

Affirm Holdings (AFRM)

Sizing the potential impact of the loss of the Walmart relationship

Buy

AFRM	12m Price Target: \$50.00	Price: \$50.08	Downside: 0.2%
-------------	----------------------------------	-----------------------	-----------------------

On 3/17/2025, Affirm's partner Walmart, announced that OnePay, in partnership with a competitor to Affirm, will be the exclusive provider of Buy-Now-Pay-Later solutions online and in-store. As a reminder, Affirm has long led with a partnership distribution model, and has had notable partnerships with top U.S. retailers, including Amazon, Shopify, Walmart, and others. As a result, 48% of AFRM's GMV in 2024 came from its top 5 partners, including ~25% from Amazon (runrate). While AFRM does not disclose the volume associated with Walmart, inside this report, we estimate that Walmart's contribution to CY2024 GMV to be roughly ~\$2.2bn (7% of total). On a prospective basis, considering the growth in AFRM's business, and the rapid (20%+) growth of Walmart's E-commerce business, we estimate that Walmart likely would have contributed \$2.4-4.7bn (~8% of current Visible Alpha Consensus Data GMV) to CY2026 estimates (the first calendar year in which the partnership will have transitioned). In this note we update our expectations for AFRM as a result of this partnership loss, as well as discuss the ramifications for the company and the industry.

- **Financial implications for AFRM:** We note that AFRM shares underperformed in April 2024 when the press reported that WMT was looking to offer BNPL through its majority owned fintech startup OnePay. On the back of today's announcement, we expect AFRM shares to underperform, and reduce our estimates and price target to reflect the loss of the Walmart relationship. In particular, we note that AFRM has extremely high incremental margins on RLTC as a result of its fixed cost base. Since FY2023, runrate opex has declined by 6% (through FY2025E) while GMV (prior to Walmart loss) is expected to have grown by 30%+ through 2025E. As a result, we expect the loss of this portfolio, which we estimate to comprise roughly ~5-10%

Will Nance

+1(212)357-7438 | will.nance@gs.com
Goldman Sachs & Co. LLC

Rajul Bothra

+1(917)343-6326 | rajul.bothra@gs.com
Goldman Sachs & Co. LLC

Jack Evans

+1(212)357-3560 | jack.evans@gs.com
Goldman Sachs & Co. LLC

Katie Huffert

+1(801)744-0801 | katie.huffert@gs.com
Goldman Sachs & Co. LLC

Key Data

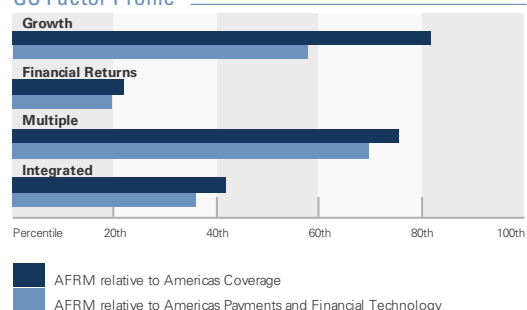
Market cap: \$17.3bn
Enterprise value: \$16.2bn
3m ADTV: \$438.6mn
United States
Americas Payments and Financial Technology
M&A Rank: 3

GS Forecast

	6/24	6/25E	6/26E	6/27E
Revenue (\$ mn) New	2,323.0	3,183.1	3,693.0	4,365.9
Revenue (\$ mn) Old	2,323.0	3,183.1	3,869.5	4,783.3
EBITDA (\$ mn)	551.5	963.0	1,076.6	1,262.9
EBIT (\$ mn)	381.0	745.4	853.9	1,040.1
EPS (\$)	0.04	0.94	0.95	1.27
EPS (\$)	0.04	0.94	1.11	1.71
P/E (X)	NM	53.0	53.0	39.5
Dividend yield (%)	0.0	0.0	0.0	0.0
Net debt/EBITDA (X)	(2.0)	(1.1)	(1.6)	(2.0)

	9/24	12/24E	3/25E	6/25E
EPS (\$)	0.09	0.45	0.16	0.23

GS Factor Profile



Source: Company data, Goldman Sachs Research estimates.
See disclosures for details.

Goldman Sachs 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. Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to www.gs.com/research/hedge.html. Analysts employed by non-US affiliates are not registered/qualified as research analysts with FINRA in the U.S.

Buy

Affirm Holdings (AFRM)

Rating since Jun 24, 2024

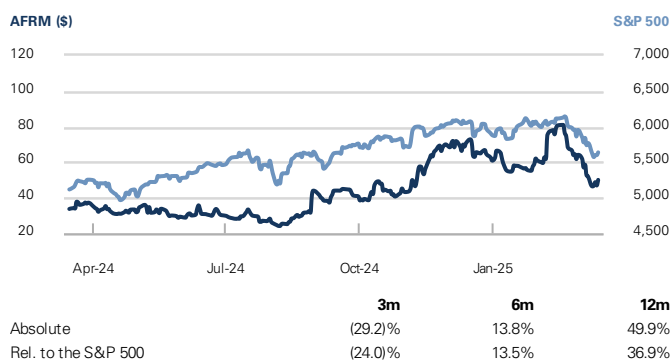
Ratios & Valuation

	6/24	6/25E	6/26E	6/27E
P/E (X)	NM	53.0	53.0	39.5
EV/EBITDA (X)	14.7	16.5	14.7	12.2
EV/sales (X)	3.5	5.0	4.3	3.5
FCF yield (%)	3.2	2.9	3.7	4.5
EV/DACF (X)	18.9	23.6	18.7	14.9
CROCI (%)	6.0	7.9	8.6	9.0
ROE (%)	0.5	11.2	10.1	11.3
Net debt/EBITDA (X)	(2.0)	(1.1)	(1.6)	(2.0)
Net debt/equity (%)	187.4	201.3	178.1	166.6
Interest cover (X)	NM	NM	NM	NM
Inventory days	NM	NM	NM	NM
Receivable days	43.4	45.9	46.8	46.3
Days payable outstanding	9.6	9.9	10.3	10.3

Growth & Margins (%)

	6/24	6/25E	6/26E	6/27E
Total revenue growth	46.3	37.0	16.0	18.2
EBITDA growth	805.7	74.6	11.8	17.3
EPS growth	103.7	2,062.6	0.1	34.0
DPS growth	NM	NM	NM	NM
Gross margin	43.0	45.6	44.0	43.1
EBIT margin	16.4	23.4	23.1	23.8

Price Performance



Source: FactSet. Price as of 14 Mar 2025 close.

Income Statement (\$ mn)

	6/24	6/25E	6/26E	6/27E
Total revenue	2,323.0	3,183.1	3,693.0	4,365.9
Cost of goods sold	(1,325.0)	(1,732.6)	(2,067.4)	(2,483.7)
SG&A	(617.0)	(705.1)	(771.8)	(842.0)
R&D	—	—	—	—
Other operating inc./exp.)	—	—	—	—
EBITDA	551.5	963.0	1,076.6	1,262.9
Depreciation & amortization	(170.6)	(217.6)	(222.7)	(222.7)
EBIT	381.0	745.4	853.9	1,040.1
Net interest inc./exp.)	—	—	—	—
Income/(loss) from associates	—	—	—	—
Pre-tax profit	30.8	405.5	420.7	574.6
Provision for taxes	(17.2)	(85.2)	(88.3)	(120.7)
Minority interest	—	—	—	—
Preferred dividends	—	—	—	—
Net inc. (pre-exceptionals)	13.5	320.3	332.3	453.9
Net inc. (post-exceptionals)	(517.8)	44.9	186.9	306.9
EPS (basic, pre-except) (\$)	0.04	0.94	0.95	1.27
EPS (diluted, pre-except) (\$)	0.04	0.94	0.95	1.27
EPS (ex-ESO exp., dil.) (\$)	--	--	--	--
DPS (\$)	—	—	—	—
Div. payout ratio (%)	0.0	0.0	0.0	0.0
Wtd avg shares out. (basic) (mn)	309.9	339.2	351.5	358.2
Wtd avg shares out. (diluted) (mn)	309.9	339.2	351.5	358.2

Balance Sheet (\$ mn)

	6/24	6/25E	6/26E	6/27E
Cash & cash equivalents	1,295.4	1,811.8	2,471.0	3,278.8
Accounts receivable	353.0	448.0	499.6	609.1
Inventory	—	—	—	—
Other current assets	1,131.6	666.7	666.7	666.7
Total current assets	2,780.1	2,926.4	3,637.2	4,554.5
Net PP&E	427.7	485.0	442.2	399.5
Net intangibles	546.9	533.9	533.9	533.9
Total investments	5,361.0	6,938.8	8,023.3	9,762.5
Other long-term assets	403.9	383.0	383.0	383.0
Total assets	9,519.6	11,267.1	13,019.7	15,633.5
Accounts payable	41.0	53.3	62.9	77.0
Short-term debt	—	—	—	—
Current lease liabilities	—	—	—	—
Other current liabilities	331.4	419.1	450.4	501.8
Total current liabilities	372.4	472.4	513.3	578.8
Long-term debt	6,415.2	7,813.2	8,897.7	10,636.9
Non-current lease liabilities	—	—	—	—
Other long-term liabilities	—	—	—	—
Total long-term liabilities	6,415.2	7,813.2	8,897.7	10,636.9
Total liabilities	6,787.6	8,285.6	9,411.0	11,215.8
Preferred shares	—	—	—	—
Total common equity	2,732.0	2,981.5	3,608.7	4,417.7
Minority interest	—	—	—	—
Total liabilities & equity	9,519.6	11,267.1	13,019.7	15,633.5
BVPS (\$)	8.82	8.79	10.27	12.33

Cash Flow (\$ mn)

	6/24	6/25E	6/26E	6/27E
Net income	(517.8)	44.9	186.9	306.9
D&A add-back	147.9	213.0	222.7	222.7
Minority interest add-back	—	—	—	—
Net (inc)/dec working capital	21.4	(1.7)	(10.7)	(44.0)
Others	798.6	417.3	440.3	502.1
Cash flow from operations	450.1	673.5	839.2	987.8
Capital expenditures	(159.3)	(178.1)	(180.0)	(180.0)
Acquisitions	—	—	—	—
Divestitures	—	—	—	—
Others	(1,165.9)	(1,082.5)	(1,084.5)	(1,739.2)
Cash flow from investing	(1,325.1)	(1,260.5)	(1,264.5)	(1,919.2)
Dividends paid	—	—	—	—
Share issuance/(repurchase)	33.1	(210.6)	—	—
Inc/(dec) in debt	1,107.2	1,605.4	1,084.5	1,739.2
Others	(229.9)	(291.4)	—	—
Cash flow from financing	910.5	1,103.4	1,084.5	1,739.2
Total cash flow	35.5	516.4	659.2	807.8
Free cash flow	290.8	495.4	659.2	807.8
Free cash flow per share (basic) (\$)	0.94	1.46	1.88	2.26

Source: Company data, Goldman Sachs Research estimates.

of our prior FY2026E GMV, to result in a roughly ~10-20% reduction in adjusted operating income and an ~16-32% reduction in EPS. We note this assumes that the Walmart portfolio volume contributes at a 4.2% RLTC margin. We note that this could underestimate the RLTC margin impact if the portfolio skews interest bearing, which we estimate typically has above average (4-5%+) RLTC margins. Additionally, we believe AFRM's multiple could compress in the near term as investors question whether the loss of this partnership weakens its distribution strategy and exposes a weaker competitive moat than previously thought.

- **Evaluating remaining partner risk:** We note that AFRM recently renewed and extended its longstanding partnership with Shopify, where AFRM is the exclusive white label provider for Shopify installments. The agreement was renewed with an initial 3-year term through 2028. Additionally, we note that both Shopify and Amazon (which we believe to be AFRM's most important and two largest partners) both have long-term warrants for AFRM shares, which we believe signals a closer long-term relationship than in AFRM's previous partnership with Walmart, which appeared to be more arms length.
- **Why we remain Buy rated:** We continue to view AFRM as the strongest underwriter of subprime and near-prime credit in the modern consumer finance space, with underwriting abilities on par with best-in-class incumbents such as Capital One. We believe AFRM's consumer friendly approach to fees (no late fees or compounding interest), its innovative product portfolio (including the AFRM card), and its distribution-centric approach to penetrating the e-commerce TAM (which admittedly is likely to be questioned in the near term) will drive significant market share gains from incumbent lenders. We also believe AFRM will continue to benefit from the secular share gains of BNPL as a category within e-commerce. We expect this to be augmented by 1) younger generation's affinity for non-card installment financing, 2) the shift towards e-commerce, where scaling barriers are lower in payments and 3) the product structure benefits of BNPL, which allow for more surgical, transaction-specific credit extension vs the one-size-fits-all approach taken for credit cards.
- **Readthroughs to the broader industry:** In the short history of BNPL, we have not seen as many instances of large exclusivity losses and aggressive competition for existing books of business. However, this has been a relatively common occurrence in the traditional co-branded and private label credit card market. Examples include the win of the U.S. Costco cobranded credit card portfolio by Citi from American Express in 2016, and the win of the Gap private label card portfolio from Synchrony to Barclays US in 2022. However, Walmart in particular has a notable history of switching credit providers, and in general, has been a vocal force in the industry against incumbent payment service providers (including Visa and Mastercard). We note that this is the third major partner change Walmart has made over the last 7 years. In 2018, Walmart exited its >18 year private label credit card relationship with Synchrony, opting for Capital One instead. Subsequently, in 2024, Walmart ended its relationship with Capital One, a process resulting in litigation between the two companies. With this history, we believe that 1) investors will likely be more attuned to the partner concentration risks and competitive intensity in the industry going

forward and 2) investors are likely to view this instance as somewhat idiosyncratic, given Walmart's particular history of aggressive auction processes for consumer credit providers.

Sizing the impact to AFRM: We estimate ~5-10% of GMV and ~10-20% adj OI reduction by CY2026

In Exhibit 1 we have put together an estimate of the current size of Walmart to Affirm and the implied volume within our prior model. We have leveraged key customer concentration statistics provided by company management to triangulate the rough volumes for Walmart.

- **Amazon Volumes (largest partner):** Affirm provides disclosures on the amount of volume Amazon contributes given it is the largest single customer of Affirm. In 2024, Amazon made up roughly 25% of Affirm's GMV, or ~\$7.8bn. We note this implies roughly 2% penetration on Amazon North American sales volume.
- **Shopify Installments Volume (we estimate 2nd or 3rd largest partner):** We estimate Affirm's exposure to Shopify by assuming a similar penetration of Shopify Payments volume that we calculate for Amazon. This could put CY24 Shopify in the \$2.2bn range, or roughly 7% of CY2024 GMV.
- **Walmart estimates:** Affirm provides regular disclosures on their Top 5 merchant concentration, which in CY24 was nearly \$15bn. We attempt to size the WMT relationship by backing out our estimates of Amazon/Shopify and sensitize Walmart's share of the remaining amount (~\$4.9bn in CY24). Given the size of these merchants, we believe WMT is likely to be the 2nd or the third largest merchant, and we suspect that the concentration begins to fall off after the top 3. Assuming 30-60% of the remaining volume is attributable to Walmart implies CY2024 Walmart volumes of \$1.5-3bn, or roughly 5-9% of AFRM volumes. This would imply ~2% of WMT NA e-commerce volumes. On a prospective basis, similar assumptions would imply that Walmart could represent between \$2.4 to \$4.7bn of our C2026 estimates.

Exhibit 1: We estimate Walmart could represent ~5-10% of our C2026 volume estimates

Affirm: Walmart Volume impact Estimation							
	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	Comment
Total GMV, Affirm	23,271	31,200	39,962	49,120	59,650	71,495	Company disclosures
% yoy	27%	34%	28%	23%	21%	20%	
Affirm Top 5 GMV	10,060	14,894	19,077	23,448	28,475	34,129	Company disclosures
% Top 5	43%	48%	48%	48%	48%	48%	
Amazon Estimates:							
Amazon GMV, Affirm	4,887	7,800					Company disclosures
% Affirm GMV over Amazon	21%	25%					Company disclosures, GS Runrate
Amazon NA Net Sales	352,828	387,497					Company disclosures
Affirm Penetration of Amazon	1.4%	2.0%					
Shopify Estimates:							
SHOP GMV	235,900	292,300					
SHOP Pay Volume	77,847	111,074					
% SHOP Pay	33%	38%					
SHOP Installments, AFRM	1,557	2,236	2,864	3,520	4,275	5,123	Leveraging Affirm Penetration of Amazon
% SHOP Install	2%	2%					
AFRM PIF Volume	3,722	4,469	5,271	6,084	6,997	8,046	Company disclosures
SHOP % of PIF	42%	50%					
Affirm Top 5 Volume:							
Amazon	4,887	7,800	9,991	12,280	14,912	17,874	
% total GMV	21%	25%	25%	25%	25%	25%	
SHOP (GSe)	1,557	2,236	2,864	3,520	4,275	5,123	
% total GMV	7%	7%	7%	7%	7%	7%	
Other (incl. Walmart)	3,616	4,858	6,222	7,648	9,288	11,132	
% total GMV	16%	16%	16%	16%	16%	16%	
Total Top 5	10,060	14,894	19,077	23,448	28,475	34,129	
% total GMV	43%	48%	48%	48%	48%	48%	
Walmart Sensitivity							
Walmart NA E-commerce	65,400	79,300					FY as est.
% yoy	22%	21%					
Walmart GMV, AFRM:							
High	2,170	2,939	3,796	4,704	5,758	6,958	Assuming 50bps share gain
% of CY26 Other Top 5	60%	61%	61%	62%	62%	63%	
% AFRM Volume	9.3%	9.4%	9.5%	9.6%	9.7%	9.7%	
% WMT E-com	3.3%	3.7%					
Medium	1,627	2,210	2,862	3,556	4,365	5,288	Assuming 50bps share gain
% of CY26 Other Top 5	45%	46%	46%	47%	47%	48%	
% AFRM Volume	7.0%	7.1%	7.2%	7.2%	7.3%	7.4%	
% WMT E-com	2.5%	2.8%					
Low	1,085	1,482	1,929	2,409	2,972	3,618	Assuming 50bps share gain
% of CY26 Other Top 5	30%	31%	31%	32%	32%	33%	
% AFRM Volume	4.7%	4.7%	4.8%	4.9%	5.0%	5.1%	
% WMT E-com	1.7%	1.9%					

Source: Company data, Goldman Sachs Global Investment Research

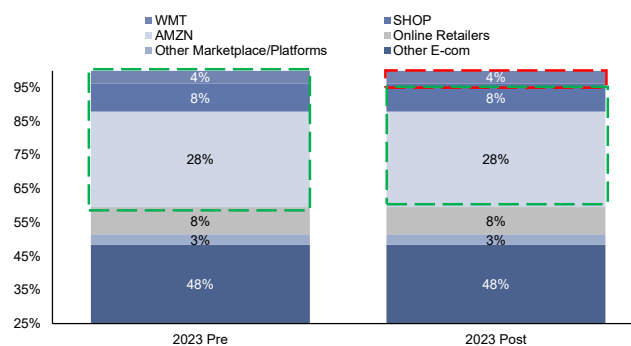
In [Exhibit 2](#) we estimate the potential impact from the lost Walmart volumes, leveraging sensitivity in [Exhibit 1](#), assuming ~4.2% RLTC margins (in line with Affirm's FY2H25 guidance). We then assume the RLTC impact falls fully down to operating income and subsequently PTI with no expense offsets. Putting it all together, we estimate the Walmart loss could reduce our non-GAAP EPS estimates by 16-32%.

Exhibit 2: The loss of Walmart could reduce our '26 Non-GAAP EPS estimates by ~16 to 32%

Walmart Sensitivity				
Walmart GMV, AFRM	2,409	3,174	3,939	4,704
Walmart RLTC, AFRM	101.19	133.31	165.43	197.56
% Margin	4.2%	4.2%	4.2%	4.2%
AFRM Impact:				
Affirm RLTC, Pre Walmart	1,870	1,870	1,870	1,870
Lost Walmart RLTC	-101	-133	-165	-198
Affirm RLTC, Post Walmart	1,769	1,737	1,705	1,673
% Change	-5%	-7%	-9%	-11%
Affirm OI, Pre Walmart	1,065	1,065	1,065	1,065
Lost Walmart OI	-101	-133	-165	-198
Affirm OI, Post Walmart	964	932	899	867
% Change	-10%	-13%	-16%	-19%
Affirm NI, Pre Walmart	486	486	486	486
Lost Walmart NI (tax adj)	-80	-105	-131	-156
Affirm NI, Post Walmart	406	381	355	330
% Change	-16%	-22%	-27%	-32%
Affirm EPS, GSe, Pre Walmart	\$1.37	\$1.37	\$1.37	\$1.37
Lost Walmart EPS (tax adj)	(\$0.23)	(\$0.30)	(\$0.37)	(\$0.44)
Affirm EPS, GSe, Post Walmart	\$1.14	\$1.07	\$1.00	\$0.93
% Change	-16%	-22%	-27%	-32%

Assumes 21% tax rate on lost OI

Source: Goldman Sachs Global Investment Research

Exhibit 3: The loss of WMT means that 4% of U.S. E-commerce will be unaddressable


Source: Company data, Goldman Sachs Global Investment Research

Valuation

Exhibit 4: GSe FY New vs. Old

AFRM new vs. old		FY-25			FY-26			FY-27		
		GS est.	Old	vs cons	GS est.	Old	vs cons	GS est.	Old	vs cons
		2025E	2025E	% Δ	2026E	2026E	% Δ	2027E	2027E	% Δ
KPIs	Core 0%	4,180	4,180	0%	4,891	4,891	0%	5,625	5,625	0%
	Pay-in-Four	4,837	4,837	0%	5,632	5,632	0%	6,477	6,477	0%
	Interest Bearing	26,254	26,254	0%	31,465	33,721	-7%	37,732	41,814	-10%
	Gross Merchandise Volume	35,271	35,271	0%	41,988	44,244	-5%	49,834	53,916	-8%
	Transactions	124	124	0%	145	153	-5%	169	182	-8%
	GMV per Txn	284	284	0%	289	290	0%	295	296	0%
	Active Customers	21	21	0%	23	23	0%	25	25	0%
	Txns per Customer	6.03	6.03	0%	6.41	6.75	-5%	6.78	7.33	-8%
	Active Merchants	348	348	0%	383	383	0%	422	422	0%
	Platform Portfolio	15.23	15.23	0%	17.43	18.70	-7%	20.97	22.89	-8%
	Equity Capital Req.	0	0		0	0		0	0	
	% Platform Portfolio	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
	Avg BS Loans	6,582	6,582	0%	7,779	8,027	-3%	9,319	10,037	-7%
	% yield	99.43%	99.43%		98.24%	100.17%		97.86%	101.74%	
Revenue	Merchant network revenue	834	834	0%	1002	1042	-4%	1188	1259	-6%
	Take rate	2.4%	2.4%	0 bps	2.4%	2.4%	4 bps	2.4%	2.3%	5 bps
	Card network revenue	209	209	0%	247	256	-4%	288	306	-6%
	Interest Income	1636	1636	0%	1910	2010	-5%	2280	2553	-11%
	Other Revenue	504	504	0%	533	562	-5%	610	665	-8%
	Net Revenue	3,183	3,183	0%	3,693	3,870	-5%	4,366	4,783	-9%
Transaction Profit	Net take rate	9.02%	9.02%	0 bps	8.80%	8.75%	5 bps	8.76%	8.87%	-11 bps
	Loss on Loan purch commitment	246	246	0%	293	311	-6%	351	384	-9%
	% GMV	0.7%	0.7%	0 bps	0.7%	0.7%	0 bps	0.7%	0.7%	-1 bps
	Provisions	622	622	0%	760	809	-6%	922	1012	-9%
	% BS loans	37.8%	37.8%	0 bps	39.1%	40.3%	-122 bps	39.6%	40.3%	-73 bps
	% GMV	1.8%	1.8%	0 bps	1.8%	1.8%	-2 bps	1.9%	1.9%	-3 bps
	Funding Costs	432	432	0%	490	506	-3%	585	630	-7%
	% BS loans	26.2%	26.2%	0 bps	25.2%	25.2%	1 bps	25.1%	25.1%	1 bps
	% GMV	1.2%	1.2%	0 bps	1.2%	1.1%	3 bps	1.2%	1.2%	0 bps
	Processing and Servicing	434	434	0%	524	547	-4%	626	677	-8%
	Other Transaction Costs / Adj	0	0	0%	0	0	NA	0	0	NA
	Transaction Costs	1,733	1,733	0%	2,067	2,173	-5%	2,484	2,703	-8%
	% GMV	4.9%	4.9%	0 bps	4.9%	4.9%	1 bps	5.0%	5.0%	-3 bps
	Revenue less txn costs	1,451	1,451	0%	1,626	1,697	-4%	1,882	2,081	-10%
	% margin GMV	4.1%	4.1%	0 bps	3.9%	3.8%	3 bps	3.8%	3.9%	-8 bps
Operating Income	Tech and data analytics	275	275	0%	296	296	0%	316	316	0%
	Sales and marketing	98	98	0%	119	119	0%	147	147	0%
	General & administrative	332	332	0%	357	357	0%	379	379	0%
	Other	0	0	NA	0	0	NA	0	0	NA
	Non-GAAP operating expenses	705	705	0%	772	772	0.0%	842	842	0%
	Non-GAAP Operating Income	745	745	0%	854	925	-8%	1,040	1,239	-16%
	% margin	23%	23%	0 bps	23%	24%	-79 bps	24%	26%	-208 bps
	Non-GAAP adjustments	850.38	850.38	0%	717.30	717.30	0%	731.65	731.65	0%
	GAAP Operating Income	-105	-105	0%	137	208	-34%	308	507	-39%
	% margin	-3%	-3%	0 bps	4%	5%	-167 bps	7%	11%	-353 bps
Pre-tax	Other income (expense)	171	171	0%	100	100	0%	80	80	0%
	Pre-tax income	66	66	0%	237	308	-23%	388	587	-34%
	Adjustments	234	234		321	392		495	693	
Taxes	Adj.Pre-tax income	405	405		421	492		575	773	
	Taxes	22	22	0%	50	65	-23%	82	123	-34%
	% GAAP tax rate	32.5%	32.5%	0 bps	21.0%	21.0%	0 bps	21.0%	21.0%	0 bps
Net income	Non-GAAP Taxes	85	85		88	103		121	162	
	% Non-GAAP tax rate	21%	21%		21%	21%		21%	21%	
	Net income	45	45	0%	187	243	-23%	307	464	-34%
Shares	Adjusted net income	275	275		145	145		147	147	
	Diluted shares	339	339	0%	332	389	-15%	454	611	-26%
	Diluted EPS	0.13	0.13	0%	0.53	0.69	-23%	0.86	1.29	-34%
EPS	Adjusted	0.81	0.81		0.41	0.41		0.41	0.41	
	Adj Diluted EPS	0.94	0.94	0%	0.95	1.11	-15%	1.27	1.71	-26%

Source: Goldman Sachs Global Investment Research

Exhibit 5: Valuation Table**Valuation methodology**

\$ mn	Q5-Q8					2025					2026			
	GP	EBITDA	EBITDA - SBC	EPS		GP	EBITDA	EBITDA - SBC	EPS		GP	EBITDA	EBITDA - SBC	EPS
Multiple	9.3x	18x	29.0x	48.0x		10.1x	19.2x	33.7x	55.8x		8.9x	16.8x	27.8x	48.0x
Valuation KPI	\$1,723	\$918	\$553	\$1.04		\$1,562	\$822	\$469	\$0.90		\$1,723	\$918	\$553	\$1.04
Implied EV	\$16,053	\$16,150	\$16,053	\$16,053		\$15,798	\$15,798	\$15,798	\$15,798		\$15,377	\$15,377	\$15,377	\$15,377
Less: Q5E Net debt	(\$1,565)	(\$1,565)	(\$1,565)	(\$1,565)		(\$1,615)	(\$1,615)	(\$1,615)	(\$1,615)		(\$2,364)	(\$2,364)	(\$2,364)	(\$2,364)
Market cap	\$17,617	\$17,714	\$17,617	\$17,617		\$17,414	\$17,414	\$17,414	\$17,414		\$17,741	\$17,741	\$17,741	\$17,741
Diluted shares outstanding	352.35	352	352	352.3		348	348.3	348.3	348.3		355	354.8	354.8	354.8
12-month Price target	\$50.00	\$50.00	\$50.00	\$50.00		\$50.00	\$50.00	\$50.00	\$50.00		\$50.00	\$50.00	\$50.00	\$50.00

Source: Goldman Sachs Global Investment Research

We update our 12-month price target for AFRM to \$50 from \$90 based on 18x EBIT multiple (down from 28x on competition, estimate visibility, and lower peer multiples) on our Q5-Q8 estimates. Key downside risks include worsening macro environment, increasing competition, and unfavorable regulation.

Disclosure Appendix

Reg AC

We, Will Nance, Rajul Bothra, Jack Evans and Katie Huffert, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

GS Factor Profile

The Goldman Sachs Factor Profile provides investment context for a stock by comparing key attributes to the market (i.e. our universe of rated stocks) and its sector peers. The four key attributes depicted are: Growth, Financial Returns, Multiple (e.g. valuation) and Integrated (a composite of Growth, Financial Returns and Multiple). Growth, Financial Returns and Multiple are calculated by using normalized ranks for specific metrics for each stock. The normalized ranks for the metrics are then averaged and converted into percentiles for the relevant attribute. The precise calculation of each metric may vary depending on the fiscal year, industry and region, but the standard approach is as follows:

Growth is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

For a more detailed description of how we calculate the GS Factor Profile, please contact your GS representative.

M&A Rank

Across our global coverage, we examine stocks using an M&A framework, considering both qualitative factors and quantitative factors (which may vary across sectors and regions) to incorporate the potential that certain companies could be acquired. We then assign a M&A rank as a means of scoring companies under our rated coverage from 1 to 3, with 1 representing high (30%-50%) probability of the company becoming an acquisition target, 2 representing medium (15%-30%) probability and 3 representing low (0%-15%) probability. For companies ranked 1 or 2, in line with our standard departmental guidelines we incorporate an M&A component into our target price. M&A rank of 3 is considered immaterial and therefore does not factor into our price target, and may or may not be discussed in research.

Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

Disclosures

The rating(s) for Affirm Holdings is/are relative to the other companies in its/their coverage universe: Affirm Holdings, AvidXChange Holdings, Bill.com Holdings, Block Inc., Coinbase Global Inc., Fidelity National Information Services, Fiserv Inc., Flywire Corp., Global Payments Inc., Global-E Online Ltd., Jack Henry & Associates Inc., Marqeta Inc., Mastercard Inc., NCR Voyix Corp., PAR Technology Corp., PayPal Holdings, Paymentus Holdings, Payoneer Global, Remitly Global Inc., Riskified Ltd., Toast Inc., Visa Inc., Western Union Co.

Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by Goldman Sachs Global Investment Research and referred to in this research.

Goldman Sachs expects to receive or intends to seek compensation for investment banking services in the next 3 months: Affirm Holdings (\$50.08)

Goldman Sachs had an investment banking services client relationship during the past 12 months with: Affirm Holdings (\$50.08)

Goldman Sachs makes a market in the securities or derivatives thereof: Affirm Holdings (\$50.08)

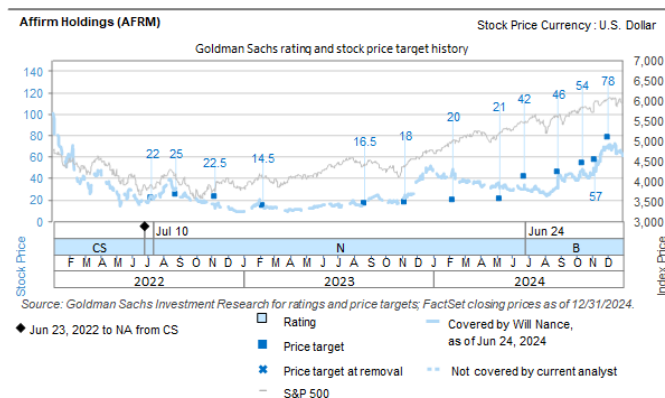
Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution				Investment Banking Relationships		
	Buy	Hold	Sell		Buy	Hold	Sell
Global	48%	34%	18%		64%	57%	43%

As of January 1, 2025, Goldman Sachs Global Investment Research had investment ratings on 3,021 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by the FINRA Rules. See 'Ratings, Coverage universe and related definitions' below. The Investment Banking Relationships chart reflects the percentage of subject companies within each rating category for whom Goldman Sachs has provided investment banking services within the previous twelve months.

Price target and rating history chart(s)



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.

Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage.

Analyst compensation: Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy generally prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director or advisor of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. LLC and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

Distribution of ratings: See the distribution of ratings disclosure above. **Price chart:** See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at <https://www.gs.com/research/hedge.html>.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. **Australia:** Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of Global Investment Research of Goldman Sachs Australia may attend site visits and other meetings hosted by the companies and other entities which are the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. To the extent that the contents of this document contains any financial product advice, it is general advice only and has been prepared by Goldman Sachs without taking into account a client's objectives, financial situation or needs. A client should, before acting on any such advice, consider the appropriateness of the advice having regard to the client's own objectives, financial situation and needs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests and a copy of Goldman Sachs' Australian Sell-Side Research Independence Policy Statement are available at: <https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html>. **Brazil:** Disclosure information in relation to CVM Resolution n. 20 is available at <https://www.gs.com/worldwide/brazil/area/gir/index.html>. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 20 of CVM Resolution n. 20, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. **Canada:** This information is being provided to you for information purposes only and is not, and under no circumstances should be construed as, an advertisement, offering or solicitation by Goldman Sachs & Co. LLC for purchasers of securities in Canada to trade in any Canadian security. Goldman Sachs & Co. LLC is not registered as a dealer in any jurisdiction in Canada under applicable Canadian securities laws and generally is not permitted to trade in Canadian securities and may be prohibited from selling certain securities and products in certain jurisdictions in Canada. If you wish to trade in any Canadian securities or other products in Canada please contact Goldman Sachs Canada Inc., an affiliate of The Goldman Sachs Group Inc., or another registered Canadian dealer. **Hong Kong:** Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. **India:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 951-A, Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. Investment in securities market are subject to market risks. Read all the related documents carefully before investing. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Goldman Sachs (India) Securities Private Limited compliance officer and investor grievance contact details can be found at this link: <https://publishing.gs.com/disclosures/hedge.html#/general/equity>. **Japan:** See below. **Korea:** This research, and any access to it, is intended only for "professional investors" within the meaning of the Financial Services and Capital Markets Act, unless otherwise agreed by Goldman Sachs. Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. **New Zealand:** Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests is available at:

<https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html>. **Russia:** Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. Research reports do not constitute a personalized investment recommendation as defined in Russian laws and regulations, are not addressed to a specific client, and are prepared without analyzing the financial circumstances, investment profiles or risk profiles of clients. Goldman Sachs assumes no responsibility for any investment decisions that may be taken by a client or any other person based on this research report. **Singapore:** Goldman Sachs (Singapore) Pte. (Company Number: 198602165W), which is regulated by the Monetary Authority of Singapore, accepts legal responsibility for this research, and should be contacted with respect to any matters arising from, or in connection with, this research. **Taiwan:** This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. **United Kingdom:** Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union and United Kingdom: Disclosure information in relation to Article 6 (2) of the European Commission Delegated Regulation (EU) (2016/958) supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council (including as that Delegated Regulation is implemented into United Kingdom domestic law and regulation following the United Kingdom's departure from the European Union and the European Economic Area) with regard to regulatory technical standards for the technical arrangements for objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest is available at <https://www.gs.com/disclosures/europeanpolicy.html> which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan Type II Financial Instruments Firms Association, The Investment Trusts Association, Japan, and Japan Investment Advisers Association. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Ratings, coverage universe and related definitions

Buy (B), Neutral (N), Sell (S) Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's total return potential relative to its coverage universe. Any stock not assigned as a Buy or a Sell on an Investment List with an active rating (i.e., a stock that is not Rating Suspended, Not Rated, Early-Stage Biotech, Coverage Suspended or Not Covered), is deemed Neutral. Each region manages Regional Conviction Lists, which are selected from Buy rated stocks on the respective region's Investment Lists and represent investment recommendations focused on the size of the total return potential and/or the likelihood of the realization of the return across their respective areas of coverage. The addition or removal of stocks from such Conviction Lists are managed by the Investment Review Committee or other designated committee in each respective region and do not represent a change in the analysts' investment rating for such stocks.

Total return potential represents the upside or downside differential between the current share price and the price target, including all paid or anticipated dividends, expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The total return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

Coverage Universe: A list of all stocks in each coverage universe is available by primary analyst, stock and coverage universe at <https://www.gs.com/research/hedge.html>.

Not Rated (NR). The investment rating, target price and earnings estimates (where relevant) are removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or in a strategic transaction involving this company, when there are legal, regulatory or policy constraints due to Goldman Sachs' involvement in a transaction, and in certain other circumstances. **Early-Stage Biotech (ES).** An investment rating and a target price are not assigned pursuant to Goldman Sachs policy when this company neither has a drug, treatment or medical device that has passed a Phase II clinical trial nor a license to distribute a post-Phase II drug, treatment or medical device. **Rating Suspended (RS).** Goldman Sachs Research has suspended the investment rating and price target for this stock, because there is not a sufficient fundamental basis for determining an investment rating or target price. The previous investment rating and target price, if any, are no longer in effect for this stock and should not be relied upon. **Coverage Suspended (CS).** Goldman Sachs has suspended coverage of this company. **Not Covered (NC).** Goldman Sachs does not cover this company.

Global product; distributing entities

Goldman Sachs Global Investment Research produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; Public Communication Channel Goldman Sachs Brazil: 0800 727 5764 and / or contatogoldmanbrasil@gs.com. Available Weekdays (except holidays), from 9am to 6pm. Canal de Comunicação com o Público Goldman Sachs Brasil: 0800 727 5764 e/ou contatogoldmanbrasil@gs.com. Horário de funcionamento: segunda-feira à sexta-feira (exceto feriados), das 9h às 18h; in Canada by Goldman Sachs & Co. LLC; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. LLC. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom.

Goldman Sachs International ("GSI"), authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA, has approved this research in connection with its distribution in the United Kingdom.

European Economic Area: GSI, authorised by the PRA and regulated by the FCA and the PRA, disseminates research in the following jurisdictions within the European Economic Area: the Grand Duchy of Luxembourg, Italy, the Kingdom of Belgium, the Kingdom of Denmark, the Kingdom of Norway, the Republic of Finland and the Republic of Ireland; GSI - Succursale de Paris (Paris branch) which is authorised by the French Autorité de contrôle prudentiel et de résolution ("ACPR") and regulated by the Autorité de contrôle prudentiel et de résolution and the Autorité des marchés financiers ("AMF") disseminates research in France; GSI - Sucursal en España (Madrid branch) authorized in Spain by the Comisión Nacional del Mercado de Valores disseminates research in the Kingdom of Spain; GSI - Sweden Bankfilial (Stockholm branch) is authorized by the SFSA as a "third country branch" in accordance with Chapter 4, Section 4 of the Swedish Securities and Market Act (Sw. lag (2007:528) om värdepappersmarknaden) disseminates research in the Kingdom of Sweden; Goldman Sachs Bank Europe SE ("GSBE") is a credit institution incorporated in Germany and, within the Single Supervisory Mechanism, subject to direct prudential supervision by the European Central Bank and in other respects supervised by German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and Deutsche Bundesbank and disseminates research

in the Federal Republic of Germany and those jurisdictions within the European Economic Area where GSI is not authorised to disseminate research and additionally, GSBE, Copenhagen Branch filial af GSBE, Tyskland, supervised by the Danish Financial Authority disseminates research in the Kingdom of Denmark; GSBE - Sucursal en España (Madrid branch) subject (to a limited extent) to local supervision by the Bank of Spain disseminates research in the Kingdom of Spain; GSBE - Succursale Italia (Milan branch) to the relevant applicable extent, subject to local supervision by the Bank of Italy (Banca d'Italia) and the Italian Companies and Exchange Commission (Commissione Nazionale per le Società e la Borsa "Consob") disseminates research in Italy; GSBE - Succursale de Paris (Paris branch), supervised by the AMF and by the ACPR disseminates research in France; and GSBE - Sweden Bankfilial (Stockholm branch), to a limited extent, subject to local supervision by the Swedish Financial Supervisory Authority (Finansinspektionen) disseminates research in the Kingdom of Sweden.

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by Global Investment Research. Goldman Sachs & Co. LLC, the United States broker dealer, is a member of SIPC (<https://www.sipc.org>).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

The analysts named in this report may have from time to time discussed with our clients, including Goldman Sachs salespersons and traders, or may discuss in this report, trading strategies that reference catalysts or events that may have a near-term impact on the market price of the equity securities discussed in this report, which impact may be directionally counter to the analyst's published price target expectations for such stocks. Any such trading strategies are distinct from and do not affect the analyst's fundamental equity rating for such stocks, which rating reflects a stock's return potential relative to its coverage universe as described herein.

We and our affiliates, officers, directors, and employees will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research, unless otherwise prohibited by regulation or Goldman Sachs policy.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options and futures disclosure documents which are available from Goldman Sachs sales representatives or at <https://www.theocc.com/about/publications/character-risks.jsp> and

https://www.fiadocumentation.org/fia/regulatory-disclosures_1/fia-uniform-futures-and-options-on-futures-risk-disclosures-booklet-pdf-version-2018.

Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Differing Levels of Service provided by Global Investment Research: The level and types of services provided to you by Goldman Sachs Global Investment Research may vary as compared to that provided to internal and other external clients of GS, depending on various factors including your individual preferences as to the frequency and manner of receiving communication, your risk profile and investment focus and perspective (e.g., marketwide, sector specific, long term, short term), the size and scope of your overall client relationship with GS, and legal and regulatory constraints. As an example, certain clients may request to receive notifications when research on specific securities is published, and certain clients may request that specific data underlying analysts' fundamental analysis available on our internal client websites be delivered to them electronically through data feeds or otherwise. No change to an analyst's fundamental research views (e.g., ratings, price targets, or material changes to earnings estimates for equity securities), will be communicated to any client prior to inclusion of such information in a research report broadly disseminated through electronic publication to our internal client websites or through other means, as necessary, to all clients who are entitled to receive such reports.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data related to one or more securities, markets or asset classes (including related services) that may be available to you, please contact your GS representative or go to <https://research.gs.com>.

Disclosure information is also available at <https://www.gs.com/research/hedge.html> or from Research Compliance, 200 West Street, New York, NY 10282.

© 2025 Goldman Sachs.

You are permitted to store, display, analyze, modify, reformat, and print the information made available to you via this service only for your own use. You may not resell or reverse engineer this information to calculate or develop any index for disclosure and/or marketing or create any other derivative works or commercial product(s), data or offering(s) without the express written consent of Goldman Sachs. You are not permitted to publish, transmit, or otherwise reproduce this information, in whole or in part, in any format to any third party without the express written consent of Goldman Sachs. This foregoing restriction includes, without limitation, using, extracting, downloading or retrieving this information, in whole or in part, to train or finetune a machine learning or artificial intelligence system, or to provide or reproduce this information, in whole or in part, as a prompt or input to any such system.