Account Transfer fees (ACATS) for the facilitating of transfers to other broker-dealers.

DAILY AVERAGE TRADES/REVENUE TRADES (% QoQ)



Source: Company filings
1) Engagement Calculated as MAUs/NCFA

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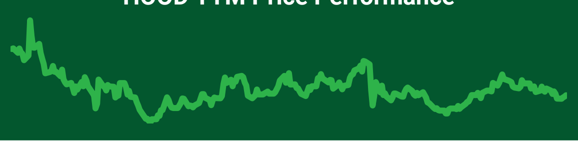
Robinhood

HOOD TTM Price Performance



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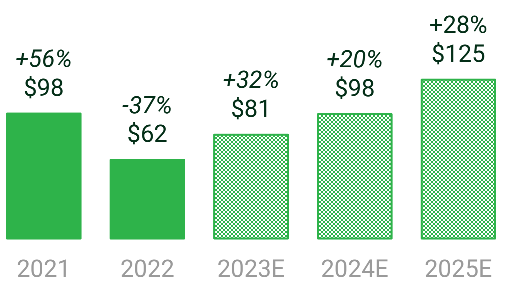
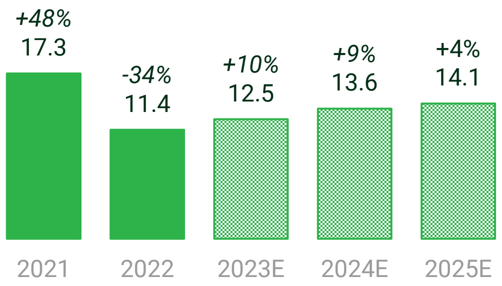
HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

($ in millions, except where otherwise noted)

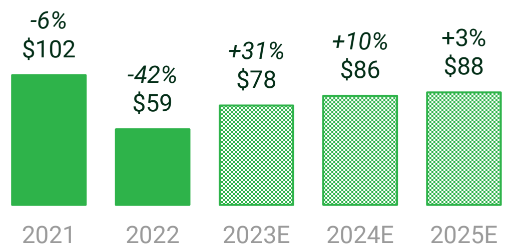
Assets Under Custody (tn)



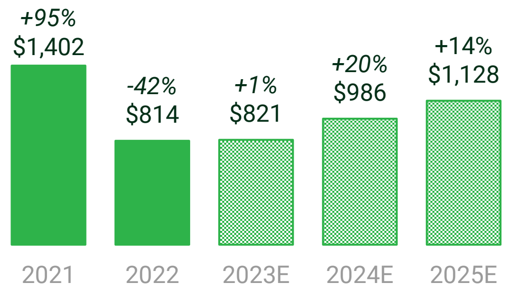
Monthly Active Users (mm)



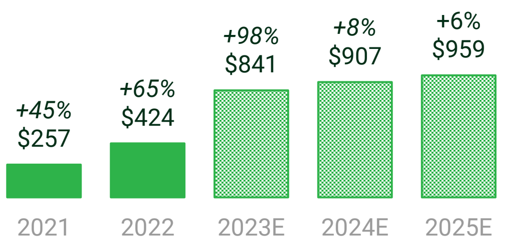
Average Revenue Per User



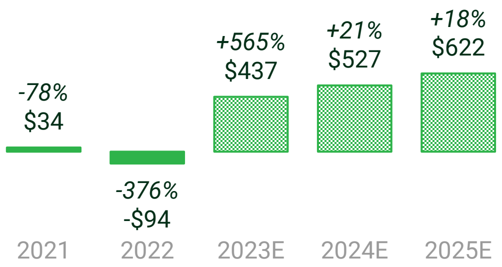
Transaction-based Revenue



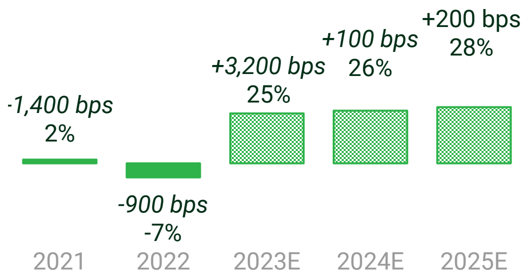
Net Interest Revenue



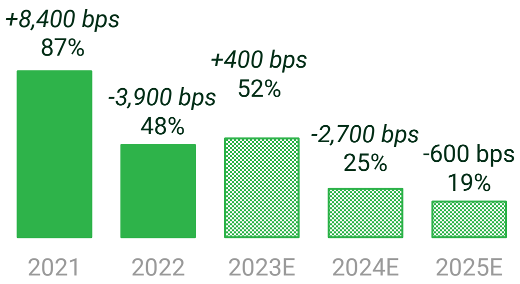
Adjusted EBITDA



Adjusted EBITDA Margin

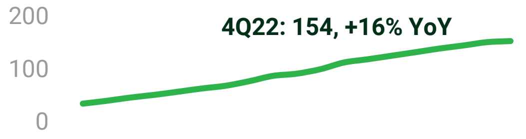


SBC as % of Revenue

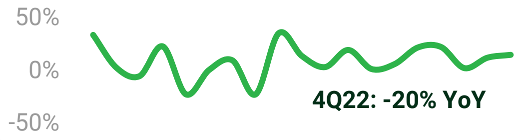


INDUSTRY KPIs

NeoBank User Total (mm)[2] *(1Q20-4Q22)*



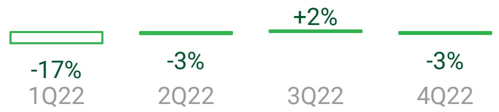
Options Vol. Growth[3] *(1Q18-4Q22)*



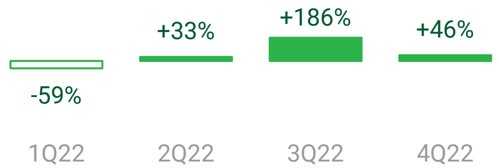
S&P 500 Market Cap[1] *(Jan 18-Feb 23)*

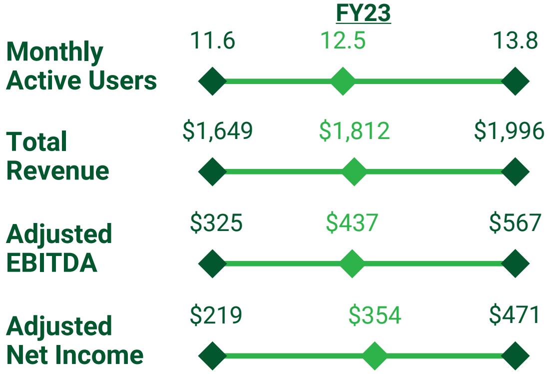
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[4]

Sales



Adj. EBITDA





TOTAL ADDRESSABLE MARKET[5]

U.S. Retail Assets		U.S. Brokered Deposits		Crypto Market Cap		Credit + Debit Card Purchase Volume		U.S. P2P and Micro-Merchant Volume
$50tn TAM	+	$1tn TAM	+	$2tn TAM	+	$7tn TAM	+	$4tn TAM

= **$64tn AUC TAM**

---

1) FactSet
2) Aggregate number of users from Venmo, CashApp SoFi,
3) COBE all tickers monthly volume summed quarterly
4) Visible Alpha Consensus Low/Average/High Range
5) Robinhood IPO Presentation

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Robinhood

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FINANCIAL TECHNOLOGY PARTNERS

VALUATION CONSIDERATIONS

Relative Valuation:

Given Robinhood's negative enterprise value and lack of profitability, it is commonly compared to peers on P/S. As of March 20th Robinhood trades at a 4.5x NTM P/S multiple, 3.3x below its average multiple of 7.8x since its IPO. It trades at a 1.3x premium to the Nasdaq, 2.9x turns below its average premium of 4.2x since the IPO. **If Robinhood were to trade in-line with peers on a P/S basis when adjusted for growth, it would imply a 12-month price of $8.05 (12% downside)**. Robinhood's product offering remains best-in-class even as other brokerages have closed the gap. That said, Robinhood remains a "show-me" story, with a significant amount of upside to the stock if management can deliver on managing expenses while growing the business. On the next page the near-term implications of these topics are explored further.

DCF Scenario:

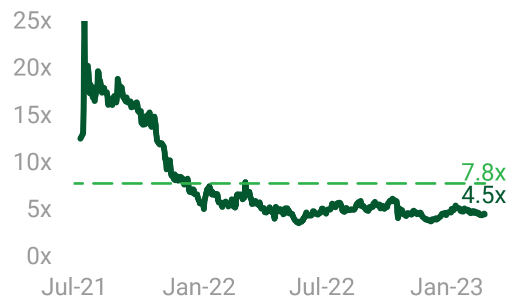
Scenario 1 – Current Price ($9.19, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of 33% in FY23 off the soft 2022 comp of -25%, followed by revenue growth of low-teens in 2024 – 2025. From here revenue gradually decelerates to match the terminal FCF growth rate of 3%. Operating margins in the scenario are expected to significantly improve to -35% (from -73%) which is in-line with consensus. Operating margins turn positive in 2025 and eventually reach a terminal value of 49%. Were shares of Robinhood to remain at the current price in 12-months, it would imply a 4x P/S multiple (based on current STM consensus sales of $2,162mm).

Scenario 2 – Crypto Winter ($7.19, 22% Downside): This DCF outlines a scenario where Robinhood's crypto trading volume declines in-line with the consensus outlook for Coinbase's crypto volume in FY23. This would represent a ~3% headwind to FY23 revenue growth. Given the high margin nature of crypto transactions, the dollar revenue impact flows through to operating margins. However, the long-term revenue/margin assumptions remain unchanged along with the FCF terminal growth rate. This scenario points to a 12-month price of $7.19 (22% downside), which based on the current STM consensus sales implies a 3x P/S multiple.

Scenario 3 – Expense Improvement ($12.65, 38% Upside): The third DCF outlines a scenario where Robinhood improves its operating leverage at a rate faster than consensus expects. The margin improvement to -35% in FY23 remains unchanged while FY24 is revised to a low single-digit negative margin. Given the high level of expense reduction already built-in to consensus this provides minimal upside relative to the average consensus price target. This scenario points to a 12-month price of $12.65 (38% upside), which based on current STM sales implies a 5x P/S multiple .

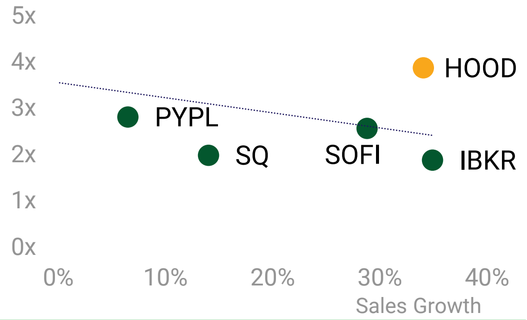
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM P/S



NTM P/S Relative to NASDAQ

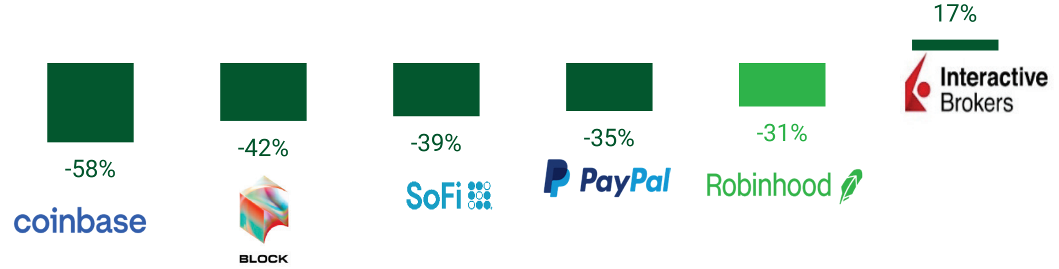
NTM P/Sales & Peer Avg. vs. Growth



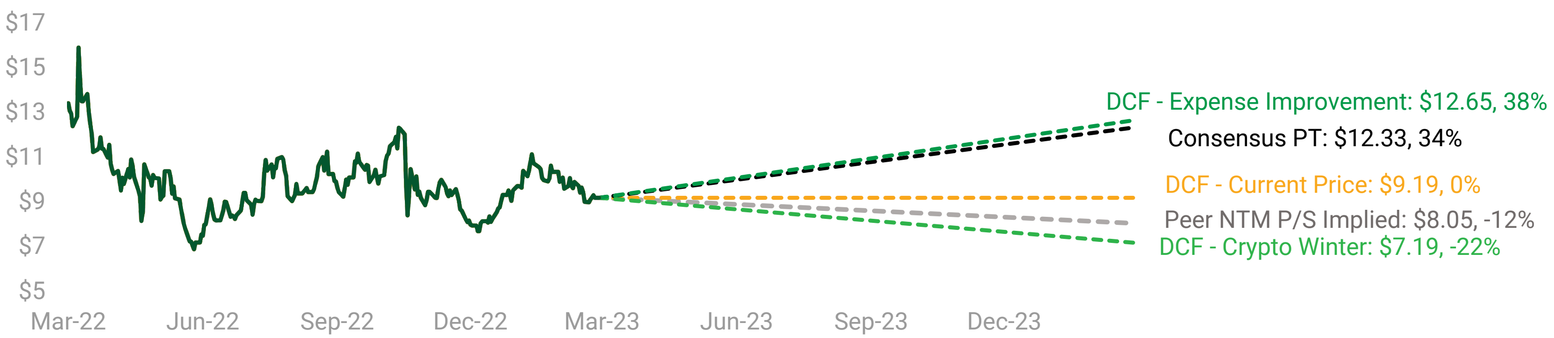
DCF Assumptions[1]

10-Yr RFR	3.9%
Cost of Equity	12.8%
Cost of Debt	5.0%
WACC	10.2%
Beta	1.4
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$2,399

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) SBC in millions

Robinhood

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DECISION TREE INPUTS

In order to evaluate the potential outcomes and their valuation implications, the following decision tree is built around 1) potential for recession and 2) operating expense management relative to consensus. While there are other drivers of Robinhood's performance (crypto, interest income, etc.) we believe these represent the most likely area(s) of upside/downside relative to consensus.

Consensus Case:

The average consensus price target for Robinhood is $12.00, with STM sales estimates of $2,162mm implying a 5.0x P/S multiple if shares trade at $12.00 in 12-months, a ~0.5x expansion relative to the current 4.5x multiple. The consensus price target implies 34% upside.

Upside Case(s)

(+) $12.76, 39% Upside: This scenario assumes no recession and that overall consumer investing patterns do not materially change. The scenario does this by 1) forecasting moderately stronger volume growth relative to consensus and 2) modest increase in active users. This volume growth flows through to revenue driving revenue growth of 40%. This implies 39% upside to the current share price with a 5.0x NTM P/S multiple.

(+-) $11.49, 25% Upside: This scenario assumes no recession, but forecasts worse operating expense controls relative to consensus. While this does not impact top-line growth, we reflect the impact of this in the multiple. Specifically, we decrease the multiple by 0.5x turn, since in a better macro backdrop there would likely be less focus on expense management. This implies 25% upside to the current share price with a 4.5x NTM P/S multiple in 12-months.

(++) $14.04, 53% Upside: This best-case scenario assumes no recession and that Robinhood outperforms consensus on operating expenses. This implies 53% upside to the current share price with a 5.5x NTM P/S multiple.

Downside Case(s):

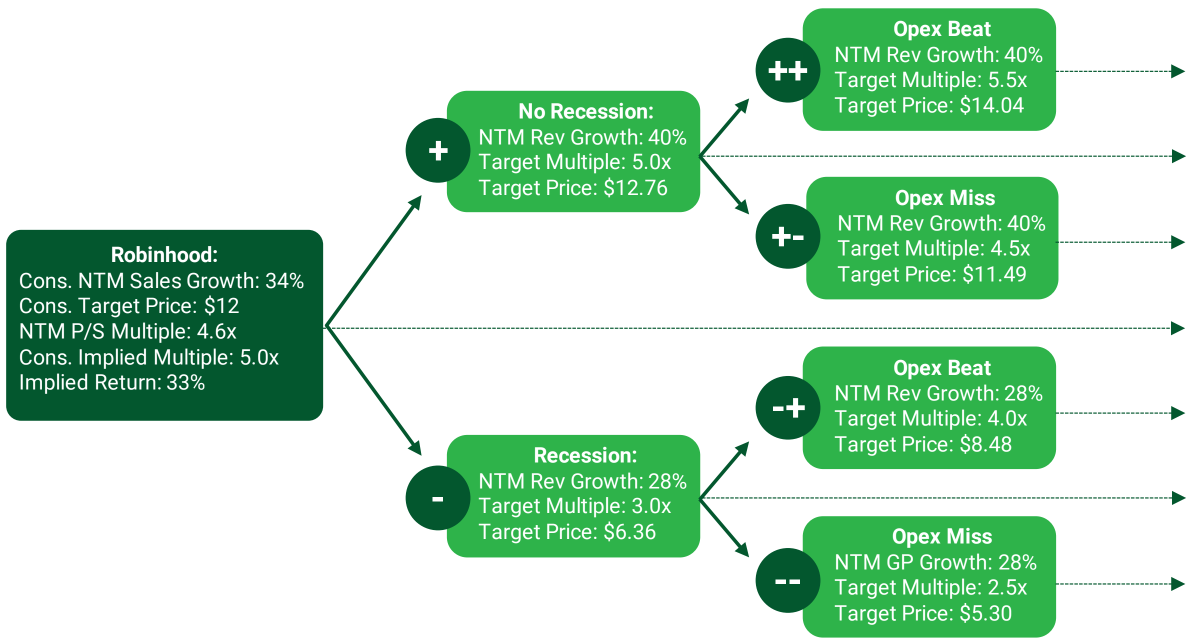
(-) $6.36, 31% Downside: This scenario assumes a recession weighing on volumes, while also modestly decreasing the number of active users, driving revenue growth of 28% relative to consensus of 34%. This implies 31% downside to the current share price with a 3.0x NTM P/S multiple.

(-+) $8.48, 8% Downside: This scenario assumes a recession offset by the better than consensus operating expense management. This implies 8% downside to the current share price with a 4.0x NTM P/S multiple.

(--) $5.30, 42% Downside: The worst-case scenario assumes a recession and underperformance on operating expenses relative to consensus expectations. This implies 42% downside to the current share price with a 2.5x NTM P/S multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Robinhood:
Cons. NTM Sales Growth: 34%
Cons. Target Price: $12
NTM P/S Multiple: 4.6x
Cons. Implied Multiple: 5.0x
Implied Return: 33%

\+ **No Recession:**
NTM Rev Growth: 40%
Target Multiple: 5.0x
Target Price: $12.76

\- **Recession:**
NTM Rev Growth: 28%
Target Multiple: 3.0x
Target Price: $6.36

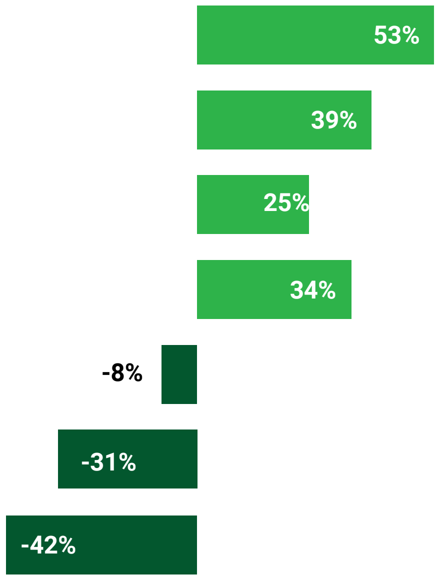
++ **Opex Beat**
NTM Rev Growth: 40%
Target Multiple: 5.5x
Target Price: $14.04

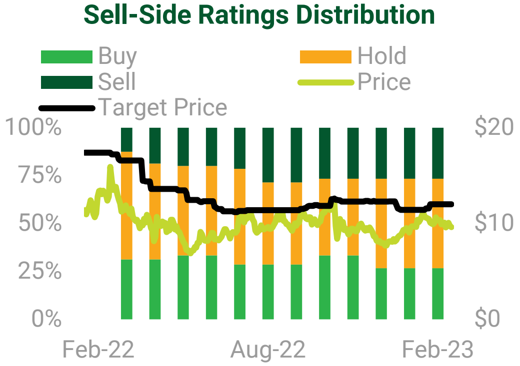
+- **Opex Miss**
NTM Rev Growth: 40%
Target Multiple: 4.5x
Target Price: $11.49

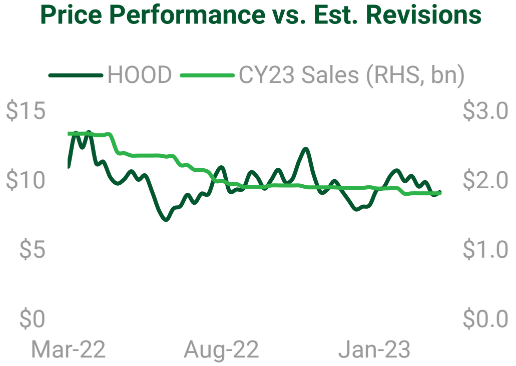
-+ **Opex Beat**
NTM Rev Growth: 28%
Target Multiple: 4.0x
Target Price: $8.48

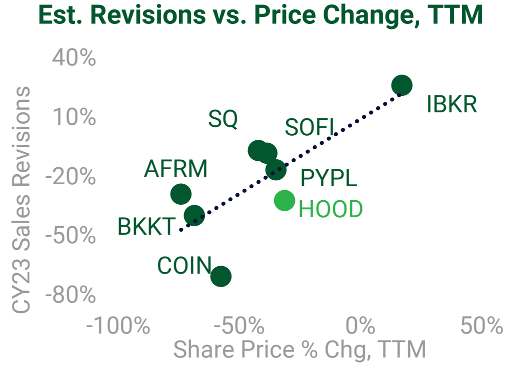
-- **Opex Miss**
NTM GP Growth: 28%
Target Multiple: 2.5x
Target Price: $5.30

12-month Price Return




Sell-Side Ratings Distribution


Price Performance vs. Est. Revisions


Est. Revisions vs. Price Change, TTM

Source: Company filings; FactSet

Robinhood

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($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: While Robinhood has booked large losses in recent quarters, management has shown incremental improvements in managing operating expenses. This has dramatically helped to improve the path to profitability, and given the strong balance sheet position, it appears unlikely that the company sees a near-term cash crunch. Prior to reporting earnings, Robinhood traded at a 4.5x P/S ratio, above several peers, which put the stock in a more vulnerable position to any missteps or signs of faltering growth.

Results Recap: Robinhood reported 4Q22 adjusted EBITDA that beat consensus, while revenue, MAUs, and assets under custody fell short of expectations. Along with earnings, Robinhood co-founders, Vlad Tenev and Baiju Bhatt, announced that they canceled their 2021 pre-IPO market-based RSU awards that total 35.5mm unvested shares. This lowers the company's GAAP operating costs by up to $50mm per quarter starting in 2Q23, already reducing HOOD's fully diluted share count by 3.5%. In addition, the Board authorized Robinhood to pursue purchasing most or all of the 55mm remaining Robinhood shares that Emergent Fidelity Technologies Ltd. bought in May 2022 (Sam Bankman-Fried's holdings). The stock traded down ~2% during the next trading day.

Guidance Recap: Robinhood issued new FY23 guidance for operating expenses in a range of $2.375 - $2.515bn, which on the low-end represents a YoY expense decline of 6% and flat on the high-end. Guidance for operating expenses excluding SBC was in the range of $1.420 - $1.480bn, which represents a decrease of between 17% and 14% YoY.

Incremental From the Call:

- **Board Authorizes Repurchase of Emergent Fidelity Technologies Ltd. Shares:** Robinhood's board of directors has approved the repurchase of the 55 million shares held at Emergent Fidelity Technologies Ltd. Emergent is a holding company for Sam Bankman-Fried, founder and former CEO of FTX. In May of 2022, Emergent purchased these shares that represent ownership of 7.48% of outstanding Robinhood shares. Robinhood has maintained a strong cash position of over $6bn, and given the nature of the FTX bankruptcy proceedings, the company's board has authorized the share repurchase. That said, an authorization of the share repurchase does not mean the company is guaranteed to execute the repurchase.
- **Co-Founders Cancel Nearly $500mm of SBC:** Co-Founders Vlad Tenev and Baiju Bhatt announced that they canceled their 2021 pre-IPO market-based RSU awards that total 35.5mm unvested shares. This is expected to decrease operating expenses by ~$50mm per quarter beginning in 2Q23. Management highlighted that there will be a one-time accounting charge related to the cancellation that will appear in 1Q23 of ~$485mm.
- **Unexpected Technical Error:** Cosmos Health Inc executed a 1-for-25 reverse stock split during the quarter. An unexpected technical error caused Robinhood to sell the stock short and then buy it back, which resulted in a loss of $57mm, with the error corrected soon after. This loss was accounted for in operating expenses, which missed expectations by 2%. Excluding this technical error, operating expenses would have been 9% better than expectations, while operating income would have posted a 16% beat, and net income would have been 20% ahead of expectations.
- **U.K. Brokerage Launch:** Robinhood announced that it will launch its brokerage platform in the U.K. before the EOFY23. It has already launched its Robinhood wallet (crypto wallet) globally and has stated it will expand its brokerage globally as well, while also expanding its security offerings.
- **Canceled Acquisition:** The Ziglu acquisition has been canceled resulting in a one-off $12mm impairment to equity securities for Robinhood. The combination of the $57mm loss related to the technical error mentioned above, and the $12mm impairment to equity securities, resulted in an $0.08 drag on EPS, a significant portion of the -$0.19 loss booked during the quarter.
- **Not Splitting its Stock:** Robinhood announced during its earnings call that a news company was reporting that Robinhood was set to announce a stock split, which the company denied.

4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Cons.	Abs.▲	▲%
Monthly Active Users	**11.4**	**12.3**	-0.87	-7%
growth (%, yoy)	*-34%*	*-29%*		
ARPU	**$66**	**$68**	-$2.11	-3%
growth (%, yoy)	*3%*	*6%*		
Total Assets Under Custody (bn)	**$62.2**	**$67.2**	-$5.00	-7%
growth (%, yoy)	*-37%*	*-31%*		
Net Deposits (bn)	**$4.8**	**$4.0**	$0.75	19%
growth (%, yoy)	*9%*	*-8%*		
Transaction-Based Revenue	**$186**	**$204**	-$17.8	-9%
growth (%, yoy)	*-30%*	*-23%*		
Net Interest Revenues	**$167**	**$159**	$7.74	5%
growth (%, yoy)	*164%*	*151%*		
Other Revenues	**$27.0**	**$28.3**	-$1.32	-5%
growth (%, yoy)	*-24%*	*-20%*		
Total Revenue	**$380**	**$391**	-$11.4	-3%
growth (%, yoy)	*5%*	*8%*		
Stock-Based Compensation	**$160**	**$168**	$8.17	5%
growth (%, yoy)	*-50%*	*-47%*		
Total Operating Expenses	**$534**	**$524**	-$9.69	-2%
growth (%, yoy)	*-32%*	*-33%*		
Operating Income	**-$168**	**-$132**	-$35.8	-27%
Operating Income Margin (%)	*-44%*	*-34%*		
Adjusted EBITDA	**$82.0**	**$56.0**	$26.0	46%
Adj. EBITDA Margin (%)	*22%*	*14%*		
Net Income	**-$166**	**-$137**	-$29.4	-22%
Net Income Margin (%)	*-44%*	*-35%*		

FY23 Guidance	New	Cons.	▲%
Operating Expenses	**$2,375mm to $2,515mm**	**$2,245mm**	**-8%**
growth (%, yoy)	*-6% to 0%*	*-5%*	*-2%*
Operating Expenses ex SBC	**$1,420mm to $1,480mm**	**$1,624mm**	**12%**
growth (%, yoy)	*-17% to -14%*	*-6%*	*10%*

Source: Company filings; FactSet; Visible Alpha

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Robinhood

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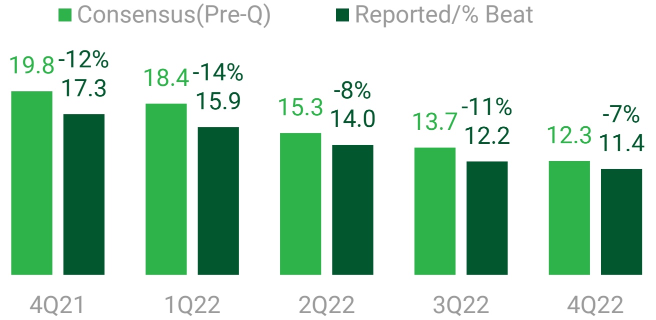
FINANCIAL TECHNOLOGY PARTNERS

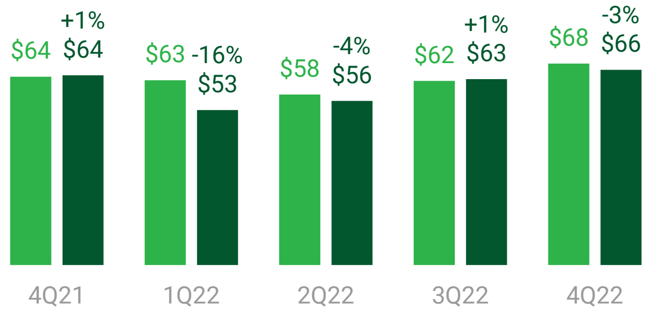
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

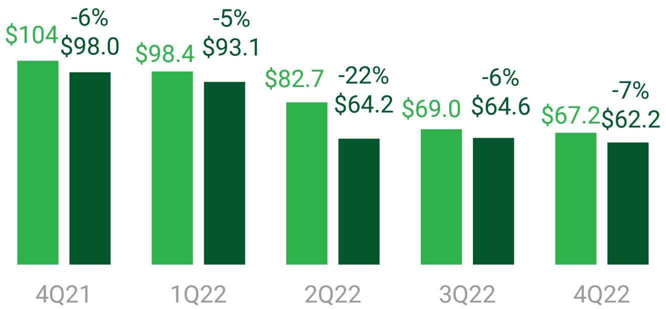
Monthly Active Users (mm)



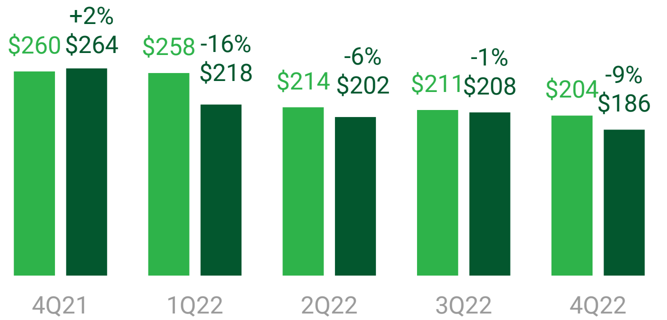
Average Revenue Per User



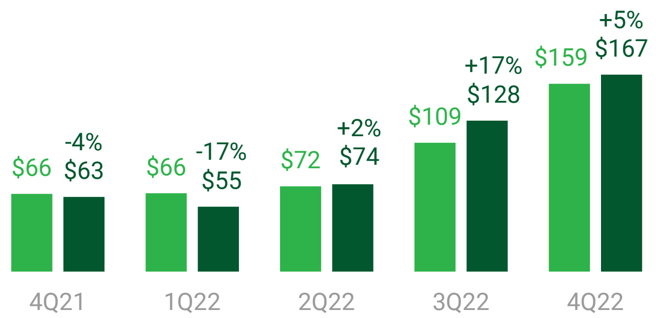
Assets Under Custody (bn)



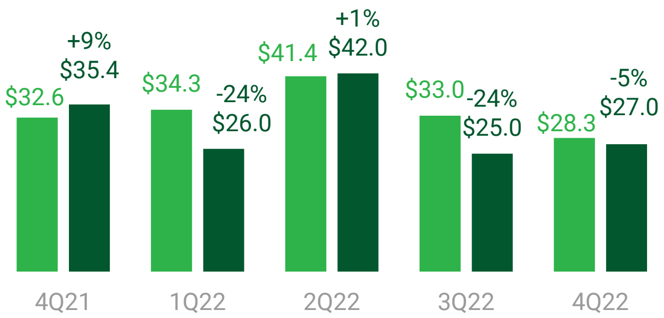
Transaction Based Revenue



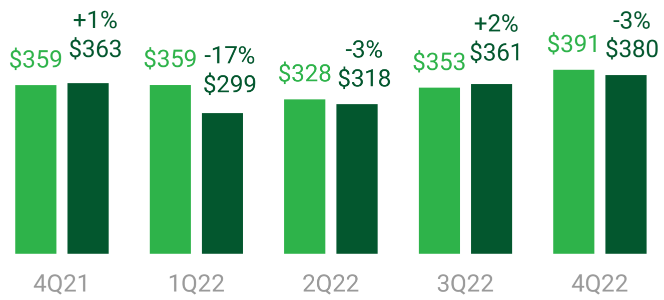
Net Interest Income



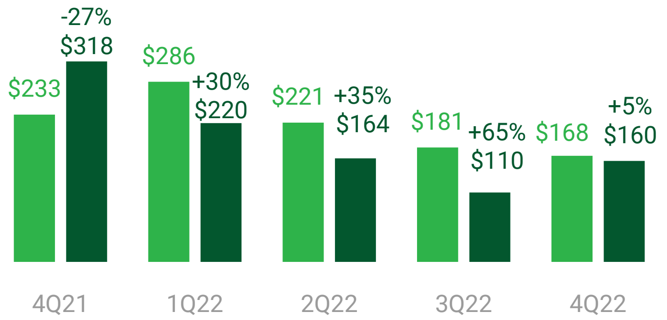
Other Revenue



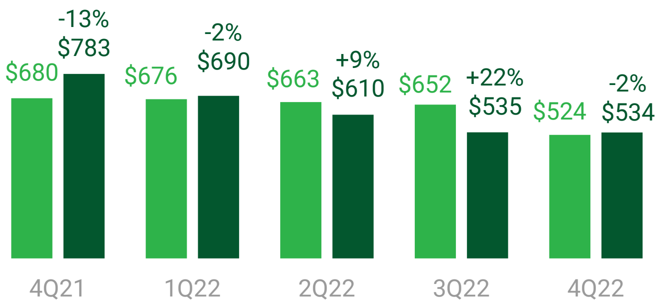
Total Revenue



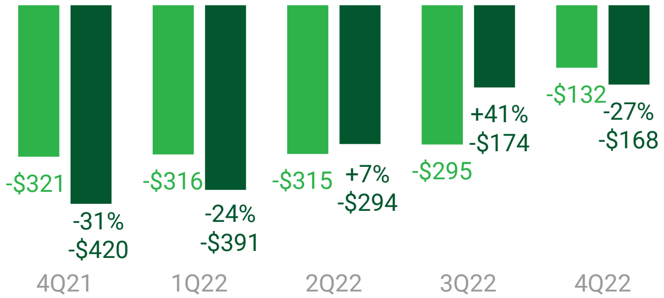
Stock-Based Compensation



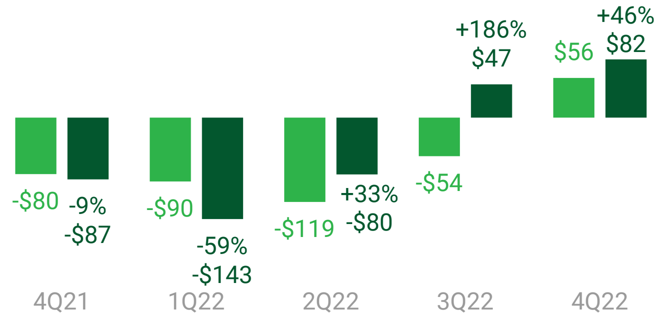
Operating Expenses



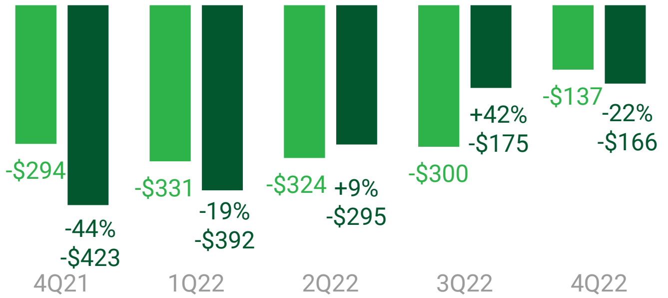
Operating Income



Adjusted EBITDA



Net Income



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FINANCIAL TECHNOLOGY PARTNERS

($ in millions, except where otherwise noted)

1Q23 EARNINGS OUTLOOK

Robinhood is projected to report 1Q23 earnings on April 27th after the market close.

What's In Focus:

Expenses management remains the primary area of focus for investors. With 4Q22 results, management laid out its FY23 guidance for operating expenses in a range of $2.375 - $2.515bn, which on the low-end represents a YoY expense decline of 6% and flat on the high-end. Guidance for operating expenses excluding SBC is in the range of $1.420 - $1.480bn, which represents a decrease of between 17% and 14% YoY. Also, since 4Q results, Robinhood disclosed it had received a subpoena by the SEC over crypto listings and custody issues. Incremental commentary is expected on the scope of the subpoena by management with 1Q23 earnings.

Trading Update:

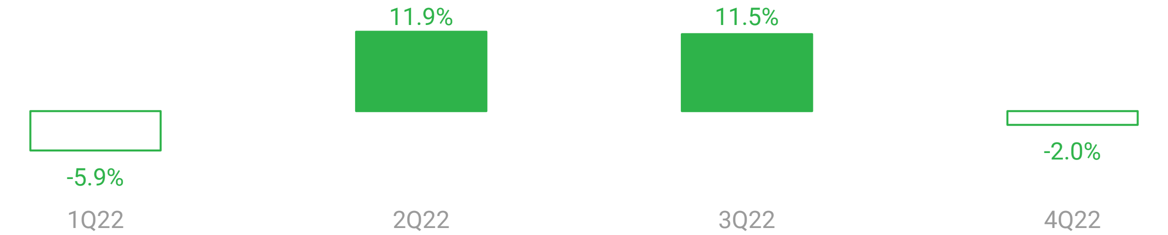
On March 13th, Robinhood reported selected monthly operating data for February 2023

- Net Cumulative Funded Accounts (NCFA) came in at 23.1mm, up 1% YoY. Monthly active users (MAUs) were12.0mm down 28% YoY. Together this represents a user engagement rate of 52%, compared to ~73% engagement in the year ago period.
- Equity trading volumes came in at $57.3bn for the month, up ~1% YoY. Crypto volumes were down 50% YoY to $3.50bn, while options contracts were able to grow 24% YoY, with 89.4mm contracts traded during February.
- Daily Active Revenue Trades (DARTs) were down for each asset class YoY, except options which were flat in the year ago period. Equity DARTs came in at 1.6mm, down 6% YoY, option DARTs came in at 0.70mm 0% change YoY, and crypto DARTs came in at 0.20mm, down 33% YoY.
- The company's margin balances came in at $3.3bn during February, down 37% YoY, which could weigh on the interest revenue segment of the business.
- One highlight from Robinhood's monthly data was its cash sweep balance, which was reported as $8.0bn up 281% YoY. With this reporting, some insight was given into Robinhood Gold user metrics, as $7.1bn of their cash sweep balances were held in Robinhood Gold accounts. This may give insight into interest revenue going forward, as management has commented on the interest rates earned from cash sweeps in Gold vs. non-Gold accounts.

Estimates:

- Since 4Q22, estimates for 1Q23 MAUs have decreased by 4% from 12.5mm to 11.9mm implying 3% QoQ growth from 11.40mm. ARPU estimates have also come down 14% from $76.62 to $65.96, which would represent 1% contraction QoQ.
- 1Q23 consensus for transaction-based revenue has also contracted since the 4Q22 print, decreasing ~6% from $209mm to $197mm. Interest revenue estimates have also contracted ~3% from $198mm to $193mm. Overall total revenue estimates are down ~4%.
- Consensus for total operating expenses increased ~58%, from $542mm to $856mm, however, this large increase is largely attributable to cancellation of Vlad Tenev's and Baiju Bhatt's 2021 pre-IPO market-based RSU awards that total 35.5mm unvested shares. Management highlighted that there will be a one-time accounting charge related to the cancellation that will appear in 1Q23 of ~$485mm.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ



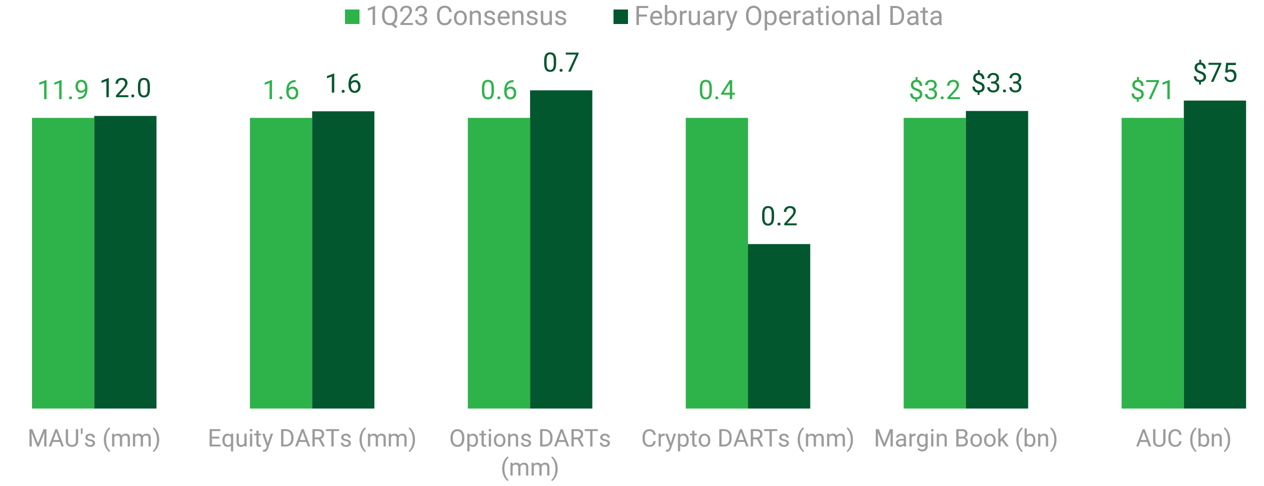
1Q22
- ~17%/~59% miss on revenue/adj. EBITDA
- MAU below consensus and 8% QoQ decline

2Q22
- Revenue 3% miss from consensus; ~33% adj. EBITDA beat
- Announces 23% reduction in headcount
- Lowers FY22 expense guide

3Q22
- 2% revenue beat; $111mm adj. EBITDA beat
- Achieved adj. EBITDA profitability a quarter ahead of its target

4Q22
- 3% miss on revenue,; ~46% adj. EBITDA beat
- Founders cancel $500mm in stock option grants, board approves repurchase of Emergent Fidelity Technology shares.

FEBRUARY MONTHLY METRICS



Source: Company filings; FactSet

Robinhood

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FINANCIAL TECHNOLOGY PARTNERS

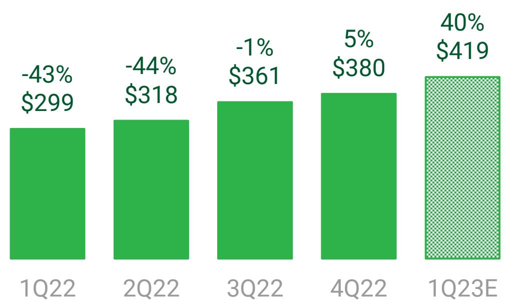
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

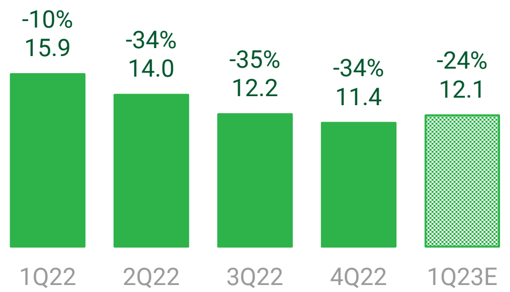
	Low	Average	High
Monthly Active Users	**11.4**	**12.1**	**12.7**
growth (%, yoy)	*-28%*	*-24%*	*-20%*
ARPU ($)	**$70.6**	**$72.8**	**$75.1**
growth (%, yoy)	*34%*	*38%*	*43%*
Total Assets Under Custody	**$67,021**	**$70,887**	**$74,844**
growth (%, yoy)	*-28%*	*-24%*	*-20%*
Transaction-based Revenue	**$181**	**$198**	**$211**
growth (%, yoy)	*-17%*	*-9%*	*-3%*
Net Interest Revenues	**$184**	**$192**	**$198**
growth (%, yoy)	*234%*	*250%*	*260%*
Other Revenues	**$27.0**	**$28.6**	**$30.8**
growth (%, yoy)	*4%*	*10%*	*18%*
Total Revenue	**$406**	**$419**	**$434**
growth (%, yoy)	*36%*	*40%*	*45%*
Total Operating Expenses	**$515**	**$897**	**$982**
growth (%, yoy)	*-25%*	*30%*	*42%*
Operating Income	**-$576**	**-$397**	**$70**
Operating Margin (%)	*-142%*	*-95%*	*16%*
Adjusted Operating Income	**$56**	**$75**	**$91**
Adj. Operating Margin (%)	*14%*	*18%*	*21%*
Net Income	**-$576**	**-$417**	**$65**
Net Income Margin (%)	*-142%*	*-100%*	*15%*

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

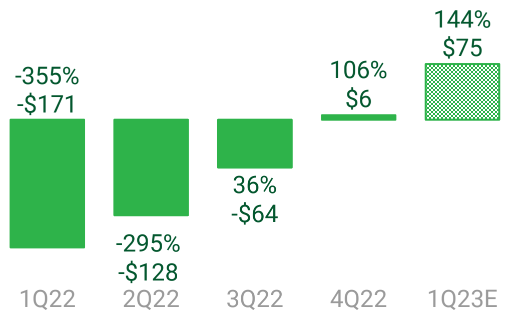
Revenue/YoY Growth



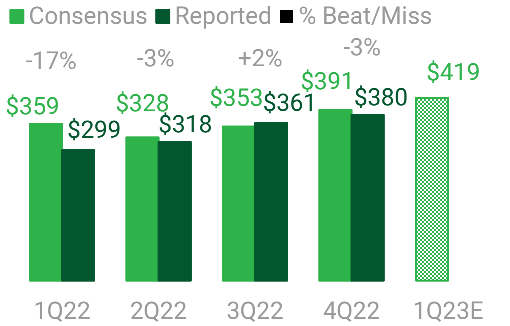
MAUs/YoY Growth



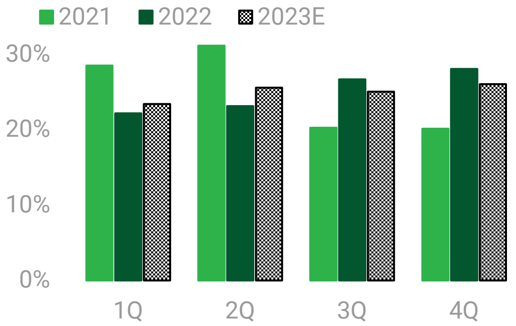
Adjusted Operating Income/YoY Growth



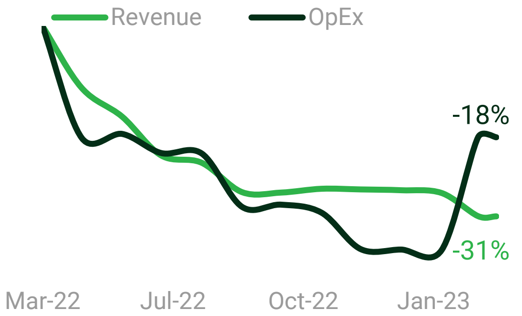
Guidance/Cons. vs. Reported



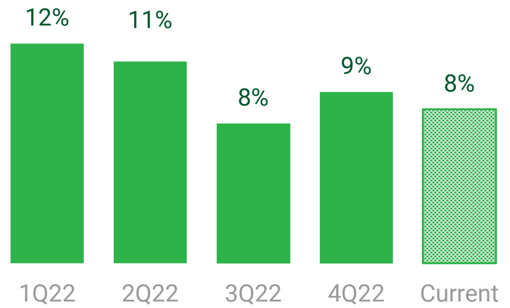
Revenue Seasonality



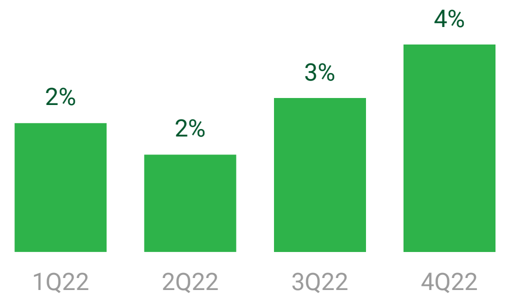
1Q23 Cons. Revisions



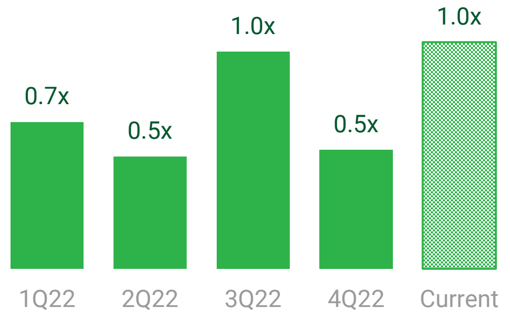
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio(1)



Source: Company filings, FactSet, Visible Alpha

1) Put/Call Ratio over 7-days leading into earnings

Robinhood

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QUESTIONS FOR MANAGEMENT

Market:

1) Given market conditions is management seeing any meaningful changes in consumer behavior regarding interacting with the platform?

Products:

2) What kind of attach rates does management expect out of new products such as retirements, Roth IRA, etc.?

3) Part of the strategy historically surrounding Robinhood Gold has been providing value to active investors and more recently there's been a pivot towards serving passive investors as well. What other features are in the pipeline that could help that adoption?

4) Robinhood has introduced a variety of newer product offerings including a Web3 wallet, launch of a U.K. brokerage in 2023, what products is management most excited to launch and what products are expected to impact margins the most going forward?

5) Some competitors have run into a lot of issues with their NFT wallets from a regulatory/compliance standpoint, how is this being mitigated at Robinhood?

Expenses:

6) The expense base has been a large area of focus over the past year, are there any other areas for cost savings beyond the recently announced headcount reductions?

7) With changes in employee count and hiring is there any change to the outlook for future utilization of SBC?

Capital Allocation:

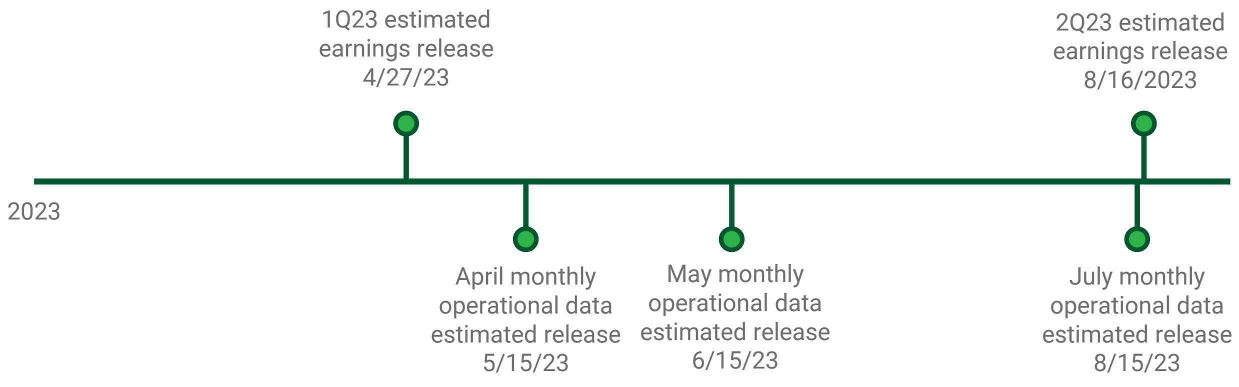
8) The company has held a significant amount of cash on the balance sheet for some time, with the cancelation of the Ziglu acquisition is M&A still in focus? Are there any specific areas that are most in focus or being actively pursued?

Guidance:

9) In 4Q22 the company saw the benefits of higher rates and with the Fed's continued rate hike trajectory, how much of those higher rate expectations are being factored into the NII guidance?

10) On the 4Q22 call management mentioned the guidance of $2.375bn - $2.515bn for operating expenses for FY23, what's the path to getting to the low-end of that guidance, and what areas will see the bulk of the cuts to achieve this?

POTENTIAL CATALYSTS



2023

1Q23 estimated
earnings release
4/27/23

April monthly
operational data
estimated release
5/15/23

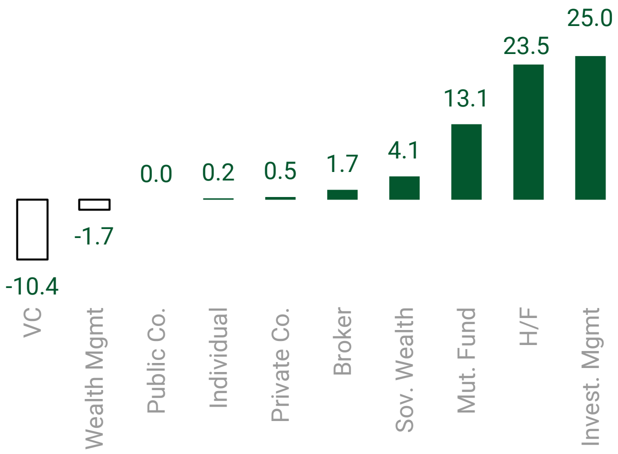
May monthly
operational data
estimated release
6/15/23

2Q23 estimated
earnings release
8/16/2023

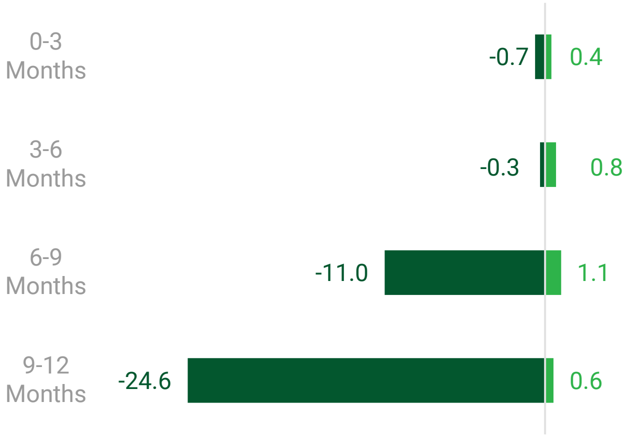
July monthly
operational data
estimated release
8/15/23

SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



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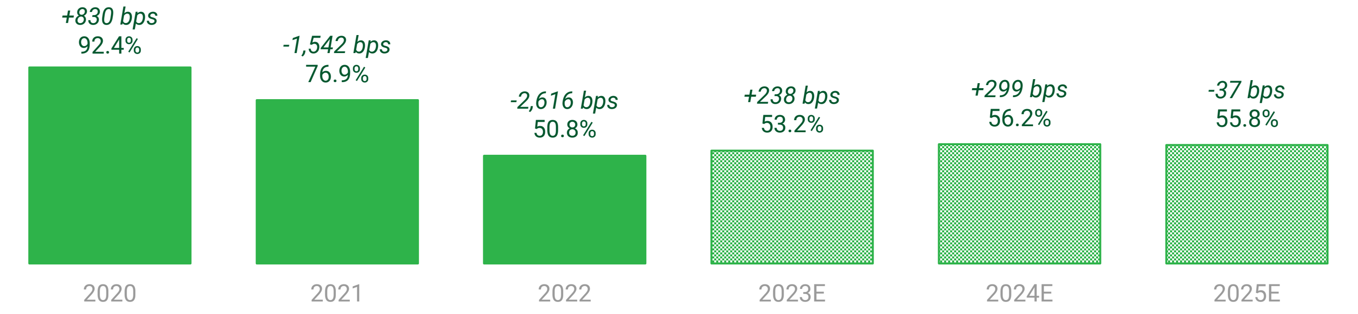
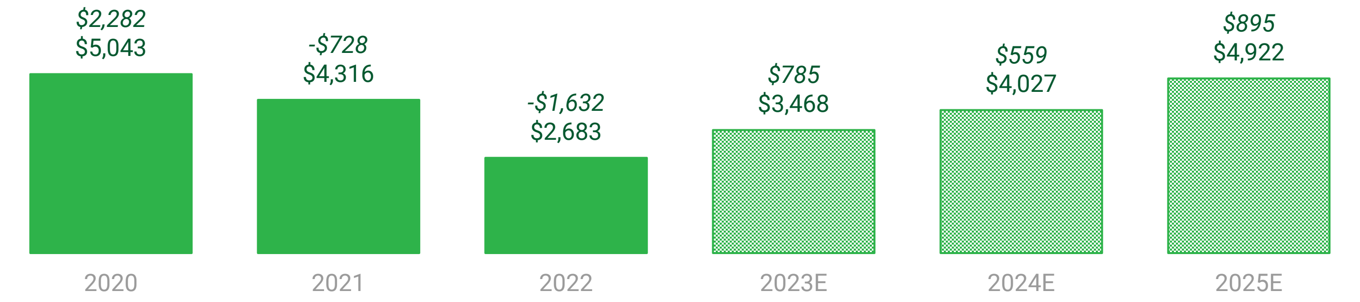
FINANCIAL TECHNOLOGY PARTNERS

COMPANY RATIOS/MARGIN ANALYSIS

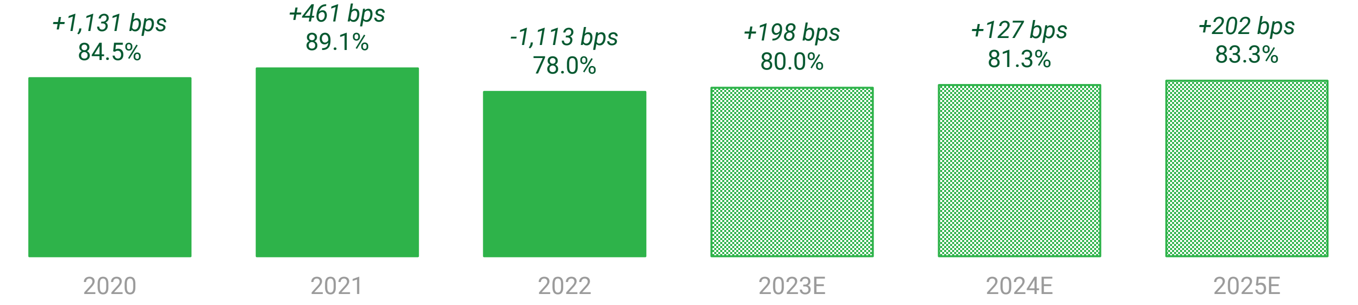
User Engagement (MAUs/NCFA)



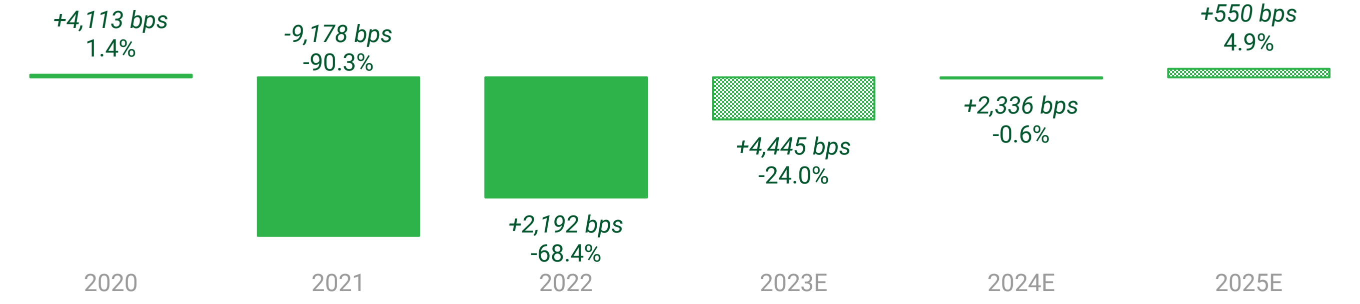
Assets Per User (AUC/NCFA)



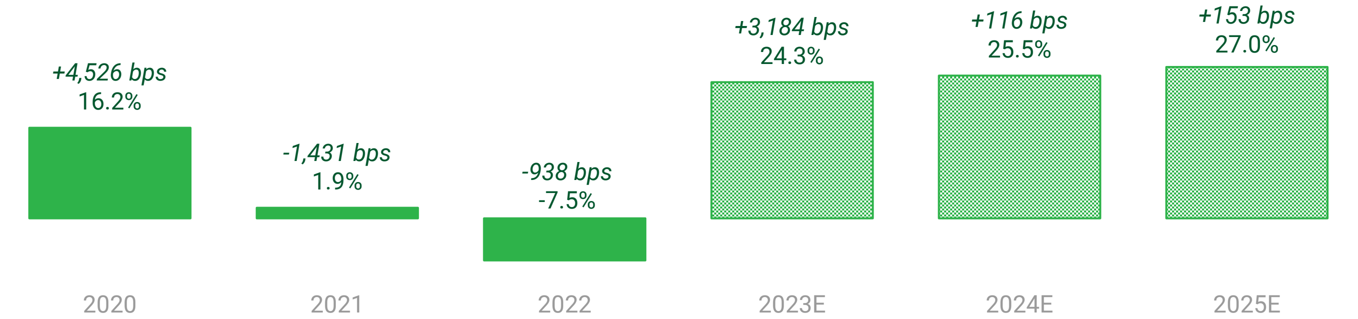
Transaction-Based Gross Margin (Txn Gross Profit % of Txn Revenue)



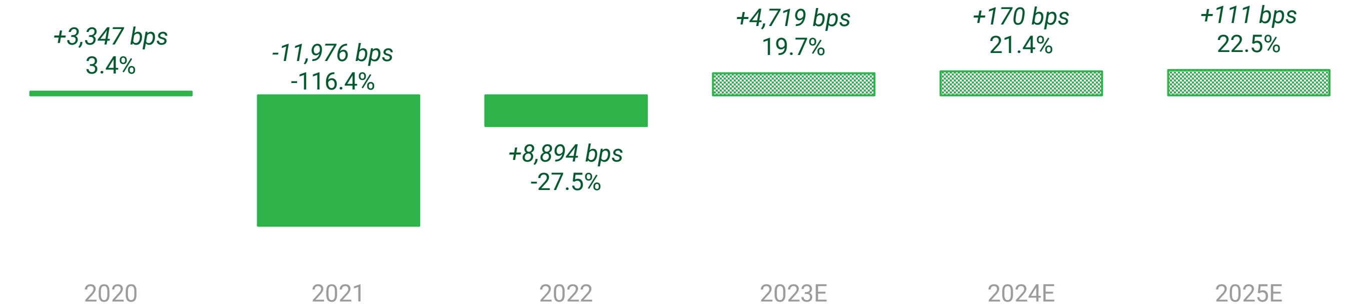
Operating Margin (% of Net Revenue)



Adjusted EBITDA Margin (% of Net Revenue)



Adjusted Net Income Margin (% of Net Revenue)



Source: Company filings, FactSet

Robinhood

HOOD TTM Price Performance

Price as of 03/17/23:	$9.19	**Shares Out (mm):**	896
Market Cap (mm):	$8,236	**Beta (Since IPO):**	1.6
52-Wk Range:	$6.81 - $16.49	**Avg. Daily Vol (mm):**	7.3

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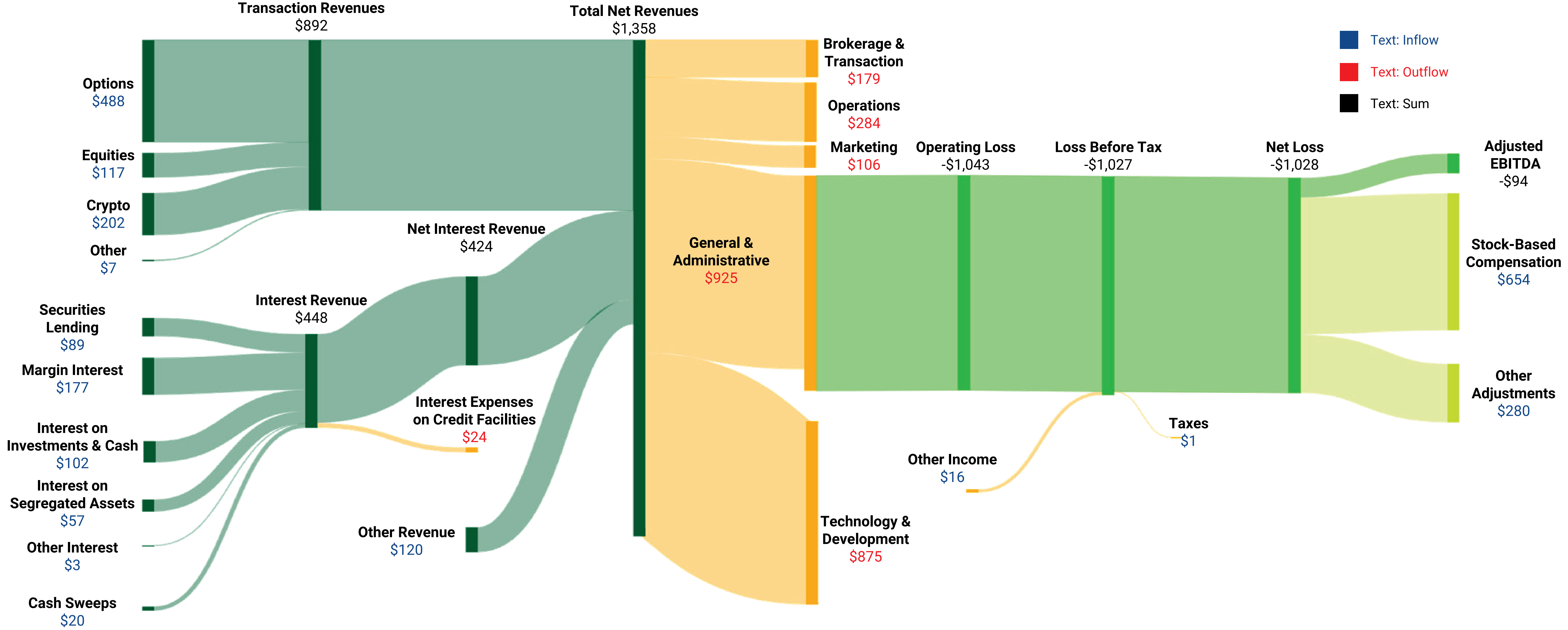
($ in millions)

P&L VISUALIZATION – TTM



Source: Company filings; FactSet

Robinhood

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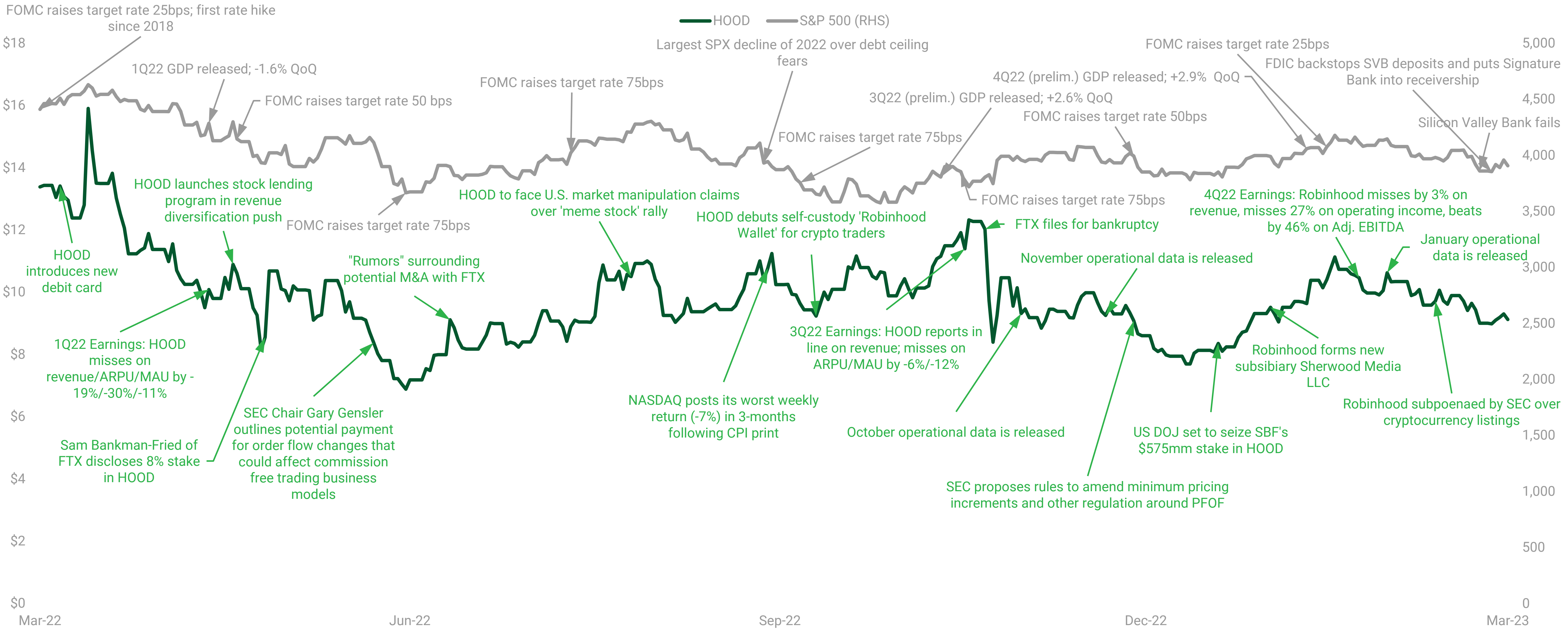
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

4Q22 (prelim.) GDP released; +2.9% QoQ

FOMC raises target rate 25bps

FDIC backstops SVB deposits and puts Signature Bank into receivership

FOMC raises target rate 50bps

Silicon Valley Bank fails

FOMC raises target rate 75bps

HOOD introduces new debit card

HOOD launches stock lending program in revenue diversification push

1Q22 Earnings: HOOD misses on revenue/ARPU/MAU by -19%/-30%/-11%

Sam Bankman-Fried of FTX discloses 8% stake in HOOD

SEC Chair Gary Gensler outlines potential payment for order flow changes that could affect commission free trading business models

"Rumors" surrounding potential M&A with FTX

HOOD to face U.S. market manipulation claims over 'meme stock' rally

HOOD debuts self-custody 'Robinhood Wallet' for crypto traders

NASDAQ posts its worst weekly return (-7%) in 3-months following CPI print

3Q22 Earnings: HOOD reports in line on revenue; misses on ARPU/MAU by -6%/-12%

FTX files for bankruptcy

October operational data is released

November operational data is released

SEC proposes rules to amend minimum pricing increments and other regulation around PFOF

US DOJ set to seize SBF's $575mm stake in HOOD

Robinhood forms new subsibiary Sherwood Media LLC

4Q22 Earnings: Robinhood misses by 3% on revenue, misses 27% on operating income, beats by 46% on Adj. EBITDA

January operational data is released

Robinhood subpoenaed by SEC over cryptocurrency listings

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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SHOPIFY PROPRIETARY COMPANY PROFILE

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Matthew O'Neill | Co-Director of Research –Matthew.O'Neill@ftpartners.com – (347) 614-2481
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SHOP TTM Price Performance

Price as of 03/17/23:	$44.68	**Shares Out (mm):**	1,277
Market Cap (mm):	$57,039	**Beta (2 Year Avg.):**	2.7
52-Wk Range:	$23.63 - $78.00	**Avg. Daily Vol (mm):**	20.1

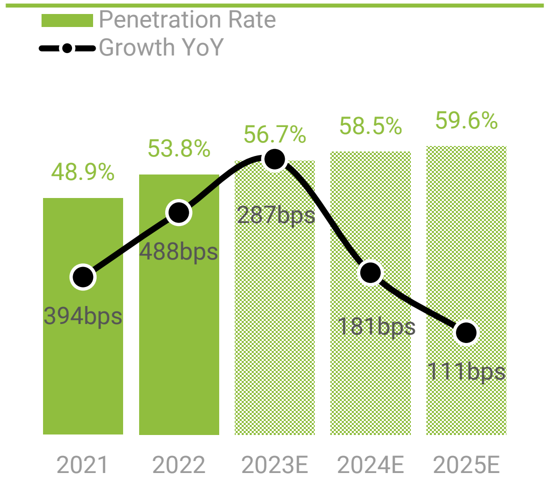
COMPANY OVERVIEW

Shopify is a leading provider of essential internet infrastructure for commerce, offering trusted tools to start, grow, market, and manage a retail business of any size.

Shopify software enables merchants to display, manage, market and sell their products across several different sales channels, including web and mobile storefronts, physical retail locations, pop-up shops, social media storefronts, native mobile apps, buy buttons, and marketplaces. Merchants use Shopify to build their online storefront and manage omnichannel solutions, manage products and inventory, process orders and payments, fulfill and ship orders, source products, leverage analytics and reporting, manage cash, payments and transactions, and access financing.

Shopify enables merchants to build their own brand, leverage mobile technology, sell internationally, and handle traffic spikes with flexible infrastructure.

SHOP PAY[1]



KEY DEBATES

1. **Shop Pay Penetration:** Shopify's merchant solutions segment, while not officially broken into its component parts by the company, is assumed to be comprised mostly of payments revenue from their POS. Continuing to increase the penetration of Shop Pay with merchants will be highly supportive to revenue growth, even if it proves margin dilutive versus the very high margins of the of the predominantly SaaS Subscription Solutions.

2. **Pricing Power:** Investors are increasingly focused on Shopify's opportunity to capture more favorable economics, specifically as peers have recently raised pricing. Shopify management has acknowledged significant pricing headroom relative to peers, which it is taking advantage of with across-the-board pricing increases for Subscription Solutions going into effect in 2023 that will be supportive to MRR, and remains focused on improving the overall take rate. However, a continued uncertain economic background could delay or deter any further pricing changes, depending on the company's experience with already announced changes. Shopify's 4Q22 total attach rate (revenue/GMV) was 2.85%, up roughly 30bps YoY.

3. **Recession**: In our view, the largest factor weighing on investor sentiment is the depth and duration of a potential recession, coupled with near-term headwinds from a pull-forward of eCommerce demand during the pandemic. While an economic downturn would pressure Shopify's topline growth in the near term, it could provide an opportunity for market share gains as customers prioritize familiarity and value.

REVENUE MODEL

Shopify reports its revenue in two business segments:

- **Subscription Solutions (27% of TTM Revenue):** Shopify generates subscription solutions revenues primarily through the sale of subscriptions to their platform, including variable platform fees, as well as through the sale of subscriptions to the company's Pro offering, the sale of themes, the sale of apps, and the registration of domain names.
- **Merchant Solutions (73%):** Shopify offers a variety of merchant solutions to augment those provided through a subscription, including accepting payments, shipping and fulfillment, and securing working capital, among others. Offering this core set of commerce necessities creates additional value for merchants, saving them time and money by centralizing functionality within a single commerce platform. The ease with which merchants can add additional functionality drives the strong attach rates seen from Shopify's merchant base. Recently introduced Shopify Commerce Components, which enables enterprise customers to add functionality on a piecemeal, driving further adoption of various offerings.

SHOPIFY INVESTMENT THEMES

Buyer Relationships

- Shopify PoS Offline GMV +40% YoY
- Recently launched Shopify POS Go, a mobile POS solution
- Shopify Collabs reached 50 million across social media in <2 months

Global Expansion

- Merchants in 175+ countries are using Shopify
- US merchants utilizing Shopify Markets sell into ~14 additional countries
- Shopify Markets Pro enables language localization for cross-border sales

Economic Lifecycle

- Shopify Capital loans advanced $1.7bn during FY22 vs $1.3bn FY21
- Announced partnerships with Ernst & Young and KPMG while expanding the relationship with Deloitte

Logistics

- Plan to combine Shopify Fulfillment Network, which already includes the acquisition of 6 River Systems, and Deliverr into a single network
- Fulfillment services resulting in up to a 25% increase in sales conversions

Source: Company filings

1) Visible Alpha Consensus Estimates

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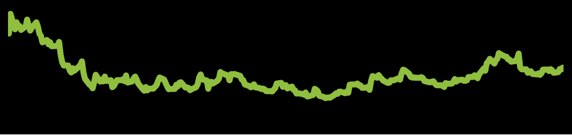
shopify

SHOP TTM Price Performance



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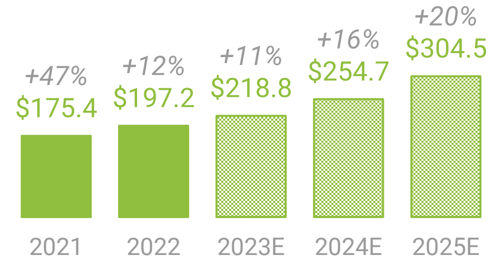
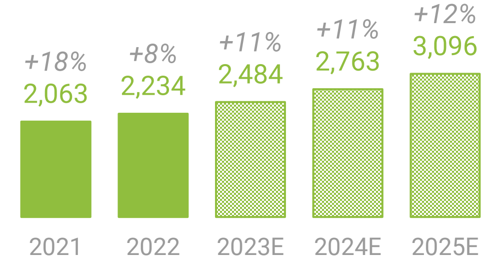
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

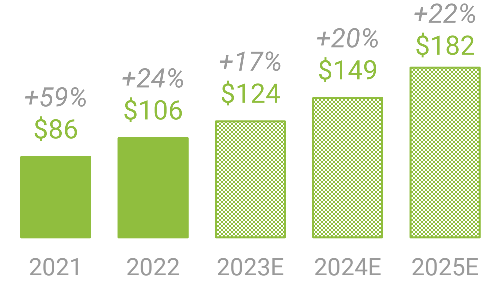
Gross Merchandise Volume (bn)



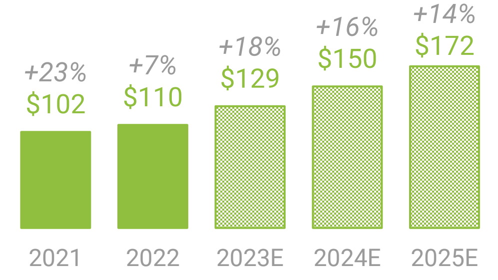
Merchants (000's)



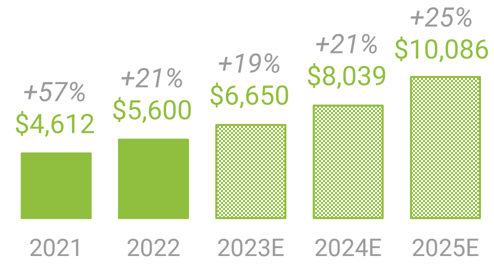
Gross Payment Volume (bn)



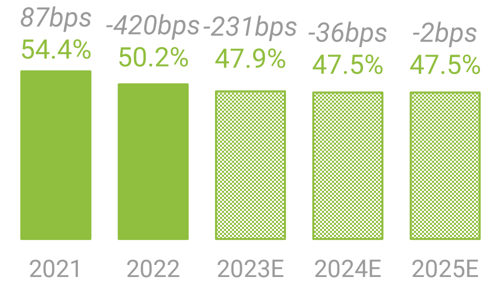
Monthly Recurring Revenue



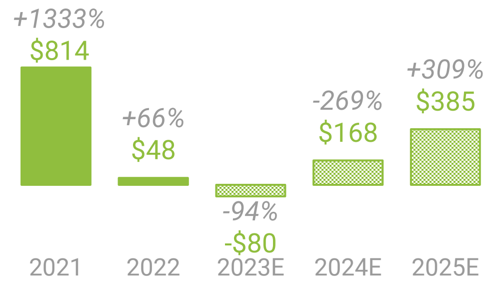
Revenue



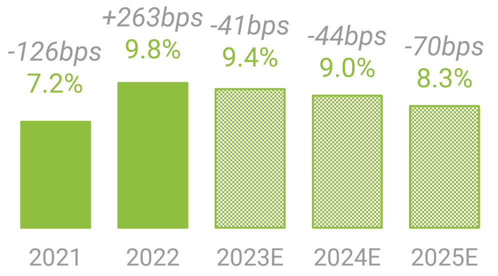
Adj. Gross Margin



Adjusted Net Income



SBC % of Revenue

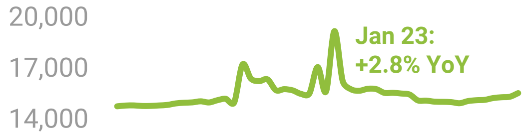


INDUSTRY KPIs

SMB Employment[2] *(1Q02-2Q22)*

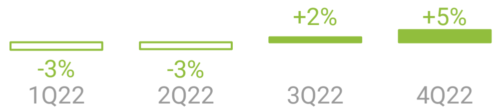
E-Commerce, % of Retail Spend Change[4] *(Jan 19-Apr 22)*

Discretionary Spending[4] *(Jan 19-Jan 23)*

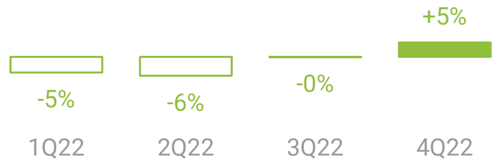


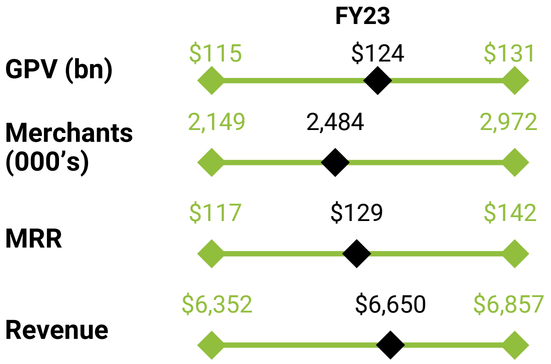
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[6]

Revenue



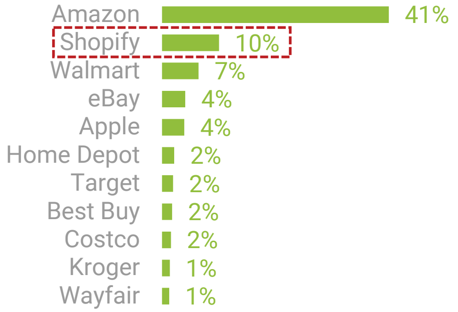
Gross Profit





TOTAL ADDRESSABLE MARKET

U.S. E-Commerce Market Share, 2021[3]



U.S. E-commerce Retail Sales[4]

$258bn

Estimated 2024 Social Commerce Sales[7]

$1.7tn

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1) FactSet, Visible Alpha
2) ADP Small Business Report
3) Shopify 4Q21 Earnings Presentation
4) FRED E-commerce Retail Sales/Real Discretionary Spending
5) Visible Alpha Consensus Low/Average/High Range
6) Shopify Trends Report 2023

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shopify

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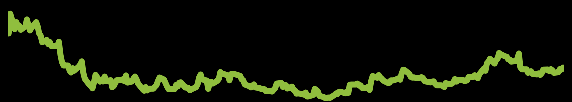

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VALUATION CONSIDERATIONS

Relative Valuation:

For many unprofitable companies, EV/GP is used for relative valuation to account for costs associated with the core operations of the business, while also providing a relatively standardized valuation approach across peers. As of March 20th Shopify trades at a 16.7x NTM EV/GP multiple, 23.5x below its 5-year average multiple of 40.2x. It also trades at a 13.5x premium to the Nasdaq, 23.3x below its 5-year average premium of 36.8x. However, we note this average was heavily skewed by significant multiple expansion during COVID as a result of e-commerce adoption pull-forward. **If Shopify were to trade in-line with peers on a NTM EV/GP basis when adjusted for growth it would imply a 12-month price of $29.66 (34% downside).** Shopify represents a unique asset in the space that, despite significant valuation rerating, still trades at a rich multiple implying increased execution risk into an arguably weakening backdrop. On the following slide, we outline potential near-term implications.

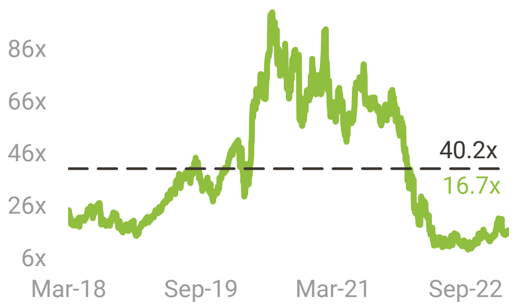
Scenario 1 – Current Price ($44.68, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, the model requires a revenue growth rate sustained at 20%+ through 2027. Operating margins over the long-term are expected to reach 60%+. If the stock were to remain at the current price in 12-months, based on current STM consensus gross profit it implies a 15x NTM EV/GP multiple.

Scenario 2 – Commerce Components ($54.44, 22% Upside): The second DCF scenario focuses on Shopify's recently launched Commerce Components offering, which broadens the company's TAM by enhancing the applicability of its commerce ecosystem to enterprise merchants by allowing for piecemeal adoption. This would sustain 20%+ revenue growth through 2029 before gradually decelerating to the terminal growth rate. This scenario points to a 12-month price of $54.44 (22% upside), which based on current STM consensus gross profit implies a 17x NTM EV/GP multiple.

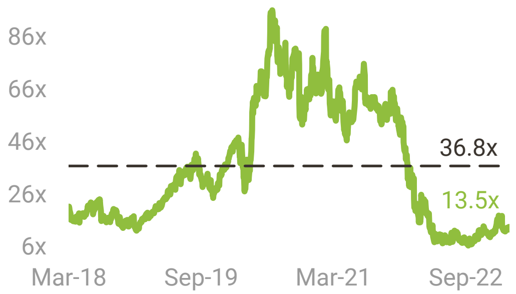
Scenario 3 – Recession ($35.38, 21% Downside): The third DCF assumptions are around the potential impacts of a near-term recession. In this scenario, near-term revenue growth expectations are lowered in 2023 and 2024, as well as EBIT margin growth before converging with the base case. This scenario points to a 12-month price of $35.38 (21% downside), which based on current STM consensus gross profit implies a 11x NTM EV/GP multiple.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

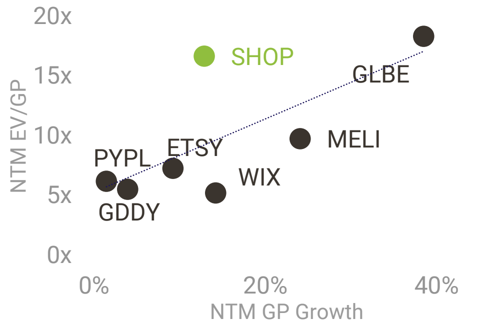
NTM EV/GP & 5-Year Average



NTM EV/GP Premium vs. NASDAQ[1]



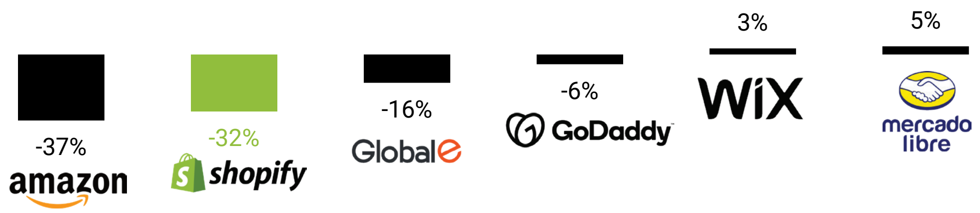
Peer NTM EV/GP Avg. vs. GP Growth



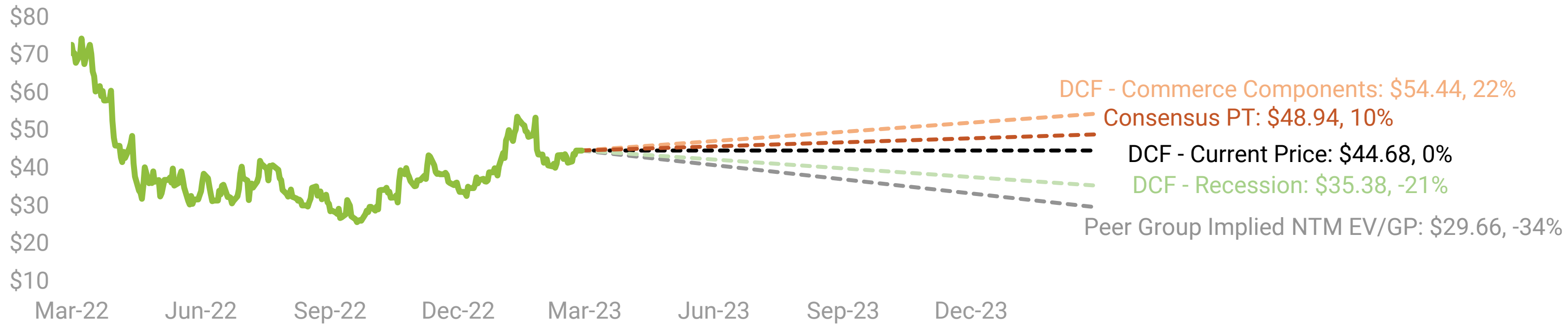
DCF Key Assumptions[2]

10-Yr RFR	3.6%
Cost of Equity	19.7%
Cost of Debt	5.8%
WACC	19.3%
Beta	2.72
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$4,435

Select Peer TTM Price Performance

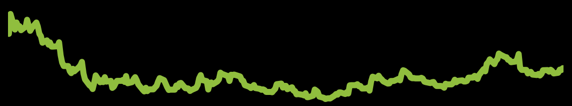


Price Chart & 12-month Forward Scenario Based Ranges



Source: Company filings, Factset, Visible Alpha
1) SHOP EV/NTM GP Less NASDAQ EV/Sales
2) SBC in millions

SHOP TTM Price Performance



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DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) the extent to which Shop Pay and Shopify Fulfillment Network (SFN) weigh on gross margins and 2) the level of churn/incremental revenue that will be generated from Shopify's price increases (which come into effect for existing merchants in April). These represent the most likely area(s) of upside/downside relative to consensus.

Consensus Case:

The average consensus price target for Shopify is $49, with STM gross profit estimates of $3,867mm implying a 15x NTM EV/GP earnings multiple in 12-months, in-line with the current multiple. The consensus $49 price target implies 10% upside to the current stock price.

Upside Case(s):

(+) $50, 12% Upside: This scenario assumes that Shopify can mitigate the negative margin headwinds associated with Shopify Payments and SFN so that gross margins return to the ~50% level. This implies 15% NTM gross profit growth and 12% upside to the current share price with a 17x NTM EV/GP multiple.

(+-) $46, 3% Upside: This scenario assumes the better-than-expected gross margin contribution but is partially offset by higher levels of churn/lower customer growth attributed to price increases. This implies 11% gross profit growth and 3% upside to the current share price with a 16x NTM EV/GP multiple.

(++) $54, 20% Upside: The best-case scenario assumes a higher gross profit margin, Shopify Payments can sustain the pace of recent penetration gains, as well as minimal customer churn related to the price increase. This implies 17% gross profit growth and 20% upside to the current share price with a 18x NTM EV/GP multiple.

Downside Case(s):

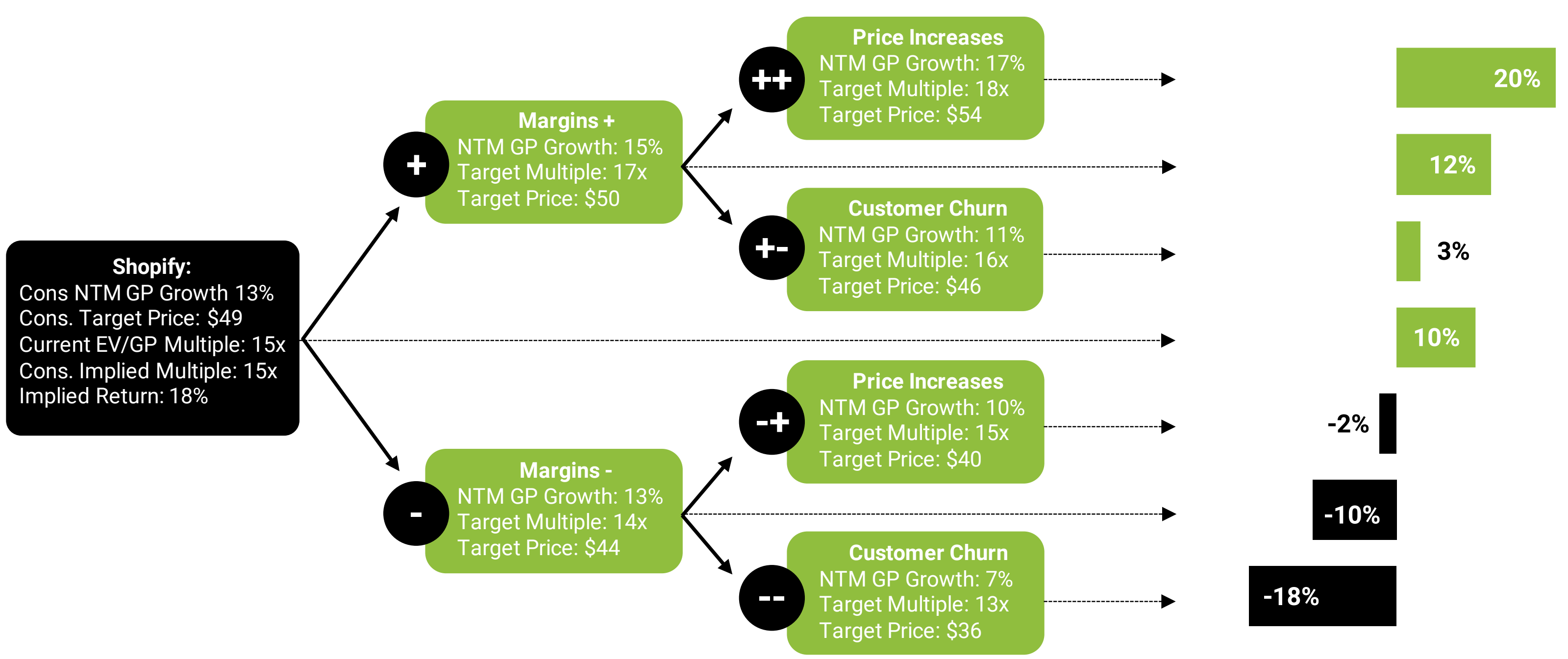
(-) $44, 10% Downside: This scenario assumes Shop Pay and SFN weigh on margins more than expected, without further accelerating revenue. This implies 13% gross profit growth and 10% downside to the current share price with a 14x NTM EV/GP multiple. In this decision tree, the multiples are modestly skewed to the downside, as Shopify's premium valuation implies there is likely larger room for multiple rerating downwards than upwards.

(-+) $40, 2% Downside: This scenario assumes weaker gross margins but the impact is partially offset by the price increases driving higher revenue without significantly contributing to churn. This implies 10% gross profit growth and 2% downside to the current share price with a 15x multiple.

(--) $36, 18% Downside: This scenario assumes weaker gross margins and higher customer churn. This implies 7% gross profit growth and 18% downside to the current share price with a 13x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Decision Tree | **12-month Price Return**



Shopify:
Cons NTM GP Growth 13%
Cons. Target Price: $49
Current EV/GP Multiple: 15x
Cons. Implied Multiple: 15x
Implied Return: 18%

\+ **Margins +**
NTM GP Growth: 15%
Target Multiple: 17x
Target Price: $50

++ **Price Increases**
NTM GP Growth: 17%
Target Multiple: 18x
Target Price: $54

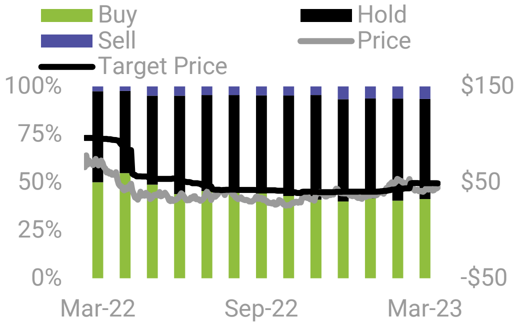
+- **Customer Churn**
NTM GP Growth: 11%
Target Multiple: 16x
Target Price: $46

\- **Margins -**
NTM GP Growth: 13%
Target Multiple: 14x
Target Price: $44

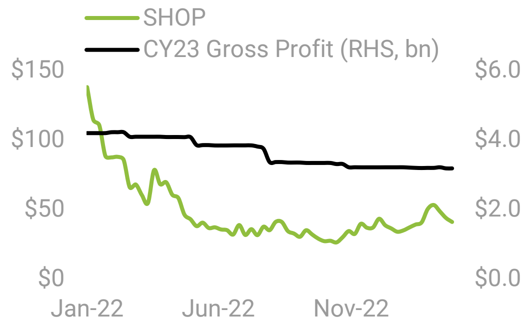
-+ **Price Increases**
NTM GP Growth: 10%
Target Multiple: 15x
Target Price: $40

-- **Customer Churn**
NTM GP Growth: 7%
Target Multiple: 13x
Target Price: $36

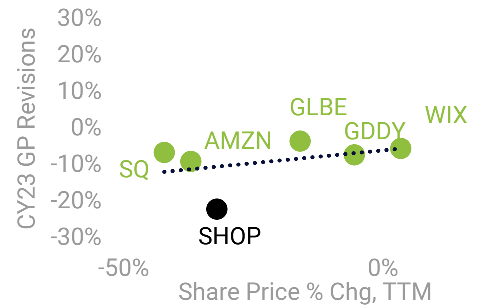
Sell-Side Ratings Distribution



Price Performance vs Est. Revisions



Est. Revisions vs Price Change, TTM



Source: Company filings; FactSet, Visible Alpha

03/20/23 - **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

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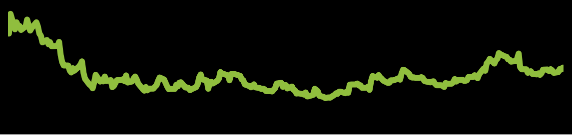
SHOP TTM Price Performance



Price as of 03/17/23:	$44.68	**Shares Out (mm):**	1,277
Market Cap (mm):	$57,039	**Beta (2 Year Avg.):**	2.7
52-Wk Range:	$23.63 - $78.00	**Avg. Daily Vol (mm):**	20.1

($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: The company reported strong 4Q22 results across the board. However, revenue guidance for 1Q23 missed consensus by about ~2%, driving the stock down ~11% after hours, giving back the 6% gain through the trading day for a net negative ~5% move on the day. That said, the many positives in the quarter, including the continued strong adoption of Shopify Payments and the launch of Commerce Components, should allow Shopify to retain its meaningful lead over competitors.

Results Recap: Shopify reported better than expected 4Q results, exceeding consensus on the top and bottom lines. Gross merchandise volume (GMV) of $61.0bn grew 13% YoY, exceeding consensus expectations of $59.0bn by 3%, while gross payment volume of $34.2bn expanded 23% YoY, 6% above consensus. This represents a 56.1% payment penetration rate for the company, 163bps ahead of expectations of 54.3%, and an increase from 51.2% in 4Q21. The company, however, narrowly missed on MRR by 2%, reporting $110mm vs estimates of $111mm, growing 7% YoY.

1Q23 Guidance Recap: The company issued guidance for high-teens YoY revenue growth, slightly below consensus of 21%. Management expects a “slightly higher” gross margin than 4Q22 of 46.0%, which is ~2% below consensus of 48% for the quarter. Operating expense growth to be in the low-single digits percentage compared to 4Q22 when one-time charges are accounted for. Stock-based compensation should stay in-line with 4Q22, which was $142mm, lower than consensus of $152mm by 7%, and capital expenditures are expected to be in-line with capital spend for FY22 of $116mm, 43% below consensus of $282mm.

Incremental from Call:

- **Guidance Commentary**: Management highlighted that guidance includes regular seasonality associated with 1Q. Shopify payments has had a negative impact to gross margins recently, and since its expansion has outpaced growth elsewhere in the company, this is expected to be a headwind to margins at least in the near-term. Shopify Fulfillment Network (SFN) is also expected to be a headwind to gross margins. With fulfillment margins generally being significantly lower than margins on subscription or payment revenue, SFN is likely to remain a focus of investors most critical questions. Management noted that the expected increase in operating expenses on a YoY basis was due to the incremental head count acquired with Deliverr and the implementation of a new compensation system, which started leveling in the back half of 2022 and will continue into 2023.
- **Shop Pay Penetration:** The company rolled out both Shop Pay and Shop Pay Installments for its Point-of-Sale product in a limited beta. Shop Pay hit a new milestone, having over 100 million buyers opted into the payments network. Shop Pay was able to contribute $11bn in GMV in Q4 and has now passed $77bn in cumulative volume since its inception in 2017. It’s important to note that Shop Pay is the payments “button” and associated offering, but not representative of the entire $34.2bn in GPV reported by Shopify.
- **Price Increases:** Shopify has announced an increase in prices across all its basic subscriptions. The company’s Basic, Shopify, and Advanced subscription prices are increasing 34% ($29 to $39), 38% ($79 to $105) and 33% ($299 to $399). Management noted that guidance issued for 1Q included these price increases. All new merchants joining the platform will do so on the new pricing tiers. Existing merchants will be moved onto the new pricing structure starting April 23rd of 2023, though they will get a one-year grace period if they switch to an annual versus a monthly commitment by that date, which means the full effect of the change will not be seen until 2Q24. These price increases will likely have a material impact on MRR, barring the unlikely chance it drives a material increase in merchant churn.
- **Commerce Components:** The company launched commerce components, an enterprise focused product at the beginning of this year. This product allows merchants to choose each component needed for their business on a piecemeal basis. Shopify, with the Commerce Components offering, recognizes that enterprise merchants have a far more complex web of vendors and/or more developed in-house technology, allowing the company’s offering to satisfy the specific needs of these merchants on a more targeted basis.

4Q22 REPORTED VS. CONSENSUS

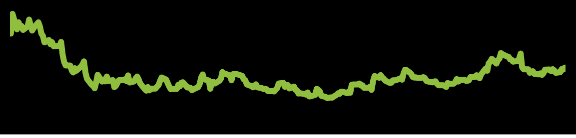
Line-Item	Reported	Cons.	Abs.▲	%▲
Gross Merchandise Volume (bn)	**$61.0**	**$59.1**	**$1.88**	**3%**
growth (%, yoy)	*13%*	*9%*		
Gross Payment Volume (bn)	**$34.2**	**$32.2**	**$2.01**	**6%**
growth (%, yoy)	*23%*	*16%*		
GPV Penetration Rate	**56.1%**	**54.5%**	**163bps**	
growth (bps, yoy)	*486bps*	*324bps*		
Monthly Recurring Revenue	**$110**	**$111**	**-$1.75**	**-2%**
growth (%, yoy)	*7%*	*9%*		
Subscription Solutions	**$400**	**$385**	**$15.6**	**4%**
growth (%, yoy)	*14%*	*10%*		
Merchant Solutions	**$1.33**	**$1.26**	**$0.07**	**6%**
growth (%, yoy)	*30%*	*23%*		
Total Revenue (bn)	**$1.73**	**$1.65**	**$0.09**	**5%**
growth (%, yoy)	*26%*	*19%*		
Cost of Revenue	**$936**	**$889**	**$47.2**	**-5%**
growth (%, yoy)	*36%*	*29%*		
Gross Profit	**$799**	**$762**	**$36.5**	**5%**
Gross Margin (%)	*46%*	*46%*	*-19bps*	
Total Operating Expenses	**$987**	**$993**	**-$5.6**	**1%**
growth (%, yoy)	*46%*	*46%*		
Operating Income	**-$189**	**-$235**	**$46.5**	**20%**
Operating Margin (%)	*-11%*	*-14%*		
Adj. Operating Income	**$61.0**	**-$37.1**	**$98.1**	**265%**
Adj Operating Margin (%)	*4%*	*-2%*		
Adj. Net Income	**$100.1**	**-$12.6**	**$113**	**897%**
Adj Net Income Margin (%)	*6%*	*-1%*		

1Q23 Guidance	New	Cons.
Revenue	"high-teens growth YoY"	18%
SBC	"in-line with 4Q22"	2% QoQ
Gross Margin	"slightly higher than 4Q of 46.1%"	48%
Operating Expenses	"LSD growth vs 4Q22 ex adjustments"	28% YoY

Source: Company filings; FactSet, Visible Alpha

shopify

SHOP TTM Price Performance



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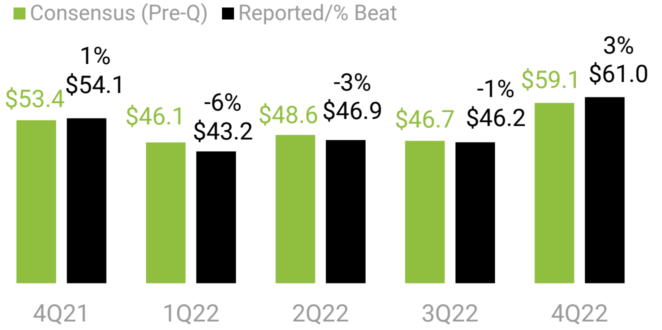
52-Wk Range:	$23.63 - $78.00	**Avg. Daily Vol (mm):**	20.1

FINANCIAL TECHNOLOGY PARTNERS

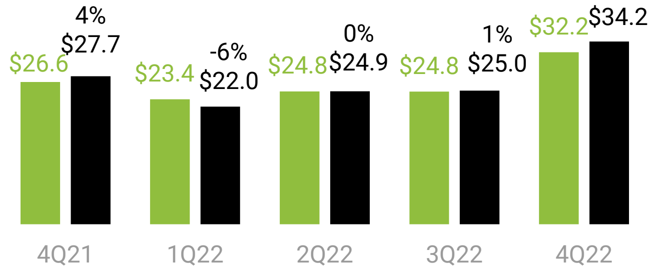
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS[1]

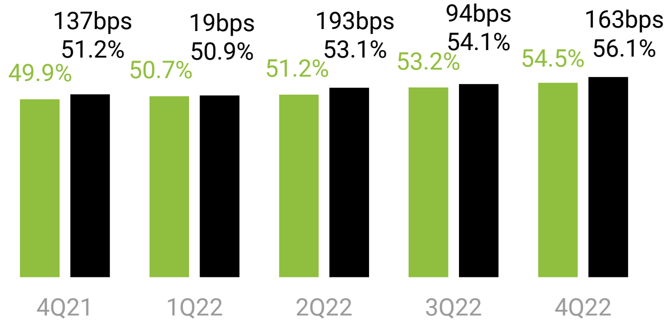
Gross Merchandise Volume (bn)



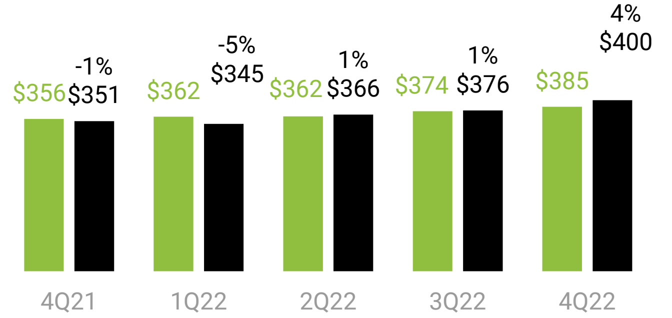
Gross Payment Volume (bn)



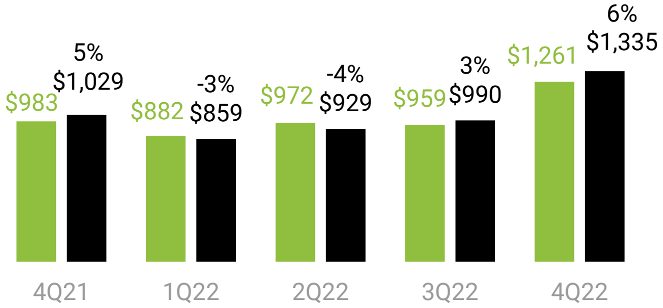
GPV Penetration Rate[2]



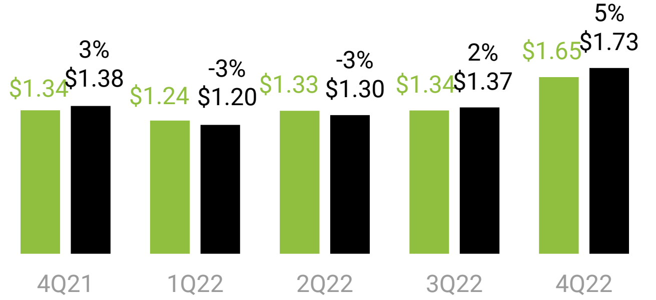
Subscription Solutions Revenue



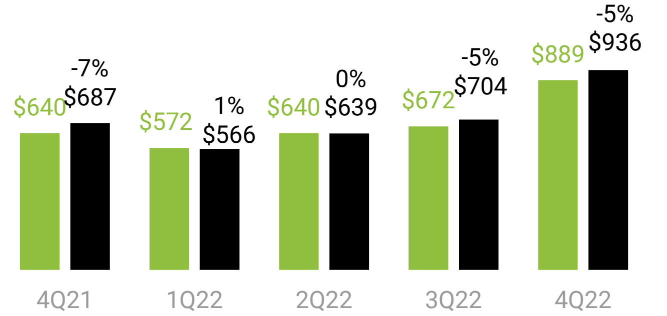
Merchant Solutions Revenue



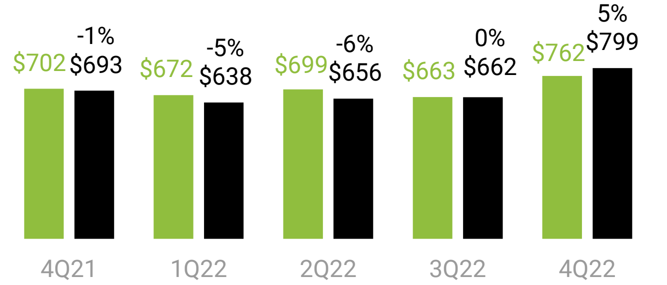
Total Revenue (bn)



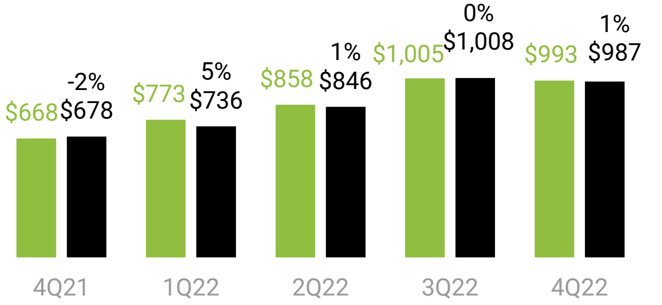
Cost of Revenue



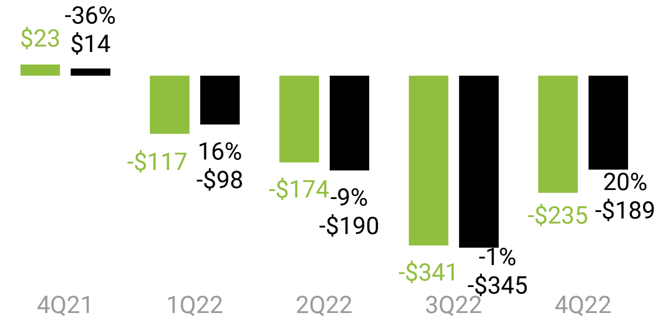
Gross Profit



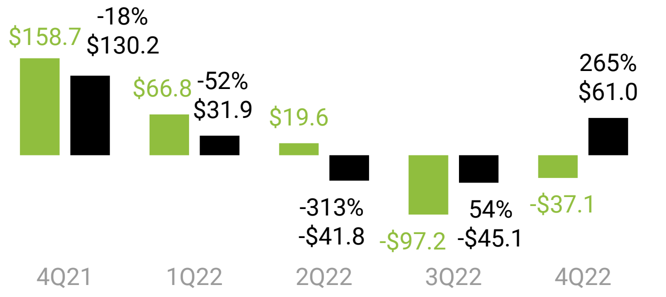
Operating Expenses



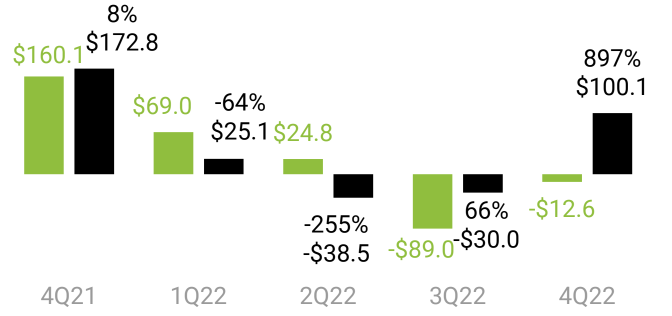
Operating Income



Adjusted Operating Income



Adjusted Net Income



Source: Company filings
1) FactSet, Visible Alpha
2) GPV Penetration Rate Calculated as GPV/GMV

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Market Cap (mm):	$57,039	**Beta (2 Year Avg.):**	2.7
52-Wk Range:	$23.63 - $78.00	**Avg. Daily Vol (mm):**	20.1

($ in millions, except where otherwise noted)

1Q23 EARNINGS OUTLOOK

Shopify is projected to report 1Q23 earnings on May 2nd after the market close.

What's In Focus:

Shopify has recently launched its Commerce Components product, an enterprise-focused offering allowing merchants to pick and choose what elements they want to utilize from Shopify's menu of commerce capabilities. This move up market expands the company's growth runway and verticals, although, with presumably less favorable unit economics that could pose a headwind to margins. Shopify has also implemented a ~33% increase in subscription prices across its product offerings, excluding its Shopify plus product which will remain at its $2,000/month price. All new merchants joining Shopify will be added on this higher pricing structure, while existing merchants have until April 23rd to switch from monthly to annual terms to keep their current pricing. This means the full effects of these price increases will not be fully lapped until 3Q24. The significant ~33% increase in subscription prices brings concerns around merchant churn rates, though consensus thinking is leaning toward this being a minor issue. The increase in prices is expected to expand the estimate range going forward due to wide-ranging assumptions around the variables discussed.

Estimates:

- **KPIs:** Since reporting earnings estimates for 1Q23, consensus GMV has been revised down ~2% from $48.5bn to $47.4bn. GPV estimates have also been revised slightly lower by ~1% from $26.4bn to $26.0bn. The small revisions downward on these top-line metrics are likely the result of weaker than expected revenue guidance from management on the 4Q22 earnings call, which was ~2% below consensus at the time. The larger downward revision to GMV in comparison to GPV implies that consensus is forecasting a higher GPV penetration rate for 1Q23 after the print, moving from 54.3%to 54.9%, a ~60bps increase in penetration.
- **Revenue:** Consensus for Subscription Solutions revenue has remained largely unchanged since reporting 4Q22 earnings. Consensus had likely already included current thinking regarding the impact of the aforementioned pricing changes. Merchant Solutions revenue, however, has been revised downward by about 3%. We believe that the revision downward in Merchant Solutions is attributable to management commentary on overall revenue growth, and given the increase in subscription pricing, the logical conclusion is for consensus revisions downward to take place within the Merchant Solutions segment.
- **Margins:** Estimates for gross profit have been revised downward by ~6% from $723mm to $677mm since reporting 4Q22 results. This revision downward also represents a decrease in gross margin estimates, moving lower by ~220bps from 49.6% to 47.4%. This contraction in margin follows the outsized contribution to revenue that Merchant Solutions has recently represented, driven at least in part by Shopify Payments, which has a significantly lower margin than the company's subscription offerings.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

1Q22	2Q22	3Q22	4Q22
• Missed on top and bottom-line • Net loss of $1.47bn versus profit of $1.26bn a year ago • Announced $2.1bn acquisition of Deliverr	• Missed on top and bottom-line • Indicated that losses will increase in Q3 • The day before print, SHOP announced layoffs for 10% of workforce, driving shares down 14%	• Revenue slightly ahead of consensus with better-than-expected operating margins • Shopify Payment penetration grew to ~54% vs. ~53% in 2Q22.	• Revenue beat of 5%, Adj. Net Income beat of $112mm • Shopify Payment penetration up to ~56% vs. ~54% in 3Q22. • 1Q23 guidance slightly short of consensus

MANAGEMENT COMMENTS/WHAT'S PRICED IN

- Shopify has put enterprise businesses in focus with new product Commerce Components
- Outlook includes assumptions that merchant solutions segment growth will continue to outpace subscription solutions growth and will drag on margins in the near-term
- Subscription prices for core product offerings have been raised ~33% across all subscriptions excluding Shopify Plus
- Deliverr has been fully integrated into the business, but comps for 1Q23 and 2Q23 will not be clean since the Deliverr acquisition was completed mid-way through 2022.
- Management has commented that they expect headcount to remain at relatively similar levels to where they exited FY22.
- Cash flow positive during Q4, management wants to show that they have the levers to pull to manage growth and profitability

Source: Company filings; FactSet
1) U.S. Census Bureau
2) Visible Alpha Consensus

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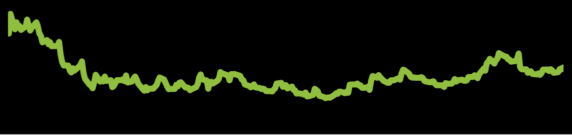
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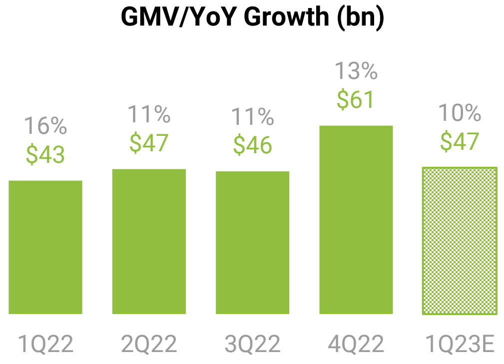
FINANCIAL TECHNOLOGY PARTNERS

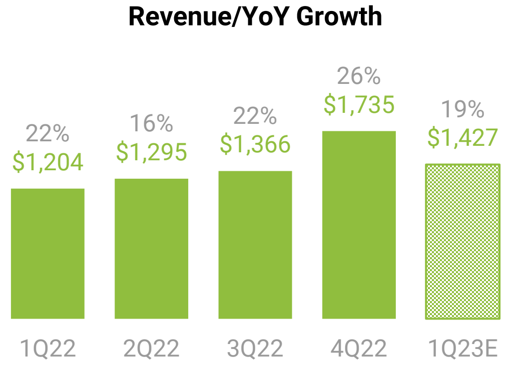
($ in millions)

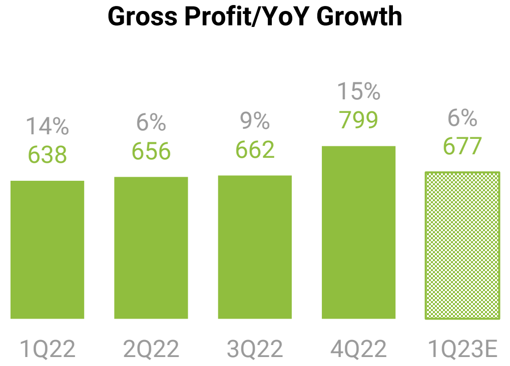
1Q23 CONSENSUS ESTIMATE RANGES

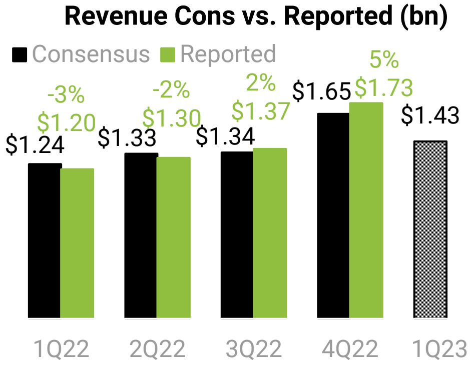
	Low	Average	High
GMV	**$43,679**	**$47,386**	**$53,336**
growth (%, yoy)	*1%*	*10%*	*23%*
GPV	**$24,451**	**$26,025**	**$27,093**
growth (%, yoy)	*11%*	*18%*	*23%*
Monthly Recurring Revenue	**$110**	**$110**	**$110**
growth (%, yoy)	*4%*	*4%*	*4%*
Subscription Solutions	**$371**	**$389**	**$410**
growth (%, yoy)	*8%*	*13%*	*19%*
Merchant Solutions	**$979**	**$1,036**	**$1,064**
growth (%, yoy)	*14%*	*21%*	*24%*
Total Revenue	**$1,414**	**$1,427**	**$1,441**
growth (%, yoy)	*17%*	*19%*	*20%*
Costs of Revenue	**$732**	**$751**	**$767**
growth (%, yoy)	*29%*	*33%*	*35%*
Gross Profit	**$660**	**$677**	**$693**
Gross Margin (% of Revenue)	*47%*	*47%*	*48%*
Total Operating Expenses	**$908**	**$935**	**$1,014**
growth (%, yoy)	*23%*	*27%*	*38%*
Operating Income	**-$355**	**-$259**	**-$186**
Operating Margin (% of Revenue)	*-25%*	*-18%*	*-13%*
Adjusted Operating Income	**-$183**	**-$88**	**-$26**
Adj. Operating Margin (% of Revenue)	*-13%*	*-6%*	*-2%*
Adjusted Net Income	**-$531**	**-$86**	**$11**
Adj. Net Income Margin (% of Revenue)	*-38%*	*-6%*	*1%*

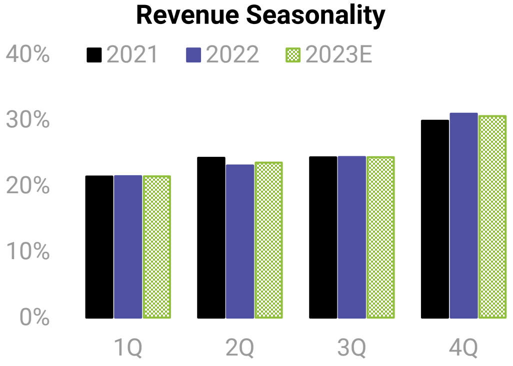
QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

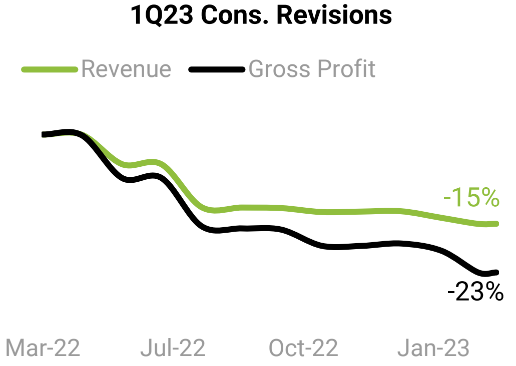

GMV/YoY Growth (bn)

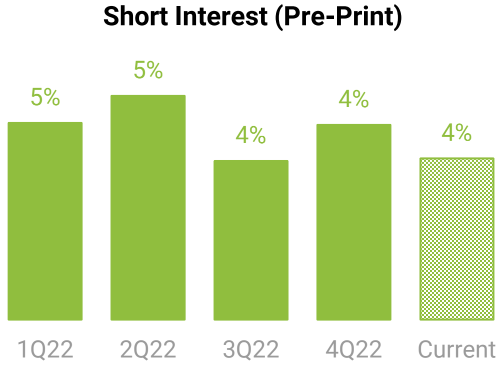

Revenue/YoY Growth

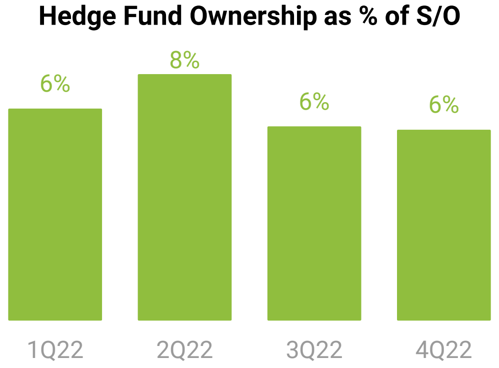

Gross Profit/YoY Growth

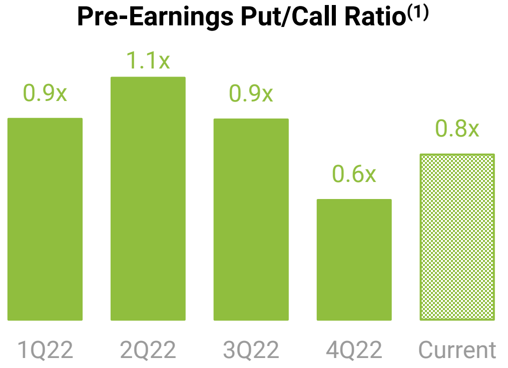

Revenue Cons vs. Reported (bn)


Revenue Seasonality


1Q23 Cons. Revisions


Short Interest (Pre-Print)


Hedge Fund Ownership as % of S/O

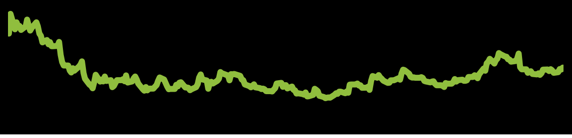

Pre-Earnings Put/Call Ratio(1)

FT Partners | Equity Research

Source: Company filings; FactSet, Visible Alpha
1) Put/Call Ratio over 7-days leading into earnings

03/20/23 - Craig Maurer | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

SHOP TTM Price Performance



Price as of 03/17/23:	$44.68	**Shares Out (mm):**	1,277
Market Cap (mm):	$57,039	**Beta (2 Year Avg.):**	2.7
52-Wk Range:	$23.63 - $78.00	**Avg. Daily Vol (mm):**	20.1

QUESTIONS FOR MANAGEMENT

General:

1) Have you seen any changes in online shopping behavior or momentum since reporting 4Q22 results?
2) How have recent pricing changes impacted new merchant growth, if at all?
3) Can you provide any color on the portion of GMV/GPV that comes through in-person POS and to what degree this volume impacts take rate?
4) Should investors carry recent efficient gains in G&A forward in their models, assuming gains are permanent?
5) What does the overall capital allocation strategy look like given multiples compressing? Is the company looking for any strategic acquisitions?
6) Given Stripes position requiring additional funding and planning a raise later this year, does Shopify see this as an opportunity to lock in a long-term contract with more favorable pricing before a potential IPO?

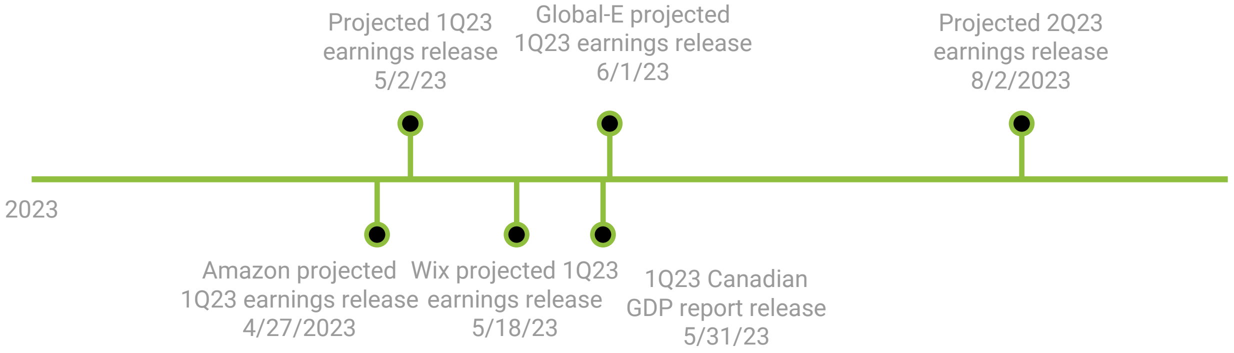
Shopify Fulfillment Network

7) Wil the technology acquired through Deliverr completely supplant your own inventory routing capability or be integrated?
8) Can you provide some sizing on the penetration rate of SFN, in number of merchants or its relationship to either GMV or GPV?
9) Has management scaled back plans for the number of owned warehouse facilities in favor of more partner facilities for SFN?
10) Can you help us contextualize SFN's margins relative to the rest of the business, and how do you see those margins evolving over time?

Shopify Payments

10) With the addition of Commerce Components potentially accelerating growth in enterprise, could this lead to a slowing of GMV penetration growth for Shopify Payments?
11) Please help us understand the relative volume contribution of Shop Pay by merchant size?
12) Is there any difference in the Shop Pay penetration rate when you look at it in terms of number of merchants rather than on a volume basis?

POTENTIAL CATALYSTS



2023

Projected 1Q23 earnings release 5/2/23

Global-E projected 1Q23 earnings release 6/1/23

Projected 2Q23 earnings release 8/2/2023

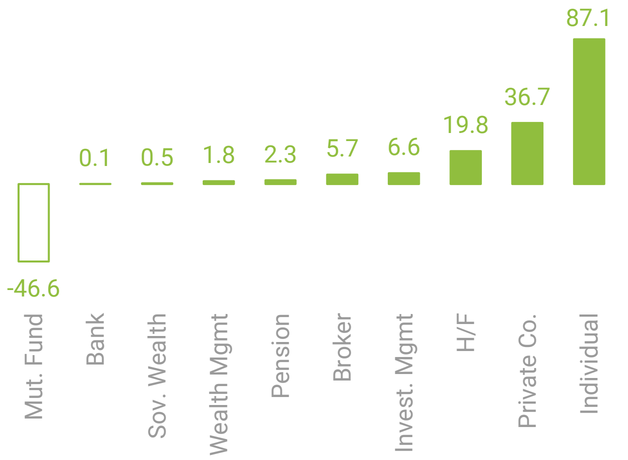
Amazon projected 1Q23 earnings release 4/27/2023

Wix projected 1Q23 earnings release 5/18/23

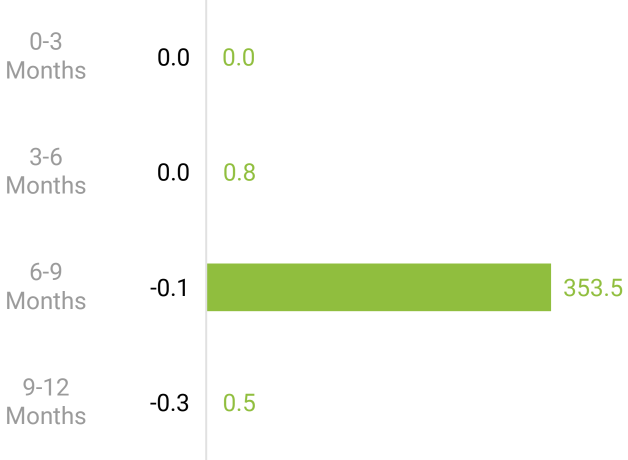
1Q23 Canadian GDP report release 5/31/23

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



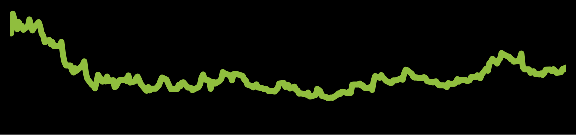
Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

shopify

SHOP TTM Price Performance



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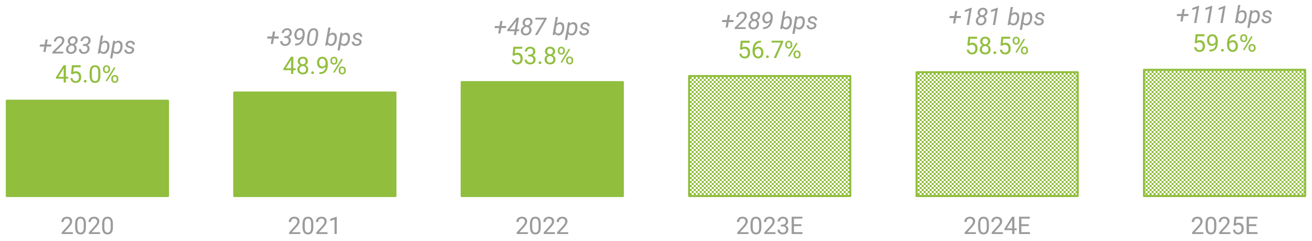
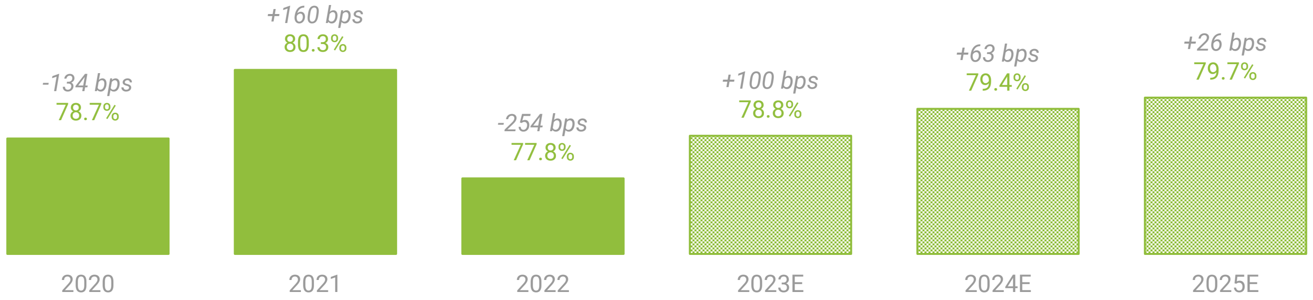
FINANCIAL TECHNOLOGY PARTNERS

COMPANY RATIOS/MARGIN ANALYSIS

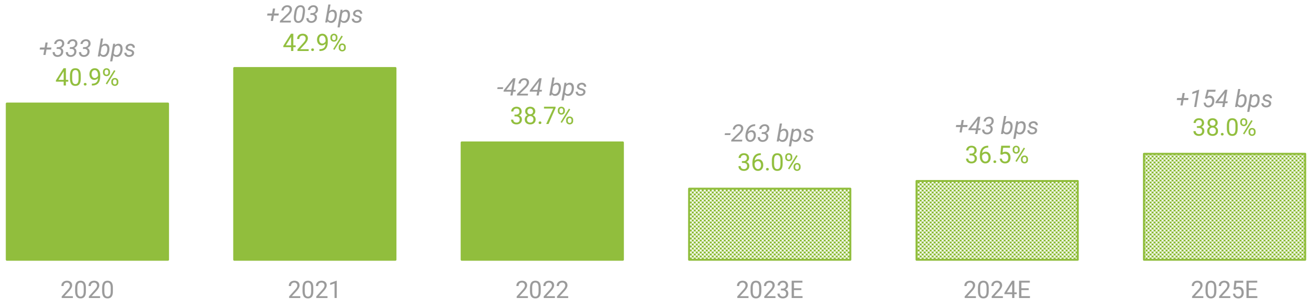
GPV Penetration Rate(2)



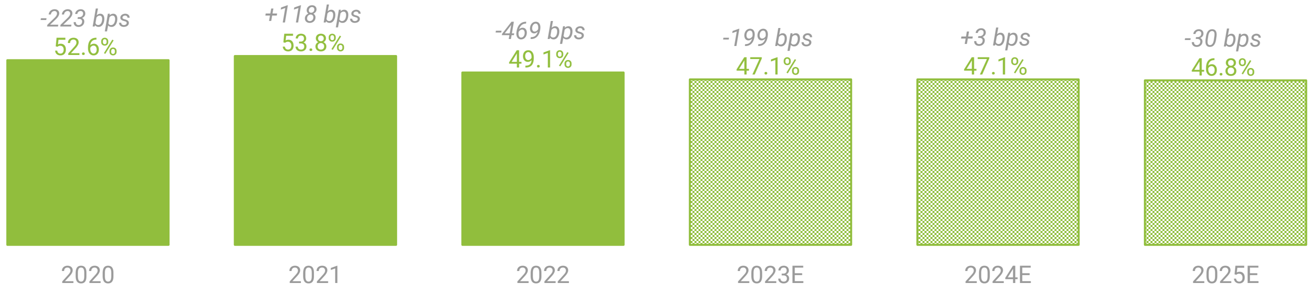
Subscription Solutions Gross Margin



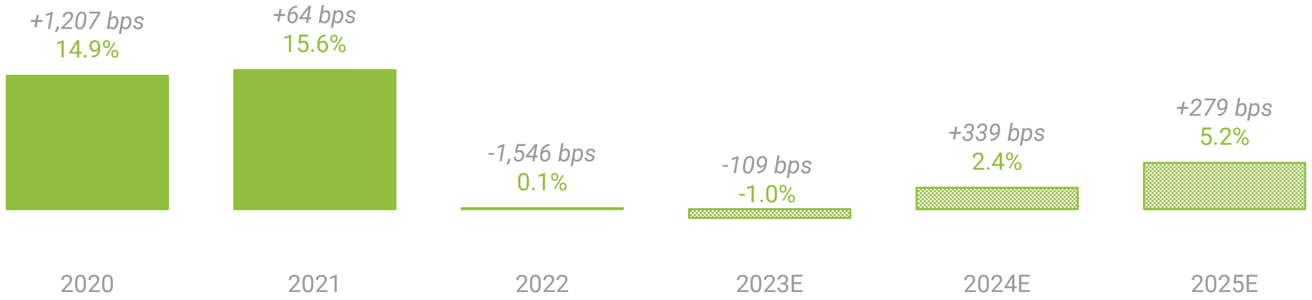
Merchant Solutions Gross Margin



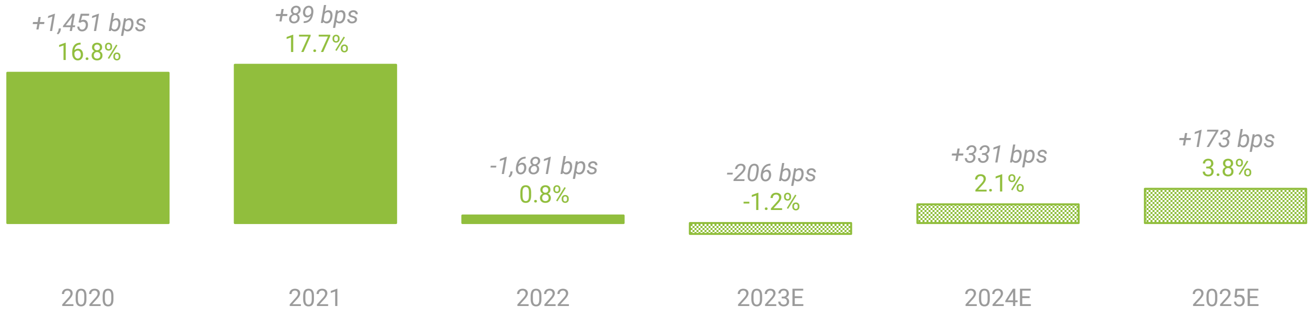
Gross Margin



Adjusted Operating Margin



Adjusted Net Income Margin

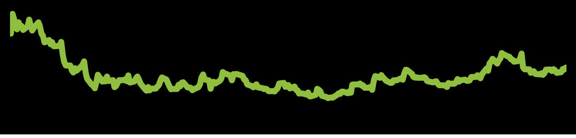


FT Partners | Equity Research

Source: Company filings
1) FactSet, Visible Alpha
2) GPV Penetration Rate Calculated as GPV/GMV

shopify

SHOP TTM Price Performance



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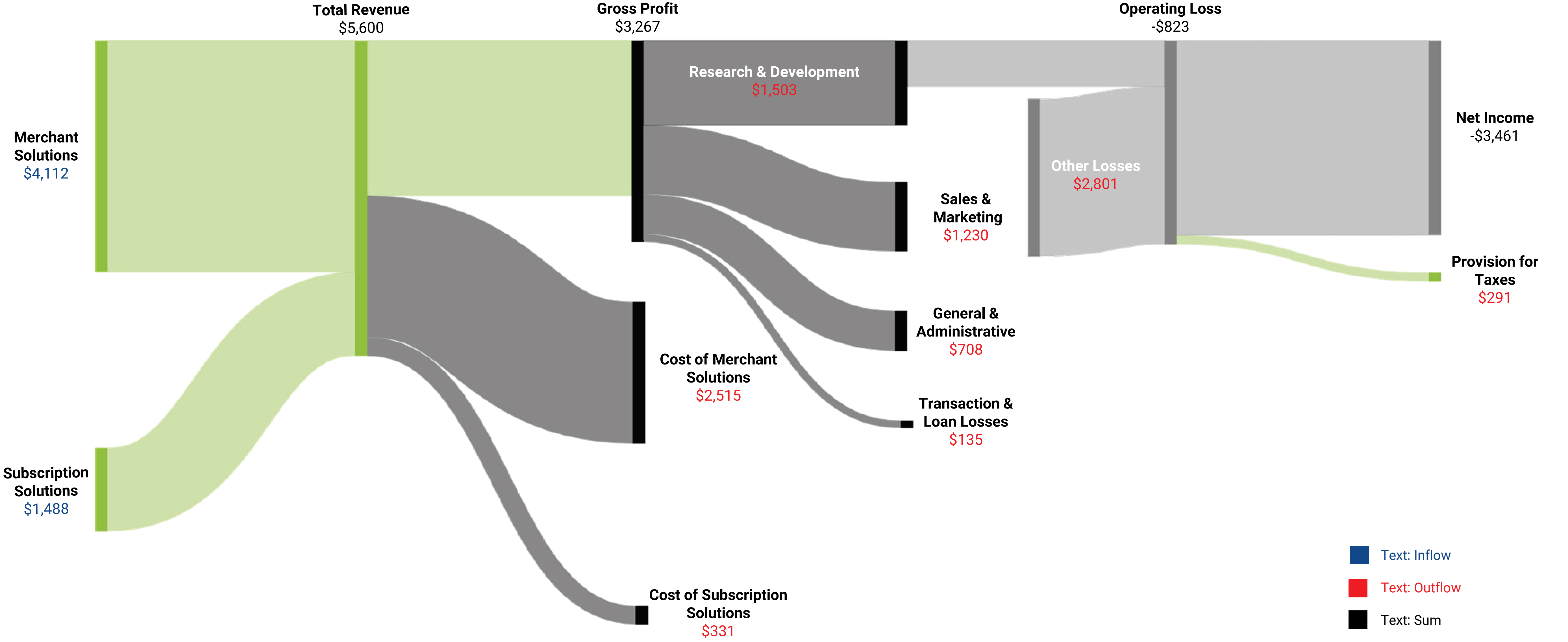
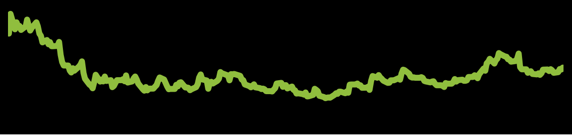
($ in millions)

P&L VISUALIZATION – TTM



Source: Company filings; FactSet

SHOP TTM Price Performance



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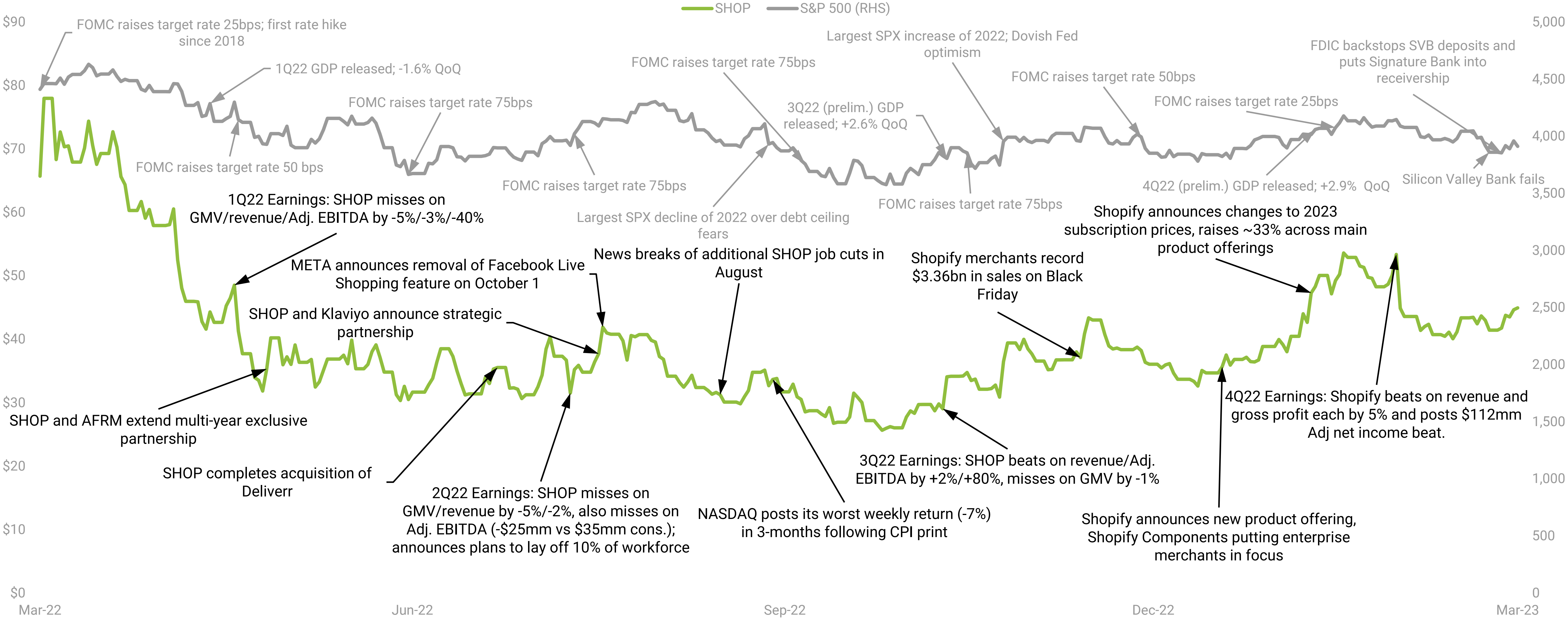
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

3Q22 (prelim.) GDP released; +2.6% QoQ

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 75bps

FOMC raises target rate 50bps

FOMC raises target rate 25bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

Silicon Valley Bank fails

1Q22 Earnings: SHOP misses on GMV/revenue/Adj. EBITDA by -5%/-3%/-40%

META announces removal of Facebook Live Shopping feature on October 1

SHOP and Klaviyo announce strategic partnership

SHOP and AFRM extend multi-year exclusive partnership

SHOP completes acquisition of Deliverr

2Q22 Earnings: SHOP misses on GMV/revenue by -5%/-2%, also misses on Adj. EBITDA (-$25mm vs $35mm cons.); announces plans to lay off 10% of workforce

News breaks of additional SHOP job cuts in August

NASDAQ posts its worst weekly return (-7%) in 3-months following CPI print

3Q22 Earnings: SHOP beats on revenue/Adj. EBITDA by +2%/+80%, misses on GMV by -1%

Shopify merchants record $3.36bn in sales on Black Friday

Shopify announces changes to 2023 subscription prices, raises ~33% across main product offerings

Shopify announces new product offering, Shopify Components putting enterprise merchants in focus

4Q22 Earnings: Shopify beats on revenue and gross profit each by 5% and posts $112mm Adj net income beat.

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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Client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as clients:* Shopify

Investment Banking Client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as investment banking clients*: *Shopify*

Non-Investment Banking Client, Securities-Related client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as non-investment banking, securities related clients: Shopify*

Non-Securities Related Client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as non securities related clients: Shopify*

Investment Banking past 12 months: *FTP Securities LLC has not received in the past 12 months compensation from investment banking: Shopify*

Investment Banking next 3 months: *FTP Securities LLC does not expect to receive compensation from investment banking Shopify in the next 3 months.*

Non-Investment Banking Compensation: *FTP Securities LLC does not expect to receive compensation for non-investment banking services from Shopify in the next 3 months.*

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SoFi

SOFI PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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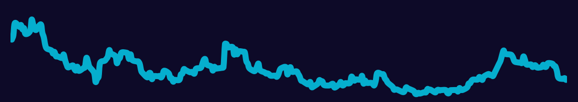
Matthew.O'Neill@ftpartners.com (347) 614-2481 *(AC) | FTP Securities LLC is a FINRA registered broker dealer (www.finra.org) and member SIPC (www.sipc.org). The firm and its reps can be found here: FTP SECURITIES LLC - BrokerCheck (finra.org) | March 20, 2023
Please refer to page 298 for important disclosures.

SoFi


SOFI TTM Price Performance

Price as of 03/17/2023:	$5.46	**Shares Out (mm):**	935
Market Cap (mm):	$5,103	**Beta (Since IPO):**	1.5
52-Wk Range:	$4.24 - $10.57	**Avg. Daily Vol (mm):**	37.6

FINANCIAL TECHNOLOGY PARTNERS

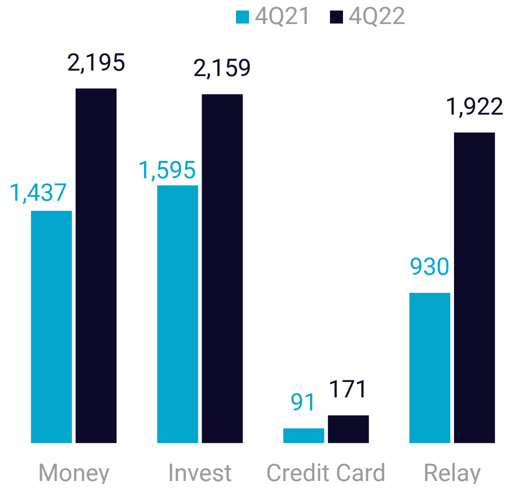
COMPANY OVERVIEW

SoFi offers a variety of financial services that allow customers to borrow, save, spend, invest, and protect their money through its various lending and financial services products. SoFi also **acquired a national bank charter** at the start of 2022, which, according to management, allowed the company to lend at more competitive rates and provide members with high-yield interest checking/savings accounts.

Products offered by SoFi are organized into three distinct categories:

- **Lending:** SoFi primarily utilizes a gain-on-sale method, aiming to originate loans (student, personal, home). These loans are recognized at fair value while on the balance sheet.
- **Technology Platform:** Primarily made up of platform fees from Galileo – a modern API focused card-issuer processor (acquired in 2020). The segment also includes revenue from Technisys (acquired in 2022).
- **Financial Services:** Includes *SoFi Money* for cash management, *SoFi Checking and Savings*, *SoFi Invest* for brokerage services, *SoFi Credit Card*, and *SoFi Relay* for financial tracking.

PRODUCTS (000)⁽¹⁾



KEY DEBATES

1. **Credit:** Given the funding environment and a growing deposit base, SoFi has increased the portion of loans it holds on its balance sheet. This has weighed on valuation as 1) the market typically assigns lower valuations to the more credit exposed businesses and 2) the delinquency rate on these loans has moved to more "normal" (pre-COVID) levels. Investors are keenly focused on SoFi's ability to execute through a consumer credit downturn, while continuing to drive product growth.

2. **Fair Value:** SoFi utilizes a fair value accounting method (like Upstart) instead of historical cost utilized by more traditional lenders like AXP, JPM, etc. The value of this method is that it 1) provides investors a more accurate valuation of company assets and 2) it limits potential impacts to net income through either timed asset sales or provision releases. However, it can lead to frequent large swings in value and investor uncertainty around how the book is currently marked (a debate that has been exacerbated by the material interest rate moves and hedge gains in recent quarters).

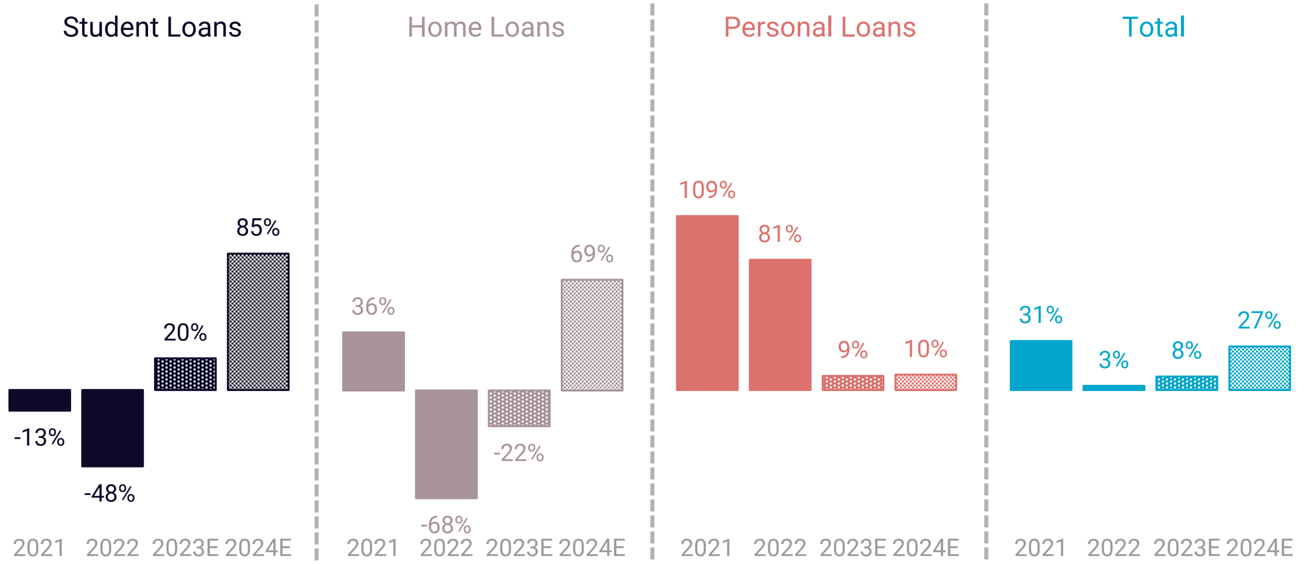
3. **Student Loans:** In 2020, student loan originations made up 51% of total originations. Following the COVID-19 pandemic and student loan moratorium, student loan originations only represented 17% of origination volume in FY22. On March 7th SoFi sued the Biden administration in an effort to end the pause on federal student loan payments. According to the complaint, SoFi projects that it will lose $25mm - $30mm if the payment pause remains in place through August. The ending/extension of the moratorium will remain a key point for investors in FY23, as well as consumer refi demand with interest rates now materially higher.

REVENUE MODEL

SoFi's revenues are primarily split between three categories:

- **Lending (72% of FY22 adjusted revenues):** Largely driven by personal, student, and home loan originations; lending is the highest grossing segment and largest contributor to total revenue. In FY22, SoFi originated $13bn in total loans Historically, student loans was the largest contributor to originations however, over the course of the student loan moratorium personal loans and home loans grew to account for a larger portion of originations.
- **Technology Platform (20% of FY22 adjusted revenues):** Segment of Galileo revenue, a 2020 acquisition which generates revenue through its technology platform fees and program management fees. Technology platform fees are for access to Galileo, which offers a suite of program, event and authorization application programming interface for both financial and non-financial institutions. Program management fees are from the creation and management of card programs.
- **Financial Services (11% of FY22 adjusted revenue):** Representing the majority of the product offerings on the platform such as cash management with *SoFi Checking and Savings* (phasing out *SoFi Money* since acquiring their bank charter in early 2022), brokerage services with *SoFi Invest*, *SoFi Credit Card* with their 3% cash back card, and *SoFi Relay's* financial tracking.

CONSENSUS ORIGINATION GROWTH BY LOAN TYPE



Source: Company filings

1) Aggregate number of lending/financial services products for all customers, including those unregistered to-date

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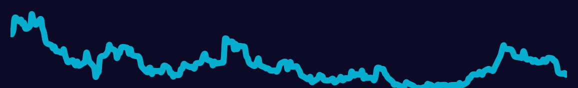
SoFi

SOFI TTM Price Performance



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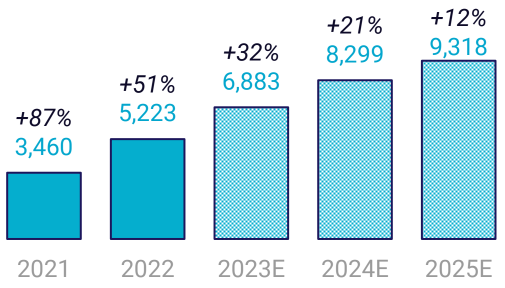
FINANCIAL TECHNOLOGY PARTNERS

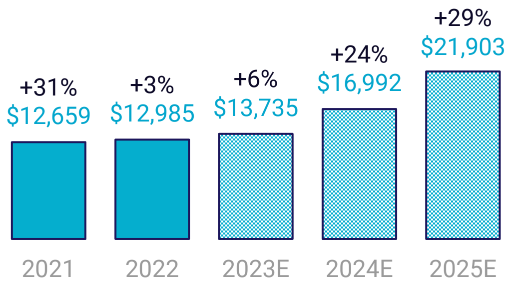
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

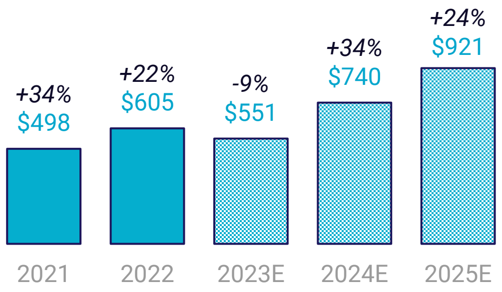
Total Members (000)[2]



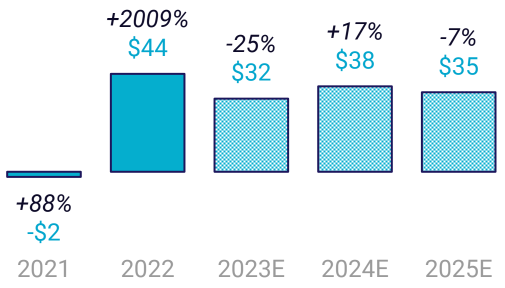
Total Origination Volume



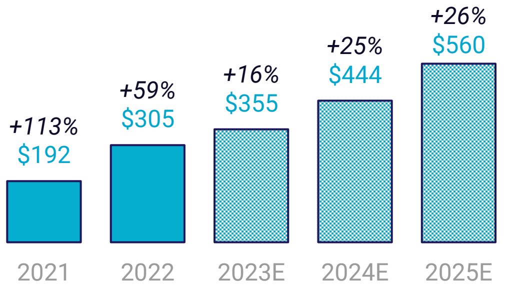
Total Origination and Sale Income



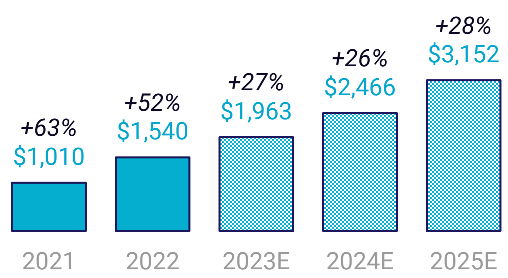
Servicing Revenue



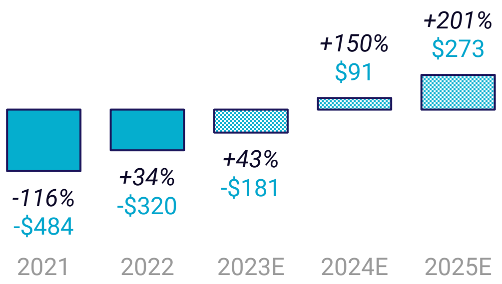
Technology Platform Fees



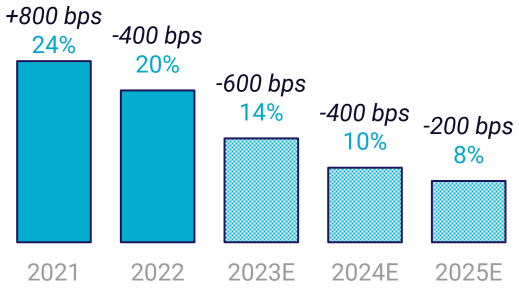
Adjusted Net Revenue



Net Income



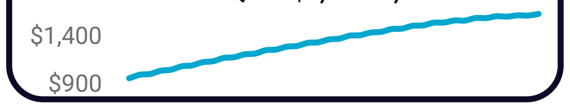
SBC % of Adj. Net Revenue



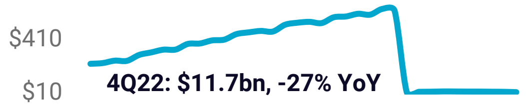
INDUSTRY KPIs

RAL Index[3] (2019-Mar 23)

Student Loan Outs. Balance ($ in bn)[4] (2013-4Q22)

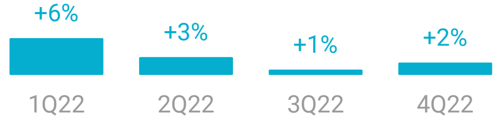


Active Student Loan Repayment ($ in bn)[4] (2014-4Q22)

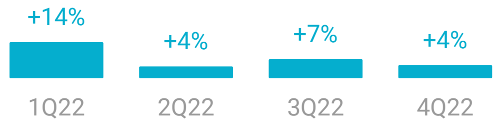


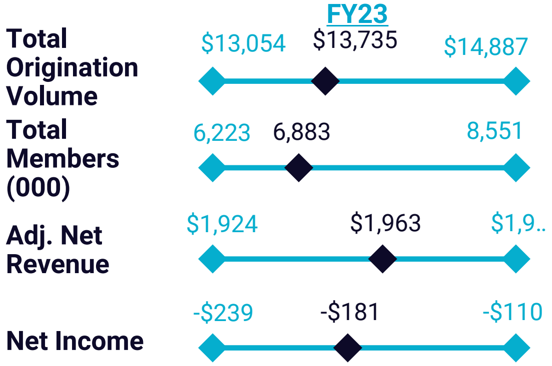
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[5]

Adjusted Net Revenue



Adjusted EBITDA





TOTAL ADDRESSABLE MARKET

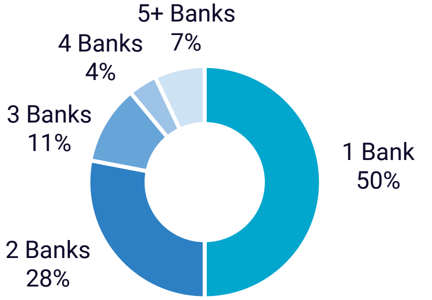
Financial Services

$2tn TAM

500m+ Bank Accounts

Top 10 legacy banks hold 48% of accounts

50% of Americans use more than one bank for their financial services



FT Partners | Equity Research

Source: Company filings
1) FactSet
2) Includes all current and prior customers (active and inactive)
3) Refinance Application Level Index: Change in avg. $ volume for last 4 weeks over previous 4-weeks avg.
4) U.S. Department of Education: Federal Student Loan Portfolio
5) FactSet Consensus Low/Average/High Range

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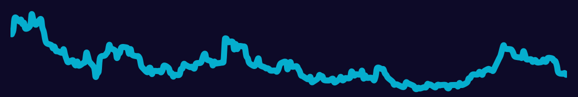
SOFI TTM Price Performance



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Market Cap (mm):	$5,103	Beta (Since IPO):	1.5
52-Wk Range:	$4.24 - $10.57	Avg. Daily Vol (mm):	37.6

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VALUATION CONSIDERATIONS

Relative Valuation:

Given SoFi's strong top-line sales growth, it is helpful to adjust book value based valuation for difference in top-line growth rates among peers. SoFi trades at a 1.0x P/BV multiple 0.3x below its average multiple of 1.3x. **If SoFi were to trade in-line with its peer group on a P/BV basis, when adjusted for top-line growth, it would imply a $10.43 price.** As interest rates have risen the narrative around SoFi has focused on 1) their hedge gains within the lending segment 2) growth sustainability given decreased refinance demand and 3) credit losses and managing the overall loan book. That said, SoFi offers a compelling value proposition for customers and is significantly ahead of traditional competitors when it comes to digital banking.

Scenario 1 – Current Price ($5.46, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of 25%+ through FY24 before sharply decelerating to mid-teens growth in 2025 and gradually decreasing to the terminal growth rate. This is significantly below consensus expectations for sustained 20%+ revenue growth through FY25. Additionally, earnings before tax margins are expected to turn profitable in FY23 and reach a 30% terminal rate. There are two likely explanations from the large deviation from consensus 1) consensus estimates for FY25 are yet to fully account for the difficult grow-over dynamics related to the student-loan moratorium likely fully expiring in FY23 and student loan originations contributing strongly to FY23 top-line growth or 2) if SoFi is able to sustain the expected 20%+ revenue growth through FY25, the stock would likely see significant price appreciation/multiple rerating. Were shares of SoFi to remain at the current price in 12-months, it would imply a 4x NTM P/S (based on current STM consensus sales of $2,483mm).

Scenario 2 – Higher Rate Path ($3.82, 30% Downside): This DCF outlines a scenario where interest rates move higher from management's commentary during its 4Q22 call, stating it expects a peak Fed funds rate of ~5%, followed by two rate cuts in the back half of the year to get to a 4.5% exit rate. This scenario assumes low 20's revenue growth in FY23/FY24 before then converging with the base case scenario. This scenario points to a 12-month price of $3.82 (30% downside).

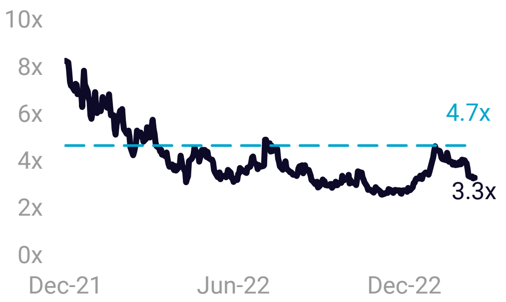
Scenario 3 – Student Loan Moratorium Ended ($8.10, 48% Upside): The third DCF assumes the student loan moratorium ends on the scheduled June 30th date, driving higher student loan originations through FY24/FY25. This scenario implies 29%/28% revenue growth in FY23/24 and a 12-month price of $8.10 (48% upside), which based on current STM consensus sales implies a 3x NTM P/S in 12-months.

Scenario 4 – Sustained 25%+ Rev Growth ($9.75, 79% upside): The fourth DCF assumes that SoFi is able to sustain the 25%+ revenue growth that consensus is forecasting through FY25. This scenario implies a 12-month price of $9.75 (79% upside), which based on current STM consensus sales implies 4x NTM P/S.

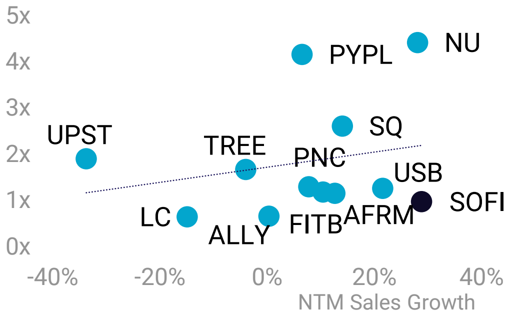
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

SOFI Price/Book Value & 1-Year Avg.

SOFI NTM Price/Sales & 1-Year Avg.



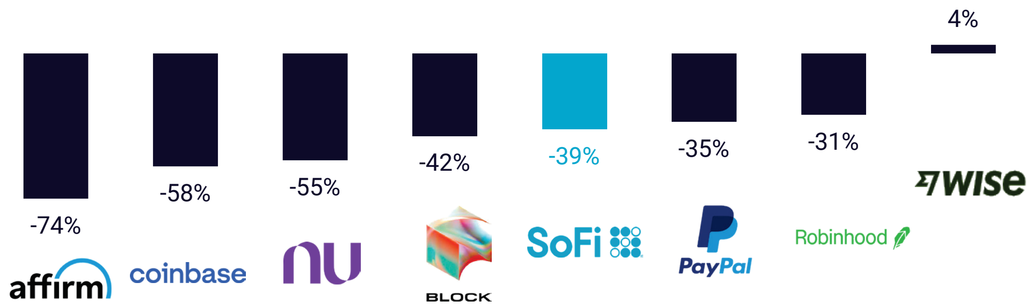
Peer Price/Book Value vs. Sales Growth



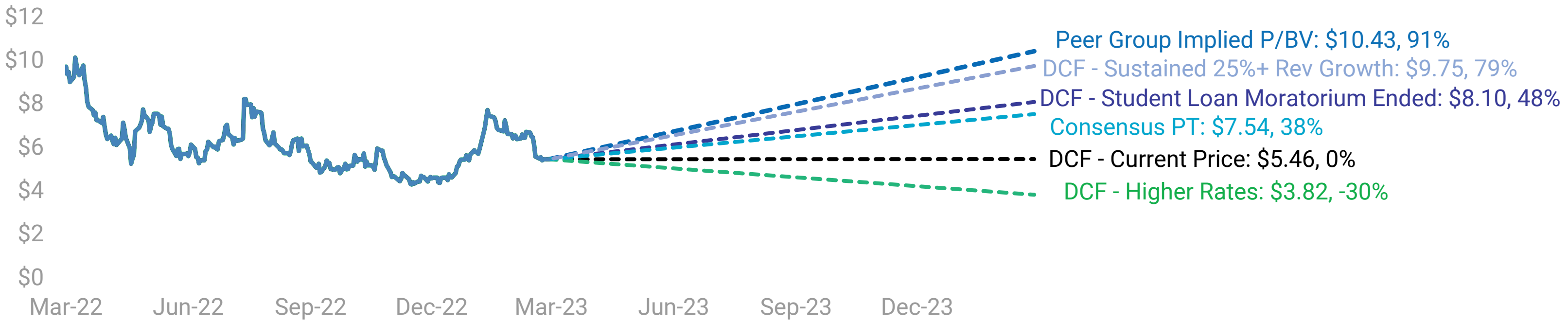
Key DCF Assumptions(1)

10-Yr RFR	3.6%
Cost of Equity	15.4%
Cost of Debt	5.0%
WACC	7.1%
Beta	1.7
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1%
Equity Value Reduction from Present + Future SBC (in mm)	$10,902

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



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Source: Company filings; FactSet

1) SBC in millions

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SoFi

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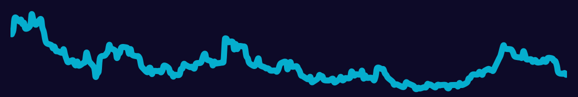

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DECISION TREE INPUTS

In order to evaluate potential outcomes and their valuation implications, the following decision tree is built around 1) potential for recession and 2) the timeline of the student loan moratorium expiring/the level of student loan originations. While there are other drivers of SoFi's performance these represent the most likely area(s) of near-term upside/downside relative to consensus.

Consensus Case:

The consensus price target for SoFi is $5.49. If SoFi were to trade at this price in 12-months it would imply a P/S of ~3x P/S in 12-months, roughly in-line with the current multiple. The consensus price target implies 38% upside to the current share price.

Upside Case(s):

(+) $8.23, 51% Upside: This scenario assumes the macro backdrop materially improves driving a higher level of loan originations, card spend volumes, etc. The scenario forecasts FY22 origination volume growing ~10% vs. consensus of ~6%. This drives 33% NTM sales growth and implies 51% upside to the current share price with a 3.0x NTM P/S multiple.

(++) $9.82, 80% Upside: The best-case scenario assumes that the student loan moratorium ends on June 30th. While this wouldn't materially impact FY23 numbers (since payments will not resume for another 60 days following this) we reflect the impact on valuation through the multiple. Given that consensus is already pricing in significant student loan origination volume (~$2.9bn in FY24) we modestly increase the implied multiple to reflect this. This drives 36% NTM sales growth and implies 80% upside with a 3.5x NTM P/S multiple.

(-+) $6.19, 14% Upside: This scenario assumes a weaker macro backdrop, with the student loan moratorium still ending at the projected June 30th date. This shows the level of sensitivity in SoFi's model to the return of student loan origination volume as even in a weaker economic backdrop, if SoFi is able to capture student loan originations, it could drive meaningful upside. This drives 20% NTM sales growth and implies 14% upside with a 2.5x NTM P/S multiple.

Downside Case(s):

(-) $4.83, 11% Downside: This scenario assumes a weaker macro backdrop which impacts SoFi's model through lower loan originations and card volume. Specifically, the scenario forecasts origination volume growth to be at a similar level as FY22 (~3%). This drives 17% NTM sales growth and implies 11% downside with a 2.0x NTM P/S multiple.

(+-) $4.70, 14% Downside: This scenario assumes a stronger macro backdrop but assumes that the student loan moratorium is extended into early FY24 which would defer significant recovery in student loan originations 2H24. The model reflects this by assuming student loan originations remain at a similar level to 4Q22 originations through 1Q24/2Q24. This drives 30% NTM sales growth and implies 14% downside with a 2x NTM P/S multiple.

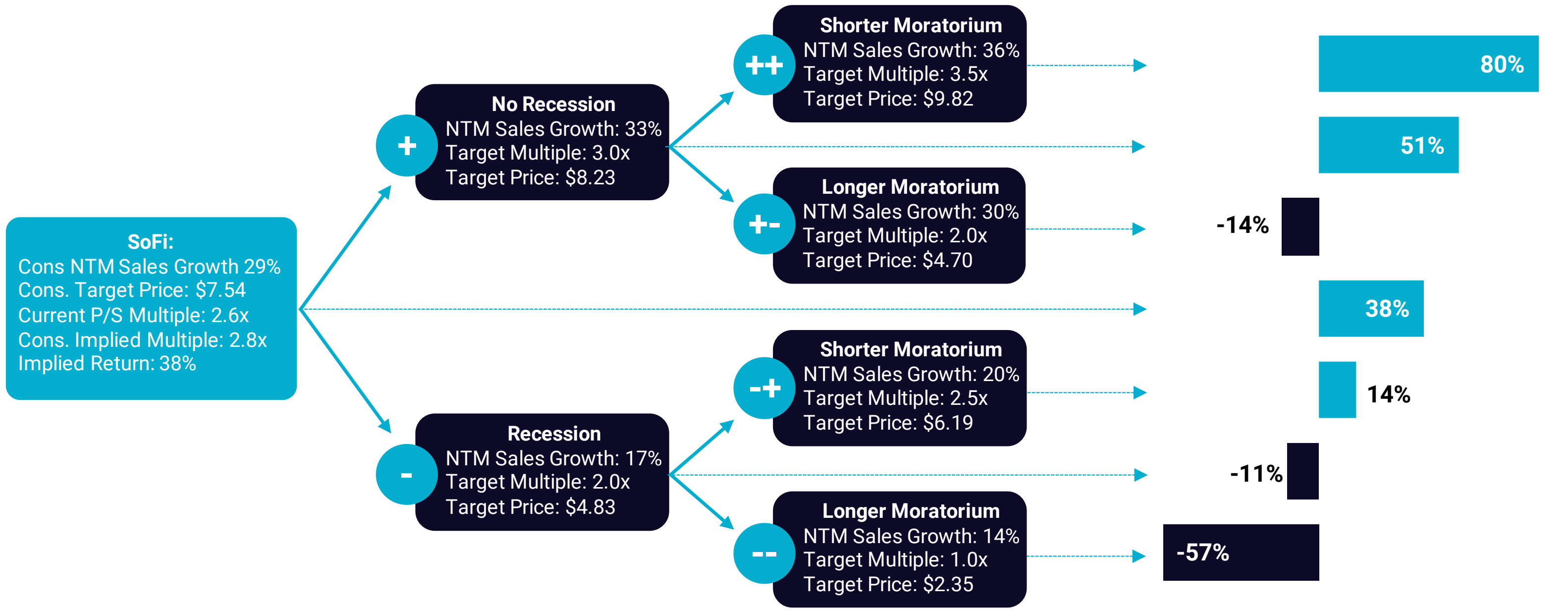
(--) $2.35, 57% Downside: The worst-case scenario assumes a weaker macro and delayed student moratorium end date, which delays a recovery in student loan origination volume until 2H24. This drives 14% NTM sales growth and implies 57% downside with a 1.0x NTM P/S multiple.

Source: Company filings; FactSet

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk

12-Month Price Performance



SoFi:
Cons NTM Sales Growth 29%
Cons. Target Price: $7.54
Current P/S Multiple: 2.6x
Cons. Implied Multiple: 2.8x
Implied Return: 38%

No Recession
NTM Sales Growth: 33%
Target Multiple: 3.0x
Target Price: $8.23

Shorter Moratorium
NTM Sales Growth: 36%
Target Multiple: 3.5x
Target Price: $9.82

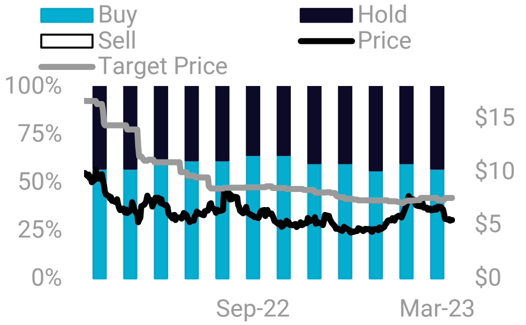
Longer Moratorium
NTM Sales Growth: 30%
Target Multiple: 2.0x
Target Price: $4.70

Recession
NTM Sales Growth: 17%
Target Multiple: 2.0x
Target Price: $4.83

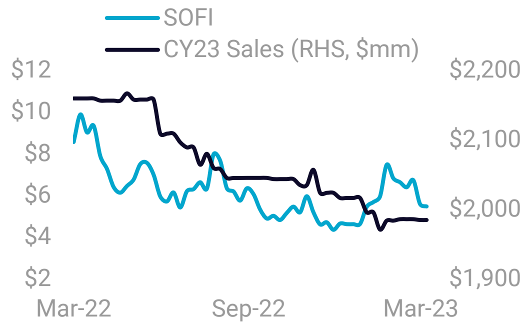
Shorter Moratorium
NTM Sales Growth: 20%
Target Multiple: 2.5x
Target Price: $6.19

Longer Moratorium
NTM Sales Growth: 14%
Target Multiple: 1.0x
Target Price: $2.35

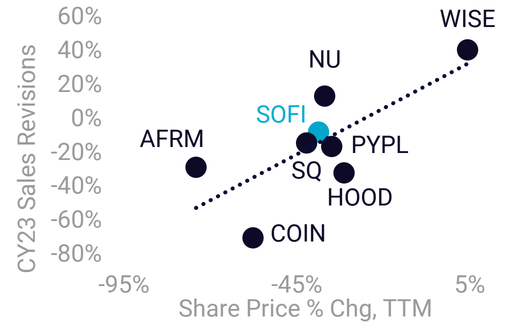
Sell-Side Ratings Distribution

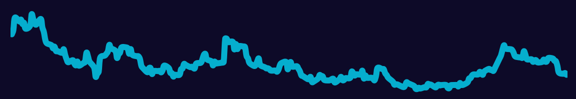


Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM





SOFI TTM Price Performance

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($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: SoFi shares rose 12.5% following the 4Q22 earnings call, primarily reacting to management expectations for GAAP profitability by 4Q23. We note that the mixed results vs. consensus for FY23 guidance is baking in relatively conservative macroeconomic assumptions which could result in incremental upside through the year, particularly in 2H23 following the end of the student loan moratorium.

Results Recap: SoFi reported 4Q22 results, including originations of $2,977mm (-21% YoY), 13% below consensus expectations for $3,419mm. 4Q lending segment origination volumes decreased 21% YoY as strong demand for personal loans was offset by lower home and student originations. Total net revenue of $457mm (+60% YoY) beat expectations by 7% with segment-level outperformance in lending (+8% vs. cons) and financial services (+20% vs. cons), partially offset by weaker technology revenue (-2% vs. consensus).

Guidance Recap: SoFi provided **1Q23** guidance and expects to generate $430mm - $440mm of adjusted net revenue in 1Q23 (~8% below consensus of $455mm at the mid-point). At the mid-point this would imply 32% growth YoY. 1Q23 guidance also includes adjusted EBITDA of $40mm - $45mm (~13% below consensus of $49mm at the mid-point) which would represent 389% growth YoY. For **FY23**, management expects adjusted net revenue of $1,925mm – $2,000mm and full-year adjusted EBITDA of $260mm - $280mm (which would imply 27%/88% growth YoY at the midpoint) compared to pre-quarter consensus expectations for $2,006mm/$254mm for revenue/adj. EBITDA, respectively.

Incremental from the Call:

- **1Q23 and FY23 Guidance:** SoFi expects to reach quarterly GAAP net income profitability by 4Q23, with GAAP net income incremental margins for the full year of 20%. With the guide, management provided macro assumptions that underpin its FY23 expectations including 1) peak federal funds rate of 5% in 2Q23 with two rate cuts in 2H23 to get to a 4.5% exit rate in FY23 2) 2.5% contraction in GDP growth and 3) the DOE moratorium on federal student loan repayments ending in June 2023. Given this set of assumptions, we see significant levels of conservatism, as the current forecast for FY23 U.S. GDP growth is 1.4%. This conservatism may be partially offset by the rate forecast given the Federal Reserve has yet to give any indication of a policy pivot. On a segment level, within Lending, SoFi expects modest growth in personal loans while student loans and home loan growth is expected to continue at similar levels (with a potential uptick following moratorium expiration/rate decreases). The Tech platform segment is expected to drive double-digit organic revenue growth. In Financial Services, SoFi expects strong revenue growth driven by product growth and increased monetization per product. This is expected to be coupled with frontloaded investments in the segment as SoFi scales its deposit base.
- **Technology Platform Synergies:** Management announced that Galileo and TechniSys are now fully integrated, enabling SoFi to leverage its combined go-to-market strategy while driving margin expansion. Management highlighted several areas of investment with the platform including 1) B2B: SoFi has looked to diversify its product out of debit or interchange ACH. By servicing B2B, SoFi provides services for SMB lending, accounts receivable, accounts payable, fleet cards, etc. 2) Consumer Facing: SoFi has also looked to add more products for consumer facing clients such as fraud protection and Pay in 4. Pay in 4 represents a particularly attractive opportunity from a unit economic standpoint for customers as it comes with an interchange rate of ~3% compared to debit at ~1%.
- **Funding Costs:** Total deposits rose 46% QoQ to $7.3bn, benefitting from the conversion of SoFi Money balances to deposit accounts. This quarter also represents the first quarter where lending net interest margin revenue is greater than noninterest revenue. Management provided commentary that it expects NIM to continue to grow both in absolute dollars and as a percentage of total revenue in the Lending sector. Management also highlighted improving dynamics in the ABS market, with several companies starting to re-enter the securitization market with spreads tightening and stated it expects to be able to access the market in Q1 and for the rest of the year.

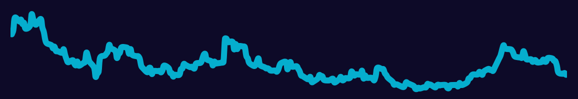
4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs. ▲	%▲
Total Originations (bn)	**$2.98**	**$3.42**	**-$0.44**	-13%
growth (%, yoy)	*-21%*	*-9%*		
Loans Held for Sale (bn)	**$13.6**	**$11.3**	**$2.25**	20%
growth (%, yoy)	*123%*	*86%*		
Total Members (000s)	**5,223**	**5,129**	**$93.9**	2%
growth (%, yoy)	*51%*	*48%*		
Lending Net Revenue	**$328**	**$303**	**$25.6**	8%
growth (%, yoy)	*54%*	*42%*		
Technology Net Revenue	**$85.7**	**$87.5**	**-$1.88**	-2%
growth (%, yoy)	*61%*	*64.2%*		
Financial Services Net Revenue	**$64.8**	**$54.1**	**$10.7**	20%
growth (%, yoy)	*195%*	*146%*		
Non-Interest Income	**$248**	**$235**	**$13.6**	6%
growth (%, yoy)	*19%*	*12%*		
Interest Income	**$307**	**$259**	**$48.2**	19%
growth (%, yoy)	*224%*	*173%*		
Total Revenue, Net of Interest Expense	**$457**	**$426**	**$30.4**	7%
growth (%, yoy)	*60%*	*49%*		
Contribution Profit	**$182**	**$148**	**$34.1**	23%
growth (%, yoy)	*103%*	*65%*		
Adj EBITDA	**$70.1**	**$42.9**	**$27.1**	63%
Adj. EBITDA Margin (%)	*38%*	*29%*		947bps
Net Income	**-$40.0**	**-$88.2**	**$48.2**	55%
growth (%, yoy)	*64%*	*21%*		

FY23 Guidance	New	%▲	Cons.	%▲
Adj. Net Revenue	**$1,925 - $2,000**	**NA**	**$2,006**	-2%
% Growth	*25% - 30%*		**29.7%**	*-221bps*
Adj, EBITDA	**$260 - $280**	**NA**	**$254**	6%
Adj. EBITDA Margin	*14% - 14%*		**13%**	*109bps*

Source: FactSet, Visible Alpha, Company filings

SOFI TTM Price Performance



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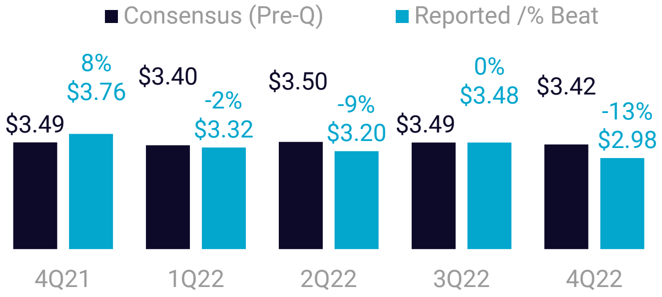
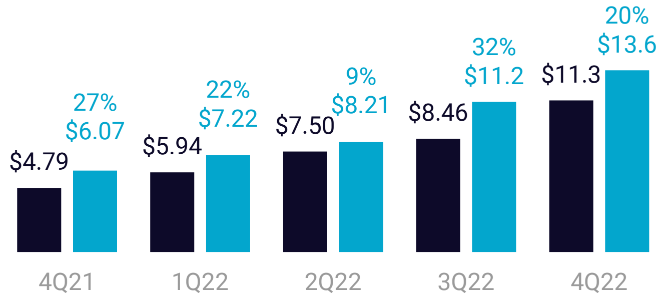
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

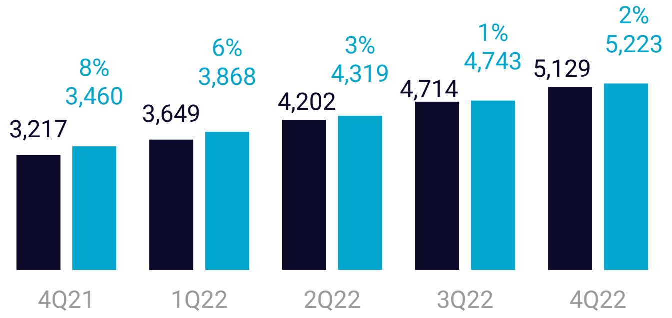
Total Originations (bn)



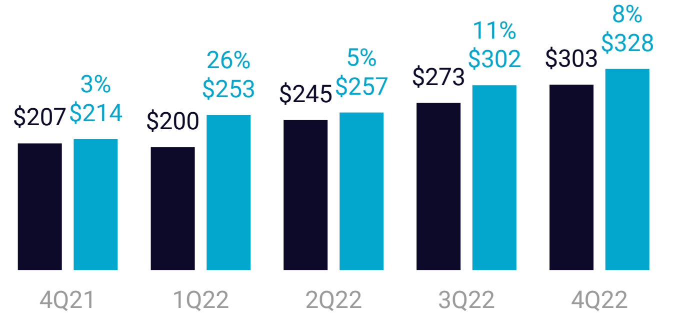
Total Loans (bn)



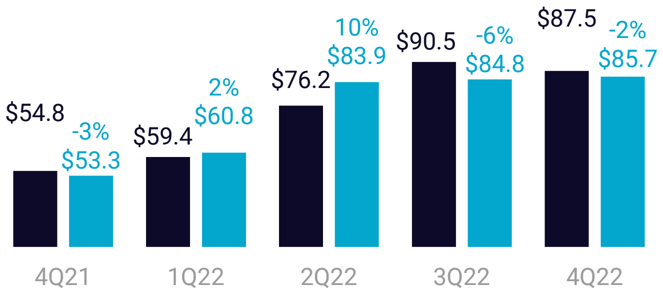
Total Members (000)



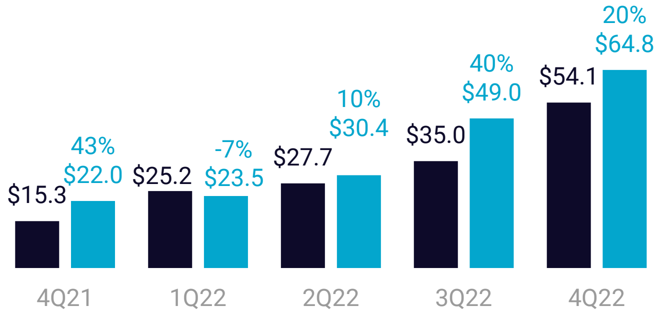
Lending Net Revenue



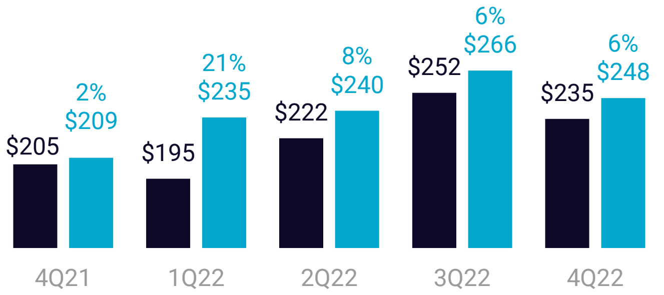
Technology Net Revenue



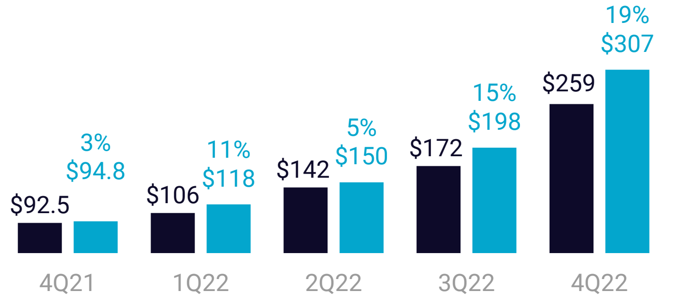
Financial Services Net Revenue



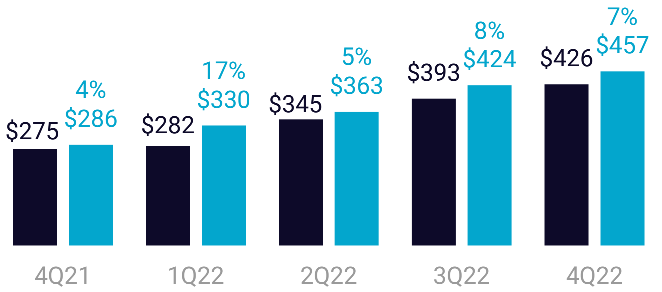
Non-Interest Income



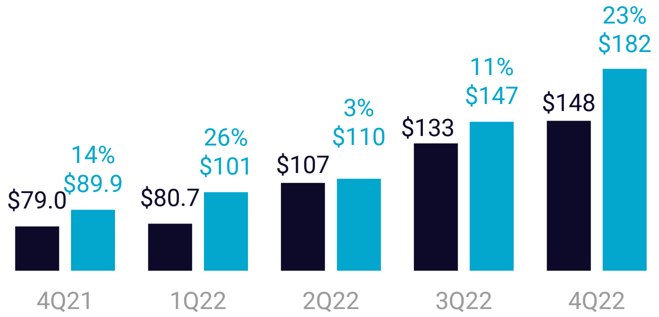
Interest Income



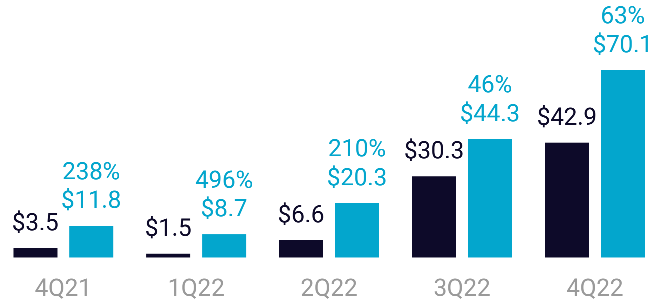
Total Revenue, Net of Interest Expense



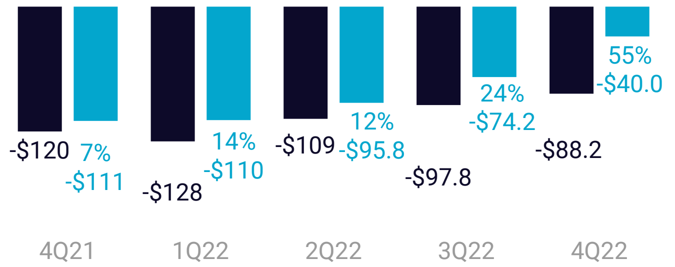
Contribution Profit



Adjusted EBITDA



Net Income



Source: Company filings; FactSet

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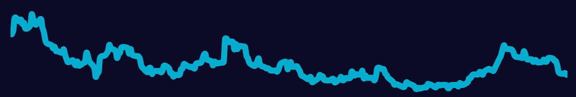

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1Q23 EARNINGS OUTLOOK

SoFi is expected to report 1Q23 earnings on May 9th before the market open.

What's in Focus:

Since reporting 4Q22 results, the underlying economic environment has shifted, particularly for banks due to the Silicon Valley Bank fallout. While SoFi has not been directly involved in the broader financial sell-off, there could be several second order affects on FY23 (though unlikely to impact 1Q23). Specifically, uncertainty surrounding the rate hike path could drive changes to FY expectations. There should be further clarity here regarding interest rates following the upcoming Fed meeting on March 22nd. Additionally, during the quarter, SoFi sued the Biden administration to end the pause on federal student loan payments. If the student loan moratorium were to end, it would not have an impact on results until 4Q (moratorium ends on June 30th with 60 more days until repayments begin). That said, consensus is expecting strong YoY student loan origination growth of 38% in 3Q and 124% in 4Q (versus relatively easy comps of -53%/-72% YoY, respectively). The ending of the student loan moratorium and the contribution to 4Q results also coincides with managements target to reach GAAP profitability by 4Q. The setup into 1Q is complex and will likely be skewed by the path the Fed sets for rates on the 22nd. Commentary in the 1Q23 call with respect to 2H/FY23 expectations will likely be more important then 1Q23 results, barring significant beat/misses relative to expectations.

Estimates:

- **KPIs:** 1Q23 consensus for total members have increased 1.8% to 5,634k, since SoFi's 4Q22 earnings announcement, while consensus for total products has fallen 4.0% to 8,431k. Consensus for origination volume has fallen 19.7% to $3,009mm versus pre-print consensus. Notably, student loan origination estimates have fallen 35% to $497mm, following management's soft guidance of relatively steady levels for the category (with uptick expected in 4Q23 following the end of the moratorium). Consensus for home loan originations has fallen 48% to $142mm versus pre-print consensus.
- **Revenue:** Consensus for net interest income has increased 7.2% to $218mm versus pre-print consensus. Consensus for loan origination volume has fallen 7.0% to $121mm versus pre-print. Consensus for technology platform fees has fallen 12% to $83mm versus pre-print. As a result, consensus for total non-interest revenue has decreased 11% to $224mm versus pre-print. Net revenue consensus for the quarter is now expected be $439mm, 3.8% below pre-print.
- **Expenses:** Consensus for G&A expenses has fallen 11% to $125mm for 1Q23 versus pre-print consensus. Cost of operations consensus fell 3.0% to $85mm as well. These decreases are slightly offset by upward consensus revisions to sales and marketing expenses and provision for loan losses (+7.2%/+10% respectively versus pre-print consensus).
- **Profitability:** 1Q23 consensus for adjusted EBITDA has fallen 11% to $44mm. Net income consensus has decreased 2.7% to -$72mm.

Economic Data:

- FOMC Meeting: March 22nd

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

1Q22
- Net revenue and adj. EBITDA beat by 17%/>100%
- Origination volume misses consensus by 2%

2Q22
- Net revenue and adj. EBITDA beat by 5%/>100%
- Origination volume misses consensus by 9%

3Q22
- Net revenue and adj. EBITDA beat by 8%/46%
- Origination volume in-line with consensus

4Q22
- Net revenue and adj. EBITDA beat by 7%/63%
- Origination volume comes in 13% below consensus
- FY23 adj. net revenue guidance misses by 2%; Adj. EBITDA guide misses

PROBABILITY OF FED FUNDS RATE

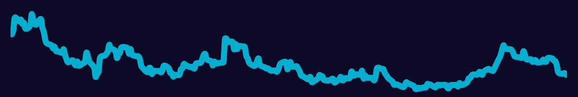
Current Target: 450-475

	Probability of Expected Fed Funds Rate									
Meeting Date	300-325	325-350	350-375	375-400	400-425	425-450	450-475	475-500	500-525	525-550
3/22/2023		0%	0%	0%	0%	0%	20%	80%	0%	0%
5/3/2023	0%	0%	0%	0%	0%	0%	0%	11%	52%	37%
6/14/2023	0%	0%	0%	0%	0%	4%	24%	47%	25%	0%
7/26/2023	0%	0%	0%	0%	4%	24%	47%	25%	0%	0%
9/20/2023	0%	0%	0%	3%	18%	40%	32%	8%	0%	0%
11/1/2023	0%	0%	1%	8%	25%	37%	24%	5%	0%	0%
12/13/2023	0%	0%	4%	16%	31%	31%	15%	3%	0%	0%

Source: Company filings
1) FactSet

SoFi

SOFI TTM Price Performance



Price as of 03/17/2023:	$5.46	**Shares Out (mm):**	935
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52-Wk Range:	$4.24 - $10.57	**Avg. Daily Vol (mm):**	37.6

FINANCIAL TECHNOLOGY PARTNERS

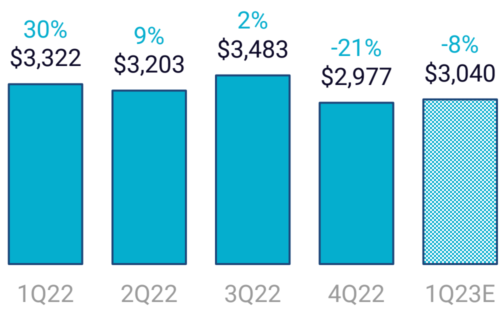
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

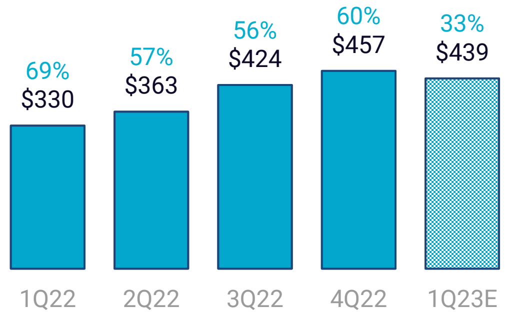
	Low	Average	High
Total Originations	**$2,780**	**$3,009**	**$3,322**
growth (%, yoy)	-16%	-9%	0%
Total Loans	**$12,625**	**$13,865**	**$15,392**
growth (%, yoy)	75%	92%	113%
Total Members (000)	**5,473**	**5,634**	**5,745**
growth (%, yoy)	41%	46%	49%
Lending Net Revenue	**$2.72**	**$2.97**	**$3.33**
growth (%, yoy)	8%	18%	32%
Technology Net Revenue	**$78.5**	**$84.1**	**$88.9**
growth (%, yoy)	29%	38%	46%
Financial Services Net Revenue	**$64.7**	**$81.9**	**$114**
growth (%, yoy)	175%	248%	384%
Non-Interest Income	**$179**	**$224**	**$239**
growth (%, yoy)	-24%	-5%	2%
Interest Income	**$310**	**$344**	**$398**
growth (%, yoy)	162%	190%	236%
Total Revenue, Net of Interest Expense	**$430**	**$439**	**$453**
growth (%, yoy)	30%	33%	37%
Contribution Profit	**$58.2**	**$146**	**$228**
growth (%, yoy)	-43%	43%	125%
Adj EBITDA	**$41.8**	**$43.6**	**$46.1**
Adj. EBITDA Margin (%)	10%	10%	10%
Net Income	**-$85.8**	**-$77.2**	**-$57.6**
growth (%, yoy)	-29%	-36%	-52%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

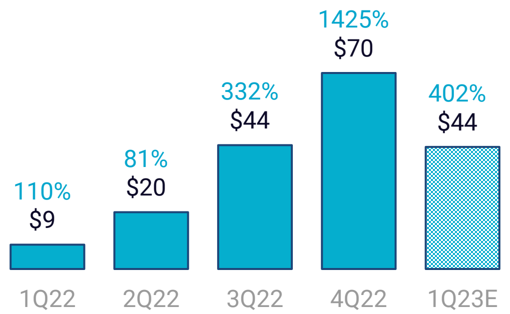
Total Loan Origination/YoY Growth



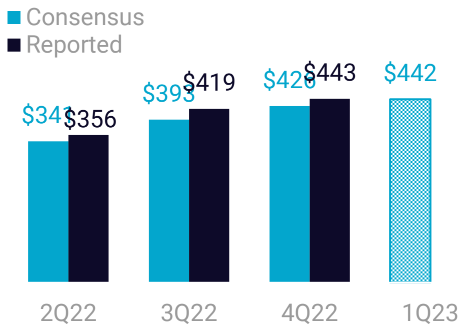
Net Revenue/YoY Growth



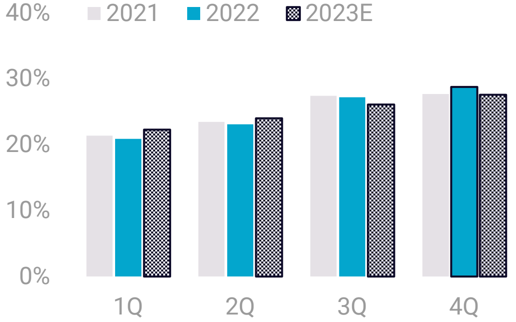
Adjusted EBITDA/YoY Growth



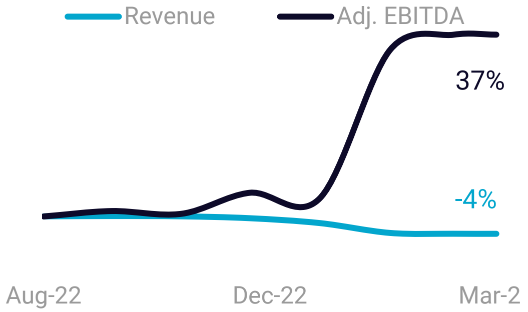
Guidance vs. Reported



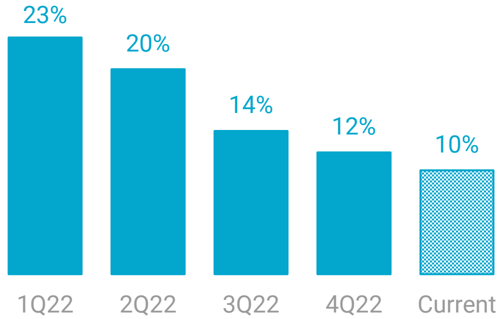
Revenue Seasonality



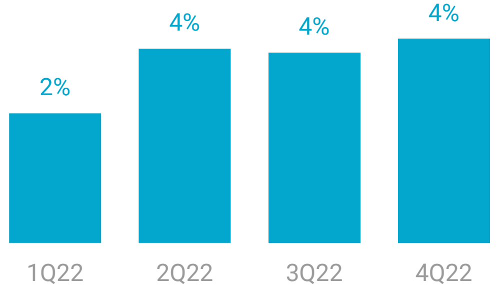
1Q23 Conssensus Revisions



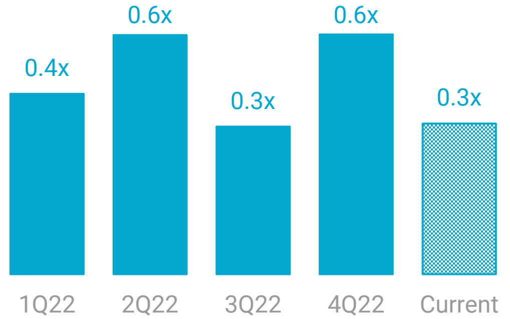
Short Interest



Hedge Fund Ownership as % of S/O



Put/Call Ratio(1)



Source: Company filings; FactSet

1) Put/Call Ratio over prior 7-days

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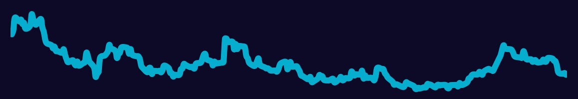
SOFI TTM Price Performance



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QUESTIONS FOR MANAGEMENT

General:

1) How much cross-sell is there between loan products, credit card, checking account, etc. Is there a product that tends to bring customers into the SoFi ecosystem first?
2) In light of recent industry events around Silicon Valley Bank and other regional banks what are management's thoughts on the future of banking? Does management expect increased concentration at the top banks?
3) Given recent industry events, the interest rate outlook has become much more mixed, how is this expected to impact SoFi's outlook for 2023, which assumed rates of 5% by mid-year and two rate cuts in 2H?
4) Management mentioned it recently accessed the ABS market and did another securitization. Is this market continuing to open up?
5) SoFi offers highly competitive APYs relative to competitors, has this had a significant impact on growing the deposit base?

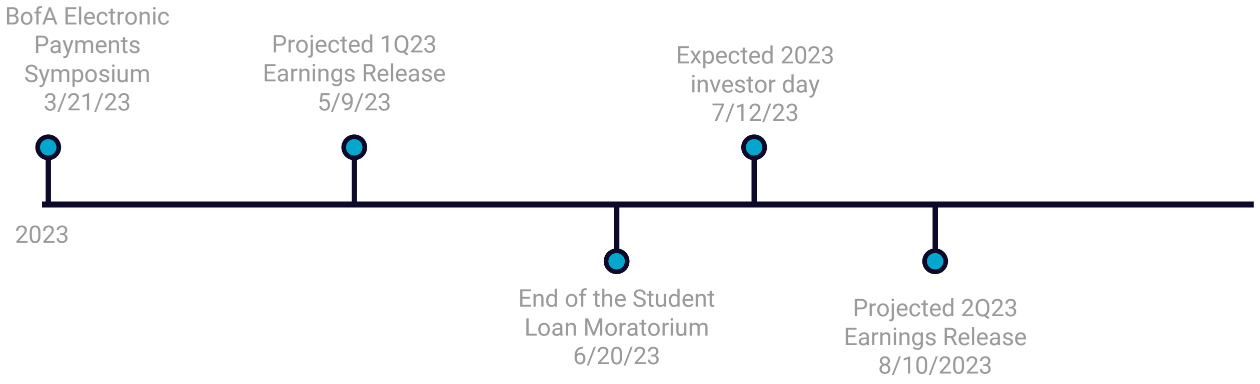
Originations:

6) Can management quantify the impact of the student loan moratorium ending on the business?
7) What is the outlook for home loan originations given the higher rate environment against the backdrop of inventories remaining depressed, thus keeping prices high?
8) How does SoFi approach underwriting? SoFi generally serves a relatively high credit quality consumer, how does this impact risk management?

Credit:

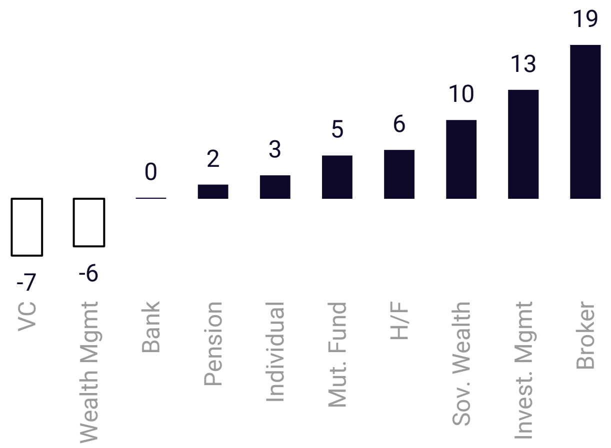
9) How are credit delinquencies trending across SoFi's different products and consumer cohorts?
10) At the end of 4Q SoFi was at ~6% market share for personal loans. What are management's long-term market share aspirations in the personal loan segment?

POTENTIAL CATALYSTS

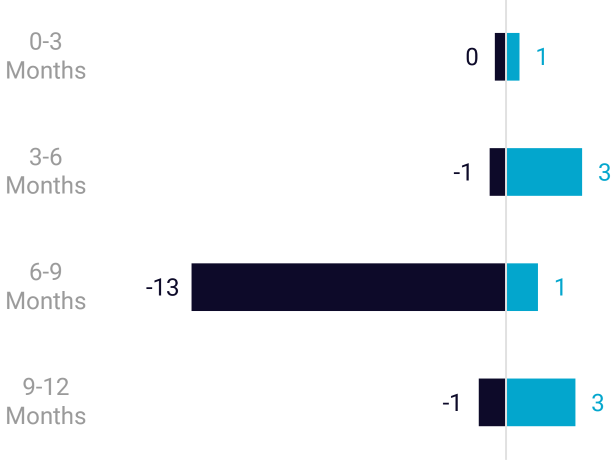


SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



Insider Shares Sold/Bought (mm)



Source: Company filings; FactSet

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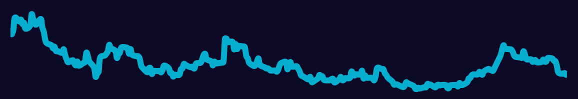

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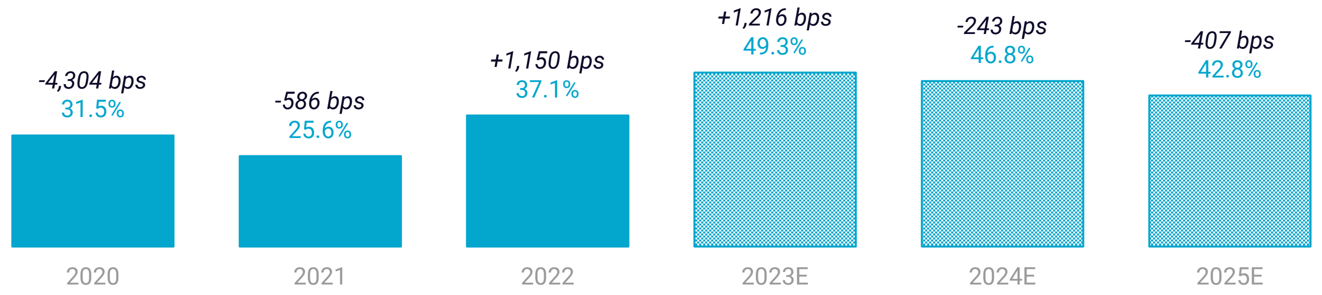
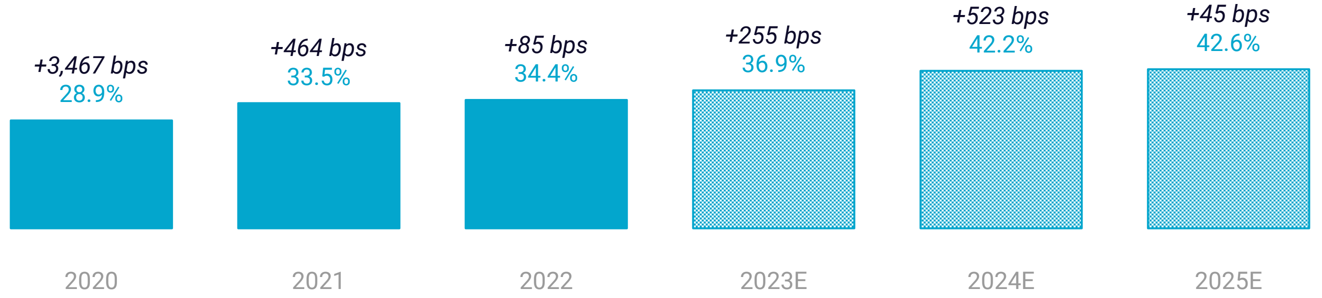
FINANCIAL TECHNOLOGY PARTNERS

COMPANY RATIOS/MARGIN ANALYSIS

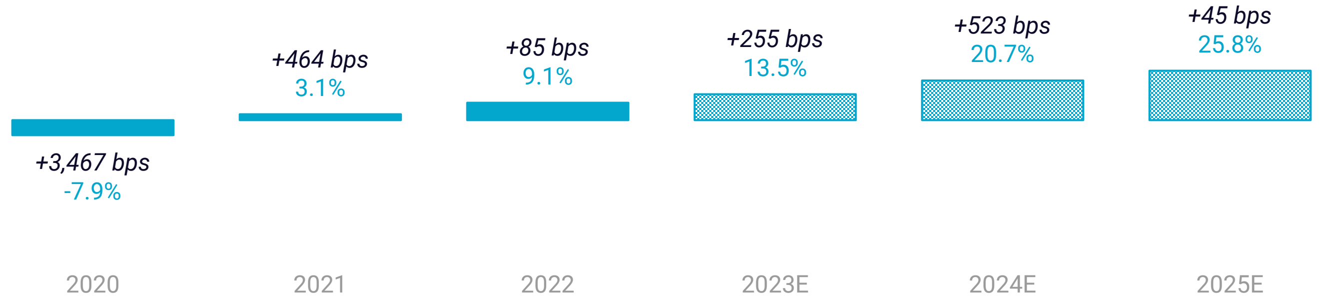
Net Interest Income (% of Adjusted Total Revenue)



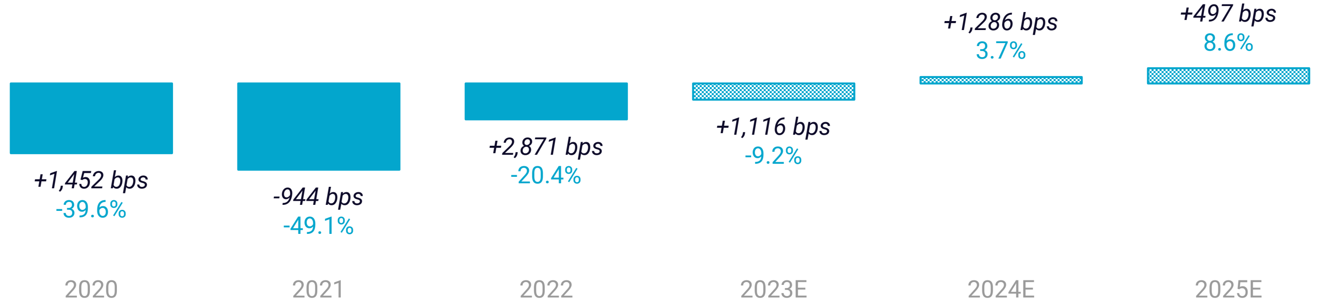
Contribution Margin



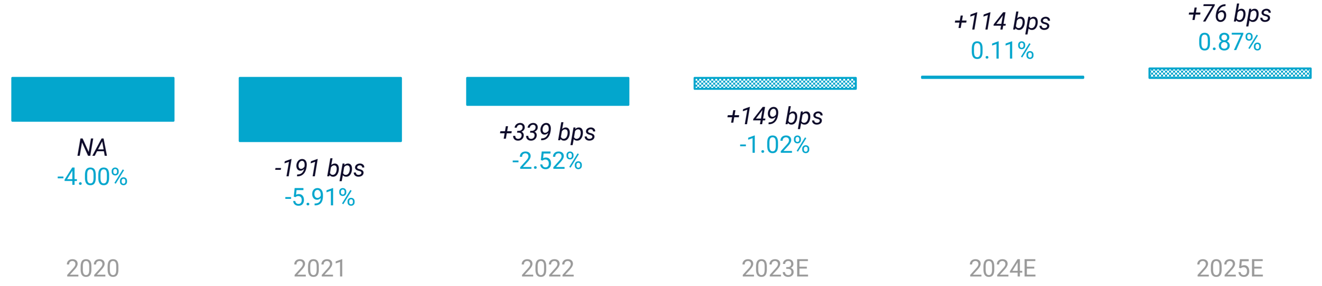
Adjusted EBITDA Margin



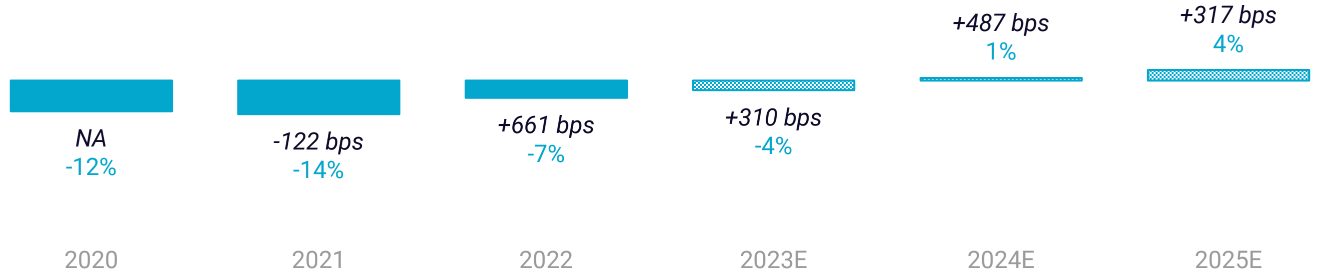
Net Income Margin



Return on Assets

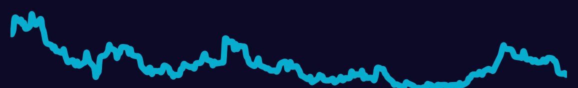


Return on Equity



Source: Company filings; FactSet

SOFI TTM Price Performance



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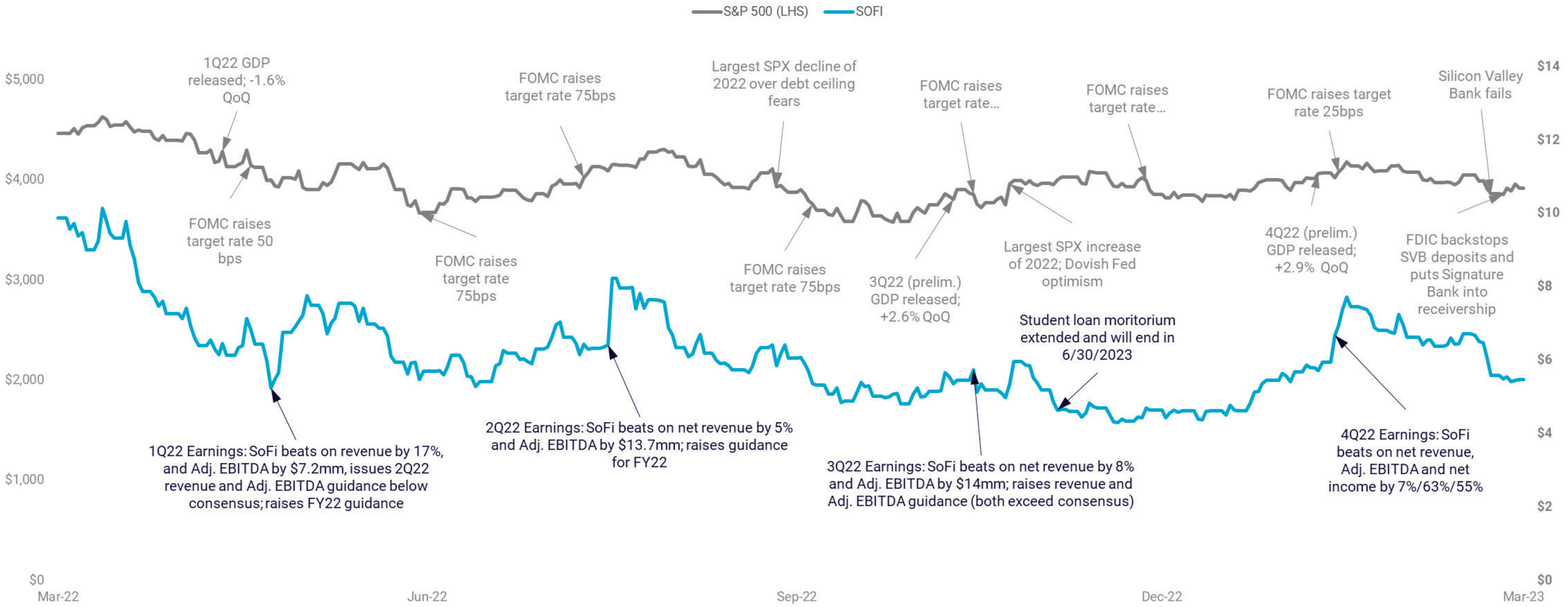
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

FOMC raises target rate…

3Q22 (prelim.) GDP released; +2.6% QoQ

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate…

FOMC raises target rate 25bps

4Q22 (prelim.) GDP released; +2.9% QoQ

Silicon Valley Bank fails

FDIC backstops SVB deposits and puts Signature Bank into receivership

Student loan moritorium extended and will end in 6/30/2023

1Q22 Earnings: SoFi beats on revenue by 17%, and Adj. EBITDA by $7.2mm, issues 2Q22 revenue and Adj. EBITDA guidance below consensus; raises FY22 guidance

2Q22 Earnings: SoFi beats on net revenue by 5% and Adj. EBITDA by $13.7mm; raises guidance for FY22

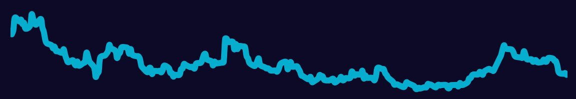
3Q22 Earnings: SoFi beats on net revenue by 8% and Adj. EBITDA by $14mm; raises revenue and Adj. EBITDA guidance (both exceed consensus)

4Q22 Earnings: SoFi beats on net revenue, Adj. EBITDA and net income by 7%/63%/55%

Source: Company filings; FactSet

SoFi

SOFI TTM Price Performance



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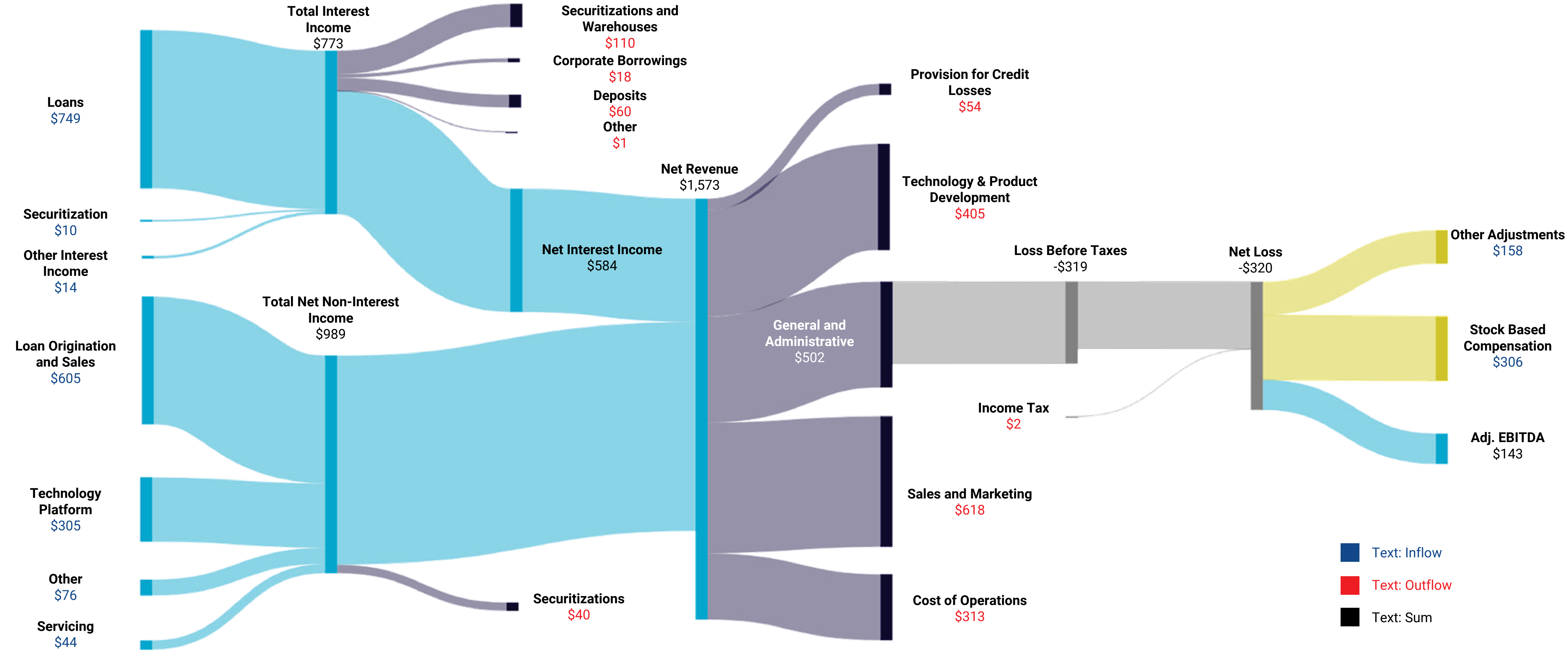
FINANCIAL TECHNOLOGY PARTNERS

($ in millions)

P&L VISUALIZATION – TTM



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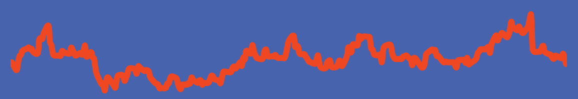
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521

TOST TTM Price Performance



Price as of 03/17/23:	$17.11	**Shares Out (mm):**	523
Market Cap (mm):	$8,945	**Beta (Since IPO):**	1.8
52-Wk Range:	$11.91 - $26.04	**Avg. Daily Vol (mm):**	6.5

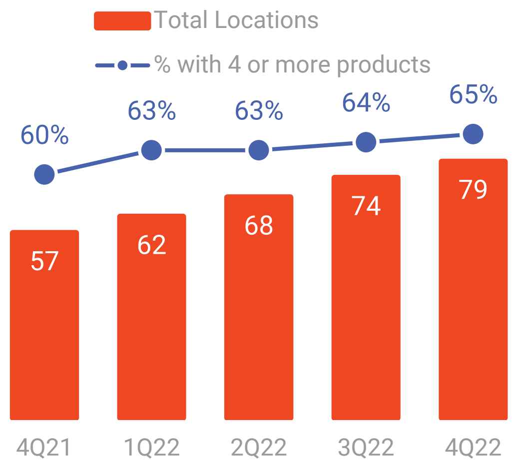
COMPANY OVERVIEW

Toast is an integrated point-of-sale provider and payment processor that provides software, hardware and financial technology solutions (primarily acquiring) to restaurants. **Toast's platform serves as the restaurant operating system, connecting front of house and back of house operations across dine-in, takeout, and delivery channels.**

As of 4Q22, the number of locations on Toast's platform represents ~9% of the ~860,000 restaurant locations in the U.S. Toast's 4Q22 ARR of $0.9bn represents ~6% of the $15bn market opportunity.

Toast has progressively expanded its platform, which now includes products such as Toast Capital, reward programs, inventory management, etc. As restaurants adopt more of the platform, it drives incremental unit economic benefits. **As of 4Q22, 65% of Toast locations used four or more elective products on top of the integrated PoS and payments solutions.**

LOCATIONS (000)



KEY DEBATES

1. **Cross-Sell:** Toast has been able to consistently outperform top-line expectations by increasing module attach rate across new and existing customers. Today, Toast's offerings span a range of product segments including PoS, Digital Ordering, Team Management, Capital, etc. With 4Q22 results the company highlighted 41% of customer locations were using 6 products or more (+200bps QoQ), with 65% using 4 products or more (+100bps QoQ). Investors are keenly focused on Toast's ability to continue to cross-sell existing customers with new products, as this is a strong driver of top-line growth and operating leverage.

2. **Profitability:** With 4Q22 results, management highlighted that the business is expecting adj. EBITDA profitability by the end of 2023, indicating that the improvement will likely occur starting in 2H23. Stock-based compensation is still a significant portion of adjustments used to arrive at the profitability metric, totaling $62mm, or 8% of total revenue in the fourth quarter (vs. 9% in 4Q21). That said, this shift towards adjusted EBITDA profitability does represent a step in the right direction as the business looks to drive operating leverage.

3. **Competition:** The PoS industry landscape has dramatically changed over the last decade, as innovation has expanded the offering suite and the COVID-19 pandemic drove widespread adoption of integrated payment systems. Although a large cohort of restaurants still rely on legacy PoS solutions, competition has increased with the likes of Block, SpotOn, TouchBistro, etc. Toast is among the best options for many restaurant types, however, increasing competition may make incremental share gains more challenging.

REVENUE MODEL

Toast generates revenue from the following four sources:

- **Subscription services (12% of TTM Net Revenue):** Fees charged to customers for software uses. Terms generally range from 12 to 36 months and the rate per location depends on the software products purchased, the hardware configuration, and employee count.
- **Financial technology solutions (83% of TTM Net Revenue):** Primarily consists of transaction-based fees earned for facilitating payment transactions. These are generally calculated as a percentage of the total transaction amount processed plus a per-transaction fee. The transaction fees collected are recognized as revenue on a gross basis. Also included are fees earned from marketing and servicing working capital loans to customers through Toast Capital, which are originated through a third-party bank. The bank originates all loans and Toast Capital services the loans through their payment's infrastructure to remit a fixed percentage of sales daily until loan repayment. Toast Capital earns a servicing fee as well as credit performance fee which is tied to portfolio performance.
- **Hardware (4% of TTM Net Revenue):** Generated from the sale of terminals, tablets, handhelds, and other such devices. Toast's hardware is typically sold at a loss on a gross margin basis.
- **Professional services (1% of TTM Net Revenue):** Fees charged for installation services. Delivered on-site, remotely, or self-guided.

TOAST PLATFORM

Point of Sale & Restaurant Operations

Software

- Point of Sale
- Mobile Order & Pay
- Kitchen Display System
- Multi Location Management
- Invoicing

Hardware

- Toast Flex
- Toast Go 2
- Toast Tap
- Kiosk
- Delphi by Toast

Financial Technology Solutions

- Payment Processing
- Toast Capital
- Customer Financing

Marketing and Loyalty

- Gift Cards
- Loyalty
- Email Marketing

Digital Ordering and Delivery

- Online Ordering
- Toast Takeout
- Toast Delivery Services
- 3rd Party Delivery Integrations

Team Management

- Payroll and Team Management
- Scheduling
- Tips Manager
- Pay Card & Payout
- Partner Services (Insurance, Benefits)

Supply Chain and Accounting

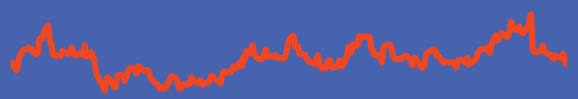
- xtraCHEF Lite
- xtraCHEF Pro

Source: Company filings

03/20/23 - Matthew O'Neill | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218 0540

toast

TOST TTM Price Performance



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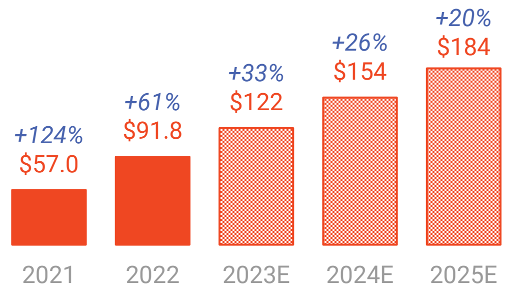
52-Wk Range:	$11.91 - $26.04	**Avg. Daily Vol (mm):**	6.5

FINANCIAL TECHNOLOGY PARTNERS

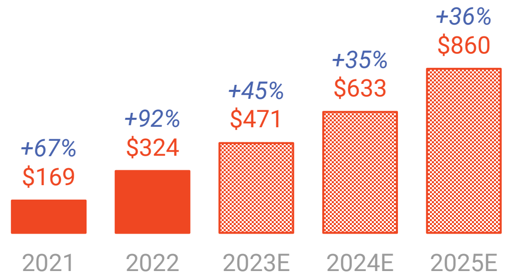
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

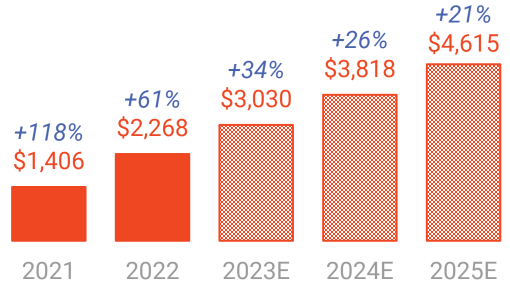
GPV ($ in bn)



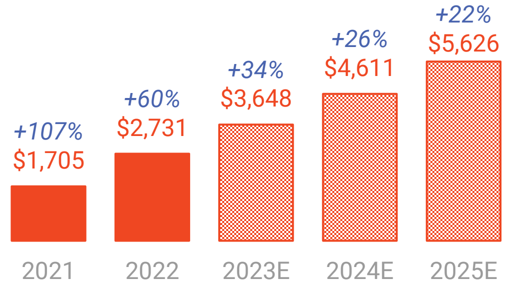
Subscription Revenue



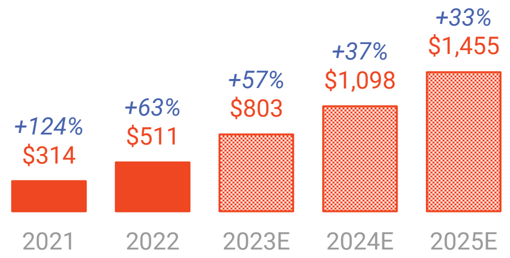
Financial Technology Revenue



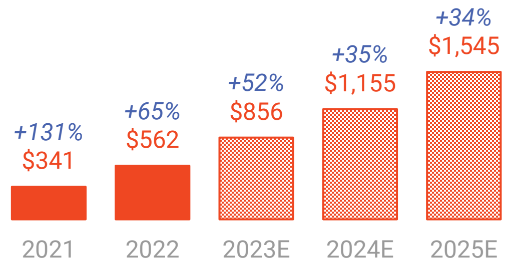
Total Revenue



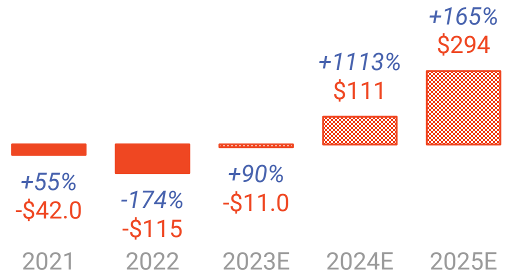
Gross Profit (Loss)



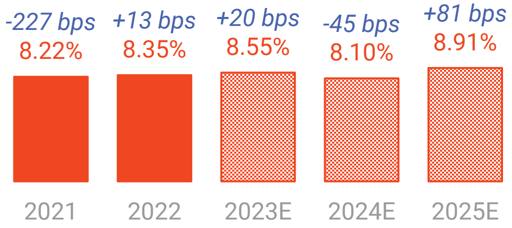
Adj. Gross Profit (Loss)



Adj. EBITDA

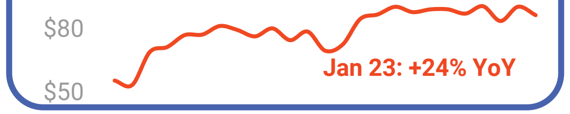


SBC as a % of Revenue



INDUSTRY KPIs

Food & Drinking Places Spend (bn)[2] *(Jan 22-Jan 23)*

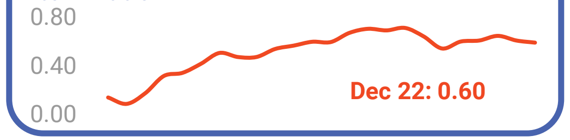


Jan 23: +24% YoY

Food Services Employment (mm)[3] *(Jan 21-Jan 23)*

CY20: +6.1% YoY

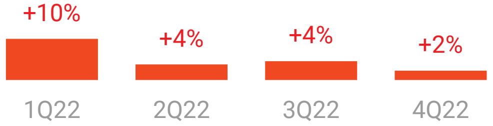
Restaurant Contribution to Inflation[3] *(Jan 21-Dec 22)*



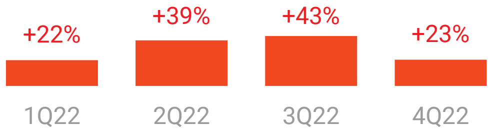
Dec 22: 0.60

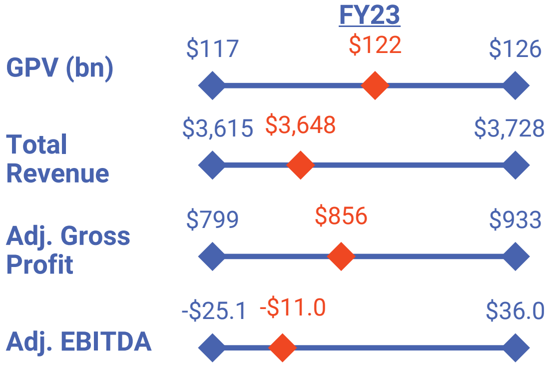
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES

Sales

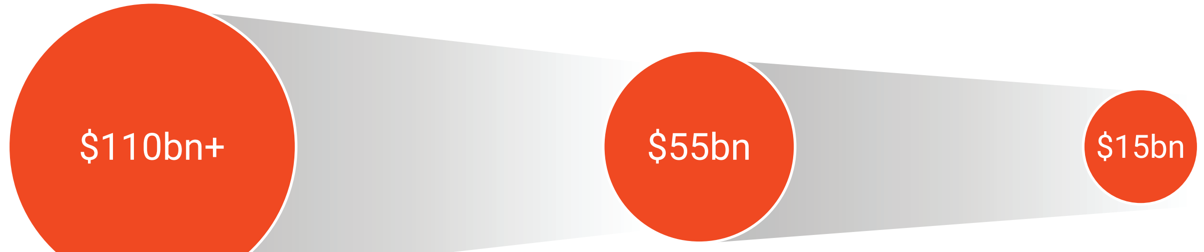


Adj. EBITDA





TOTAL ADDRESSABLE MARKET



Global TAM

U.S. TAM
Est. restaurant spend on technology by 2024

SAM[4]
Payments + Toast Capital + Subscription

toast

6%
SAM Penetration

$0.9bn
4Q22 ARR

FT Partners | Equity Research

Source: Company filings
1) FactSet
2) U.S. Census Bureau Advanced Monthly Sales for Retail and Food Services
3) U.S. Bureau of Labor Statistics
4) SAM: Serviceable Addressable Market

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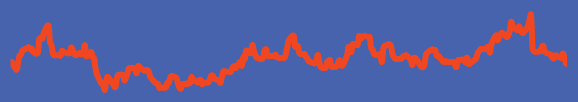
TOST TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

VALUATION CONSIDERATIONS

Relative Valuation:

For less mature FinTech companies that have yet to turn profitable, EV/GP is used for relative valuation to account for costs associated with the core operations of the business (such as interchange and hardware costs for Toast), while also providing a relatively standardized valuation approach across peers. Toast trades at a 9.5x NTM EV/GP multiple, 8.8x below its average multiple of 18.3x since its IPO. It trades at a 6.3x premium to the Nasdaq (which is measured on an EV/Sales basis) 8.5x below its average premium of 15x since the IPO. Relative to peers, Toast trades at a significant premium to other SMB merchant acquirers such as Block and Lightspeed. **If Toast were to trade in-line with its peer group on an EV/GP basis when adjusted for growth, it would imply a $14.74 price.** Overall, Toast's market opportunity, product offering, etc. are compelling and the market recognizes it is a best-in-class provider. That said, despite its valuation rerating lower, it still trades at a significant premium relative to peers. As such, expectations are high leaving minimal room for underperformance vs. expectations going forward. While the following scenarios represent the longer-term potential implications, the next page outlines the potential impact from near-term variables.

DCF Valuation:

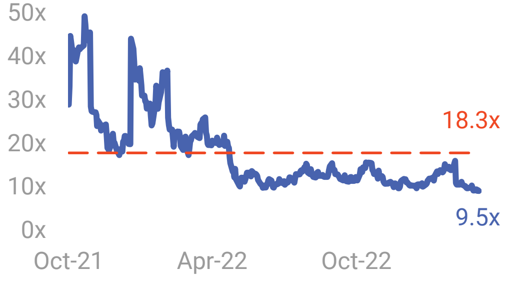
Scenario 1 – Current Price ($17.11, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires revenue growth of 33%/27%/20% in FY23/FY24/FY25, before gradually decelerating and reaching a terminal growth rate of 3%. Operating margins are expected to stay marginally negative through 2025 and gradually scale to 35% over the long-term. Were shares of Toast to remain at the current price in 12-months, it would imply a 7x NTM EV/GP multiple (based on current STM consensus gross profit of $1,103mm).

Scenario 2 – Cross-Sell ($27.83, 63% Upside): The second DCF outlines a scenario where Toast sells more modules across its existing customer base and customer pipeline, therefore revenue growth is increased to 36%/30%/22% in FY23/24/25 before gradually decelerating growth to the terminal growth rate. Operating margins are also increased, with profitability accelerated to 2024 due to unit economic uplift of cross-selling before reaching operating margins of ~37% over the long-term. This scenario points to a 12-month price of $27.83 (63%) upside which based on the current STM consensus gross profit implies a 12x EV/GP multiple in 12-months.

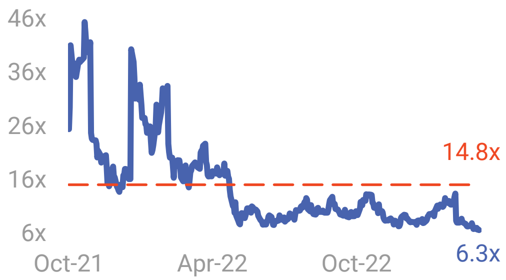
Scenario 3 – Recession ($14.30, 16% Downside): The third DCF assumes a near-term recession, weighing on revenue growth. In this scenario, FY23/FY24 revenue growth is decreased by ~5% relative to the base case before modestly rebounding in 2024. From here, growth is gradually decelerated to the terminal growth rate. Operating margins remain unchanged relative to the base case. This set of assumptions points towards a 12M forward share price of $14.30 (16% downside) implying a 6x NTM EV/GP.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

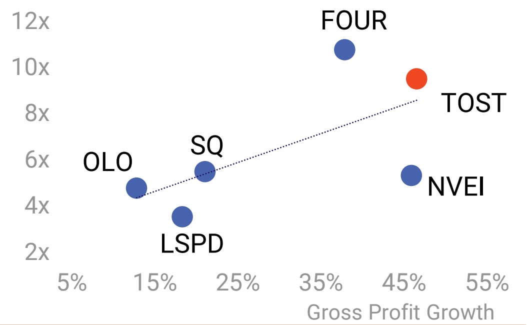
NTM EV/GP & Avg. Since IPO



NTM EV/GP Premium vs. NASDAQ(1)



Peer EV/GP & NTM GP Growth

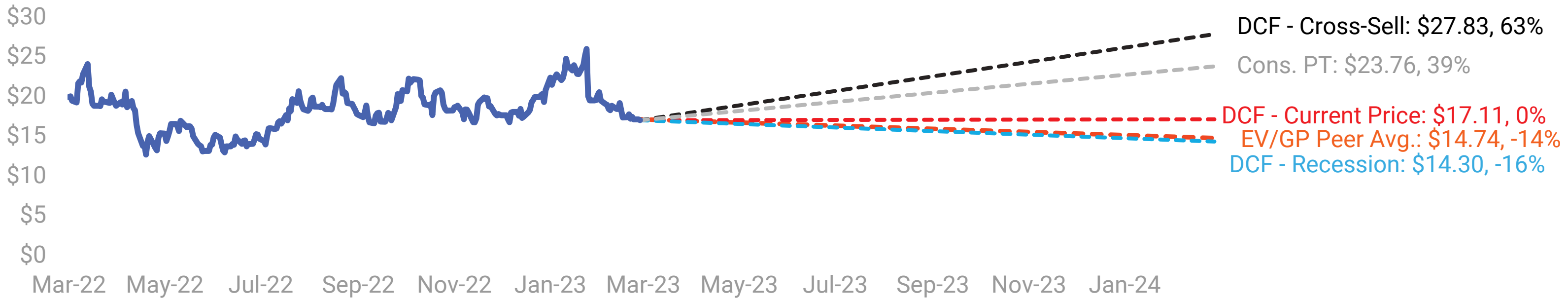


DCF Key Assumptions

10-Yr RFR	4.0%
Cost of Equity	16.7%
Cost of Debt	5.0%
WACC	16.5%
Beta	2.0
DCF FCF Terminal Growth Rates	3.0%
SBC Terminal Growth Rates	1.0%
Equity Value Reduction from Present + Future SBC (in mm)	$4,399

Select Peer TTM Price Performance

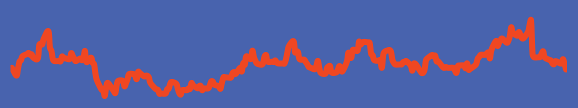
Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet; Visible Alpha

1) TOST EV/NTM GP Less NASDAQ EV/NTM Sales

TOST TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) potential for recession and 2) Toast's ability to cross-sell its products thereby impacting ARPU. While there are other drivers of Toast's performance (market share gains, expense management, etc.) these represent the most likely area(s) of upside/downside relative to consensus.

Consensus Case:

The average consensus price target for Toast is $24, with STM gross profit estimates of $1,097mm implying a 10x NTM EV/GP multiple, if shares of TOST trade at this price in 12-months. This 10x multiple is 8x below Toast's average NTM EV/GP multiple of 18x since its IPO. The consensus price target of $24 implies 39% upside to the current share price of $17.

Upside Case(s):

(+) $29, 67% Upside: This scenario assumes the economy avoids a recession and more specifically that out-of-home consumer spending on food remains strong. The scenario model reflects this by 1) assuming a slight beat vs. consensus 2-year stacked growth for GMV and a modest uptick in net new adds, relative to consensus. This implies 76% gross profit growth and 67% upside to the current share price with a 12x EV/GP multiple.

(+-) $25, 45% Upside: This scenario assumes no recession, but forecasts ARPU remains flat as a result of weaker cross-selling performance. This implies 65% gross profit growth and 45% upside to the current share price with a 11x EV/GP multiple.

(++) $32, 89% Upside: This scenario assumes no recession and faster growth in ARPU as a result of improved cross-selling. This would accelerate gross profit growth to 85% and implies 89% upside to the current share price with a 13x EV/GP multiple.

Downside Case(s):

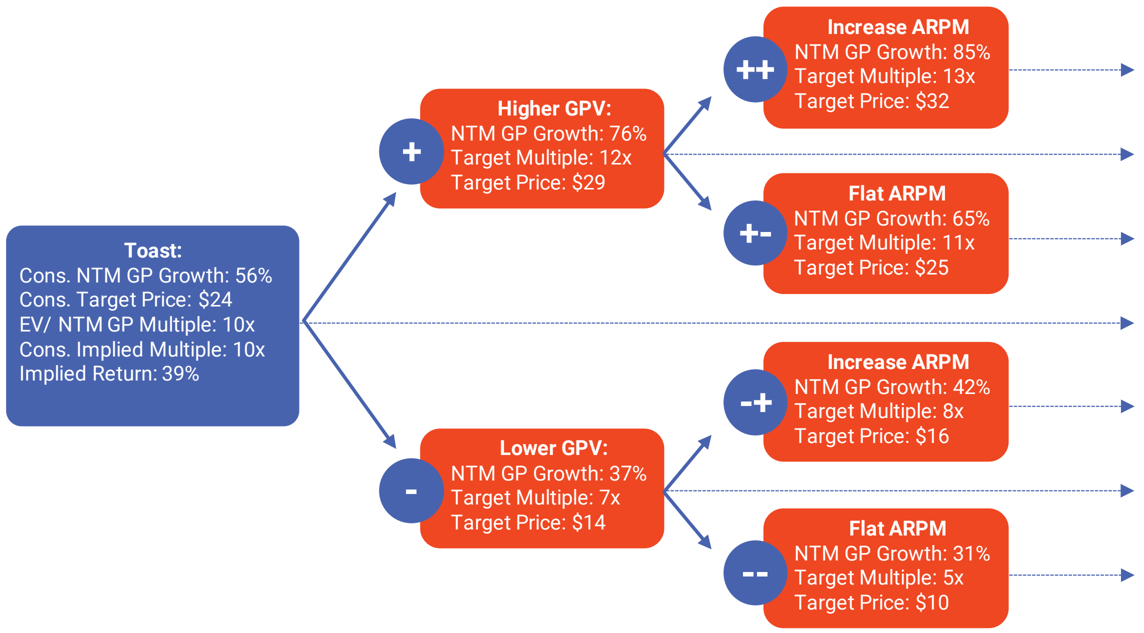
(-) $14, 18% Downside: This scenario assumes a recession, which is reflected in the model by growing GPV by the trough of out of home food spend during the GFC plus GPV from net adds. The forecast for net adds is also modestly decreased. This implies 37% gross profit growth and implies 18% downside to the current share price with a 7x NTM EV/GP.

(-+) $16, 5% Downside: This scenario assumes a recession partially offset by faster growth in ARPU. This implies 42% gross profit growth and implies 5% downside to the current share price with an 8x EV/GP multiple.

(--) $10, 40% Downside: This scenario assumes a recession and that Toast is unable to deliver ARPU expansion. This implies 31% gross profit growth and implies 40% downside to the current share price with a 5.0x NTM EV/GP multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Toast:
Cons. NTM GP Growth: 56%
Cons. Target Price: $24
EV/ NTM GP Multiple: 10x
Cons. Implied Multiple: 10x
Implied Return: 39%

\+ **Higher GPV:**
NTM GP Growth: 76%
Target Multiple: 12x
Target Price: $29

++ **Increase ARPM**
NTM GP Growth: 85%
Target Multiple: 13x
Target Price: $32

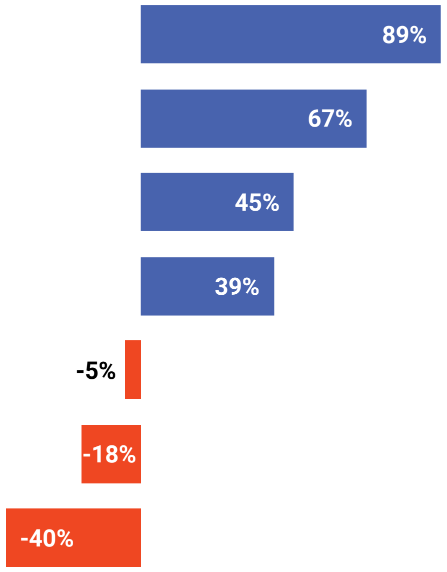
+- **Flat ARPM**
NTM GP Growth: 65%
Target Multiple: 11x
Target Price: $25

\- **Lower GPV:**
NTM GP Growth: 37%
Target Multiple: 7x
Target Price: $14

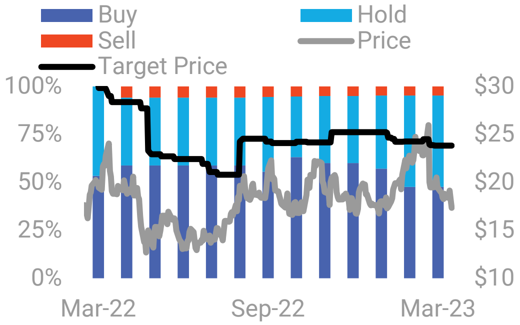
-+ **Increase ARPM**
NTM GP Growth: 42%
Target Multiple: 8x
Target Price: $16

-- **Flat ARPM**
NTM GP Growth: 31%
Target Multiple: 5x
Target Price: $10

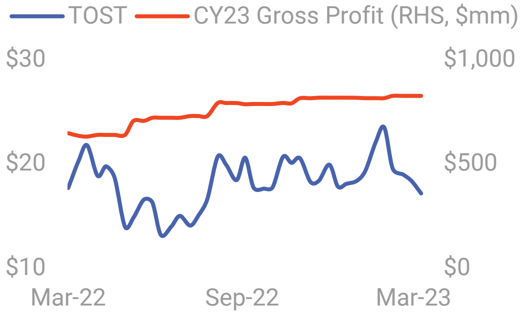
12-Month Price Return



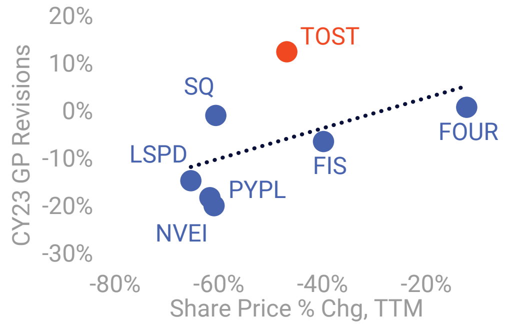
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions

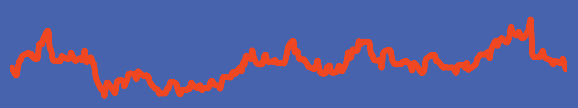


Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

TOST TTM Price Performance



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($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: Management's tone on the earnings call was largely positive. That said, shares traded off ~24% following the 4Q22 release and conference call. We believe two primary factors conspired to drive the sharp sell-off in the shares: 1) pre-print Toast was trading at a healthy premium (10.3x EV/GP) vs. peers (such as Shift4, Lightspeed, and Nuvei at 9.4x/4.0x/5.6x EV/GP, respectively), and 2) given the relative multiple premium, investors likely needed to see a combination of stronger results, better cross-sell execution, and FY23 revenue guidance, particularly for total revenue, that implied greater upside vs. pre-print consensus.

Results Recap: Toast reported $25.5bn in gross payment volumes, ~1% above consensus. Total locations grew +39% YoY to 79,000 which was in-line with consensus. Annual recurring revenue (ARR) grew 59% YoY to $901mm, 1% below consensus. Total revenue of $769mm beat by 2%, adjusted EBITDA of -$18.0mm came in better than consensus of -$23.8mm, and net income of -$99.0mm outperformed consensus by 1%.

Guidance Recap: **1Q23** guidance calls for total revenue of between $745mm - $775mm, implying 42% YoY growth at the midpoint, modestly above consensus at $756mm and adjusted EBITDA of negative $30mm - negative $20mm, $1mm above consensus of -$26mm at the midpoint. **FY23** guidance calls for total revenue guidance of between $3,570mm - $3,660mm, 1% above consensus of $3,619mm and adjusted EBITDA of negative $30mm - negative $10mm, likely implying EBITDA profitability by 2H23. This adjusted EBITDA guidance is +26% above expectations of -$27mm for the year.

Incremental From the Call:

- **Guidance Context:** With 4Q22 results, management issued 1Q23 total revenue guidance implying 8% QoQ deceleration (50.2% YoY in 4Q22 vs. +42% YoY in 1Q23), while reiterating the fact that GMV is typically weakest in the first and fourth quarter of each fiscal year. This seasonality was largely reflected in consensus prior to the press release. Management indicated that its guidance assumes a conservative macroeconomic outlook. With the 1Q23 adjusted EBITDA guide, management is implying modest margin contraction of 95bps (vs. +19bps QoQ in 4Q22). The FY23 adjusted EBITDA guide implies an incremental $5mm of profitability after 1Q23 though. Management highlighted the fact that the business is expecting adjusted EBITDA profitability by the end of the year, indicating that the improvement will likely occur staring in 2H23. That said, stock-based compensation is still a significant portion of adjustments used to arrive at the profitability metric. SBC totaled $62mm, or 8% of total revenue in the fourth quarter, which compares to $46mm in SBC in 4Q21 representing 9% of total revenue.
- **Cross-Sell Opportunities and ARPU Expansion:** Management highlighted the fact that 41% of customer locations were using 6 products or more (+200bps QoQ), with 65% using 4 products or more (+100bps QoQ). These dynamics underscore the company's ability to upsell products/services that are beneficial to restaurants. The company recently announced a partnership with Google to engage customers online, or on Google Maps, thereby allowing restaurants to directly manage online order flow from the Toast platform. This, paired with the added drive-through solutions through the Delphi Display acquisition, demonstrates the company's ability to offer value-added products that expand ARPU. 4Q22/FY22 SaaS ARPU increased 12%/19% YoY, respectively. However, ARR missed consensus by 1% in 4Q22 due to below consensus subscription revenue ($95mm vs. consensus $98mm). The company's cross-selling efforts have proven less effective than consensus expectations over the short-term, however, these investments have the potential to drive higher recurring revenues over the long-term.

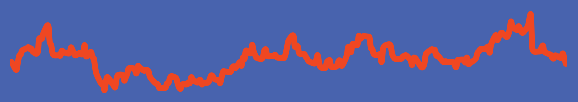
4Q22 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	Abs.▲	%▲
Gross Payment Volume (bn)	**$25.5**	**$25.2**	**$0.29**	**1%**
growth (%, yoy)	*49%*	*47%*		
Annual Recurring Revenue	**$901**	**$910**	**-$9.10**	**-1%**
growth (%, yoy)	*59%*	*60%*		
Total Locations (k)	**79.0**	**79.2**	**-0.17**	**0%**
growth (%, yoy)	*39%*	*39%*		
Financial Technology Revenue	**$640**	**$621**	**$19.0**	**3%**
growth (%, yoy)	*52%*	*48%*		
Subscription Revenue	**$95.0**	**$97.8**	**-$2.85**	**-3%**
growth (%, yoy)	*76%*	*81%*		
Hardware Revenue	**$27.0**	**$28.1**	**-$1.15**	**-4%**
growth (%, yoy)	*-13%*	*-9%*		
Professional Services Revenue	**$7.00**	**$6.86**	**$0.14**	**2%**
growth (%, yoy)	*17%*	*14%*		
Total Revenue	**$769**	**$754**	**$15.1**	**2%**
growth (%, yoy)	*50%*	*47%*		
Adjusted Cost of Revenue	**$611**	**$592**	**-$18.9**	**-3%**
growth (%, yoy)	*42%*	*38%*		
Adjusted Gross Profit	**$172**	**$162**	**$10.0**	**6%**
Gross Profit Margin (%)	*22%*	*21%*		88bps
Operating Expenses	**$257**	**$253**	**-$3.66**	**-1%**
growth (%, yoy)	*36%*	*34%*		
Adjusted EBITDA	**-$18.0**	**-$23.8**	**$5.81**	**24%**
Adj .EBITDA Margin (%)	*-2%*	*-3%*		82bps
Net Income	**-$99.0**	**-$100**	**$1.43**	1%
Net Income Margin (%)	*-13%*	*-13%*		45bps

FY23 Guidance	Old	New	%▲	Cons.	%▲
Total Revenue	**NA**	**$3,570 - $3,660**	**NA**	**$3,619**	**0%**
growth (%, yoy)		*32%*		*33%*	
Adjusted EBITDA	**NA**	**($30.0) - ($10.0)**	**NA**	**($27.0)**	**26%**
Adj. EBITDA Margin (%)		*-1%*		*-1%*	19bps

Source: Company filings; FactSet; Visible Alpha

TOST TTM Price Performance



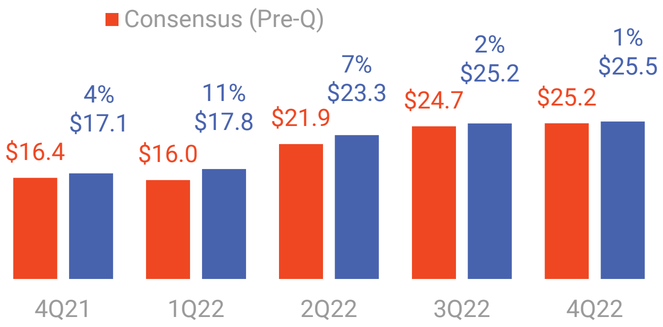
Price as of 03/17/23:	$17.11	**Shares Out (mm):**	523
Market Cap (mm):	$8,945	**Beta (Since IPO):**	1.8
52-Wk Range:	$11.91 - $26.04	**Avg. Daily Vol (mm):**	6.5

FINANCIAL TECHNOLOGY PARTNERS

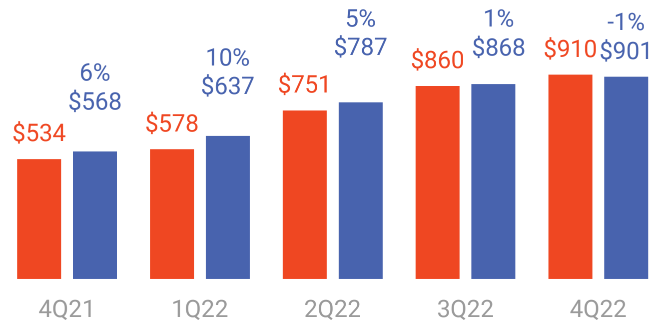
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

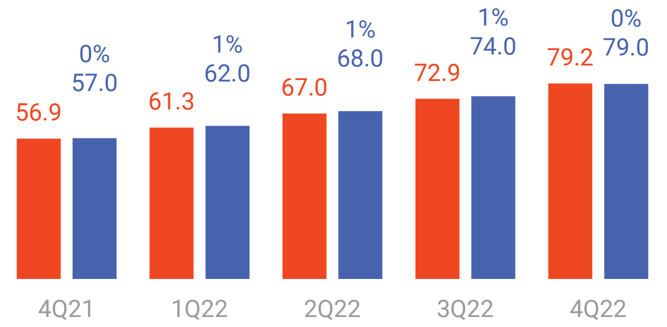
Gross Payment Volume (bn)



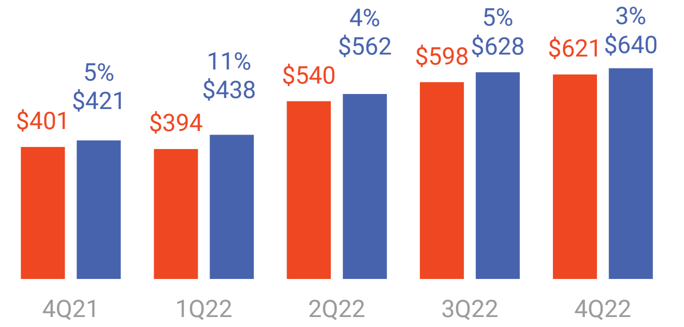
Annual Recurring Revenue



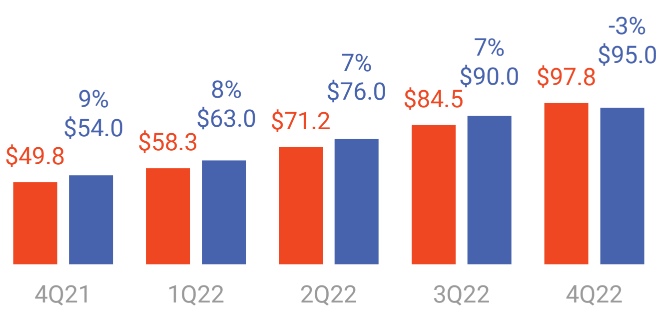
Total Locations (000)



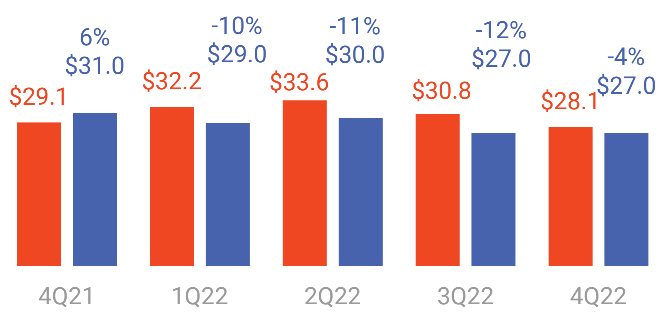
Financial Technology Revenue



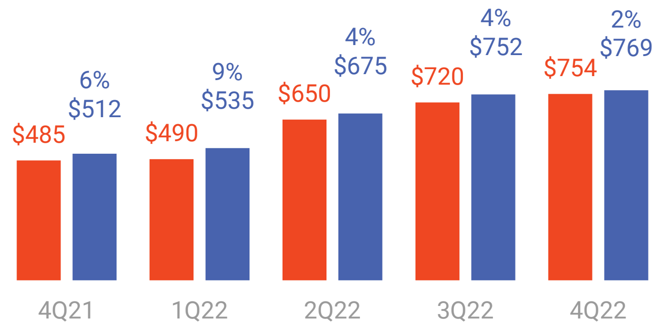
Subscription Revenue



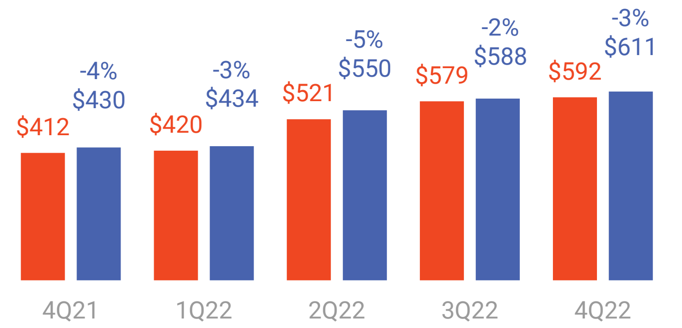
Hardware Revenue



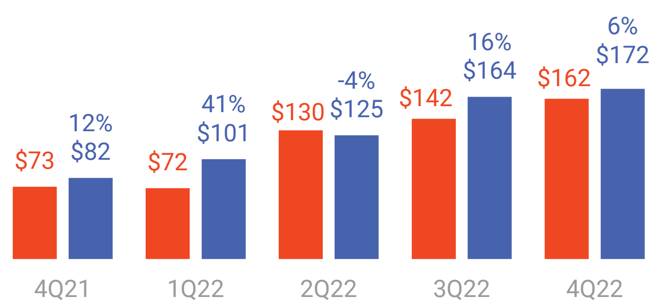
Total Revenue



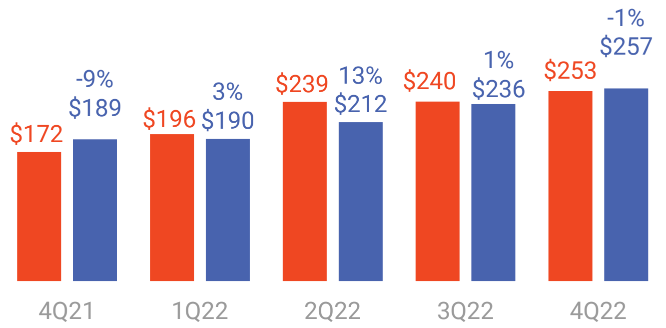
Adj. Cost of Sales



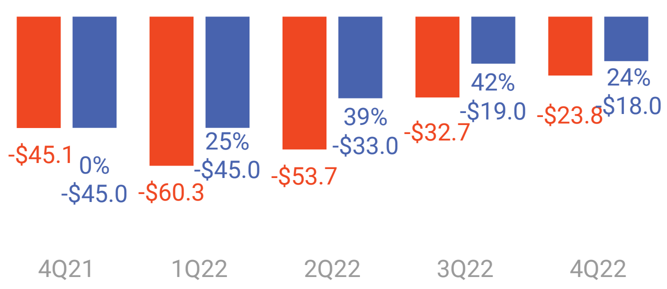
Adj. Gross Profit



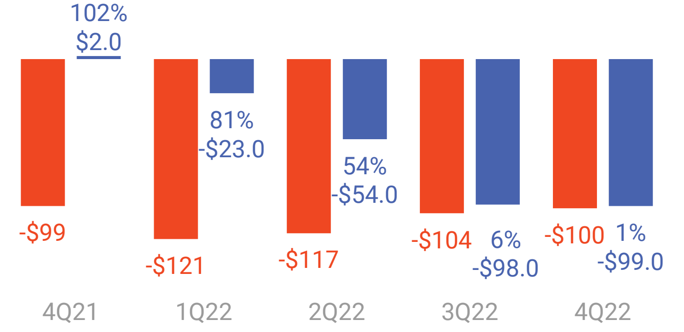
Total Operating Expenses



Adj. EBITDA



Net Income



Source: Company filings; FactSet

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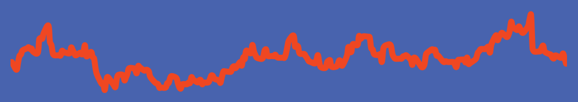
TOST TTM Price Performance



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($ in millions, except where otherwise noted)

1Q23 EARNINGS OUTLOOK

Toast is projected to report 1Q23 earnings on May 11, before market open.

What's in Focus:

Similar to 4Q22, investors will primarily be focused on FY23 guidance (and any subsequent revisions to the initial guide) and measurable success in cross-selling and upselling existing customers. In terms of guidance, management had indicated that it is assuming a conservative economic outlook. It is possible that management is baking in too much conservatism in the guide, and there could be upside in 1Q23 results given the uptick seen in restaurant/beverage activity shown in January/February 2023 retail spending data. According to the National Restaurant Association, early estimates for restaurant/beverage sales volume in January reflect 25% YoY growth. 1Q23 GPV consensus is $24.5bn, implying 38% YoY growth. The business has traditionally outpaced industry growth by a larger margin, although the differential compressed throughout 2022. Toast's growth outperformance vs. the market (Toast GPV growth – industry sales volume growth) has been significant but has also been compressing, totaling 69%/45%/41%/36% YoY in 1Q22, 2Q22, 3Q22, and 4Q22, respectively.

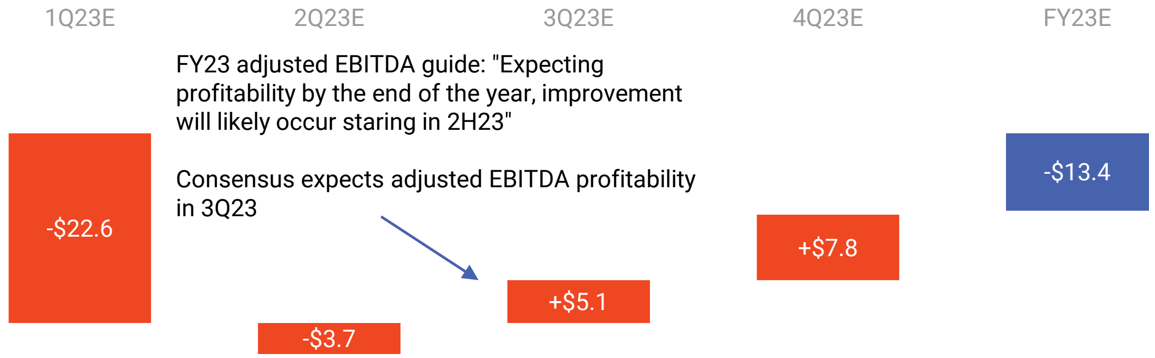
Estimates:

- **KPI's:** Consensus has revised 1Q23 GPV estimates up 0.8% to $25.1bn, implying 41% YoY growth (vs. 98% YoY growth in 1Q22), versus pre-print consensus. On the 4Q22 call, management reiterated the fact that 1Q and 4Q are typically weaker periods for volumes. Consensus for total locations remain relatively close/slightly below the pre-4Q22 release (83.8K vs. 84.0K).
- **Revenue:** Versus pre-print consensus 1Q23 financial technology revenue has been revised up 2.5% to $628mm. Subscription revenue consensus has decreased 4.1% to $102mm, slightly offsetting the revisions to financial technology revenue. Consensus on total revenue has increased 1%, totaling $765mm for 1Q23.
- **Expenses:** Financial technology cost of revenue estimates have increased 1.9% to $496mm, while subscription cost of revenue has been revised down 1.1% to $36.8mm. Total cost of revenue consensus has increased 1.2% to $606mm. However, adjusted gross profit estimates have been revised up to $174mm from $168mm driven by higher expected revenue. Sales and marketing expenses have been revised down 1.1% to $405mm for 1Q23. R&D expenses have remained consistent over pre-4Q22 estimates ($106.4mm vs. $106.3mm), although G&A expenses have increased 2.1% to $98mm.
- **Profitability:** 1Q23 net income consensus has been revised down 3% since 4Q22 results to $85.7mm to $88.3mm while FY23 estimates have been revised down 2% versus pre-print consensus.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

GPV and total revenue beat by 11%/9%	GPV and total revenue beat by 7%/4%	GPV and total revenue beat by 2%/4%	GPV and total revenue beat by 1%/2%
Q2 guidance ahead of consensus; Raised FY22 revenue and adj. EBITDA guidance	Q3 guidance ahead of consensus	4Q22 ahead of consensus	Adj. EBITDA guidance for FY23 ahead of consensus

CONSENSUS FY23 ADJUSTED EBITDA



FY23 adjusted EBITDA guide: "Expecting profitability by the end of the year, improvement will likely occur staring in 2H23"

Consensus expects adjusted EBITDA profitability in 3Q23

Source: Company filings, FactSet

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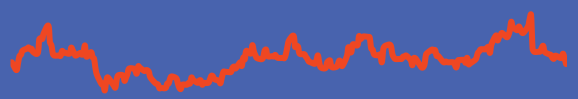

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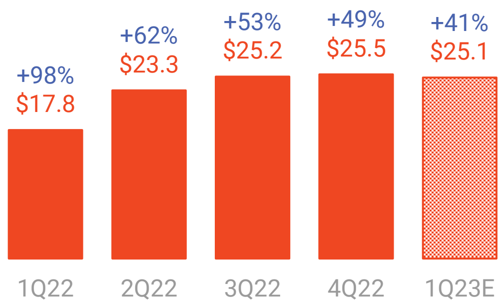
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

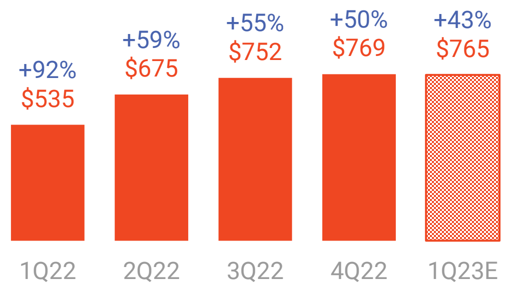
	Low	Average	High
Gross Payment Volume (bn)	**$23.9**	**$25.1**	**$25.8**
growth (%, yoy)	34%	41%	45%
Annual Recurring Revenue	**$884**	**$937**	**$979**
growth (%, yoy)	39%	47%	54%
Total Locations (000)	**81.4**	**83.8**	**85.2**
growth (%, yoy)	31%	35%	37%
Financial Technology Revenue	**$616**	**$629**	**$646**
growth (%, yoy)	41%	44%	47%
Subscription Revenue	**$90.3**	**$102**	**$110**
growth (%, yoy)	43%	61%	75%
Hardware Revenue	**$24.1**	**$28.7**	**$32.0**
growth (%, yoy)	-17%	-1%	10%
Professional Services Revenue	**$4.16**	**$6.14**	**$7.95**
growth (%, yoy)	-17%	23%	59%
Total Revenue	**$748**	**$765**	**$783**
growth (%, yoy)	40%	43%	46%
Adjusted Cost of Revenue	**$582**	**$593**	**$602**
growth (%, yoy)	34%	36%	38%
Adjusted Gross Profit	**$148**	**$174**	**$196**
Gross Profit Margin (%)	20%	23%	25%
Operating Expenses	**$240**	**$259.3**	**$288.4**
growth (%, yoy)	26%	37%	52%
Adjusted EBITDA	**-$29.4**	**-$21.9**	**-$5.5**
EBITDA Margin (%)	-4%	-3%	-1%
Net Income	**-$136**	**-$88**	**-$31**
Net Income Margin (%)	-18%	-11%	-4%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

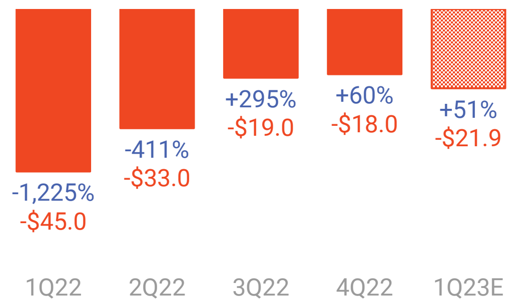
GPV (billions)/YoY Growth



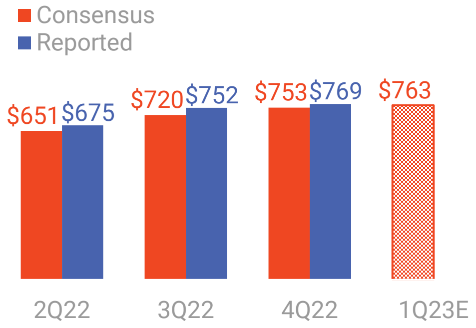
Revenue/YoY Growth



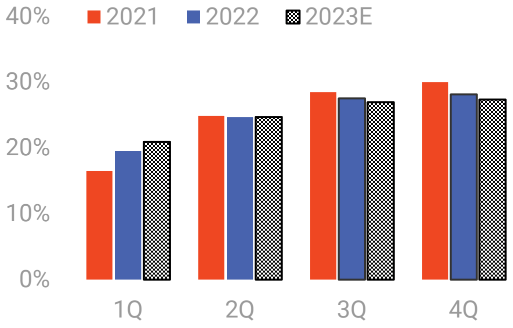
Adjusted EBITDA/YoY Growth



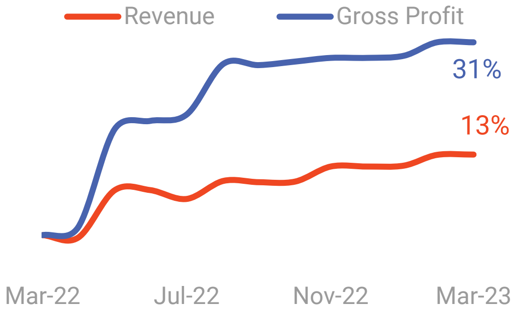
Consensus vs. Reported



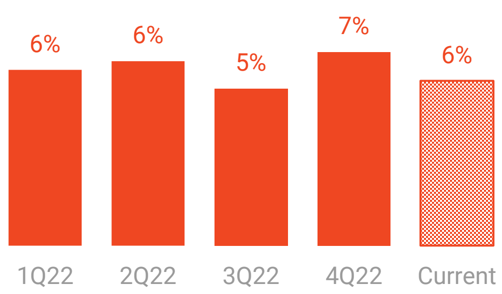
Revenue Seasonality



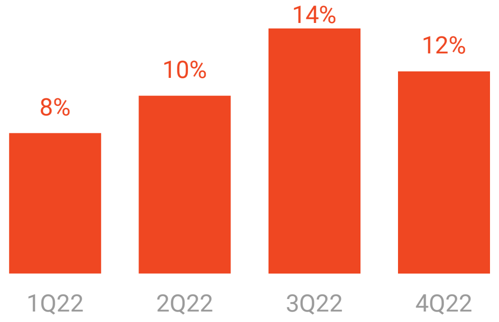
1Q23 Cons. Revisions



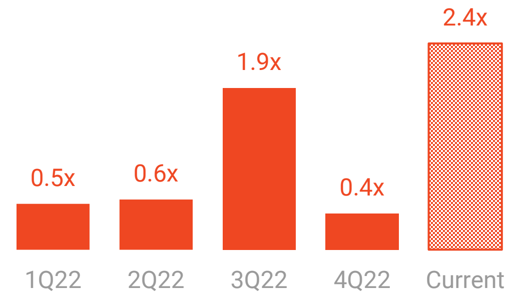
Short Interest



Hedge Fund Ownership as % of S/O



Put/Call Ratio[1]



Source: Company filings, FactSet

1) Put/Call Ratio over prior 7-days

FT Partners | Equity Research

03/20/23 - **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218 0540

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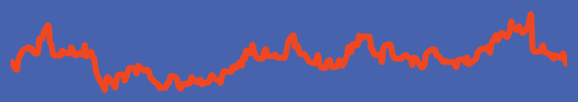
TOST TTM Price Performance



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QUESTIONS FOR MANAGEMENT

General:

1) With the guidance pointing to EBITDA profitability exiting 2023, what is the pathway to get there?
2) In terms of location adds, are wins coming from more legacy competitors or are there competitive takeaways from other modern iPoS providers?
3) Can management discuss the rate limiting factor on NNA's (net new adds) is? Is it sales team size? Is there a long pipeline of customers there and how are leads generated?
4) Regarding the macro environment, what is the feedback from customers? Is there any weakness or softening in the transaction count or otherwise?
5) In the event of a significant economic slowdown do you expect the priority to be NNA's, increasing ARPU, expense management, or a balance of the three?
6) Given some of the comments around pricing by Block, Clover, and Fiserv, is there room to raise pricing going forward?

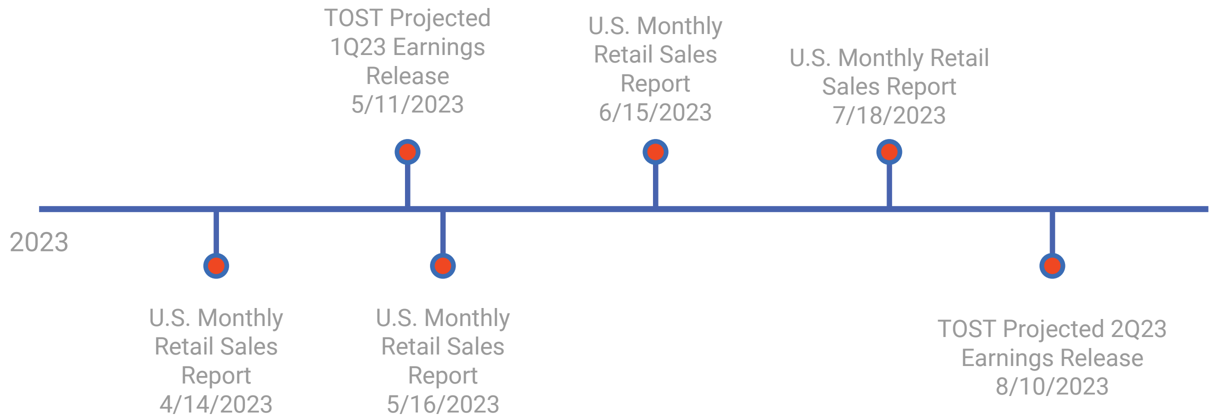
Products:

7) With respect to the Delphi Display acquisition, what is the logical next step for rolling out new capabilities and capturing more of the QSR market? Could you speak to the size of this opportunity?
8) How is the invoice product being monetized? Is it purely a SaaS fee or is there a cost per invoice/transaction?

Markets:

9) International expansion is a long-term objective, with management having mentioned that 2022 and 2023 are expected to be building years? What early differences and challenges if any have arisen in these markets compared to the U.S.?
10) There's been a move market to service mid-market and even enterprise-sized customers, what is the magnitude of the implied take rate differential for these larger customers vs. the SMB base?

POTENTIAL CATALYSTS



2023

U.S. Monthly Retail Sales Report 4/14/2023

TOST Projected 1Q23 Earnings Release 5/11/2023

U.S. Monthly Retail Sales Report 5/16/2023

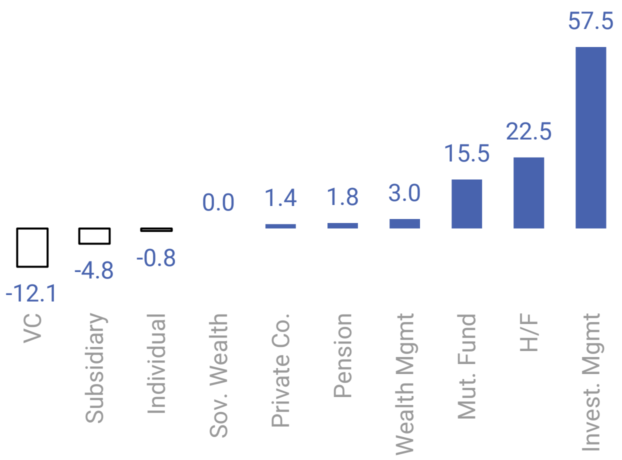
U.S. Monthly Retail Sales Report 6/15/2023

U.S. Monthly Retail Sales Report 7/18/2023

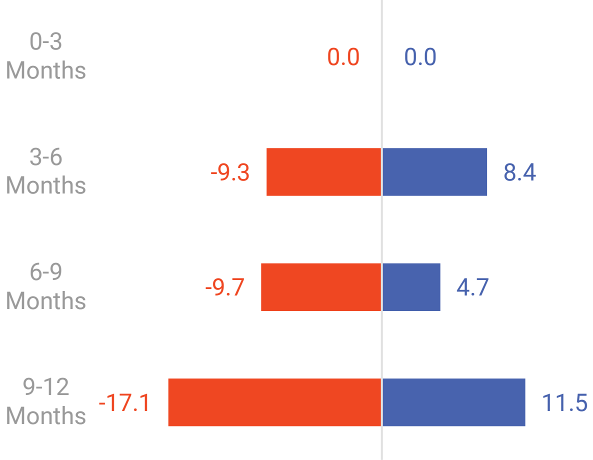
TOST Projected 2Q23 Earnings Release 8/10/2023

SHAREHOLDER ANALYSIS

Six-Month Position Change (mm)



Insider Shares Sold/Bought (mm)



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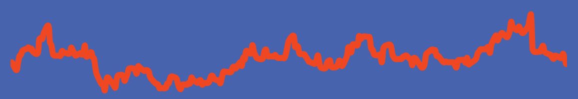

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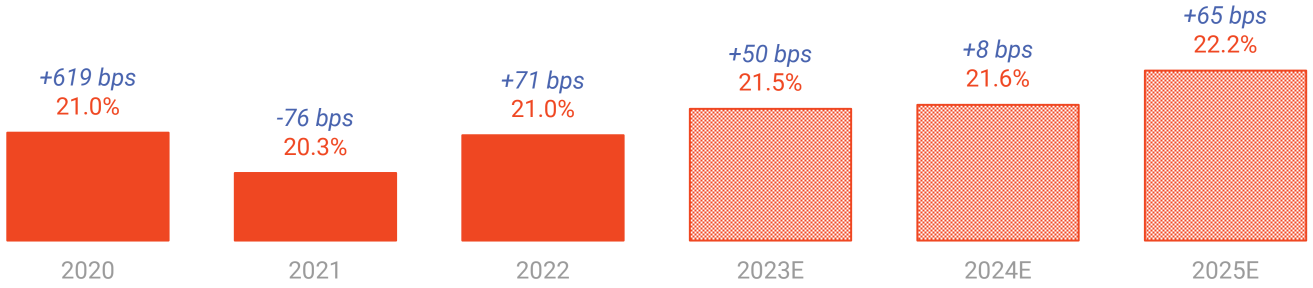
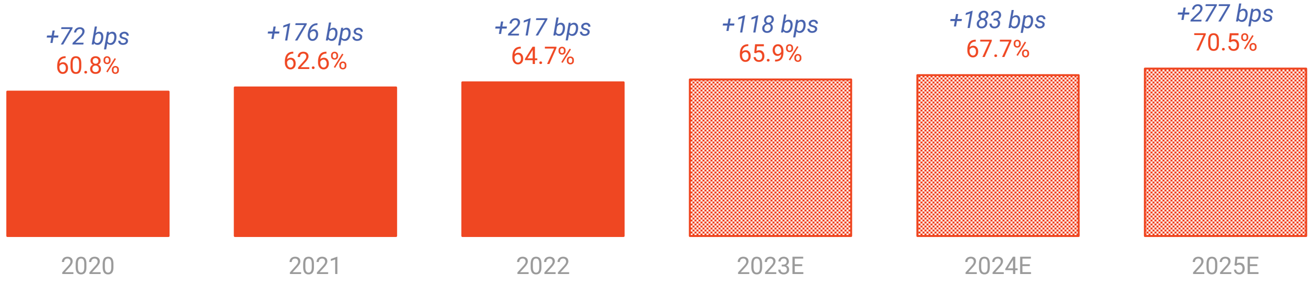
COMPANY RATIOS/MARGIN ANALYSIS

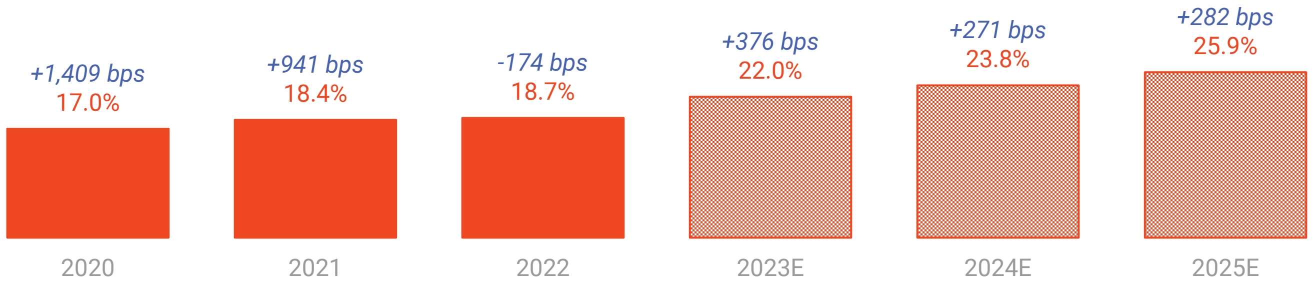
Financial Technology Segment Gross Margin



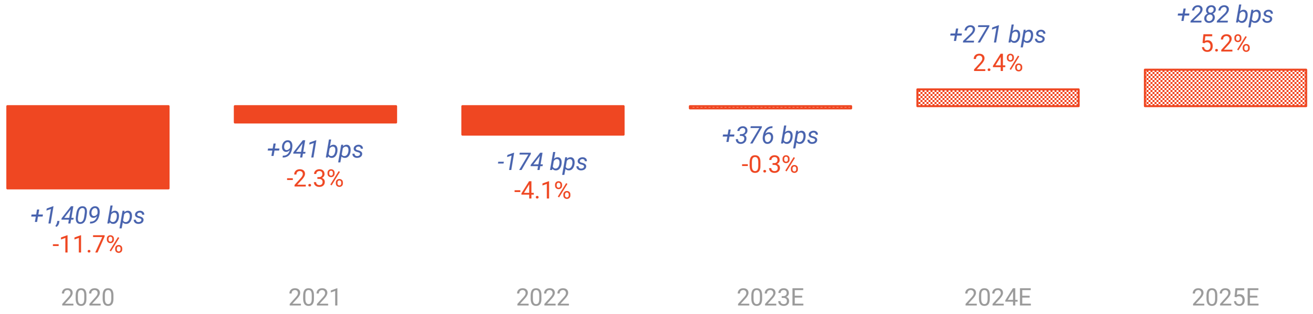
Subscription Segment Gross Margin



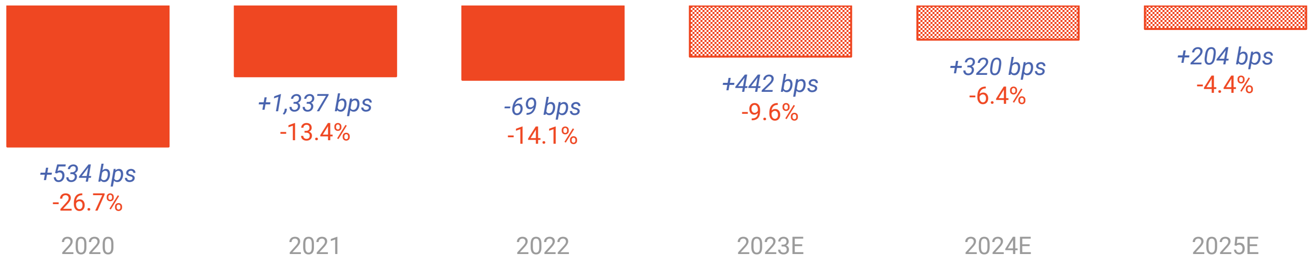
Overall Gross Margin



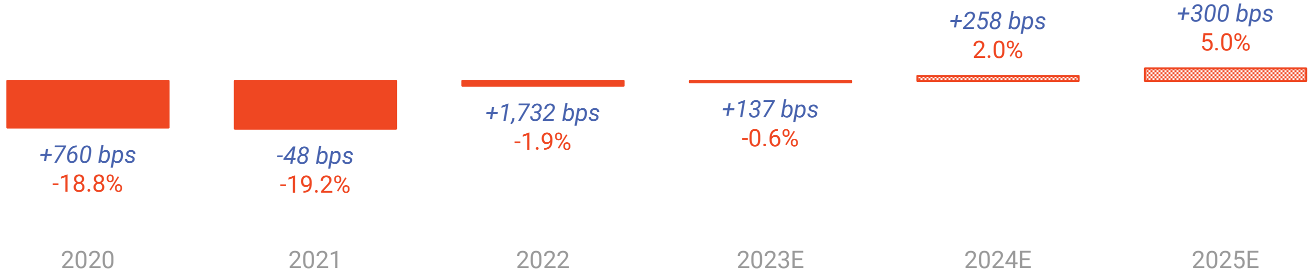
Adjusted EBITDA Margin



Operating Margin



Adjusted Net Income Margin



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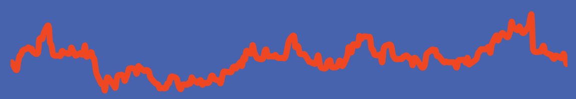

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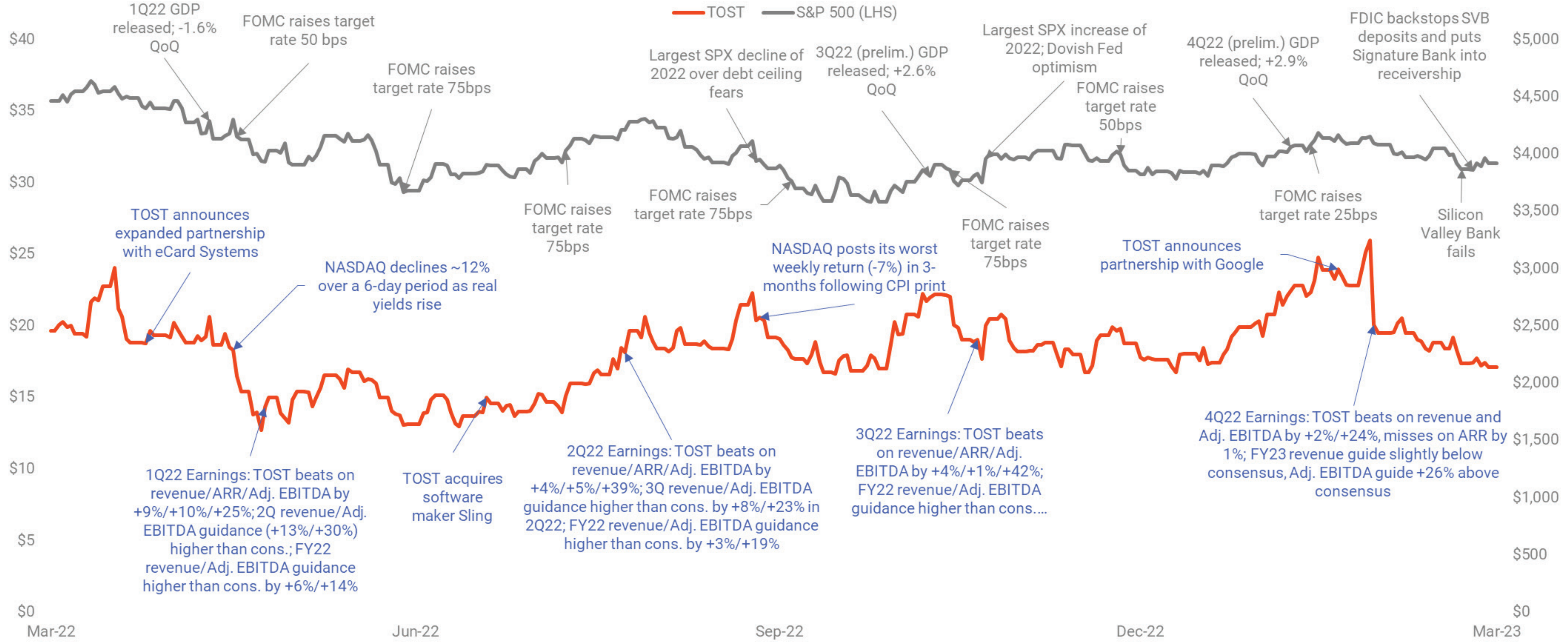
FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

3Q22 (prelim.) GDP released; +2.6% QoQ

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

TOST announces expanded partnership with eCard Systems

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 25bps

Silicon Valley Bank fails

NASDAQ declines ~12% over a 6-day period as real yields rise

NASDAQ posts its worst weekly return (-7%) in 3-months following CPI print

TOST announces partnership with Google

1Q22 Earnings: TOST beats on revenue/ARR/Adj. EBITDA by +9%/+10%/+25%; 2Q revenue/Adj. EBITDA guidance (+13%/+30%) higher than cons.; FY22 revenue/Adj. EBITDA guidance higher than cons. by +6%/+14%

TOST acquires software maker Sling

2Q22 Earnings: TOST beats on revenue/ARR/Adj. EBITDA by +4%/+5%/+39%; 3Q revenue/Adj. EBITDA guidance higher than cons. by +8%/+23% in 2Q22; FY22 revenue/Adj. EBITDA guidance higher than cons. by +3%/+19%

3Q22 Earnings: TOST beats on revenue/ARR/Adj. EBITDA by +4%/+1%/+42%; FY22 revenue/Adj. EBITDA guidance higher than cons.…

4Q22 Earnings: TOST beats on revenue and Adj. EBITDA by +2%/+24%, misses on ARR by 1%; FY23 revenue guide slightly below consensus, Adj. EBITDA guide +26% above consensus

Source: Company filings; FactSet

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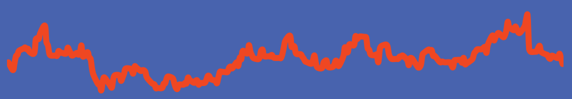
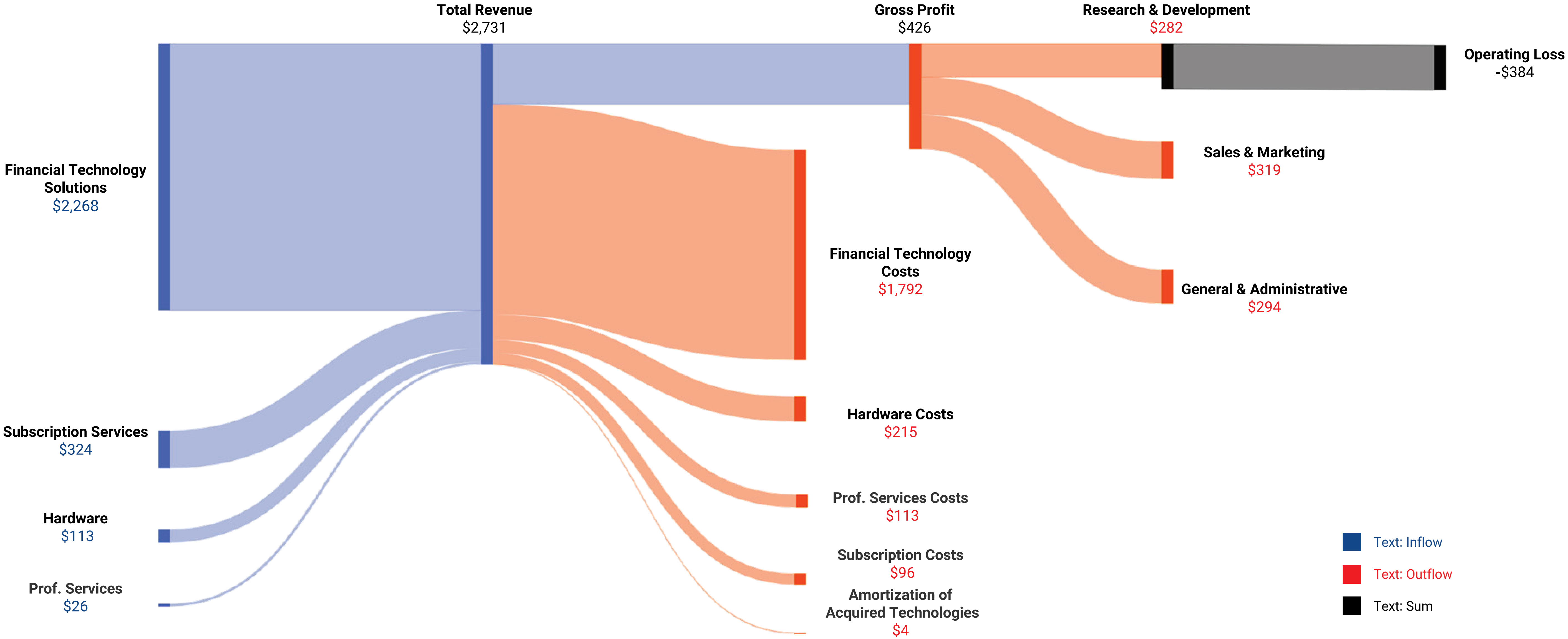


Price as of 03/17/23:	$17.11	**Shares Out (mm):**	523
Market Cap (mm):	$8,945	**Beta (Since IPO):**	1.8
52-Wk Range:	$11.91 - $26.04	**Avg. Daily Vol (mm):**	6.5

FINANCIAL TECHNOLOGY PARTNERS

($ in millions)

P&L VISUALIZATION – TTM



Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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Upstart

UPSTART PROPRIETARY COMPANY PROFILE

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Upstart

UPST TTM Price Performance

Price as of 03/17/23:	**$15.23**	**Shares Out (mm):**	**81.4**
Market Cap (mm):	**$1,240**	**Beta (2-Year Avg.):**	**2.2**
52-Wk Range:	**$12.01 - $133.80**	**Avg. Daily Vol (mm):**	**6.3**

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COMPANY OVERVIEW

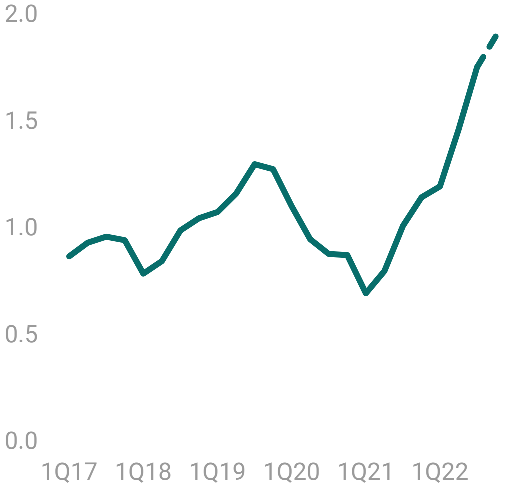
Upstart is an online lending marketplace that connects consumers, banks, and institutional investors through its shared platform.

On the consumer side, Upstart aggregates demand on Upstart.com, where consumers are presented with bank-branded offers from partners. Partners can also offer Upstart powered loans through a bank-branded interface on their own website/mobile-application.

Consumers on the Upstart platform are generally offered unsecured personal and secured auto loans ranging from $1,000 to $50,000, with terms typically ranging from three to seven years, with a monthly repayment schedule and no prepayment penalty.

On the funding side, bank partners can retain loans that align with risk objectives, while loan volumes exceeding their collective funding capacity can be flowed through to Upstart's funding program and sold to institutional investors.

UPSTART MACRO INDEX[1]



KEY DEBATES

1. **Macro Conditions:** Management reiterated the challenging macro environment for Upstart with 4Q22 results and issued 1Q23 guidance substantially below street expectations. Management did however note incremental reasons for optimism including improving consumer savings and consumption data in addition to the company's proprietary UMI index recovering. Looking forward, the macro backdrop, specifically the health of the consumer and funding availability, will likely be the biggest determinants of Upstart's over or under performance.

2. **Funding Constraints:** Upstart typically has three outlets for the loans it originates 1) bank partners, 2) institutional investors (through securitizations), or 3) holding loans on its balance sheet. Over 2022, Upstart faced significant funding constraints as funding partners' risk appetite decreased, which has resulted in Upstart taking on greater balance sheet exposure (loans on balance sheet increased to a record $1,010mm in 4Q22). Management is now in late-stage conversations with potential committed capital partners, which if successful could prove an effective way to reduce volatility and risk.

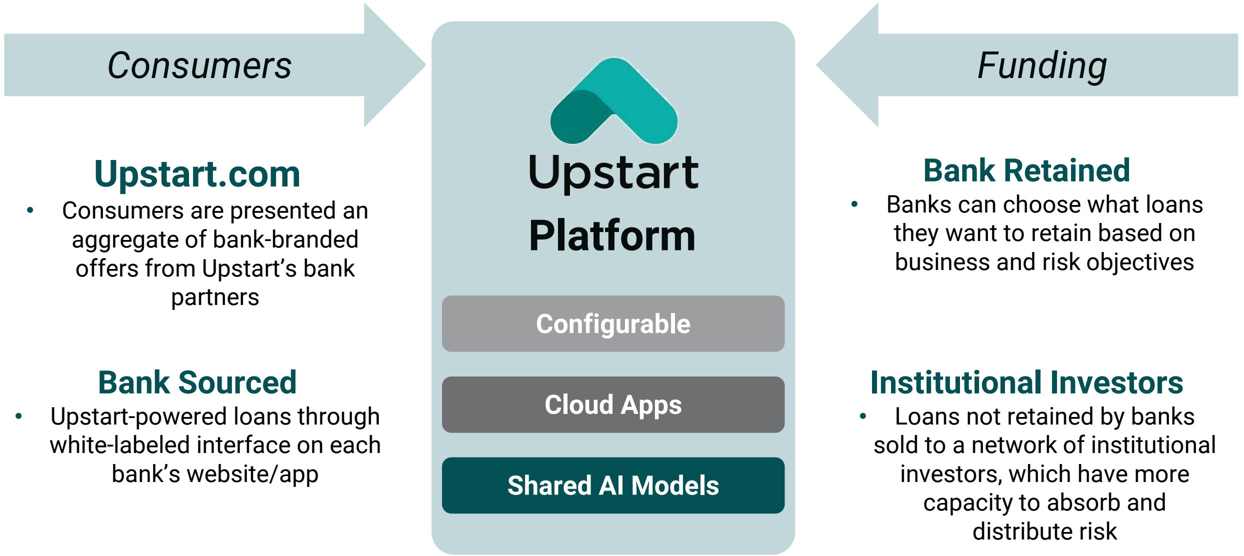
3. **Unit Economics:** While the macro environment has deteriorated, Upstart has seen success improving its unit economic profile, increasing the overall take rate despite lower origination volume. Additionally, the contribution margin of 53.1% in 2H22 represented a 3.8ppt uplift YoY as a result of marketing efficiencies. While progress has been made, updates to the funding mix are likely to reduce loan profitability as committed capital partners may require discounts versus the current marketplace funding partners.

REVENUE MODEL

Upstart's revenue model consists of the following:

- **Revenue from fees (108% of TTM net revenue):** Reported on a net basis, Upstart generates fees through three sources:
    - **Referral fees:** Fees generated from the referral of borrowers from Upstart.com to lending partners, paid by the lending partners on a per-borrower basis. Fees are charged net of any fees the lending partner charges Upstart.
    - **Platform fees:** Fees generated from lending partner's use of the Upstart AI lending marketplace, which includes collection of loan application data, underwriting of credit risk, verification and fraud detection.
    - **Loan servicing fees**: Fees generated from loan holders for the collecting, processing, and reconciling of loan payments received. Fees are based on a predetermined percentage of the outstanding principal balance, with certain ancillary fees generated on a per-transaction basis for processing late payments and payments declined for insufficient funds.
- **Interest income and fair value adjustments (-8% of TTM net revenue):** Comprised of interest income on loans held on the balance sheet, interest expense on funding debt, and net changes in the fair value of financial instruments on the balance sheet.

UPSTART ECOSYSTEM



Consumers

Funding

Upstart Platform

- Configurable
- Cloud Apps
- Shared AI Models

Upstart.com

- Consumers are presented an aggregate of bank-branded offers from Upstart's bank partners

Bank Sourced

- Upstart-powered loans through white-labeled interface on each bank's website/app

Bank Retained

- Banks can choose what loans they want to retain based on business and risk objectives

Institutional Investors

- Loans not retained by banks sold to a network of institutional investors, which have more capacity to absorb and distribute risk

FT Partners | Equity Research

Source: Company filings

1) Upstart Macro Index, 4Q22 earnings presentation

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Upstart

UPST TTM Price Performance

Price as of 03/17/23:	$15.23	Shares Out (mm):	81.4
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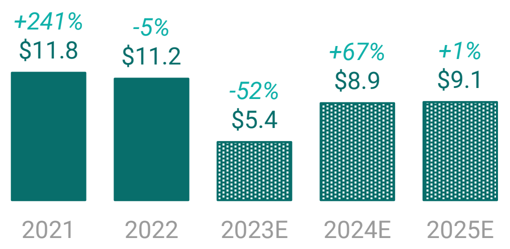
52-Wk Range:	$12.01 - $133.80	Avg. Daily Vol (mm):	6.3

FINANCIAL TECHNOLOGY PARTNERS

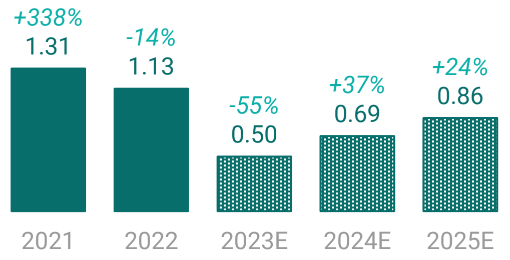
($ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

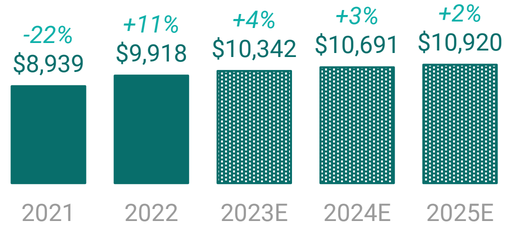
Loan Origination Volume (bn)



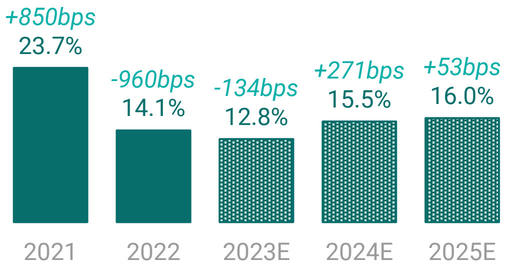
Number of Loans Funded (mm)



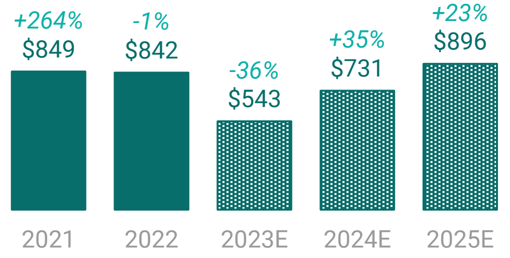
Average Loan Size (Abs.)



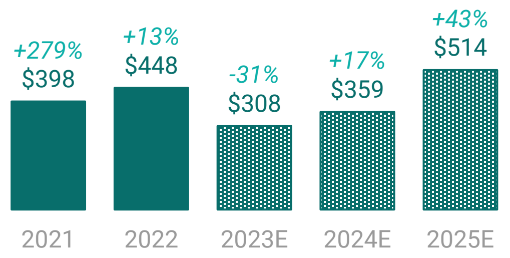
Conversion Rate[7]



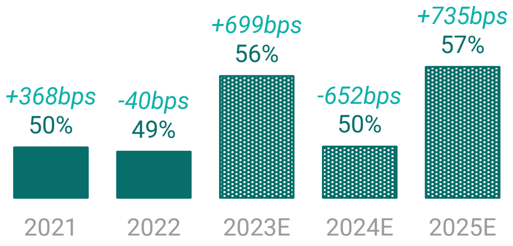
Total Revenue



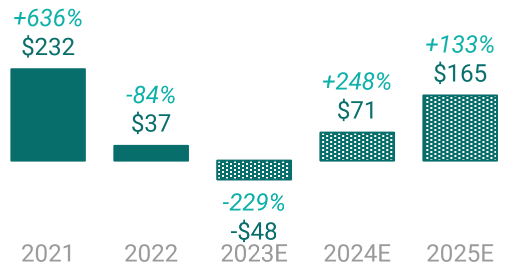
Contribution Profit[5]



Contribution Margin[6]



Adjusted EBITDA



INDUSTRY KPIs

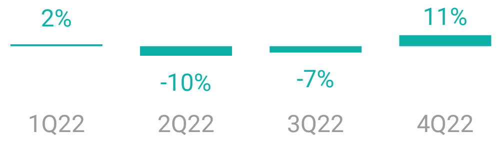
Total Household Debt[2] *(C1Q14 – C4Q22)*

Personal Savings Rate[2] *(Jan 18 – Jan 23)*

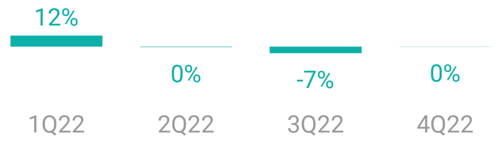
Rate on Personal Loans[2] *(May 15 – Nov 22)*

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[3]

Total Revenue

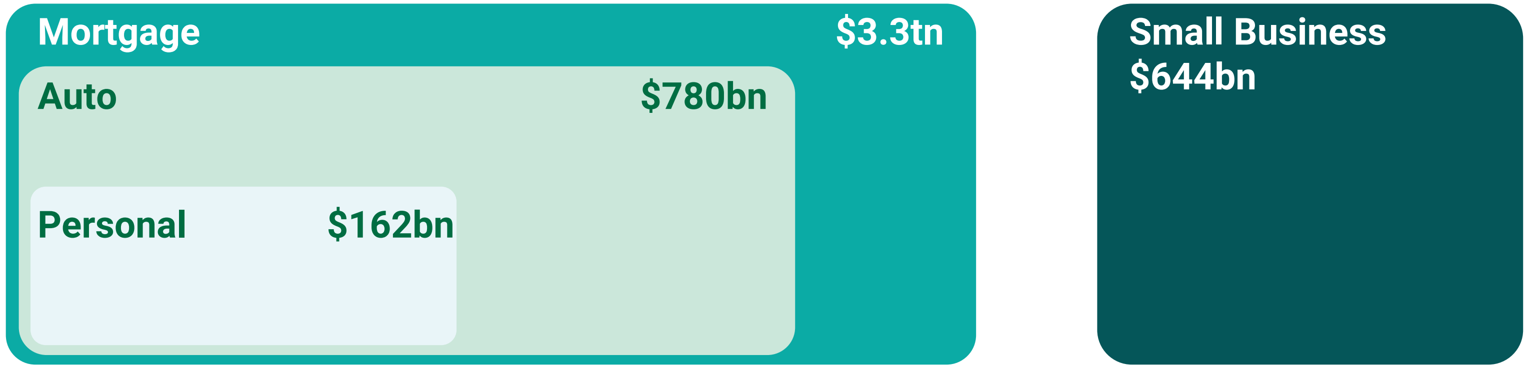


Contribution Profit



Transaction Volume (bn)	$4.41	$5.36	$7.03
Total Revenue	$462	$543	$792
Contribution Profit	$267	$307	$396
Adjusted EBITDA	-$192	-$48	$134

TOTAL ADDRESSABLE MARKET – GLOBAL[4]



Mortgage **$3.3tn**

Auto **$780bn**

Personal **$162bn**

Small Business $644bn

Source: Company filings; FactSet
1) Visible Alpha
2) Federal Reserve
3) FactSet, VA Consensus Low/Average/High Range
4) UPST 4Q22 Earnings Presentation
5) Defined as revenue from fees less variable expenses
6) Defined as contribution profit divided by revenue from fees
7) Defined as number of loans divided by the number of rate requests

Upstart

UPST TTM Price Performance

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Market Cap (mm):	$1,240	Beta (2-Year Avg.):	2.2
52-Wk Range:	$12.01 - $133.80	Avg. Daily Vol (mm):	6.3

VALUATION CONSIDERATIONS

Relative Valuation:

As of March 20th, Upstart trades at a 5.9x NTM EV/Contribution Profit multiple, 17.7x below its average multiple of 23.6x since IPO. It currently trades at a 2.5x EV/CP premium to the Nasdaq (measured against the Nasdaq EV/Sales), 17.4x lower than its 3-year average of 19.9x. Upstart has seen significant multiple rerating over the TTM. **If Upstart were to trade in-line with peers on a EV/CP basis (or most equivalent metric) it would imply a 12-month price of $15.40, (1% upside).** While the last two years have shown Upstart's sensitivity to credit cycle concerns and interest rates, **the company could rebound meaningfully in 2H23 if management is successful in securing committed capital partner.**

Scenario 1 – Current Price ($15.23, 0%): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To approximate this, the scenario points to sharp revenue contraction in FY23 (in-line with consensus estimates) followed by revenue growing at a ~30% CAGR through FY27 predicated on **1) the securing of committed loan facilities to hedge ABS market volatility 2) improvement in ABS market liquidity and consumer credit quality and 3) penetration of new products.** The scenario also assumes negative EBIT margins in the near-term, followed by a gradual recovery to +20% over the long-term. Were shares of Upstart to remain at their current price in 12-months, it would imply a 5.1x NTM EV/CP multiple (based on current STM consensus contribution profit of $354mm).

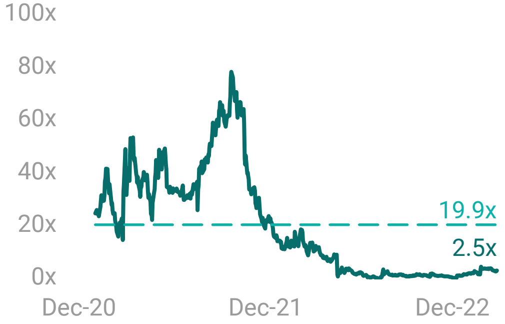
Scenario 2 – Favorable Funding Mix ($35.00, 130%): The second DCF scenario outlines the scenario in which Upstart is able to reach favorable agreements for committed capital partners. This would thereby enable an efficient hybrid market-place/committed capital model, in which the company is able to meaningfully accelerate loan originations in the short-term, while simultaneously reducing balance sheet risk. In this case, the scenario models a 33% CAGR revenue growth through FY27. This scenario points to a $35 target price representing 130% upside and would imply a 9.7x NTM EV/CP multiple.

Scenario 3 – Less Favorable Funding Mix ($10.97, -28%): The third DCF scenario estimates the impact of the company not being able to secure favorable committed capital partner terms. This would likely have the impact of weighing on loan origination volume and fees per loan, coming in below consensus in FY23 and FY24, before making a more gradual recovery. If this scenario were to unfold, management would likely take more draconian actions with respect to cost cutting, which could partially offset the EBIT margin headwinds. This scenario points to a 12-month target price of $10.97, -28% below the current price, it would imply a 4.0x NTM EV/CP multiple.

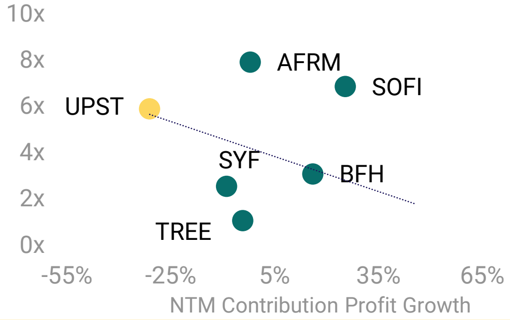
PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

NTM EV/Contribution Profit Since IPO

NTM EV/Contribution Profit vs. NASDAQ[1]



Peer Avg. NTM EV/CP[2] vs. CP Growth

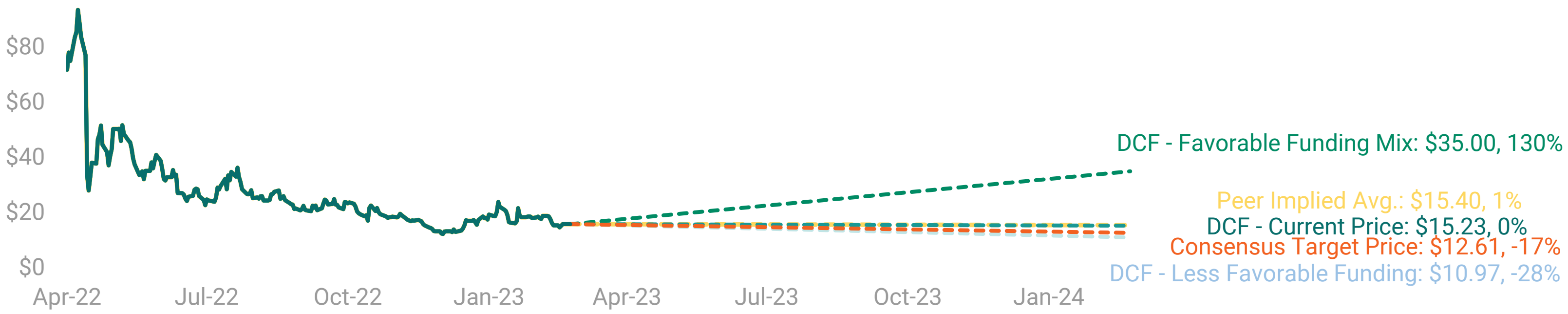


DCF Assumptions[3]

10-Year Rf	4.1%
Cost of Equity	20.9%
Cost of Debt	5.0%
WACC	13.4%
Beta	2.6
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate	1.0%
Equity Value Reduction from Present + Future SBC	$73.4

TTM Price Performance

Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) Utilizes Nasdaq EV/Sales for premium base

2) Or most equivalent metric (after provision, funding costs, transaction costs)

3) SBC in millions

Upstart

UPST TTM Price Performance

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Market Cap (mm):	$1,240	Beta (2-Year Avg.):	2.2
52-Wk Range:	$12.01 - $133.80	Avg. Daily Vol (mm):	6.3

FINANCIAL TECHNOLOGY PARTNERS

DECISION TREE INPUTS

The decision tree to the right is designed to evaluate potential outcomes and their valuation implications. This decision tree is built around 1) improvements in the macro environment and 2) the effect committed capital will have on loan profitability. While there are other drivers of Upstart's performance (contribution cost efficiency, OpEx etc.) these represent the most likely area(s) of variance relative to management's outlook and the consensus view over the short-to-medium term.

Consensus Case:

The consensus target price for Upstart is $12.61, which implies a 4.5x EV/contribution profit multiple, and -18% downside relative to the current share price of $15.23.

Upside Case:

(+) $29, 90% Upside: This scenario assumes the macro environment improves in terms of interest rates, credit quality and funding market stability. Specifically, it assumes 1) increased level of rate inquires and an increased conversion rate later in FY23 and through FY24. This implies -27% NTM contribution profit growth and a $29 price (90% upside), when assuming a 7.0x EV/CP multiple.

(+-) $25, 61% Upside: This scenario also assumes an improved macro environment for Upstart, but additionally forecasts an increased discount for securing committed capital partners beyond consensus expectations. Specifically, it assumes a more aggressive deceleration in loan profitability as committed capital is onboarded onto the platform. In the event of a stronger macro environment, there would likely be less pressure on the business model requiring committed capital. As a result the assumed multiple is decreased 0.5x to 6.5x. This implies -31% NTM contribution profit growth and a $25 target price (61% upside), when assuming a 6.5x EV/CP multiple.

(++) $30, 96% Upside: The scenario assumes an improved macro environment for Upstart borrowers and forecasts improved economics on loan profitability for deals with committed capital partners. This implies -23% NTM contribution profit growth and a $30 target price (96% upside), when assuming a 7.5x EV/CP multiple.

Downside Case:

(-) $9, 41% Downside: This scenario assumes extended weakness in the macro environment, weighing on inquiries and conversion rates. The model reflects this by reducing rate inquires and conversion rates. This implies -37% NTM contribution profit growth and a $9 target price (41% downside), when assuming a 4.0x EV/CP multiple.

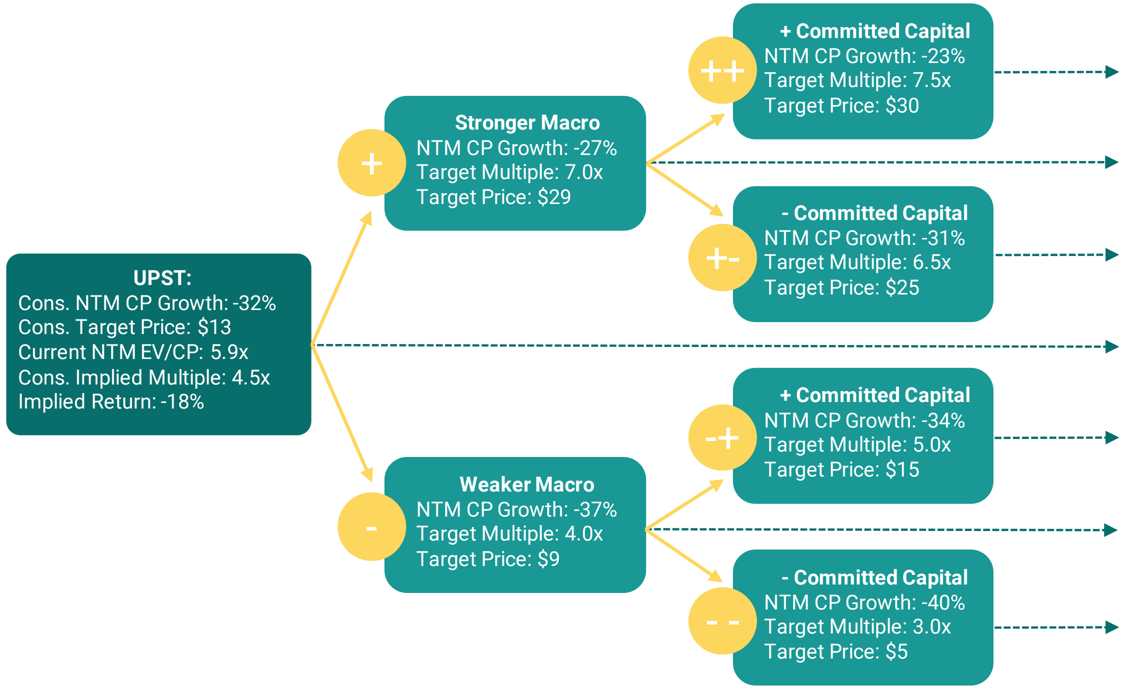
(-+) $15, 2% Downside: This scenario assumes extended macro weakness and the previously discussed stronger unit economics on committed capital deals. This implies -34% NTM contribution profit growth and a $15 target price (-2% downside), when assuming a 5.0x EV/CP multiple.

(--) $5, 70% Downside: The worst-case scenario assumes extended macro weakness and less favorable unit economics on committed capital funding schemes. This implies -40% NTM contribution profit growth and a $5 target price (-70% downside), when assuming a 3.0x EV/CP multiple.

Source: Company filings; FactSet

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



UPST:
Cons. NTM CP Growth: -32%
Cons. Target Price: $13
Current NTM EV/CP: 5.9x
Cons. Implied Multiple: 4.5x
Implied Return: -18%

\+ **Stronger Macro**
NTM CP Growth: -27%
Target Multiple: 7.0x
Target Price: $29

\- **Weaker Macro**
NTM CP Growth: -37%
Target Multiple: 4.0x
Target Price: $9

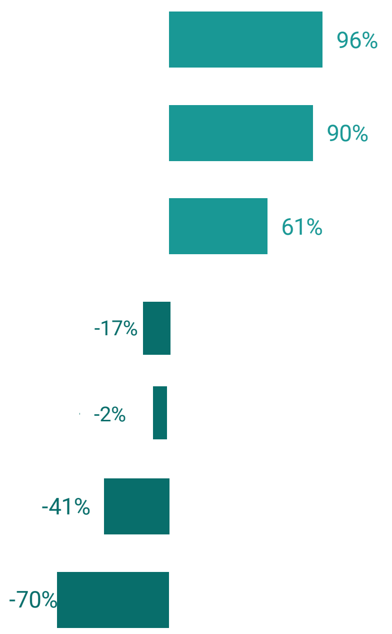
++ **+ Committed Capital**
NTM CP Growth: -23%
Target Multiple: 7.5x
Target Price: $30

+- **- Committed Capital**
NTM CP Growth: -31%
Target Multiple: 6.5x
Target Price: $25

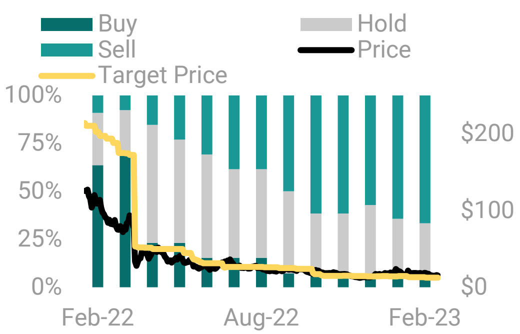
-+ **+ Committed Capital**
NTM CP Growth: -34%
Target Multiple: 5.0x
Target Price: $15

\- - **- Committed Capital**
NTM CP Growth: -40%
Target Multiple: 3.0x
Target Price: $5

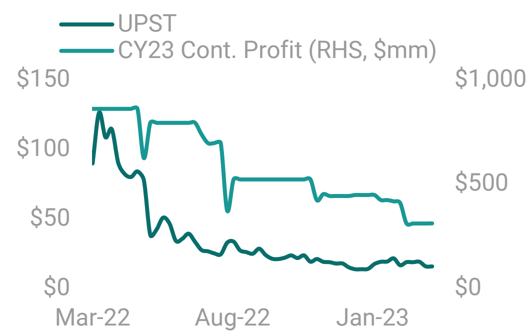
12-Month Price Return



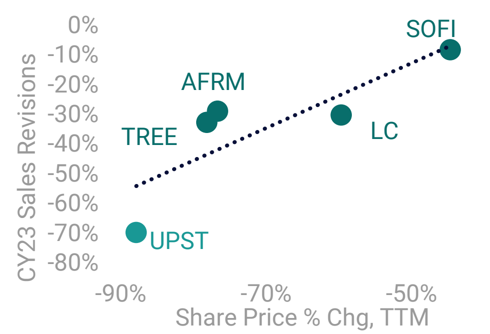
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



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FINANCIAL TECHNOLOGY PARTNERS

($ in millions, except where otherwise noted)

4Q22 EARNINGS CALL RECAP

Takeaway: The macro environment continues to place critical pressure on Upstart's business model, with turbulent funding markets representing the primary rate limiting factor to loan origination volume. Management noted that it is now in late-stage conversation with committed capital partners, the result of which is likely to provide meaningful stability to the business. Beyond the funding market dynamics, management also focused on the macro environment noting that it is seeing improvements in the health of both the consumer and the ABS market. Ultimately securing committed capital and the extent to which the macro backdrop improves, will likely prove to be the two largest determinants of the speed and success of Upstart's recovery.

Results Recap: Upstart reported $1.54bn in loan volume (-62% YoY) in 4Q22, 4% below consensus of $1.60bn. The loan funnel conversion rate declined by more than 13ppt YoY to ~11.0%, below consensus of 12.3%. Reported fee revenue of $156mm declined 46% YoY, in line with consensus expectations. Net revenue of $147mm (-52% YoY) exceeded consensus of $132mm and surpassed the high end of management's guidance range of $125-$145mm, driven by higher-than-expected net interest income (+64% vs. consensus) as a result of increased loans retained on the balance sheet vs. expectations. Contribution profit matched consensus at $82.0mm, falling 52% YoY and the contribution margin increased 67bps YoY to 53%, slightly missing guidance of 54%. Adjusted EBITDA declined 118% YoY to -$16.6mm but beat consensus by 54% and came in well above guidance of -$35mm, driven by the the 11% net revenue beat coupled with the 5% beat on operating expenses.

Guidance Recap: Upstart's 1Q23 guidance came in well below consensus on the top and bottom-lines. The company's net revenue guidance of ~$100mm (-68% YoY) was below pre-print consensus of $152mm by 34%, which management attributed to funding constraints, low consumer approvability, and interest rates (in addition to a 10-15ppt seasonal drag due to tax season). While contribution margin guidance topped pre-print consensus by 145bps, the impact of the lower revenue guidance resulted in contribution profit guidance coming in 32% below pre-print consensus. Adjusted EBITDA guidance similarly missed pre-print consensus, with guidance for -$45mm versus pre-print consensus of -$16mm. While the 1Q23 guide disappointed, management expects to resume QoQ revenue growth within the year, likely driven by an expected improvement in funding capacity and consumer approvability.

Incremental from the call:

- **Funding Sources:** While funding constraints were a recurring theme in 2022, it now constitutes a critical rate-limiting factor, and is the center of focus in the near-term as increased ABS market volatility and consumer delinquencies have reduced lender demand. In particular, the company has seen lenders who rely primarily on the ABS market reduce volume on the platform relative to those who don't. To date, the company has been able to partially circumvent funding constraints by increasing the loans held at fair value on the balance sheet (up 300% YoY to $1.01bn), however management indicated on the call that the company's balance sheet is now at maximum capacity and that it doesn't expect to use it as a funding source going forward. Obtaining committed capital is management's top priority noting **that it is in advanced stages with several funding partners and expects concrete news regarding a secured partnership soon.** Management also pointed to initial signs of ABS market recovery with spreads tightening, in-line with commentary made by other ABS market-reliant companies. Additionally, the company expects that the expansion into secured products like auto-loans and home-loans will provide improved funding appetite on the platform during challenging macro periods.
- **Macro-Challenges:** The challenging macro environment is affecting Upstart by **1) decreasing lender demand due to consumer delinquency and ABS market volatility and 2) decreasing consumer approvability.** While the company exited 2022 with elevated delinquency rates, management noted it is seeing signs of improvement. The personal savings rate has increased marginally for three consecutive quarters, and management believes data regarding workforce participation rates and the reversal in the growth of real personal consumption suggests that the savings rate has a considerable runway to improve. The company's UMI (Upstart Macro Index) increased marginally in Q4, and is showing "encouraging" signs of stabilization in early 2023.

4Q22 REPORTED VS. CONSENSUS

Line Item	Reported	Consensus	ABS ▲	% ▲
Rate Requests (mm)	**1.13**	**1.39**	**-0.26**	**-19%**
growth (%, yoy)	*-39%*	*-25%*		
Loan Conversion Rate	**11.0%**	**12.3%**	**-129bps**	
growth (bps, yoy)	*-1,340bps*	*-1,211bps*		
Loan Volume (bn)	**$1.54**	**$1.60**	**-$0.06**	**-4%**
growth (%, yoy)	*-62%*	*-61%*		
Fee revenue	**$156**	**$156**	**-$0.43**	**0%**
growth (%, yoy)	*-46%*	*-46%*		
Net Interest Income	**-$8.7**	**-$24.2**	**$15.5**	**64%**
growth (%, yoy)	*-150%*	*-238%*		
Net Revenue	**$147**	**$132**	**$15.0**	**11%**
growth (%, yoy)	*-52%*	*-57%*		
Borrower Acquisition & Verification Costs	**$73.6**	**$73.9**	**-$0.29**	**0%**
growth (%, yoy)	*-47%*	*-46%*		
Fee Revenue Contribution Profit	**$82.0**	**$82.1**	**-$0.17**	**0%**
Contribution Margin (%)	*53%*	*53%*	*4bps*	
Total Operating Expenses	**$205**	**$215**	**-$9.52**	**5%**
growth (%, yoy)	*140%*	*-12%*		
Adjusted EBITDA	**-$16.6**	**-$35.8**	**$19.2**	**54%**
Adj. EBITDA Margin (%)	*-11%*	*-27%*	*1,584bps*	
Adjusted Net Income	**-$20.9**	**-$40.6**	**$19.7**	**48%**
Adj. Net Income Margin (%)	*-14%*	*-31%*	*1,653bps*	

1Q23 Guidance	New	Cons.	% ▲
Revenue	**$100**	**$152**	**-34%**
growth (%, yoy)	*-68%*	*-51%*	
Contribution Profit	**$60.5**	**$88.8**	**-32%**
Contribution Margin (%)	*55%*	*54%*	*145bps*
Adjusted EBITDA	**-$45.0**	**-$16**	**-185%**
Adj. EBITDA Margin (%)	*-45%*	*-10%*	*-3,465bps*

Source: Company filings; FactSet; Visible Alpha

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Upstart

UPST TTM Price Performance

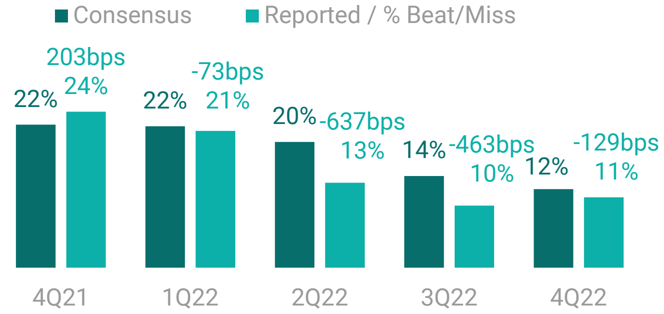
Price as of 03/13/23:	**$15.12**	**Shares Out (mm):**	**81.4**
Market Cap (mm):	**$1,231**	**Beta (2-Year Avg.):**	**2.3**
52-Wk Range:	**$12.01 - $133.80**	**Avg. Daily Vol (mm):**	**6.1**

FINANCIAL TECHNOLOGY PARTNERS

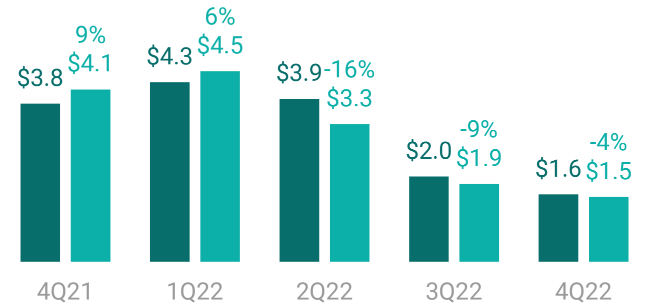
($ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

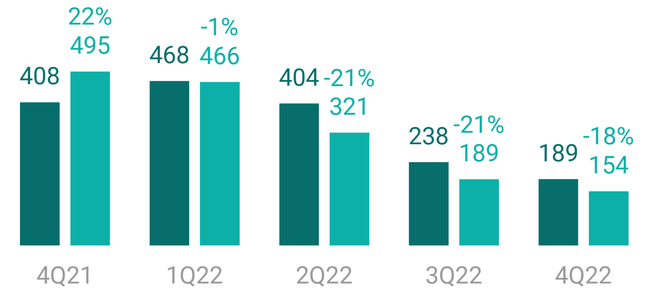
Loan Conversion Rate



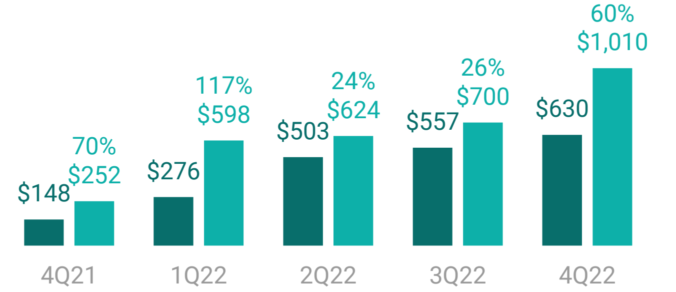
Loan Origination Volume (bn)



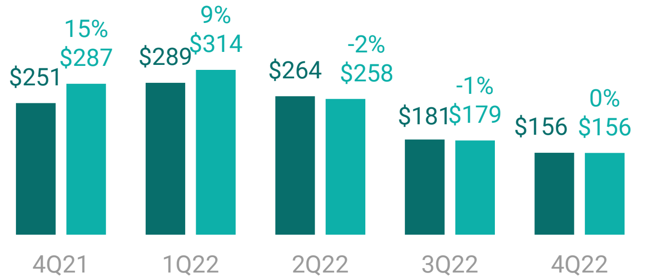
Number of Loans Originated (000)



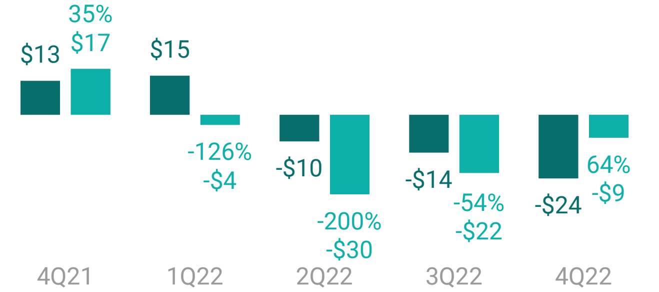
Loans on Balance Sheet



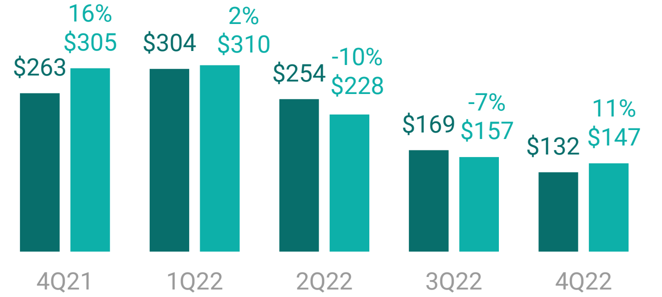
Fee Revenue



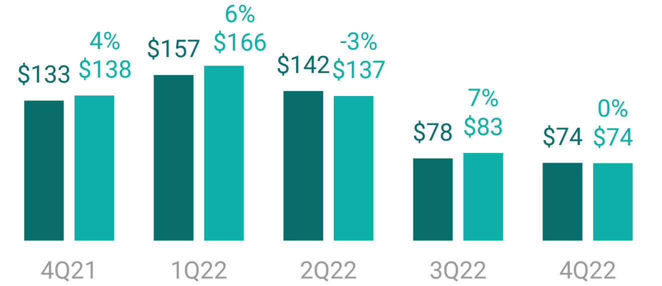
Net Interest Income



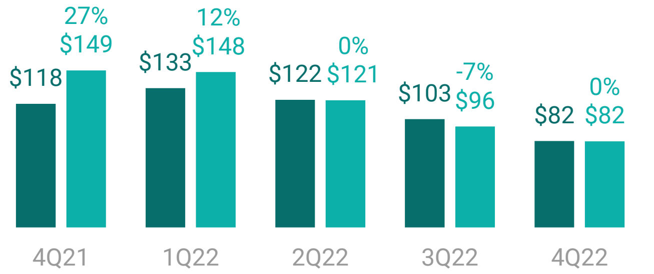
Total Revenue



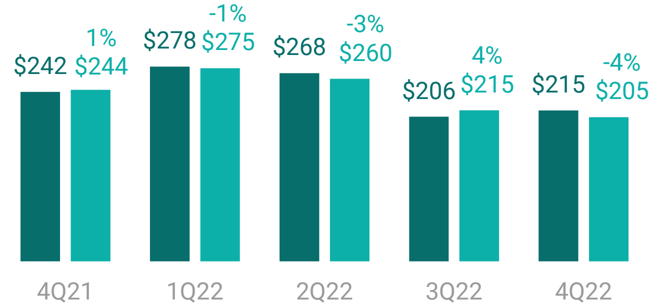
Borrower Acquisition & Verification Costs



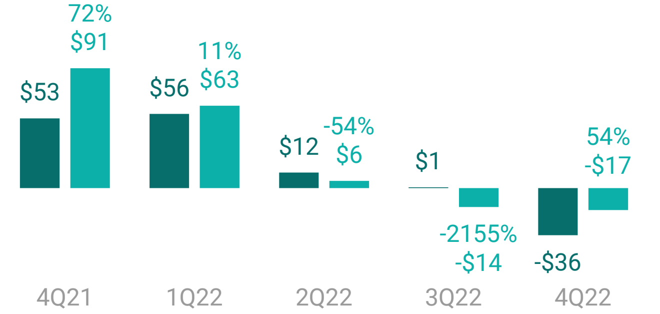
Contribution Profit



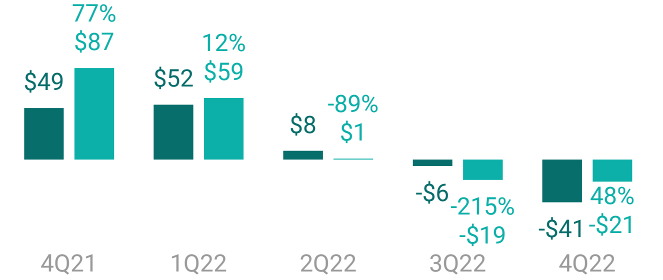
Total Operating Expenses



Adjusted EBITDA



Adjusted Net Income



Source: Company filings; FactSet, Visible Alpha

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Upstart

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Price as of 03/17/23:	$15.23	Shares Out (mm):	81.4
Market Cap (mm):	$1,240	Beta (2-Year Avg.):	2.2
52-Wk Range:	$12.01 - $133.80	Avg. Daily Vol (mm):	6.3

FINANCIAL TECHNOLOGY PARTNERS

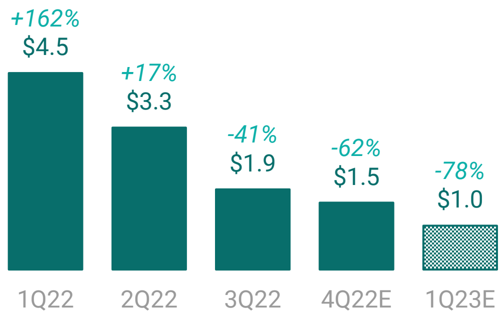
($ in millions)

1Q23 CONSENSUS ESTIMATE RANGES

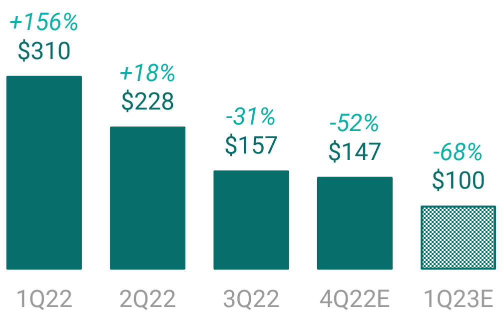
	Low	Average	High
Rate Requests (000's)	**575**	**692**	**870**
growth (%, yoy)	-71%	-65%	-55%
Loan Origination Volume (bn)	**$0.70**	**$1.00**	**$1.33**
growth (%, yoy)	-85%	-78%	-71%
Loan Conversion Rate	**9.5%**	**12.6%**	**20.4%**
▲ *in % (bps)*	-1182bps	-875bps	-92bps
Revenue From Fees	**$107**	**$109**	**$111**
growth (%, yoy)	-66%	-65%	-65%
Net Interest Income	**-$12**	**-$9**	**-$2**
growth (%, yoy)	-203%	-143%	59%
Total Revenue	**$96**	**$100**	**$110**
growth (%, yoy)	-69%	-68%	-65%
Variable Costs	**$44**	**$50**	**$58**
growth (%, yoy)	-73%	-70%	-65%
Gross Profit	**$42**	**$50**	**$65**
growth (%, yoy)	-71%	-65%	-55%
Total Operating Expenses	**$178**	**$209**	**$246**
growth (%, yoy)	-35%	-24%	-11%
Operating Income	**-$145**	**-$109**	**-$81**
growth (%, yoy)	-517%	-413%	-332%
Adjusted EBITDA	**-$51**	**-$45**	**-$39**
growth (%, yoy)	-182%	-172%	-163%
Net Income	**-$148**	**-$134**	**-$88**
growth (%, yoy)	-552%	-510%	-370%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

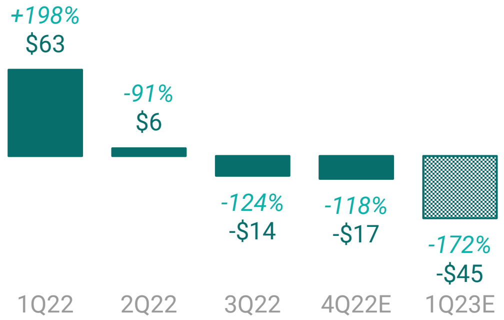
Loan Origination Volume (bn)



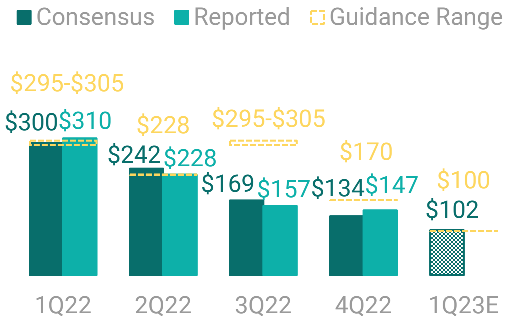
Revenue



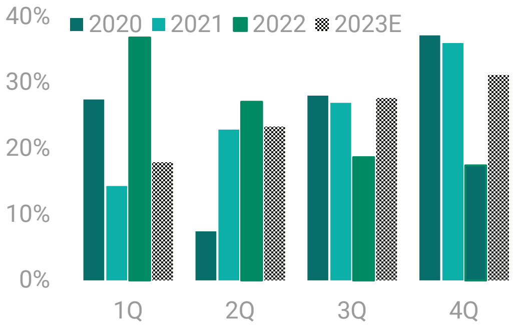
Adjusted EBITDA



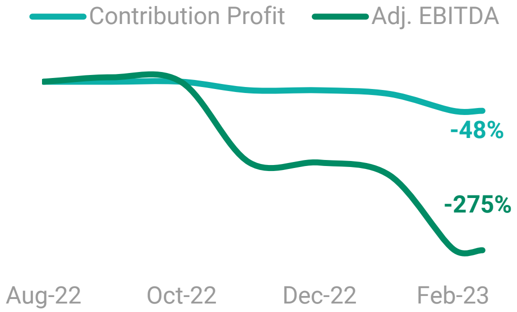
Revenue Cons. vs. Reported



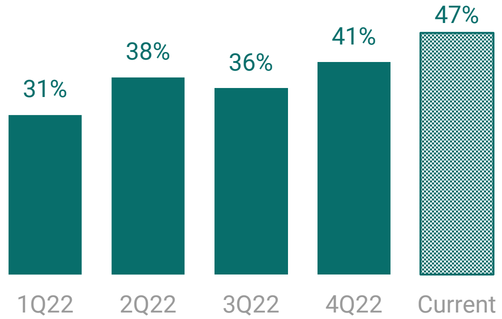
Revenue Seasonality



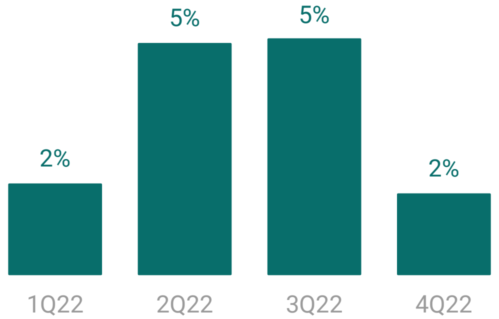
1Q23 Estimate Revisions



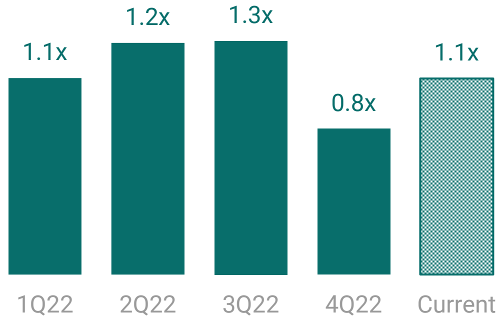
Short Interest (Pre-Print)



Hedge Fund Ownership as % of S/O



Put/Call Ratio[1]



Source: Company filings; FactSet

1) Put/Call Ratio over 7-days leading into earnings

FT Partners | Equity Research

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FINANCIAL TECHNOLOGY PARTNERS

1Q23 EARNINGS OUTLOOK

What's In Focus:

With volatile funding markets and weaker consumer credit quality placing continued pressure on Upstart's operating model, **focus going into 1Q23's print will be centered on three main factors: 1) ABS market health 2) conversations with potential committed capital partners and 3) overall consumer trends.** The shift from a solely marketplace-based funding model towards a hybrid committed/uncommitted capital funding model will provide a more stable baseline for cost of capital, but will also likely negatively impact Upstart's unit economics, so management commentary around term agreements, assuming a partner is announced, will be in focus.

Estimates:

KPIs: Since 4Q22 earnings, consensus 1Q23 loan volume has declined 41% from $1.71bn to $1.01bn (-78% YoY) and FY23 estimates declined 31% to $5.36bn (-53% YoY). Estimates for the number of funded loans in 1Q23 declined 51% to 98k (-79% YoY), with FY23 estimates decreasing 42% to 504k (-52% YoY). The estimated conversion rate in 1Q23 increased 35bps to 12.7% (down 8.7ppt YoY) from 12.3%. Post 4Q22, consensus now expect loans held at fair value to remain under $1bn for the quarter and full year at $991mm (+66% YoY) and $965mm (+61% YoY), respectively, in-line with management's commentary during 4Q22's earnings call.

Revenue: Platform and referral fee revenue estimates were revised down 41% and 31% for 1Q23 and FY23 to $67mm (-76% YoY) and $361mm (-53% YoY), respectively. Consensus for net interest income during 1Q23 were increased from -$15.1mm to -$9.1mm and estimated losses for FY23 were improved from -$24mm to -$3mm. As a result, net revenue consensus decreased 34% to $100mm (-68% YoY) for 1Q23 and decreased 24% to $545 (-35% YoY) for the full year.

Expenses: Since 4Q22's print, consensus estimates for 1Q23 contribution costs have declined by 35% to $49.8mm (-70% YoY) from $77.2mm and estimates for FY23's contribution costs have improved 28% to $235mm (-49% YoY) from $327mm. Estimates for OpEx in 1Q23 saw a 2% uptick from $207mm to $212mm (-23% YoY), however, FY estimates saw a more substantial decline of 10% to $753mm (-21% YoY) from $838mm.

Earnings: Although consensus for 1Q23 contribution profit declined 33% to $59.6mm (-60% YoY) and FY23 estimates declined 24% to $307mm (-31% YoY), contribution margin remained flat at 54% for 1Q23 (+7ppt YoY) and increased 2ppt to 57% (+8ppt YoY) for FY23. Adjusted EBITDA estimates for 1Q23 declined 185% to -$45mm (-172% YoY) from -$16mm and declined 218% for FY23 from $42mm to -$49mm (-229% YoY).

Full Estimates: Given the disappointing 1Q23 guidance and the suspension of full-year guidance, consensus for FY23 transaction volume, revenue, and contribution profit were reduced 31%, 26%, and 24% respectively. With an uncertain macro driving higher interest rates and Upstart's target demographic being on more precarious footing than FY20/21, variability in FY estimates has increased considerably.

POST-RESULTS ONE-DAY ALPHA VS. SP500

1Q22
- 2%/11% beat on revenue/adj. EBITDA
- Q2 revenue/adj. EBITDA guidance 10%/44% below consensus
- Lowered FY22 revenue guide ~11%

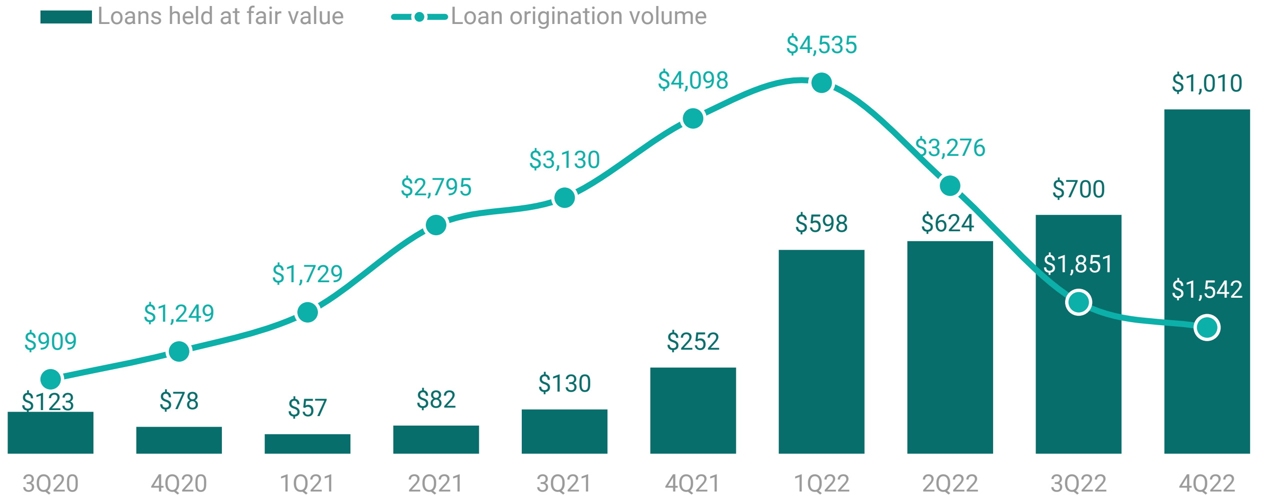
2Q22
- 10%/54% miss on revenue/adj. EBITDA
- Q3 revenue/adj. EBITDA guidance 32%/100% below consensus

3Q22
- 7% miss on revenue, $15mm miss on adj. EBITDA (-$14mm reported vs. $1mm expected)
- Both metrics reported significantly below company guidance
- Q4 revenue guidance 27% below consensus

4Q22
- 4% miss on loan volume, 11% beat on net revenue driven by net interest income
- 1Q23 revenue/contribution profit guidance below consensus by 34%/32%.

ORIGINATIONS & BALANCE SHEET FUNDING

($ in millions)



FT Partners | Equity Research

Source: Company filings; FactSet
1) U.S. Census Bureau

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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

General:

1) Now that the auto lending product has launched, what further opportunities does management see for Upstart to expand its product offering?

2) What are some of the underlying assumptions both macro and company specific that underpin the 1Q23 guidance?

Credit:

3) The conversion on rate requests was 11.0% in 4Q22, down 13.4ppt YoY from 24.4% in 4Q21. Are higher rates the driving force behind the decline or are there other factors in play? What does management see as a sustainable run rate in a steady-state environment?

4) What is management seeing in terms of NPL/delinquency trends?

5) What are Upstart's bank partners saying regarding risk appetite for 2023, does management expect further tightening of lending standards from those partners?

Loan Funding

6) There seems to be an increased focus on securing a supply of funding for the platform, specifically from more long-term partners. What is management seeing in terms of investor appetite and what is the optimal funding mix with respect to committed vs. uncommitted capital for Upstart?

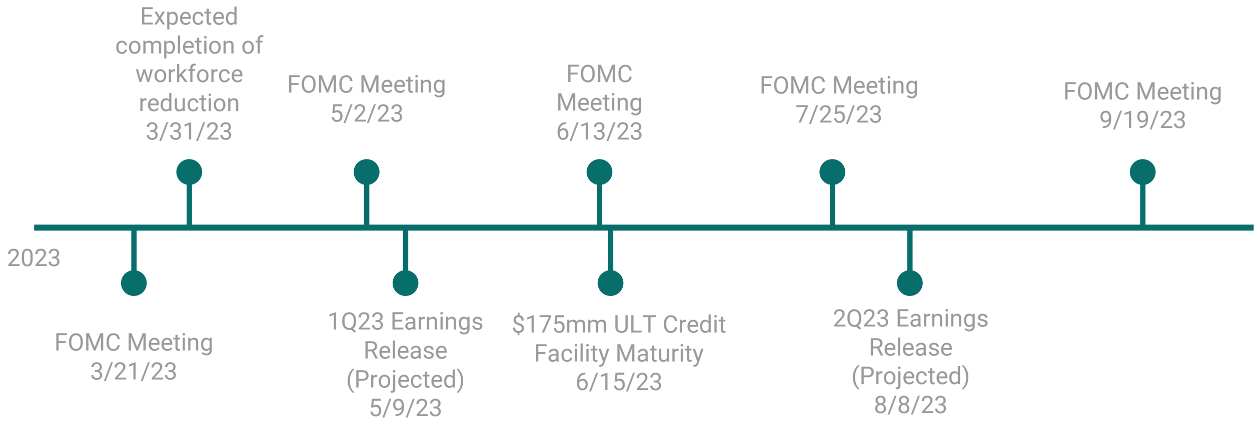
7) On-balance sheet loans increased from $250mm during 4Q21 to $1,010mm in 4Q22, what is the ideal ratio/balance between on-balance sheet vs. off-balance sheet loans?

8) How does the unit economic profile differ between loans Upstart keeps on the balance sheet vs. those taken on by banks/investors?

9) What kind of impact can investors expect to see on loan unit economics from committed capital partners?

10) How does management expect committed capital's share of the overall funding mix to mature? Is there a ramping period to be expected?

POTENTIAL CATALYSTS



2023

FOMC Meeting 3/21/23

Expected completion of workforce reduction 3/31/23

FOMC Meeting 5/2/23

1Q23 Earnings Release (Projected) 5/9/23

FOMC Meeting 6/13/23

$175mm ULT Credit Facility Maturity 6/15/23

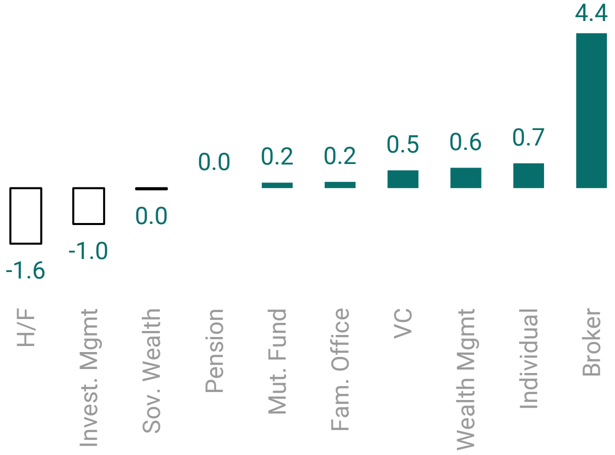
FOMC Meeting 7/25/23

2Q23 Earnings Release (Projected) 8/8/23

FOMC Meeting 9/19/23

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



Insider Shares Sold/Bought (mm)

Source: Company filings; FactSet

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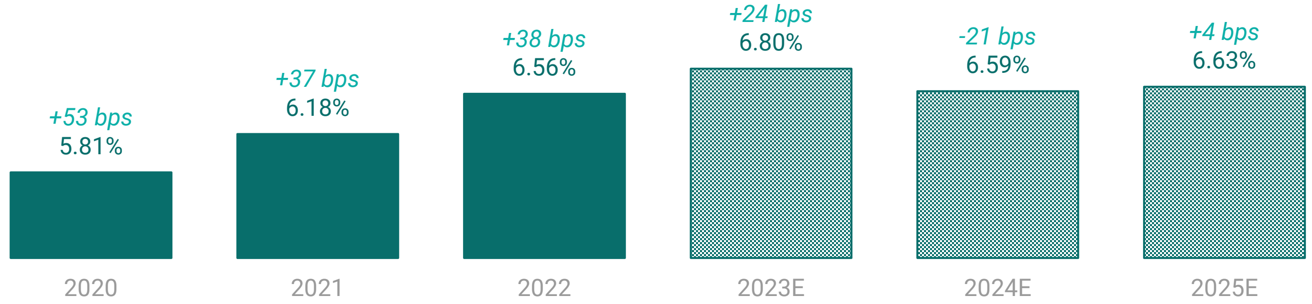
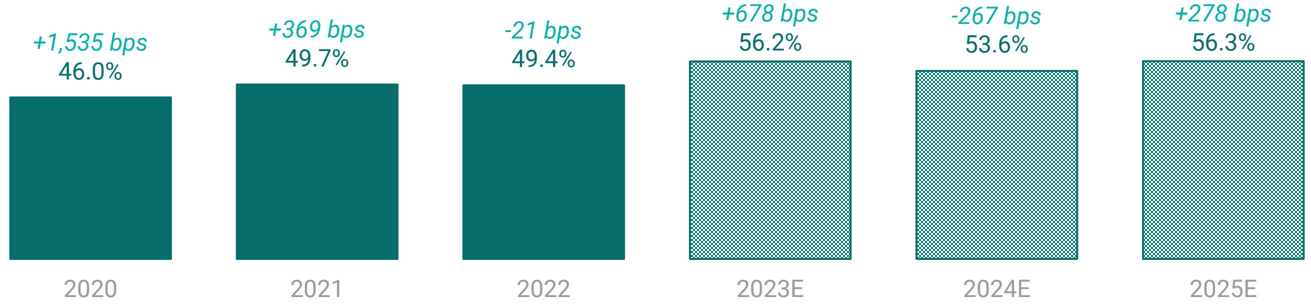
COMPANY RATIOS/MARGIN ANALYSIS

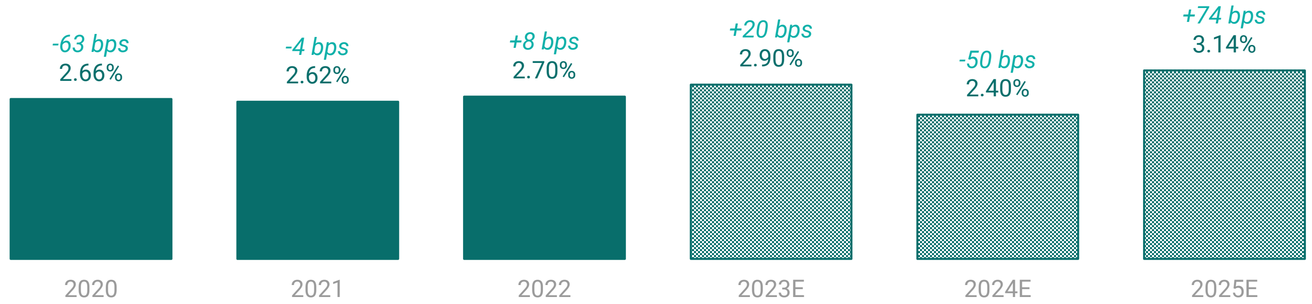
Platform and Referral Fees (% of Loan Volume)



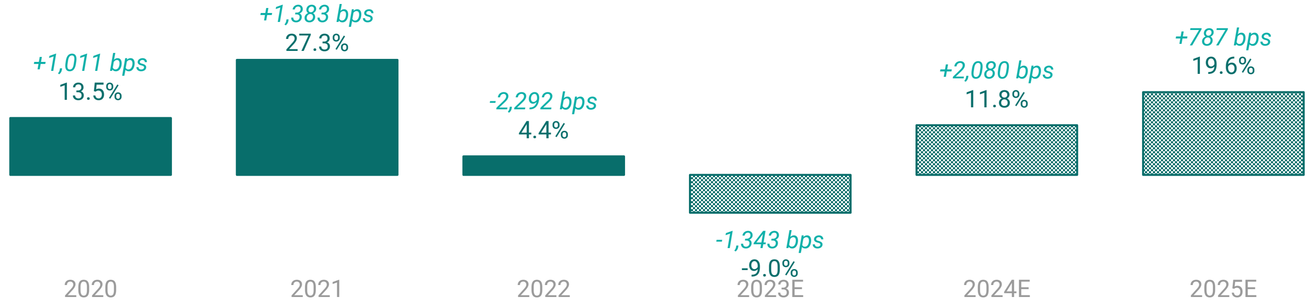
Contribution Margin (% of Fee Revenue)



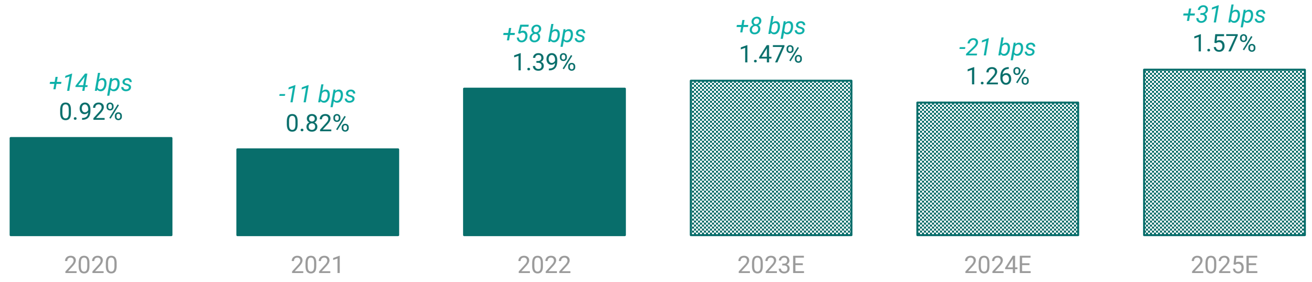
Borrower Acquisition Cost (% of Loan Volume)



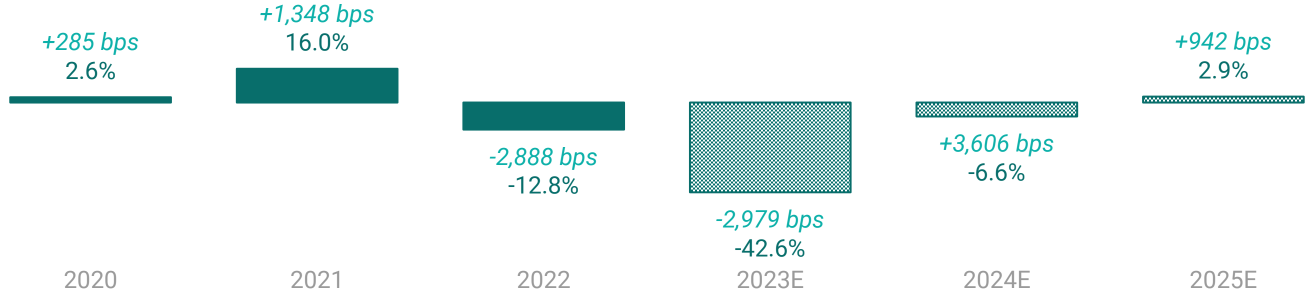
Adjusted EBITDA Margin (% of Total Revenue)



Borrower Verification Cost (% of Loan Volume)



Net Income Margin (% of Total Revenue)



Source: Company filings; FactSet

Upstart

UPST TTM Price Performance

Price as of 03/17/23:	$15.23	Shares Out (mm):	81.4
Market Cap (mm):	$1,240	Beta (2-Year Avg.):	2.2
52-Wk Range:	$12.01 - $133.80	Avg. Daily Vol (mm):	6.3

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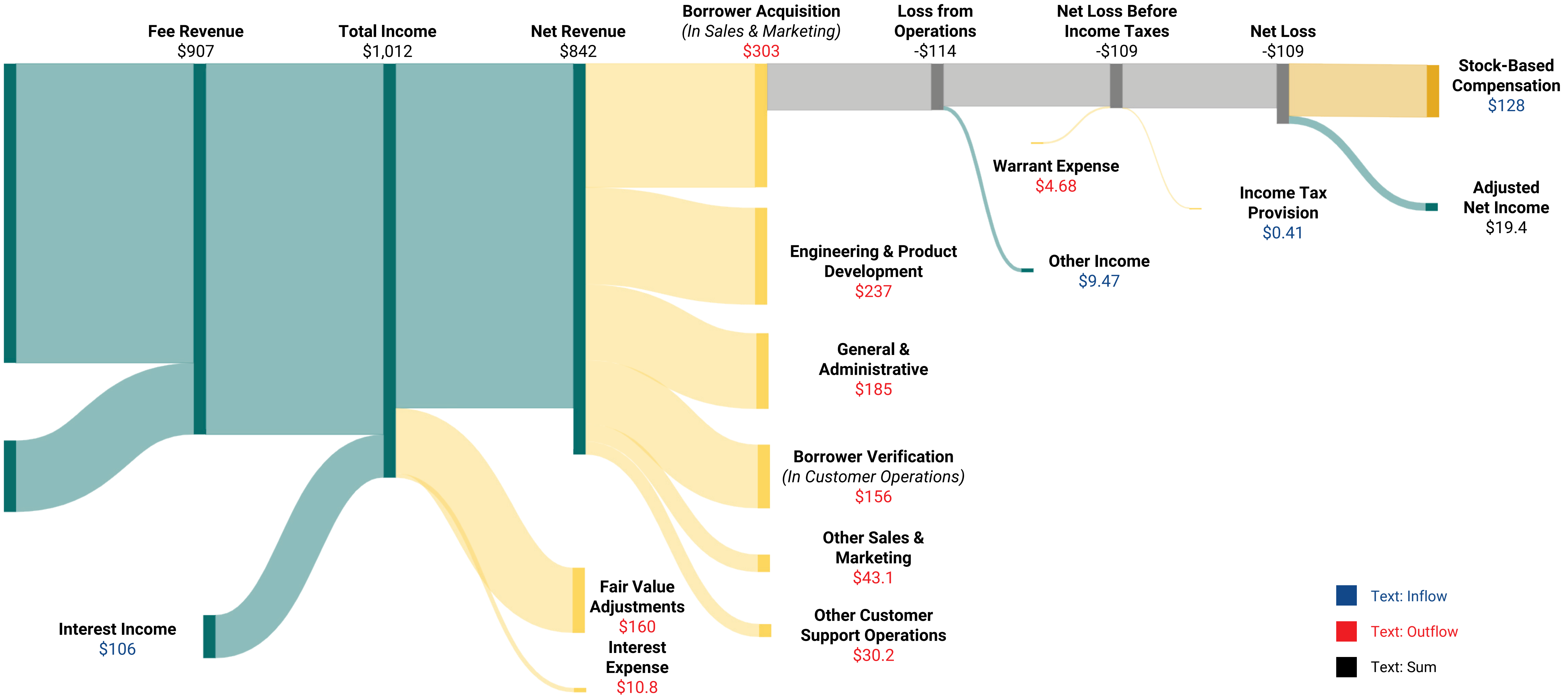
($ in millions, except where otherwise noted)

P&L VISUALIZATION – TTM



Fee Revenue
$907

Total Income
$1,012

Net Revenue
$842

Borrower Acquisition
(In Sales & Marketing)
$303

Loss from Operations
-$114

Net Loss Before Income Taxes
-$109

Net Loss
-$109

Stock-Based Compensation
$128

Platform & Referral Fees, Net
$732

Servicing Fees
$175

Interest Income
$106

Warrant Expense
$4.68

Other Income
$9.47

Income Tax Provision
$0.41

Adjusted Net Income
$19.4

Engineering & Product Development
$237

General & Administrative
$185

Borrower Verification
(In Customer Operations)
$156

Other Sales & Marketing
$43.1

Other Customer Support Operations
$30.2

Fair Value Adjustments
$160

Interest Expense
$10.8

🟦 Text: Inflow
🟥 Text: Outflow
⬛ Text: Sum

Source: Company filings; FactSet

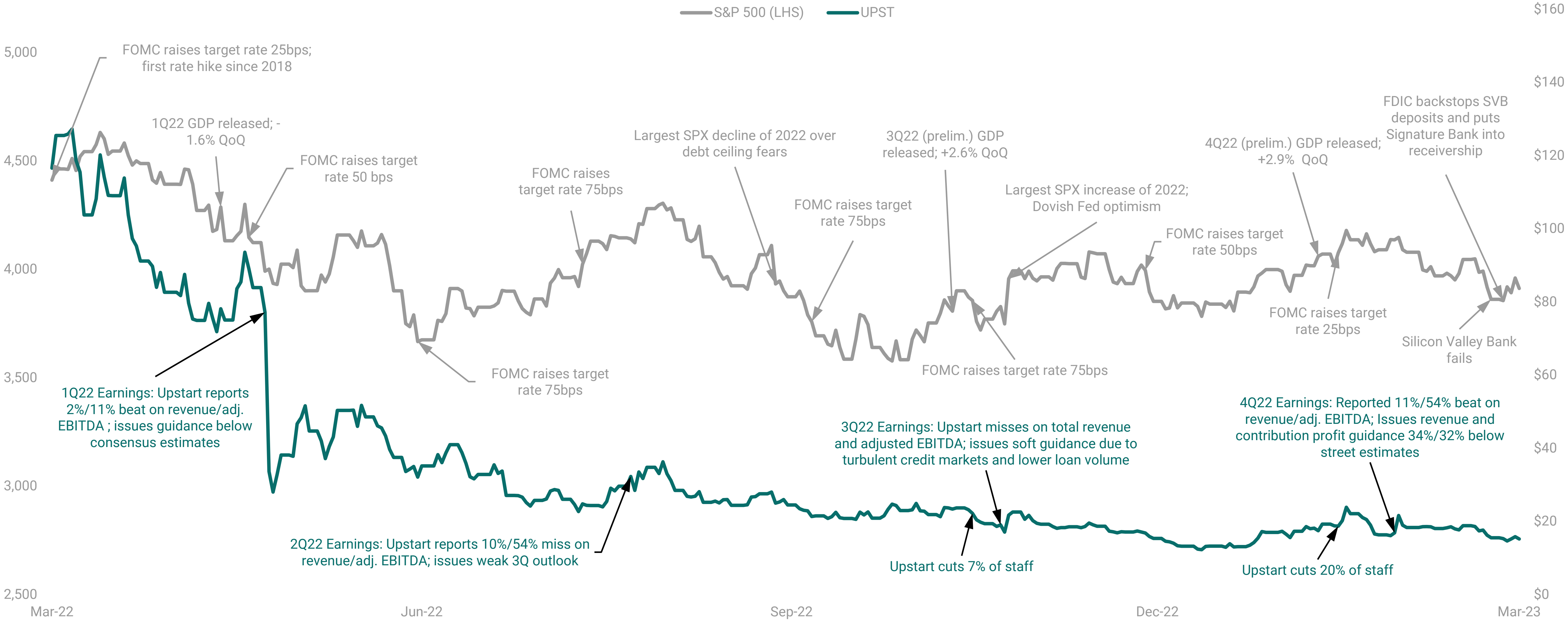
Upstart

UPST TTM Price Performance

Price as of 03/13/23:	**$15.12**	**Shares Out (mm):**	**81.4**
Market Cap (mm):	**$1,231**	**Beta (2-Year Avg.):**	**2.3**
52-Wk Range:	**$12.01 - $133.80**	**Avg. Daily Vol (mm):**	**6.1**

FINANCIAL TECHNOLOGY PARTNERS

PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



FOMC raises target rate 25bps; first rate hike since 2018

1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

3Q22 (prelim.) GDP released; +2.6% QoQ

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

4Q22 (prelim.) GDP released; +2.9% QoQ

FDIC backstops SVB deposits and puts Signature Bank into receivership

FOMC raises target rate 50bps

FOMC raises target rate 25bps

Silicon Valley Bank fails

FOMC raises target rate 75bps

FOMC raises target rate 75bps

1Q22 Earnings: Upstart reports 2%/11% beat on revenue/adj. EBITDA ; issues guidance below consensus estimates

2Q22 Earnings: Upstart reports 10%/54% miss on revenue/adj. EBITDA; issues weak 3Q outlook

3Q22 Earnings: Upstart misses on total revenue and adjusted EBITDA; issues soft guidance due to turbulent credit markets and lower loan volume

Upstart cuts 7% of staff

4Q22 Earnings: Reported 11%/54% beat on revenue/adj. EBITDA; Issues revenue and contribution profit guidance 34%/32% below street estimates

Upstart cuts 20% of staff

Source: FactSet

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VISA

VISA PROPRIETARY COMPANY PROFILE

The Only Global Investment Bank Focused Exclusively On FinTech

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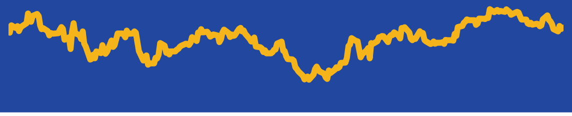
VISA

V TTM Price Performance



Price as of 03/10/23:	$217.39	**Shares Out (mm):**	1,631
Market Cap (bn):	$354	**Beta (2 Yr Avg.):**	0.9
52-Wk Range:	$174.60 - $234.30	**Avg. Daily Vol (mm):**	6.0

FINANCIAL TECHNOLOGY PARTNERS

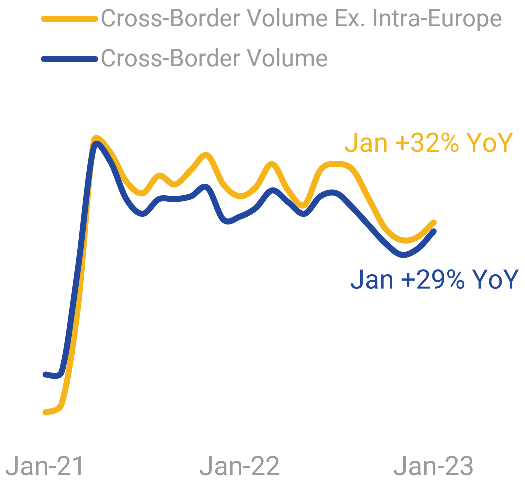
COMPANY OVERVIEW

Visa is a technology company in the global payments industry that provides payment rails that connect consumers, financial institutions, merchants, governments, and other organizations worldwide, **enabling them to use electronic forms of payment instead of cash and checks.**

The company provides transaction processing services (primarily authorization, clearing and settlement) to financial institutions and merchant clients through VisaNet. The company also partners with traditional and emerging financial players providing access to its global network through APIs.

In addition, Visa provides a range of other value-added services including **issuer & consumer solutions, data and cybersecurity, and fraud management**.

CROSS-BORDER VOLUME



KEY DEBATES

1. **Macro Outlook:** Visa's FY23 outlook for net revenue growth of mid-teens is predicated on there not being a recession or significant geopolitical shock. While consumer spending has remained strong, economic indicators overall remain mixed. With results, Visa provided an update on volume trends, stating that through the first weeks of the F2Q quarter trends have remained stable. On a YoY basis, U.S. payment volume is up 14% but has partially benefitted from lapping Omicron-related weakness. **Investors remain keenly focused on the overall consumer spending environment as a potential area of upside/downside to overall revenue growth.**

2. **Cross-Border:** Cross-border transactions provide a 2x-3x unit economic uplift on revenue compared to domestic volume. As a result, cross-border spending and more directly cross-border travel have significant impacts on top-line revenue. Apart from select areas of APAC, the consensus view is that travel has fully rebounded to 2019 levels. As a result, **investor focus has primarily shifted towards China and the potential for the travel rebound in the region to drive incremental upside to expectations.**

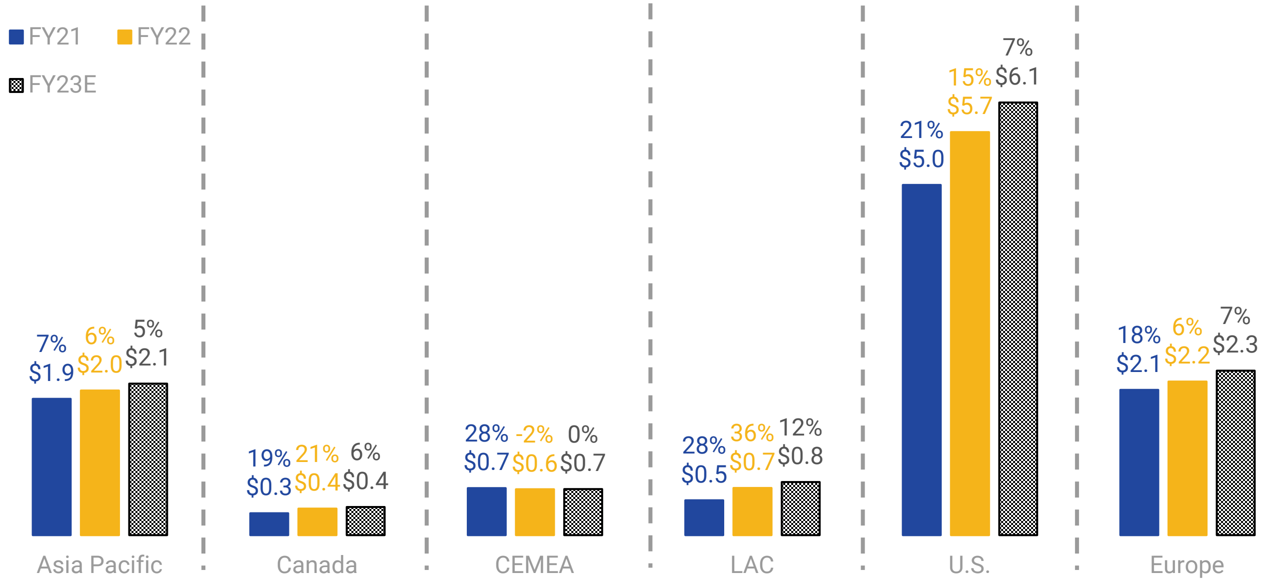
3. **New Flows:** Visa has identified a ~$185tn opportunity in new flows, primarily made up of B2B ($120tn) and B2C ($30tn). These new flows represent the next phase of Visa's growth, however, sizing the potential revenue contribution has proven challenging as the **new flows represents a larger volume opportunity but likely carry a lower unit economic profile.**

REVENUE MODEL

Visa derives its revenue from four different streams, partially offset by client incentives (a contra-revenue line item):

- **Services Revenue (33% of TTM Gross Revenue):** Fees charged to issuers & acquirers for the usage of Visa payment services. Current quarter service revenues are determined by applying the current quarter's pricing to the prior quarter's payment volume. Service revenues also include assessments designed to support ongoing acceptance and volume growth initiatives, which are recognized in the same period the related volumes are transacted.
- **Data Processing Revenues (36%):** Earned for authorization, clearing, settlement, network access and other maintenance, support services that facilitate transactions, and information processing. Data processing revenues are recognized in the same period the related transactions occur or services are performed.
- **International Transaction Revenues (26%):** Earned for cross-border transaction processing and currency conversion. International transaction revenues are recognized in the same period the cross-border transactions occur.
- **Other Revenues (5%):** Consists of value-added services, license fees, and fees for account holder services.
- **Client Incentives (-26%):** Incentives provided to clients, merchants, and partners based on payment volume, cards issued, or transactions facilitated. Client incentives are accounted for as a contra-revenue line item.

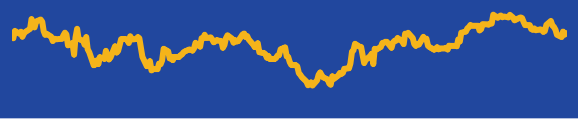
PAYMENTS VOLUME BY GEOGRAPHY (tn) / YOY GROWTH



Source: Company filings; FactSet

VISA

V TTM Price Performance



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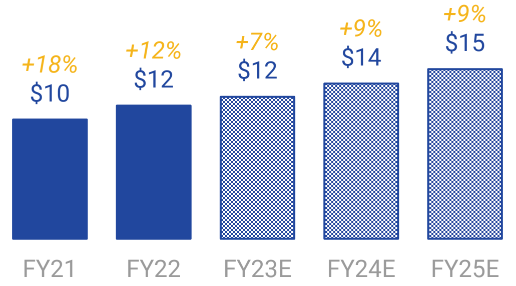
FINANCIAL TECHNOLOGY PARTNERS

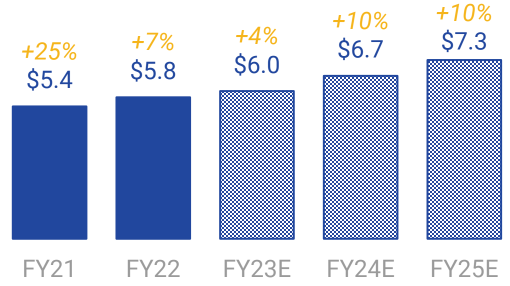
($ in billions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

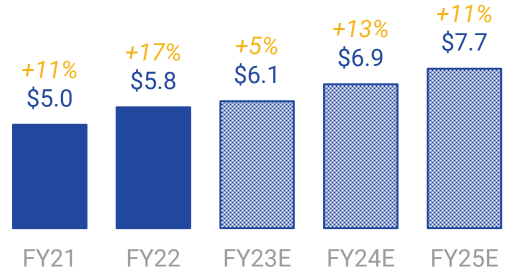
Payment Volume (tn)



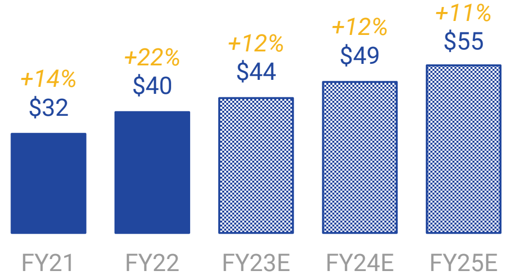
Debit Volume (tn)



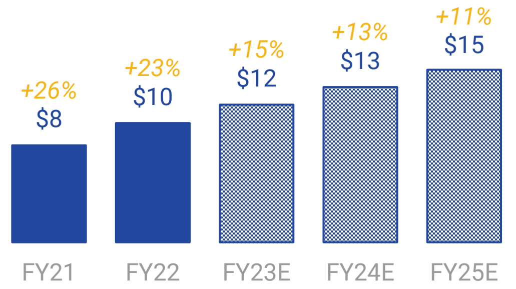
Credit Volume (tn)



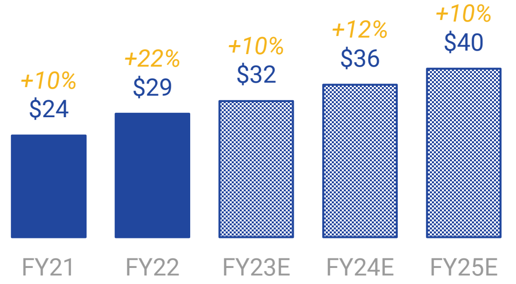
Gross Revenue



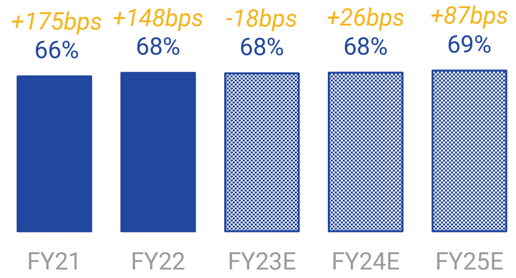
Client Incentives



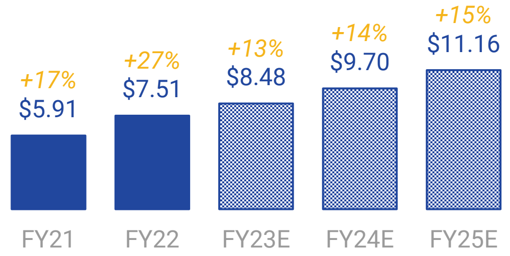
Net Revenue



Adjusted Operating Margin

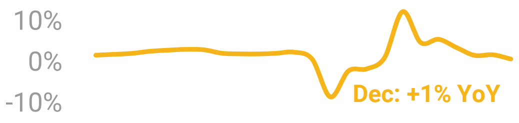


Adjusted Diluted EPS



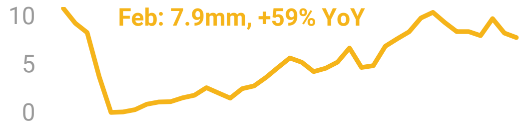
INDUSTRY KPIs

U.S. GDP Growth[2] *(Jan 17-Dec 22)*



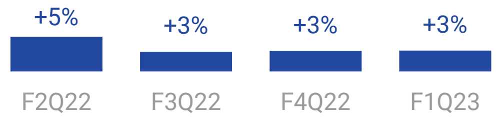
Consumer Sentiment[3] *(Jan 19-Feb 23)*

U.S Cross-Border Travel[4] *(Dec 19-Feb 23)*

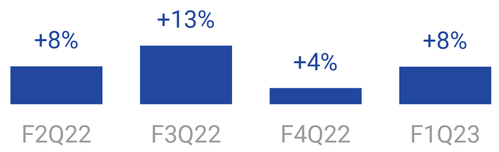


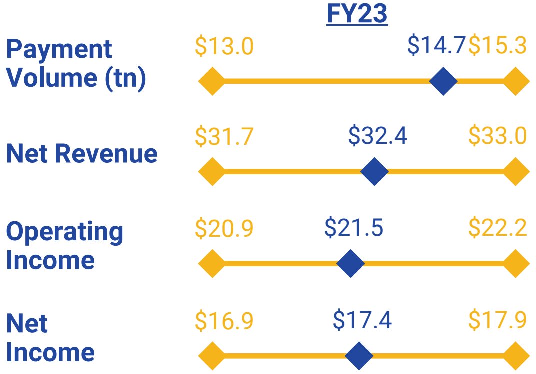
SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES(5)

Net Revenue



Adjusted Diluted EPS

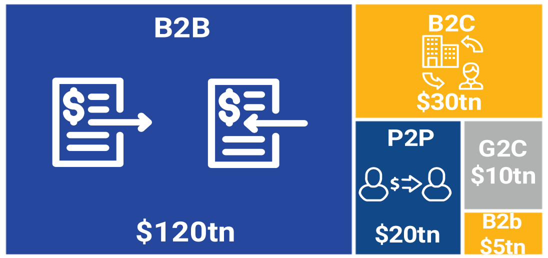




TOTAL ADDRESSABLE MARKET - GLOBAL

Total Opportunity(6)

New Flow Opportunity



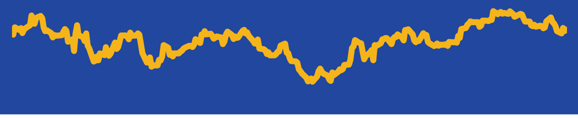
FT Partners | Equity Research

Source: Company filings
1) FactSet
2) Bureau of Economic Activity GDP
3) Michigan Consumer Sentiment Index
4) International Trade Administration APIS/I-92 Monitor, in millions
5) FactSet Consensus Low/Average/High Range
6) Visa 2020 Investor Community Meeting

03/20/23 - **Craig Maurer** | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

VISA

V TTM Price Performance



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52-Wk Range:	$174.60 - $234.30	**Avg. Daily Vol (mm):**	6.0

VALUATION CONSIDERATIONS

Relative Valuation:

Visa trades at a 25x NTM P/E multiple, 6x below its average 5-year multiple of 31x. It currently trades at a 7.7x premium to the S&P500, ~4x below its 5-year average premium of 12x**. If Visa's P/E multiple were to return to its 5-year average premium to the market in 12-months it would trade at $295 (36% upside) based on current STM consensus EPS of $10.08.** Visa also trades at a 3.6x discount to Mastercard compared to its 5-year average discount of 4.6x. Visa's discount to Mastercard is primarily attributed to Mastercard's higher expected top-line growth rate as a result of its greater exposure to higher growth geographies and more diverse revenue streams. Despite the view that Mastercard has potential for more incremental upside given larger exposure to Asia and a head start in value-add services, Visa remains one of the most structurally sound stories in the space capable of delivering consistent top and bottom-line growth regardless of the underlying economic environment.

DCF Scenarios:

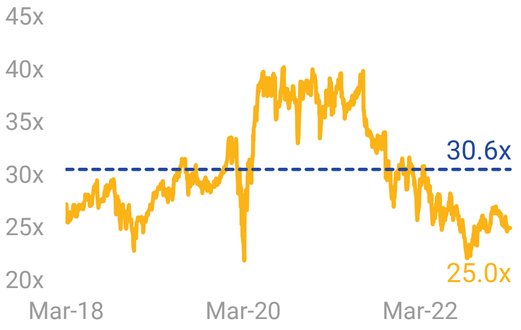
Scenario 1 – Current Price ($217, 0% Upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires a combination of low double-digit revenue growth through 2026 before gradually decelerating to the terminal growth rate of 3%, combined with operating margin expansion of ~100 bps over the next three years. Were shares of Visa to remain at the current price in 12-month, it would imply a 21.5x P/E multiple (based on current STM consensus EPS of $10.08).

Scenario 2 – New Flows ($270, 24% Upside): This scenario assumes Visa captures (and monetizes) a greater portion of the B2B Payments TAM, whereby revenue growth assumptions are moderately accelerated to low-to-mid-teens through 2026 before gradually decelerating to the 3% terminal growth rate. Margin expectations are modestly decreased through 2026 before increasing them back to the longer-term average to account for potential lower unit economic profiles of these transactions. Based on the current STM consensus EPS, this scenario implies that shares of Visa would be trading at a 27x NTM P/E multiple in 12-months. This scenario points to a 12-month price of $270 (24% upside).

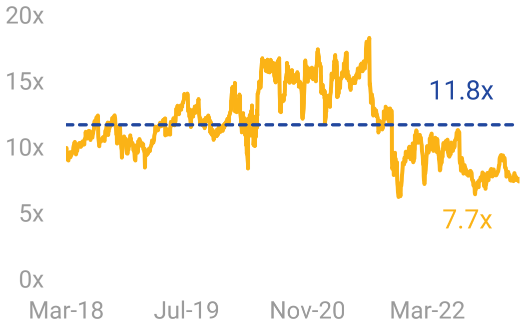
Scenario 3 – Incremental Regulation ($176, 19% Downside): The third DCF scenario estimates the impact of adding incremental credit interchange regulation to the Durbin amendment. In this scenario, revenue growth expectations are decreased to MSD by 2025, while margin expectations are unchanged as incremental margin pressure would be spread across all participants in the payments value chain. This scenario points to a 12-month price of $176 (19% downside) which based on the current STM consensus EPS implies a 17.5x P/E multiple.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

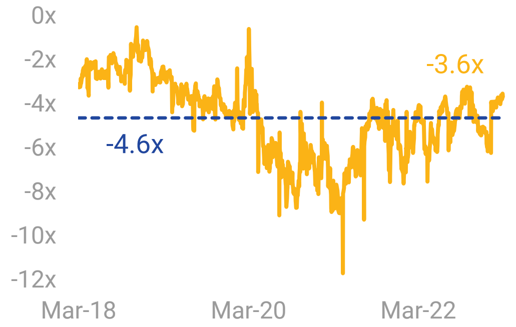
V NTM P/E & 5-Year Average



Premium vs. S&P500 & 5-Year Average



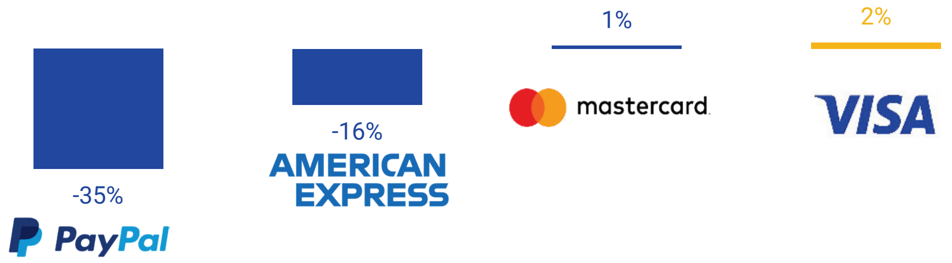
Discount vs. MA & 5-Year Average



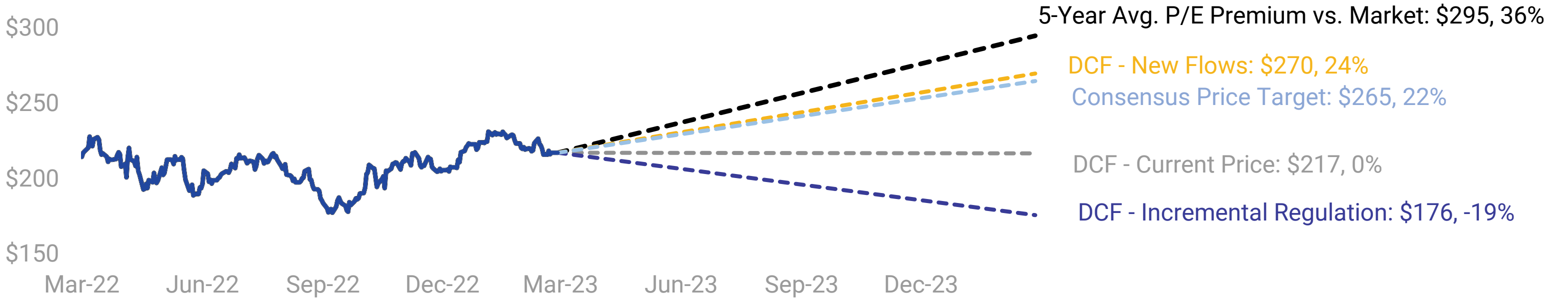
DCF Key Assumptions[1]

10-Yr RFR	**3.9%**
Cost of Equity	**10.4%**
Cost of Debt	**5.0%**
WACC	**10.1%**
Beta	**1.0**
DCF FCF Terminal Growth Rate	**3.0%**
SBC Terminal Growth Rate	**1.0%**
Equity Value Reduction from Present + Future SBC	**$7,828**

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges

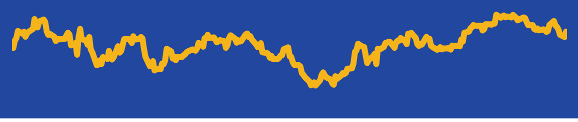


Source: Company filings, FactSet

1) SBC in millions

VISA

V TTM Price Performance



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DECISION TREE INPUTS

In order to evaluate the potential outcomes and their valuation implications, the decision tree to the right is built around 1) potential for recession and 2) rebound in APAC volume. While there are other drivers of Visa's performance, (B2B penetration, regulation, etc.) these represent the most likely area(s) of upside/downside relative to management's outlook/consensus.

Consensus Case:

The average consensus price target for Visa is $264, with STM EPS estimates of $10.08 implying a 26x P/NTM earnings multiple in 12-months (in-line with the current multiple), if shares of V trade at this price in 12-months. This 26x multiple is 5x below Visa's 5-year average P/E multiple of 31x. The consensus price target implies 21% upside relative to the current share price.

Upside Case(s):

(+) $290, 33% Upside: This scenario assumes the global economy avoids a recession and PCE trends remain strong. The scenario reflects this by 1) assuming no deceleration in the stacked growth rate of purchase volume relative to 4Q22 and 2) marginally improved gross margins driven by a faster rebound in international travel and a mix shift towards credit. This implies 14% EPS growth and 33% upside to the current share price with a 28x multiple.

(+-) $270, 24% Upside: This scenario assumes no recession, but forecasts continued weakness in APAC purchase volume (primarily driven by a slower rebound in China than expected). The model reflects this by assuming no acceleration in the stacked growth rate of APAC purchase volume and modestly weaker international transactions revenue. This implies 12% EPS growth and 24% upside to the current share price with a 27x multiple.

(++) $322, 48% Upside: The best-case assumes no recession and forecasts a quicker rebound in APAC purchase volume and modestly stronger international transactions revenue. This implies a 16% NTM EPS growth and 48% upside to the current share price with a 29x multiple.

Downside Case(s):

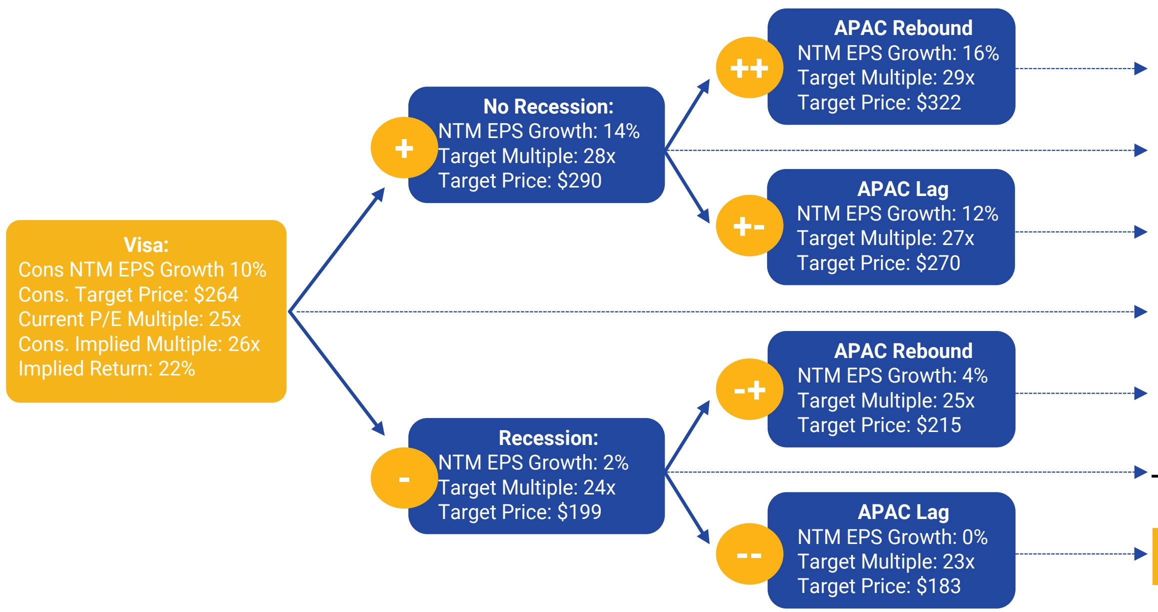
(-) $199, 9% Downside: This scenario assumes a global recession, weighing on overall volume. The model reflects this by assuming purchase volume declines to the YoY growth trough of PCE during the GFC. It also assumes moderate contraction in gross margin due to weaker international travel and a mix shift to debit. This implies 2% EPS growth and 9% downside to the current share price with a 24x multiple.

(-+) $215, 1% Downside: This scenario assumes a global recession and the previously mentioned stronger rebound in APAC purchase volume/international transaction revenue. This implies 4% EPS growth and 1% downside to the current share price with a 25x multiple.

(--) $183, 16% Downside: The worst-case scenario assumes a global recession and the previously mentioned slower rebound in in APAC purchase volume/international transaction revenue. This implies 0% EPS growth and 16% downside to the current share price with a 23x multiple.

DECISION TREE & CONSENSUS OUTLOOK

Decision Tree



Visa:
Cons NTM EPS Growth 10%
Cons. Target Price: $264
Current P/E Multiple: 25x
Cons. Implied Multiple: 26x
Implied Return: 22%

+

No Recession:
NTM EPS Growth: 14%
Target Multiple: 28x
Target Price: $290

++

APAC Rebound
NTM EPS Growth: 16%
Target Multiple: 29x
Target Price: $322

+-

APAC Lag
NTM EPS Growth: 12%
Target Multiple: 27x
Target Price: $270

-

Recession:
NTM EPS Growth: 2%
Target Multiple: 24x
Target Price: $199

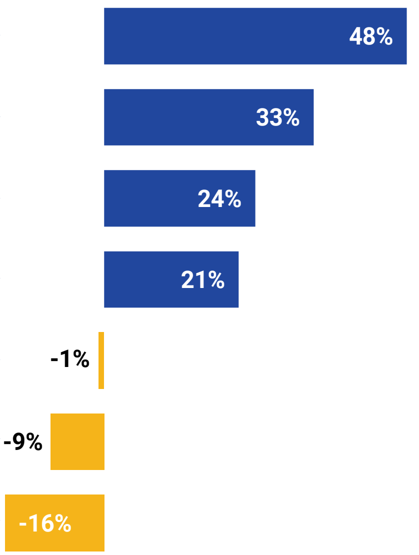
-+

APAC Rebound
NTM EPS Growth: 4%
Target Multiple: 25x
Target Price: $215

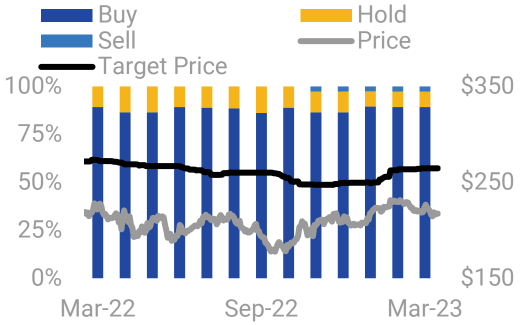
--

APAC Lag
NTM EPS Growth: 0%
Target Multiple: 23x
Target Price: $183

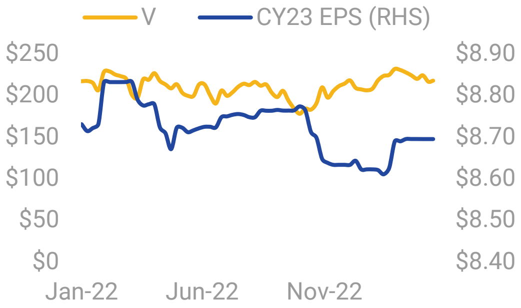
12-month Price Return



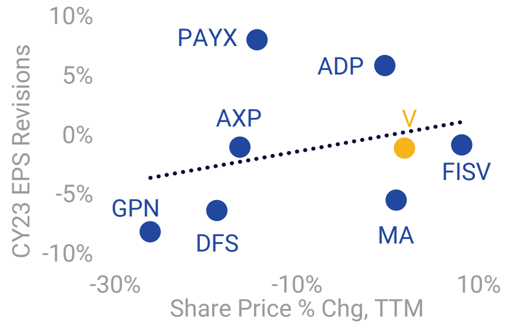
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM



Source: Company filings; FactSet

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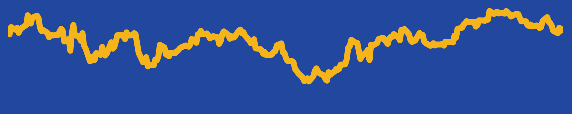
VISA



V TTM Price Performance

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FINANCIAL TECHNOLOGY PARTNERS

($ in billions, except where otherwise noted)

F1Q23 EARNINGS CALL RECAP

Takeaway: Visa shares traded up ~1.5% at the market open on January 27th, with the gain likely driven by strong performance in cross-border and other revenues. Management remains confident in its network of networks strategy, while providing a more subdued take on Asia as the last remaining significant piece to the global reopening puzzle. When Visa reports F2Q23, Ryan McInerney will have been CEO for roughly three months and will add his own flavor to earnings calls going forward.

Results Recap: Visa reported F1Q23 results with payments volume of $3.01tn growing 7% YoY (CC), coming in 3% below consensus expectations. Relative to Mastercard's 4Q22 results released earlier in the day, Visa's overall payments volume grew somewhat slower at 7% (CC) vs. Mastercard, which saw purchase volume grow 11% (CC). Net revenue in the quarter was $7.94bn (+12% GAAP, +19% Adj.), beating consensus expectations by 3% with outperformance primarily driven by other revenue which grew 31% YoY and beat expectations by 19%. Excluding one-time items and related tax impacts, non-GAAP net income from the quarter was $4.58bn or $2.18 a share, increasing 17%/21%, respectively.

Incremental From the Call:

- **Guidance/Outlook:** On the call, Visa provided its F2Q23 guidance. Visa is assuming that trends in domestic payment volumes and processed transactions are sustained with some benefit from lapping Omicron in January last year. Management is also expecting sustained cross-border e-commerce growth rates through F2Q (ex Russia and crypto). Using these assumptions, Visa expects mid-teens constant dollar net revenue YoY growth in F2Q vs. cons. estimates of 6.8%. In F1Q, management provided a FY23 client incentive percent of gross revenue range of 26.5% to 27.5%. In F2Q, client incentives are expected to run higher at the upper end of the range vs. consensus estimates of 26.9%. In further conversations with management, it clarified that client incentives at the high end of the range does not signify a long-term trend. Rebates and incentives are heavily dependent on contract renewals, which renew episodically. However, management noted that the average term of a contract is 5-7 years. Visa also expects non-GAAP operating expense growth 200-300bps lower than F1Q (~25%).
- **Cross-Border Opportunity:** In both V and MA's earnings calls, it was clear that investors see the recovery of China cross-border volumes to pre-COVID levels as a significant driver of revenue growth in FY23. However, management teams stated different opinions on expectations of recovery. Mastercard management expects these flows to be an important factor in driving growth in FY23 while Visa's expectations for China cross-border volume growth contribution was much more subdued. In conversations with management, it further clarified that the company is currently not expecting China to fully recover both inbound/outbound until F2H23. If China recovers quicker than expected, it could significantly help drive growth above expectations for Visa, since its FY23 net revenue growth outlook was not as dependent on China as Mastercard's.
- **Capital Allocation:** Investors were curious about Visa's appetite for M&A and balance sheet utilization given the current macro environment. Management reiterated its capital allocation strategies, stating that the company would look to M&A after prioritizing organic growth strategies. After exhausting these two methods, management would explore dividend increases and further share repurchases (in this order). The company also highlighted deflating valuation multiples for FinTech companies and the fact that this could naturally lead to more M&A opportunities.

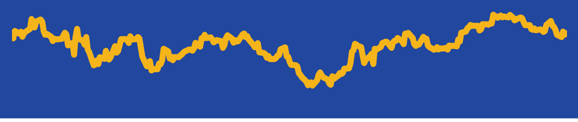
F1Q23 REPORTED VS. CONSENSUS

Line-Item	Reported	Consensus	$▲	%▲
Payments Volume (tn)	**$3.01**	**$3.11**	**-$0.09**	**-3%**
growth (%, yoy)	2%	5%		
Processed Transactions (bn)	**52.5**	**52.8**	**-0.30**	**-1%**
growth (%, yoy)	10%	11%		
Services Revenue	**$3.51**	**$3.41**	**$0.10**	**3%**
growth (%, yoy)	10%	7%		
Data Processing Revenue	**$3.83**	**$3.90**	**-$0.08**	**-2%**
growth (%, yoy)	6%	8%		
International Transactions Revenue	**$2.80**	**$2.67**	**$0.13**	**5%**
growth (%, yoy)	29%	23%		
Other Revenue	**$0.59**	**$0.49**	**$0.09**	**19%**
growth (%, yoy)	31%	10%		
Client Incentives	**$2.79**	**$2.81**	**-$0.02**	**-1%**
growth (%, yoy)	18%	18%		
Net Revenue	**$7.94**	**$7.70**	**$0.24**	**3%**
growth (%, yoy)	12%	9%		
Adj. Operating Expenses	**$2.44**	**$2.40**	**$0.04**	**2%**
growth (%, yoy)	15%	13%		
Adj. Operating Income	**$5.50**	**$5.30**	**$0.20**	**4%**
Operating Margin (%)	69%	69%		*39bps*
Adj. Net Income	**$4.58**	**$4.23**	**$0.35**	**8%**
Net Income Margin (%)	58%	55%		*272bps*
Adj. Diluted EPS	**$2.18**	**$2.01**	**$0.17**	**8%**
growth (%, yoy)	21%	11%		

F2Q23 Guidance	Commentary	Pre-Q Cons.
Net Revenue	*"Mid-teens constant dollar net revenue growth, HSD nominal growth"*	8%
Client Incentives	*"Expected to run higher at upper end of 26.5% - 27.5% range"*	17%
Adjusted OpEx	*"Adjusted OpEx growth in nominal dollars is expected to be 2 to 3 points lower than 1Q"*	13%
Tax Rate	*"Upper end of 19.0% - 19.5% for rest of the year"*	19%

Source: Company filings; FactSet; Visible Alpha

V TTM Price Performance



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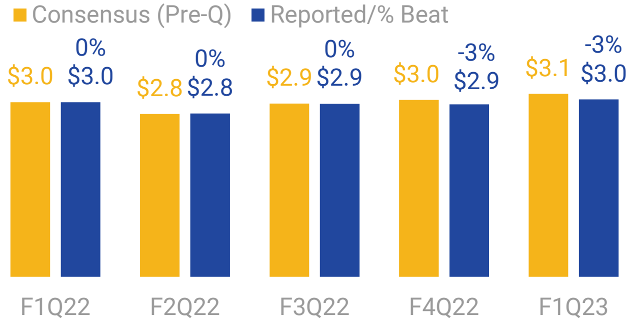
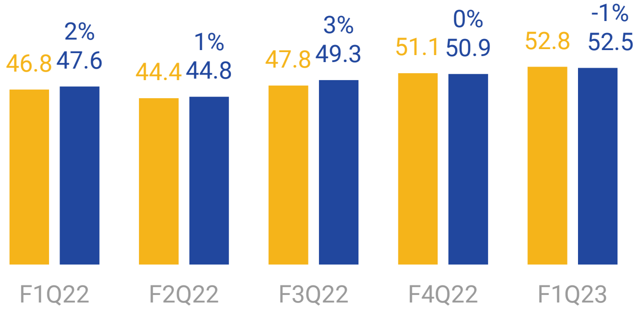
($ in billions, except where otherwise noted)

REPORTED VS. CONSENSUS

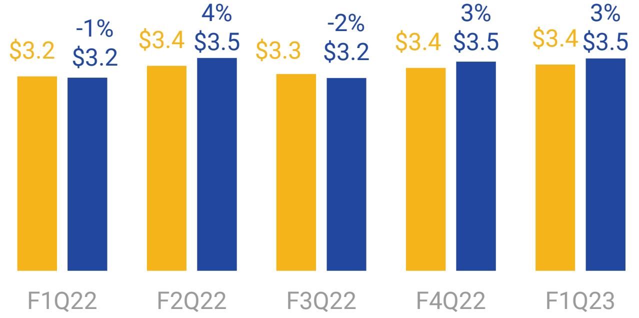
Payments Volume (tn)



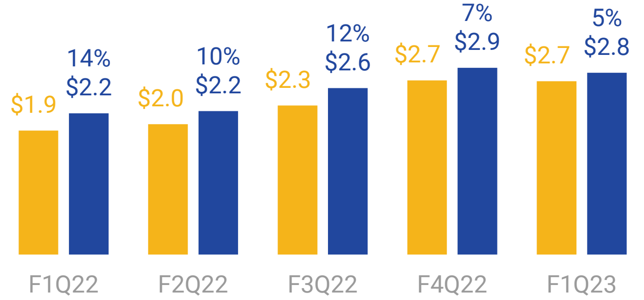
Processed Transactions (bn)



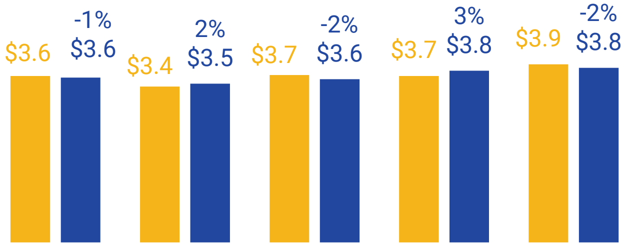
Service Revenue



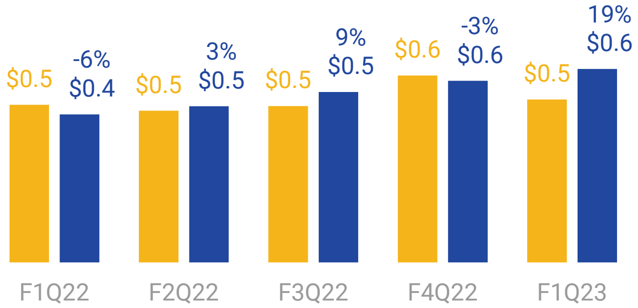
International Transaction Revenue



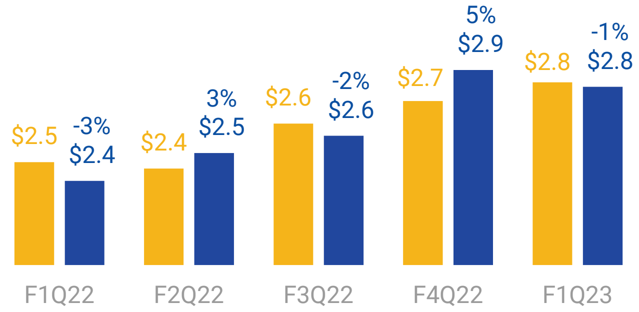
Data Processing Revenue



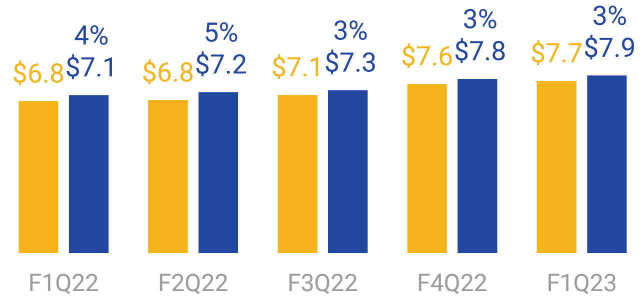
Other Revenue



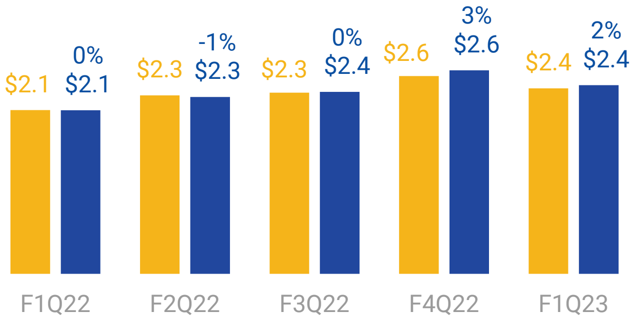
Client Incentives



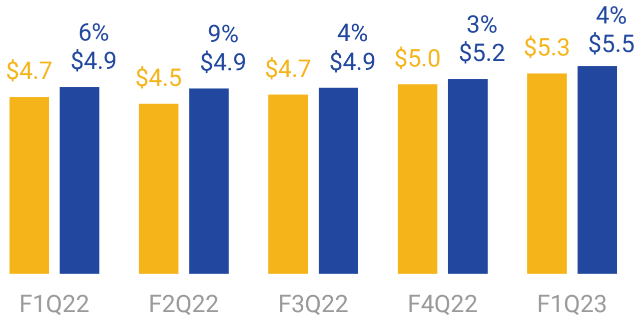
Net Revenue



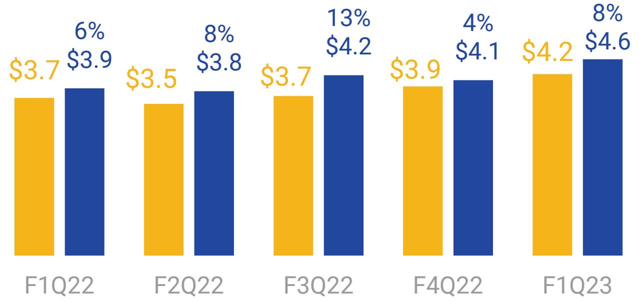
Adjusted Operating Expenses



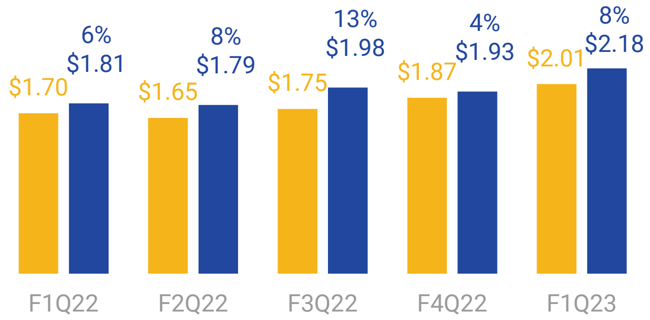
Adjusted Operating Income



Adjusted Net Income



Adjusted Diluted EPS



Source: Company filings; FactSet; Visible Alpha

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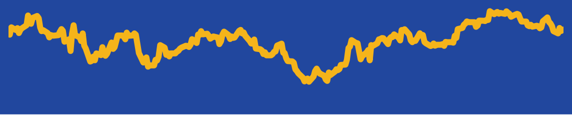
VISA

V TTM Price Performance



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($ in billions, except where otherwise noted)

F2Q23 EARNINGS OUTLOOK

Visa is projected to report F2Q23 earnings on April 26th after the market close.

What's In Focus:

Throughout F2Q23, China cross-border trends and overall consumer health have remained top of mind for investors. With F1Q23 results, management stated its expecting China to take "a bit of time before we're going to see the Chinese traveler back in Europe/ at the level of pre-pandemic or back in the United States at the level of pre-pandemic". Additionally, Visa stated it is not expecting any kind of inbound travel volume recovery in China in 2H. This represents a significantly softer outlook relative to Mastercard's outlook on China. However, we recognize that Mastercard has larger exposure to China than Visa. That said, OAG's international travel index shows international travel trends have yet to materially improve throughout 2023 as international capacity through week 22 of the year with international capacity still 16.5% behind the same week in 2019. the early weeks of 2023 with total international seats in 2023 still down ~19% relative to 2019 levels. That said, bookings for international seats are showing signs of recovery, with international seats expected to be 14% below 2019 levels over the next three months. As of January 2023, international flight capacity was 1.5%, 50bps above January 2022, but still well below the 12% capacity in 2019. Overall, the number of seats between China and its largest international corridors remains well below 2019 levels, as seen in the graphic to the bottom right.

Estimates:

Since Visa reported on January 26th estimates for F2Q purchase volume have remained relatively unchanged at $2.94bn (+6% YoY). This is a sequential increase in purchase volume growth from ~2% in F1Q23. Consensus for net revenue growth is 8% relative to management guidance for net revenue growth in HSD. Consensus expects adjusted operating expenses to grow 13% YoY. This compares to management's outlook for adjusted operating expense growth to be 2-3 percentage points lower than 1Q, which was 15%. Estimates for F2Q23 adjusted EPS have remain relatively unchanged at $1.98 for the quarter.

Outlook:

Visa's quarterly and FY outlook assumes no recession as business trends have remained stable. While the macro backdrop has remained mixed, consumer spending has remained strong, driven in part by inflation, consumers drawing down savings, and taking on additional debt. PCE in the U.S was up 5.4% in January. Relative to Mastercard, we see a higher likelihood of positive outlook/estimate revisions due to the lower expectations around China travel and the potential for improvement there.

POST-RESULTS ONE-DAY ALPHA VS. SP500

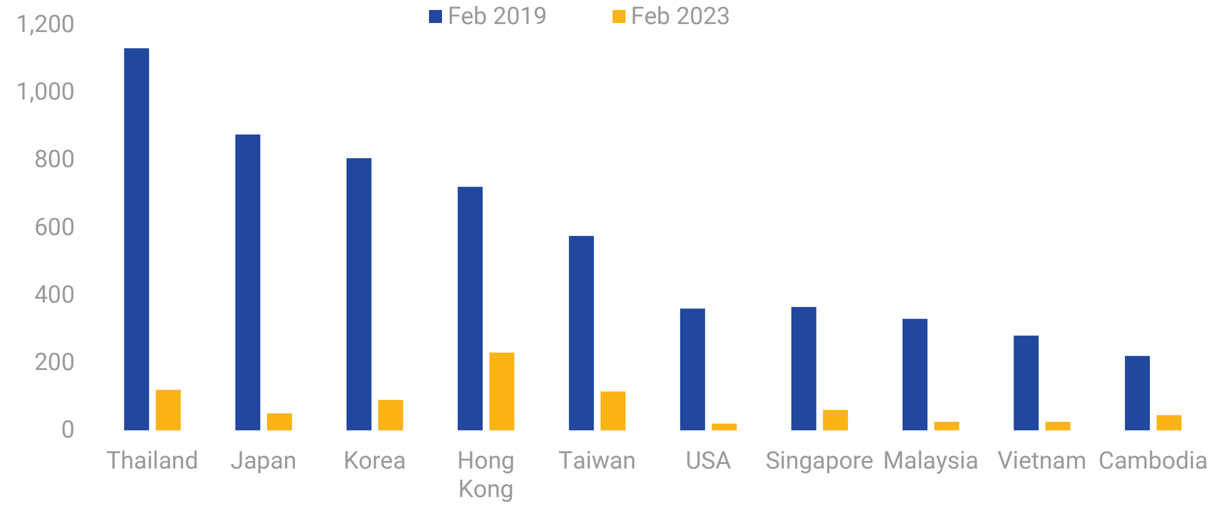
F2Q22
- Adj. EPS of $1.79 vs. Street at $1.65 & Net rev of $7.21bn vs. Street at $6.8bn
- Mgmt. updated FY22 rev guidance to high-teens - 20% vs. high-teens previously

F3Q22
- Adj. EPS of $1.98 vs. Street at $1.75,
- 15c – 20c of EPS beat driven by lower taxes
- Mgmt. stated no indication of volume slowdown

F4Q22
- Reported Adj. EPS of $1.93 vs. Street at $1.87
- EPS beat driven by higher intl. txn. fees, partially offset by higher opex

F1Q23
- Reported Adj. EPS of $2.18 vs. Street at $2.01
- Stock performance driven by strong performance in international txn volume & other revs

CHINA'S TOP 10 INTERNATIONAL MARKETS – AIR TRAVEL SEATS(1)



Source: Visible Alpha; FactSet
1) OAG International Travel Index

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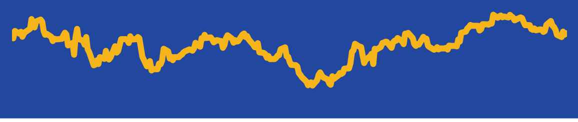
VISA

V TTM Price Performance



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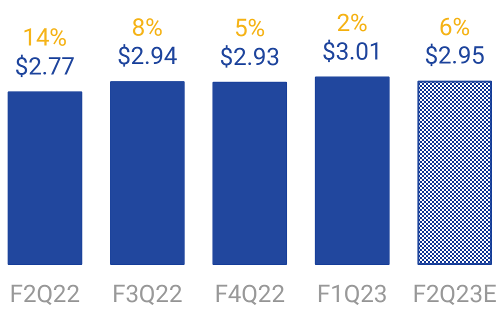
FINANCIAL TECHNOLOGY PARTNERS

($ in billions) F1Q23 CONSENSUS ESTIMATE RANGES

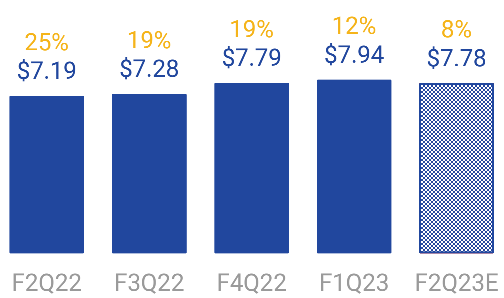
	Low	Average	High
Payment Volume (tn)	$2.85	$2.95	$3.11
growth (%, yoy)	3%	6%	12%
Processed Transactions (bn)	47.2	49.7	50.9
growth (%, yoy)	5%	11%	14%
Services Revenue	$3.53	$3.63	$3.78
growth (%, yoy)	0%	3%	7%
Data Processing Revenue	$3.57	$3.75	$3.92
growth (%, yoy)	3%	8%	13%
International Transaction Revenue	$2.20	$2.73	$2.91
growth (%, yoy)	0%	24%	32%
Other Revenue	$0.54	$0.59	$0.64
growth (%, yoy)	14%	23%	35%
Client Incentives	$3.00	$2.91	$2.68
growth (%, yoy)	20%	17%	7%
Net Revenue	$7.49	$7.78	$7.90
growth (%, yoy)	4%	8%	10%
Adj. Operating Expenses	$2.56	$2.58	$2.69
growth (%, yoy)	12%	13%	17%
Adj. Operating Income	$5.11	$5.21	$5.29
Operating Margin (%)	68%	67%	67%
Adj. Net Income	$3.94	$4.15	$4.23
Net Income Margin (%)	53%	53%	54%
Adj. Diluted EPS	$1.89	$1.98	$2.03
growth (%, yoy)	6%	11%	14%

QUARTERLY CONSENSUS ESTIMATES & OPTION ACTIVITY

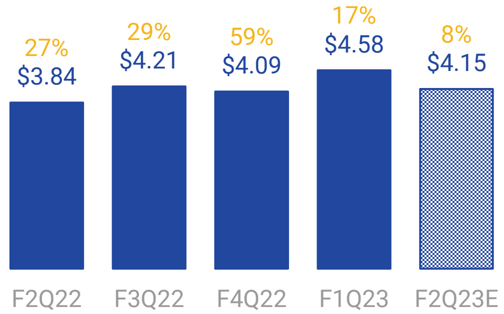
TPV (tn)/YoY Growth



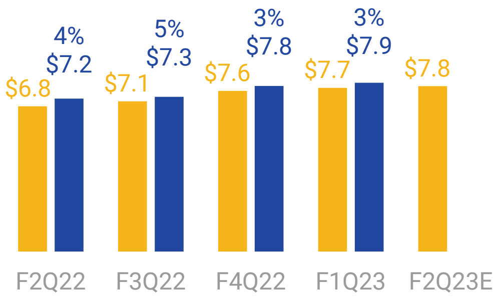
Net Revenue/YoY Growth



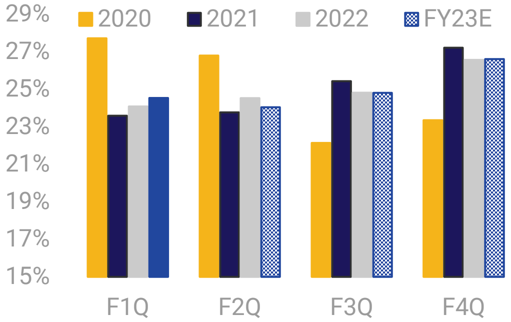
Adjusted Net Income/YoY Growth



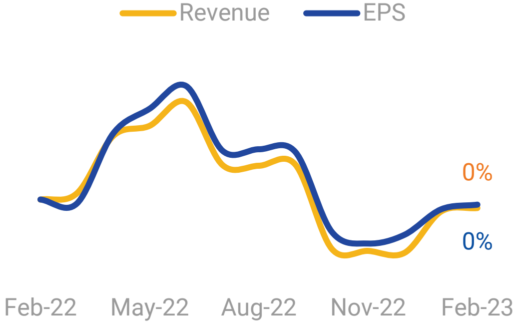
Revenue Consensus vs. Reported



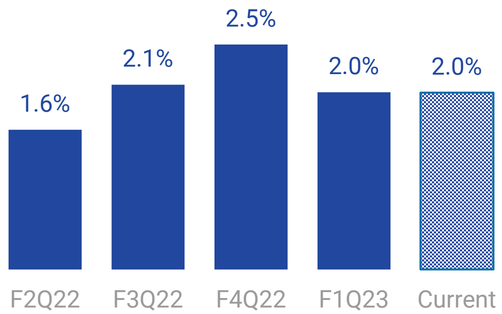
Revenue Seasonality



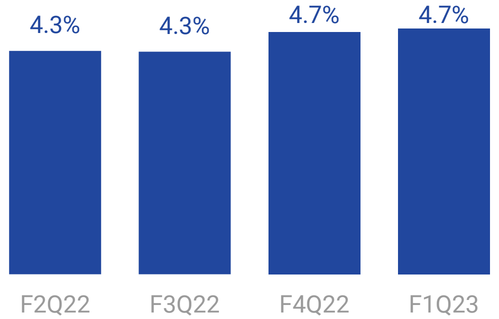
F2Q23 Consensus Revisions



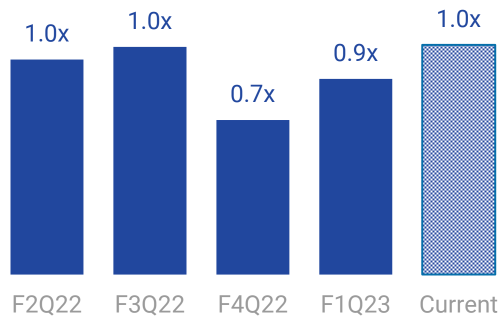
Short Interest



Hedge Fund Ownership as % of S/O



Pre-Earnings Put/Call Ratio(1)



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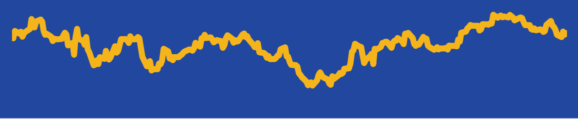
Source: Company filings; FactSet

1) Put/Call Ratio over 7-days leading into earnings

03/20/23 - Craig Maurer | Co-Director of Research – Craig.Maurer@ftpartners.com – (929) 286-9516 **Matthew O'Neill** | Co-Director of Research – Matthew.O'Neill@ftpartners.com – (347) 614-2481 **Zachary Gunn** | Research Associate – Zachary.Gunn@ftpartners.com – (628) 218-0540

VISA


V TTM Price Performance

Price as of 03/10/23:	$217.39	**Shares Out (mm):**	1,631
Market Cap (bn):	$354	**Beta (2 Yr Avg.):**	0.9
52-Wk Range:	$174.60 - $234.30	**Avg. Daily Vol (mm):**	6.0

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QUESTIONS FOR MANAGEMENT

Guidance:

1) What assumptions regarding the tightening/loosening of COVID restrictions in Asia is built into the FY23 guidance?
2) FY23 guidance implies that the COVID travel recovery is fully lapsed in the U.S., how much of the recovery is left to go in other regions?

General:

3) How much of a difference has there been in the strength of consumer spending in Europe compared to other geographies?
4) Volume-based revenue is typically hedged from inflation impacts, but with value-added services representing a greater portion of net revenues is the top-line potentially becoming less correlated to inflation?
5) Some of the greatest areas of inflation are in primarily non-carded segments like energy or housing, is there any sign that a greater portion of the consumers wallet share is moving away from cards as a result?
6) On the F4Q22 call, management mentioned ex-Russia and Crypto, cross-border e-commerce has been relatively stable, how much of an impact does crypto have on the e-commerce space?
7) What are the primary metrics management tracks to determine whether to ramp up or pull back expense growth?
8) Can management provide an update on the B2B opportunity and how the various products (card-based payments, cross-border payments, AP/AR payments) are resonating in their respective markets
9) In terms of volume processing DPS is one of the biggest players in the space at ~$2tn authorization volume in FY22, what is the roadmap for DPS going forward?

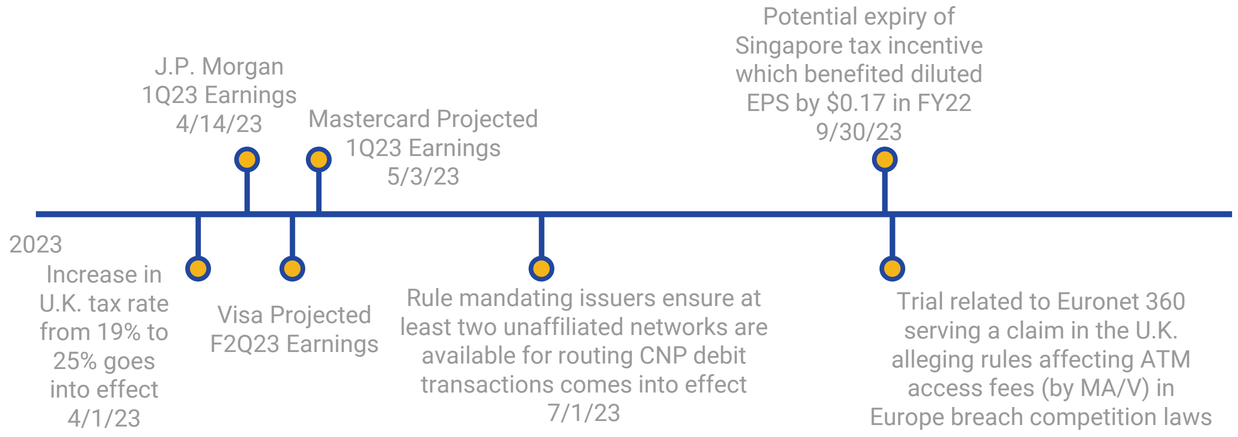
Regulation:

10) Does management expect there to be any material impacts on the business due to the Federal Reserve's enforcement of utilizing two unaffiliated networks for online debit transactions?

Capital Allocation:

11) With valuations at a more reasonable level compared to the last ~2 years it is fair to expect Visa to be actively pursing M&A and what type of assets are most desirable?

POTENTIAL CATALYSTS


2023

Increase in U.K. tax rate from 19% to 25% goes into effect 4/1/23

J.P. Morgan 1Q23 Earnings 4/14/23

Visa Projected F2Q23 Earnings

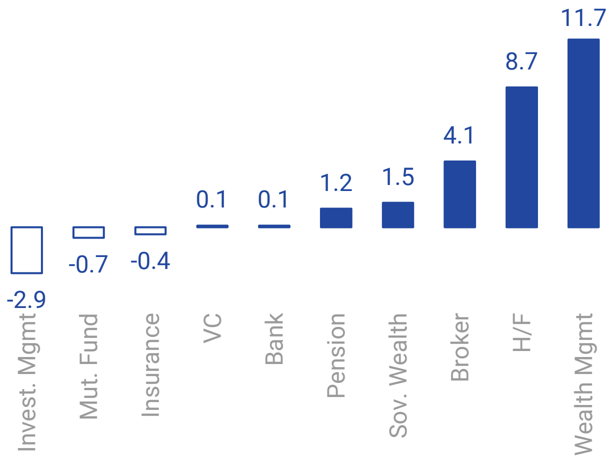
Mastercard Projected 1Q23 Earnings 5/3/23

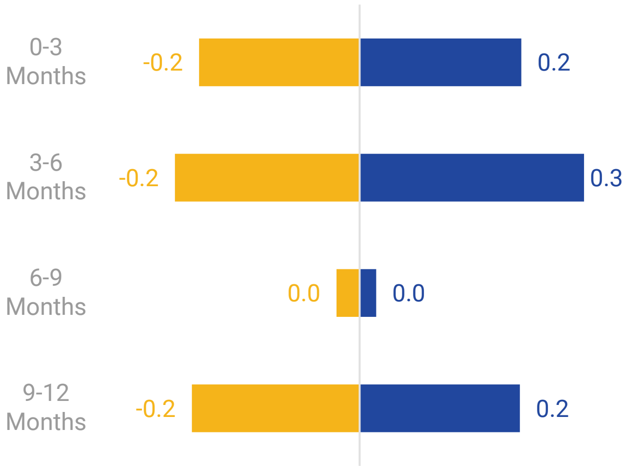
Rule mandating issuers ensure at least two unaffiliated networks are available for routing CNP debit transactions comes into effect 7/1/23

Potential expiry of Singapore tax incentive which benefited diluted EPS by $0.17 in FY22 9/30/23

Trial related to Euronet 360 serving a claim in the U.K. alleging rules affecting ATM access fees (by MA/V) in Europe breach competition laws

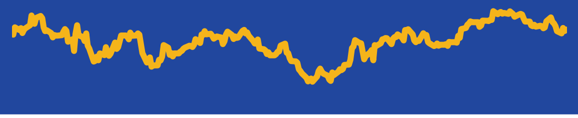
SHAREHOLDER ANALYSIS


Six-Month Position Change (mm)


Insider Shares Sold/Bought (mm)

Source: Company filings; FactSet

V TTM Price Performance



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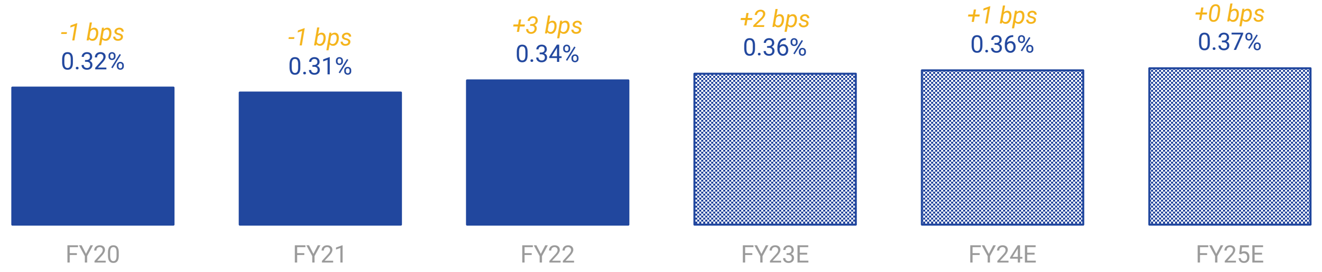
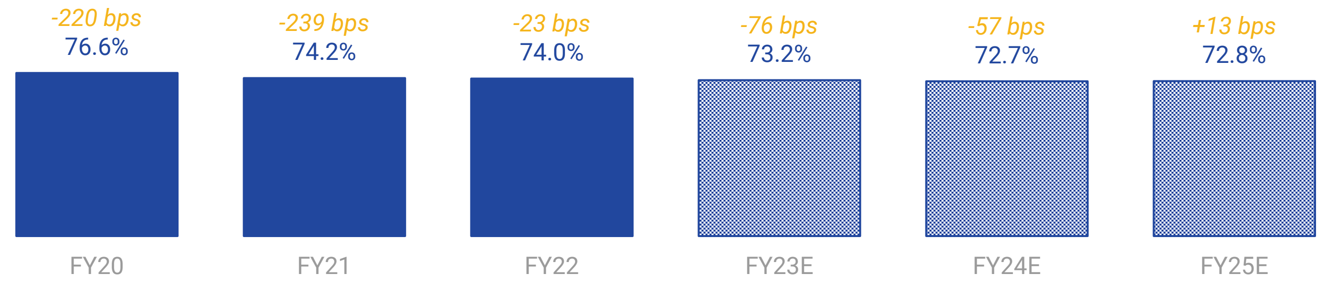
COMPANY RATIOS/MARGIN ANALYSIS

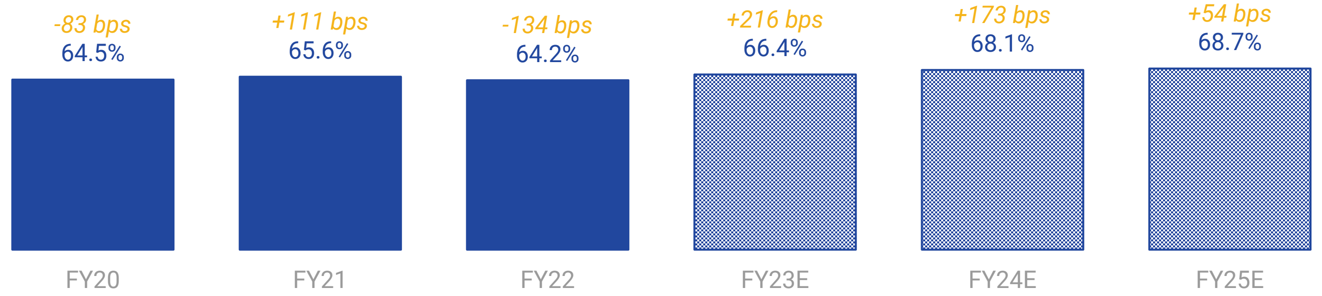
Gross Revenue Yield (% of Purchase Volume)



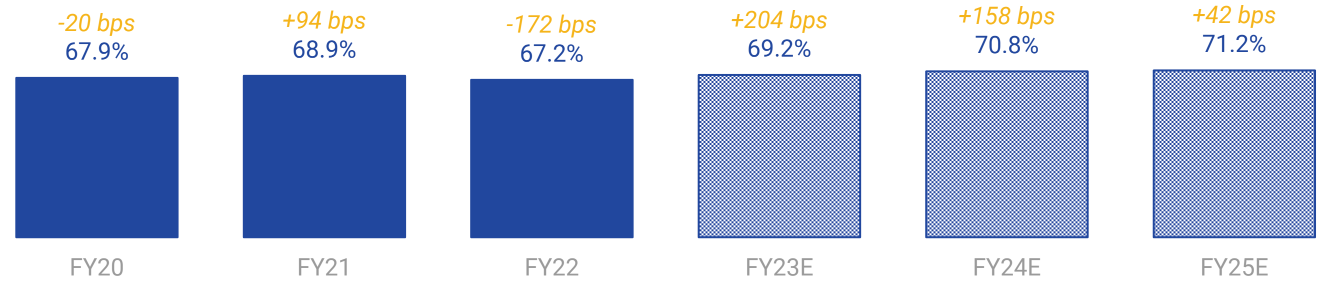
Net Revenue (% of Gross Revenue)



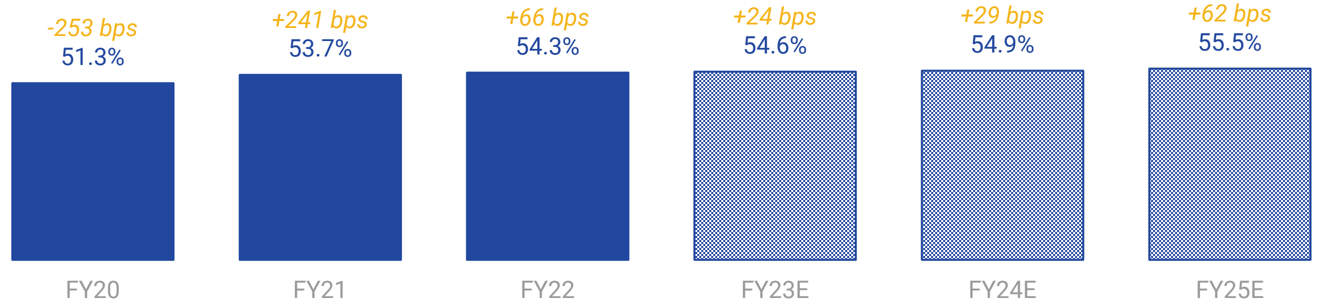
Operating Income Margin (% of Net Revenue)



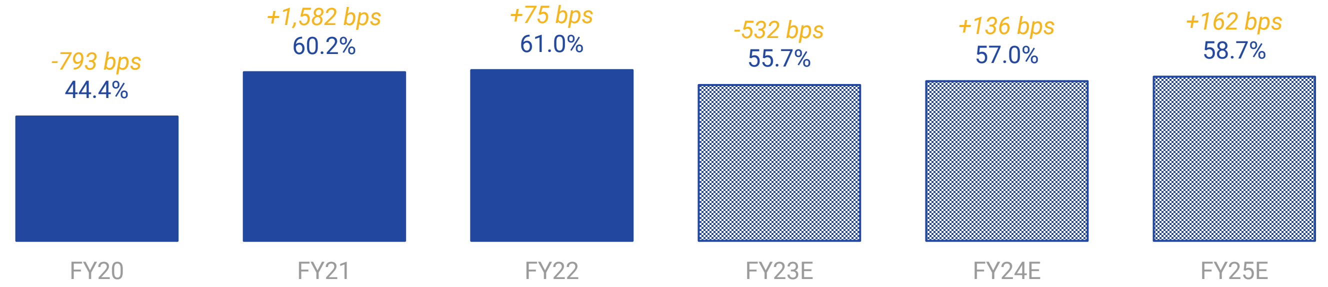
EBITDA Margin (% of Net Revenue)



Net Income Margin (% of Net Revenue)



Free Cash Flow Margin (% of Net Revenue)



Source: Company filings, FactSet

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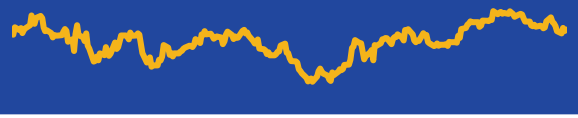

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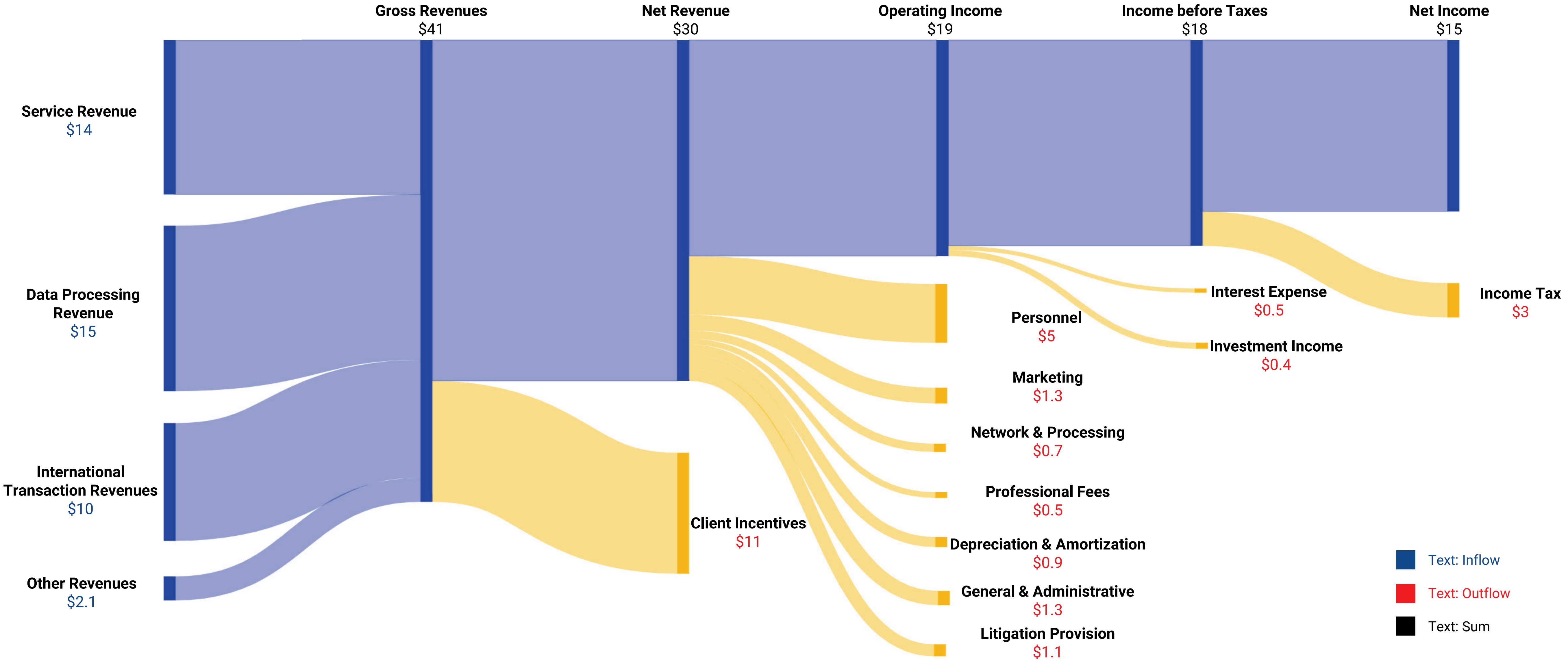
($ in billions)

P&L VISUALIZATION – TTM



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VISA

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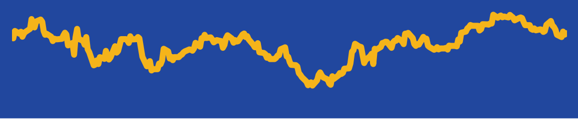

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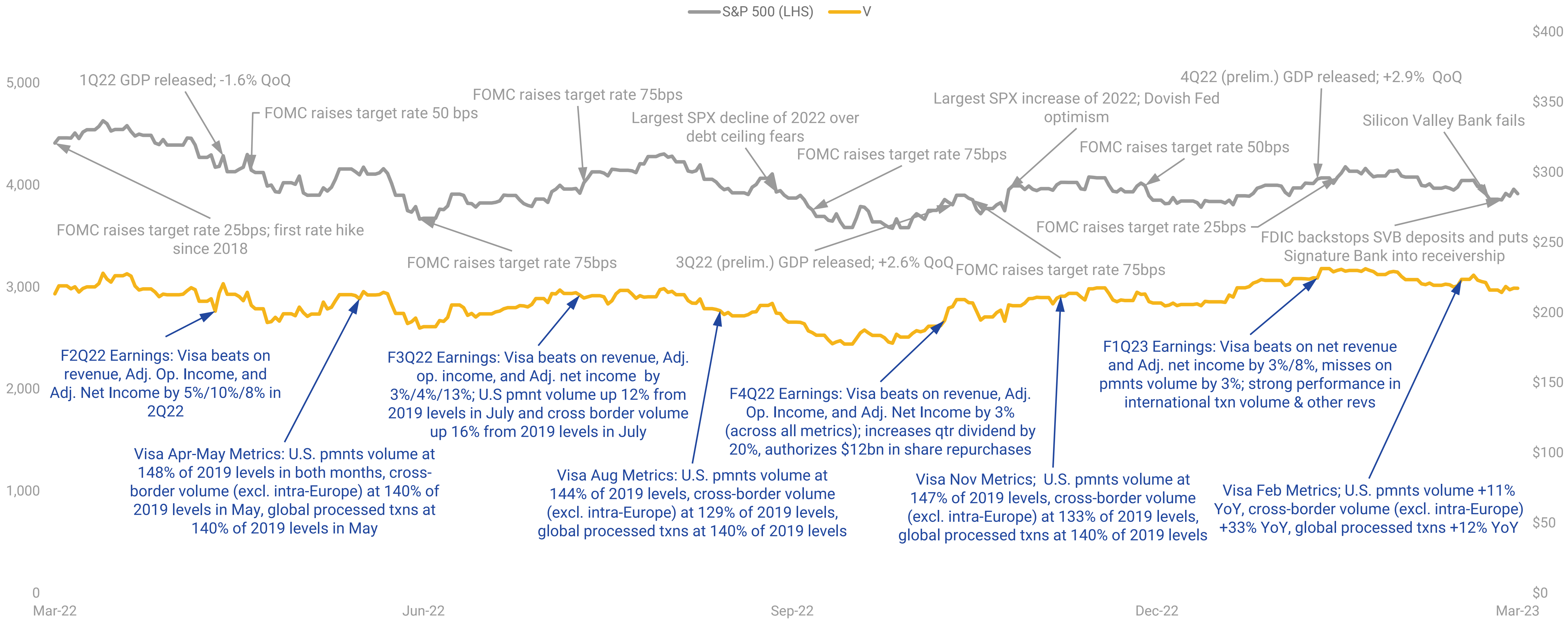
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

4Q22 (prelim.) GDP released; +2.9% QoQ

Silicon Valley Bank fails

FOMC raises target rate 25bps; first rate hike since 2018

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

FOMC raises target rate 75bps

FOMC raises target rate 25bps

FDIC backstops SVB deposits and puts Signature Bank into receivership

F2Q22 Earnings: Visa beats on revenue, Adj. Op. Income, and Adj. Net Income by 5%/10%/8% in 2Q22

F3Q22 Earnings: Visa beats on revenue, Adj. op. income, and Adj. net income by 3%/4%/13%; U.S pmnt volume up 12% from 2019 levels in July and cross border volume up 16% from 2019 levels in July

F4Q22 Earnings: Visa beats on revenue, Adj. Op. Income, and Adj. Net Income by 3% (across all metrics); increases qtr dividend by 20%, authorizes $12bn in share repurchases

F1Q23 Earnings: Visa beats on net revenue and Adj. net income by 3%/8%, misses on pmnts volume by 3%; strong performance in international txn volume & other revs

Visa Apr-May Metrics: U.S. pmnts volume at 148% of 2019 levels in both months, cross-border volume (excl. intra-Europe) at 140% of 2019 levels in May, global processed txns at 140% of 2019 levels in May

Visa Aug Metrics: U.S. pmnts volume at 144% of 2019 levels, cross-border volume (excl. intra-Europe) at 129% of 2019 levels, global processed txns at 140% of 2019 levels

Visa Nov Metrics; U.S. pmnts volume at 147% of 2019 levels, cross-border volume (excl. intra-Europe) at 133% of 2019 levels, global processed txns at 140% of 2019 levels

Visa Feb Metrics; U.S. pmnts volume +11% YoY, cross-border volume (excl. intra-Europe) +33% YoY, global processed txns +12% YoY

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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WISE

WISE PROPRIETARY COMPANY PROFILE

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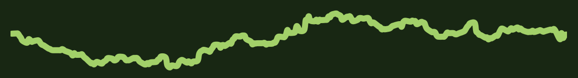
For Sales Inquiries | Rob Riley – Head of Sales – Rob.Riley@ftpartners.com – (929) 286-9521



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COMPANY OVERVIEW

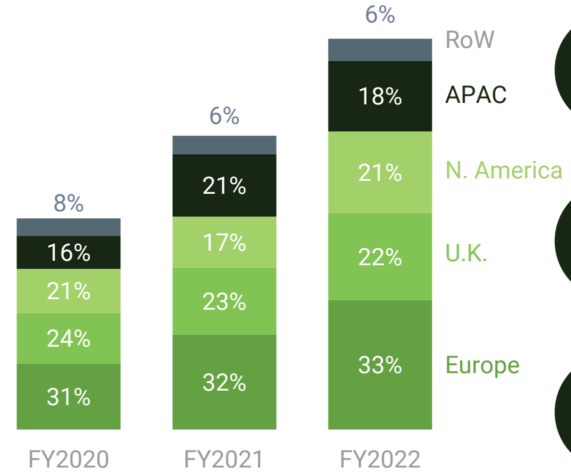
Wise enables cross-border transactions servicing individuals, businesses, and financial institutions.

Wise accounts allow individuals to send/receive both cross-border and domestic transfers, as well as save and invest those funds. Other features include scheduled or recurring payments and automatic conversion into specific currencies. The primary use case for Wise solutions by consumers is remittances, primarily among emigrants, expats, and foreign travelers.

Wise Business provides branded cross-border payment solutions. With Wise Business, the company also provides a suite of services, including spend management, payroll, accounts receivable, and supplier payments/accounts payable management.

Wise's long-term mission is to provide cross-border payment services that are instant, convenient, transparent, and eventually free (likely subsidized by other fee-bearing/interest-generating products).

REVENUE BY REGION



KEY DEBATES

1. **Market Share:** Over the past decade, the remittance space has been characterized by the rapid growth of disruptive digitally-native providers (Wise, Remitly, WorldRemit), while incumbent providers (Western Union, Ria, Moneygram) have had to make significant investments in digital solutions and concede on price. Given the low-switching costs for the remittance space, digitally-native providers have continued to gain market share even as their relative advantages shrink. There is investor concern that as incumbent providers modernize their platform, differences between remittance providers become less relevant.

2. **Growth Deceleration:** With F3Q23 results, Wise upgraded its FY23 guidance and now expects total income (transaction fees + NII) growth of 68% - 72% (55% - 60% previously). However, even with the updated guidance, implied growth for total income will decrease 2.6% QoQ in F4Q (based on consensus estimates for 69% growth in FY23) from +17.3% in F3Q. This represents the first quarter since being public that total income is expected to decline QoQ. We attribute recent weakness in the share price to investors pricing in a continually decelerating growth rate.

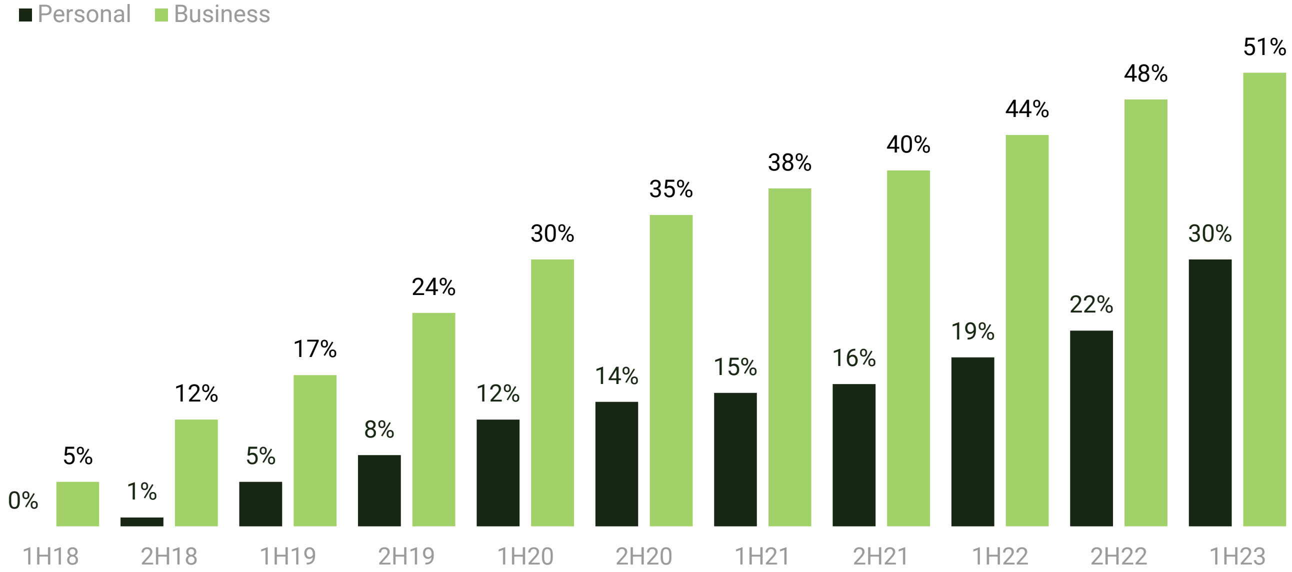
3. **Customer Balances:** A large portion of Wise's F3Q23 total income beat was driven by higher-than-expected net interest income. While Wise does not disclose the balances in the quarter, we suspect the higher contribution from NII is the result of growing account balances and the higher rate environment. We believe the Street may continue to struggle modeling NII, as Wise rolls out new interest-bearing products that will weigh on the net interest margin.

REVENUE MODEL

Wise reports total income in two segments:

- **Transaction Fees (93% of TTM Revenue):** Wise earns revenues from upfront fees it charges customers who use the platform (mobile or desktop) to send, spend, receive and hold money globally. The majority of these fees are earned when customers send or convert foreign currency. Wise's revenue is a function of its volumes and take rates, which are based on the fees it charges on cross-border payments. In addition, Wise earns fees on domestic same currency transactions, as when customers pay out to local currency bank accounts or spend domestically on their Wise debit cards. Wise also takes on cost-of-sales which includes bank and partner fees, as well as foreign exchange and other costs. The key metrics for the business include personal and business customer bases, volumes per customer, and the overall take rate. Over the trailing twelve months Wise generated 77% of its transaction revenue from "personal revenue" and 23% from "business revenue".
- **Net Interest Income (7%)**: Wise allows customers to purchase securities and invest funds through the Wise Account. Wise generates revenue from customer-held balances on the balance sheet. NII has grown to represent a larger portion of revenue, however, the contribution may be modestly offset with the launch of products that provide interest back to users.

PERSONAL/BUSINESS CUSTOMERS USING 1+ PRODUCTS



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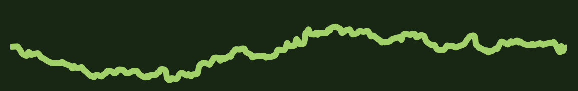
WISE TTM Price Performance



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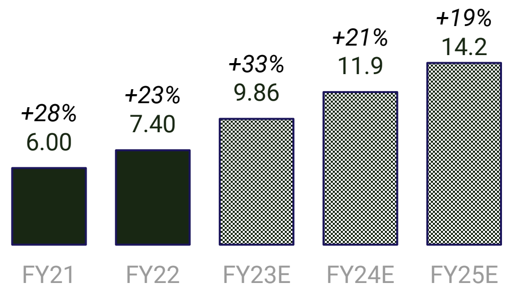
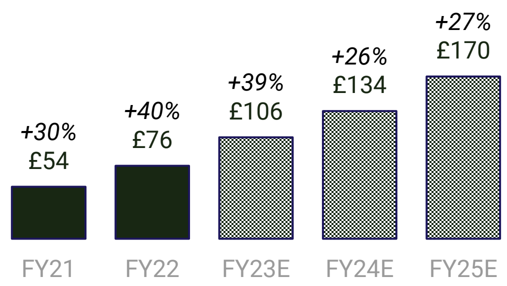
(£ in millions, except where otherwise noted)

HISTORICAL RESULTS & CONSENSUS FORECASTS[1]

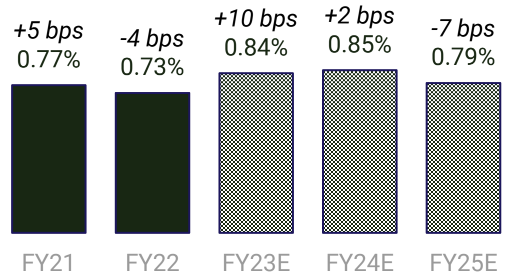
Active Customers (mm)



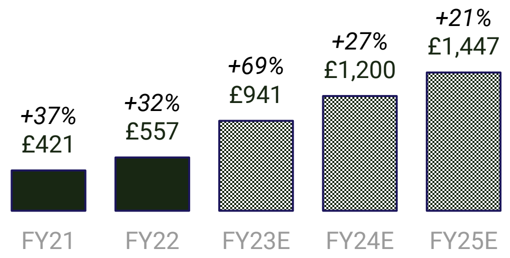
Total Volume (bn)



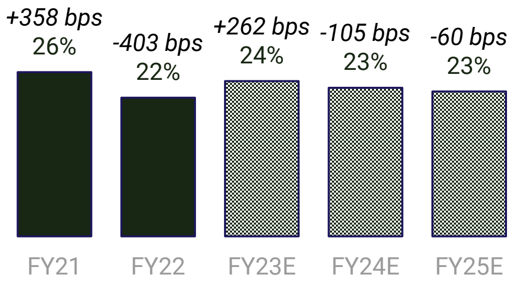
Take Rate



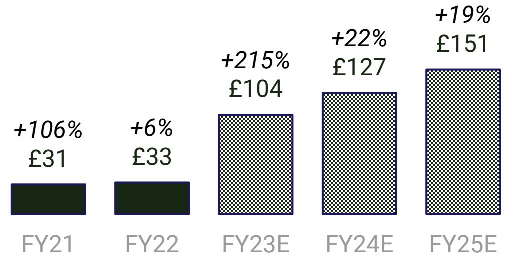
Total Income



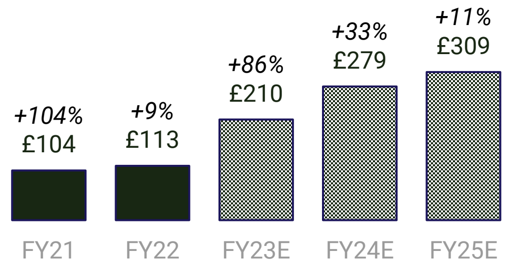
Adjusted EBITDA Margin



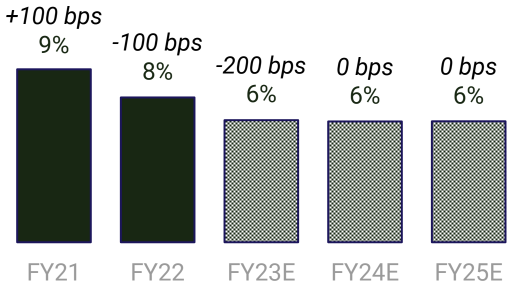
Net Profit



Free Cash Flow

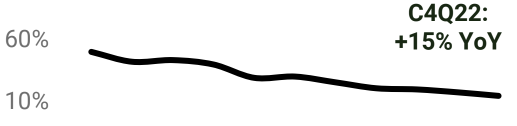


SBC as % of Total Income



INDUSTRY KPIs

NeoBank User Growth[2] *(1Q20-4Q22)*

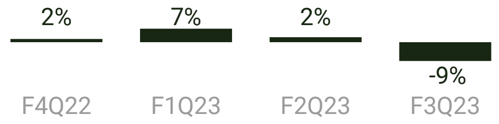


Mexico Remittance Volume[3] *(Jan 19-Jan 22)*

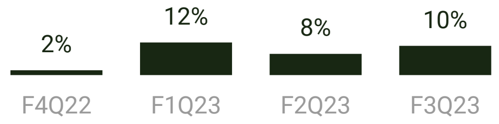
Overseas Philippines Remittances[3] *(Jan 19-Jan 22)*

SURPRISE HISTORY & FY23 CONSENSUS ESTIMATES[4]

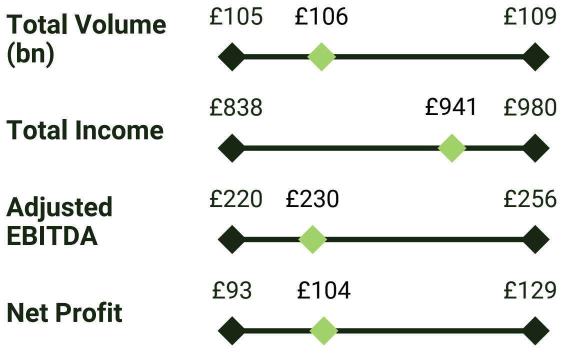
Volume



Total Income



FY23



TOTAL ADDRESSABLE MARKET

Personal Cross Border Volume

<4% Wise Personal Market Share

£2tn TAM

SMB Cross Border Volume

<1% Wise Business Market Share

£9tn TAM

Wise vs. Banks

Wise 0.64% Avg. Fee

3% - 7% Avg. Fee

Source: Company filings
1) Visible Alpha
2) Aggregate # of users: Venmo, CashApp, SoFi, MoneyLion, and Dave
3) Banco De Mexico/Bangko Sentral, in USD millions
4) FactSet Consensus Low/Average/High Range

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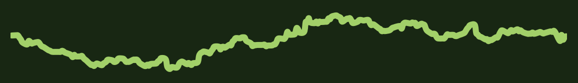
WISE TTM Price Performance



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52-Wk Range:	£2.85 - £7.32	**Avg. Daily Vol (mm):**	1.5

VALUATION CONSIDERATIONS

Relative Valuation:

While Wise is profitable and can be looked at on P/E, the combination of its high multiple and lack of profitable high-growth peers make EV/GP a better metric. As of March 20th, Wise trades at a 4x EV/GP, 7x below its 3-year average NTM EV/GP multiple of 11x. Wise also trades at a 3x premium to the Euro STOXX 50 relative to its 3-year average premium of 9x. **If Wise were to trade in-line with its peer group on an EV/GP basis when adjusted for growth, it would imply a 12-month forward price of £6.38 (16% upside).** Wise's premium is often attributed to a mix of its high-growth profile and geographic listing (due to the general lack of high-growth European tech stocks). Wise represents a compelling high-growth asset, but we recognize it operating in a commoditized end-market which could weigh on long-term growth and margin potential.

DCF Scenarios:

Scenario 1 – Current (£5.52, 0% upside): This DCF outlines a reasonable combination of revenue growth and margin expansion to arrive at a 12-month forward price that matches the current share price. To arrive at the current share price 12-months from now, it requires a combination of 20%+ revenue growth in FY23/FY24/FY25 before decelerating to high-teens and gradually decelerating towards the terminal growth rate. Operating margins are also expected to gradually expand to a long-term rate of 40%+. The terminal FCF growth rate is 3%. Were shares of Wise to remain at the current price in 12-months, it would imply a 3.6x NTM EV/GP multiple (based on current STM consensus gross profit of £954mm).

Scenario 2 – Cross Sell (£8.24, 49% upside): The second DCF outlines a scenario where Wise maintains higher revenue growth over the near to medium-term from cross-selling products, driving higher consumer stored balances and more robust interest revenue. Margin estimates are marginally increased to account for the mix shift towards interest revenues. This scenario shows sustained 20%+ revenue growth through 2026 before decelerating towards the terminal rate. Long-term operating margins reach 45% in the long-term. This scenario points to a 12-month price of £8.24 (49% upside), which based on the current STM consensus gross profit implies a 6.6x NTM/GP.

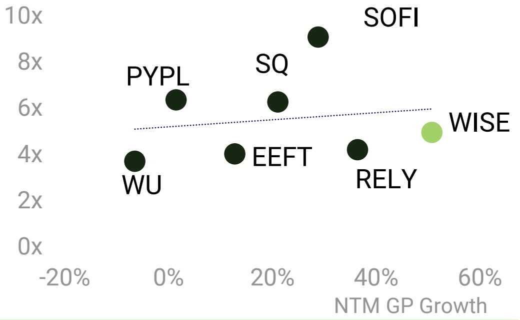
Scenario 3 – Competition (£4.20, 24% downside): Part of Wise's strategy has been conceding on price to lower the overall cost of remittances for consumers, driving incremental volume/customer growth. As such, the third DCF outlines a scenario where other providers broadly match Wise on price, potentially leading to higher churn and/or increased CAC. In this scenario, revenue growth drops below 20% in 2024 and long-term operating margins reach 30%. This scenario points to a 12-month price of £4.20 (24% downside), which based on the current STM consensus gross profit implies a 2.1x NTM/GP.

PEER GROUP TTM PRICE PERFORMANCE & VALUATION METHODOLOGIES

EV/NTM GP & Avg. Since Listing

NTM EV/GP vs. STOXX 50

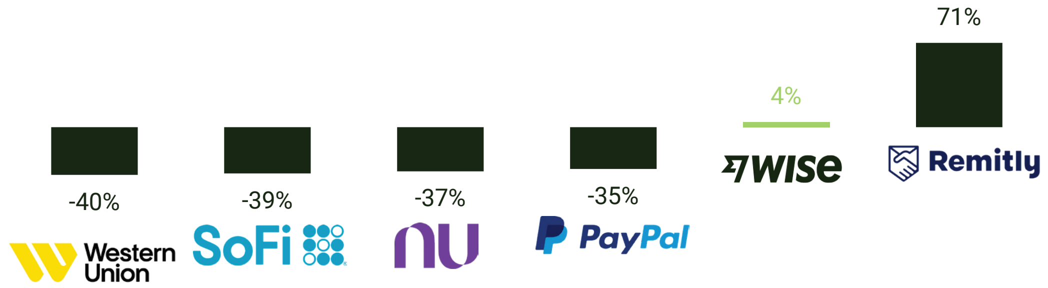
NTM EV/GP & Peer Avg. vs. GP Growth



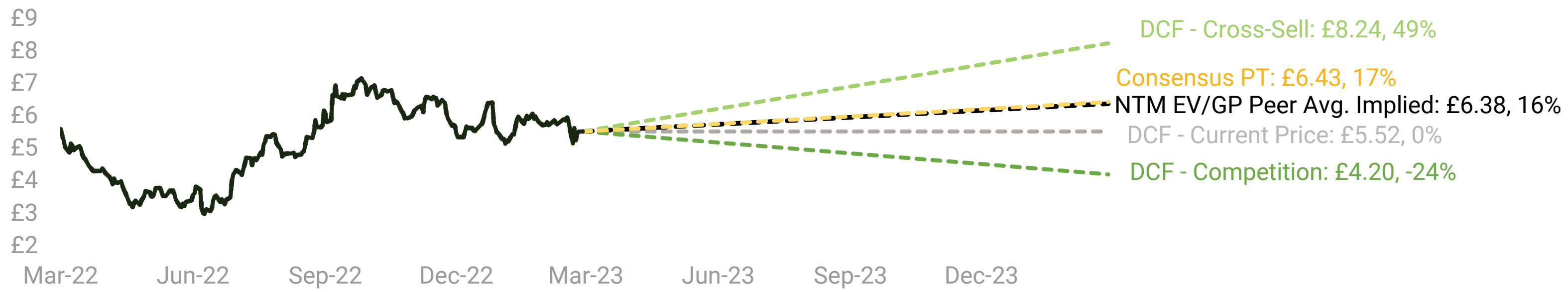
DCF Assumptions[1]

10-Yr RFR	3.2%
Cost of Equity	11.1%
Cost of Debt	3.7%
WACC	10.8%
Beta	1.5
FCF Terminal Growth Rate	3.0%
SBC Terminal Growth Rate (All DCF's)	1.0%
Equity Value Reduction due to SBC	£1,058

Select Peer TTM Price Performance



Price Chart & 12M Forward Scenario Based Ranges



Source: Company filings; FactSet

1) SBC in millions

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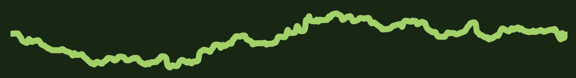
WISE

WISE TTM Price Performance



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DECISION TREE INPUTS

To evaluate the potential outcomes and their valuation implications, the decision tree to the right is built around 1) changes in volume per customer (VPC) and 2) higher/lower net interest income (NII), as these are two key factors that have the most potential to surprise relative to consensus/buy-side estimates.

Consensus Case:

The average consensus price target for Wise is ~£6.43 If shares if Wise were to trade at this price in 12-months it would imply a 4.5x EV/NTM gross profit multiple based on STM GP consensus of £954mm. This consensus price target implies 17% upside relative to the current share price.

Upside Cases:

(+) £7.39, 34% Upside: This scenario assumes VPC returns to the ~£4,900 level present in F1/F2Q23 vs. current consensus expectations for ~£4,700 over the next two quarters before trending back upwards to ~£4,800. In this scenario, user count is held in-line with consensus estimates with the higher VPC flowing through into total volume. This implies 70% gross profit growth and 34% upside to the current share price with a 5.5x EV/GP multiple.

(+-) £7.00, 27% Upside: This scenario assumes recovery in VPC but a lower net yield than current expectations, while holding balance growth in-line with consensus expectations. If Wise does share back a greater portion of interest, it is likely overly punitive to decrease growth of customer balances relative to expectations as it would likely have the opposite effect. However, this scenario also does not point to multiple contraction/expansion as variations in NII so far have not driven material multiple rerating. Therefore, the higher interest revenue is accounted for in gross profit growth but does not result in a higher/lower multiple. This implies 57% gross profit growth and 27% upside to the current share price with a 5.5x EV/GP multiple.

(++) £7.63, 38% Upside: The best-case scenario assumes the higher level of VPC while increasing the amount of customer balances held on the platform at a ~80bps net yield. This implies 78% gross profit growth and 38% upside to the current share price with a 5.5x EV/GP multiple.

Downside Cases

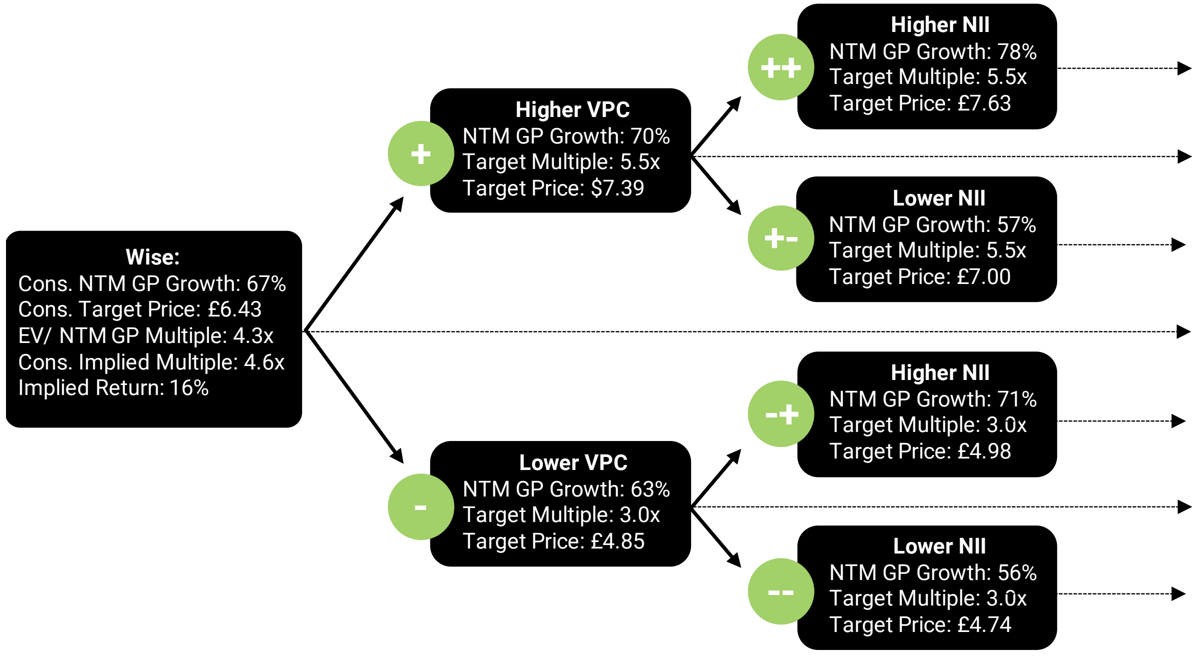
(-) £4.85, 12% Downside: This scenario assumes VPC does not recover and stays at the most recently reported ~£4,500 level with the impact of this flowing through to lower volume. This implies 63% gross profit growth and 12% downside to the current share price with a 3.0x EV/GP multiple.

(-+) **£4.98, 10% Downside:** This scenario assumes the lower level of VPC persisting, but customer balances held on the platform grow faster at a ~80bps net yield. This implies 71% gross profit growth and 10% downside to the current share price with a 3.0x EV/GP multiple.

(–) **£4.74, 14% Downside:** The worst-case scenario sees lower VPC persisting, while Wise shares back a greater portion of the yield with customers than current expectations while holding balance growth in-line with consensus expectations. This implies 56% gross profit growth and 14% downside to the current share price with a 3.0x EV/GP multiple.

DECISION TREE & CONSENSUS OUTLOOK

Outcome Tree & Reward/Risk



Wise:
Cons. NTM GP Growth: 67%
Cons. Target Price: £6.43
EV/ NTM GP Multiple: 4.3x
Cons. Implied Multiple: 4.6x
Implied Return: 16%

+ **Higher VPC**
NTM GP Growth: 70%
Target Multiple: 5.5x
Target Price: $7.39

++ **Higher NII**
NTM GP Growth: 78%
Target Multiple: 5.5x
Target Price: £7.63

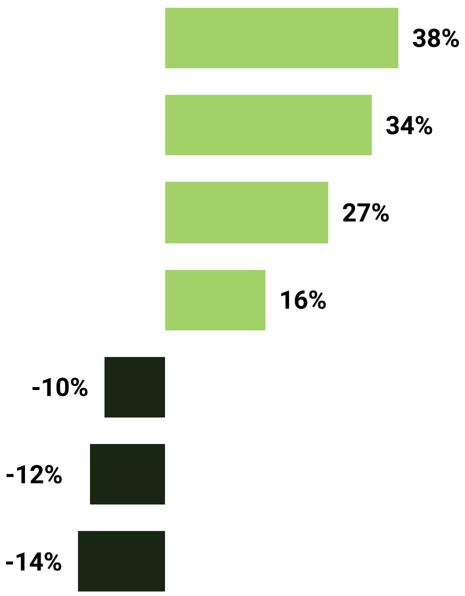
+- **Lower NII**
NTM GP Growth: 57%
Target Multiple: 5.5x
Target Price: £7.00

\- **Lower VPC**
NTM GP Growth: 63%
Target Multiple: 3.0x
Target Price: £4.85

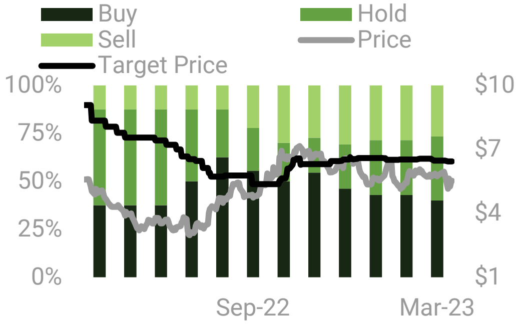
-+ **Higher NII**
NTM GP Growth: 71%
Target Multiple: 3.0x
Target Price: £4.98

-- **Lower NII**
NTM GP Growth: 56%
Target Multiple: 3.0x
Target Price: £4.74

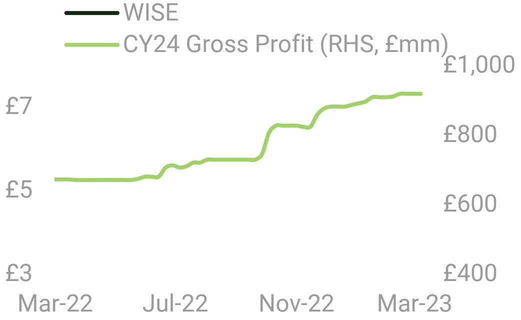
12-Month Price Return



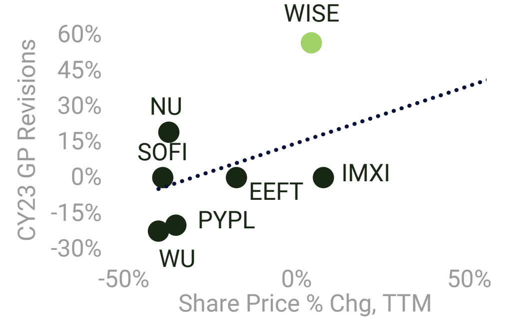
Sell-Side Ratings Distribution



Price Performance vs. Est. Revisions



Est. Revisions vs. Price Change, TTM[1]



Source: Company filings, FactSet

1) SOFI revision reflects contribution profit

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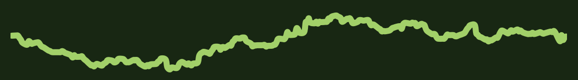
WISE TTM Price Performance



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(£ in millions, except where otherwise noted)

F3Q23 EARNINGS CALL RECAP

Takeaway: Wise reported its F3Q23 trading update on January 17th and shares closed down 11%. This was attributed to relatively weak personal volume per customer through the quarter and a consensus miss on personal and business volumes. Although total income beat by 10%, this was driven by higher-than-expected net interest income. The updated guidance also implies a QoQ decrease in total income, which represents the first instance since Wise went public. We recognize that Wise has maintained a significant valuation premium which likely has not gone unnoticed.

Results Recap: Wise released its F3Q23 trading update, reporting £26.4bn in total volumes with personal volumes of £19bn, missing total volume expectations by 9%. Personal and business revenues totaled £174mm/£51mm missing estimates by 11%/2%, respectively. The revenue beat was driven by a total transaction take rate of 85bps, 8bps above consensus expectations and +7bps QoQ. Management attributed 2bps of the take rate expansion to higher prices, with the remaining 5bps attributed to mix shifts in product and payment size. Wise also reported total income (revenue + NII) of £269mm, +10% above consensus expectations of £243mm. This beat was primarily driven by net interest income of £44mm vs. analyst expectations for £25mm.

Guidance Recap: With results, Wise upgraded its FY23 guidance and now expects total income growth of 68% - 72% compared to previous guidance of 55% - 60%. Management also expects adjusted EBITDA margins for F2H23 to be higher than 22% but maintains its medium-term target for adjusted EBITDA margins at or above 20%.

Incremental From the Call:

- **Guidance/Outlook:** The increase in top-line guidance implies an incremental ~£70mm relative to the previous guidance midpoint (8% higher at the midpoint and 6% above pre-print consensus). On EBITDA, management also provided additional commentary that the F4Q23 EBITDA margin will be sufficiently ahead of 22%. We attribute the strong margins to the NII outperformance flowing through to EBITDA. We understand management's reluctance to deviate from its provided EBITDA margin range of 20%, as we expect contributions from NII to potentially decrease as Wise launches/updates products to pay interest to customers.
- **4Q Deceleration:** According to the updated guidance, implied growth for total income will decrease 2.4% in 4Q from +17.3% in 3Q. This represents the first quarter since being public that QoQ total income is expected to decrease. While management did not comment on the exact drivers of this, we expect F4Q will experience similar headwinds on personal volume per customer, as management disclosed that much of the incremental decrease in personal VPC was concentrated from customer cohorts sending $10,000 or more in volumes, predominately focused on discretionary spend denominated in USD. This cohort represents a considerable amount of platform volumes (anywhere between 25% and 50%) and is particularly sensitive to volume pull-forwards during times of interest rate volatility.
- **Net Interest Income:** The 10% top-line beat on total income was primarily driven by higher-than-expected net interest income. Management disclosed that the company will continue to rollout new products that may offset interest income. We believe the Street may continue to struggle modeling the contribution from interest income as Wise generates interest from 1) customer held balances on the BS and 2) a "management" fee for the interest products where consumers move funds off Wise's balance sheet and into a fund.
- **Share Repurchases:** The company received regulatory approval for share repurchases aimed to offset the dilutive impact of stock-based compensation. Although management did not disclose the total amount approved, it did report that the company intends to purchase up to £10mm through the remainder of FY23. While this currently represents an immaterial portion of S/O, management commented that the regulatory approval is a first step and that the company has a healthy eligible capital balance.

F3Q23 REPORTED VS. CONSENSUS

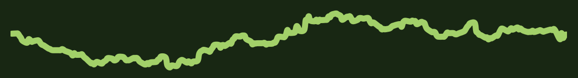
Line-Item	Actual	Consensus	Abs.▲	%▲
Personal Customers	**5.50**	**5.51**	-0.01	0%
growth (%, yoy)	*34%*	*34%*		
Business Customers	**0.32**	**0.32**	0.00	1%
growth (%, yoy)	*28%*	*27%*		
Total Customers	**5.80**	**5.83**	-0.03	0%
growth (%, yoy)	*33%*	*34%*		
Personal Volume	**£19.0**	**£21.4**	-£2.45	-11%
growth (%, yoy)	*26%*	*42%*		
Business Volume	**£7.4**	**£7.6**	-£0.18	-2%
growth (%, yoy)	*35%*	*38%*		
Total Volume	**£26.4**	**£29.0**	-£2.63	-9%
growth (%, yoy)	*28%*	*41%*		
Average Volume Per Customer	**£4,552**	**£5,010**	-£458	-9%
growth (%, yoy)	*-4%*	*6%*		
Total Transaction Revenue	**£225**	**£223**	£2.17	1%
▲ in % (bps, yoy)	*50%*	*49%*		
Net Interest Incomes	**£43.5**	**£24.9**	£18.6	75%
% of total income	*16%*	*10%*		*594bps*
Total Income	**£269**	**£243**	£25.5	10%
growth (%, yoy)	*79%*	*62%*		

FY23 Guidance	Old	New	+/-	Cons.	+/-
Total Income	**£864 - £891**	**£936 - £958**	**8%**	**£897**	6%
% Growth	*55% - 60%*	*68% - 72%*	*1,250bps*	61%	*892bps*

Source: FactSet, Visible Alpha, Company filings

WISE

WISE TTM Price Performance



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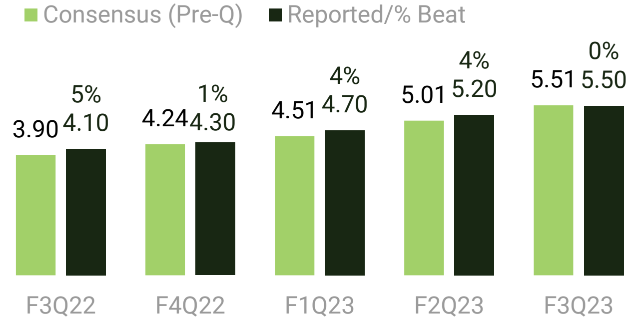
FINANCIAL TECHNOLOGY PARTNERS

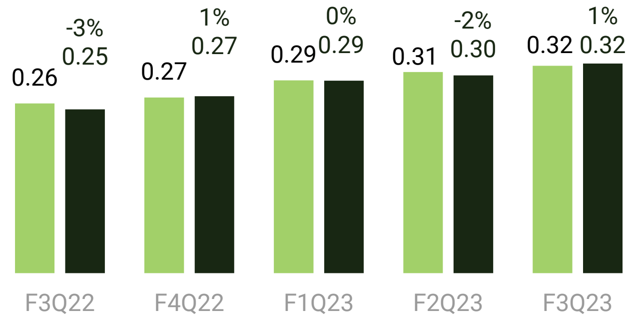
(£ in millions, except where otherwise noted)

REPORTED VS. CONSENSUS

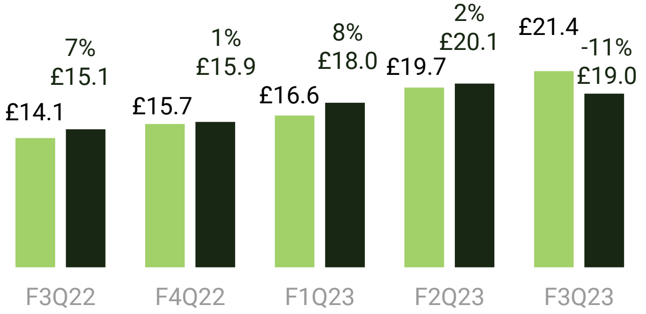
Personal Customers



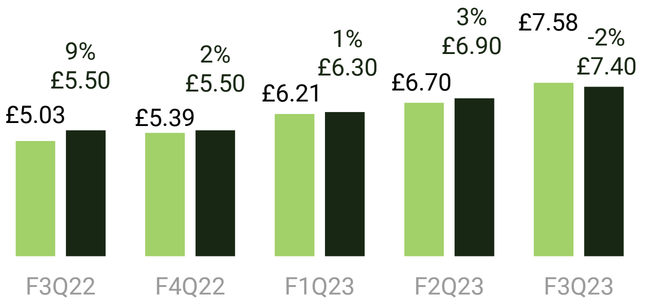
Business Customers



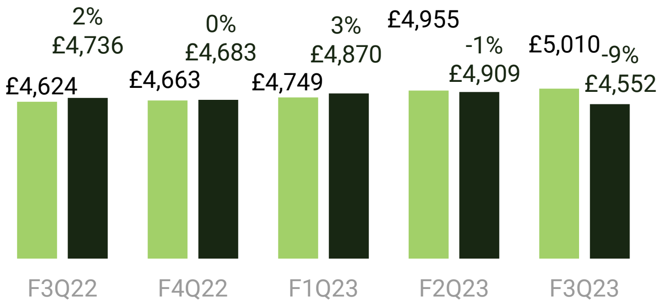
Personal Volume (bn)



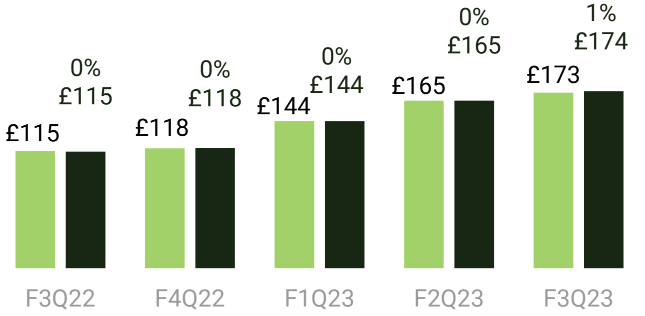
Business Volume (bn)



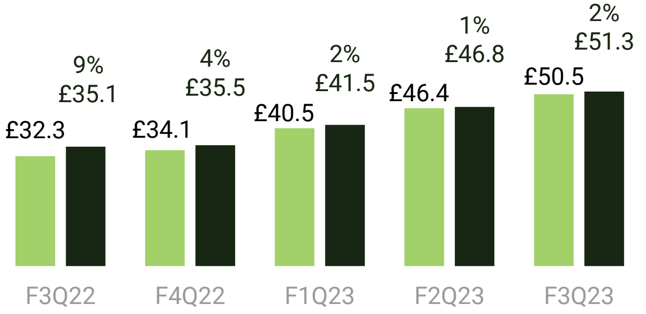
Average Volume Per Customer



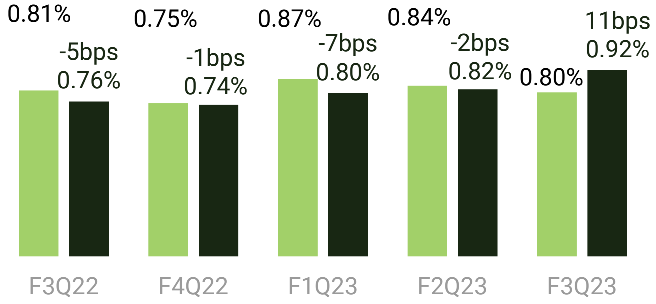
Personal Revenue



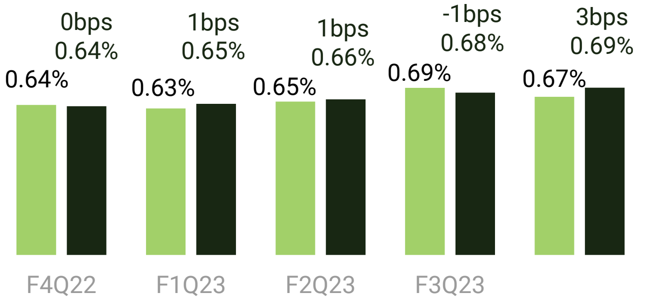
Business Revenue



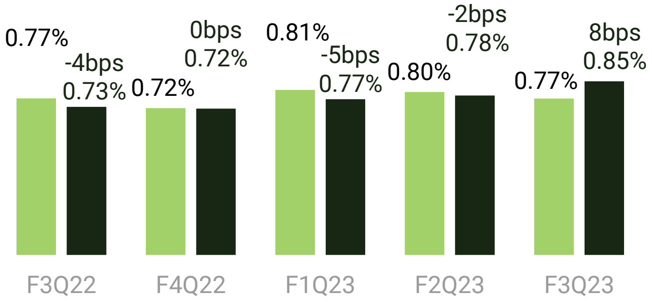
Personal Take Rate



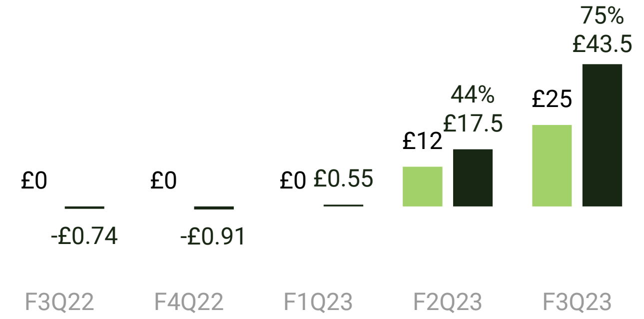
Business Take Rate



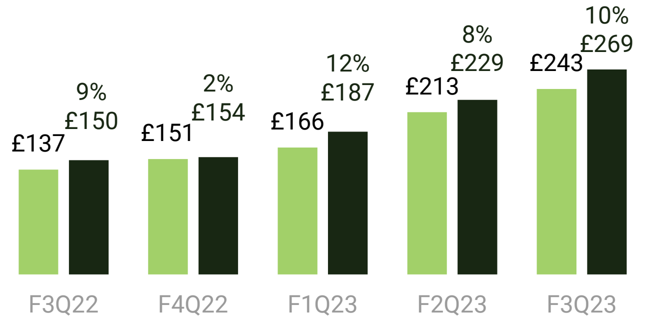
Total Transaction Take Rate



Net Interest Income



Total Income



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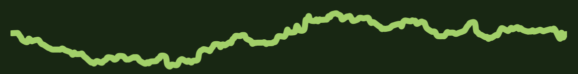

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F2H23 EARNINGS OUTLOOK

Wise is expected to announce its F2H23 update on April 28th, 2023. Going into the print, the following topics will likely be in focus:

- **Total Income:** With F3Q23 results, Wise raised its FY23 total income growth guidance 8% at the midpoint to 68% - 72%, implying £947mm for the fiscal year. This exceeded pre-quarter estimates for the fiscal year by 6%, as consensus expected top-line growth of 61% YoY to £897mm. With results, consensus has largely reflected the updated guidance and now anticipates top-line YoY growth of 70% to £945mm. This remains in-line with management forecasts. The updated guidance implies QoQ total income decline for the first time since going public, decreasing 2% from F3Q23 to £262mm.
- **Net Interest Income:** Consensus is forecasting a 22% QoQ decline in net interest income to £34mm in F4Q23. We believe this result is unlikely and represents potential upside to upcoming results, considering the trends in customer balances and the prevailing interest rate environment. Last quarter, the company exceeded consensus expectations for total income by 10%, largely driven by better-than-expected net interest income (£44mm vs. £25mm consensus estimate) and higher prices in the personal segment (+11bps vs. consensus estim.). Wise has benefitted from higher interest rates while maintaining the majority of the economics due to a lack of interest-earning products offered to customers. The company did not provide an exact timeline for the rollout of these products, but disclosed it expects adj. EBITDA expansion for F2H23 (above 22% realized in F1H23). We believe this would imply at least one more quarter of elevated net interest income before Wise begins returning a greater portion of interest back to its customers. Additionally, the Bank of England recently raised its benchmark interest rate 50bps to 4.0%, its highest level since 2008. This, coupled with the slow rollout of interest-earning products, would imply net interest income acceleration, counter to consensus forecasts. While we see potential for upside to NII, higher NII drove the F3Q beat, and the stock did not react positively. This is likely do to the fact that investors don't view NII as a core part of the business, and fundamental performance and execution in the core business is what is most critical.
- **Foreign Exchange Rates:** GBP/USD exchange rates saw significant volatility in Wise's F3Q23, with the GBP trading near parity by the end of September 2022 before recovering in F4Q22, resulting in management highlighting the swings in VPC. Specifically, management stated that with volatile rates in prior periods, volume was "pulled forward" increasing VPC in 1H and weighing on VPC in F3Q. At the same time, management was uncertain whether the impact is expected to last through F4Q. Wise stated this trend was particularly pronounced with customer cohorts sending large volumes (>$10,000) denominated in USD, with relative discretion over when transfers are made, and that this cohort represents anywhere between 25%-50% of platform volumes. In F4Q GBP/USD exchange rates have mostly stabilized. Therefore, VPC is likely to stabilize in F4Q, and in the event average volumes remain depressed, it is more likely to be attributed it to weakness in the core consumer than FX dynamics.

POST-RESULTS ONE-DAY ALPHA VS. NASDAQ

F4Q22	F1Q23	F2Q23	F3Q23
• Total volume/income 2% above expectations • FY23 Guidance: revenue growth of 30% to 35% and adj. EBITDA margins of 20%+	• Total volume/income beat consensus of 7%/12% • Volume per active customer in the personal segment expanded 7% YoY	• Total income beat by 8% driven of NII • FY23 Guidance Update: Total income to grow 55%-60% YoY; +20% CAGR over the medium-term	• Missed total volume expectations of 9% • Reported total income beat by 10% driven by higher NII • NII of $44mm, above expectations of $25mm

NET INTEREST INCOME SENSITIVITY (REVENUE IMPLICATIONS)

Customer Balances	Net Yield 0.40%	0.45%	0.50%	0.55%	0.60%
£5,918	-2.5%	-1.9%	-1.4%	-0.8%	-0.3%
£6,657	-1.9%	-1.3%	-0.7%	-0.1%	0.6%
£7,397	-1.4%	-0.7%	0.0%	0.7%	1.4%
£8,137	-0.8%	-0.1%	0.7%	1.4%	2.2%
£8,876	-0.3%	0.6%	1.4%	2.2%	3.0%

Customer Balances	Net Yield 0.40%	0.45%	0.50%	0.55%	0.60%
£5,918	£524	£527	£529	£532	£535
£6,657	£527	£530	£533	£537	£540
£7,397	£530	£533	£537	£541	£544
£8,137	£532	£537	£541	£545	£549
£8,876	£535	£540	£544	£549	£553

Source: Company filings; FactSet

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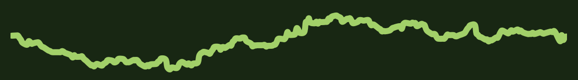
WISE

WISE TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

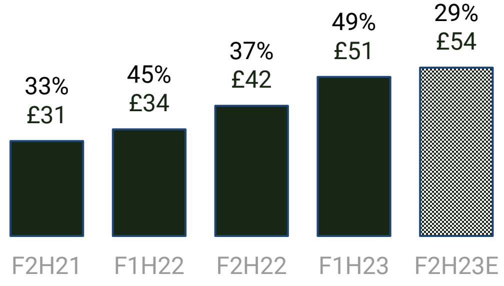
2H23 CONSENSUS ESTIMATE RANGES

(£ in millions)

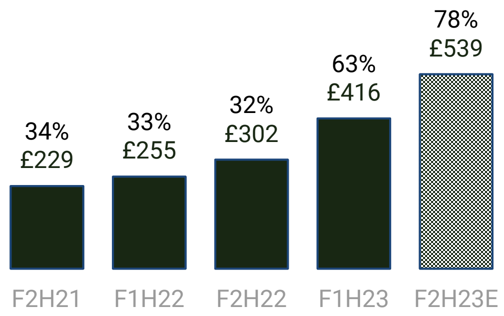
	Low	Average	High
Total Volume - Personal (bn)	**£39**	**£40**	**£43**
growth (%, yoy)	25%	28%	40%
Total Volume - Business (bn)	**£15**	**£15**	**£16**
growth (%, yoy)	33%	37%	46%
Total Volume (bn)	**£54**	**£54**	**£55**
growth (%, yoy)	28%	29%	32%
Business Revenue	**£98**	**£103**	**£106**
growth (%, yoy)	39%	45%	51%
Personal Revenue	**£350**	**£356**	**£367**
growth (%, yoy)	50%	53%	58%
Net Interest Income	**£17**	**£85**	**£104**
growth (%, yoy)	NA	NA	NA
Total Income	**£456**	**£539**	**£564**
growth (%, yoy)	51%	78%	86%
Cost of Sales	**£145**	**£188**	**£201**
growth (%, yoy)	41%	82%	95%
Gross Profit	**£336**	**£363**	**£396**
Gross Margin (% of Revenue)	74%	67%	70%
Total Operating Expenses	**£248**	**£267**	**£290**
growth (%, yoy)	46%	58%	71%
Operating Income	**£78**	**£92**	**£122**
Operating Margin (% of Revenue)	17%	17%	22%
Net Income	**£55**	**£67**	**£92**
Net Income Margin (% of Revenue)	12%	12%	16%

SEMI-ANNUAL CONSENSUS ESTIMATES & OPTION ACTIVITY

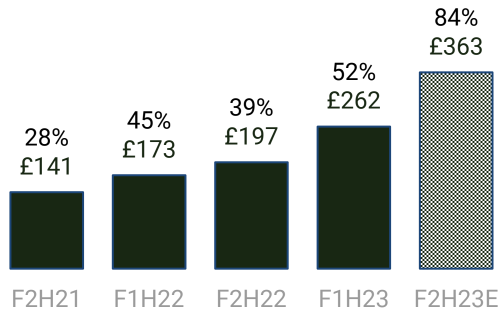
Volume (bn)/YoY Growth



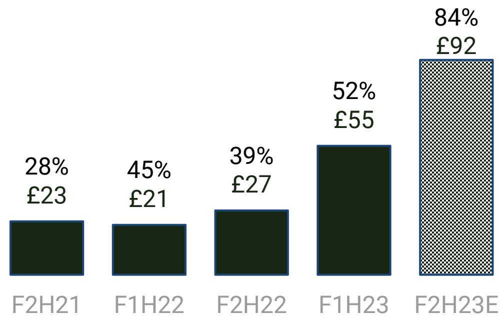
Total Income/YoY Growth



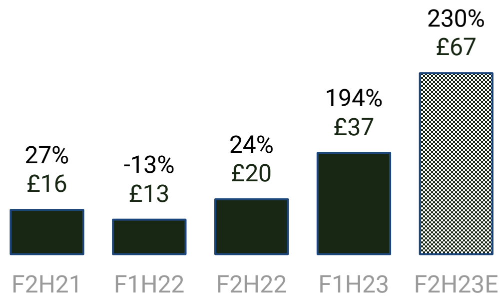
Gross Profit/YoY growth



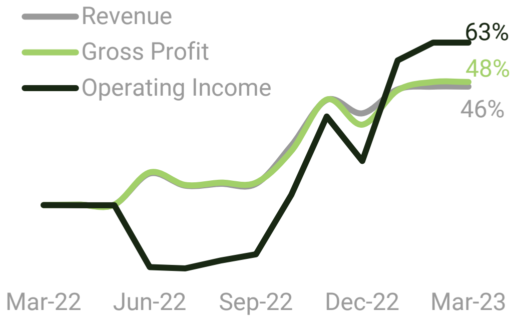
Operating Profit/YoY Growth



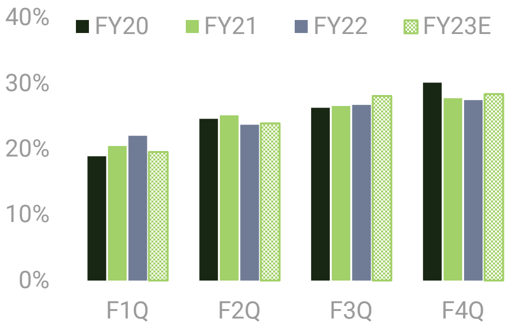
Net Income/YoY Growth



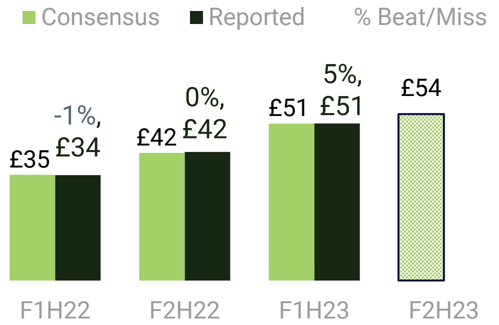
F4Q23 Cons. Revisions



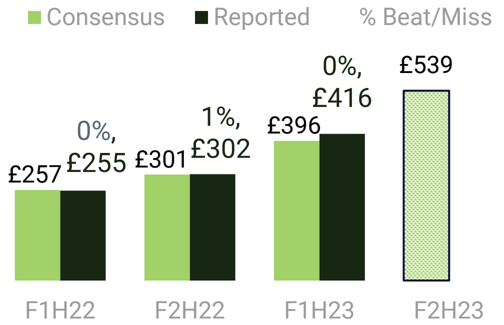
Revenue Seasonality



Volume Cons. vs. Reported (bn)



Revenue Cons. vs. Reported



Source: Company filings
1) FactSet

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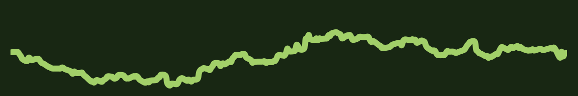
WISE TTM Price Performance



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FINANCIAL TECHNOLOGY PARTNERS

QUESTIONS FOR MANAGEMENT

Fundamentals:

1) Where does management see the long-term operating margins for the business? What is the roadmap to get there?
2) How does management plan on managing expenses in the current environment? Is the priority investing in growth or for near-term incremental savings?
3) The updated total income guidance for FY23 implies a sequential decline in revenue, what is driving this slowdown? Is it the weaker macro environment or increased competition, a combination of both, or other factors?

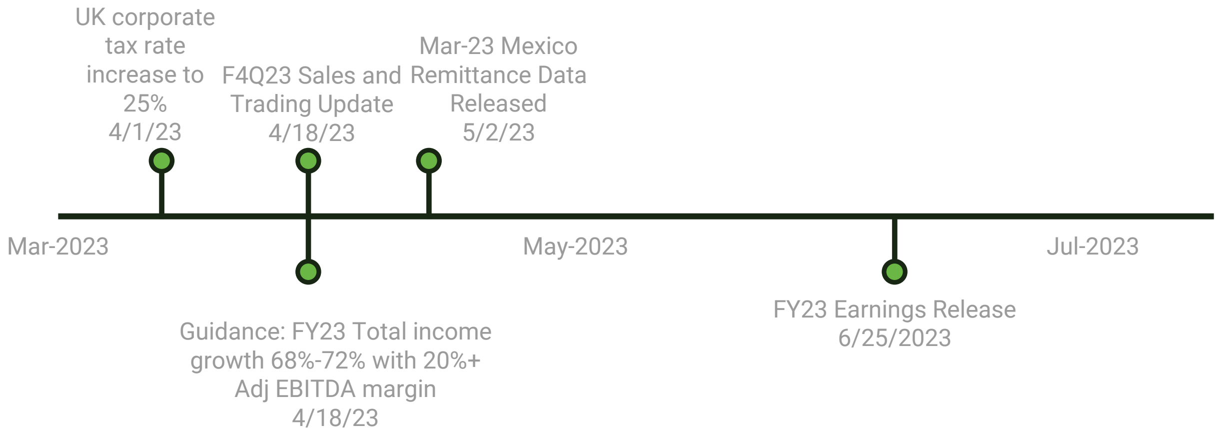
General:

4) How much of an impact is the shift in the interest rate environment expected to have on the business? Particularly surrounding Wise Account Balances?
5) With newly acquired customers, where are they primarily coming from? Is Wise winning customers from other digitally native providers or the more traditional players in the space?
6) Does management have any data it can share on engagement levels with the app? How frequently are consumers interacting with the company's products?
7) Can management discuss the customer acquisition strategy. Is the focus on expanding on the corridors Wise already serves, going deeper in existing corridors, or a mix of both?
8) How should investors think about the impact to NII now that interest is being provided to some customers on their stored balances?

Products:

9) What is the timeframe for rolling out products that provide interest back to customers in other geographies, given it is only available in the U.K currently?
10) The Wise Business product supports small businesses that may not get the same levels of support from their traditional bank. How will the company keep businesses using the product as they grow?
11) Can management elaborate on the attach rate on the card product? What type of consumers does Wise see adopting that product the most?

POTENTIAL CATALYSTS



UK corporate tax rate increase to 25%
4/1/23

F4Q23 Sales and Trading Update
4/18/23

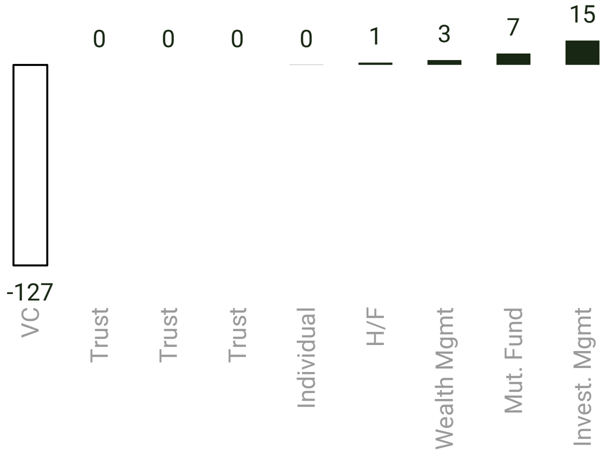
Mar-23 Mexico Remittance Data Released
5/2/23

Guidance: FY23 Total income growth 68%-72% with 20%+ Adj EBITDA margin
4/18/23

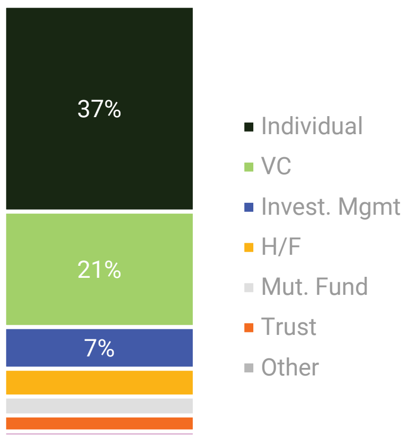
FY23 Earnings Release
6/25/2023

SHAREHOLDER ANALYSIS

Six-Month Position Changes (mm)



Ownership Breakdown



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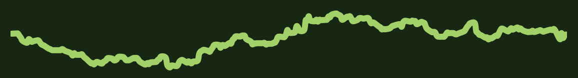

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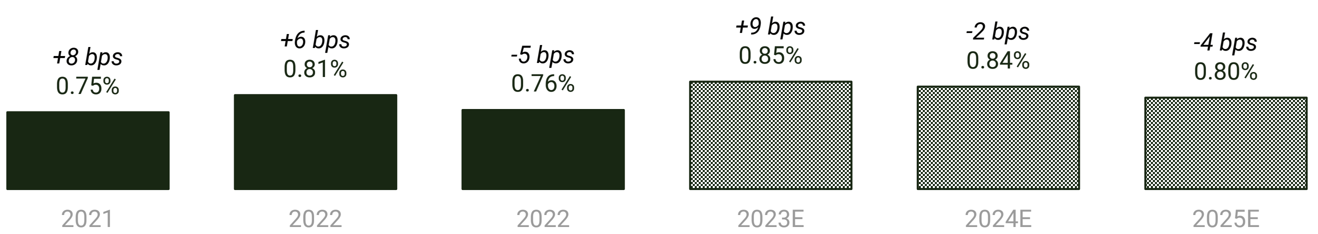
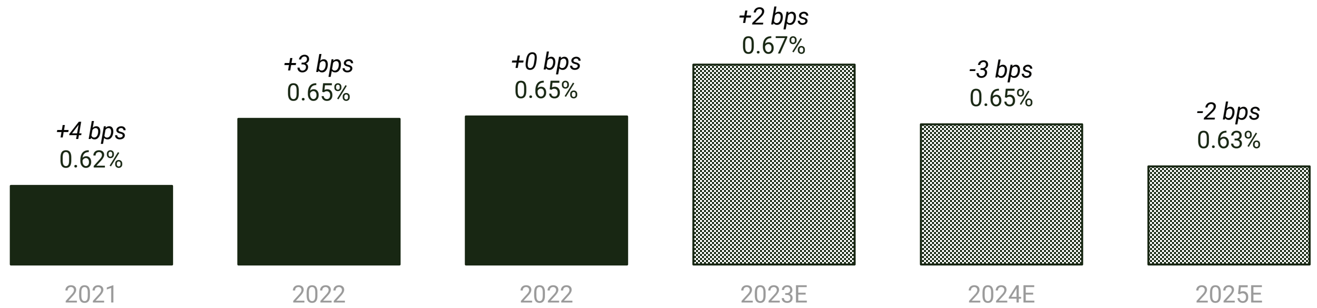
COMPANY RATIOS/MARGIN ANALYSIS

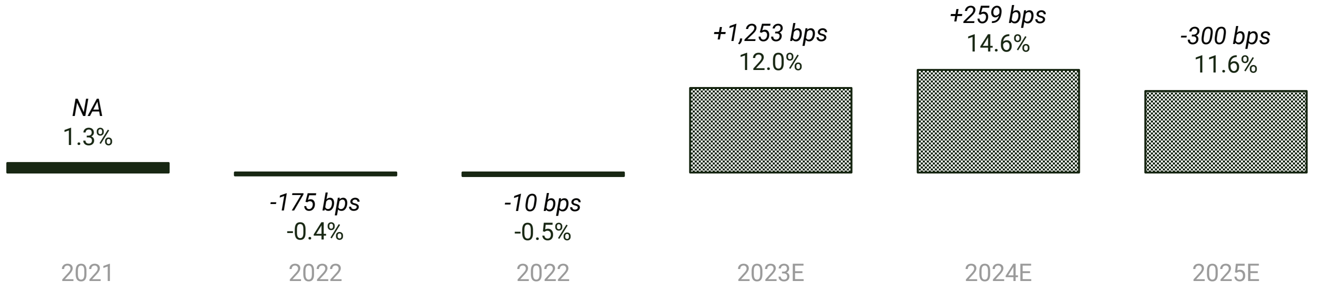
Personal Take Rate



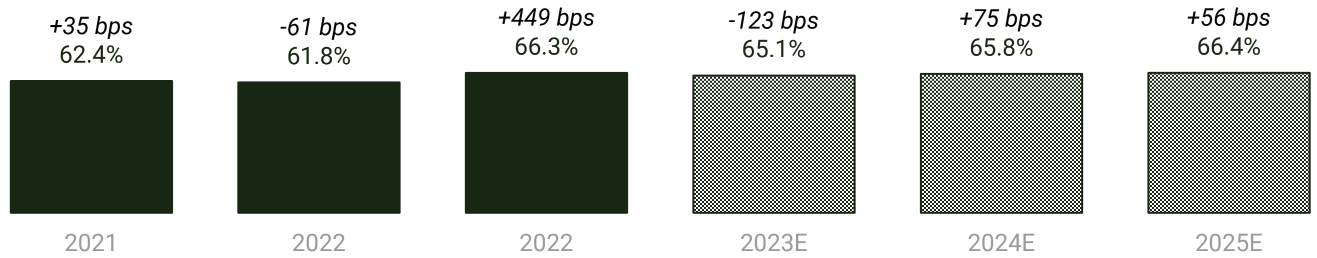
Business Take Rate



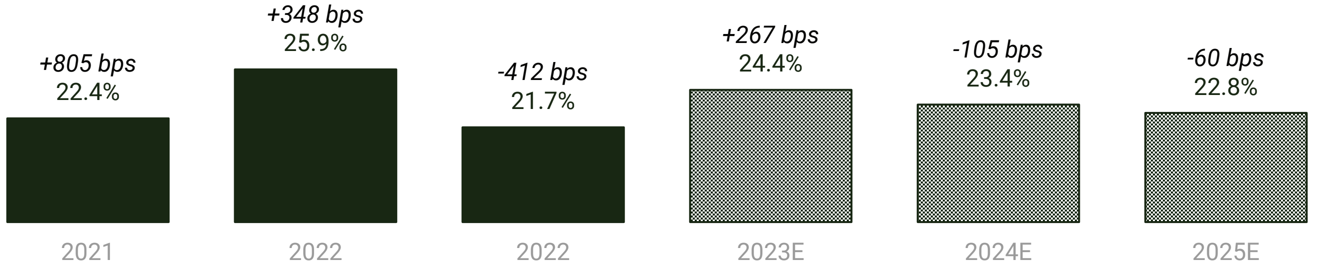
Net Interest Income as a % of Total Income



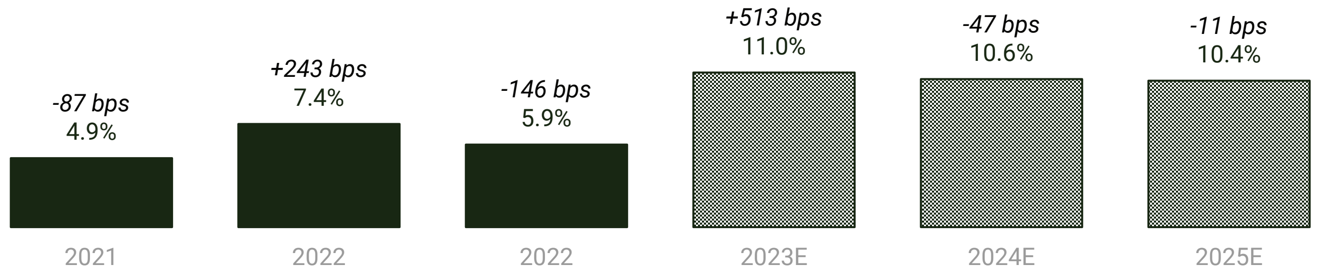
Gross Margin



Adjusted EBITDA Margin



Net Income Margin



Source: Company filings; FactSet

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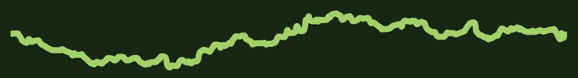

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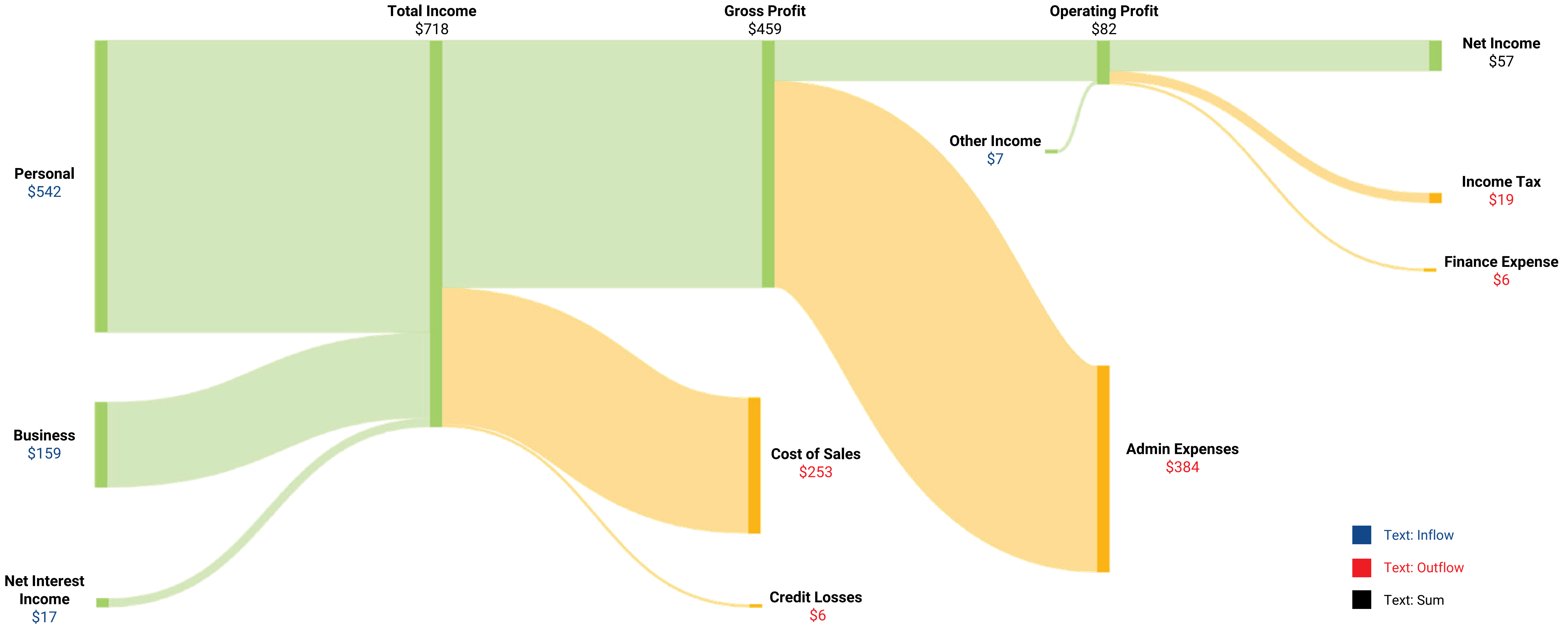
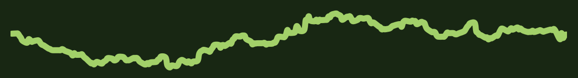
P&L VISUALIZATION – TTM



Source: Company filings; FactSet

1) Represents H2FY22 – H1FY23

WISE TTM Price Performance



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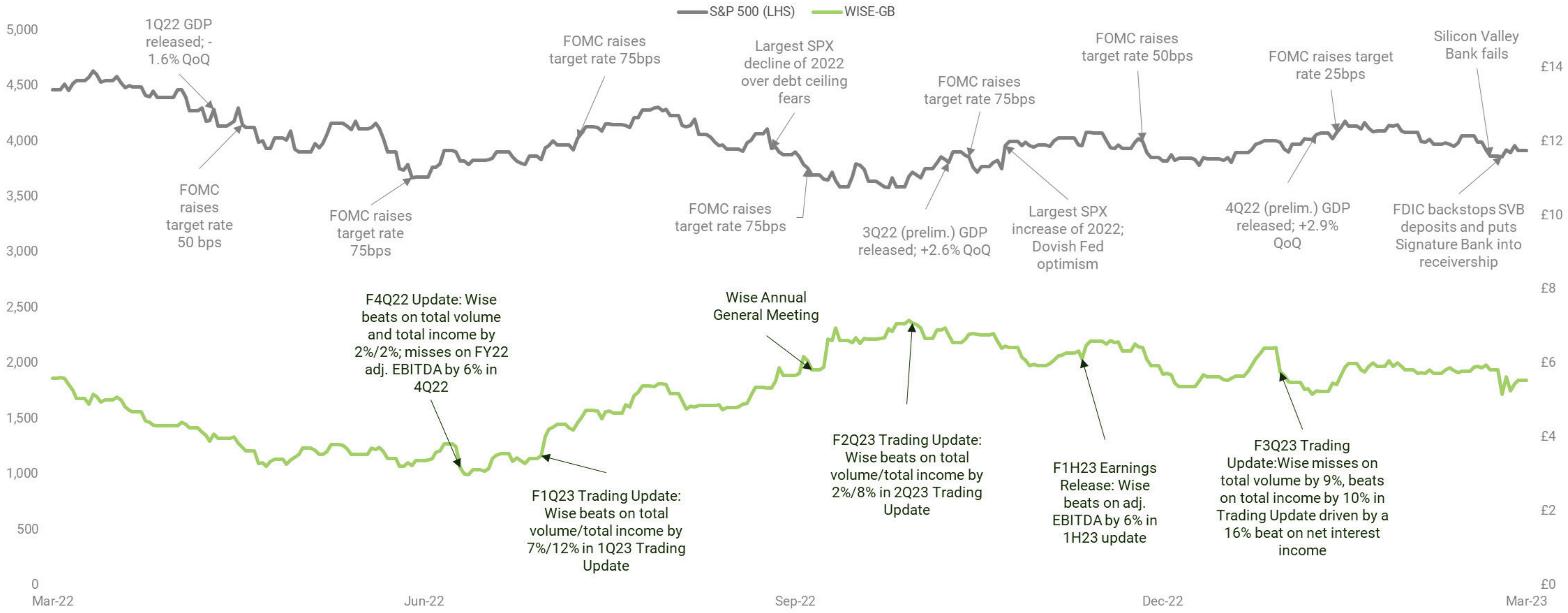
PRICE PERFORMANCE WITH COMMENTARY VS. S&P 500



1Q22 GDP released; -1.6% QoQ

FOMC raises target rate 50 bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

FOMC raises target rate 75bps

Largest SPX decline of 2022 over debt ceiling fears

FOMC raises target rate 75bps

3Q22 (prelim.) GDP released; +2.6% QoQ

Largest SPX increase of 2022; Dovish Fed optimism

FOMC raises target rate 50bps

4Q22 (prelim.) GDP released; +2.9% QoQ

FOMC raises target rate 25bps

Silicon Valley Bank fails

FDIC backstops SVB deposits and puts Signature Bank into receivership

F4Q22 Update: Wise beats on total volume and total income by 2%/2%; misses on FY22 adj. EBITDA by 6% in 4Q22

F1Q23 Trading Update: Wise beats on total volume/total income by 7%/12% in 1Q23 Trading Update

Wise Annual General Meeting

F2Q23 Trading Update: Wise beats on total volume/total income by 2%/8% in 2Q23 Trading Update

F1H23 Earnings Release: Wise beats on adj. EBITDA by 6% in 1H23 update

F3Q23 Trading Update:Wise misses on total volume by 9%, beats on total income by 10% in Trading Update driven by a 16% beat on net interest income

Source: Company filings; FactSet

Financial Technology Partners LP & FTP Securities LLC

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Client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as clients:* Wise

Investment Banking Client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as investment banking clients*: *Wise*

Non-Investment Banking Client, Securities-Related client: *FTP Securities LLC has not had within the past 12 months, any of the following companies as non-investment banking, securities related clients: Wise*

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