

Payments, Processors & IT Services

Weekly "Navigator"

Industry Overview

MA to report on 1/31

Buy-rated Mastercard (MA) reports on 1/31. Overall, we are comfortable with consensus C4Q forecasts based on V's results and the leading indicators we track. We anticipate MA's initial F24 revs guidance to be roughly in-line with BofAe/Street at 11%/12%. Following V's print, Street now likely expects modest deceleration in Jan. MTD metrics, and our 1Q MA estimates are below Street. Variables to watch include tougher 1H crossborder comps, diminished FX volatility, and client incentives. Though MA remains wellowned, we don't expect much stock price volatility around the print. Preview here.

SOFI to report on 1/29

Neutral-rated SOFI (SOFI) reports before the market on 1/29. We expect investors to be most focused on 2024 guidance and growth drivers, as well as details on SOFI's loan sale agreements. We expect SOFI to highlight that 2024 growth will be driven by the Technology and Financial Services segment and investors will be looking for details on product drivers and timing. While we expect credit to remain solid, any weakness on credit or fair value write-downs will likely weaken sentiment. We expect SOFI to achieve GAAP net income profitability in 4Q23 and guide for the same in 2024.

Hosting PAYX management meetings on 1/29

We will be hosting in-person meetings with PAYX's CEO, John Gibson, and CFO, Robert Schrader, on 1/29 in New York. Topics of discussion will likely include health of the SMB market, retention trends, growth trajectory of the PEO business, update on the key selling season, as well as the outlook for the impact of broader macro trends like unemployment and interest rates on the business for the year.

Global IT Services call on 1/30

Please join us and our global counterparts Kunal Tayal, Fred Boulan, and Aditya Buddhavarapu on January 30, at 8am ET for a discussion on the Global IT Services sector. This call will explore current trends surrounding IT Services, including the evolving demand environment and competitive landscape as well as market outlook and top picks for 2024 across key regions.

Other earnings next week

Neutral-rated ADP reports on 1/31. We expect a generally in-line print and unchanged revs/EPS guide. Outlook for bookings and retention could be slightly upticked. Potential reacceleration of the PEO segment will also be in focus, along with how macro trends of rising unemployment and stagnating rates are affecting the core business.

Underperform-rated GIB reports on 1/31. Investor focus will be on the demand environment, Build and Buy strategy, and ability to leverage IP revs to drive growth. **Underperform-rated DXC** reports on 2/1, and this will be the new CEO's first earnings call. We will be listening for an update on a potential glidepath towards positive top-line rev growth, and strength in demand environment between GBS and GIS segments.

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26 January 2024

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Weekly "Navigator"

The goal of our Weekly "Navigator" is to provide investors in the Payments, Processors & IT Services space with unique insights into key upcoming events and potential catalysts for the sector, while analyzing important developments from recent weeks. The Navigator also provides a concise, real-time summary of where we stand on each stock in our coverage universe, as well as charts detailing absolute and relative performance.

Top Picks in Payments

Company	Ticker	Rating	What Gives Us Conviction?
Block	SQ	Buy	 3Q print was a clear positive catalyst as SQ provided a defined timeframe to achieve "Rule of 40" by 2026, consisting of mid-teens+ gross profit (GP) growth and mid-20% adj. op. inc. (AOI) margin, implying nearly \$3B of AOI in '26. SQ also announced its first ever share buyback program of \$1B; Initial '24 guide (not expected) of \$2.4B of adj. EBITDA and \$875M in AOI were also well ahead of consensus. For '24 gross profit we believe buy-side is modestly below sell-side at 16-17% growth. CEO Dorsey needs to demonstrate execution in his new role running the Square (seller) business, for example by driving success of SQ's new verticalized/localized sales model.
Fidelity National Information Services	FIS	Buy	 Catalyst path includes close of Worldpay transaction and clean RemainCo guide (1Q24), followed by Investor Day in 2Q24. RemainCo's simplified business model and new comp set should improve sentiment in the stock. Big question is normalized growth for Banking segment (~75% of RemainCo). We think initial Banking guide for '24 will be ~2-3% (ex. dis-synergies). While the CFO change announced on 8/22/23 was not widely anticipated, FIS appears to be bringing in a more experienced CFO (James Kehoe from Walgreens) ahead of closing the Worldpay transaction.
Global Payments	GPN	Buy	 While '23 was a de-leveraging year, GPN will soon be in a position to deploy its balance sheet more actively. Larger buybacks could be on tap in '24, and GPN could re-engage with M&A. Investor reaction was mixed to 12/14/23 reports of GPN potential buying FOUR, which GPN subsequently denied. Despite macro uncertainty and worsening FX, GPN delivered an in-line+ 3Q while maintaining revs guide and inching up EPS; organic merchant vols growth was robust and EVO cost synergies were raised. Current valuation does not adequately reflect the strength of GPN's competitive positioning and execution. Potential Analyst Day in 1H24 could help investors unpack the story better.
Accenture	ACN	Buy	 Premiere global IT services franchise, which is likely to remain a share-taker regardless of economic backdrop. Pristine earnings quality, balance sheet, and cash flow generation/ deployment are also highlights. ACN reported solid F1Q results across the P&L, with bookings meaningfully ahead of expectations. ACN also reiterated F24 guidance of 2-5% cc revs growth, which continues to assume no improvement in discretionary spending. Initial F2Q guide was modestly below Street (ACN citing softer UK market), and management declined to provide quarterly bookings guidance but suggested a solid pipeline. See Al as more of an opportunity than a threat, as Accenture should win new consulting assignments to help clients navigate Al. However, this incremental work is likely to come on at a measured pace.
American Express	AXP	Buy	 Premier Payments franchise, that drives 80% of revenue from spending volumes/fees and just 20% from lending; Increased focus on expense growth/margins. Spending volumes have tempered, but remain robust and within the company's expectation to hit its top and bottom-line growth targets. Higher revenue and EPS growth model warrant premium valuation.

Source: BofA Global Research



Payments & Processors Coverage Snapshot

Company	QRQ	Rating	PO	Verage Snapshot Thesis
Payments/	Processors	_		
ADP	B-2-7	Neutral	\$243	 Upgraded to Neutral on 1/17/2024 as we believe the worst is over in the PEO segment and F2Q will be the trough for growth and margins. Our analysis suggests payroll stocks tend to lag during the initial phase of a rising unemployment cycle, and following significant LTM underperformance, we saw more balanced risk/reward in ADP. On F2Q call, expect ADP to reiterate initial F24 guidance of 6%-7% YoY top line growth and 10%-12% Adj EPS growth; bookings and retention guide could be upticked this quarter or next.
COIN	C-3-9	Under- perform	\$79	 3Q transaction volumes and transaction revenues missed ests as crypto market volatility remained weak. That said, 4Q volumes have seen meaningful re-acceleration amid higher bitcoin prices. The 3Q23 print beat on adj EBITDA, but did so with higher take rates and better OpEx leaving key questions around longer-term trends like retail trading volumes and revenue diversification unanswered. Expect regulatory and legal overhangs (ie, SEC v COIN) to persist; on January 10th, the SEC approved 11 BTC spot ETFs to begin trading, and while COIN will earn fees as custodian for several of these products, this could be a double-edged sword, as ETFs represent a form of competition for retail bitcoin investors, and custodial spreads will likely be quite thin.
DLO	C-2-9	Neutral	\$22	 Downgraded to Neutral from Buy on 8/3/23, due to risks regarding further margin declines beyond '23, uncertain pace of top-line deceleration, heightened regulatory scrutiny in Argentina, and volatility in country mix (ie, Nigeria). Niche payments platform provider with an enviable customer base (i.e. AMZN and GOOG) serving processing of eCommerce payments in emerging market geographies; medium-term guidance for "rule of 100%+" financial profile (adding together gross profit growth and gross profit/adjusted EBITDA) compares favorably to the coverage universe. 3Q results were mixed, with top-line miss mostly due to devaluation of Nigerian Naira and macro weakness in Argentina; '23 guidance was reaffirmed, and 4Q estimates should be achievable; CFO will step down in 1Q24 to pursue other opportunities.
FIS	B-1-7	Buy	\$75	 Catalyst path includes close of Worldpay transaction and clean RemainCo guide (1Q24), followed by Investor Day in 2Q24. RemainCo's simplified business model and new comp set should improve sentiment in the stock. Big question is normalized growth for Banking segment (~75% of RemainCo). While the CFO change announced on 8/22/23 was not widely anticipated, FIS appears to be bringing in a more experienced CFO (James Kehoe from Walgreens) ahead of closing the Worldpay transaction.
FI	B-1-9	Buy	\$162	 Clover remains a competitive differentiator for Merchant; Fintech and Payments segments performing reasonably well also. Expect buybacks to remain primary form of capital deployment; defensive name in a choppy macro that has been showing Merchant segment revs outperformance vs. comps (albeit with some transitory tailwinds). 3Q highlighted the strength of FI's Acceptance segment, and F23 guidance was raised for revs, margins, EPS and FCF. November 2023 Analyst Day highlighted robust multi-year outlook.
FLYW	C-1-9	Buy	\$31	 Unique blend of vertical software and a payments platform offering a compelling value prop. Target verticals are underpenetrated for electronic payments, as highlighted at May 2022 Analyst Day. 5+ year financial targets are compelling; 30%+ revenue CAGR and 25%+ adjusted EBITDA margins. M&A could provide upside. Management execution has been strong since mid-'21 IPO. View 3Q print choppiness as more of a one-off situation.
FOUR	C-1-9	Buy	\$85	 We are bullish on the long-term story, as end-to-end conversions, new verticals and share gains remain important and idiosyncratic growth drivers. Solid 4Q outlook and commentary/disclosures reinforcing confidence in FOUR's '24 financial targets, which suggest potential upside to consensus; 3Q top line metrics missed consensus but adj. EBITDA and FCF beat. FOUR is led by a management team with a generally strong execution track record.
GPN	B-1-8	Buy	\$165	While '23 was a de-leveraging year, GPN will soon be in a position to deploy its balance sheet more actively. Larger buybacks could be on tap in '24, and GPN could re-engage with M&A. Investor reaction was mixed to 12/14/23 reports of GPN potential buying FOUR, which GPN subsequently denied.



				 Despite macro uncertainty and worsening FX, GPN delivered an in-line+ 3Q while maintaining revs guide and inching up EPS; organic merchant vols growth was robust and EVO cost synergies were raised. Current valuation does not adequately reflect the strength of GPN's competitive positioning and execution. Potential Analyst Day in 1H24 could help investors unpack the story better. Upgraded to Buy from Neutral on 12/6/23, driven by the company's high quality business model,
JKHY	B-1-7	Buy	\$186	 solid bookings and pipeline, more palatable valuation, and prospect for margin expansion and FCF conversion to improve in F25 (Jun). Improving macro conditions should pose a tailwind to growth, as a more benign operating environment for FIs may lead to incremental IT spend. Solid F1Q24 were driven by strong complementary sales, as well as continued core takeaways and debit/credit signings. Adj. op. margins show signs of improvement, with increased operating leverage driving a small 10bps raise in F24.
МА	B-1-7	Buy	\$484	 Still see long-term/secular displacement of cash in favor of electronic payments. Believe MA's model would be quite resilient in a recession. Expect initial 2024 guidance on 4Q earnings call to be relatively in-line with Street. X-border travel, FX volatility, and rebates/incentives are potential wildcards. MA continues to enjoy a significant competitive moat, buoyed by a culture of technology innovation.
MQ	C-2-9	Neutral	\$7	 Modern card-issuing platform providing customizable card issuing, transaction processing, and program management. The Block renewal relieves an overhang, but the new terms and related accounting changes will likely mean numbers are messy for next 3 quarters, and client concentration remains high. Post-Investor Day, we believe new M-T growth targets (20% growth in revs/GP and HSD/LDD%+ adj. EBITDA margins) seem more realistic.
NVEI / YNVEI	C-1-7	Buy	\$29 / C\$39	 Shares pulled back significantly following disappointing 2Q results, which lowered '23 guidance for all metrics as well as medium-term revenue guidance to 15-20% (just five months after it was adjusted to 20%+ from 30%+); management attributed '23 rev guidance cut to longer-than expected implementation timelines for large global customers and a contract exit. Provider of fully integrated merchant acquiring and payment gateway services. While meaningful crypto exposure spoiled 2022 performance, crypto is now only ~5% of rev. US iGaming and geographic expansion (i.e. Latin America) are potential future growth tailwinds. Paya acquisition should help with diversification.
PAYX	B-3-7	Under- perform	\$105	 Downgraded to Underperform on 4/3/2023 due to expectations of rising unemployment and lower rates which could create dual headwinds. Our analysis suggests payroll stocks tend to lag during initial phase of rising unemployment cycle. Shares traded down following the F2Q print on 12/21/23 as revenues on their largest segment missed. F24 Adj EPS guidance was ticked up slightly, though management sounded cautious on SMBs given the tougher macro conditions. Headroom for improvement in employment and rates has become much more limited. At current multiple, we see better risk/reward elsewhere.
PYPL	B-2-9	Neutral	\$66	 Downgrade to Neutral on 12/6/23; we see '24 as transition year, as new management seeks to earn credibility and drive sustained top-line improvement. The 2024 product offerings announced on 1/25 will likely take time to move the needle. Initiatives to improve TP growth may be taking longer than expected to gain traction; '24 Street estimates may be too high. However, new CEO will likely be more disciplined on Braintree pricing. PYPL still has a strong brand, balance sheet, and scale, but expect shares to be range-bound near-term. Product event hosted by new CEO on 1/25 was somewhat underwhelming for investors.
SQ	C-1-9	Buy	\$85	 3Q print was a clear positive catalyst as SQ provided a defined timeframe to achieve "Rule of 40" by 2026, consisting of mid-teens+ gross profit (GP) growth and mid-20% adj. op. inc. (AOI) margin, implying nearly \$3B of AOI in '26. SQ also announced its first ever share buyback program of \$1B; Initial '24 guide (not expected) of \$2.4B of adj. EBITDA and \$875M in AOI were also well ahead of consensus. For '24 gross profit we believe buy-side is modestly below sell-side at 16-17% growth. CEO Dorsey needs to demonstrate execution in his new role running the Square (seller) business, for example by driving success of SQ's new verticalized/localized sales model.
TOST	C-2-9	Neutral	\$18	 We downgraded TOST to Neutral (12/6/23) on intensifying competition and transitioning sales strategy which could weigh on SaaS ARPU growth and '24 top-line guide. Competitors are closing distribution & functionality gaps; our November 2023 restaurant POS survey showed Toast lagged Square and Clover.



				3Q did not feature the typical beat/raise on revenue we have seen from TOST since its IPO two years ago. '24 Adj. EBITDA could beat on costs, but TOST needs to continue investing in growth, and we would not envision sufficient adj. EBITDA generation to drive valuation support.
V	B-1-7	Buy	\$305	 We continue to see ample headroom in the long-term/secular displacement of cash in favor of electronic payments across the globe. We believe V's model would be quite resilient in a recession due to high levels of diversification and secular tailwinds, plus flexible opex structure. F1Q featured a top and bottom line beat but vols decelerated 80bps q/q (Reg II) and F2Q revs guide came in slightly below the street, while Jan. vols slowed due to weather. The F24 revs guide was unchanged, leaving it still F2H-loaded. On the F1Q print, V also announced shareholders voted to approve the class B share exchange program at the 1/23 annual meeting.
WEX	B-1-9	Buy	\$229	 Bullish on fundamentals, benefiting from secular tailwinds and strong competitive positioning. A beneficiary of rising gas prices and sustained robust demand for international travel globally. Fleet demand has been weak due to a "freight recession" but 2H23 could be a trough
WU	B-3-7	Under- perform	\$12	 WU continues to be a "show me" story, while structural concerns continue to swirl around the stock. Branded digital revs increased in 3Q for first time since 1Q22, and retail transaction growth improved to flat for first time since 2019. However, '23 guidance raise was again due to transitory tailwinds from Iraq, and 4Q estimates came down. October 2022 Analyst Day unveiled Evolve 25 strategy, with WU aiming to leverage core retail user base to drive growth in Digital and adoption of broader wallet solution. 3-year financial targets were underwhelming.

Source: BofA Global Research, Company data, Bloomberg

IT Services Coverage Snapshot

Company	QRQ	Rating	PO	Thesis
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IT Services	s			
ACN	B-1-7	Buy	\$379	 Premiere global IT services franchise, which is likely to remain a share-taker regardless of economic backdrop. Pristine earnings quality, balance sheet, and cash flow generation/ deployment are also highlights. ACN reported solid F1Q results across the P&L, with bookings meaningfully ahead of expectations. ACN also reiterated F24 guidance of 2-5% cc revs growth, which continues to assume no improvement in discretionary spending. Initial F2Q guide was modestly below Street (ACN citing softer UK market), and management declined to provide quarterly bookings guidance but suggested solid pipeline. See Al as more of an opportunity than a threat, as Accenture should win new consulting assignments to help clients navigate Al. However, this incremental work is likely to come on at a measured pace.
CTSH	B-3-7	Under- perform	\$66	 3Q revs was modestly below BofAe/Street, offset by margin/EPS outperformance. However, 4Q revs guide was below consensus, as CTSH indicated discretionary spending has continued to soften further driven by increased macro uncertainty. Expect in-line 4Q and '24 guide consistent w/ consensus; 1Q Street revs could be a touch high, '24 bookings comps stiffen, and broader questions remain surrounding post-'23 top-line growth. New CEO has business on a better trajectory, though tougher choices between growth and margins may lie ahead (ie, pursuit of large contracts).
DXC	C-3-9	Under- perform	\$21	 On 10/4/22, DXC confirmed discussions with private equity firm regarding a potential acquisition, and on 3/6/23 DXC indicated that these discussions had terminated without an offer being made. DXC deemed a bid from Atos in early 2021 as inadequate. We remain concerned about DXC's outsized exposure to more commoditized parts of the IT Services market (ie, infrastructure outsourcing). Recent CEO change was a surprise. F2Q24 results were in-line with Street, with the company suggesting recent improvements in converting pipeline to bookings. While F24 const-curr revs growth/adj. EPS guide was reiterated, we anticipate both macro and structural headwinds will continue in the near term. High exposure to more commoditized parts of the IT outsourcing market impeding the turnaround.
EPAM	C-3-9	Under- perform	\$233	 Downgraded to Underperform from Buy on 6/5/23 after surprising 2Q pre-announcement of weaker-than-expected growth, EPAM may also be suffering from diminished brand equity among clients following last year's headcount re-positioning post the start of the Russia/Ukraine war. Demand environment for discretionary IT Services remains soft (EPAM suggested ~85% exposure to "build"-related services), and the company's lack of cost cutting-related service offerings and low visibility on growth re-acceleration to management's traditional 20%+ growth target may pressure valuation beyond the near term.



GIB / YGIBA	B-3-9 /A-3-9	Under- perform	\$89 / C\$122	 While 3Q results were better than feared, 4Q revs were guided down below the Street, as discretionary spending is expected to remain sluggish in the near-term (though the worst seems to be over), and management surprisingly previewed the potential for '24 non-GAAP operating margins to decline y/y. '24 consensus revs growth of 4.5% is not demanding but also does not support current valuation multiple. GIB delivered soft F4Q const-curr revs growth and continued muted demand commentary. While GIB experienced solid demand for managed services and government solutions in F4Q, and management expressed confidence in the company's build and buy strategy, macro softness will likely weigh on GIB's organic const-curr growth profile. Relative valuation vs. comps (i.e., DXC) suggests shares of GIB could underperform in the near-term Overall, GIB's competitive position is solid, but certain business lines continue to weigh on revenue.
TASK	C-3-9	Under- perform	\$11	 Leading global provider of digital customer experience technology and services providing a mix of digital and omni-channel offerings. We downgraded to U/P on 5/9; We believe the company is losing visibility, while structural changes in client behavior could have implications for longer-term potential revenue growth in the business. Ongoing concerns around ChatGPT/generative AI displacing labor-intensive IT/BPO outsourcing businesses will also continue to be a sentiment overhang. 1Q results beat, but F2Q/F23 top-line was guided below expectations.
TWKS	C-2-9	Neutral	\$5	 Premium global technology consultancy that develops close relationships with C-level executives enabling transformation through the use of digital technologies. After several quarters of consecutive guide downs, management is seeing initial signs of demand stabilization, however, initial high-level 2024 growth commentary appears light, and visibility on client spending re-accelerating remains limited. Post-IPO execution has been quite mixed and Street communication has room to improve.
TTEC	B-2-7	Neutral	\$23	 Market leader in both business segments Engage and Digital, with high revenue visibility and admirable competitive positioning. Downgraded to Neutral on 10/10/22; Although we believe that near-term estimates are likely fine, the outlook suggests further softening in trends and limited visibility amid a tougher macro, while valuation (trades at a premium to comps) suggests somewhat balanced risk/reward Solid 2Q results and reiterated '23 guide, but cautious macro/demand commentary limits visibility
TIXT / YTIXT	B-1-9	Buy	\$13 / C\$18	 Leading and differentiated Digital customer experience provider and IT services specialist with attractive normalized financial growth and profitability profile 2Q results, guide, and commentary consistent with 7/13/23 update; Temporary supply/demand imbalances are largely resolved Updated outlook embeds additional conservatism and assumes no macro improvement in 2H23, with benefits from cost efficiency programs expected to improve 2H margins

Source: BofA Global Research, Company data, Bloomberg



Consumer Finance Coverage Snapshot

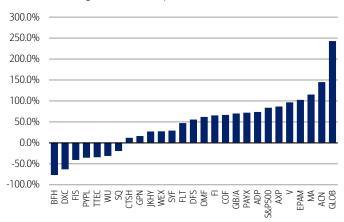
Company	QRQ	Rating	PO	Thesis
IT Services	s	_		
AXP	B-1-7	Buy	\$224	 Premier Payments franchise, that drives 80% of revenue from spending volumes/fees and just 20% from lending; Increased focus on expense growth/margins Spending volumes have tempered, but remain robust and within the company's expectation to hit its top and bottom-line growth targets. Higher revenue and EPS growth model warrant premium valuation
BFH	C-2-7	Neutral	\$35	 Downgraded to Neutral from Buy on 10/5/23 on headline risk from the potential CFPB late fee rule and a vulnerable cardholder base, offset by cheap valuation Private-label card issuer focused on smaller / medium sized merchants with a relatively outsized share of subprime borrowers compared to peers Earnings are particularly susceptible to late fee and credit, though trading at 80% of tangible book, risk / reward appears more balanced
COF	B-1-7	Buy	\$146	 Technology focused financial institution and one of the largest issuers of credit cards (#1 by cards issued) and auto loans (#3 by loans) in the U.S Full spectrum lender with a "barbell" strategy and in-line credit performance despite higher exposure to subprime consumers. Capital returns and loan growth are near-term positives.
DFS	B-1-7	Buy	\$118	 Upgraded to Buy from Neutral on 12/6/23 as card stocks tend to rerate higher as peak losses come into view, which we anticipate happening in 1H24 Operates a somewhat unique integrated issuer/network model that drives attractive economics 2024 loan growth and credit guide was disappointing, but seems conservative, in our view
OMF	C-1-7	Buy	\$54	 Subprime lending specialist with an attractive return profile, strong unit economics, and credit discipline Fixed funding cost base mitigates rising rate pressure in the near to medium term Buyback potential is solid and we do not see the \$1/share quarterly dividend as at-risk
SOFI	C-2-9	Neutral	\$9.50	 We downgraded Sofi from Buy to Neutral on 6/16/23 One-stop-shop financial service company that operates Galileo, a technology platform that offers services to ~90% of neobanks in the US.
SYF	B-2-7	Neutral	\$41	 Downgraded to Neutral from Buy on 12/13/22 on higher credit losses and lower discretionary spend. Private-label powerhouse with an enviable merchant partner portfolio Portfolio improvements and risk-share model help mitigate credit pressure in a downturn.

Source: BofA Global Research, Company data, Bloomberg

Stock Performance



Most of the coverage universe underperformed the S&P500

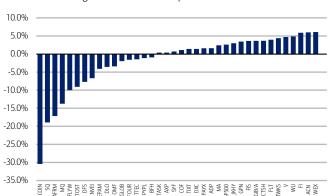


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 2: Year to Date

Most of the coverage universe has underperformed the S&P 500

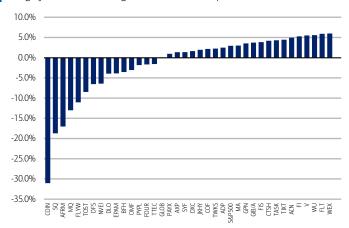


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 4: Last One Month

Roughly half of the coverage universe has underperformed the S&P 500

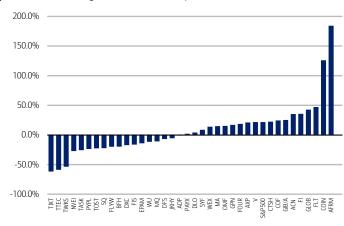


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 1: Last Twelve Months

Most of the coverage universe has underperformed the S&P 500

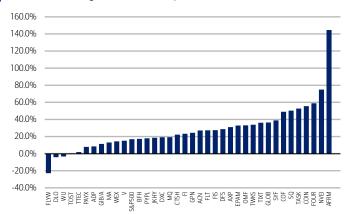


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 3: Last Three Months

Most of the coverage universe has outperformed the S&P 500

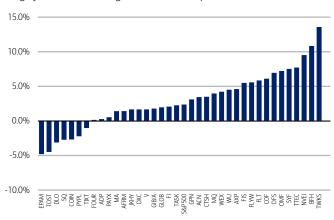


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 5: Last One Week

Roughly half of the coverage universe has outperformed the S&P 500



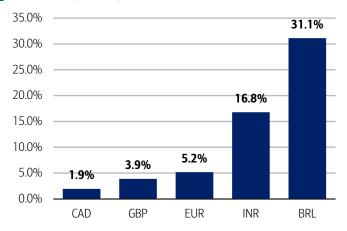
Source: BofA Global Research, Bloomberg



Currency Moves

Exhibit 6: Last Five Years - USD Strengthening/(Weakening)

USD has strengthened against most major currencies

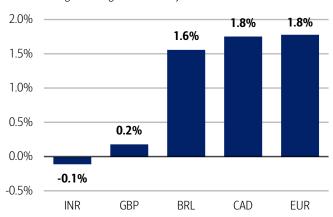


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 8: Year to Date - USD Strengthening/(Weakening)

USD has strengthened against most major currencies

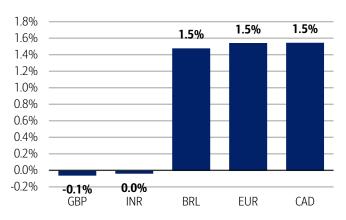


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 10: Last One Month - USD Strengthening/(Weakening)

USD has strengthened against the BRL, EUR, and CAD

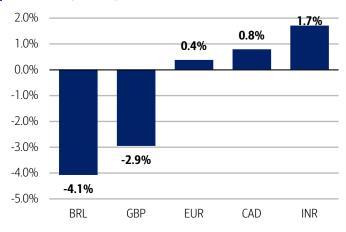


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 7: Last Twelve Months – USD Strengthening/(Weakening)

USD has strengthened against the EUR, CAD, INR

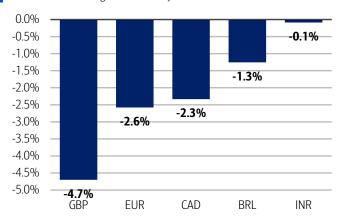


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 9: Last Three Months - USD Strengthening/(Weakening)

USD has weakened against most major currencies

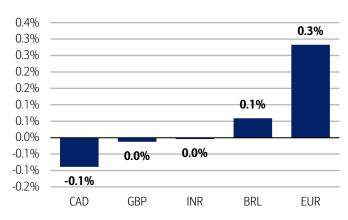


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 11: Last One Week - USD Strengthening/(Weakening)

USD has weakened against CAD, GBP, and INR



Source: BofA Global Research, Bloomberg



Comp Sheets

Exhibit 13: Payment Processors Valuation summary

		Price	Market	Net debt	EV	C	alendar E	PS	Ca	lendar P	/E	Caler	ıdar Reve	enues	Rev CAGR	Calen	dar P/Re	/enues	Cal	endar EBITD	A (\$m)	Calen	dar EV/EI	BITDA	Div
Name	Ticker	1/26/2024	Cap (\$m)	(current)	(current)	2022	2023E	2024E	2022	2023E	2024E	2022	2023E	2024E	'21-'24	2022	2023E	2024E	2022	2023E	2024E	2022	2023E	2024E	Yield
Payments / Transaction Processors																									
Automatic Data Processing	ADP	\$236.72	\$97,364	2,177	99,541	7.52	8.58	9.56	31.5x	27.6x	24.8x	17,247	18,617	19,760	8%	5.6x	5.2x	4.9x	4,545	5,201	5,715	21.9x	19.1x	17.4x	2.4%
Affirm	AFRM	\$40.71	\$12,284	1,073	13,357	-2.66	-3.34	-2.48	-15.3x	-12.2x	-16.4x	1,349	1,588	1,992	32%	9.1x	7.7x	6.2x	-813	-1,066	-765	-16.4x	-12.5x	-17.5x	0.0%
Coinbase	COIN	\$121.01	\$28,951	-1,897	27,054	-2.41	3.42	2.79	-50.2x	35.4x	43.4x	3,194	2,985	3,544	-23%	9.1x	9.7x	8.2x	-371	924	958	-72.8x	29.3x	28.3x	0.0%
Dlocal	DLO	\$17.06	\$4,940	-598	4,342	0.43	0.55	0.76	39.7x	31.0x	22.4x	419	636	891	54%	11.8x	7.8x	5.5x	153	212	295	28.4x	20.5x	14.7x	0.0%
Fidelity National Info Svcs	FIS	\$62.25	\$36,882	18,190	55,072	3.78	3.41	5.00	16.5x	18.3x	12.5x	9,719	9,833	10,198	N/A	3.8x	3.8x	3.6x	3,182	3,945	4,116	17.3x	14.0x	13.4x	3.3%
Fiserv	FI	\$140.66	\$84,422	21,957	106,379	6.50	7.49	8.51	21.6x	18.8x	16.5x	16,773	18,024	20,096	9%	5.0x	4.7x	4.2x	7,696	8,334	9,042	13.8x	12.8x	11.8x	0.0%
FleetCor	FLT	\$293.80	\$21,214	5,889	27,102	16.10	17.02	19.89	18.2x	17.3x	14.8x	3,427	3,785	4,131	13%	6.2x	5.6x	5.1x	1,932	2,178	2,409	14.0x	12.4x	11.2x	0.0%
Flywire	FLYW	\$20.83	\$2,529	-122	2,407	-0.06	0.19	0.40	-347.2x	109.6x	52.1x	267	374	488	39%	9.5x	6.8x	5.2x	15	36	62	162.1x	66.0x	38.8x	0.0%
Global Payments	GPN	\$131.38	\$34,210	15,420	49,629	9.33	10.40	11.77	14.1x	12.6x	11.2x	8,092	8,666	9,331	6%	4.2x	3.9x	3.7x	3,933	4,328	4,694	12.6x	11.5x	10.6x	0.8%
Jack Henry & Associates	JKHY	\$168.29	\$12,256	261	12,517	4.82	4.98	5.35	34.9x	33.8x	31.4x	1,990	2,149	2,298	7%	6.2x	5.7x	5.3x	613	670	726	20.4x	18.7x	17.2x	1.2%
Marqeta	MQ	\$6.02	\$3,142	-1,287	1,854	-0.34	-0.41	-0.32	-17.7x	-14.5x	-19.1x	748	670	520	0%	4.2x	4.7x	6.0x	-42	-10	-4	-44.4x	-183.5x	-457.7x	0.0%
Mastercard	MA	\$436.80	\$409,621	8,074	417,695	10.68	12.14	14.02	40.9x	36.0x	31.2x	22,231	25,010	27,844	14%	18.4x	16.4x	14.7x	15,018	16,902	18,957	27.8x	24.7x	22.0x	0.6%
Nuvei	NVEI	\$24.50	\$3,431	1,119	4,550	1.86	1.71	2.14	13.2x	14.3x	11.4x	843	1,191	1,397	25%	4.1x	2.9x	2.5x	351	435	515	13.0x	10.5x	8.8x	1.6%
PayPal	PYPL	\$60.71	\$65,454	-311	65,143	4.13	4.98	5.32	14.7x	12.2x	11.4x	27,518	29,571	31,490	7%	2.4x	2.2x	2.1x	5,870	6,523	6,700	11.1x	10.0x	9.7x	0.0%
Paychex	PAYX	\$121.01	\$43,542	-532	43,010	3.99	4.47	4.80	30.4x	27.1x	25.2x	4,817	5,162	5,477	8%	9.0x	8.4x	7.9x	2,109	2,285	2,454	20.4x	18.8x	17.5x	2.9%
Shift4	FOUR	\$73.15	\$6,030	1,023	7,053	1.40	2.93	3.91	52.3x	25.0x	18.7x	1,994	2,612	3,696	39%	3.0x	2.3x	1.6x	290	461	649	24.3x	15.3x	10.9x	0.0%
**Block	SQ	\$62.71	\$38,510	-1,853	36,657	1.00	1.86	3.04	62.7x	33.7x	20.6x	5,992	7,343	8,679	25%	6.4x	5.2x	4.4x	991	1,359	1,674	37.0x	27.0x	21.9x	0.0%
Toast	TOST	\$16.60	\$8,967	-998	7,969	-0.53	-0.45	-0.17	-31.3x	-36.9x	-97.6x	562	891	1,142	50%	16.0x	10.1x	7.9x	-115	45	148	-69.5x	175.9x	53.9x	0.0%
Visa	٧	\$272.61	\$561,847	-3,866	557,981	7.88	8.99	10.21	34.6x	30.3x	26.7x	30,151	33,317	36,771	13%	18.6x	16.9x	15.3x	21,158	23,553	26,083	26.4x	23.7x	21.4x	0.8%
Western Union	WU	\$12.50	\$4,554	1,171	5,725	1.76	1.72	1.70	7.1x	7.3x	7.4x	4,476	4,320	4,161	-6%	1.0x	1.1x	1.1x	1,075	1,004	1,164	5.3x	5.7x	4.9x	7.5%
Wex	WEX	\$206.38	\$8,820	-22	8,798	13.55	14.66	15.91	15.2x	14.1x	13.0x	2,351	2,537	2,785	15%	3.8x	3.5x	3.2x	1,029	1,093	1,167	8.6x	8.0x	7.5x	0.0%
*Adyen	ADYEN	€1147.60	€ 35,434	-951	34,483	18.17	20.30	25.21	63.2x	56.5x	45.5x	1,330	1,615	2,014	26%	26.6x	21.9x	17.6x	728	710	919	47.3x	48.6x	37.5x	0.0%
*Shopify	SHOP	\$80.49	\$103,911	-3,796	100,115	0.04	0.70	1.10	2012.3x	114.7x	73.0x	5,600	6,995	8,378	22%	18.6x	14.9x	12.4x	97	810	1,390	1036.6x	123.6x	72.0x	0.0%
*Broadridge	BR	\$208.25	\$24,500	3,680	28,180	6.33	7.24	8.02	32.9x	28.8x	26.0x	5,833	6,318	6,718	8%	4.2x	3.9x	3.6x	1,442	1,355	1,661	19.5x	20.8x	17.0x	1.5%
*Equifax	EFX	\$248.43	\$30,611	5,589	36,200	7.56	6.65	8.16	32.9x	37.4x	30.4x	5,122	5,253	5,757	5%	6.0x	5.8x	5.3x	1,722	1,696	1,992	21.0x	21.3x	18.2x	0.6%
*Fair Isaac	FICO	\$1284.27	\$31,917	1,792	33,709	17.75	20.26	25.42	72.4x	63.4x	50.5x	1,400	1,551	1,771	10%	22.8x	20.6x	18.0x	614	824	955	54.9x	40.9x	35.3x	0.0%
Average									83.4x	26.3x	17.4x				59%	8.7x	7.2x	6.3x				51.1x	20.5x	2.0x	

Source: BofA Global Research estimates, Bloomberg

*Represents Bloomberg estimates, **Uses gross profit instead of revs as per model



Exhibit 14: IT Services

Valuation summary

		Price	Market	Net debt	EV	Ca	lendar EF	PS .	Ca	alendar P	/E	Cale	ndar Reven	ues	Rev CAGR	Calen	dar P/Rever	nues	Calen	dar EBITD	A (\$m)	Calend	lar EV/EE	BITDA	Div
Name	Ticker	1/26/2024	Cap (\$m)	(current)	(current)	2022	2023E	2024E	2022	2023E	2024E	2022	2023E	2024E	'21-'24	2022	2023E	2024E	2022	2023E	2024E	2022	2023E	2024E	Yield
IT Services																									
Accenture	ACN	\$371.94	\$248,163	-4,065	244,097	11.06	11.70	12.97	33.6x	31.8x	28.7x	62,633	65,139	69,435	8%	4.0x	3.8x	3.6x	11,582	11,451	12,949	21.1x	21.3x	18.9x	1.4%
EPAM Systems	EPAM	\$285.13	\$16,452	-1,759	14,693	10.90	10.35	10.90	26.2x	27.5x	26.2x	4,825	4,667	4,938	10%	3.4x	3.5x	3.3x	910	804	869	16.1x	18.3x	16.9x	0.0%
DXC Technology	DXC	\$23.19	\$4,491	3,917	8,408	3.29	3.24	3.80	7.0x	7.1x	6.1x	14,847	13,976	13,896	-6%	0.3x	0.3x	0.3x	2,331	1,993	1,960	3.6x	4.2x	4.3x	0.0%
CGI Group (CAD)	GIB/A	\$147.13	\$34,220	2,174	36,394	6.29	7.23	7.87	23.4x	20.4x	18.7x	13,225	14,433	14,993	7%	2.6x	2.4x	2.3x	2,600	2,871	3,017	14.0x	12.7x	12.1x	0.0%
Globant	GLOB	\$233.26	\$9,898	5	9,903	3.49	5.73	6.63	66.8x	40.7x	35.2x	1,780	2,095	2,467	24%	5.6x	4.7x	4.0x	315	427	497	31.5x	23.2x	19.9x	0.0%
TaskUs	TASK	\$13.12	\$1,172	197	1,369	1.39	1.28	1.32	9.4x	10.3x	9.9x	960	917	887	5%	1.2x	1.3x	1.3x	223	214	204	6.1x	6.4x	6.7x	0.0%
Thoughtworks	TWKS	\$5.02	\$1.598	252	1.851	0.42	0.13	0.25	12 0x	38.6x	20.1x	1.296	1.142	1.109	1%	1.2x	1.4x	1.4x	257	128	160	7.2x	14.4x	11.6x	0.0%
TTEC	TTEC	\$21.35	\$1,013	948	1,960	3.68	2.21	2.31	5.8x	9.7x	9.2x	2,444	2,441	2,467	3%	0.4x	0.4x	0.4x	327	277	285	6.0x	7.1x		4.9%
Telus	TIXT	\$8.70	\$2,394	1.660	4.054	1.23	0.92	1.10		9.5x	7.9x	2.468	2,709	2.878	9%	1.0x	0.9x	0.8x	607	582	674	6.7x	7.0x		0.0%
*Endava	DAVA	\$74.65	\$4311	-99	4,212	2.59	2.29	2.06			36.2x	925	958	870	5%	4.7x	4.5x	5.0x	193	186	187	21.9x		22.5x	
		\$74.05	110,40	-55	4,212	2.33	2.23	2.00	20.00	J2.0X	J0.2X	923	930	670	370	4.78	4.34	J.UX	195	100	107	21.34	22.00	22.38	0.0%
Indian IT Services	CTSH																								
Cognizant		\$78.30	\$39,261	-923	38,338	4.39	4.41	4.66	17.8x	17.8x	16.8x	19,428	19,361	19,722	2%	2.0x	2.0x	2.0x	3,537	3,163	3,408	10.8x	12.1x	11.2x	1.5%
*Exlservice	EXLS	\$32.37	\$5,339	-1	5,337	1.20	1.42	1.62	26.9x	22.8x	20.0x	1,412	1,626	1,806	17%	3.8x	3.3x	3.0x	297	349	385	17.9x	15.3x	13.9x	0.0%
*Genpact	G	\$36.16	\$6,560	999	7,559	2.74	2.89	3.10	13.2x	12.5x	11.7x	4,371	4,453	4,678	5%	1.5x	1.5x	1.4x	805	770	828	9.4x	9.8x	9.1x	1.5%
*InfoSys	INFY	\$20.09	\$83,383	-1,547	81,836	0.72	0.73	0.78	27.9x	27.5x	25.7x	17,999	18,553	19,523	8%	4.6x	4.5x	4.3x	4,318	4,315	4,840	19.0x	19.0x	16.9x	2.1%
* TCS (₹)	TCS	₹3,810.30	₹13,942,083	-354,710	13,587,373	110.90	122.69	137.78	34.4x	31.1x	27.7x	2,168,870	2,388,180	2,567,418	12%	6.4x	5.8x	5.4x	573,300	629,060	700,817	23.7x	21.6x	19.4x	1.3%
*Wipro	WIT	\$5.73	\$29,936	-2,453	27,483	0.26	0.26	0.28	21.7x	21.7x	20.8x	11,214	10,992	11,189	4%	2.7x	2.7x	2.7x	2,097	2,083	2,143	13.1x	13.2x	12.8x	0.2%
*WNS	WNS	\$68.71	\$3,216	115	3,331	3.79	4.37	4.50	18.1x	15.7x	15.3x	1,130	1,265	1,367	11%	2.8x	2.5x	2.4x	259	302	351	12.9x	11.0x	9.5x	0.0%
Average									22.0	21.3x	10.74				7%	2.44	2.74	2.04				15.24	14.6x	12.20	
Total IT Services Average											19.7x					3.4x	3.2x	3.0x				1 D.3X		13.3x	
									22.4x	22.1x	19.8x				7%	3.4x	3.2x	3.0x				14.3x	14.1x	12.9x	<u> </u>

Source: BofA Global Research estimates, Bloomberg *Represent Bloomberg estimates

BofA GLOBAL RESEARCH

Exhibit 15: Consumer Finance

Valuation summary

		Price	Market	Net debt	EV	c	alendar E	PS	(alendar F	P/E	Cale	ndar Reve	enues	Rev CAGR	Caler	ıdar P/Re	venues	Caler	ıdar EBITDA (Ş	im)	Caler	ndar EV/EI	BITDA	Div
Name	Ticker	1/26/2024	Cap (\$m)	(current)	(current)	2022	2023E	2024E	2022	2023E	2024E	2022	2023E	2024E	'21-'24	2022	2023E	2024E	2022	2023E	2024E	2022	2023E	2024E	Yield
Consumer Finance																									
American Express	AXP	\$188.07	\$137,055	4,152	141,207	9.84	11.19	12.88	19.1x	16.8x	14.6x	52,862	60,631	66,468	16%	2.6x	2.3x	2.1x	9,938	13,878	15,137	14.2x	10.2x	9.3x	1.3%
Bread Financial Holdings	BFH	\$32.63	\$1,610	1,702	3,312	4.46	14.33	8.74	7.3x	2.3x	3.7x	3,826	4,289	3,974	7%	0.4x	0.4x	0.4x	344	907	588	9.6x	3.7x	5.6x	2.6%
Capital One	COF	\$132.55	\$50,422	6,559	56,981	17.91	11.98	13.90	7.4x	11.1x	9.5x	34,250	36,787	38,788	8%	1.5x	1.4x	1.3x	9,300	6,508	6,508	6.1x	8.8x	8.8x	1.8%
Discover Financial	DFS	\$103.74	\$25,941	-4,052	21,889	15.46	11.26	11.26	6.7x	9.2x	9.2x	13,304	15,860	16,181	10%	1.9x	1.6x	1.6x	5,881	2,068	5,900	3.7x	10.6x	3.7x	2.7%
OneMain Financial	OMF	\$47.52	\$5,698	18,661	24,359	7.01	5.29	7.07	6.8x	9.0x	6.7x	4,172	4,271	4,525	1%	1.4x	1.3x	1.3x	2,081	2,081	2,081	11.7x	11.7x	11.7x	8.4%
SoFi Technologies	SOFI	\$7.65	\$7,334	3,541	10,875	-0.40	-0.39	0.01	-19.1x	-19.4x	526.5x	1,574	2,087	2,555	38%	4.7x	3.5x	2.9x	143	356	540	75.9x	30.5x	20.1x	0.0%
Synchrony Financial	SYF	\$38.46	\$15,649	1,723	17,372	6.15	5.19	7.35	6.3x	7.4x	5.2x	16,005	17,288	19,314	9%	1.0x	0.9x	0.8x	3,730	4,755	5,424	4.7x	3.7x	3.2x	2.6%
Average									4.9x	5.2x	82.2x				13%	1.9x	1.6x	1.5x				18.0x	11.3x	8.9x	

Source: BofA Global Research estimates, Bloomberg *Represent Bloomberg estimates



Price objective basis & risk

Accenture Plc (ACN)

We use a 50/50 blend of 31x C24E GAAP EPS and our DCF to calculate our 12-month price objective of \$379. Our target multiple reflects a modest premium to the 3-year historical multiple, based on ACN's improved growth trajectory as we proceed through F24. The multiple continues to represent a premium to comps due to ACN's competitive positioning and enviable financial metrics.

We use a 10.1% weighted-average cost of capital (WACC) and 3% terminal growth rate for our DCF.

Upside risks to our price objective are 1) acceleration in top-line growth, 2) sharp and sustained rebound in consulting bookings, 3) margin expansion in excess of typical annual 20-30bps target.

Downside risks to our price objective are 1) ability to hire at scale to meet demand, 2) employee attrition, 3) competition from multiple types of vendors, 4) cyclical nature of discretionary IT services spending among Accenture's clients.

ADP (ADP)

Our \$243 PO is based on a 50/50 combination of a 24x PE multiple to FY25E EPS and our DCF model. Our 24x PE multiple represents a premium of nearly 30% premium to the S&P 500, consistent with ADP's long-term average. We think this is appropriate as we balance the general stability in ADP's core business with the current cycle for employment and rates. Our DCF uses an approximate 3% terminal rate and a 9% WACC.

Upside risks to our price objective are: 1) stronger than forecast economic / employment backdrop - ADP's business model is tied to cyclical swings in US private sector employment. 2) better than expected margin / new bookings performance and 3) ADP is perceived as a high-quality company than can comfortably endure the unprecedented pressures from the pandemic.

Downside risks to our price objective are: 1) while ADP has a defensive business model, its shares have been tied to cyclical swings in US private sector employment, 2) potential for new competitive entrants or disintermediation through technical innovation, and 3) potential regulatory changes.

American Express Company (AXP)

Our \$224 price objective is based on a 15x multiple to our 2025 EPS forecast. The 15x PE multiple is the middle of the historical range (12-18x) for AXP, which we think is appropriate given the growth outlook and strong operating momentum it is experiencing.

Downside risks to our PO are weaker-than-expected macroeconomic conditions, softer consumer and business spending, weaker loan growth, increasing competition, weaker US consumer credit performance, disruptions in capital markets, or an increasing regulatory burden.

Block Inc (SQ)

Our price objective of \$85 is based on a blend of 6x C24E EV/adjusted gross profit (which we use as a proxy for adjusted net revenue) and our DCF (14% WACC, 4% terminal growth). Our target multiple is in-line with the comp group.

Upside risks to our price objective are 1) better-than-expected overall macro conditions for small / medium sized businesses, 2) better-than-expected accretion from pending Afterpay acquisition, 3) re-acceleration of Cash App gross profit growth, 4) market perception of SQ as a terminal value stock.



Downside risks to our price objective are 1) increased competition from a wider group of companies as SQ moves upmarket and international, and intensifying competition in Cash App, 2) overall macro conditions for small/medium-sized businesses, and 3) lack of diversification for Cash App revenue/gross profit streams.

Bread Financial Holdings Inc (BFH)

Our \$35 PO is based on a 4x PE multiple to '24e EPS. A 4x PE multiple is below peers currently trading at 7x and the typical range for card issuers (7-12x), reflecting the hostile macro backdrop and BFH's outsized exposure to the subprime consumer relative to peers.

Downside risks to our price objective are: an economic downturn, which could lead to elevated loan loss rates, increased defaults, higher credit costs and slower loan growth. Deteriorating economic conditions would likely hurt investor sentiment and drive valuations lower. Loss of retail partners also poses a risk to growth and the earnings outlook.

Capital One Financial (COF)

Our \$146 PO is based on a 10.5x PE multiple to our 2024 EPS forecast. A 10.5x PE multiple is in the middle of the historical range (7-12x) which we think is appropriate given the more optimistic macro outlook and strong loan growth, partially offset by rising credit costs.

Downside risks are: slower than expected revolving credit growth, faltering economic recovery and rising loan losses, which could drive earnings below our estimates, and result in valuation compression. Cybersecurity and regulations are also risks.

CGI Inc. (GIB / YGIBA)

We use a 50/50 blend of 17x C24E EPS and our DCF model to calculate our 12-month PO of CAD122 (\$89). Our target multiple reflects a mild premium to GIB's closest comps which, along with GIB, maintain annualized total shareholder return profiles in the high single digit/low double digit range. Moreover, unlike a majority of its peers in the IT Outsourcing space, GIB is projected to modestly increase its margins y/y in the coming years. Also, over the last several years, GIB has been able to successfully acquire and integrate several companies. GIB currently derives only around 23% of Digital revenues compared to its closest peers which derive around 60%. Digital is a faster growing segment of the overall IT services end-market. That said, we believe over the last few years, GIB has materially improved its Digital/consulting capabilities. Our discounted cash flow (DCF) analysis assumes a weighted average cost of capital (WACC) of 9.9% and a terminal growth rate of 3%.

Downside risks are 1) war for talent and elevated attrition levels, 2) lack of formal guidance, 3) potential implications of Brexit, 4) risks related to M&A, 5) potential slowdown in US Government spending, 5) FX.

Upside risks are 1) better-than-expected bookings and top-line growth trends, 2) extended period of greater-than-expected margin expansion, 3) stronger hiring and quicker to higher-growth Digital services.

Cognizant Technology Solutions (CTSH)

We use a blend of 15x our 2024E non-GAAP EPS estimates and our DCF model to calculate our 12-month price objective of \$66. Our multiple represents a 25% discount to the S&P500, which we believe is appropriate based on CTSH's revenue and EPS growth profile, along with the risk/reward. Our DCF model assumes a weighted average cost of capital (WACC) of 10.9% and terminal growth rate of 2.2%.



Upside risks to our price objective are: 1) better than expected hiring and revenue growth trends, 2) significant improvement in employee attrition, 3) extended period of material margin expansion. Downside risks to our price objective are 1) potential work visa reform, 2) cyclical nature of CTSH's discretionary IT services businesses, 3) competition for talent, 4) wage inflation.

Coinbase (COIN)

We calculate our price objective of \$79 based on a 5.1x multiple to our 2024E revenues. The multiple represents an approximately 20% discount to COIN's comp group (due to elevated crypto risk/volatility and regulatory uncertainty), which includes a mix of exchanges, brokers, crypto-centric platforms, and high-growth consumer-facing Fintech platforms.

Upside risks to our price objective are 1) rising cryptocurrency prices, 2) market share gains as current crypto headwinds causes industry consolidation, and 3) regulatory clarity

Downside risks are 1) lower volatility and pricing for cryptocurrencies, 2) intensifying competitive landscape that could accelerate pressure on pricing/take rates, 3) increasing global crypto regulation, and 4) cyber-attacks.

Discover Financial (DFS)

We calculate a \$118 PO based on an 10.5x PE multiple to our 2024 EPS forecast. A 10.5x multiple is in the middle of DFS's recent historical range (7-12x) and reflects the more optimistic macro outlook, resilient consumer balance sheets, and strong business fundamentals.

Downside risks to our price objective are: if the economy falls into a recession, credit costs could rise rapidly and compress margins more than our current forecast. Deteriorating economic conditions would likely hurt sentiment and drive DFS's valuation lower.

DLocal (DLO)

Our \$22 PO is based on a 50/50 blend of 28x C24E adj. EPS (representing a PEG of approximately 0.7x, around a 60% discount to that of the S&P 500 given DLO's exposure to emerging markets and risk of further take rate degradation) and our discounted cash flow (DCF) model. Our DCF model is based on a weighted-average cost of capital (WACC) of 16% and a 4% long-term growth rate.

Downside risks are geographic concentrations, competition, near-term sentiment overhang from the short seller report, uncertain pace of top-line deceleration, further take rate degradation, regulatory risks, migration to new internal systems, and cross-border exchange rates.

DXC Technology (DXC)

Our 12-month price objective of \$21 for DXC is based on 5x C24e non-GAAP EPS estimate and our discounted cash flow (DCF). Our multiple represents around 50% discount to the comp group based on DXC's Central and Eastern European exposure and subpar revenue growth profile. Our DCF has a weighted-average cost of capital (WACC) of 15.9% and terminal growth rate of 1%.

Upside risks to our price objective are 1) better-than-expected hiring and revenue growth trends, particularly in DXC's legacy IT services business, 2) DXC is able to pivot to higher-growth, higher-margin Digital services more quickly than anticipated, 3) extended period of material margin expansion.

Downside risks to our price objective are 1) DXC's legacy IT services business continues to be a drag on growth, 2) merger integration with HPE-ES, missteps in execution of the



company's long-term margin improvement efforts, 3) talent availability, as DXC attempts to further pivot to Digital services, 4) high degree of competition across DXC's end markets, 5) decreased European enterprise spending on IT services in current geopolitical environment.

EPAM Systems (EPAM)

We use a 22x 2024E non-GAAP EPS multiple and discounted cash flow (DCF, 50/50 blend) to calculate our 12-month price objective of \$233. Our 22x multiple is in line with EPAM's LTM historic average, justified, in our view, by the company's revenue growth and margin profile. Our DCF uses a weighted-average cost of capital (WACC) of 13.1% and terminal growth rate of 3.8%.

Downside risks to our price objective are 1) volatility in revenues from EPAM's largest clients, 2) competition for engineering talent, 3) geopolitical volatility in Central/Eastern Europe, 4) cyclical nature of discretionary IT services spending among EPAM's clients, 5) continued regulatory and macro/FX uncertainty.

Upside risks to our price objective are 1) accelerated demand turn-around for growth-oriented initiatives, 2) increased pricing power for both new and existing contracts, 3) decline in attrition and improvement in utilization metrics.

Fidelity National Information Services (FIS)

We apply a 13.5x multiple to our 2025 non-GAAP EPS estimate, which is roughly a 25% discount to the S&P500, given FIS' slower organic growth profile, to calculate our 12-month price objective of \$75.

Risks are: 1) intense competition among core banking providers, 2) client base consolidation, 3) delayed sales cycle among Banking clients, 4) management execution, 5) Worldpay transaction close is delayed or fails to close.

Fiserv Inc (FI)

We use 19x our '24E non-GAAP EPS to calculate our 12-month price objective of \$162. In our view, FI should trade at a modest premium to the S&P500 given its bullish medium-term targets at its recent Analyst Day.

Downside risks are 1) FI's legacy client base continues to gradually shrink, 2) large post-merger integration can be challenging, 3) data and security breaches - an ongoing industry threats, 4) heavy regulatory oversight.

Flywire (FLYW)

Our \$31 PO is based on a blend of 6x our 2024 revenue less ancillary services estimate and our DCF model. For our DCF, we assume a weighted-average cost of capital (WACC) of 13.3% and a terminal growth rate of 4.2%. Our revenue multiple is relatively in line with the comp group, justified, in our view, by FLYW's strong growth profile and vertical mix.

Risks: 1) significant concentration in the education vertical, 2) competition from larger players, 3) near-term pandemic related headwinds related to suppressed travel volumes and delayed implementation timelines, 4) cyber-threats/attacks.

Global Payments Inc (GPN)

We apply a 14x multiple to our '24 non-GAAP EPS estimate to calculate our 12-month price objective of \$165. Our multiple, which is a 30% discount to the S&P500, reflects GPN's outsized exposure to consumer spending and SMB relative to peers amid an uncertain macro backdrop.

Risks are 1) the ability to continue sourcing acquisitions, as M&A activity has been a



significant part of its growth story (as GPN becomes larger it may become more of a challenge to find transformational deals), 2) M&A integration as GPN's acquisitive nature is not without risk, and 3) macro/cyclical conditions as merchant acquirers are most sensitive to consumer-related indicators, such as retail sales, consumer confidence and revolving credit.

Jack Henry & Associates (JKHY)

We calculate our price objective of \$186 based on a blend of a 35x our C24 P/E estimate and our discounted cash flow (DCF) model. Our target multiple is a 15% premium to comps, given the consistency of JKHY's financial performance. Our DCF assumes a weighted average cost of capital (WACC) of 7.68% and a terminal growth rate of 3%.

Downside risks are 1) exposure to regional banking sector, 2) US consumer spending softness, 3) intense competition among core banking providers, 4) client base in secular decline due to consolidation, 5) data and security breaches - an ongoing industry threat, 6) heavy regulatory oversight.

Upside risks are: 1) increasing stability within the regional banking sector, 2) elevated payment adoption among both debit and credit transactions, 3) better-than-expected US macro resiliency, 4) slowdown in US bank and credit union consolidation.

Marqeta (MQ)

We establish a \$7 PO based on 50/50 blend of 6x C24E EV/Gross Profit (most important top-line metric) and our DCF (12% WACC, 4% terminal growth). Our target multiple is a 15% discount to peers, justified given MQ's faster top-line growth but lower margin profile, as well as high client concentration (SQ).

Upside risks are 1) renewal of top client Block's (SQ) contracts with better than anticipated terms/pricing, 2) significant international expansion, 3) faster-than-expected achievement of long-term growth targets (30% growth in revs/gross profit and 20%+ adj. EBITDA margins).

Downside risks are 1) high client concentration (SQ represented 76%/50% of revs/gross profit in 1Q23), 2) material pricing pressure (i.e. from Block renewal), 3) intensifying competition,

Mastercard Inc (MA)

We utilize a 50/50 blend of 34x '24E GAAP EPS and our DCF model to calculate our 12-month price objective of \$484. Our multiple is a premium vs. the S&P500 given MA's above average earnings growth in a normalized environment, increased diversification, competitive positioning, secular tailwinds, and recession resilience. Our multiple is also slightly higher than its closest peer given MA grows faster, albeit off of a smaller base. Our discounted cash flow (DCF) analysis assumes a weighted average cost of capital of around 10% and a terminal growth rate of 4%.

Downside risks to our price objective are 1) weak consumer spending in the event of a macroeconomic downturn, 2) increased customer concentration and consolidation, 3) legislative and regulatory changes, 4) potential litigation settlements, which could include monetary damages, and/or result in changes in business practices, 5) loss of customer contracts due to increased competition or new entrants, including local/global payment networks, new start-ups and existing large and small technology companies, and 6) large fluctuations in the value of currencies/foreign exchange rates.

Nuvei (NVEI / YNVEI)

We calculate our price objective of \$29 USD (CAD 39) based on a 50/50 blend of 9x our 2024E EPS estimate and our DCF model. We apply around a 60% discount for NVEI relative to its comp group based on lower revenue growth relative to peers and in-line



profitability. Our DCF model assumes a WACC of 15% and a terminal growth rate of 3.5%.

Risks to our PO: 1) increased regulation for online gaming and financial services, 2) end-to-end conversions fall short of internal expectations, 3) take rate compression from mix shift to larger merchants

OneMain Holdings, Inc. (OMF)

Our \$54 price objective is based on a 7.5x multiple of our 2024 EPS forecast. A 7.5x PE multiple at the higher end of historical range (4-8x), it is also an approx. 20% discount to peers trading at 9.5x. We think valuation is justified given OMF's subprime exposure heading into a weakening macro environment.

Downside risks to our price objective are deterioration in credit, execution risk on the credit card portfolio, macroeconomic risk, regulatory risk, and a dividend cut.

Paychex (PAYX)

Our \$105 PO is based on a 50/50 combination of a 23x PE multiple to our CY24E EPS and our discounted cash flow (DCF) model. A 23x PE multiple is an approximately 20% premium to the S&P 500, which is below PAYX's 10-yr average premium of about 50%. We think this correctly reflects PAYX's operating momentum, coupled with elevated risks of rising unemployment, higher rates, and weakness in the SMB market. Our DCF uses a 3% terminal rate and a 9.5% WACC.

Downside risks to our price objective are 1) slower new business formation, 2) declines in US employment, and 3) greater competition from payroll software firms, which puts pressure on pricing.

Upside risks to our price objective are 1) faster new business formation and 2) strong US employment growth.

PayPal Holdings Inc (PYPL)

Our PO of \$66 is based on a 50/50 blend of 16x '24E P/E including stock-based compensation and our DCF model. We believe this multiple is warranted as sustained improvements in top-line metrics and initiatives to improve transaction profit growth may be taking longer than expected to implement. Our DCF assumes a weighted average cost of capital (WACC) of 13% and a terminal growth rate of 3.5%.

Downside risks to our price objective are: 1) macro (PYPL's business skews towards lower to middle income consumers' spending on more discretionary purchases, which could be impacted by the higher inflation/higher rates environment, though stubbornly low unemployment gives us some comfort), 2) execution on the ongoing strategic initiatives to improve transaction profit/unbranded margins, and 3) competition (we expect the PYPL market share debate to remain unsettled for the foreseeable future).

Shift4 Payments, Inc (FOUR)

We calculate our price objective of \$85 based on a blend of 20x our 2024 adj. EPS estimate and our DCF model. We apply a modest premium to the S&P500 given FOUR's higher growth prospects. Our DCF model assumes a WACC of 14% and long-term growth rate of 3%.

Risks: 1) macro pressure on the restaurant and hospitality industries, 2) end-to-end conversions fall short of internal expectations, 3) take rate compression from mix shift to larger merchants.

SoFi Technologies Inc (SOFI)



Our \$9.50 price objective is based on a sum-of-the-parts of 2x current tangible book value and 5x on Technology segment's 2024 net revenue. 2x TBV reflects SOFI's faster growth and 5x to Technology net revenue is in-line with its closest peer.

Risks are dependence on volatile gain-on-sale (GoS) margins, execution risk, consumer credit / recession risk, customer concentration risk and regulation / consumer data privacy concerns.

Synchrony Financial (SYF)

Our \$41 PO is based on a 6.5x P/E multiple on 2025E EPS. Our multiple is on the low end of the typical trading range for SYF (6-12x), which we think is appropriate given the relatively uncertain macro backdrop and rising credit costs, somewhat balanced by the potential for high capital returns.

Downside risks to our price objective are an economic downturn, which could lead to elevated loan loss rates, increased defaults, higher credit costs and slower loan growth. Deteriorating economic conditions would likely hurt investor sentiment and drive valuations lower. Loss of retail partners also poses a risk to growth and earnings outlook.

Upside risks are: Consumer balance sheets continue to hold strength and credit metrics remain strong. Increased visibility in peak loss rates shifts investor sentiment. Federal reserve achieves a soft landing. Outsized capital return.

TaskUs (TASK)

We derive our \$11 price objective based on a 8x multiple to our 2024E adj. EPS estimate. Our multiple represents a 10% discount to CX outsourcing comps (TIXT, TLPFF, CNXC, TDCX, G), which we believe is justified due to TASK's lower growth profile and limited visibility on estimates, along with higher client concentration and limited float/trading volume.

Upside risks to our price objective area: 1) faster than expected growth in top clients, 2) better pricing, 3) lower than anticipated wage inflation, 4) improved macro outlook

Downside risks to our price objective are: 1) loss of large clients that prevent TASK from achieving its financial growth targets, 2) intensifying competition for Digital talent, 3) wage inflation, and 4) limited free float and low trading liquidity.

Telus International (TIXT / YTIXT)

We calculate our price objective of US\$13/C\$18 based on a 50/50 blend of 11x multiple C24E P/E and our DCF. Our multiple is in-line with CX outsourcing comps justified in our view given TIXT's higher underlying organic growth profile and diversified business model, balanced by limited near-term visibility and higher vertical concentration (i.e. tech). Our DCF assumes a 15% WACC and 2% terminal growth.

Upside risks to our price objective are 1) better-than-expected organic revenue growth trends, 2) extended period of material margin expansion, 3) significant growth in top clients, 4) lower-than-expected employee attrition rates.

Downside risks to our price objective are 1) loss of large clients that prevent TIXT from achieving its financial growth targets, 2) intensifying competition for Digital talent, 3) wage inflation, 4) limited free float and low trading liquidity, and 5) risks related to M&A.

Thoughtworks (TWKS)

We use a blend of 21x C24E P/E and discounted cash flow (DCF) to calculate our \$5 PO. Our multiple is a 15% discount to the peer group, justified, in our view, by TWKS' lower growth profile, in-line margins, and diversification. Our DCF has a weighted-average cost of capital (WACC) of 13.1% and terminal growth rate of 3.5%.



Downside risks: 1) availability of digital talent, 2) competition/pricing pressure, 3) geopolitical volatility (i.e., China), and 4) limited free float/liquidity.

Upside risks: 1) higher-than-anticipated revenue growth driven by accelerated demand for IT services, 2) lower voluntary attrition rates, 3) better-than-expected bookings.

Toast (TOST)

Our price objective of \$18 is based on a 50/50 blend of 7x C24E EV/adjusted gross profit and our DCF (15% WACC, 4% terminal growth). Our target multiple represents a 20% premium to Toast's comp group, given its best-in-class hardware/software platform and differentiated distribution strategy.

Upside risks to our price objective are better-than-expected overall macro conditions for small / medium sized businesses and faster-than-expected expansion into international markets / path to profitability.

Downside risks to our price objective includes deteriorating macro conditions (e.g. restaurants pulling back on IT spending or consumers spending less money at restaurants) and intense competition.

TTEC Holdings (TTEC)

We calculate our price objective of \$23 using a blend of 8x C24E P/E and our DCF. Our target multiple is a 10% discount to the comp group, consisting of pure-play customer experience (CX) outsourcers. We believe this is justified given TTEC has less visibility on near-term estimates and a lower organic growth and margin profile. Our discounted cash flow (DCF) assumptions include a 10% weighted-average cost of capital (WACC) and 2.5% terminal growth.

Downside risks to our price objective are 1) increased pricing pressure and commoditization of contact call centers, 2) competition for Digital talent, 3) wage inflation, 4) risks related to M&A, and 5) FX.

Upside risks to our price objective are 1) faster-than-expected mix shift to digital, driving structurally higher growth rate, 2) outperformance in voice-based contact center work which would benefit Engage segment, 3) lower attrition and strong hiring trends.

Visa Inc. (V)

We use a 50/50 blend of 30x C'24E EPS (GAAP) and our discounted cash flow (DCF) model to calculate our 12-month price objective of \$305. Our multiple is a slight premium to V's 5-year historical average, which we view the multiple as justified given Visa's growth profile, increased diversification, execution track record, and large addressable market opportunity. The key assumptions in our DCF model include a terminal growth rate of 3.5% and a weighted average cost of capital (WACC) of around 9%.

Downside risks to our price objective are 1) weak consumer spending in the event of a macroeconomic downturn, 2) increased customer concentration and consolidation, 3) legislative and regulatory changes, 4) potential litigation settlements, which could include monetary damages, and/or result in changes in business practices, 5) loss of customer contracts due to increased competition or new entrants, including local/global payment networks, new start-ups and existing large and small technology companies, and 6) large fluctuations in the value of currencies/foreign exchange rates.

Western Union (WU)

We use 7x our '24E adjusted EPS to calculate our 12-month price objective of \$12. This multiple is a 50% discount to the S&P 500 and in-line with WU's historical multiple, due



to WU's lower growth and earnings quality, as well as competitive threats.

Upside risks to our price objective are: 1) C2C pricing proves healthier than anticipated, 2) WU accelerates its progress in penetrating digital/on-line channels, while achieving stable/better performance in retail channels, thereby delivering meaningful and sustainable improvements in top-line growth.

Downside risks to our price objective are: 1) C2C pricing pressure intensifies, as the competitive environment thickens, 2) disruptive technologies cause competitive losses for WU.

WEX Inc. (WEX)

We calculate our price objective of \$229 based on 14.5x our 2024 non-GAAP EPS estimate. Our PE multiple is a 20% discount to the S&P, which we view as warranted given lower peer multiples and increased recession risk slightly offset by WEX's strong fundamentals and favorable long-term trends.

Downside risks to our price objective are 1) weakening macro environment reduces demand for trucking/fuel, 2) increased competition, 3) large fluctuations in fuel prices/foreign exchanges rates, 4) travel volumes remain muted.

Analyst Certification

We, Jason Kupferberg, Cassie Chan and Mihir Bhatia, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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BofA Securities is currently acting as a financial advisor to Promocion y Operacion SA de CV (Prosa) in connection with its proposed sale of its majority interest to Visa Inc, which was announced on December 15, 2023.

BofA Securities is currently acting as Financial Advisor to Accenture PLC in connection with its proposed acquisition of Navisite LLC, which was announced on January 10, 2024.



US - Payments, Processors, Specialty Finance and IT services Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Accenture Plc	ACN	ACN US	Jason Kupferberg
	American Express Company	AXP	AXP US	Mihir Bhatia
	Block Inc	SQ	SQ US	Jason Kupferberg
	Capital One Financial	COF	COF US	Mihir Bhatia
	Discover Financial	DFS	DFS US	Mihir Bhatia
	Enact Holdings	ACT	ACT US	Mihir Bhatia
	Essent Group	ESNT	ESNT US	Mihir Bhatia
	Fidelity National Information Services	FIS	FIS US	Jason Kupferberg
	Fisery Inc	FI	FLUS	Jason Kupferberg
	FleetCor Technologies Inc.	FLT	FLT US	Mihir Bhatia
	Flywire	FLYW	FLYW US	Jason Kupferberg
	Global Payments Inc	GPN	GPN US	Jason Kupferberg
	Jack Henry & Associates	JKHY	JKHY US	Jason Kupferberg
	Mastercard Inc	MA	MA US	Jason Kupferberg
	MGIC Investment Corp.	MTG	MTG US	Mihir Bhatia
	·	NMIH	NMIH US	Mihir Bhatia
	NMI Holdings Nuvei	NVEI	NVELUS	Jason Kupferberg
	Nuvei	YNVEI	NVEI CN OMF US	Jason Kupferberg
	OneMain Holdings, Inc.	OMF		Mihir Bhatia
	Shift4 Payments, Inc	FOUR	FOUR US	Jason Kupferberg
	Telus International	TIXT	TIXT US	Cassie Chan
	Telus International	YTIXT	TIXT CN	Cassie Chan
	Visa Inc.	V	V US	Jason Kupferberg
	WEX Inc.	WEX	WEX US	Mihir Bhatia
NEUTRAL				
	ADP	ADP	ADP US	Jason Kupferberg
	Affirm Holdings	AFRM	AFRM US	Jason Kupferberg
	Bread Financial Holdings Inc	BFH	BFH US	Mihir Bhatia
	DLocal	DLO	DLO US	Jason Kupferberg
	Globant SA	GLOB	GLOB US	Jason Kupferberg
	Marqeta	MQ	MQ US	Jason Kupferberg
	PayPal Holdings Inc	PYPL	PYPL US	Jason Kupferberg
	SoFi Technologies Inc	SOFI	SOFIUS	Mihir Bhatia
	Synchrony Financial	SYF	SYF US	Mihir Bhatia
	Thoughtworks	TWKS	TWKS US	Jason Kupferberg
	Toast	TOST	TOST US	Jason Kupferberg
	TTEC Holdings	TTEC	TTEC US	Cassie Chan
	Trecholdings	TILC	TIEC 03	Cassie Chair
UNDERPERFORM				
	CGI Inc.	GIB	GIB US	Jason Kupferberg
	CGI Inc.	YGIBA	GIB/A CN	Jason Kupferberg
	Cognizant Technology Solutions	CTSH	CTSH US	Jason Kupferberg
	Coinbase	COIN	COIN US	Jason Kupferberg
	DXC Technology	DXC	DXC US	Jason Kupferberg
	EPAM Systems	EPAM	EPAM US	Jason Kupferberg
	Paychex	PAYX	PAYX US	Jason Kupferberg
	Radian Group Inc	RDN	RDN US	Mihir Bhatia
	Rocket Companies, Inc.	RKT	RKT US	Mihir Bhatia
	TaskUs	TASK	TASK US	Cassie Chan
	Western Union	WU	WUUS	Jason Kupferberg

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Financial Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%



Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

R2Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.

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BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Amer Express, Discover Finl, Fiserv, Flywire, Global Payments Inc, Mastercard Inc,

Synchrony Financial.
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