This report is intended for adoherty@williamblair.com. Unauthorized distribution prohibited

July 18, 2024 **Industry Report**



Andrew W. Jeffrey, CFA +1 415 796 6896 ajeffrey@williamblair.com

Cristopher Kennedy, CFA +13123648596 ckennedy@williamblair.com

Marc Feldman, CPA +1 312 364 8397 mfeldman@williamblair.com

Adib Choudhury +1 212 237 2758 achoudhury@williamblair.com

Joel Riechers +1 212 237 2726 jriechers@williamblair.com

Fintech: Taking the Long View

Highlighting Our Best Ideas: V and MA, AXP, FI, FIS, SQ (Upgrading to Outperform From Market Perform), WEX, and RELY

In this report, we introduce a multiyear thematic fintech outlook, realign stock coverage, and update two ratings. William Blair's fintech team, including analysts Andrew W. Jeffrey, CFA, and Cristopher D. Kennedy, CFA, and associates Marc Feldman, CPA, Adib Choudhury, and Joel Riechers, will cover 27 stocks, divided into four primary subsegments: networks, merchant acquiring and processing, banktech and embedded finance, and cross-border payments and remittances. Overlap exists, but within categories, Jeffrey will take primary responsibility for networks and merchant processors, including co-coverage with Kennedy on Visa, Mastercard, American Express, Fiserv, Euronet, and Flywire. Kennedy will focus on banktech and embedded finance and cross-border payments and remittance. Refer to exhibit 3 on page 7 for coverage and ratings.

There is no way to sugarcoat it: many fintech stocks have underperformed the market (exhibit 2 on page 6) since the end of 2019, and over the trailing 12 months. With a few notable exceptions, our view is that the group has suffered from concerns about relatively poor competitive differentiation, aging tech stacks, and lower-thanappreciated entry barriers. We accordingly encourage investors to focus on what we see as two key structural alpha drivers: 1) wide competitive moats, augmented by above-industry organic revenue growth at scale; and 2) ongoing share gains, powered by distinctive software and value-added services.

Our best large-cap ideas exemplifying these themes are Outperform-rated—Visa, Mastercard, American Express, Fiserv, FIS, and Block (upgrading to Outperform). Among smaller caps, we highlight WEX, Flywire, and Remitly, whose pullbacks may create an attractive entry point for long-term investors. Further, as we review our universe, we are downgrading PayPal to Market Perform from Outperform.

As an important aside, two Outperform-rated names, Global Payments and Corpay, are not among our best ideas, but have what we consider company-specific catalysts. We remain constructive on Global Payments, considering recent relative underperformance, comparatively consistent financial results, a sharp relative valuation discount, and value-creation options—e.g., the sale of its issuer solutions. We make a similar observation about Corpay. While we see near-term EPS risk, our view is that the stock is trading at a meaningful discount to its sum-of-the-parts (SOTP) valuation, and we believe management will revisit strategic value-creation options.

Please refer to important disclosures on pages 61 and 62. Analyst certification is on page 61. William Blair or an affiliate does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. This report is not intended to provide personal investment advice. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments, or strategies to particular clients. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein.

Contents

Our Big-Picture View	5
Our Best Ideas: A Thumbnail Sketch—V, MA, AXP, SQ, FI, FIS, RELY, and WEX Lead the Way	
Our Favorite Fintech Names in Greater Detail	9
Visa and Mastercard: Industry Stalwarts, Long-Term Buy-and-Hold, Get Aggressive on Pullbacks	9
American Express: Hitting All the Right Notes	12
Fiserv: Software-Integrated SMB POS Leader	14
Block: Upgrading to Outperform From Market Perform on Likely Modest GPV Trend Improvement and Powerful EBITDA Upside	
WEX: The Street Has Become Too Negative on This Well-Run Fintech's Long-Term FCF ROIC Potential	23
FIS: Streamlined Discipline Should Keep a Good Thing Going	26
Remitly: Unduly Punished, in Our Opinion, Despite Strong Fundamentals	27
Other Rating Change	29
PayPal: Downgrading to Market Perform on Limited TAM Upside, Growing Competition, and Lack of UC Strategy	29
Attractively Valued Outperform-Rated Fintechs That Have Pulled Back to Create Compelling Risk/Reward or Are Dependent on Corporate Catalysts	33
Flywire: Superior Business. Structural Questions Appear to Be Discounted in Valuation	33
Global Payments: Mr. Bready, Tear Down That Issuer Business	34
Corpay: Time to Get Serious About What's Really Core	37
Secular Trend: Networks and Merchant Processors—Global Card Volume, VAS, and New Flows Growth Outlook Is Robust	40
Secular Trend: Merchant Acquiring and Processing—Competitively Differentiated Software-Integrated POS	43
Secular Trend: Banktech and Embedded Finance	45
Banktech	45
Embedded Finance	49
Secular Trend: Cross-Border Payments and Remittances	53
Cross-Border Commerce	54
Cross-Border B2B Payments	54
Global Remittances	
Appendix	56

Exhibit 1 Fintech Coverage Portfolio Manager Summary (\$s in millions, except per share values)

Company	Analyst I	Rating	Market Cap (\$M)	Thesis	Bull Case	Bear Case
Networks						
American Express (AXP)	AJ+CK	OP	180,233	Strong differentiated franchise with large growth opportunities and strong financia performance (midteens EPS growth, >30% ROE) at an attractive valuation.	Effective acquisition and continued spending growth from premium and millennial/Gen-Z consumers. Acceleration of SME spending growth and continued wallet share gains. Success in driving international merchant acceptance.	Managing credit cycle and macro economy, competition.
Corpay (CPAY)	AJ	OP	21,580	Corporate restructuring unlocks shareholder value as fundamentals stabilize.	Effective cross-selling of AP solutions into fleet customer base. Better 2H24 lodging results. Cost takeouts. Accelerated buybacks.	Protracted period of management or board inaction. Ongoing vehicle segment demand softness. Sluggish lodging recovery.
Mastercard (MA)	AJ+CK	OP	414,701	Leading network w/superior VAS offerings and organic rev growth. Premium P/E to V maintained by relatively faster top-line expansion.	Robust summer travel season and cross-border demand, augmented by above-corp-avg VAS rev growth, operating leverage, and buybacks.	Regulatory and competitive concerns. A sharp travel slowdown and/or U.S. recession, to which Mastercard has greater exposure than Visa.
Visa (V)	AJ+CK	OP	549,001	Key beneficiary of global secular transition to e-payments. Core holding. Buy any sharp pullbacks.	Strong VAS rev growth catch-up, new flows monetization, superior merchant location growth, and relative recession resistance due to leading debit share.	Regulatory pressure. Stock could continue to lag MA's valuation in a robust economy, due to less discretionary spend leverage.
WEX (WEX)	AJ	OP	8,049	Long-term FCF-ROIC compounder w/competitively advantaged tech offerings. Risks materially priced in.	Street has become too negative on travel segment competitive risk, fleet demand softness, and disappointing benefits top-line. Worst case is priced in, as C25 organic rev growth seems poised to rebound.	Protracted soft fleet demand, a sharp travel slowdown and/or yield compression, continued HSA account growth softness. Complexity pressures valuation.
Merchant Acquiring	g and Proc	essing				
Block (SQ)	AJ	OP	45,935	$2\mbox{H}24$ Square GPV acceleration. Strong EBITDA upside as company targets C26 Rule of 40.	Square share gains, accelerating gross profit growth, and improving Cash App inflows and monetization.	Ongoing elevated merchant churn and execution lapses that sustain SMB share loss. Cash App regulatory scrutiny or inability to drive inflows.
Cantaloupe (CTLP)	СК	OP	541	Software/payments platform focused on fragmented, unattended market, with improving margins. Targets imply \sim \$75M of EBITDA by FY26 (versus \sim \$35M in FY24).	Sustained EBITDA growth through the acceleration of high-margin subscription revenue growth and transaction margin expansion. Cross-selling VAS and success with SMBs, micro-markets, and international should drive subscription growth.	Subscription revenue growth decelerates, margin expansion stalls, and competitive pressures on device/customer expansion.
Fiserv (FI)	AJ+CK	OP	93,467	Leading diversified global merchant processor taking SMB share, owing to leading Clover platform. Valuation supported by 38 consecutive years of double-digit EPS growth.	Merchant segment organic rev growth 2x+ the market, driven by Clover, e-commerce, and rest of world. Powerful cross-sell/platform capabilities, op leverage and FCF ROIC.	Software-integrated SMB POS lead eroded by improving competitor execution. Argentina inflation and revenue anticipation loan tailwinds lapse.
Global Payments (GPN)	AJ	OP	26,560	Corporate restructuring to "pure-play" merchant processor unlocks shareholder value and capital to reinvest for faster organic rev growth.	Merchant business grows faster than anticipated on power of 60% tech-enabled solutions. Better investor appreciation of assets (upcoming analyst day) and/or value unlock prompts positive re-rating.	Protracted period of management or board inaction on strategic initiatives. Merchant segment top-line growth remains around industry average. Likely better analyst day disclosure doesn't drive multiple expansion.
Nuvei (NVEI)	СК	MP	4,551	Being acquired by Advent for \$34.00 per share.	Deal successfully closes.	Acquirer backs out or renegotiates takeout valuation lower.
Nayax (NYAX)	СК	MP	775	Software/payments platform focused on fragmented, unattended market, with improving margins. Targets imply \$1B of revenue and \$300M of adj. EBITDA by 2027-28 (vs. \$327M of revenue and ~\$32M of EBITDA in 2024).	Acquisition of SMB and enterprise customers internationally in traditional verticals and emerging verticals (e.g., EV charging). Retention and growth with existing customers. Sourcing and integration of acquisitions. Transaction margin expansion.	Dual-listed on the TASE, but investors' ability to accumulate shares is hindered by low average daily trading volume on the Nasdaq. Competitive pressures on device/customer expansion. Failure to source/integrate acquisitions.
PayPal (PYPL)	AJ	MP	66,260	Limited U.S. e-commerce TAM and growing competition pressure branded TPV growth, hence transaction \$ expansion and EBIT margin.	Focus on better Braintree conversion drives faster branded TPV and branded margin \$ growth. Robust FCF and shareholder return fuels EPS upside as competitive concerns ease.	Continued mix shift toward unbranded volume pressures transaction \$ growth and EBIT margin. Growing competitive concerns and lack of UC strategy create protracted valuation pressure.
Riskified (RSKD)	СК	OP	1,154	Unique business that is focused on reducing payments fraud while helping customers grow. Debt-free balance sheet (\$422M of cash/equivalents), targeting 15%-20% EBITDA margins by 2026 (vs3% in 2023).	Improving cohort performance, and increased mix of new products/services (Policy Protect, Dispute Resolve, Account Secure, Policy Decisions) should drive improving gross margins.	Managing risks associated with core chargeback guarantee solution, and the ability to diversify into new solutions.

Exhibit 1 (cont.) Fintech Coverage Portfolio Manager Summary (\$s in millions, except per share values)

Company	Analyst	Rating	Market Cap (\$M)	Thesis	Bull Case	Bear Case
Banktech and Emb	pedded Fin	ance				
Alkami (ALKT)	СК	OP	3,215	Leading provider of digital banking solutions with strong revenue visibility operating in large and fragmented market. Targets imply about \$500M of revenue and \$100M adj EBITDA in 2026 (vs. estimated \$331M / \$23M in 2024).	Continued traction in the bank channel supported to recent implementations. Successful cross-selling and platform capability expansion. Margin expansion through renewals and operating expense leverage.	Competition, customer implementations, continued success in the bank channel, and progress to reaching financial targets.
Evertec (EVTC)	ск	OP	2,269	Strong competitive position in Puerto Rico, expanding its presence in Latin America (now 40% of revenues vs 11% in 2016 and 21% before Sinqia) via \$591M acquisition of Sinqia.	Improving economic environment in core Puerto Rico market coupled with strong organic growth trends within Latin America. Successful completion and integration of acquisitions should augment Latin America growth.	Integration of Sinqia, expected to be neutral to EPS in year-1 (vs. initially neutral to slightly positive); new management at Sinqia. Increasingly competitive LatAm market. Geographic concentration and customer concentration risk.
FIS (FIS)	СК	OP	44,454	FIS has a diverse set of assets, maintains a strong distribution platform that is highly embedded into the financial system.	Near-term results should be driven by internal initiatives and capital deployment (\$4B share buybacks); 2025-26 financial targets may prove conservative.	45% stake of Worldpay complicates modeling/valuation; financial targets appear reasonable, but requires strong internal execution.
Green Dot (GDOT)	СК	MP	532	Growth of its largest BaaS customer has contributed to \sim 700bp of EBITDA margin pressure since 2022; Federal Reserve consent order lingers.	After years of focusing on internal operations, management appears to be focused on growth; Green Dot is unique play on embedded finance.	Two largest customers represent ~59% of revenue in 2023, gross profit contribution is much more diversified; core metrics are challenged, regulations.
Jack Henry (JKHY)	СК	OP	12,396	Leading provider of core and complementary solutions to banks and credit unions; revenue/EPS at a 7%/12% CAGR since 2011, >20% ROIC.	Ongoing sales momentum augments recurring revenue (90%+ of total) growth with existing clients. Continued adoption (and selling outside the core) of modern cloud-native complementary solutions. Cloud-core initiative could drive improved economics and TAM expansion over LT.	Financial institution consolidation expected to continue. Financial institutions may shift from best of suite to best of breed solutions.
MeridianLink (MLNK)	СК	OP	1,750	MeridianLink is a leading provider of consumer loan origination systems (LOSs) to banks and credit unions; ~200,000 active users and nearly 2,000 customers.	Growth should accelerate following technology upgrades, go-to-market strategies, and as the macro environment normalizes (recovery in mortgage/auto loans).	Growth is tied to consumer lending volumes (e.g., auto, mortgage); competition, and revenue growth has slowed to +5% in 2023 with 2%-5% expected in 2024.
Marqeta (MQ)	СК	OP	2,875	Marqeta has evolved into a full-scale platform to enable embedded finance. With SQ renewal addressed, 2025/26 targets call for mid-20s revenue growth and MSD-LDD EBITDA margins; GAAP NI positive by 4Q26.	Faster-than-anticipated booking-to-revenue conversion of newer customer. Retention and successful cross-sell with existing customers. Sales momentum in embedded finance. Operating leverage on margins. Cleaner comparison beginning 2H24.	Key customer risk as \sim 45% of gross profit is driven by Block (Cash Card contract expires June 30, 2028); regulatory overhangs.
nCino (NCNO)	СК	OP	3,807	Leading provider of commercial loan origination systems for enterprise financial institutions; initiatives to expand into new services (i.e., retail LOS, mortgage). MT targets call for a Rule-of-40, Rule-of-50 LT (vs. Rule-of-32 in FY24).	Success in adding new customers, cross-selling into existing customers, and international expansion. New product introductions coupled with normalizing churn should help drive accelerating subscription revenue growth in fiscal 2026.	Progress in noncommercial business has been slower than expected; revenue churn was elevated in FY24-FY25.
Q2 Holdings (QTWO)	СК	OP	4,189	Q2 is a diversified provider of bank-technology solutions with an expanding suite of products. CY24-26 targets call for avg. subscription growth of 14%, annual EBITDA margin expansion of 300-400bp, and over 70% FCF conversion in 2026.	Continued sales momentum driving new customer wins and existing customer cross-sells. BaaS platform diversifies business, enabling Q2 to capture share of massive embedded finance TAM. Margin expansion through mix benefits and scale.	Continued macro-driven volatility in subscription revenue growth and new sales activity. \$191M of debt due November 2025.
Cross-Border Pay	ments and	Remitta	nces			
Euronet (EEFT)	AJ+CK	OP	5,055	Leading EU and emerging market ATM franchise continues taking share, complemented by above-market money transfer revenue growth and greater contribution from REN-centric software offerings.	Robust C24 travel season provides ATM network revenue upside while underperforming machines are taken offline, boosting margin. Money transfer rev growth accelerates along w/agent growth and corridor share gains.	Travel demand sags and money transfer segment organic rev growth is pressured by geopolitical unrest. Investors unwilling to pay a premium for cash-based business w/cyclical demand exposure.
Flywire (FLYW)	AJ+CK	OP	2,329	Proprietary payment network, software, and platform wilong runway of organic rev growth compounding, driven by share gains in multibillion \$ early stage vertical market TAMs.	Upside driven by uptake in domestic healthcare and education payment products. Education-related regulatory overhangs dissipate as travel segment remains strong.	Slower-than-expected student visa growth. Local payment methods embraced.
Payoneer (PAYO)	СК	OP	2,094	Payoneer provides services that provide SMB customers access to global markets; it has a strong brand, with large cross-selling opportunities.	Accelerating non-float revenue should be a key catalyst; guidance calls for +10% in 2024 (vs. +22% in 2022 and +5% in 2023).	Lower interest rates represent a headwind to float revenue; cross-selling strategies may prove more difficult.
Remitly (RELY)	СК	OP	2,559	Digital money remittance company that is disrupting a large, highly fragmented market. Unit economics remain robust and growth opportunities are significant.	Continued resilience in existing customer behavior (e.g., 95% transaction profit retention after year 1) and efficiency in new customer acquisition (<12 mo. avg. payback and >6x LTV/CAC). Successful send market expansion. Margin expansion through transaction profit improvements and operating leverage.	Geographic concentration, ability to navigate the regulatory environment, internal execution, competition, pricing, and unit economics.
Western Union (WU)	СК	MP	4,356	Western Union has been losing market share in the massive money remittance industry; and has printed relatively stable retail transactions and sluggish yet improving digital revenue growth. FCF remains stable and attractive dividend yield.	Financial and KPI targets set low bar and appear achievable. Results may continue to benefit from regulatory benefit in Iraq. Leverage of WU brand name and image globally.	Revenue benefit from regulatory change in Iraq may normalize; market share losses may continue; digital growth is lagging peers.

Sources: FactSet and William Blair Equity Research

Our Big-Picture View

Having covered the fintech industry for nearly 25 years, we are struck by the extent to which the group has suffered significant post-COVID multiple compression, as illustrated by exhibits 36-42, contained in the appendix of this report. These exhibits depict the next-12-month (NTM) estimated P/Es for many names, both pre- and post-COVID. Our view is that significant multiple compression reflects fears of heightened competition, lower-than-appreciated entry barriers, aging tech stacks, and concerns about the long-term scale potential of fast-growing smaller fintechs.

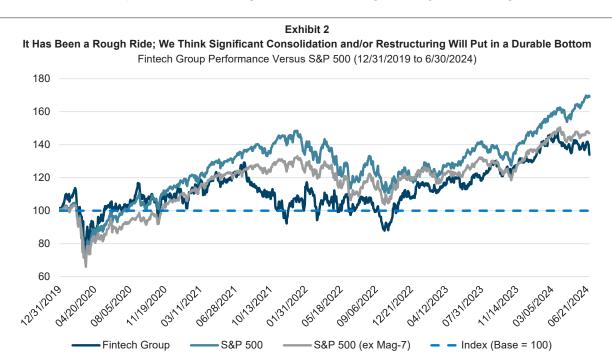
Considering recent performance, we recognize that investors' alpha-generation requirements make the group less attractive. We perceive the market as sending fintechs a clear message that the old model of M&A-driven revenue and EPS growth and adding new independent software vendor (ISV) distribution channels, which fueled share-price outperformance between the global financial crisis (GFC) and pandemic, no longer works. We believe this shift reflects the adverse effects of higher interest rates, questionable strategic rationale for some M&A, growing competition from vertically integrated POS software, and in some cases inconsistent financial performance.

Fintech has structurally changed by becoming more commoditized and increasingly dominated by a few providers capable of serving all but the most specialized merchant and issuer needs. While the prospect of lower interest rates should aid industry multiples, we believe investors must be more selective than ever, focusing on a handful of leaders with differentiated technology and accompanying above-average organic revenue growth at scale, financial consistency, and strong or improving free cash flow return on invested capital (FCF ROIC).

As an example, we highlight Visa and Mastercard's aggressive value-added services (VAS) push. Many of the companies' capabilities encroach on what have historically been services provided by merchant processors and other fintechs, including: risk/tokenization, data analytics, issuer processing, buy now pay later (BNPL), core processing, virtual card (vCard), business-to-business (B2B), and open banking. This has pressured legacy fintechs to push more aggressively into vertical market software and innovative merchant-facing solutions. Few have succeeded, in **our opinion.** We view Fisery, Block, and Shift4 as the best examples of this evolve-or-die approach. Companies like Global Payments and Corpay exemplify those struggling to adapt. We believe there is significant value in the hybrid network and credit models (e.g., Discover, American Express), and believe American Express's focus on premium consumers and SMBs remains key points of differentiation. While still lagging Visa and Mastercard, American Express continues to make progress expanding its global acceptance, evidenced by nearly 89 million global acceptance locations (versus 27 million in 2017). We contend it has a long runway of growth and maintains strong competitive advantages relative to its peers.

So, what turns the group? We acknowledge that a sharp valuation reset alone is not enough to attract new flows. We see two catalysts that can establish a durable bottom for fintechs: 1) significant industry consolidation and 2) business restructurings. On the former, we have seen a slew of M&A by both strategics and private equity over the past 12-18 months. We believe that the combination of large markets, secular tailwinds, and lower valuations suggests continued consolidation, with higher potential for some smaller- or midcap names such as Payoneer, Flywire, Riskified, and Marqeta. While the acquirer would benefit from innovative technologies and synergies, the acquiree could benefit from being part of a larger company with broader distribution. For example, Marqeta could be highly complementary to a network's vCard issuing and processing offerings, while Flywire could augment cross-border solutions at a company like Corpay. In past cycles, we note that valuation bottoms have been put in by sustained M&A. We believe the same could be true today. Notably, while some significant M&A has taken place in the last 12 months, we would have anticipated more by now. Our view is that industry consolidation will likely accelerate meaningfully over the next 12-18, especially if interest rates trend lower.

Regarding potential corporate restructurings, we argue that the era of the fintech conglomerate is over. The idea of using inexpensive debt or expensive stock to acquire marginally complementary businesses and extracting synergies is no longer a formula for multiple expansion. Rather, we believe investors are put off by the complexity and financial inconsistency of models like Global Payments, Corpay, and WEX. We accordingly anticipate these management teams will be forced, either by ongoing stock price underperformance or activists, to sell assets, streamline business units and go-to-market, and reinvest in their most competitively advantaged assets. Absent either of these relatively dramatic developments, we anticipate ongoing underperformance for most fintechs, with just a handful of well-positioned standouts generating consistent alpha.



Note: Prices indexed to 100

Sources: FactSet and William Blair Equity Research

William Blair

Exhibit 3
Fintech Coverage List
(\$s in millions, except per share values)

Company	Analyst	Dating	Price	52-Week	Market	FCF ROIC		Revenue			EBITDA			EPS		E	V/Reveni	ıe	E	EV/EBITC)A		P/E		Lev	ered FC	F %
Company	Analyst	Rating	07/16/24	Range	Сар	2025E	2023A	2024E	2025E	2023A	2024E	2025E	2023A	2024E	2025E	2023A	2024E	2025E	2023A	2024E	2025E	2023A	2024E	2025E	2023A	2024E	2025E
Networks																											
American Express (AXP)	AJ+CK	OP	\$249.63	\$141 - \$250	180,233	NA	60,515	66,591	72,993	NA	NA	NA	\$11.21	\$12.95	\$14.88	NA	NA	NA	NA	NA	NA	22.3x	19.3x	16.8x	NA	NA	NA
BILL Holdings (BILL)	JR	MP	\$55.73	\$46 - \$140	6,412	11.3%	857	1,192	1,525	41	168	258	\$0.34	\$1.84	\$2.20	6.5x	4.7x	3.7x	136.5x	33.3x	21.7x	165.2x	30.2x	25.4x	0.3%	2.5%	6.2%
Corpay (CPAY)	AJ	OP	\$293.61	\$220 - \$320	21,580	15.3%	3,758	3,936	4,357	1,993	2,115	2,371	\$13.20	\$18.82	\$21.42	7.2x	6.9x	6.2x	13.6x	12.8x	11.4x	22.2x	15.6x	13.7x	5.3%	5.7%	6.7%
Mastercard (MA)	AJ+CK	OP	\$443.53	\$360 - \$490	414,701	73.0%	25,098	27,788	31,414	15,346	17,060	19,490	\$12.26	\$14.35	\$16.81	16.8x	15.2x	13.5x	27.5x	24.8x	21.7x	36.2x	30.9x	26.4x	2.8%	3.1%	3.5%
Visa (V)	AJ+CK	OP	\$269.25	\$228 - \$291	549,001	42.7%	33,351	36,920	40,359	23,653	26,085	29,086	\$9.00	\$10.28	\$11.64	16.5x	14.9x	13.7x	23.3x	21.2x	19.0x	29.9x	26.2x	23.1x	3.4%	3.6%	4.0%
WEX (WEX)	AJ	OP	\$189.84	\$162 - \$244	8,049	10.0%	2,548	2,736	2,923	1,108	1,256	1,387	\$14.81	\$16.22	\$18.56	4.7x	4.4x	4.1x	10.9x	9.6x	8.7x	12.8x	11.7x	10.2x	6.4%	8.2%	9.3%
Merchant Acquiring and	Processin	ng	-14.35%																								
Block (SQ)	AJ	OP	\$72.07	\$39 - \$88	45,935	11.7%	8,920	10,806	13,504	1,792	2,845	3,600	\$1.80	\$3.48	\$4.44	5.0x	4.1x	3.3x	24.7x	15.6x	12.3x	40.1x	20.7x	16.2x	1.1%	3.3%	4.5%
Cantaloupe (CTLP)	CK	OP	\$7.30	\$6 - \$8	541	NA	253	295	344	36	39	52	\$0.20	\$0.22	\$0.32	2.1x	1.8x	1.6x	15.0x	13.6x	10.4x	36.5x	33.2x	22.8x	4.0%	NA	NA
Fiserv (FI)	AJ+CK	OP	\$157.14	\$109 - \$160	93,467	8.6%	17,865	19,233	20,883	8,208	9,180	10,208	\$7.52	\$8.79	\$10.17	6.5x	6.1x	5.6x	14.2x	12.7x	11.4x	20.9x	17.9x	15.5x	4.3%	4.8%	5.3%
Global Payments (GPN)	AJ	OP	\$103.11	\$92 - \$142	26,560	7.6%	8,671	9,223	9,853	4,326	4,650	4,997	\$10.42	\$11.58	\$13.18	4.8x	4.5x	4.2x	9.6x	8.9x	8.3x	9.9x	8.9x	7.8x	9.6%	10.9%	11.6%
Nuvei (NVEI)	CK	MP	\$32.59	\$13 - \$37	4,551	14.2%	1,190	1,377	1,596	437	495	605	\$1.69	\$1.98	\$2.69	4.8x	4.1x	3.6x	13.0x	11.5x	9.4x	19.3x	16.5x	12.1x	6.5%	8.0%	10.4%
Nayax (NYAX)	CK	MP	\$23.00	\$17 - \$31	775	22.4%	236	327	414	8	32	52	(\$0.48)	(\$0.11)	\$0.40	3.2x	2.3x	1.8x	91.2x	23.2x	14.5x	NA	NA	57.5x	NA	1.4%	4.0%
PayPal (PYPL)	AJ	MP	\$61.81	\$50 - \$77	66,260	35.4%	29,771	32,051	34,644	6,100	6,152	6,685	\$5.10	\$4.21	\$4.39	2.0x	1.8x	1.7x	9.5x	9.5x	8.7x	12.1x	14.7x	14.1x	6.9%	7.6%	8.4%
Riskified (RSKD)	CK	OP	\$6.52	\$3 - \$7	1,154	60.1%	298	329	368	(8)	15	29	\$0.05	\$0.21	\$0.29	2.5x	2.2x	2.0x	NA	48.2x	25.2x	130.4x	31.0x	22.5x	0.6%	3.1%	4.4%
Toast (TOST)	SS	OP	\$27.30	\$14 - \$28	17,308	185.3%	1,362	1,754	2,168	61	270	424	\$0.00	\$0.33	\$0.74	11.9x	9.2x	7.5x	265.5x	60.0x	38.2x	NA	82.7x	36.9x	0.3%	1.5%	2.4%
Banktech and Embedde	d Finance																										
Alkami (ALKT)	CK	OP	\$33.16	\$15 - \$33	3,215	22.6%	265	331	411	(2)	23	57	(\$0.04)	\$0.21	\$0.50	11.8x	9.5x	7.6x	NA	138.2x	54.7x	NA	160.7x	65.8x	NA	0.6%	1.9%
Evertec (EVTC)	CK	OP	\$34.21	\$29 - \$42	2,269	15.3%	695	851	926	292	332	366	\$2.82	\$2.90	\$3.23	4.3x	3.6x	3.3x	10.3x	9.1x	8.2x	12.1x	11.8x	10.6x	6.6%	7.2%	9.8%
FIS (FIS)	CK	OP	\$76.91	\$47 - \$79	44,454	9.6%	9,820	10,129	10,541	3,972	4,125	4,337	\$3.38	\$4.93	\$5.46	5.3x	5.2x	5.0x	13.2x	12.7x	12.1x	22.8x	15.6x	14.1x	4.3%	5.8%	6.1%
Green Dot (GDOT)	CK	MP	\$9.99	\$7 - \$21	532	16.2%	1,484	1,601	1,690	171	171	202	\$1.63	\$1.56	\$1.75	0.4x	0.3x	0.3x	3.1x	3.1x	2.6x	6.1x	6.4x	5.7x	18.8%	22.8%	25.2%
Jack Henry (JKHY)	CK	OP	\$169.74	\$137 - \$178	12,396	18.4%	2,160	2,302	2,479	676	715	820	\$5.11	\$5.42	\$6.22	5.8x	5.5x	5.1x	18.7x	17.7x	15.4x	33.2x	31.3x	27.3x	3.1%	3.0%	3.5%
MeridianLink (MLNK)	CK	OP	\$22.63	\$15 - \$26	1,750	NA	304	317	345	113	127	144	(\$0.14)	\$0.33	\$0.45	7.0x	6.7x	6.1x	18.7x	16.7x	14.7x	NA	68.6x	50.3x	2.3%	NA	NA
Marqeta (MQ)	CK	OP	\$5.55	\$5 - \$7	2,875	NA	676	505	628	(2)	10	47	(\$0.42)	\$0.03	(\$0.17)	2.8x	3.8x	3.0x	NA	183.1x	40.2x	NA	185.0x	NA	NA	NA	NA
nCino (NCNO)	CK	OP	\$32.66	\$27 - \$37	3,807	10.1%	477	543	624	70	92	124	\$0.51	\$0.64	\$0.89	8.0x	7.0x	6.1x	54.6x	41.4x	30.8x	64.0x	51.0x	36.7x	1.6%	2.0%	2.7%
Q2 Holdings (QTWO)	CK	OP	\$70.47	\$29 - \$71	4,189	NA	625	687	764	77	112	144	(\$1.12)	(\$0.74)	(\$0.24)	7.0x	6.4x	5.8x	57.3x	39.3x	30.5x	NA	NA	NA	1.1%	NA	NA
Cross-Border Payments	and Remi	ittances																									
Euronet (EEFT)	AJ+CK	OP	\$108.63	\$74 - \$120	5,055	29.6%	3,688	4,016	4,352	619	681	759	\$7.46	\$8.60	\$9.45	1.4x	1.3x	1.2x	8.3x	7.6x	6.8x	14.6x	12.6x	11.5x	7.5%	8.3%	9.2%
Flywire (FLYW)	AJ+CK	OP	\$18.91	\$15 - \$36	2,329	69.5%	382	488	620	42	70	111	(\$0.07)	\$0.10	\$0.53	4.5x	3.5x	2.8x	40.6x	24.6x	15.4x	NA	189.1x	35.7x	1.9%	3.8%	5.9%
Payoneer (PAYO)	CK	OP	\$5.53	\$4 - \$6	2,094	151.5%	831	905	973	205	207	217	\$0.24	\$0.28	\$0.39	1.8x	1.7x	1.6x	7.4x	7.3x	7.0x	23.0x	19.8x	14.2x	6.2%	8.6%	10.7%
Remitly (RELY)	CK	OP	\$13.48	\$12 - \$28	2,559	28.2%	944	1,205	1,551	44	90	140	(\$0.65)	(\$0.38)	(\$0.12)	2.6x	2.0x	1.6x	54.6x	26.9x	17.3x	NA	NA	NA	1.3%	2.8%	4.7%
Western Union (WU)	CK	MP	\$12.60	\$11 - \$14	4,356	NA	4,470	4,179	4,238	1,030	990	1,005	\$1.74	\$1.74	\$1.83	1.3x	1.4x	1.4x	5.6x	5.9x	5.8x	7.2x	7.2x	6.9x	15.6%	NA	NA
S&P 500			\$5,667.20	\$4,104 - \$5,670								_	\$226	\$246	\$274							25.0x	23.0x	20.6x			

Note: Stephen Sheldon (SS); Jake Roberge (JR) Sources: FactSet and William Blair Equity Research

Our Best Ideas: A Thumbnail Sketch—V, MA, AXP, SQ, FI, FIS, RELY, and WEX Lead the Way

As detailed in our company write-ups that follow, we view Visa and Mastercard as long-term above-average organic revenue and FCF compounders and believe the stocks will keep pace in a directional bull market while delivering superior through-the-cycle risk-adjusted returns. Although **MA** and **V** stocks have been relative year-to-date market laggards, we recommend them today for long-term investors and would become more aggressive during market drawdowns or periods of company-specific uncertainty (for example, due to regulatory or competitive fears).

Regarding American Express, we see ongoing demographic and SMB share gains and merchant location growth as underpinning above-average organic revenue growth and returns (versus the market), hence multiple expansion. We see accelerating second half 2024 Square GPV, gross profit, and EBITDA growth as driving a significant positive re-rating for Block. We also contend the Street fundamentally undervalues the company's cash app segment, hence our upgrade. Fiserv should continue posting superior top-line and EPS expansion, in our opinion, as Clover takes market share, its international merchant business thrives, and the company monetizes platform business beyond Clover. As for FIS, we see the company poised for more consistent financial performance, EPS upside, and aggressive shareholder capital return. This should at least support further multiple expansion. Lastly, we contend Remitly has been unduly punished by competitive concerns and what we consider investor confusion around KPIs, such as new active customers vs. new customer adds and revenue yield vs. profit yield. We also believe competitive concerns have been overblown, creating an attractive entry point for aggressive growth investors.

We view **WEX** and Corpay as more alike than different but favor WEX in a head-to-head match-up, owing to what we consider a better-defined product suite. Although we have historically harbored reservations about travel customer concentration, we contend the <u>recently negotiated long-term Booking.com contract</u> and growing non-travel corporate volume mitigate this risk. We are also enamored with the company's strong healthtech competitive position, as evidenced by 20% of HSA accounts on its platform. We also like that associated custodial balances on which the company earns interest offer a hedge on corporate debt costs. Lastly, we believe the <u>2023 Payzer acquisition</u> offers material cross-selling upside not contemplated in Street estimates.

While not a best idea, given our multiyear thematic outlook, we are downgrading **PayPal** to Market Perform from Outperform. Although the stock appears attractively valued at just 14.1 times estimated 2025 EPS, 8.7 times EBITDA, and an 8.4% FCF yield, we increasingly view PayPal as at best a balanced risk/reward, given growing competition, associated challenges improving transaction margin, a limited e-commerce TAM given a lack of card-present or unified commerce strategy, structural challenges monetizing Venmo, and apparent unwillingness to make a strategically accretive acquisition.

Our Favorite Fintech Names in Greater Detail

Visa and Mastercard: Industry Stalwarts, Long-Term Buy-and-Hold, Get Aggressive on Pullbacks

We believe the two pure-play networks will generate through-the-cycle alpha, even if they do not necessarily attract incremental capital in a technology- and AI-led bull market. These companies have the key characteristics of superior investments, in our opinion, including: 1) above-average durable organic revenue growth; 2) consistent above-average FCF ROIC; 3) superior financial consistency; and 4) disciplined, shareholder-friendly capital allocation.

As previously discussed, we anticipate the companies' roughly \$20 trillion core global carded TAM will deliver consistent high-single-digit percent-plus durable volume growth, and unlike other ecosystem participants, we believe Mastercard and Visa possess significant pricing power. As a result, we expect organic revenue growth will at least track market volume expansion with potentially more relative upside at Mastercard given its smaller size and our view toward incremental share gain. This consideration, combined with modest operating leverage and ongoing share buybacks, suggests both companies can deliver near-20% long-term EPS compounding. Although this outlook is materially consistent with consensus and likely reflected in current valuation, history suggests bouts of fear around competition or regulatory risk can create attractive entry points for opportunistic investors. Regardless, we recommend both stocks for long-term growth investors today.

In addition to Visa and Mastercard's leading share of the carded market, we believe they are diversifying their businesses and becoming more deeply embedded in their customers' payments infrastructures. One of our multiyear secular growth theses is embedded finance. Embedded finance describes the process of nonfinancial companies offering financial services, such as earned wage access (EWA), vCards, or BNPL. The two leading networks have created new VAS revenue streams by offering these solutions to issuing and non-issuing customers. They have also built and acquired assets that support bill-pay, which is driving card attach, and open banking, which we think will gain share, particularly outside the U.S. Open banking solutions are important, in our view, as account-funded wallets are a competitive threat to cards. We are encouraged that the networks have cut open banking deals around the world, with perhaps the most notable being Mastercard's relationship with IP Morgan Chase. While we believe Mastercard's VAS offering is more sophisticated and diversified than Visa's, representing almost 40% of revenue versus Visa's roughly 25%, both companies are well positioned to grow VAS organic revenue at above-corporate-average rates. This increases confidence in our multiyear organic revenue, EBITDA, FCF, and EPS growth algorithm.

Longer term, we anticipate that new flows will play a larger role supporting the networks' organic revenue growth. Visa estimates that the new flow TAM, including solutions like B2B and money movement, is roughly \$200 trillion, or about 10 times the carded TAM. Although the companies do not explicitly quantify new flows revenue contribution, Visa has offered some key performance indicators (KPIs) suggesting that it has good traction. For example, on its second quarter fiscal 2024 call, management mentioned that new flow revenue growth was 14%, underpinned by 31% growth in Visa Direct transactions, which reached 2.3 billion, and 8% B2B volume expansion. Similarly, on its first quarter 2024 call, Mastercard highlighted new flows, citing an expanded B2B relationship with Wells Fargo and 40% remittance and disbursements transaction growth. We are enthusiastic about potential future new flow revenue contribution and anticipate the networks will provide more disclosure, just as they have as their VAS revenue has scaled.

Lastly, as we touched on earlier, credentials, tokenization, and merchant acceptance location growth bolster confidence in our roughly 10% long-term sustainable organic revenue growth outlook. The ability to support new credentials for issuers and tokenize transactions across different

payment modalities is unique to Visa and Mastercard. As further data points, Mastercard highlighted on its first quarter 2024 call that it saw 50% tokenized transaction growth, with tokens representing just 25% of Mastercard processed transactions. In addition to creating a more secure payment environment where credentials are shared between issuer and merchant, improving approval rates and transaction flow, we view tokens as an important inroad to selling more VAS.

Visa and Mastercard already boast robust EBITDA margin, but we believe there remains upside as the companies enjoy natural operating leverage and bring more transactions onto their networks. Mastercard recently disclosed that it has increased its share of processed transactions to roughly 66%, from just 55% in 2018. We believe this reflects European Maestro conversions, share gains, and flips of previously closed-loop networks to Mastercard. We estimate that Visa's calendar 2025 EBITDA margin will be 72%, and we put Mastercard's calendar 2025 margin at 62%. Over time, we anticipate both companies can take profitability toward 80%, even as they invest for sustained above-average organic revenue growth. We believe such strong profitability and ample FCF can generate 3-plus percentage points of annual EPS growth via share buybacks. We project that Visa will generate above \$22 billion of calendar 2025 FCF, while Mastercard should produce almost \$15 billion in calendar 2025. The networks have historically been acquisitive, although given their size, we do not anticipate material FCF devoted to M&A. Rather, we believe they will continue doing important tuck-in deals that provide capabilities, such as bill-pay, fraud and analytics, B2B payments, open banking solutions, disbursements, and remittances.

Valuation

We believe Visa and Mastercard are the best-positioned fintechs to drive EPS growth, robust FCF ROIC, shareholder capital return, and accretive M&A. This supports our view toward sustained premium valuations. Specifically, we note that Mastercard and Visa currently trade at 26.4 times and 23.1 times estimated 2025 EPS, respectively. We see both multiples as at least sustainable, supporting high-teens percent annual price gains, driven by EPS growth. That said, we view Visa's roughly 12% relative discount as modestly too wide. We appreciate Mastercard's faster relative VAS revenue growth and greater long-term margin expansion potential, but we believe Visa's leading merchant acceptance footprint and lower exposure to discretionary credit and cross-border spending will allow the stock to close this gap, through the economic cycle.

	Exhibit 4	
Visa Inc.	Estimate	Changes

William Blair Estimat	<u>tes</u> 2023		2024			2025	
(In \$M, except EPS)	<u>Actual</u>	<u>Prior</u>	New	<u>∆\$</u>	<u>Prior</u>	<u>New</u>	<u>∆\$</u>
Revenue Y/Y %	\$33,351 10.5%	\$37,004 11.0%	\$36,920 10.7%	(\$83)	\$40,727 10.1%	\$40,359 9.3%	(\$368)
EBITDA Y/Y % Margin %	23,653 10.7% 70.9%	26,062 10.2% 70.4%	26,085 10.3% 70.7%	\$23	28,973 11.1% 71.1%	29,086 11.5% 72.1%	\$113
Adj. EPS	\$9.00	\$10.25	\$10.28	\$0.03	\$11.51	\$11.64	\$0.13
Y/Y %	0.14255	13.8%	14.1%			13.3%	
FCF	19,121		19,496			22,295	
Y/Y %	7.8%		2.0%			14.4%	
Conversion %	102.6%		93.9%			97.5%	
Consensus Estimate	<u>es</u>		2024			2025	
(In \$M, except EPS)			<u>Estimate</u>			<u>Estimate</u>	
Revenue			\$36,833			\$40,546	
Y/Y %			10.4%			10.1%	
EBITDA			26,083			29,049	
Y/Y %			10.3%			11.4%	
Margin %			70.8%			71.6%	
Adj. EPS			\$10.24			\$11.56	
Y/Y %			13.7%			12.9%	

Note: Reflects calendar year metrics. Fiscal year ended September. Sources: Company reports, FactSet, and William Blair Equity Research

Exhibit 5 **Mastercard Incorporated Estimate Changes**

William Blair Estima	<u>tes</u> 2023		2024			2025	
(In \$M, except EPS)	<u>Actual</u>	<u>Prior</u>	New	<u>∆\$</u>	<u>Prior</u>	New	<u>∆\$</u>
Revenue Y/Y %	\$25,098 12.9%	\$27,801 10.8%	\$27,788 10.7%	(\$13)	\$31,499 13.3%	\$31,414 13.0%	(\$85)
EBITDA Y/Y % Margin %	15,346 14.5% 61.1%	17,146 11.7% 61.7%	17,060 11.2% 61.4%	(\$86)	19,770 15.3% 62.8%	19,490 14.2% 62.0%	(\$281)
Adj. EPS	\$12.26	\$14.27	\$14.35	\$0.07	\$16.50	\$16.81	\$0.31
Y/Y %		16.4%	17.0%		15.6%	17.1%	
FCF	11,513		12,976			14,695	
Y/Y %	14.1%		12.7%			13.3%	
Conversion %	99.2%		97.9%			97.7%	
Consensus Estimat	<u>es</u>						
			2024			2025	
(In \$M, except EPS)			<u>Estimate</u>			<u>Estimate</u>	
Revenue			\$27,831			\$31,275	
Y/Y %			10.9%			12.4%	
EBITDA			17,137			19,555	
Y/Y %			11.7%			14.1%	
Margin %			61.6%			62.5%	
Adj. EPS			\$14.29			\$16.59	
Y/Y %			16.6%			16.1%	

Sources: Company reports, FactSet, and William Blair Equity Research

Risks

Aside from macro exposure (the potential adverse EPS effects of which the networks can at least partly offset through lower marketing spend and the built-in stabilizer of rebates and incentives), we view the biggest risks to our bullish thesis as regulatory overreach and the proliferation of open banking. On the former, there have been myriad efforts over the years to lower interchange, and despite the recent U.S. interchange lawsuit settlement, which now needs to be revisited given it was rejected by a judge on June 25, large merchants continue to complain about high card acceptance costs. We encourage investors to note that lower interchange has no direct effect on Visa and Mastercard as it is a cost borne by merchants, not a network revenue stream. History has demonstrated, in our opinion, that issuers have responded to lower interchange by cutting consumer cardholder rewards, rather than pressuring the networks for lower fees. While we are hard-pressed to envision a situation in which interchange falls enough to impact consumer rewards such that card use would materially suffer, we cannot rule out this scenario.

As discussed above, open banking, which allows consumers to fund cards with bank accounts, potentially circumvents the networks. Although we anticipate open banking will gain global popularity—see Pix's success in Brazil—both companies are actively supporting these capabilities. In addition, we note that fraud prevention and customer service can suffer when transactions lose the protection of Visa and Mastercard issuer services.

American Express: Hitting All the Right Notes

Over the years, Amex has narrowed its focus to premium consumers and SMBs, and it has expanded its network, remaining keenly focused on improving its value proposition and driving customer engagement. This narrower focus has driven accelerating organic revenue growth, and we are bullish on its aspirational double-digit revenue growth target (versus prior target of mid- to uppersingle-digit growth), and midteens EPS growth (versus prior target of double digits).

American Express has a small share in a massive, growing market, boasting revenue of \$60.5 billion in what we estimate is a \$700 billion payments market opportunity. The industry is expected to grow revenue at a 7% clip, while industry billings are growing at a 9% rate through 2026. American Express's core 16 markets represent about 81% of the revenue pool, and within its top five countries it has just about 6% share of total spending.

While difficult to quantify, we believe American Express's growing presence with millennial and Gen Z customers represents a nice tailwind to growth. We estimate that billed business from the youngest cohorts has grown at a 24% compound annual clip and now represents 32% of U.S. consumer volume exiting 2023 (versus 20% exiting 2019). The data suggests that Amex's share of wallet with younger demographics is 10%-30% above that of older cohorts. Volume for millennial and Gen Z customers was about 17% below all other age cohorts, and as these customers grow their income, American Express should at least gain its fair share, in our opinion. We note that peak earnings years in the U.S. typically occur at 45-54 years old (includes Gen X) with an average pretax income of nearly \$130,000 per year. This compares to about \$52,000 for Gen Z and \$100,000 for millennials.

We believe expanding merchant acceptance is a key driver of increasing American Express's share of spending wallet. The number of global locations accepting Amex exceeds 89 million, up 35% from 66 million in 2021, versus less than 10 million in 2016 and 25 million in 2017. Excluding merchants from China, global locations in force rose 27%, to about 62 million in 2023, versus 49 million in 2021. Notably, management has increased international locations in force by almost 4 times since 2017, and expanded coverage has led to greater spend with international merchants,

which generated \$518 billion in network spend in 2023 on an FX-adjusted basis, versus \$304 billion in 2017. American Express also introduced a target of 90 million international locations in force by 2026, representing an increase of about 25% from 2023.

We believe the dramatic growth in merchant acceptance to date has been primarily driven by American Express's hybrid acquiring strategy, which employs third-party partners for SMB acceptance. For example, in 2014, American Express launched OptBlue, which allowed third parties to contract directly with smaller merchants to accept American Express cards and negotiate pricing. These third-party acquirers include Fisery, FIS, Elavon, TransFirst, Heartland, Wells Fargo, Chase Global Payments, and Bank of America, among others. American Express also partners with payment facilitators like Stripe, Adven, and Block, along with licensed acquirers including Samsung Card, Isracard, and Garanti BBVA, to efficiently reach the long tail of merchants.

Improving SMB Business

American Express has a built a significant leadership position in the SMB market, in our opinion, and it has gained market share since the pandemic despite volatile industry trends. The company has 3.9 million U.S. small-business customers, which had \$427 billion of billings in 2023, representing 25% of billed volume, and about 47% market share. Prior to the pandemic, U.S. small-business card spend had been a relatively stable industry, growing at about a 9% compound annual rate between 2010 and 2019, though the pandemic skewed trends and more recently organic industry pressure has kept organic growth subdued.

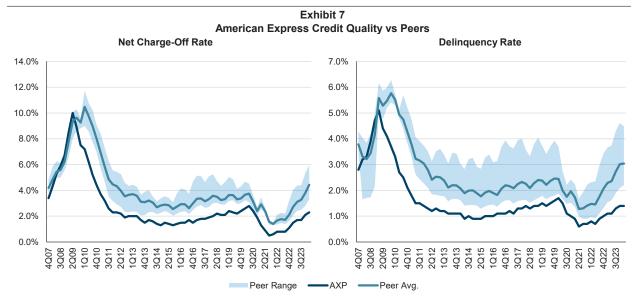
As outlined below, contribution from attrition and new accounts have been relatively stable, suggesting this segment of the company's business is positioned for a rebound.

Exhibit 6 AXP U.S. SME Billed Business Growth by Contribution

Period	Organic Growth	Impact from Attrition	New Acct. Growth	Total Growth
2019	3%	-3%	6%	6%
2020	-14%	-3%	5%	-12%
2021	19%	-2%	7%	24%
2022	13%	-2%	8%	19%
2023	-2%	-2%	7%	3%
4Q23	-4%	-2%	6%	1%
1Q24	-3%	-2%	6%	1%

Note: New account spend defined as ≤13 months of tenure Source: Company reports

American Express is not immune to credit risk, but we think a focus on premium consumers has driven industry-leading credit quality, which should help mitigate cyclical volatility in the credit cycles. Consider the improving average credit score across its customer base as 70% of U.S. consumer and small business card member loans and receivables are from customers with FICO scores over 720, versus 55% in 2007, and the average FICO for newly acquired U.S. consumer accounts was 759, which is 53 points ahead of the industry. Given the premium customer base, American Express's net charge-off and delinquency rates have consistently been below its top-5 credit card issuing peers.



Notes: Peers include BAC, C, JPM, DFS, and COF; peer avg. between 4Q07 and 2Q10 excludes BAC due to resegmentation Sources: Company reports and William Blair Equity Research

Valuation and Risks

We anticipate AXP shares will appreciate at least in line with earnings growth, yet we believe the opportunity for continued multiple expansion is warranted given the evolution of the business, its faster growth profile, and the fundamental performance relative to the market.

Relative to the market, AXP shares trade at a 16% discount to the S&P 500, which compares to the 10-year average discount of 18%, even though American Express's revenue and earnings growth has outperformed the overall market over the last 5- and 10-year periods. Further, American Express's revenue and earnings growth generally outperforms similarly valued constituents of the S&P 500; thus, we believe a valuation premium to the S&P 500 is warranted. We encourage investors to recall that AXP shares traded at 1.1-times *premium* prior to 2014. Applying an S&P 500 multiple of 23 times to our 2024 estimates suggests 19% upside from current levels, while applying a 25-times multiple (10% premium to the S&P 500) suggests 31% upside. The data suggests that the "Magnificent 7" adds about 3.5 points to the market multiple, thus implying that AXP shares trade about in line with the "ex-Magnificent 7" market multiple of 19.7 times, while applying a 21.7-times multiple (10% premium, ex-Magnificent 7) suggests 12.6% upside.

Key risks include higher-than-expected credit costs, a slowdown in card spending, increased regulatory scrutiny of the credit card industry, compression of interchange fees prompted by regulatory intervention, and economic cyclicality.

Fiserv: Software-Integrated SMB POS Leader

FI has been one of the best-performing fintech stocks in our universe, having nearly kept up with the S&P 500 (+23% vs. +26%) over the trailing 12 months. We attribute this relatively strong performance to sustained above-average merchant organic revenue growth, which has consistently been well above peer performance, primarily Global Payments and Worldpay (private). Merchant top-line expansion has also significantly exceeded our estimates of midsingle-digit percent U.S. industry revenue growth and closer to 10% rest of world. Specifically, in the first quarter of 2024, Fiserv's merchant segment delivered 21% organic revenue growth, excluding the benefit of Argentina inflation. We believe this is an impressive result measured against Global's 8% first-quarter

merchant organic revenue growth and what we believe was low-single-digit percent growth at Worldpay. We do not anticipate such robust performance to continue, considering outsized firstquarter SMB growth, but we believe Fisery will grow significantly faster than peers for the near term. We think this relatively faster growth, fueled by Clover's leading software-integrated POS position, along with steady operating leverage, strong FCF conversion, and shareholder capital return, will at least sustain Fiserv's valuation.

It is our opinion that Clover is Fiserv's key distinction, and the primary reason FI shares have outperformed most of its fintech peers over at least the last 12 months. To wit, Clover delivered 30% first quarter 2024 organic revenue growth, or nearly 10 points of merchant segment top-line expansion. Whereas we had previously expected non-Clover offerings, including enterprise, to be a drag on the segment's top line, this has not been the case, as evidenced by first quarter's 29% enterprise organic revenue growth. We now think Clover can support 8-10 percentage points of segment organic revenue growth, while the rest of merchant, or the remaining approximately 70% of revenue, can add 3-5 percentage points of expansion. This would be markedly slower than the first-quarter performance, even as we expect full year 2024 merchant organic revenue growth to be in the high teens, excluding Argentina inflation, slowing to roughly 16% in 2025. Regardless, this merchant organic revenue growth outlook is well above peers, and we contend it is difficult to overstate Clover's contribution to merchant retention, market share, pricing power, and long-term ROIC. At this point, we would go so far as to say that the software-integrated SMB POS market is a two-horse race, between Square and Clover. Some smaller, vertical-specific providers, like Toast, and innovative next-generation technology offerings, such as those from Shift4, can eat around the edges, but we do not anticipate any providers rivaling the leaders for significant market share. We also like Clover's horizontal market approach. Whereas we see it concentrating on restaurant growth, given the importance of this vertical, we believe its multi-industry offering, and Square's similar market orientation, are competitive advantages.

We focus on Fiserv's U.S. merchant segment success but would be remiss not to discuss impressive international organic revenue growth. We estimate that nearly 30% of Fiserv's merchant revenue is generated outside the U.S., with outsized contributions from Europe and Latin America. We have been impressed by roughly midteens percent international organic revenue growth, excluding Argentina inflation, and see opportunities for it to take share in important markets like Brazil where Fisery provides infrastructure support for Pix, the nation's leading open banking offering. We expect to hear more about a growing Pix revenue contribution in second half 2024 and into next year, particularly as the network becomes more merchant facing and adds services, rather than being peer-to-peer (P2P) centric. We also think Clover's international expansion efforts add confidence to the company's goal of reaching \$4.5 billion of Clover revenue by 2026. For example, Fiserv recently launched Clover in Germany via a partnership with Deutsche Bank. Importantly, we think SMB software-integrated POS is much less mature outside the U.S., offering Clover a potential first-mover advantage.

In addition to what we view as Clover's explicit financial contributions to our bullish Fisery outlook, there are some investor-perception benefits from the way Fiserv talks about its overall business, particularly the increasing importance of VAS to its long-term organic revenue growth, profitability, and ROIC. We also like the simplicity of Fiserv's two-segment reporting, which we think helps investors understand the business, particularly as the company seems to be enjoying cross-selling success, which we discuss below. In some ways, we contend Fiserv has taken a page from the networks' playbook as it highlights VAS as an important organic revenue growth driver. Specifically, the company is making what we see as a credible argument that its above-average longterm organic revenue growth is not solely dependent on card volume. Rather, Fiserv can introduce new services that augment yield. This is most easily seen in Clover, in our view, considering first quarter 2024's 10-basis-point year-over-year yield improvement.

The company has become increasingly focused on capturing the B2B opportunity and has sized the revenue opportunity at about \$2 billion with its existing customers. Fiserv recently announced a partnership with Melio, a B2B payments platform, which will combine Melio's AP/AR workflows with Fiserv's biller, merchant, and payments network and capabilities. The new offering, Cash-Flow Central, is a suite of solutions that help enable B2B payments and is primarily targeted to small businesses. The offering joins Fiserv's existing portfolio of B2B payments offerings, including SnapPay, which is a cloud-based B2B solution (AP/AR) that integrates into SAP ERP systems that largely targets large/midmarket firms.

We believe Fiserv's merchant business is key to the stock's prospective outperformance, but the company's financial solutions segment also appears poised to deliver relatively strong, at least midsingle-digit, organic revenue growth, despite concerns about the health of the U.S. financial institution market. Although the company's core banking solutions, which are about 25% of segment revenue, may remain a laggard (2% normalized first quarter 2024 organic revenue growth), we think the rest of the segment can power 5%-8% top-line expansion, driven by ongoing issuer processing and digital payments wins. We see Fiserv continuing to benefit from P2P volume growth at Zelle (45% first quarter 2024 transaction expansion), new card issuing verticals like government, digital core wins at its Finxact subsidiary, and more accounts payable (AP)/accounts receivable (AR) automation wins with its CashFlow Central offering at partner banks. Notably, the company announced a CashFlow Central win at US Bank earlier this year, indicative of how Fiserv is competing with Visa and Mastercard for new flows. This is another factor that sets Fiserv apart competitively from other fintechs, in our opinion.

Fiserv has done a good job delivering steady operating leverage, in our opinion, and we put 2025 consolidated adjusted EBIT margin at 39.6%, up from 33.9% in 2021. Margin expansion is a function of scale and more software revenue flowing across its Clover platform, in our opinion. We expect Fiserv will deliver 50-100 basis points of annual margin expansion over the next three to five years. This should support at least \$4.9 billion of 2025 FCF, which we anticipate will compound at an 8%-10% annual rate. Share buybacks will probably be Fiserv's chief use of capital, as the company has not done significant M&A. This could change, however, and we would not be surprised to see Fiserv do a significant acquisition. This is another reason we argue that Global Payments should be pursuing strategic M&A: if Fiserv does a deal that bolsters its competitive position, it could further pressure Global Payments' multiple.

Valuation

We expect robust organic revenue, EBITDA, EPS, and FCF growth will at least support Fiserv's current valuation, which at 15.5 times estimated 2025 EPS and 11.4 times estimated 2025 EBITDA represents just a modest premium to stocks of less well-differentiated and slower growing fintechs, like Corpay. We also note that FI shares trade at an estimated 38% P/E and 44% EBITDA multiple discount to the estimated 2025 average for V and MA. We anticipate that Fiserv's relative valuation gap will close as the company delivers consistently above-consensus financial results. A move to its post-COVID NTM P/E implies a \$180-plus stock.

	ı	Exhib Fiserv, Inc. Estin		jes			
William Blair Estimat							
	2023		2024			2025	
(In \$M, except EPS)	<u>Actual</u>	<u>Prior</u>	New	<u>∆\$</u>	<u>Prior</u>	<u>New</u>	<u>∆\$</u>
Revenue	\$17,865	\$19,119	\$19,233	\$114	\$20,896	\$20,883	(\$13)
Y/Y %	7.5%	7.0%	7.7%		9.3%	8.6%	. ,
Adj. EBIT	6,729	7,444	7,484	\$41	8,339	8,278	(\$61)
Y/Y %	14.4%	10.6%	11.2%		12.0%	10.6%	, ,
Margin %	37.7%	38.9%	38.9%		39.9%	39.6%	
EBITDA	8,208	9,048	9,180	\$133	9,987	10,208	\$221
Y/Y %	13.8%	10.2%	11.8%	,	10.4%	11.2%	,
Margin %	45.9%	47.3%	47.7%		47.8%	48.9%	
Adj. EPS	\$7.52	\$8.69	\$8.79	\$0.11	\$9.93	\$10.17	\$0.23
Y/Y %		15.5%	16.9%		14.3%	15.6%	
FCF	4,016		4,503			4,911	
Y/Y %	14.3%		12.1%			9.1%	
Conversion %	86.7%		87.3%			84.6%	
Consensus Estimate	es						
' <u> </u>	<u> </u>		2024			2025	
(In \$M, except EPS)			Estimate			Estimate	
Revenue			\$19,254			\$20,939	
Y/Y %			7.8%			8.8%	
Adj. EBIT			7,479			8,315	
Y/Y %			11.1%			11.2%	
Margin %			38.8%			39.7%	
EBITDA			9,054			9,934	
Y/Y %			10.3%			9.7%	
Margin %			47.0%			47.4%	
Adj. EPS			\$8.71			\$10.13	
Y/Y %			15.8%			16.3%	

Risks to Our Outperform Rating

Sources: Company reports, FactSet, and William Blair Equity Research

Perhaps the biggest near-term risk to our bullish Fiserv outlook is likely meaningful second half 2024 and first half 2025 merchant segment organic revenue growth deceleration as the company grows over Clover SaaS attach gains, pricing actions, and the tailwinds of Argentinian inflation. We also expect Square to be more competitive in second half 2024, particularly in the hospitality vertical. This is a not a thesis-changing observation. Rather, it could create some near-term headwinds after a strong run. Otherwise, Fiserv could face increased competition from other software-integrated POS providers, like Square, Global Payments, Toast, and Shift4. It could also face competitive threats from emerging UC offerings from Adyen, Stripe, and Shopify. Any change in Argentinian merchant settlement practices could also hurt the company's revenue loan anticipation business, which is part of this market's tailwind. In financial solutions, we see risk from a potentially soft financial institution spending environment amid deposit outflows and consolidation. There are also new digital native competitors in this market, and we think the company's Finxact offering remains relatively small, despite some impressive recent wins.

Block: Upgrading to Outperform From Market Perform on Likely Modest GPV Trend Improvement and Powerful EBITDA Upside

We recognize that SQ stock performance has disappointed over the last 12 months, with shares down 4.5% versus the SPX up 25.8%. Our view is that much of this relative underperformance reflects concerns about Square's ecosystem (40% of gross profit dollar) share losses. These concerns have been justified, in our view, evidenced by Square's 8% first quarter 2024 gross payment volume (GPV) growth, which meaningfully lagged Clover's (backed by Fiserv) 19% and was just in line with Visa. However, we believe this spread is currently maximized, set to close measurably in second half 2024 and beyond. This outlook, consistently above-consensus EBITDA, what we consider a clear path to Rule of 40 by 2026, and Square's compelling valuation prompt us to upgrade our rating to Outperform from Market Perform.

Our bullish view reflects the following: First, we contend Square's execution is steadily improving, marked by simpler merchant onboarding and new vertical solutions, such as in hospitality. Second, CEO Jack Dorsey is injecting new energy into a business that had become complacent, despite technology leadership. In addition to streamlined merchant onboarding, Square has consolidated apps, and made it easier for merchants to accept payments through the introduction of capabilities like Tap-to-Pay on iPhone. Third, Cash App continues emerging as an important neobank leader, and the company is adding new monetization levers such as short-term loans. Fourth, expense discipline drove first quarter 2024 EBITDA margin to 33.7% of gross profit, up from 21.5% last year, and we believe this strong operating leverage will continue. Fifth, we see optionality in potential Square distribution deals, although details of such an arrangement remain unclear. Lastly, the stock should rerate higher, in our opinion, as the Street gains comfort with the company's ability to achieve its Rule-of-40 goal.

It's all about Square, in our view, as software-integrated vertical market payment solutions rapidly displace legacy POS. We see Square and Clover as the clear leaders in this market, with a combined \$600 billion GPV, or perhaps around 20% of the SMB TAM. Exhibits 9 and 10 illustrate our view of the software-integrated point-of-sale (POS) evolution, and we contend the democratization of SMB POS software is the most important secular merchant trend, followed closely by unified commerce (UC), which we will delve into at a later date. We believe software-integrated POS is such an important trend because it creates a system of record for smaller merchants, which historically have been forced to manually bridge the gap between POS card acceptance and general ledger, accounting, inventory, payroll, time, attendance, and other systems. The integration of these solutions, and others, has created an accelerating disintermediation of legacy POS, in our opinion, while simultaneously raising switching costs and creating incremental monetization opportunities. Given this backdrop, we contend it is easy to understand why Fiserv has outperformed nearly every other name in the fintech space: Clover has emerged as the SMB software-integrated POS leader, and our thesis is that Square is poised to play catch-up. This is a non-consensus view that we contend is not currently reflected in the stock.

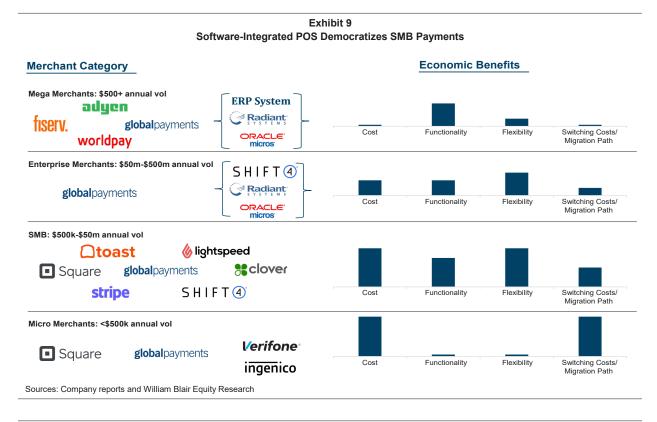


Exhibit 10 POS Software Evolution Shifts Long-Term Economic Opportunity

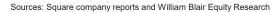
Payment Flow Has Remained Relatively Consistent but Ecosystem Participant Economics Have Shifted

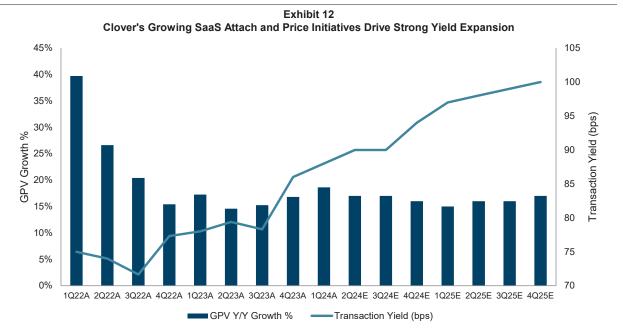


Cristopher Kennedy, CFA +1 312 364 8596 | 19

As illustrated in exhibit 11, we model a steady improvement in Square's second half 2024 GPV, closing the gap with Clover. Management has expressed confidence in this view, and we are encouraged by a few anecdotal observations, including apparent merchant satisfaction with the company's new restaurant solution and a meaningful improvement in merchant onboarding flow. For example, management highlighted on the first quarter 2024 call that it has cut the number of onboarding steps to 2 from 15, reducing the time it takes a merchant to get live to just two minutes. The company plans to convert to a single Square app by year-end, further streamlining its offering, and we believe leading monetization will benefit further from the integration of BNPL on Cash App Card.

Exhibit 11 Square GPV Growth Has Lagged, but We Think the Bottom Is In 35% 120 115 30% 110 25% Transaction Yield (bps GPV Growth % 100 20% 95 15% 90 85 10% 80 5% 75 0% 70 1Q22A 2Q22A 3Q22A 4Q22A 1Q23A 2Q23A 3Q23A 4Q23A 1Q24A 2Q24E 3Q24E 4Q24E 1Q25E 2Q25E 3Q25E 4Q25E GPV Y/Y Growth % Transaction Yield (bps)

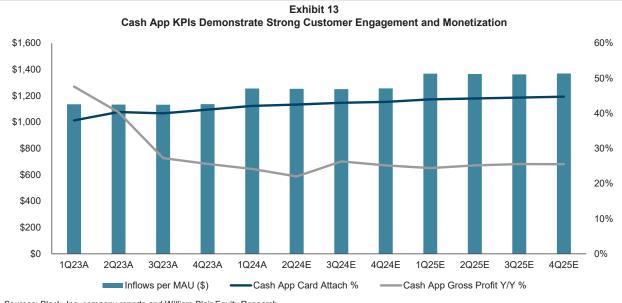




Sources: Fiserv company reports and William Blair Equity Research

Perhaps as important, our view is that Clover's strong recent relative performance is more reflective of its distribution advantage and significantly lower software attach than of superior technology. We acknowledge that Fiserv tends to serve relatively larger SMBs, and we suspect elevated churn along the "long tail" of Square's merchant base has contributed to slower GPV expansion. Regarding distribution, we think Fiserv boasts the most diverse and effective internal sales and third-party distribution in the merchant market, a fact reflected in the company's roughly 30% U.S. market share. In addition, the ramp-up to 20% first quarter 2024 Clover software attach, from just about 10% two years ago, has created a powerful pricing tailwind, reflected in the yield performance illustrated in exhibit 12 Although impressive, we highlight that Square's software attach, hence the stickiness of its offering, is materially higher. Including sidecar merchants, which do not use software-integrated solutions, Square boasts 59% software attach, and this figure rises to almost 80% when considering those merchants using the company's more sophisticated POS. Although higher software attach likely leaves less room for pricing improvement, it illustrates the extent to which Square merchants use its solutions to run their day-to-day businesses, which to us is the most accurate depiction of Square's competitive advantage.

In addition to our view toward improving Square GPV growth, we anticipate ongoing high-teens percent Cash App ecosystem gross profit dollar growth, driven by steady inflows and modest monetization improvements. We believe investors will applaud a rising contribution from interchange revenue, versus instant deposit, as it is more sustainable and a good proxy for daily consumer Cash App Card use. We anticipate rising Cash App Card attach, which at more than 40% today is strong, but has material upside. We encourage investors to recognize that Cash App Card customers generate roughly 5 times more gross profit than Cash App customers, making Cash App Card attach a critical KPI, in our opinion (see exhibit 13). To the extent Cash App Card accounts are the key inflow driver, we are encouraged by management's first-quarter call commentary about focus on direct deposit growth, and the mention that paycheck volume growth exceeds total inflows. While we continue to expect interchange to be the key gross profit driver, Block is introducing new Cash App solutions, including financial goal guidance, BNPL, and Cash App Borrow. We think Cash App Borrow could be an upside driver as it has a network effect across the ecosystem, encouraging higher spending, and correspondingly more interchange revenue. We are bullish on the future of neobanks, or nontraditional banks, where we anticipate strong demographic demand for more digital, user friendly, and fully integrated financial experiences. We view Cash App as a category leader, a key consideration underpinning our more bullish stock outlook.



Sources: Block, Inc. company reports and William Blair Equity Research

We introduce our SOTP valuation in exhibit 14. While we view shares of SQ as significantly undervalued, based on this analysis, we acknowledge that valuing Cash App is challenging, given a lack of comparable companies. However, our view is that a tighter integration of Block's two ecosystems, of which BNPL on Cash App Card is an example, can drive a flywheel effect by which consolidated gross profit and EBITDA growth accelerate. We further contend that as Cash App Card demonstrates its relevance as a daily consumer spend vehicle, investors will ascribe a higher multiple, likely reflecting growing EBITDA contribution.

Exhibit 14

Block, Inc. Sum-of-the-Parts Analysis Illustrates Upside Potential

Dollars in millions, except share price	Square	Cash App	Block
2025 segment gross profit (excl. corporate)	\$4,216.9	\$6,081.6	\$10,298.5
Unallocated corporate Allocation by segment Allocated corporate	\$66.8 40.0% \$26.7	\$66.8 60.0% \$40.1	\$66.8 100.0% \$66.8
2025 gross profit (incl. corporate) Estimated EBITDA margin (% gross profit)	\$4,243.6 45.0%	\$6,121.7 27.6%	\$10,365.3 34.7%
2025 segment EBITDA estimate	\$1,909.6	\$1,690.6	\$3,600.2

Sensitivity Analysis (Implied Enterprise Value and Share Price)

		Square	EBITDA M	ultiple	
	12.0x	13.0x	14.0x	15.0x	16.0x
13.0v	\$44,893	\$46,803	\$48,712	\$50,622	\$52,532
10.07	\$72.40	\$75.39	\$78.39	\$81.39	\$84.38
14 0v	\$46,584	\$48,493	\$50,403	\$52,313	\$54,222
14.04	\$75.05	\$78.05	\$81.04	\$84.04	\$87.03
45 Ov	\$48,274	\$50,184	\$52,094	\$54,003	\$55,913
10.01	\$77.70	\$80.70	\$83.69	\$86.69	\$89.69
16 0v	\$49,965	\$51,875	\$53,784	\$55,694	\$57,603
10.01	\$80.35	\$83.35	\$86.35	\$89.34	\$92.34
17.0v	\$51,656	\$53,565	\$55,475	\$57,384	\$59,294
17.00	\$83.01	\$86.00	\$89.00	\$92.00	\$94.99
	13.0x 14.0x 15.0x 16.0x 17.0x	13.0x \$44,893 \$72.40 14.0x \$46,584 \$75.05 15.0x \$48,274 \$77.70 16.0x \$49,965 \$80.35 17.0x \$51,656	12.0x 13.0x 13.0x 13.0x \$44,893 \$46,803 \$72.40 \$75.39 \$46,584 \$48,493 \$75.05 \$78.05 \$48,274 \$50,184 \$77.70 \$80.70 \$49,965 \$51,875 \$80.35 \$83.35 \$17.0x \$51,656 \$53,565	12.0x 13.0x 14.0x 13.0x \$44,893 \$46,803 \$48,712 \$72.40 \$75.39 \$78.39 14.0x \$46,584 \$48,493 \$50,403 \$75.05 \$78.05 \$81.04 15.0x \$48,274 \$50,184 \$52,094 \$77.70 \$80.70 \$83.69 16.0x \$49,965 \$51,875 \$53,784 \$80.35 \$83.35 \$86.35 17.0x \$51,656 \$53,565 \$55,475	13.0x \$44,893 \$46,803 \$48,712 \$50,622 \$72.40 \$75.39 \$78.39 \$81.39 \$46,584 \$48,493 \$50,403 \$52,313 \$75.05 \$78.05 \$81.04 \$84.04 \$48,274 \$50,184 \$52,094 \$54,003 \$77.70 \$80.70 \$83.69 \$86.69 \$80.35 \$83.35 \$86.35 \$89.34 \$51,656 \$53,565 \$55,475 \$57,384

Sources: Company data and William Blair Equity Research

From a consolidated financial standpoint, we anticipate above-consensus EBITDA performance, supported by low- to midteens percent ecosystem gross profit growth and strong corporate spend discipline. As mentioned, Block drove EBITDA margin to 33.7% in first quarter 2024, from a low of 12.7% in the second quarter of 2022. Our view is that strong operating leverage will continue as the company holds headcount relatively steady and maintains a commitment to a four- to six-quarter cash payback period in both of its core businesses. We accordingly model Rule of 35 in 2024, rising to Rule of 36 in 2025. Block has a stated goal of achieving Rule of 40 in 2026, and we think it could reach that important milestone at least one to two quarters earlier. The combination of all these drivers should result in strong multiple expansion, in our opinion, particularly as we believe the market does not currently discount strong second-half Square GPV growth improvement and likely underestimates EBITDA upside.

Valuation

In addition to our SOTP approach, we think Block is an attractive risk/reward based on its modest 7% EBITDA multiple premium versus Fiserv, despite our outlook for faster EBITDA growth at Block as the company strives for its 2026 Rule-of-40 goal. We estimate about 27% EBITDA growth

for Block in 2025, significantly higher than our 11% growth estimate for Fiserv. In addition, we anticipate that accelerating second half 2024 and 2025 Square GPV growth will ally investors' share-loss fears, prompting modest multiple expansion. Our SOTP valuation, which approaches \$85, implies that Block will trade at nearly 15 times our 2025 EBITDA estimate.

		Exhibit Block, Inc. Estim		es			
William Blair Estimate	2023		2024			2025	
(In \$M, except EPS)	<u>Actual</u>	<u>Prior</u>	<u>New</u>	<u>∆\$</u>	<u>Prior</u>	<u>New</u>	<u>∆\$</u>
Gross Profit Y/Y %	\$7,504 25.2%	\$8,809 17.4%	\$8,975 19.6%	\$166	\$10,094 14.6%	\$10,365 15.5%	\$272
EBITDA Y/Y % Margin %	1,792 80.8% 23.9%	2,795 56.0% 31.7%	2,845 58.8% 31.7%	\$50	3,558 27.3% 35.3%	3,600 26.5% 34.7%	\$42
Adj. EPS	\$1.80	\$3.36	\$3.48	\$0.11	\$4.22	\$4.44	\$0.21
Y/Y %		87.1%	93.3%		25.5%	27.6%	
FCF Y/Y %	515		1,533 197.8%			2,073 35.2%	
Conversion %	6.9%		17.1%			20.0%	
Consensus Estimates (In \$M, except EPS)	<u>s</u>		2024 <u>Estimate</u>			2025 <u>Estimate</u>	
Gross Profit Y/Y %			\$8,819 17.5%			\$10,217 15.9%	
EBITDA			2,782			3,518	
Y/Y %			55.2%			26.5%	
Margin %			31.5%			34.4%	
Adj. EPS			\$3.35			\$4.32	
Y/Y %			86.2%			29.0%	

Note: EBITDA margin and FCF conversion are as a percentage of gross profit Sources: Company reports, FactSet, and William Blair Equity Research

Risks to Our Outperform Rating

We see several risks to our Outperform thesis. These include: 1) persistently slower Square GPV volume growth, compared with Clover, which we consider a key investor focus; 2) inability to evolve vertical market software and technology to remain competitive with new entrants; 3) elevated SMB churn, owing to share loss or adverse cyclical events; 4) inability to drive steadily higher Cash App inflows given intense neobank competition; 5) consumer reluctance to embrace Cash App Card as a daily spend vehicle; 6) adverse Cash App regulation, e.g., elimination of instant deposit; 7) faster payments pressuring instant deposit yield; and 8) an inability to achieve Rule of 40 by 2026, which we think is an important multiple driver.

WEX: The Street Has Become Too Negative on This Well-Run Fintech's Long-Term FCF ROIC Potential

WEX has emerged as one of our favorite fintech "conglomerates" in an era when we see historically acquisitive companies as generally out of favor. Like its closest comparable, Corpay, WEX was built through a series of acquisitions, some of which appear thematically or functionally incongruous in retrospect. While the company's revenue still skews more toward its mobility segment compared with Corpay (fleet company spend management and associated cards are estimated to be roughly 50% of 2024 revenue, versus a bit less than 40% for Corpay), our view is that the company's

non-fleet spend management businesses can sustain at least comparable through-the-cycle organic revenue growth with less volatility. Further, we assert the stock's recent substantial relative underperformance (-22% since its recent April 4, 2024, peak versus +8% for the SPX) and attractive FCF multiple make it a compelling risk/reward.

Although we will likely hear investor pushback around the long-term risk that WEX could lose Booking.com, its largest corporate payments customer, we think the recently signed long-term contract and the company's leading vCard issuing capabilities argue against the worst-case outcome. Specifically, in conjunction with the new contract, Booking.com took some of its European disbursement business in-house as it owns money movement licenses. Although this is a hit to customer revenue, it is reflected in current guidance. In addition, we do not anticipate further Booking.com revenue losses, owing to the value delivered by WEX's vCard solutions (discussed below). We also encourage investors to note that WEX currently processes just around 50% of Booking's business, suggesting the company can gain long-term wallet share. Our view is that the Booking. com risk to WEX's travel subsegment has been the biggest overhang on the stock, but it is now well understood and adequately reflected in current valuation. Lastly, we note that CPAY stock is down almost as much as WEX since it reported first quarter 2024 results, suggesting weakness reflects broad risk-off sentiment as much as company-specific concerns.

Drilling down a little deeper, we believe WEX has been weak owing to three concerns that we now consider at least reflected in valuation. The first is the risk of lower fuel prices. The second is ongoing concern about yield pressure in the company's corporate payments segment. And third is investors' broad fears that there is limited fintech competitive differentiation, hence the focus on clear innovation leaders such as Fiserv.

On the first point, we believe WEX stock has overreacted to uncertainty around fuel prices. As a rule of thumb, a \$0.10/gallon decline in U.S. fuel would be a \$0.30 (roughly 2%) EPS headwind. So, even if fuel were to fall \$0.50, or nearly 15% below management guidance, this would be an approximate 10% annualized EPS headwind, yet the stock has fallen nearly 14% since the company reported first quarter 2024 results. On the second point, we think earnings power of the corporate payments segment (about 20% of estimated calendar 2024 revenue) has been materially de-risked by the recent multiyear contract renewals with Booking.com and HBX, which should increase WEX's wallet share and alleviate concerns about yield compression. These new contracts are reflected in 2024 guidance. As mentioned, fears about potential future insourcing of the Booking.com business probably are not going away soon, as this customer brought in-house some European disbursement functionality when it negotiated the new deal. That said, we contend that vertically integrating payments, especially vCard issuing, could be a challenge for Booking.com as it would incur more fraud risk and must build infrastructure that requires high volume to scale. We understand that Booking's merchant business is a drag on its EBIT margin, and this could influence an ultimate decision to insource, but this would be several years away and we expect WEX will work hard to sustain more favorable revenue-sharing terms to keep this important piece of volume.

It is admittedly more difficult to gauge travel demand (travel vCard volume is about 70% of segment total), but we believe the company is gaining share of overall travel spend given its relationships with 8 of the top 10 global online travel agencies and the ongoing shift to a direct, or merchant, spend model. Lastly, we like the long-term upside of the company's benefits segment, which now processes for about 20% of U.S. HSA accounts and should continue gaining share, in our view.

Regarding competitive differentiation, or lack thereof, we think this narrative has materially run its course, evidenced by significant group multiple compression. We are not calling a bottom, but it is our opinion that the 12- to 18-month risk/reward skews to the upside perhaps as much as it has in recent memory. We see WEX as a long-term winner, and we think it has the

management and portfolio of businesses to deliver at least industry average through-the-cycle organic revenue growth with superior EPS expansion. The fintech conglomerate era may be over, in our view, but we believe WEX is probably the best remaining company among these historically M&A-driven models.

Fuel price and travel demand are center stage, in our opinion, but we also note that macro concerns are likely taking their toll. WEX over-samples to large, over-the-road (OTR), fleet customers in comparison to Corpay, which should generally insulate the company from a trucking recession. In first quarter 2024, purchased fuel gallons increased 1%, sequentially, the first quarter-on-quarter growth in five periods, even though same-store sales fell low-single-digit percent. In addition, the company continues adding new vehicles, expanding its customers by 4% in the first quarter. It also launched its new Mastercard-partnered open-loop solution, which could boost 2025 wallet share and is in early days. Although cross-selling in the mobility business has historically been challenging, owing to embedded customer behavior and credit risk management, we think WEX is well positioned to improve its segment revenue yield, an upside driver not reflected in current estimates. We also like the recent Payzer acquisition and contend there is ample cross-sell potential into this leading field services management SaaS customer base. We do not see upside from this cross-sell materializing until 2025 but still view it as another potential EPS driver.

As a note on electric vehicle (EV) risk and opportunity, we think the market is less worried about fleet EV transition than it was a year-plus ago. WEX and Corpay have both launched offerings aimed at helping their customers as they grow hybrid fleets, including home-charging reimbursement software, public charging access solutions, and integrated reporting. The precise economics of EV versus internal combustion engine (ICE) versus hybrid fleets remains to be seen, although WEX and Corpay each contend there is upside to unit economics from newer offerings. **Regardless, we think the market's concerns about structural disintermediation have fallen significantly, and any lingering risk is well reflected in WEX's relative valuation discount.**

Valuation

Given the foregoing, we think it is fair for investors to ask: "what gets WEX's valuation going higher?" In a space that generally boasts predictable, high recurring revenue; strong margin; steady, consistent EPS; and shareholder friendly capital allocation, catalysts can often be difficult to identify. We do not view WEX as an exception. Despite the ongoing compression of NTM estimated P/Es across the group, WEX remains a relative outlier, given an estimated 8.7-times 2025 EBITDA multiple and a 9.3% FCF yield. These multiples compare with Corpay, its closest peer, at 11.4 times estimated 2025 EBITDA and a 6.7% FCF yield, respectively. We expect WEX will materially close this gap as investors appreciate that they may have overreacted to travel segment organic revenue and profit growth disruption risk.

We also project that long-term free cash flow return on invested capital (FCF ROIC) will head higher as the company integrates the Payzer acquisition and is unlikely to do more large-scale M&A. We submit that FCF ROIC is the best predictor of long-term valuation gains and equity returns, a subject we will explore in greater depth at a later date. Specifically, we estimate that WEX's 2025 FCF ROIC will reach 10%, up from just 6.9% in 2023. This improvement will be driven by strong FCF conversion, which we put at about 100% of adjusted net income (ANI), and low-single-digit percent invested capital declines, resulting from efficient working capital utilization and intangibles amortization.

	,	Exhibit WEX Inc. Estima		es			
William Blair Estimate (In \$M, except EPS)	es 2023 <u>Actual</u>	<u>Prior</u>	2024 <u>New</u>	<u>∆\$</u>	<u>Prior</u>	2025 <u>New</u>	<u>Δ\$</u>
Revenue Y/Y %	\$2,548 8.4%	\$2,743 7.6%	\$2,736 7.4%	(\$6)	\$2,985 8.8%	\$2,923 6.8%	(\$62)
EBITDA Y/Y % Margin %	1,108 7.7% 43.5%	1,208 9.1% 44.1%	1,256 13.4% 45.9%	\$48	1,320 9.2% 44.2%	1,387 10.4% 47.4%	\$67
Adj. EPS Y/Y %	\$14.81	\$16.37 10.5%	\$16.22 9.6%	(\$0.14)	\$18.38 12.3%	\$18.56 14.4%	\$0.19
FCF Y/Y % Conversion %	517 -33.9% 80.1%		660 27.8% 95.8%			751 13.7% 97.6%	
Consensus Estimate (In \$M, except EPS)	<u>es</u>		2024 Estimate			2025 Estimate	
Revenue Y/Y %			\$2,745 7.7%			\$2,950 7.5%	
EBITDA Y/Y % Margin %			1,236 11.6% 45.0%			1,352 9.4% 45.8%	
Adj. EPS Y/Y %			\$16.28 10.0%			\$18.59 14.2%	

Risks to Our Outperform Rating

Sources: Company reports, FactSet, and William Blair Equity Research

We see the risk of lower fuel prices as well reflected in WEX's valuation; however, this could remain an overhang. The company's new Booking.com contract involves insourcing of some functionality, which could cause investors to reassess the corporate payments segment's competitive positioning. An ongoing or worsening freight slump has the potential to pressure vehicle adds and/or fuel gallons processed. Competitive challenges and/or the ability to monetize a wider array for mobility customer payments could weigh on segment organic revenue growth. In WEX Health, we view any changes to HSA adoption or demand as a potential risk factor, particularly given WEX's high market share. An inability to cross-sell mobility solutions into Payzer's base could limit the mobility segment's organic revenue growth acceleration. Lastly, capital allocation, particularly M&A, could raise execution and EPS power risks.

FIS: Streamlined Discipline Should Keep a Good Thing Going

After years of choppy financial results, FIS has taken several initiatives since late 2022 to improve business performance, including: largely refreshing its senior leadership (including CEO/CFO), completing a board-led strategic review (selling a majority stake of Worldpay), lowering long-term growth targets, and executing strongly against the Future Forward initiative. While early, management is focused on profitable growth and disciplined capital allocation while meeting its financial targets, which it has for five consecutive quarters.

Over the near term, we believe internal initiatives (i.e., cost, tax rate) and redeployment of capital should buoy adjusted EPS; consider we expect \$4 billion of share repurchases, and 2024 free cash flow conversion is estimated at 85%-90%. While M&A is included, management's 2025-2026 financial targets call for 4.5%-5.5% adjusted revenue growth, 40-60 basis points of adjusted

EBITDA margin expansion, and 9%-12% adjusted EPS growth. We believe these targets are reasonable, considering that the banking segment accounts for about 70% of total revenue (83% is recurring) and targets call for 3.5%-4.5% revenue growth (versus 4% TAM growth), while 72% of capital markets segment revenue is recurring and targets call for 7.5%-8.5% growth (versus 6% TAM growth).

FIS has developed a global distribution platform that is highly embedded into the financial system. It has over 14,000 clients, including a presence among 95% of the world's leading banks that have over \$16 trillion of assets, and it processes over 60 billion transactions per year. About 20% of revenue is from outside the United States, as it has a presence in 150 countries. About 80% of total revenue is recurring, and management estimates that it has about 5% share of an estimated \$193 billion total addressable market.

We believe cross-selling with existing customers and expanding beyond traditional verticals remain large opportunities for FIS. Key initiatives include selling more solutions (i.e., payments) into the existing banking customers, and selling banking solutions to capital markets customers (and vice versa). Seventy percent of large U.S. banking clients use solutions from both segments. Further, selling outside its core markets (e.g., insurance companies, auto/equipment, corporations) represents a large opportunity as 20% of banking solutions revenue comes from customers residing outside the financial services sector, while 30% of capital markets revenues is outside its core sector.

While Atelio is unlikely to move the needle in the near term, we look forward to tracking its progress following its launch in May 2024 as a fintech platform that helps power embedded finance. Atelio has modern tech infrastructure that will enable developers, corporate customers, and third parties to access FIS's infrastructure to power embedded finance initiatives. The revenue model will be a combination of SaaS/transaction fees and will likely take time to ramp up but represents upside relative to the 2025-2026 financial targets. FIS expects the BaaS market (TAM) to be greater than \$25 billion by 2026 and embedded finance TAM to be about \$230 billion of revenue by 2025.

Valuation and Risks

FIS shares trade at 14.1 times 2025 adjusted EPS, which compares to the 10-year average multiple of 17 times. We believe the sale of Worldpay will help drive multiple expansion due to more focus and note that FIS's multiple compressed following the Worldpay acquisition. Key risks include competition, bank-IT spending budgets, customer consolidation, foreign-exchange volatility, rising interest rates, and internal execution.

Remitly: Unduly Punished, in Our Opinion, Despite Strong Fundamentals

We continue to believe that Remitly is in the early innings of a long-term, high-growth story, currently capturing just a small share (about 2%) of the \$1.8 trillion global remittance market; in our view, the recent pullback in shares creates an attractive entry point for investors. RELY shares are down 31% year-to-date, which we attribute to: 1) market confusion over the key drivers and seasonality trends of the business (e.g., the change in active customers versus new customer adds, revenue take-rate versus transaction profit take-rate), 2) questions about the effectiveness and implications to unit economics of incremental marketing expense, 3) fears over increased competition, and 4) the lack of a March-quarter raise in revenue guidance, although adjusted EBITDA guidance was raised by 9% at the midpoint.

Despite market concerns and confusion, Remitly's KPIs and unit economics have remained strong, and financial results have outperformed expectations since its IPO. We acknowledge that increasing the frequency of disclosures could bring added clarity for investors, but management's commentary suggests that KPIs and unit economics are robust. In each of the last eight quarters, management has cited record new customer adds, and recent disclosures over unit

economics include: 1) an average payback period of less than 12 months (first quarter 2024); 2) transaction profit retention of 95% following the first full year of acquisition (fourth quarter 2023); and 3) LTV-to-CAC exceeding the 6-times ratio cited at the IPO (second quarter 2023). Relative to our estimates when we initiated coverage in October 2021, 2023 revenue was 24% higher, while adjusted EBITDA were \$76.5 million better.

Opportunities exist to increase market share within existing send markets and geographic expansion is a clear growth opportunity, in our opinion. Remitly operates in 31 send markets, which represent just 31% of total formal channel remittance volumes. Based on the World Bank's estimate of formal channel volumes by send market, we estimate Remitly has 15% share across its 31 send markets, but we believe its actual share is much smaller due to the informal channel. Further, recent entries, such as the UAE, are yet to materially contribute to financial results as new send markets typically take time to ramp consistently. While management takes a judicious approach to all investment decisions, we see opportunities for geographic expansion. Remitly has a presence in only 5 of the top 10 remittance send markets and we note the top 10 markets account for about 58% of global remittance volumes based on data from the World Bank.

It remains early, but we think leveraging Remitly's global network for use-cases aside from remittances represents an incremental growth opportunity for the company. Management has a variety of ongoing initiatives to expand its consumer offering beyond just remittances, which at the core should help drive new user growth and engagement. In addition, while details are limited, recent commentary suggests that Remitly plans to leverage its existing global platform for use-cases outside remittances and related complementary services; based on the company's most recent annual report, opportunities exist within cross-border C2B, B2C, and SMB payments.

Transaction and adjusted EBITDA margins have increased substantially over time and significant opportunity remains for further margin expansion. Benefiting from lower fraud costs (driven by investments and innovation in developing fraud and compliance systems), scale benefits (enabling more attractive partner terms), and direct partner integrations, transactions expense as a percentage of revenue has declined from 44% in 2019 to 35% in 2023. While management anticipates variability by quarter, the company broadly expects this trend to continue as it invests in fraud systems, while also increasing scale. Adjusted EBITDA margin was 5% in 2023 (versus -3% in 2022) and our estimates call for 7% margin in 2024, benefiting from scale and technology investments. We anticipate further EBITDA margin expansion as Remitly continues to gain scale, especially within marketing. Remitly's advertising expense was 19.2% of 2023 revenue, which compares to Western Union at 4.2%. That said, on an absolute dollar basis, spending is comparable.

Valuation and Risks

Shares trade at approximately 1.6 times estimated 2025 revenue and at 17.3 times estimated 2025 EBITDA, which in our view represents an attractive valuation given future growth prospects and margin expansion opportunity. As we outline above, Remitly has captured just a small share of the global remittance market and we believe growth and margin opportunities are clear. Management's disciplined investment approach and sustained focus on delivering strong unit economics should support continued above-average organic revenue growth, in our opinion. The balance sheet is strong with \$286 million of cash, which we think gives Remitly ample resources to aggressively invest in growth. Recent takeouts of fintech peers with similar growth characteristics have taken place at about 7-9 times revenue. On an EV/GP basis, shares trade at 2.3 times, while digital money transfer peer Wise trades at 5.5 times. Key risks include geographic concentration, ability to navigate the regulatory environment, internal execution, competition, and pricing.

Other Rating Change

PayPal: Downgrading to Market Perform on Limited TAM Upside, Growing Competition, and Lack of UC Strategy

We consider PayPal one of the most perplexing names in our coverage universe. The company boasts an impressive roughly 220 million monthly active accounts, 30 million-plus accepting merchants, and first-mover status in the relatively fast-growing e-commerce category. The stock is also attractively valued, in our view, having traded down 10% (SPX up 6%) since 10 days before Apple announced new fintech initiatives in its latest iOS release, and as the fintech group remains pressured. PYPL shares trade at just 8.7 times our 2025 EBITDA estimate and at 11.9 times estimated 2025 FCF, both steep discounts to traditional networks and Fiserv.

Despite these considerations, our decision to lower the rating on the stock to Market Perform reflects our overall view toward increasing competition on multiple fronts and a paucity of levers to accelerate organic revenue growth and/or transaction dollar margin. We are fans of new CEO Alex Chriss and think new initiatives are incremental positives. These include: 1) PayPal Complete Payments (PPCP); 2) Fastlane, which aims to improve enterprise authorization rates and monetization; 3) an effort to roll out new SMB tech integrations, allowing the company to sell more branded solutions; 4) renewed focus on Venmo monetization; 5) new VAS, such as fraud, payouts, and processing orchestration; 6) rigorous expense controls; and 7) accelerated shareholder capital return. However, as we survey the fintech landscape, we view more challenges than upside drivers. There are several fintech names where we are incrementally more bullish, particularly Block, on which we raised our rating to Outperform, as discussed above.

Competitive Risks Inform Our Downgrade

We think the market understands many of our competitive concerns, and recent Street downgrades have balanced sentiment on the stock. Just 50% of analysts rate PYPL Outperform, versus 75% at the beginning of 2023. However, we do not view these risks abating sufficiently to be more bullish on the stock. In fact, while we believe PayPal has begun, and should continue, stabilizing transaction processing volume (TPV) growth and driving less transaction margin dollar degradation through recent initiatives, we struggle to imagine a path to meaningful TPV growth acceleration and/or transaction margin dollar acceleration, which would be key valuation catalysts.

We are similarly guarded on PayPal's ability to monetize Venmo for B2C payments, considering significant unified commerce competition and a laggard value proposition. We also do not believe greater Xoom investment will meaningfully bolster the company's standing in the highly competitive and commoditized global remittance market. Instead, we see rising competition from a variety of e-commerce and UC processors, perhaps the most meaningful of which is Apple Pay, mitigating improving unit economics and weighing on PayPal's valuation. Although some investors may cheer an aggressive buyback, which we expect to exceed \$5 billion in 2024, good operating leverage, and robust FCF, rising competitive risk outweighs these tailwinds, in our opinion.

We see three primary competitive forces we do not expect will abate and could intensify, over the next few years: First and foremost, our view is that Apple's ongoing consumer-facing fintech investments, primarily Apple Pay, create intractable competitive challenges. Apple Pay's native app status on the company's iPhone creates an intrinsic competitive advantage, in our opinion, particularly as U.S. contactless payment adoption rises. Visa mentioned on its fiscal second quarter 2024 earnings call that U.S. contactless adoption reached 50%, and we think it will ultimately converge on global adoption, which is nearly 80%, excluding the U.S. We think this is important because consumers will be inclined to use top-of-wallet cards for card-present payments, and this behavior will translate into e-commerce. Even if PayPal succeeds in moving up the enterprise

checkout stack with its Fastlane product, the proliferation of e-commerce tender choices and consumers' growing comfort with contactless payments will pressure PayPal usage, in our view. In addition, Apple announced phone-to-phone payments with its new iOS release, and this, while not particularly novel, could further pressure PayPal's ability to monetize Venmo—an important pillar of the PayPal bull argument. Lastly, we note that Visa's recently announced "One Card to Rule Them All" solution could further pressure PayPal's tender share. This product allows consumers to choose transaction funding on the fly, switching between debit, credit, prepaid, and loyalty. Although such an offering might not work well for all issuers, we think the largest banks, like JP Morgan Chase, which have leading demand deposit account (DDA) share and significant installed credit customer bases, could see changing consumer behavior that keeps more payments on their products. We think this is another impediment to broader PayPal tender share.

We see PayPal's e-commerce TAM as inherently limited, a key factor that we think hinders TPV growth acceleration. At least in the U.S., PayPal's TAM is effectively off-Amazon e-commerce, as PayPal is not an accepted tender type at Amazon. According to Nilson, 2024 U.S. carded spend will reach approximately \$12 trillion, of which the St. Louis Fed (FRED) puts e-commerce at roughly 16%, or \$1.9 trillion. Street estimates put Amazon's 2024 North America non-AWS sales at roughly \$400 billion, or more than 20% of the market. This leaves PayPal an approximate \$1.5 trillion 2024 U.S. TAM, and we put the company's non-Venmo/P2P TPV at more than \$700 billion, or almost 50% of the U.S. off-Amazon e-commerce market, including payment service providers (PSPs) like Adyen and Shopify (see exhibit 17). This significant share of U.S. e-commerce volume suggests that PayPal will be pressured to grow faster than the market, in our opinion. To wit, the company posted 12% first quarter 2024 U.S. TPV growth, in line with Amazon and our estimate of the overall e-commerce market. Compounding this likely growth challenge, and transaction dollar margin compression associated with mix and pricing competition, we highlight that more than 80% of U.S. carded spend is at physical retail, a market to which PayPal has de minimis exposure. This is a key reason we believe PayPal should buy a physical world acquirer—to gain exposure to the large card-present market and to compete better with emerging UC providers. We do not see this as a likely near-term use of capital, however.

U.S. card payment volume: ~\$12T

U.S. e-commerce payment volume: ~\$1.9T

Off-Amazon e-commerce volume: ~\$1.5T

PayPal U.S. payment volume: ~\$1.5T

Exhibit 17
PayPal's Nearly 50% U.S. TAM Share Limits TPV Growth Upside

Note: PayPal payment volume excludes P2P contribution Sources: St. Louis Federal Reserve, Nilson, FactSet, and William Blair Equity Research Other competition, aside from Apple Pay and Amazon, could continue pressuring PayPal's TPV growth and unit economics—the primary U.S. challengers being Stripe (private) and Adyen, in our opinion. Both these companies have modern e-commerce tech stacks, with Stripe competing more with PayPal's SMB business, although we think it is moving upmarket, and the latter going up against Braintree, PayPal's mostly unbranded enterprise merchant offering. Although Stripe and Adyen acquire PayPal volume, which we think ameliorates some of the referenced e-commerce growth challenges, considering both companies are growing relatively faster, they have well-articulated UC strategies, meaning they are moving aggressively into physical POS, where we see PayPal's share as effectively nonexistent. We also highlight Shopify, which supports PayPal as a tender type and is similarly aggressively pursuing a UC strategy. **Our view is that PayPal will participate less in these companies' strong TPV growth as more of their business becomes card-present.** This potential competitive challenge may not be as well understand by some PayPal investors who have not fully internalized the opportunity cost we see the company facing, absent a better-articulated UC approach.

In addition to competitive considerations, we think PayPal will struggle with shifting mix and its adverse effect on transaction dollars and transaction margin. This may limit operating margin expansion, in our opinion. Even as we think the company has done a good job of taking out nontransaction expenses, there is a limit to these reductions. Specifically, we believe continued relatively fast unbranded volume growth—a combination of Braintree and powered by PayPal offerings—will pressure transaction dollars and transaction margin, as these solutions carry higher funding costs than PayPal's branded volume. As illustrated in exhibit 18, we think that branded volume growth will remain in the midsingle-digit percent while branded volume will expand at a 20%-plus annual rate. As a result, we model 2025 transaction margin slipping to 41.3% from 50% in 2022. **Transaction margin is effectively PayPal's gross margin, and we contend declining gross margin is inconsistent with multiple expansion.** To wit, we estimate that adjusted operating margin will peak at around 18% in late 2024 (17.1% for the full year), before declining roughly 40 basis points in 2025. Such a decline would be notable, in our opinion, particularly considering we estimate just 1.3% nontransaction expense growth on 8.1% net revenue expansion.

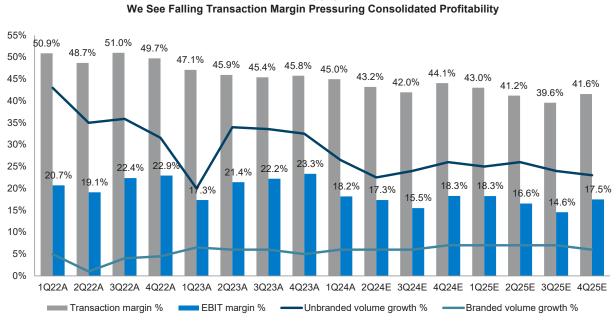


Exhibit 18

Sources: PayPal Holdings Inc. company reports, William Blair Equity Research

We have spoken with the company about its branded strategy, and we recognize that our outlook could be conservative. Even so, our observations about relatively limited TAM and lack of a UC strategy suggest that accelerating branded volume growth could be an uphill battle. Regardless, we do not think even modestly better branded volume growth will forestall the eventual pressure higher-cost unbranded volume will place on consolidated profitability. That said, we think PayPal will see some success as it tries to convince Braintree customers to migrate to branded solutions by delivering improving authorization rates and VAS, such as fraud, disbursements, and FX solutions. We also expect the company will upgrade legacy merchant integrations, which we think it has neglected for several years. Our understanding is that a super-majority of SMB customers currently run on integrations that do not support updated branded functionality or PCCP. Even PCCP will struggle to gain traction, in our opinion, as it is late to the market, versus PSP competitors like Stripe and Adyen.

Valuation

As mentioned, we see potential upside to 2024 and 2025 EPS estimates as PayPal continues reducing nontransaction expenses and buys back stock with robust FCF. However, we do not anticipate that the stock's P/E will appreciably rise in the absence of accelerating TPV growth or expanding transaction dollar margin. To be clear on this point, we previously believed slower transaction dollar margin contraction could encourage long-term GARP-oriented investors, but given apparently rising competitive concerns, we are increasingly convinced that PayPal will have to reverse the decline in what is effectively its gross margin, and most important unit economic KPI, for the stock to re-rate higher. We do not see this as a high-probability outcome in 2024 or 2025, hence our lower rating.

	PayPa	Exhibit al Holdings Inc.		hanges			
William Blair Estimate (In \$M, except EPS)		<u>Prior</u>	2024 <u>New</u>	<u>∆\$</u>	<u>Prior</u>	2025 <u>New</u>	<u>∆\$</u>
Revenue Y/Y %	\$29,771 8.2%	\$31,812 6.9%	\$32,051 7.7%	\$238	\$34,145 7.3%	\$34,644 8.1%	\$499
EBITDA Y/Y % Margin %	6,100 18.4% 20.5%	5,921 -2.9% 18.6%	6,152 0.8% 19.2%	230	6,631 12.0% 19.4%	6,685 8.7% 19.3%	54
Adj. EPS	\$5.10	\$4.13	\$4.21	\$0.08	\$4.58	\$4.39	(\$0.19)
Y/Y %		-19.1%	-17.4%		11.0%	4.2%	
FCF Y/Y % Conversion %	4,554 -10.8% 80.7%		5,036 10.6% 113.7%			5,582 10.8% 124.1%	
Consensus Estimates (In \$M, except EPS)	<u>s</u>		2024 Estimate			2025 Estimate	
Revenue Y/Y %		\$32,036 7.6%		\$34,705 8.3%			
EBITDA		5,913		6,468			
Y/Y %		-3.1%		9.4%			
Margin %		18.5%			18.6%		
Adj. EPS			\$4.15			\$4.58	
Y/Y %			-18.6%			10.4%	

Where We Could Be Wrong/Risks to Our Market Perform Rating

We recognize that PayPal's apparently undemanding estimated 2025 valuation means that a little good news could go a long way, particularly given the stock's recent 19% retrenchment from April 2024 highs. We are constructive on some of the company's notable turnaround initiatives, including Fastlane, PPCP, VAS, and new SMB technology integrations. Although our more cautious stance reflects skepticism regarding theses offerings' ability to move the needle, PayPal's large U.S. TAM limiting TPV growth and unit economic improvement, and likely insurmountable competitive pressure from myriad recent market entrants, we acknowledge that PayPal is a self-help story. In addition, we anticipate that the company will generate hearty 2024 FCF of roughly \$5 billion and \$6 billion in 2025. As a result, even modestly better TPV growth and/or transaction dollar margin, combined with likely buyback-driven EPS accretion, could generate modest multiple expansion. Regardless, we see a decidedly clearer path to alpha generation among our top Outperform-rated names.

Attractively Valued Outperform-Rated Fintechs That Have Pulled Back to Create Compelling Risk/Reward or Are Dependent on Corporate Catalysts

As previously mentioned, we recognize the perils of becoming too negative following a long period of group relative underperformance and sour investor sentiment. We have laid out two primary preconditions for a durable bottom, namely industry consolidation and/or corporate restructuring to unlock SOTP value. We cannot offer a good sense of timing, but we have growing conviction that Global Payments and Corpay will be compelled by ongoing share underperformance or activist involvement to revisit the idea of breaking apart the companies. We also remain confident in a major M&A wave, with several logical targets in mind, but timing of such an event is difficult, in our opinion. Flywire is a name that we view as a potentially attractive acquisition candidate and a stock whose recent pullback creates an attractive entry point for risk-tolerant long-term growth investors.

Flywire: Superior Business. Structural Questions Appear to Be Discounted in Valuation

FLYW shares are down 18% year-to-date over investor concerns about the potential impact of various regulatory changes within the education business and the ability to meet guidance, which implies 25% first half 2024 revenue growth, accelerating to 30% in the second half. Flywire has navigated regulatory changes over the years, has a developed a track record of expanding into new verticals, and has a history of strong financial performance. Further, we remain encouraged by six years of at least 120% NRR with improving profitability; adjusted EBITDA margin was 5.6% in 2022, 11.0% in 2023, and 2024 guidance calls for 14% at the midpoint. FLYW shares trade at 3.5 times 2024 revenue, which compares to consolidation in the fintech sector at 7-9 times. We accordingly reiterate our Outperform rating on what we see as compelling risk/reward and potential to be acquired.

We believe Flywire is a high-quality, above-average organic revenue growth play on the modernization of account receivable processes in the education, healthcare, travel, and B2B verticals. We view these vertical market TAMs as underserved and ripe for disruption. The company has successfully diversified beyond education into new verticals through both internal investment and M&A, and we believe there are more opportunities for expansion—it recently entered the ocean experiences market that has a \$16 billion TAM. Flywire's solutions are differentiated by its modern, cloud-based technology platform; a proprietary global payments network; and its verticalspecific software expertise.

We believe Flywire's payments network represents a unique, competitive advantage and an underappreciated asset. The network enables Flywire to have visibility and control the flow of funds, is scalable across geographies, and continues to evolve, including adding new alternative payment methods in relevant markets. We believe other key advantages of the network include "plug-and-play" configuration (with little customer impact), faster settlement for payers/clients, cost savings via smart payment routing, and faster issue resolution driven by its direct partner relationships with banks, acquirers, and networks. The network can process high-value, complex payment flows in a seamless and fully compliant manner across 240-plus countries and territories, 140-plus global currencies, 1,500 currency pairs, and 4,000 geographic corridors. In many senses, this positions Flywire as a unique fintech asset as it generally operates as the system of record and enables the connectivity between partners in the ecosystem—we see such a rare combination as ultimately creating significant shareholder value. Although it differs from other closed-loop networks, like American Express, Corpay, and WEX in that it is not carded, we think its proprietary bank connections and direct account payouts are distinctive.

Balance Sheet, Valuation, and Risks

Flywire exited the March quarter with \$619 million in cash and equivalents and no debt. We encourage investors to recall that in August 2023, Flywire raised \$260 million of net proceeds (8.5 million shares at \$32.00 per share). We expect Flywire to continue investing capital primarily in organic revenue growth while also pursuing strategic M&A focused on adding 1) presence in existing verticals, 2) new capabilities to cross-sell, and 3) new verticals. Shares trade at 3.5 times 2024 revenue or 2.8 times 2025, which compares to recent consolidation within the fintech sector ranging from 5 to 9 times revenue. Risks include execution, competition, economic cyclicality, and regulation.

Global Payments: Mr. Bready, Tear Down That Issuer Business

Our view is that the market will ultimately force Global's board of directors' hand, and the company will move to restructure its business into a pure-play merchant processor. Although the company will probably resist major corporate action until after its fall analyst day, we have difficulty imagining a scenario in which management will alter investor sentiment solely via better disclosure. **That said, we contend Global Payments would be afforded a higher multiple as a pure-play merchant processor**. It would be the only publicly traded pure-play merchant company, its stand-alone organic revenue growth would be higher than it is today, and divestiture of the issuer business would eliminate what we view as a significant competitive overhang. Proceeds from a sale could be used to pay down debt, and a smaller company would be a more attractive acquisition candidate, in our opinion. A clean balance sheet could also be used for strategically accretive M&A, which we see as more difficult given the current capital structure.

We do not believe the upcoming analyst day will be a material positive catalyst. While we see Global as a reasonably well-positioned, geographically diversified, tech-enabled merchant processor with enviable, if ungainly assets, we do not think a better description of the company's software offerings, for example, will magically alter investors' views and cause a positive rerating toward Fiserv's valuation. Rather, the market has stated its view clearly, in our opinion: actions speak louder than words, and only a concrete move toward explicit value creation will change investors' minds. In this regard, we see time running short. It is possible that management and the board will lose the ability to shape Global's narrative if the company stubbornly pursues its current course. Further, we think the competitive threat to Global's issuer business grows daily, increasing the imperative that the company breaks itself up before the stock's valuation becomes permanently impaired.

We see the case for selling or spinning off the issuer business as simple: it is a competitively laggard offering in an increasingly crowded market that is unlikely to see organic revenue growth accelerate meaningfully above 5%. While these attributes make it relatively unattractive to public market

investors, in our opinion, the segment's robust profitability and customer embeddedness, even in the face of competitive threats, and strong FCF should make it attractive to private equity. Although the world has changed since Francisco Partners acquired Verifone for roughly 17 times estimated forward EBITDA in 2018, we believe Global's issuer business is superior to Verifone's hardware offering. As a result, we see a strong SOTP argument favoring disposition (see exhibit 20).

Exhibit 20
Global Payments, Inc. Sum-of-the-Parts Analysis Supports Corporate Restructuring Outcome

Dollars in millions, except share price	Merchant Segment	Issuer Segment	Global Payments	
2025 segment income	\$3,742.4	\$1,056.8	\$4,799.2	
Unallocated corporate overhead expense Allocation by segment Allocated corporate overhead expense	\$334.1 75% \$250.54	\$334.1 \$83.51	\$334.1 100% \$334.1	
D&A Allocation by segment Allocated D&A	\$532.0 <u>75%</u> \$399.0	\$532.0 \$133.0	\$532.0 100% \$532.0	
2025 segment adjusted EBITDA estimate	\$3,890.9	\$1,106.2	\$4,997.1	

Sensitivity Analysis (Implied Enterprise Value and Share Price)

Merchant EBITDA Multiple 8.0x 9.0x 10.0x 11.0x 12.0x \$37,764 \$41,655 \$45,546 \$49,437 \$53,328 6.0x \$98.12 \$83.01 \$113.22 \$128.33 \$143.43 \$38,871 \$42,761 \$46,652 \$50,543 \$54,434 7.0x Issuer \$87.31 \$102.41 \$117.52 \$132.62 \$147.73 **EBITDA** \$47,759 \$39,977 \$43,868 \$51,649 \$55,540 8.0x Multiple \$91.60 \$106.71 \$121.81 \$136.92 \$152.02 \$41,083 \$44,974 \$48,865 \$52,756 \$56,647 9.0x \$95.90 \$111.00 \$126.11 \$141.21 \$156.32 \$42,189 \$46,080 \$49,971 \$53,862 \$57,753 10.0x \$100.19 \$115.30 \$130.40 \$145.51 \$160.61

Sources: Company data and William Blair Equity Research

Although we do not see the upcoming analyst day as a clear catalyst, neither do we believe it will be bereft of value. We expect management to do a better job describing and quantifying its technology-enabled offerings, which compose roughly 60% of merchant segment revenue. Specifically, greater disclosure around revenue and profit contribution could ease valuation of the company's subsegments, such as vertical market software (roughly \$1 billion, or 15% of segment revenue), software-integrated POS (about 6% of segment revenue), ISV (approximately 18% of segment revenue), Xenial (enterprise restaurant software), and K-12 education, which account for most of the incremental 20% of tech-enabled revenue.

We believe the Street understands these businesses well, and as we illustrate in our SOTP, the stock probably trades at a substantial discount. The question for us is not what these businesses are theoretically worth. Rather, our question is: will management monetize any of these segments via sale? We think this is a critical point because Global has been unable to accelerate merchant organic revenue growth, which remains around the market average despite strong contribution from tech-enabled solutions and its EVO business, which is growing above corporate

average in many cash-centric emerging markets. We argue that the Street is fairly valuing Global's technology-enabled merchant assets as a whole. In other words, absent the sale of one of its vertical software solutions that validates a higher multiple, or accelerating segment organic revenue growth, additional disclosure is unlikely to boost Global's multiple. Further, we believe investors would simply rather own Fiserv for Clover exposure or Block for Square exposure. As a result, Global must shift the narrative, in our view, by either selling some merchant assets to manifest a SOTP valuation or by divesting its issuer segment.

We do not view the issuer segment entirely with a jaundiced eye. Global has a blue-chip financial institution customer base, in our opinion, and the company has done a good job selling in VAS, which we see as critical for the segment to maintain midsingle-digit percent organic revenue growth. We also think the issuer segment is a nicely profitable business, boasting an estimated low-50% EBITDA margin. We believe the challenge for investors, however, is concern about lack of competitive differentiation, and perhaps the long-term health of bank-customers' debit and credit card businesses amid rising neobank competition. By management's own admission on the first quarter 2024 call, its legacy issuer offerings, like card embossing and statements, are struggling. This has heightened the focus on selling digital customer-facing solutions and VAS, such as fraud. While we have not seen material competitive encroachment, our sense is that investors are eyeing new digital entrants, like Marqeta, and even the networks outside the U.S., as potential competition. This has created a terminal value headwind for Global Payments, in our view.

Lastly, we see little upside potential to organic revenue, EPS (save share buybacks), and EBITDA growth. Global has delivered consistent financial results, but it grows revenue at roughly industry average and its FCF ROIC has been stuck at 6%-7% for several years. Our view is that long-term FCF ROIC potential is higher and has been weighed down by intangibles from several acquisitions. Nonetheless, we think Global checks only two out of four boxes necessary for a premium valuation (financial consistency and shareholder friendly capital allocation).

Valuation

The foregoing probably sounds less bullish than our rating suggests, and we have regularly advocated for corporate action to drive shareholder value for several years. We would not rate Global Payments Outperform if we felt management would keep its head buried in the sand into perpetuity, or if we sensed that the company's businesses were structurally impaired; we do not. That said, we contend time is growing short for Global's current management and board of directors to control their own destiny, and we think aggressive restructuring or activist involvement is imminent. This is why we maintain an Outperform rating. There is simply too much intrinsic value for us to become more cautious with GPN shares trading at just 8.3 times our estimated 2025 EBITDA and at a 11.6% estimated 2025 FCF yield.

Exhibit 21 Global Payments, Inc. Estimate Changes							
William Blair Estimate (In \$M, except EPS)	<u>9s</u> 2023 Actual	Prior	2024 <u>New</u>	<u>∆\$</u>	<u>Prior</u>	2025 New	<u>∆\$</u>
Revenue Y/Y %	\$8,671 7.2%	\$9,233 6.5%	\$9,223 6.4%	(\$10)	\$9,913 7.4%	\$9,853 6.8%	(\$60)
EBITDA Y/Y % Margin %	4,326 10.0% 49.9%	4,656 7.6% 50.4%	4,650 7.5% 50.4%	(\$5)	5,034 8.1% 50.8%	4,997 7.5% 50.7%	(\$37)
Adj. EPS	\$10.42	\$11.61	\$11.58	(\$0.03)	\$13.21	\$13.18	(\$0.03)
Y/Y %		11.4%	11.1%		13.8%	13.8%	
FCF	2,548		2,907			3,071	
Y/Y %	11.9%		14.1%			5.6%	
Conversion %	93.4%		99.6%			96.4%	
Consensus Estimate	<u>s</u>						
(In \$M, except EPS)			2024 Estimate			2025 Estimate	
Revenue			\$9,227			\$9,906	
Y/Y %			6.4%			7.4%	
EBITDA			4,640			4,992	
Y/Y %			7.3%			7.6%	
Margin %			50.3%			50.4%	
Adj. EPS			\$11.64			\$13.19	
Y/Y %			11.7%		•	13.3%	<u> </u>

Risks to Our Outperform Rating

Sources: Company reports, FactSet, and William Blair Equity Research

Risks include a protracted period of management and/or board inaction. We define this period as 12 months, after which we might conclude management will no longer control the range of corporate outcomes, and a third party will likely be involved. In addition, we see a risk of rising U.S. software-integrated POS competition; questions about the durability of vertical market software organic revenue growth; the need to invest more in updating its tech stack, either organically or via M&A; and potential issuer share loss or decelerating legacy segment organic revenue growth.

Corpay: Time to Get Serious About What's Really Core

We see parallels between Global and Corpay: each has apparently good businesses and generates respectable organic revenue growth and robust profitability. We think each company has a broadly respected management team and strong track records of shareholder capital return. Despite this, both companies' stocks have underperformed the SPX since the March 2020 COVID low (GPN -2%/CPAY +74%, SPX +159%) and have suffered material NTM estimated P/E multiple contraction (see exhibits 36 and 38 in the appendix).

Although Corpay has a very different business than Global's, focused on managing B2B spend and increasingly shifting into vehicle-based consumer spend, they share complexity—in our opinion, Corpay more than Global. Further, whereas we think Corpay boasts significantly higher entry barriers, as reflected in the stock's roughly 31% estimated 2025 relative EBITDA premium to WEX, the company's financial results have been less consistent. In fact, we cut our 2024 and 2025 EPS estimates to \$18.82 and \$21.42, from \$18.93 and \$21.67, respectively, as the company strives to reinvigorate its vehicle segment and its lodging business, which missed first quarter 2024 Street estimates. Our relatively low confidence in Corpay's ability to hit estimated 2024 EPS, absent more aggressive share repurchases, is a likely valuation headwind.

Our Outperform rating reflects a view that management and the board will revive a strategic review process, the last iteration of which failed to alter the corporate structure. Absent such a review and a subsequent breakup of Corpay's business within the next 12 months, we would be less inclined to be bullish.

We think Corpay faces several organic revenue, EBITDA, and EPS headwinds, some of which are cyclical and others that threaten to create ongoing business inconsistency. The first is a persistently sluggish freight market, which while showing some signs of bottoming (rising rejection rates and WEX's comments that OTR revenue rose sequentially in the first guarter of 2024 for the first time in five periods) continues to suffer from small fleet failures and stagnant large fleet spending. Corpay oversamples to smaller fleets, and while credit among these customers has apparently stabilized, the company's late fee revenue has suffered. Given credit uncertainty, however, we do not anticipate management loosening underwriting to accelerate top-line growth soon. The second is an unproven ability to sell corporate payments services, such as full-stack AP automation and bill payment, into its fleet customer base. We are constructive on the company's relatively new Corpay One Mastercard, which integrates spend and AP automation, but we do not think better sales execution will benefit organic revenue growth until next year. Third is that Corpay's lodging segment is a question mark, in our opinion, even as management is confident that it has addressed systems issues that caused first quarter 2024 organic revenue to decline 9%. Whereas systems disruptions may be in the past, we contend recent segment results highlight the cyclicality of a business the company has previously indicated should not be volatile. We think this raises quarterly results risk. Fourth, we believe ongoing M&A, however modest, will not instill confidence in shaky investors. These factors compel us to recommend WEX more strongly for purely fundamental investors, even as we see Corpay as attractively valued on a SOTP basis (see exhibit 22).

Exhibit 22
Corpay, Inc. Sum-of-the-Parts Analysis Supports Our Outperform Rating

Dollars in millions, except share price

Segment	2025E EBITDA	A					
Vehicle Payments (59% margin)	\$1,255	Implied EV	\$12,549	\$13,804	\$15,059	\$16,314	\$17,568
		Segment Multiple	10x	11x	12x	13x	14x
Corporate Payments (50% margin)	\$679	Implied EV	\$8,824	\$9,503	\$10,182	\$10,861	\$11,539
, (1)	,	Segment Multiple	13x	14x	15x	16x	17x
Lodging (59% margin)	\$340	Implied EV	\$3,056	\$3,395	\$3,735	\$4,074	\$4,414
Loughig (00 % margin)	φοτο	Segment Multiple	9x	10x	11x	12x	13x
Other (200)	# 00	lead to al EV	#400	ተ ደበበ	# 007	Ф 70 <i>Г</i>	#000
Other (36% margin)	\$98	Implied EV Segment Multiple	\$490 5 x	\$588 6x	\$687 7 x	\$785 8x	\$883 9x
Total	\$2,371	9	\$24,919	\$27,290	\$29,662	\$32,033	\$34,404
Net Debt (as of 1Q24)			\$5,452	\$5,452	\$5,452	\$5,452	\$5,452
Implied Equity Value			\$15,841	\$21,838	\$24,210	\$26,581	\$28,952
Diluted Shares (as of 1Q24)			73.5	73.5	73.5	73.5	73.5
Implied Share Price			\$215.39	\$296.94	\$329.18	\$361.42	\$393.66

Note: Excludes potential impact from the acquisition of GPS (expected close 1/1/2025), which is estimated to generate \$100 million in revenue with mid-40% EBITDA margins in 2024

Sources: Company data and William Blair Equity Research

We anticipate that some investors will be skeptical that Corpay will pursue a breakup to create shareholder value after eschewing an opportunity to do so last year. That said, we are more optimistic given that CEO Ron Clarke is likely nearing retirement age, a factor that could underpin greater urgency, and CPAY has lagged the SPX since COVID. We understand the logic purportedly behind last year's decision to keep Corpay intact, namely that there are no good comparables for the company's disparate businesses, and therefore the board was not convinced it could maximize value. On its face, this argument makes sense, but between the stock's roughly 8% pullback from its 52-week high and what we see as a wide gap between market value and intrinsic value, we think this logic no longer applies.

As illustrated in exhibit 22, CPAY is worth 23%-34% more than its current value, based on our conservative SOTP assumptions. As importantly, we note the stock traded at roughly our SOTP target just three months ago, a point at which management probably felt pretty good about the decision to keep the company intact. Further, we believe a sale of the lodging segment, for example, consummated at an estimated 2025 EBITDA multiple even close to our estimate would suffice to drive the stock back toward its 52-week high, based solely on third-party confirmation of the segment's value and management's willingness to be proactive.

To be clear, we have a difficult time justifying our Outperform rating based solely on fundamentals. We see Corpay posting roughly industry-average organic revenue growth, even as its corporate payments segment (roughly 30% of revenue) appears poised to generate mid- to high-teens percent long-term top-line expansion. We believe recent lodging softness, growing model complexity, the need to cross-sell corporate payment solutions into the vehicle segment to drive faster revenue growth, uncertainty around the company's long-term consumer vehicle payment ambitions, and the poor fit of the company's other segment will constrain valuation.

Valuation

Our bullish view rests on a conviction that management and the board will feel pressure to generate better shareholder returns, and in short order. Corpay has reached an agreement with one activist since the beginning of 2023, and we would not be shocked if another comes along to force action. Like Global Payments, our view is that downgrading Corpay at this juncture, trading at just about 11.4-times estimated 2025 EBITDA and an 6.7% FCF yield, would effectively be leaving alpha on the table. However, our time horizon is 12 months, beyond which we think it would be safe to conclude that management is not serious about addressing the referenced structural challenges, and we would likely consider the risk/reward more balanced.

c			ges			
2023	Duian	2024	A 6 *	Duion	2025	۸.۴
Actual	Prior	New	$\Delta \mathbf{a}$	Prior	New	<u>∆\$</u>
\$3,758 9.6%	\$4,001 6.5%	\$3,936 4.7%	(\$65)	\$4,420 10.5%	\$4,357 10.7%	(\$63)
1,993 12.7% 53.0%	2,151 7.9% 53.8%	2,115 6.1% 53.7%	(\$36)	2,401 11.6% 54.3%	2,371 12.1% 54.4%	(\$30)
\$16.92	\$18.93	\$18.82	(\$0.11)	\$21.67	\$21.42	(\$0.24)
	11.9%	11.2%	,	14.5%	13.8%	,
1,148		1,240			1,452	
		92.0%			95.0%	
=		2024 Estimate			2025 Estimate	
		\$4,009 6.7%			\$4,422 10.3%	
		2,156 8.2%			2,395 11.1%	
					\$22.23 16.8%	
	2023 Actual \$3,758 9.6% 1,993 12.7% 53.0% \$16.92	Corpay, Inc. Estir 2023 Actual \$3,758 9.6% \$4,001 9.6% \$6.5% 1,993 2,151 12.7% 7.9% 53.0% \$53.8% \$16.92 \$18.93 1,148 1.4% 91.2%	2023 Actual Prior \$3,758 9.6% 6.5% 4.7% 1,993 2,151 2,115 12.7% 7.9% 6.1% 53.0% 53.8% 53.7% \$16.92 \$18.93 \$18.82 \$11.9% 1,148 1.4% 91.2% 92.6% 2024 Estimate \$4,009 6.7% 2,156 8.2% 53.8% \$19.03	Corpay, Inc. Estimate Changes 2023	Corpay, Inc. Estimate Changes 2023 Actual Prior \$3,758 9.6% 6.5% 4.7% 10.5% 1,993 12.7% 7.9% 6.1% 53.0% 53.8% 53.7% \$16.92 \$18.93 \$18.82 \$1.240 11.2% 11.9% 11.2% 11.9% 11.2% 14.5% 1.148 1.4% 91.2% 2024 Estimate \$4,009 6.7% 2,156 8.2% 53.8% \$19.03	Corpay, Inc. Estimate Changes 2023 Actual Prior New \$3,758 9.6% 6.5% 4.7% 10.5% 10.7% 1,993 2,151 2,115 3.0% 53.8% 53.7% \$16.92 \$18.93 \$18.82 \$1.148 1,240 1,452 1.4% 91.2% 92.6% 2024 2025 Estimate \$4,009 \$4,422 6.7% 2025 Estimate \$4,009 \$4,422 \$1.1% 53.8% 54.2% \$19.03 \$22.23

Risks to Our Outperform Rating

Sources: Company reports. FactSet, and William Blair Equity Research

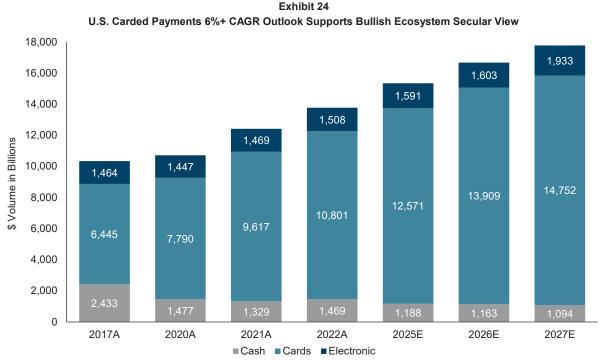
Risks include ongoing sluggish fleet demand, owing to cyclical softness and/or Corpay's inability to cross-sell AP solutions into its installed base; volatile Brazil tolls results and lower yield as the company shifts to an interchange model; uncertain foreign exchange volatility, which could adversely affect the cross-border portion of the company's corporate payments segment; shifts in lodging demand from cyclical and seasonal industries, like airlines; inconsistent other segment organic revenue growth performance; and uncertainty around any potential corporate restructuring actions, which we see as key to multiple expansion.

Secular Trend: Networks and Merchant Processors—Global Card Volume, VAS, and New Flows Growth Outlook Is Robust

We believe the long-term TAM runway remains lengthy, suggesting that many large merchant ecosystem participants, even those we view as competitively challenged, like PayPal and to a lesser degree Global, can regain their footing. We nonetheless believe that time is running short, and we are approaching a tipping point at which fintech investors will have few alpha-generation options, absent major industry consolidation. As important, in our view, sturdy global card volume growth means consistent above-average organic revenue growth for leading networks such as Visa, Mastercard, and American Express.

We highlight four key drivers of likely durable low-double-digit percent global card volume growth, which should translate into 10%-12% network organic revenue growth compounding, a 6%-8% legacy merchant organic revenue CAGR (pricing pressure), and low- to midteens percent

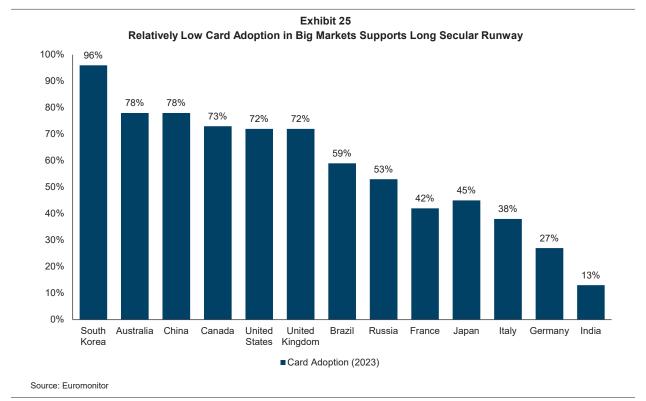
software-integrated merchant organic revenue growth compounding. These secular drivers are: 1) global card adoption, with the U.S. running at 6%-plus annual growth (see exhibit 24), and we estimate the rest of the world at 10%-plus; 2) proliferation of credentials/tokens, e.g., contactless card, e-commerce credentials, and digital wallets; 3) developing VAS portfolios, which diversify network revenue streams and make them less dependent on card volume alone; and 4) ongoing strong merchant location growth, particularly outside the U.S. We also highlight the roles open banking and faster payments can play as emerging markets adopt nontraditional business-to-consumer (B2C) payments solutions. As we discuss in our detailed company write-ups, we believe Visa and Mastercard are well positioned to participate in these non-card-specific market growth drivers.



Note 1) 2017A-2027E CAGRs: Cash -7.7%, Cards +8.6%, Electronic +2.8%, Total Tender +7.8% Note 2) 2022A-2027E CAGRs: Cash -5.7%, Cards +6.4%, Electronic +5.1%, Total Tender +6.3%

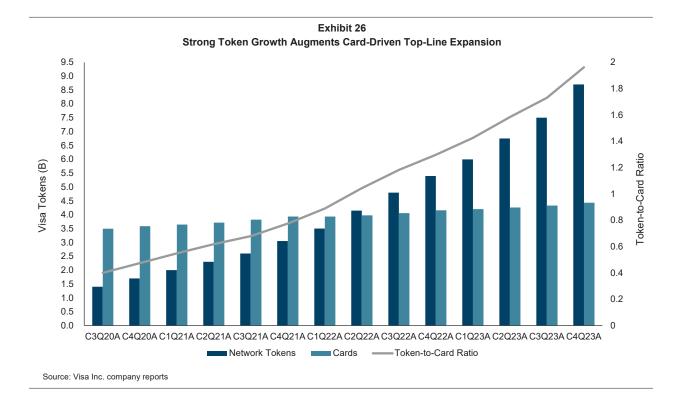
Source: Nilson

We assert this bullish secular outlook is particularly pertinent for our Visa and Mastercard theses, and it also underpins our enthusiasm for Fiserv's and Square's long-term organic revenue growth prospects. These are the fintechs best positioned to capitalize on global secular growth while monetizing VAS and software solutions, in our opinion. We field many investor questions about the durability of network organic revenue growth, considering that several developed markets, including the U.S., Australia, Canada, and the U.K., boast 70%-plus card attach. However, exhibit 25 highlights that several large economies remain where card adoption lags materially, including Brazil, France, Japan, Italy, and Germany. Therefore, as card adoption increases in these markets, rivaling the U.S. and Canada, we expect global developed market card volume (excluding rest of world, Russia, China, and India) to be at least 2%-4% faster than Nilson's nearly 7% U.S. growth outlook. Whereas we acknowledge that Visa and Mastercard may struggle to replicate developed-world economics in markets like India, let alone Russia and China, card adoption will remain an important tailwind, in our opinion.



Payment volume growth is only one important secular ecosystem driver. We view token and credential growth as key volume and monetization vehicles as well. A credential refers to an entity, usually an individual, who has authorization to make an electronic payment. A token represents a secure, encrypted version of a card's 16-digit primary account number (PAN), enabling a card to be presented for authorization without revealing specific information about the credential holder. In this sense, credentials are a proxy for card growth. We think tokenization expansion should accelerate, given improving commerce velocity driven by trends like contactless payments and e-commerce, which should run several percentage points faster than card-present volume expansion. Tokens are a particularly important network volume driver, in our opinion, as they reduce fraud, especially in card-not-present (CNP) transactions. Visa boasts roughly 9.5 billion global tokens, more than twice as many Visa cards in circulation, and growing 50%-plus (exhibit 26). We believe this highlights the key role tokenization is playing in driving network volume growth. The company also noted on its fiscal second quarter 2024 conference call that it sees measurable e-commerce authorization uplift and lower fraud as tokens proliferate. For additional information on payments fraud, see our report.

We anticipate material economic benefits accruing from higher authorization rates and lower fraud. Lastly, we note Mastercard's recent announcement that it is committed to 100% European e-commerce tokenization by 2030. This is a worthy goal, in our opinion, as elimination of manually keyed e-commerce transactions promises to make online commerce as seamless and ubiquitous as contactless card-present payments have become. For additional information on the growth of contactless payments, see our report.



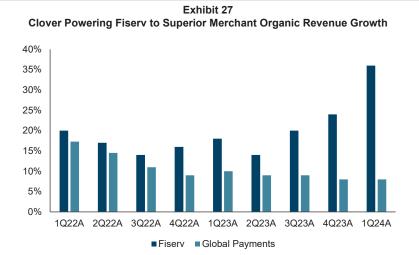
As a last observation, despite the relatively mature nature of the global card market, we view merchant acceptance growth as a key long-term electronic payment volume driver. Over the years, American Express and Mastercard have expanded the acceptance footprint; more recently Visa reported 17% acceptance growth in fiscal first quarter 2024, versus just 7% reported payment volume expansion. Although some of Visa's growth is coming in relatively immature markets, like Brazil, and through share gains, such as its new Caixa Bank relationship, we note contributions from new tender types, like bill payment and B2B, as important drivers—we discuss new flow and VAS TAM in the company-specific sections of this note. We anticipate growing merchant acceptance will be the third leg on the global card volume growth stool, benefiting Visa, Mastercard, and American Express.

Secular Trend: Merchant Acquiring and Processing—Competitively Differentiated Software-Integrated POS

We recognize the risk of becoming too conservative following a period of broad relative underperformance, particularly considering the historical forward 12-month estimated P/E reset. Accordingly, we would not be surprised to see rallies in beaten-down names. Although we appreciate that some value investors will be tempted by laggards' strong balance sheets and FCF, our view is that terminal value risk outweighs these constructive attributes. We maintain that potential M&A remains an important caveat to this point. Despite modest recent industry consolidation, we are disappointed that Global Payments, for example, has not pursued a strategically transformative acquisition to better compete with Clover. Alternatively, we continue to believe the company could unlock significant shareholder value by selling its relatively commoditized issuer business that it acquired in 2019. Further, while we appreciate PayPal's self-help strategy under new management, we similarly believe the company needs to improve its unified commerce (UC) position to maintain long-term competitive relevance and reaccelerate organic revenue and

transaction margin growth. We would accordingly review our rating in the event of strategically compelling M&A, and we argue that PayPal must pursue a UC acquisition to alter its long-term growth and return trajectory.

Beyond meaningfully accelerating industry consolidation, we recommend that investors focus on clearly defensible fintech leaders. We put the U.S. e-payment volume TAM at roughly \$12 trillion, growing midsingle digits plus. Revenue growth should lag volume expansion by 2-3 percentage points, as we see pricing pressure at enterprise merchants and ample capital capping small and medium business (SMB) pricing power. The exception to this yield compression outlook resides in software and VAS, in our opinion—offerings that virtually every merchant participant boasts at some level but not equally. For example, Global Payments generates about 60% of its merchant segment revenue from tech-enabled solutions, yet the company has been unable to accelerate merchant segment organic revenue growth (see exhibit 27). We anticipate that in the absence of a significant strategically accretive acquisition, the company will continue posting roughly industry-average organic revenue growth. By contrast, Fiserv is posting 12%-14% merchant segment organic revenue growth, excluding its Argentina business, led by mid-20%-plus Clover top-line expansion. As much as we like the durability of Global's merchant organic revenue growth, we question the company's ability to accelerate top-line expansion, likely capping longer-term valuation.



Note: GPN organic growth reflects management disclosure around constant-currency growth rates excl. the acquisition of EVO Payments and dispositions. FI 1Q24 growth includes 15-point benefit from Argentina. Sources: Company reports and William Blair Equity Research

We argue it is difficult to overstate the importance of SMB software-integrated POS solutions. As we discuss in more detail in our Fiserv and Block write-ups, we think plug-and-play, or self-service, SMB software has truly democratized business. We are aware that some industry observers and participants decry the notionally high cost of SMB card acceptance, which in some cases can approach 400 basis points of volume. We think this is a red herring, however. Whereas historically low-tech merchant POS solutions, like standalone terminals, had to be manually integrated into basic business management solutions, like Excel spreadsheets and QuickBooks, next-generation SMB POS software offers powerful enterprise resource and planning (ERP) capabilities heretofore only available to much larger merchants. In this regard, we contend the value created by powerful new software at least justifies the relatively high price SMBs pay to accept cards. Our view is that yield expansion, especially at Clover, and to a lesser extent Square, supports this point. Rather than overcharging small merchants, we think leading software-integrated POS providers are pricing to value, much as the networks have done for years.

We argue the foregoing explains why Global and Fiserv can experience meaningfully divergent organic revenue growth, despite each boasting strong tech-enabled solutions at scale. We think Fisery has three important advantages. First, we believe Clover taps into SMBs' growing desire for plug-and-play solutions, while Global's software offerings are more likely to be integrated into legacy hardware. We assert this distinction is one reason Clover's U.S. gross payment volume (GPV) is growing faster than Square's—simplicity matters. We like Global's POS software business, which is putting up about 20% organic revenue growth, but it is only about 6% of merchant revenue. Second, after many years of scale distribution taking a backseat to ISV relationships, we believe U.S.-based bank distribution partnerships and large internal salesforces are increasingly important. Fisery boasts the industry's best distribution, in our opinion, even after dissolving its JP Morgan and Bank of America JVs. We view Wells Fargo as an important partner and think Fisery's fintech segment is becoming an increasingly efficient cross-sell channel. Third is pricing power. Clover's yield has increased roughly 11 basis points since fourth quarter 2022 (to 88 basis points from 77 basis points), while Global's revenue growth has roughly tracked volume. We assert this is a critical observation as Clover has increased software attach from near zero to 20%. Clover now accounts for nearly 30% of Fiserv's merchant business, and we believe the company has also taken advantage of Square's go-to-market challenges to raise price. We accordingly anticipate that Fiserv will continue posting roughly 2 times U.S. merchant organic revenue growth. Although some of this is likely reflected in the stock's significant nearly 100% estimated relative 2025 P/E premium to Global, we believe investors will continue focusing on fintech's best companies, namely Fiserv.

Although Square, Block's merchant business, has struggled in the last couple of years, losing share to Clover, we believe new vertical market software and simplified go-to-market initiatives under cofounder Jack Dorsey's day-to-day supervision should allow Square to recapture past glory. Despite Clover's success, we contend Square is the best software-integrated POS in the market, evidenced by almost 60% of gross profit generated by SaaS, and nearly 80% excluding merchants that do not use the company's software solutions (known as sidecar merchants). We believe this above-average software attach will aid retention and monetization. We also anticipate optionality in potential new distribution deals. Although the company has experimented in the past with bank distribution, and this may not be the most efficient channel, we expect it will move to integrate some type of third-party distribution, which we believe could materially accelerate organic revenue growth. Acquiring a company like Shift4, with its strong installed enterprise customer base and diversified distribution, would be a positive, in our opinion, and this asset will be accretive to whichever company ultimately acquires it, which we see as a highly likely eventual outcome. We dig deeper into our company-specific upgrade for Block in the preceding discussion of the company.

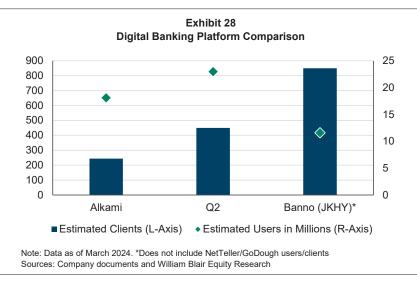
Secular Trend: Banktech and Embedded Finance

Banktech

We continue to believe that the banktech industry represents an attractive market for long-term investors. Our work suggests that IT spending is largely a nondiscretionary item for regional and community financial institutions as they face increasing competition from megabanks, fintechs, challenger banks, and big tech. Through the emergence of ATMs in the 1960s, debit cards in the early 1990s, online banking/bill-pay in the 2000s, and the current move to mobile/digital banking, we believe that financial institutions rely on banktech providers to navigate the evolving environment, meet changes in consumer demands, and ultimately help financial institutions grow revenues and become more efficient. We outline trends that we are seeing within the space below, but we take a deeper dive in our recent industry note: Digital Banking, Business Banking, Embedded Finance/BaaS, Cloud Cores, and More: A Review of Opportunities Within BankTech.

Strong digital banking solutions are more than just teller replacements, and in our view, represent new channels for customer engagement and create new revenue opportunities for banks. Essentially all financial institutions had to adopt digital banking solutions due to the pandemic, but consumers are increasingly seeking out more advanced features, while financial institutions are in search of ways to increase customer engagement and monetization. In our view, the frequency of digital "visits," which can exceed 300 times per year (versus about 10 branch visits per year), highlights the importance of a strong digital experience for retention and creates a clear opportunity for banks to leverage these platforms to drive further engagement and sales. Given these dynamics, we believe that modern offerings with broader capabilities, either native or through fintech integrations, should see increased win rates.

While there are likely dozens of digital banking solution providers, we believe the sheer number of financial institutions, coupled with the growing demand for modern solutions, creates a large market that should support multiple winners. Across our coverage, there are multiple examples of modern digital platforms from both core and digital banking focused providers, including Experience Digital (Fiserv), Banno (Jack Henry), Digital One (FIS), Alkami, and Q2. For perspective, Alkami estimates that there are 250 million digital accounts (up from 185 million in 2021) in its target market, which is sized at \$11 billion. Q2 sizes its opportunity at \$15 billion.



Amongst digital banking providers, we are particularly attracted to the high level of visibility and significant growth opportunities of Alkami. Alkami operates under long-term contracts (70 months on average), with over 95% mix of subscription revenue, which drives strong revenue visibility. While Alkami has historically had an outsized presence with credit unions, the company is gaining traction in the banking channel and newly implemented customers should have a compounding affect, serving as a case study in future bids. Alkami's guidance calls for 25% revenue growth (driven by midsingle-digit ARPU growth and midteens user growth), and at least 20% adjusted EBITDA margin by 2026 (versus -0.6% in 2023).

In our view, to capture the incremental revenue opportunity of SMB banking, community and regional financial institutions must adopt modern dedicated solution. The \$370 billion to \$400 billion SMB banking market has typically been underserved by traditional financial institutions, but given the size of the opportunity, institutions are focused on capturing the market by introducing new services and offerings. Given these trends, we have seen increased investment and product innovation from banktech providers around the SMB opportunity, including SMB dedicated digital banking platforms, digital account opening solutions, and loan origination systems.

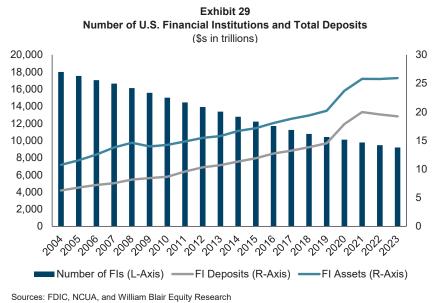
Further, we believe institutions have an opportunity to drive further engagement and monetization by integrating various functionalities directly into their digital experience through fintech integration, such as B2B AP/AR automation software.

Financial institutions have the option to choose "best-of-breed" versus "best-of-suite" solutions as they modernize tech stacks, but we believe a large addressable market and interoperability allows room for multiple winners. The banktech market comprises core providers (e.g., FIS, Fiserv, Jack Henry), which aim to provide a one-stop shop for financial institutions, and companies that aim to provide best-of-breed solutions offering a narrower set of use-cases (e.g., Q2, Alkami, nCino, MeridianLink). Over the years the lines have blurred as core providers have developed competitive complementary solutions, while best-of-breed providers have broadened product offerings through both internal R&D and M&A. Further, both core provider and point solution providers have become increasingly open to third-party integrations to drive retention and find ways to monetize connections.

Modern cloud-native, API-first modularized cores can de-risk the core conversion process, simplify third-party integrations, enable real-time processing, allow burst processing, and facilitate real-time updates, among other benefits. Over the past decade, a growing number of modern core providers have emerged, but maintain limited market share and are primarily used in tandem with traditional cores to operate subsidiary-like initiatives, such as a digital neobank, or to enable institutions to enter the BaaS or embedded finance space. Still, we believe that over the long term, modern cores will eventually gain market share as financial institutions transition away from legacy core systems. As a result, traditional providers are acquiring and/or building competing offerings; examples include Fiserv's purchase of Finxact, FIS's Modern Banking Platform initiative, and the Jack Henry Platform.

Of the Big 3 core providers, FIS's Modern Banking Platform and Fiserv's Finxact were earlier to market, but in our view, Jack Henry has provided the most defined product roadmap for its modern core initiative, which has drawn interest from larger institutions outside the company's target market. Modules have been released, but management believes the company is 3-5 years out from a full core in the cloud and believes clients and regulators should be prepared for the transition at that time. It remains early, but management believes the transition to the platform offering should drive 20%-25% revenue uplift and support margin expansion.

Despite headlines of bank consolidation, activity is primarily concentrated across the smallest institutions, while typical end-markets across our coverage remain robust measured by both number of institutions and financial performance. The number of U.S. financial institutions has fallen at a 3.5% annual clip since 2004 due to industry consolidation partly offset by limited de novo growth. Despite the shrinking number of financial institutions, the total dollar amount of financial institution assets and deposits was near peak levels exiting 2023; assets have grown at a 4.7% compound annual rate since 2004, while deposits have grown at a 6.1% compound annual rate.



As outlined in exhibit 30, the smallest financial institutions—banks with less than \$250 million of assets and credit unions with less than \$50 million of assets—have seen the most consolidation, with the number of institutions falling at a 6% compound annual clip since 2002. Interestingly, the number of banks with assets between \$250 million and \$50 billion has increased at a 1.2% annual clip to 2,706 institutions, while the number of credit unions with assets of \$50 million to \$10 billion has increased at a 1.4% annual clip to 2,445.

While not fully immune to bank consolidation, the banktech providers under our coverage typically target midsize or larger financial institutions. Target markets vary by company, but at the lower end of the range, Jack Henry targets institutions with between \$250 million and \$50 billion of assets, and its average customer has approximately \$1 billion in assets. On the upper end of the market, FIS maintains a presence with some of the largest financial institutions both domestically and abroad. Given these dynamics, the group should see benefit from consolidation as their customers acquire smaller institutions.

Exhibit 30 Number of Financial Institutions by Asset Range and Year 2002 vs. 2023

	Banks		
Asset Range	2002	2023	CAGR
<\$250M	7,228	1,843	-6.3%
\$250M to <\$1B	1,582	1,756	0.5%
\$1B to <\$10B	453	837	3.0%
\$10B to <\$50B	82	113	1.5%
\$50B to <\$1T	24	43	2.8%
>\$1T	0	4	NA
ΔΙΙ	9 369	4 596	-3 3%

Credit Unions						
Asset Range	2002	2023	CAGR			
<\$50M	7,981	2,236	-5.9%			
\$50M to <\$250M	1,371	1,354	-0.1%			
\$250M to <\$1B	385	674	2.7%			
\$1B to <\$10B	71	417	8.8%			
>\$10B	1	21	15.6%			
All	9,809	4,702	-3.4%			

Sources: FDIC, NCUA, and William Blair Equity Research

While we do not anticipate a banking crisis and corresponding economic downturn on the scale seen during the great recession, we believe that bank technology providers should be able to navigate a potential slowdown in the economic cycle and recent pressures among financial institutions. Despite over 400 failures and severe financial pressure between 2008 and 2010, established banktech providers, including Fisery, FIS, and Jack Henry, reported relatively stable revenues and were able to successfully navigate the environment—during the peak of the crisis, Jack Henry's adjusted EBITDA fell 2% in 2009.

Exhibit 31
Established Banktech Great Recession Era
Estimated Pro Forma Revenue and Stock Price Performance
(\$s in millions)

Estimated Pro Forma Revenue

	CY	CY	CY	CY
	2007	2008	2009	2010
FI	\$4,081	\$4,074 -0.2%	\$4,077	\$4,133
y/y change	8.9%		0.1%	1.4%
FIS	\$4,905 <i>6.5%</i>	\$4,953	\$4,925	\$5,270
y/y change		1.0%	-0.6%	7.0%
JKHY	\$815	\$895	\$908	\$939 3.3%
y/y change	13.8%	9.8%	1.5%	
Stock Price Perfo	rmance			
FI	5.9%	-34.5%	33.3%	20.8%
FIS	3.7%	-29.8%	44.1%	16.9%
JKHY	13.7%	-20.3%	19.2%	26.0%
KBW Regional Bank Index S&P500	-24.4% 3.5%	-21.7% -38.5%	-24.2% 23.5%	18.2% 12.8%

Note: Values are estimated and pro forma for acquisitions and divestitures; JKHY values calendarized

Sources: Company reports, FactSet, and William Blair Equity Research

Embedded Finance

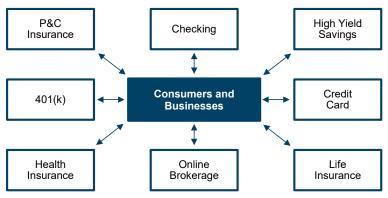
As we outline in our recent industry report: <u>A New Wave of Financial Services</u>: <u>How Open Banking and BaaS Are Fueling Embedded Finance</u>, we believe embedded finance should serve as a long-term secular tailwind for companies in the fintech ecosystem; our definitions are outlined below:

- Embedded finance refers to the integration of innovative financial services into software applications for consumers or businesses, typically enabled by open banking, BaaS, and modern API technology.
- Open banking refers to the provisioning of open access to financial data through secure APIs, typically to trusted third parties servicing consumers or businesses. Access to this data through open banking helps companies/developers create more seamless customer experiences, ranging from account opening to payments, post-transaction follow-up, and credit availability in a more personalized/tailored product offering. The use-cases for open banking will continue to evolve and include payments, lending, and account verification.
- **Banking as a Service (BaaS)** refers to the leveraging of a licensed financial institution's product and regulatory capabilities by a nonbank entity to distribute financial products; these functions are generally accessed through modern API architecture.

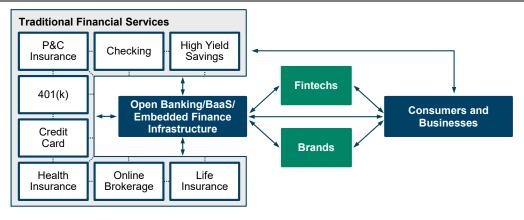
Nonfinancial institutions (e.g., retailers, marketplaces, and software companies) have several advantages in offering digital financial services (e.g., payments, savings, credit, insurance, and banking) directly to their end-customers, including lower customer acquisition costs, attractive crosssell economics, situational product offerings, and improved consumer choice. However, financial institutions should continue to have a key role in enabling nonregulated entities to offer various solutions, such as deposit accounts, money transfers, card issuance, and loan origination services.

Extending Financial Products Beyond Financial Institituions

Legacy Distribution of Financial Products



Embedded Finance Distribution



Source: William Blair Equity Research

We believe this integration helps create a win-win-win scenario for all parties in the ecosystem—in general, consumers and businesses enjoy a better, more personalized/seamless experience; companies benefit from improved customer retention and the opportunity for cross-sells (with attractive customer acquisition costs); and enablers benefit from overall market adoption. Further, the combination of consumers' willingness to share data and companies' ability to capture data, along with the adoption of new technologies such as generative artificial intelligence (GenAI), could have significant implications globally. For example, utilizing data can create a more seamless experience when onboarding customers by reducing fraud risk and by streamlining manual tasks or can create a more personalized experience with more targeted recommendations for customers.

The market opportunity for embedded finance, open banking, and BaaS is vast, given improvements in technology, growing consumer adoption, and expanding use-cases. Precisely sizing the market is challenging and estimates vary widely: consider Bain Capital estimates that embedded finance can enable over \$7 trillion of total U.S. financial transactions by 2026 while FIS expects the BaaS market (TAM) to be greater than \$25 billion by 2026 and the embedded finance TAM to be about \$230 billion of revenue by 2025. Regardless, we believe the opportunity is large, expanding, and in its early innings. In addition, we believe these technologies support the gig economy and drive financial inclusion, which is a leading initiative by a host of government and nongovernment agencies.

We believe account-to-account (A2A) payments powered by open banking represent an emerging use-case for the technology. Unlike traditional A2A payments that rely on travel over bank infrastructure, open-banking-powered A2A payments offer myriad potential benefits, including lower costs, faster settlement, and increased security (versus legacy A2A payments). For example, Token, which is an open banking platform that enables A2A payments, has outlined that the cost of accepting an account-to-account payment via open banking infrastructure is significantly below that of other payment methods for merchants due to automated reconciliation and lower network/interchange fees. Further, in the United States, Mastercard helps power JP Morgan's Pay-by-Bank, which is an ACH-based payment that uses open banking technology. The initiative enables bill payments between parties in a secure way without the need to manually enter a routing number and account information and helps add new value-added services for traditional ACH transactions.

The data suggests financial institutions that embrace BaaS can generate higher returns as they can leverage the bank charter and extend well beyond the confines of a geographic region. Using a sample of 30 BaaS banks relative to the industry, BaaS banks tend to generate higher returns, yet experience higher charge-offs/loss provisions. We note that the number of BaaS-sponsor banks has increased to 136 exiting 2023 (up from 78 in early 2022), according to data from FedFis; further, 74 of the BaaS banks only provide credit solutions, while 52 (38%) provide both credit and deposit solutions.

Exhibit 33 BaaS Bank vs Community Bank Select Metrics CY2023				
	BaaS Banks (n=30)	FDIC Community Banks (n=4,140)		
% of Unprofitable Institutions	10.00%	5.24%		
Yield on Earning Assets	6.74%	5.04%		
Net Interest Margin	4.75%	3.39%		
Credit Loss Provision to Assets	0.65%	0.12%		
Net Charge-Off to Loans/Leases	0.78%	0.11%		
Efficiency Ratio	62.03%	64.17%		
ROE	12.35%	10.74%		
ROA	1.21%	1.01%		

While the financial opportunity of embracing BaaS is clear, regulatory risks exist; in 2023, BaaSsponsored banks accounted for 13.5% of severe enforcement actions issued to U.S. banks, according to S&P Global. Based on data from the various banking regulators, we found that the number of enforcement actions against BaaS-forward banks has been increasing and totaled 7 in the first half of 2024 (versus 0 in 2021, 1 in 2022, and 5 in 2023).

Key risks associated with embedded finance, open banking, and BaaS include managing consumer data, the ability to operate at scale, and determining the party accountable when an issue arises. The ecosystem that helps power embedded finance includes consumer brands, regulated financial institutions, and fintechs, and the lines between these entities are blurring. Each party in the ecosystem serves a unique role and must balance the risk with the opportunity.

We believe Evolve Bank and Trust highlights some of the risk of banks working with fintechs and managing consumer data in an embedded finance ecosystem. In 2023, Evolve Bank and Trust decided to exit its longstanding contract with Synapse, and as part of the wind-down process it was discovered that Synapse Brokerage maintained irregular internal ledgers and Synapse ultimately filed for bankruptcy in April 2024. Separately, in May 2024, Evolve Bank experienced a data breach. Through a malware attack, criminal organization LockBit gained access to Evolve's systems and leaked customer data, including social security numbers, account numbers, and contact information of both Evolve's personal banking customers and the customers of its open banking partners; at this time, reports suggest impacted fintechs include Affirm, Branch, EarnIn, Marqeta, Melio, Mercury, and Wise. The announcement of the breach came on the heels of Evolve receiving a consent order from the Federal Reserve in June, which scrutinized practices within the bank's open banking division.

Embedded finance is a massive opportunity, and among the purer plays within our coverage, Marqeta is a clear beneficiary of the trend. Through a series of platform investments, new leadership, and changes in go-to-market strategy, the company has become increasingly focused on powering embedded finance; management sizes the revenue opportunity at \$22 billion today, growing at a 19% compound annual rate through 2026 to \$55 billion. Management views embedded finance as the next leg of growth for the company and recent trends have been encouraging; embedded finance accounted for 35% of bookings in the 12 months ended September 2023. Initial areas of focus within embedded finance include 1) accelerated wage access (AWA), 2) B2B, and 3) cobranded credit. Comparisons should begin to normalize in the September quarter as it passes the anniversary of the Block contract, and the company has a strong debt-free balance sheet with \$1.2 billion of cash (40% of market cap).

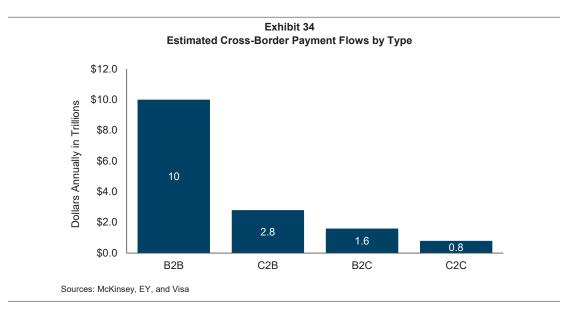
In addition to the purer-plays on embedded finance (Marqeta, Green Dot), several companies under coverage are focused on enabling embedded finance.

- Networks: Visa acquired Tink/Pismo, while Mastercard acquired Finicity/Nets/VocaLink.
- Banktech providers: FIS recently launched Atelio, which enables developers, corporate customers, and third parties to access FIS's infrastructure to power embedded finance initiatives. Finxact (owned by Fiserv) helps power Walmart's Even app, which is a neobank initiative for employees and includes features such as early earned wage access, budgeting, and saving tools; the platform has nearly 900,000 active members. Q2's Fabric and Helix offerings power embedded finance experiences, and the company's Innovation Studio enables banks to embed fintech solutions directly into their customer experience. The Jack Henry Platform should enable community and regional institutions to more easily integrate with and embed open banking powered fintech offerings.

Secular Trend: Cross-Border Payments and Remittances

Both international trade and migration have reached all-time highs, yet the existing cross-border payments systems in place remain ripe for disruption. International trade measured by exported goods and services as a percent of GDP has doubled to nearly 30%, or \$32 trillion (versus 15% in the early 1970s), according to the World Bank, while international migrant stock has increased over 80% between 1990 and 2020, to 281 million individuals, according to the United Nations. Despite these figures, payments across borders remain a pain point as they are typically characterized by higher costs, slower processing speeds, higher payment declines, and limited transparency relative to domestic payments for consumers and businesses alike.

Sizing the market is complicated due to the TAM's large size and strong growth, lack of uniform data, and intra-bank transactions. However, Mastercard has sized the opportunity for send at \$32 trillion, while Visa estimates that \$15 trillion is addressable by fintech providers, comprising B2B (e.g., supplier payments, professional services spend), C2B (e.g., consumer e-commerce), B2C (e.g., refunds, payroll, insurance disbursements), and C2C (e.g., remittances). Further, Payoneer estimates that there are over 80 million small to midsize businesses (SMBs) globally, a growing portion of which rely on international commerce for growth.



Banks process most cross-border transactions, but incumbent and emerging fintechs are focused on addressing the various challenges of cross-border payments across C2C, C2B, B2B, and B2C flows. In addition to the inefficiencies of the correspondent banking system, we attribute the challenges of cross-border payment to several factors, including: 1) inefficient international payments infrastructure; 2) increased regulatory and compliance burden; 3) difficulties managing the growing number of alternative payment methods, or APMs—e.g., Alipay in China, Pix in Brazil; 4) higher fraud challenges; 5) sales and value-added tax (VAT) management; and 6) foreign exchange management challenges.

There are several companies in our coverage list that are focused on enabling cross-border payments, and while overlaps exist, these companies range from infrastructure players such as Visa, Mastercard, Euronet, FIS, and Fiserv to merchant acquirers such as Global Payments and Worldpay and emerging private companies such as Airwallex, Stripe, and Checkout.com. Select verticals and opportunities are outlined below.

Cross-Border Commerce

Juniper Research estimates that cross-border e-commerce flows totaled \$1.6 trillion in 2023 and expects this number to grow at nearly a 16% compound annual rate through 2028. In addition to the core complexities of cross-border payments, cross-border e-commerce presents the added challenges of acquiring foreign consumers through digital channels, presenting pricing and checkout flows relevant to local consumers, tax and royalty challenges, and order fulfillment and returns. Data points illustrating these challenges are bountiful: 1) international traffic constitutes roughly 30% of total e-commerce web traffic but only 5% to 10% of e-commerce sales, according to Global-e, and 2) 52% of international merchants report international payment authorization rates below 80%, according to a survey conducted by Bluesnap, which compares to an 85% approval rate for card-not-present transactions and a 96% approval rate for card-present transactions.

A variety of public and private fintechs are addressing these challenges, and in our coverage notable mentions include PayPal, Nuvei, Payoneer, Flywire, and Worldpay (45% owned by FIS). Outside e-commerce, Flywire has developed a proprietary global payments network and vertically integrated software to enable the acceptance of high-value, complex payments such as within education and high-end travel, which represent \$660 billion and \$530 billion markets, respectively.

Cross-Border B2B Payments

Like domestic B2B payments, cross-border B2B payments remain dominated by traditional financial institutions, which in our view creates a large opportunity for cross-border-focused fintechs to better serve the market by digitizing flows and adding value through software. Cross-border B2B payments merge the core challenges of cross-border with the outsized use of paper, tedious accounts receivable (AR) and accounts payable (AP) processes, and manual reconciliation efforts of B2B payments.

Payoneer is a leading modern cross-border commerce enablement provider that has been diversifying into value-added services like cards, AR/money-in service, working capital, B2B, and checkout.

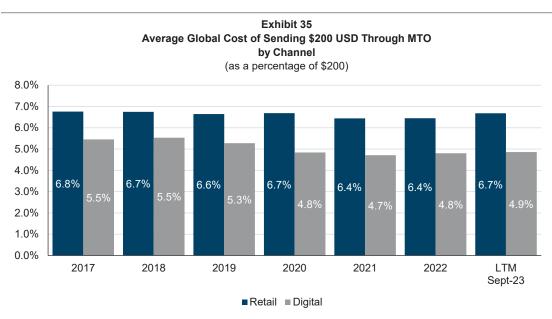
About 26% of Corpay's revenue is from its corporate payments segment, about 60% of which is focused on cross-border payments. This business has been built through a series of acquisitions, including Cambridge (\$675 million), AFEX (\$460 million), Global Reach (\$103 million), and the pending acquisition of GPS Capital Markets for \$725 million (roughly 16 times 2024 EBITDA).

Global Remittances

The World Bank sizes total formal channel (e.g., money transfer operators and banks) remittance volume at \$857 billion globally, but the informal channel (e.g., cash sent through travelers) is at least the same size, if not multiples larger. The remittance market is highly fragmented between global money transfer operators (MTOs), regional MTOs, and traditional financial institutions. Consider that Western Union maintains the largest share at 10% to 15% of the formal market, but a smaller share when including the informal channel. While macro factors such as oil production and prices can have impacts on migrant flows, and thus outward remittance volumes, remittance funds are predominantly used for daily living expenses and as a result, remittances are largely nondiscretionary.

Our work suggests that the remittance market is much larger and more fragmented than most investors understand, and that the market should support multiple winners. This said, within our coverage, we believe that Remitly is best positioned to capture share within the remittance market and believe the company is in the early innings of a long-term, high-growth story. Remitly has significant growth opportunities in both existing send countries (31 total) and new markets, and in our view, the company has industry-leading technology and customer service, differentiating it from legacy peers.

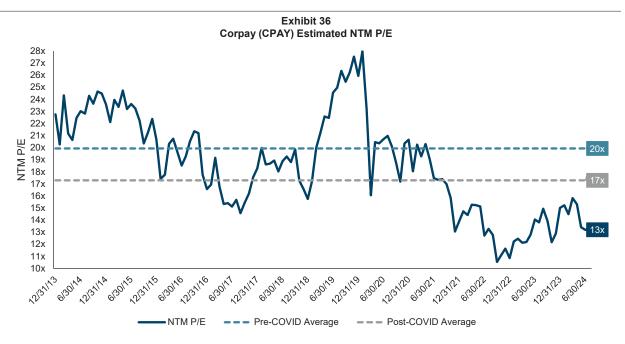
Despite concerns of a "race to the bottom," industry pricing has remained stable since the pandemic and provider considerations go beyond cost; providers that excel in speed, convenience, ease of use, additional features, and brand trust/loyalty should be able to sustain premium pricing and take share. As we outlined in our recent industry report (see note), pricing is complex as it is influenced by several factors such as channel, dollar amount sent, and speed, but in general financial institutions remain the most expensive way of sending money, followed by MTOs and digital providers. Further, while still below pre-pandemic levels, remittance pricing from MTOs has been relatively stable to slightly increasing in 2023 across digital and retail channels. Further, we believe that the ability of digital-first, customer-centric providers, such as Remitly, to charge premium pricing in large and mature corridors supports our view that the money remittance industry is not a commodity (see note). Digital providers have taken share, but we believe adoption is still in its early stages. We encourage investors to consider that Remitly has just 2% share of the \$1.8 trillion market, while estimates from the Visa Economic Empowerment Institute suggest digitally sent remittances (including through legacy players) accounted for 57% of formal volumes.



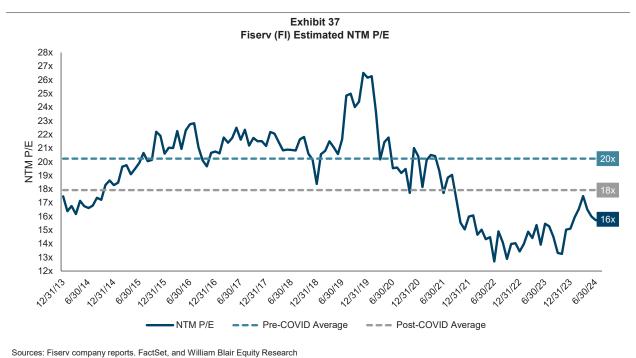
Sources: The World Bank, Remittance Prices Worldwide, available at http://remittanceprices.worldbank.org, and William Blair Equity Research

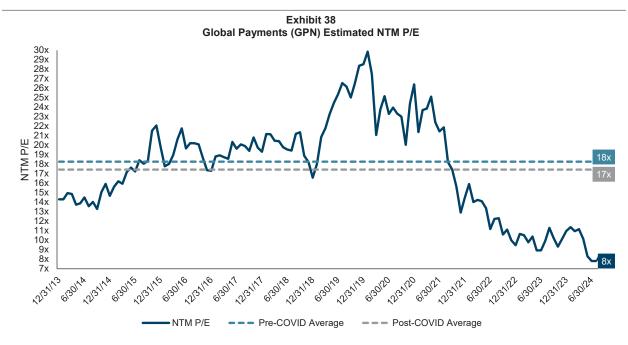
In our view, planned entries and incremental investments in remittance from large consumer-facing fintechs highlight the attractiveness of the space. Still, multiple hurdles to entry exist, which create opportunities for scaled remittance providers and the networks. Block (see note), PayPal (see note), Coinbase, and X, among others, have announced plans to enter or further invest in the space in recent periods, but entering the market is challenging given the highly regulated nature and the time and capital investments required to build networks at scale. Further, the introduction of cryptocurrencies into the remittance ecosystem is not new, and according to 2021 testimony to the United States Senate, Alexis Goldstein (director of financial policy, Open Markets Institute) suggested that the cost of converting crypto to fiat currencies can be prohibitive. Given these barriers, remittance providers have essentially white labeled their in-house systems for third-party consumption. For example, Euronet's Dandelion offering helps power Remitly, Xoom, and Zepz/WorldRemit; Visa Direct and Mastercard Send are leveraged by various remittance providers to disburse funds directly to cards; and Remitly has suggested opportunities exist for third parties to leverage its platform.

Appendix

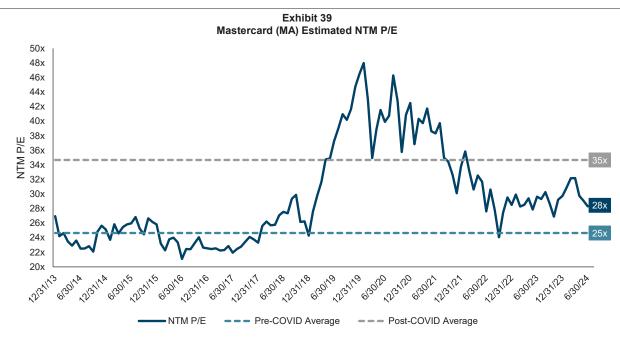


Sources: Corpay company reports. FactSet, and William Blair Equity Research

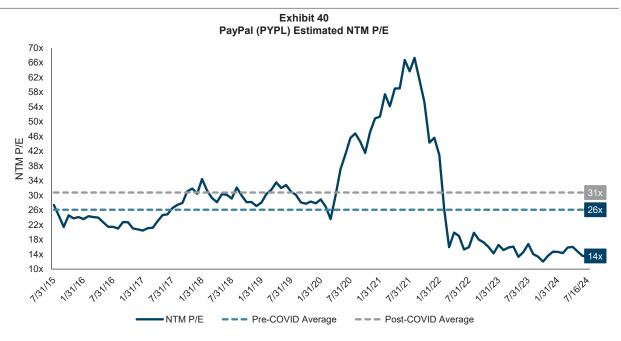




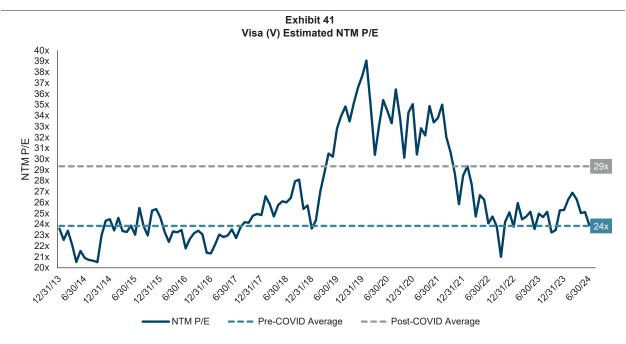
Sources: Global Payments company reports. FactSet, and William Blair Equity Research

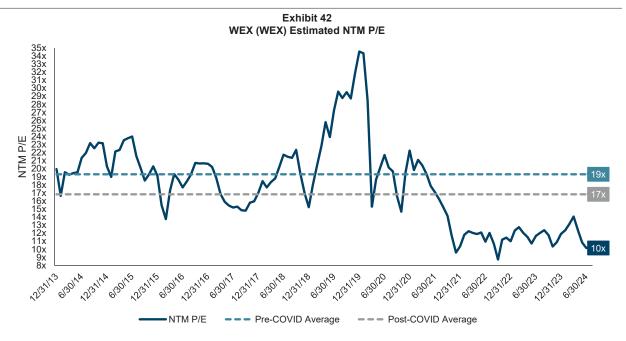


Sources: Mastercard company reports. FactSet, and William Blair Equity Research



Sources: PayPal company reports. FactSet, and William Blair Equity Research





Sources: WEX company reports. FactSet, and William Blair Equity Research

The prices of the common stock of other public companies mentioned in this report follow:

Affirm Holdings, Inc.	\$33.46
Amazon.com, Inc. (Outperform)	\$193.02
Apple Inc.	\$234.82
Bank of America Corporation	\$44.13
Booking Holdings Inc.	\$4,119.09
Coinbase Global, Inc.	\$251.49
Deutsche Bank AG	\$16.54
JPMorgan Chase & Co.	\$213.62
Shift4 Payments, Inc.	\$73.10
Shopify, Inc. (Outperform)	\$69.72
U.S. Bancorp	\$43.29
Walmart Inc.	\$69.99
Wells Fargo & Company	\$60.24

IMPORTANT DISCLOSURES

One or more of the research analysts responsible for covering American Express Company mentioned in this report owns shares of the security.

William Blair or an affiliate was a manager or co-manager of a public offering of equity securities for MeridianLink, Inc. within the prior 12 months.

William Blair or an affiliate beneficially own or control (either directly or through its managed accounts) 1% or more of the equity securities of Flywire Corporation and Euronet Worldwide, Inc. as of the end of the month ending not more than 40 days from the date herein.

William Blair or an affiliate is a market maker in the security of American Express Company, Block, Inc., Corpay, Inc., Fiserv, Inc., Fidelity National Information Services, Inc., Flywire Corporation, Global Payments, Inc., Mastercard Incorporated, PayPal Holdings Inc., Remitly Global, Inc., Visa Inc., WEX Inc., Euronet Worldwide, Inc., Payoneer Global Inc., The Western Union Company, nCino, Inc., Marqeta, Inc., Q2 Holdings, Inc., MeridianLink, Inc., Jack Henry & Associates, Inc., Green Dot Corporation, EVERTEC, Inc., Alkami Technology, Inc., Riskified Ltd., Nayax Ltd., Nuvei Corporation and Cantaloupe, Inc.

William Blair or an affiliate expects to receive or intends to seek compensation for investment banking services from American Express Company, Block, Inc., Corpay, Inc., Fiserv, Inc., Fidelity National Information Services, Inc., Flywire Corporation, Global Payments, Inc., Mastercard Incorporated, PayPal Holdings Inc., Remitly Global, Inc., Visa Inc., WEX Inc., Euronet Worldwide, Inc., Payoneer Global Inc., The Western Union Company, nCino, Inc., Marqeta, Inc., Q2 Holdings, Inc., MeridianLink, Inc., Jack Henry & Associates, Inc., Green Dot Corporation, EVERTEC, Inc., Alkami Technology, Inc., Riskified Ltd., Nayax Ltd., Nuvei Corporation and Cantaloupe, Inc. or an affiliate within the next three months.

William Blair or an affiliate received compensation for investment banking services or non-investment-banking services from MeridianLink, Inc. within the last 12 months. MeridianLink, Inc. is or was, within the last 12 months, an investment banking client of William Blair & Company and/or one or more of its affiliates.

Officers and employees of William Blair or its affiliates (other than research analysts) may have a financial interest in the securities of American Express Company, Block, Inc., Corpay, Inc., Fiserv, Inc., Fidelity National Information Services, Inc., Flywire Corporation, Global Payments, Inc., Mastercard Incorporated, PayPal Holdings Inc., Remitly Global, Inc., Visa Inc., WEX Inc., Euronet Worldwide, Inc., Payoneer Global Inc., The Western Union Company, nCino, Inc., Marqeta, Inc., Q2 Holdings, Inc., MeridianLink, Inc., Jack Henry & Associates, Inc., Green Dot Corporation, EVERTEC, Inc., Alkami Technology, Inc., Riskified Ltd., Nayax Ltd., Nuvei Corporation and Cantaloupe, Inc.

This report is available in electronic form to registered users via R*Docs™ at https://williamblairlibrary.bluematrix.com or www.williamblair.com.

Please contact us at +1 800 621 0687 or consult https://www.williamblair.com/equity-research/coverage for all disclosures.

Cristopher Kennedy and Andrew W. Jeffrey attests that 1) all of the views expressed in this research report accurately reflect his/her personal views about any and all of the securities and companies covered by this report, and 2) no part of his/her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed by him/her in this report. We seek to update our research as appropriate. Other than certain periodical industry reports, the majority of reports are published at irregular intervals as deemed appropriate by the research analyst.

DOW JONES: 41198.10 S&P 500: 5588.27 NASDAQ: 17996.90

Additional information is available upon request.

Current Rating Distribution (as of July 18, 2024):

Coverage Universe	Percent	Inv. Banking Relationships *	Percent	
Outperform (Buy)	71	Outperform (Buy)	8	
Market Perform (Hold)	28	Market Perform (Hold)	1	
Underperform (Sell)	1	Underperform (Sell)	0	

^{*}Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

The compensation of the research analyst is based on a variety of factors, including performance of his or her stock recommendations; contributions to all of the firm's departments, including asset management, corporate finance, institutional sales, and retail brokerage; firm profitability; and competitive factors.

OTHER IMPORTANT DISCLOSURES

Stock ratings and valuation methodologies: William Blair & Company, L.L.C. uses a three-point system to rate stocks. Individual ratings reflect the expected performance of the stock relative to the broader market (generally the S&P 500, unless otherwise indicated) over the next 12 months. The assessment of expected performance is a function of near-, intermediate-, and long-term company fundamentals, industry outlook, confidence in earnings estimates, valuation (and our valuation methodology), and other factors. Outperform (O) - stock expected to outperform the broader market over the next 12 months; Market Perform (M) - stock expected to perform approximately in line with the broader market over the next 12 months; Underperform (U) - stock expected to underperform the broader market over the next 12 months; not rated (NR) - the stock is not currently rated. The valuation methodologies include (but are not limited to) price-to-earnings multiple (P/E), relative P/E (compared with the relevant market), P/E-to-growth-rate (PEG) ratio, market capitalization/revenue multiple, enterprise value/EBITDA ratio, discounted cash flow, and others. Stock ratings and valuation methodologies should not be used or relied upon as investment advice. Past performance is not necessarily a guide to future performance.

The ratings and valuation methodologies reflect the opinion of the individual analyst and are subject to change at any time.

Our salespeople, traders, and other professionals may provide oral or written market commentary, short-term trade ideas, or trading strategies-to our clients, prospective clients, and our trading desks-that are contrary to opinions expressed in this research report. Certain outstanding research reports may contain discussions or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Always refer to the most recent report on a company or issuer. Our asset management and trading desks may make investment decisions that are inconsistent with recommendations or views expressed in this report. We will from time to time have long or short positions in, act as principal in, and buy or sell the securities referred to in this report. Our research is disseminated primarily electronically, and in some instances in printed form. Research is simultaneously available to all clients. This research report is for our clients only. No part of this material may be copied or duplicated in any form by any means or redistributed without the prior written consent of William Blair & Company, L.L.C.

This is not in any sense an offer or solicitation for the purchase or sale of a security or financial instrument. The factual statements herein have been taken from sources we believe to be reliable, but such statements are made without any representation as to accuracy or completeness or otherwise, except with respect to any disclosures relative to William Blair or its research analysts. Opinions expressed are our own unless otherwise stated and are subject to change without notice. Prices shown are approximate. This report or any portion hereof may not be copied, reprinted, sold, or redistributed or disclosed by the recipient to any third party, by content scraping or extraction, automated processing, or any other form or means, without the prior written consent of William Blair. Any unauthorized use is prohibited.

If the recipient received this research report pursuant to terms of service for, or a contract with William Blair for, the provision of research services for a separate fee, and in connection with the delivery of such research services we may be deemed to be acting as an investment adviser, then such investment adviser status relates, if at all, only to the recipient with whom we have contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing). If such recipient uses these research services in connection with the sale or purchase of a security referred to herein, William Blair may act as principal for our own account or as riskless principal or agent for another party. William Blair is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

For important disclosures, please visit our website at williamblair.com.

This material is distributed in the United Kingdom and the European Economic Area (EEA) by William Blair International, Ltd., authorised and regulated by the Financial Conduct Authority (FCA). William Blair International, Limited is a limited liability company registered in England and Wales with company number 03619027. This material is only directed and issued to persons regarded as Professional investors or equivalent in their home jurisdiction, or persons falling within articles 19 (5), 38, 47, and 49 of the Financial Services and Markets Act of 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not "relevant persons."

"William Blair" and "R*Docs" are registered trademarks of William Blair & Company, L.L.C. Copyright 2024, William Blair & Company, L.L.C. All rights reserved.

William Blair & Company, L.L.C. licenses and applies the SASB Materiality Map® and SICSTM in our work.



Equity Research Directory

John Kreger, Partner Director of Research +1 312 364 8612 Kyle Harris, CFA, Partner Operations Manager +1 312 364 8230

CONSUMER

Sharon Zackfia, CFA, Partner +1 312 364 5386

Group Head-Consumer

Lifestyle and Leisure Brands, Restaurants, Automotive/E-commerce

Jon Andersen, CFA, Partner +1 312 364 8697

Consumer Products

Phillip Blee, CPA +1 312 801 7874

Home and Outdoor, Automotive Parts and Services, Discount and

Dylan Carden +1 312 801 7857

E-commerce, Specialty Retail

ECONOMICS

Richard de Chazal, CFA +44 20 7868 4489

ENERGY AND SUSTAINABILITY

Jed Dorsheimer +1 617 235 7555 Group Head-Energy and Sustainability Generation, Efficiency, Storage

Tim Mulrooney, Partner +1 312 364 8123

Sustainability Services

FINANCIAL SERVICES AND TECHNOLOGY

Adam Klauber, CFA, Partner +1 312 364 8232 Group Head–Financial Services and Technology

Financial Analytic Service Providers, Insurance Brokers, Property & Casualty Insurance

Andrew W. Jeffrey, CFA +1 415 796 6896 Fintech

Cristopher Kennedy, CFA +1 312 364 8596

Fintech, Specialty Finance

Jeff Schmitt +1 312 364 8106

Wealthtech, Wealth Management, Capital Markets Technology

GLOBAL SERVICES

Tim Mulrooney, Partner +1 312 364 8123

Group Head-Global Services Commercial Services, Staffing

Andrew Nicholas, CPA +1 312 364 8689

Consulting, HR Technology, Information Services

Trevor Romeo, CFA +1 312 801 7854

Staffing

HEALTHCARE

Biotechnology

Tim Lugo, Partner +1 415 248 2870

Group Head-Biotechnology

Sami Corwin, Ph.D. +1 312 801 7783

Andy T. Hsieh, Ph.D., Partner +1 312 364 5051

Myles R. Minter, Ph.D. +1 617 235 7534

Matt Phipps, Ph.D., Partner +1 312 364 8602

Healthcare Technology and Services

Ryan S. Daniels, CFA, Partner +1 312 364 8418

Group Head–Healthcare Technology and Services Healthcare Technology, Healthcare Services

Margaret Kaczor Andrew, CFA, Partner +1 312 364 8608

Medical Technology

Brandon Vazquez, CFA +1 212 237 2776

Dental, Animal Health

Scott Hansen Associate Director of Research +1 212 245 6526

Life Sciences

Matt Larew, Partner +1 312 801 7795

Life Science Tools, Bioprocessing, Healthcare Delivery

Andrew F. Brackmann, CFA +1 312 364 8776

Diagnostics

Max Smock, CFA +1 312 364 8336

Pharmaceutical Outsourcing and Services

INDUSTRIALS

Brian Drab, CFA, Partner +1 312 364 8280

Co-Group Head-Industrials

Advanced Manufacturing, Industrial Technology

Ryan Merkel, CFA, Partner +1 312 364 8603

Co-Group Head-Industrials

Building Products, Specialty Distribution

Louie DiPalma, CFA +1 312 364 5437

Aerospace and Defense, Smart Cities

Ross Sparenblek +1 312 364 8361

Diversified Industrials, Robotics, and Automation

TECHNOLOGY, MEDIA, AND COMMUNICATIONS

Jason Ader, CFA, Partner +1 617 235 7519

Co-Group Head–Technology, Media, and Communications Infrastructure Software

Arjun Bhatia, Partner +1 312 364 5696

Co-Group Head-Technology, Media, and Communications Software as a Service

Dylan Becker, CFA +1 312 364 8938

Software, Software as a Service

Louie DiPalma, CFA +1 312 364 5437

Government Technology

Jonathan Ho, Partner +1 312 364 8276

Cybersecurity, Security Technology

Maggie Nolan, CPA, Partner +1 312 364 5090

IT Services

Jake Roberge +1 312 364 8056

Software, Software as a Service

Ralph Schackart III, CFA, Partner +1 312 364 8753

Internet and Digital Media

Stephen Sheldon, CFA, CPA, Partner +1 312 364 5167

Vertical Technology - Real Estate, Education, Restaurant/Hospitality

EDITORIAL AND SUPERVISORY ANALYSTS

Steve Goldsmith, Head Editor and SA +1 312 364 8540

Audrey Majors, Editor and SA +1 312 364 8992

Beth Pekol Porto, Editor and SA +1 312 364 8924

Lisa Zurcher, Editor and SA +44 20 7868 4549

Mubasil Chaudhry, Editor and SA +44 20 7868 4453