

Tesla Inc. (TSLA)

Better than expected 1Q report; key debates likely to remain on deliveries, margins, and autonomy

Neutral

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TSLA	12m Price Target: \$175.00	Price: \$144.68	Upside: 21.0%
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Tesla reported revenue/non-GAAP diluted EPS (excluding SBC) of \$21.3 bn/\$0.45, which was 4%/\$0.04 below the Street (FactSet) and in line with/\$0.01 above GS. The automotive non-GAAP gross margin (including SBC and excluding the revenue from regulatory credits) was 16.4%, above GS at 14.5% but down from 17.2% in 4Q23 and 19.0% in 1Q23. The total company gross margin (including SBC) was 17.4%, above the Street at 17.1%.

We believe the report was better than relatively low investor expectations, with: 1) an automotive non-GAAP gross margin that declined both qoq and yoy (driven by lower pricing) but was above both GS and consensus; 2) the company is still expecting to grow vehicle volumes in 2024 (implying a pick-up from the ~9% yoy decline in 1Q); and 3) post recent media reports (e.g., Reuters) that Tesla was significantly delaying or canceling plans for a consumer vehicle using its low-cost next generation platform (a product that Tesla had said would be key for future growth), Tesla's update that it will seek to launch new models using elements of the low-cost platform but on existing lines to save capex/pull-in timing should help to mitigate intermediate to longer-term growth concerns.

We maintain our Neutral rating on the stock. We believe many of the key investor debates on the stock will continue to relate to vehicle volumes, gross margins, and the outlook for FSD/robotaxis. We continue to see a longer-term opportunity for Tesla both in terms of improved vehicle volumes and software given the company's product leadership and ability to provide well integrated full solutions (including with software), but we expect margins/EPS to remain pressured in the near to intermediate term in light of the current competitive and demand environment. We continue to expect it will take time for Tesla to grow its FSD/robotaxi business more materially, although recognize the end to end neural net

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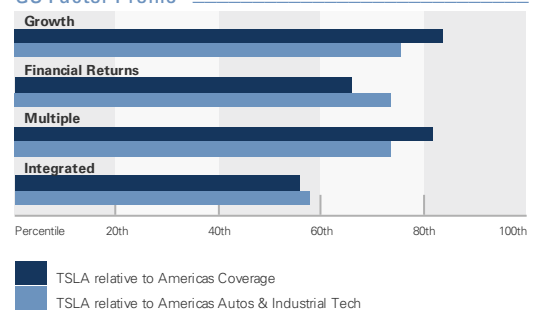
Key Data

Market cap: \$504.1bn
Enterprise value: \$490.3bn
3m ADTV: \$18.2bn
United States
Americas Autos & Industrial Tech
M&A Rank: 3

GS Forecast

	12/23	12/24E	12/25E	12/26E
Revenue (\$ mn) New	96,773.0	102,068.0	122,166.4	143,027.2
Revenue (\$ mn) Old	96,773.0	99,802.0	122,946.4	146,945.2
EBITDA (\$ mn)	16,633.0	17,180.7	23,907.0	31,308.3
EBIT (\$ mn)	8,891.0	8,428.9	12,644.8	17,856.5
EPS (\$) New	2.60	2.20	3.25	4.45
EPS (\$) Old	2.60	1.90	3.25	4.45
P/E (X)	83.5	65.8	44.6	32.5
Dividend yield (%)	0.0	0.0	0.0	0.0
Net debt/EBITDA (X)	(0.9)	(0.8)	(1.0)	(1.1)
	3/24	6/24E	9/24E	12/24E
EPS (\$)	0.34	0.50	0.64	0.72

GS Factor Profile



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

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Neutral

Tesla Inc. (TSLA)

Rating since Jun 25, 2023

Ratios & Valuation

	12/23	12/24E	12/25E	12/26E
P/E (X)	83.5	65.8	44.6	32.5
EV/EBITDA (X)	40.6	26.1	18.5	13.8
EV/sales (X)	7.0	4.4	3.6	3.0
FCF yield (%)	0.6	0.4	2.1	2.6
EV/DACF (X)	46.2	32.9	23.2	17.2
CROCI (%)	33.2	22.4	25.7	28.9
ROE (%)	16.9	11.4	14.5	16.7
Net debt/EBITDA (X)	(0.9)	(0.8)	(1.0)	(1.1)
Net debt/equity (%)	(22.5)	(18.8)	(27.0)	(33.9)
Interest cover (X)	57.0	32.9	52.7	74.4
Inventory days	61.1	65.2	61.9	63.8
Receivable days	12.2	15.3	16.1	15.5
Days payable outstanding	68.5	67.0	61.2	57.4

Growth & Margins (%)

	12/23	12/24E	12/25E	12/26E
Total revenue growth	18.8	5.5	19.7	17.1
EBITDA growth	(22.1)	1.7	44.9	35.8
EPS growth	(28.2)	(15.6)	47.7	37.1
DPS growth	NM	NM	NM	NM
Gross margin	18.2	17.8	18.1	19.3
EBIT margin	9.2	8.3	10.4	12.5

Price Performance



Source: FactSet. Price as of 23 Apr 2024 close.

Income Statement (\$ mn)

	12/23	12/24E	12/25E	12/26E
Total revenue	96,773.0	102,068.0	122,166.4	143,027.2
Cost of goods sold	(79,113.0)	(83,939.2)	(100,041.5)	(115,485.1)
SG&A	(4,800.0)	(5,115.4)	(4,933.1)	(5,013.4)
R&D	(3,969.0)	(4,584.4)	(4,547.0)	(4,672.3)
Other operating inc./exp.)	—	—	—	—
EBITDA	13,558.0	13,793.7	19,982.0	27,128.3
Depreciation & amortization	(4,667.0)	(5,364.8)	(7,337.2)	(9,271.7)
EBIT	8,891.0	8,428.9	12,644.8	17,856.5
Net interest inc./exp.)	910.0	1,309.0	1,810.0	2,060.0
Income/(loss) from associates	—	—	—	—
Pre-tax profit	9,975.0	9,887.9	14,454.8	19,916.5
Provision for taxes	(926.0)	(2,112.7)	(2,891.0)	(3,983.3)
Minority interest	23.0	(75.0)	(75.0)	(90.0)
Preferred dividends	—	—	—	—
Net inc. (pre-exceptionals)	9,072.0	7,700.2	11,488.8	15,843.2
Net inc. (post-exceptionals)	9,072.0	7,700.2	11,488.8	15,843.2
EPS (basic, pre-exception)	2.86	2.41	3.57	4.90
EPS (diluted, pre-exception)	2.60	2.20	3.25	4.45
EPS (ex-ESO exp., dil.) (\$)	--	--	--	--
DPS (\$)	—	—	—	—
Div. payout ratio (%)	0.0	0.0	0.0	0.0
Wtd avg shares out. (basic) (mn)	3,173.5	3,194.5	3,214.8	3,234.8
Wtd avg shares out. (diluted) (mn)	3,482.8	3,502.2	3,538.0	3,559.8

Balance Sheet (\$ mn)

	12/23	12/24E	12/25E	12/26E
Cash & cash equivalents	17,189.0	16,635.7	26,236.8	38,304.7
Accounts receivable	3,508.0	5,036.3	5,729.3	6,381.6
Inventory	13,626.0	16,368.0	17,570.0	22,791.6
Other current assets	15,541.0	18,151.0	18,151.0	18,151.0
Total current assets	49,864.0	56,191.0	67,687.1	85,629.0
Net PP&E	33,905.0	39,638.2	42,380.9	44,189.2
Net intangibles	431.0	367.0	287.0	207.0
Total investments	0.0	0.0	0.0	0.0
Other long-term assets	22,666.0	22,790.0	22,890.0	22,990.0
Total assets	106,618.0	118,738.2	132,997.0	152,767.2
Accounts payable	14,431.0	16,368.0	17,188.0	19,144.9
Short-term debt	—	—	—	—
Current lease liabilities	2,373.0	2,461.0	2,461.0	2,461.0
Other current liabilities	11,944.0	12,267.0	12,267.0	12,267.0
Total current liabilities	28,748.0	31,096.0	31,916.0	33,872.9
Long-term debt	2,857.0	2,899.0	2,899.0	2,899.0
Non-current lease liabilities	—	—	—	—
Other long-term liabilities	11,404.0	11,694.0	11,694.0	11,694.0
Total long-term liabilities	14,261.0	14,593.0	14,593.0	14,593.0
Total liabilities	43,009.0	45,689.0	46,509.0	48,465.9
Preferred shares	—	—	—	—
Total common equity	62,634.0	72,247.2	85,686.0	103,499.2
Minority interest	975.0	802.0	802.0	802.0
Total liabilities & equity	106,618.0	118,738.2	132,997.0	152,767.2
BVPS (\$)	17.98	20.63	24.22	29.07

Cash Flow (\$ mn)

	12/23	12/24E	12/25E	12/26E
Net income	14,974.0	7,658.2	11,488.8	15,843.2
D&A add-back	4,667.0	5,364.8	7,337.2	9,271.7
Minority interest add-back	—	—	—	—
Net (inc)/dec working capital	(2,248.0)	(2,487.3)	(1,075.0)	(3,917.0)
Others	(4,137.0)	1,853.0	1,950.0	1,970.0
Cash flow from operations	13,256.0	12,388.7	19,701.0	23,168.0
Capital expenditures	(8,898.0)	(10,673.0)	(10,000.0)	(11,000.0)
Acquisitions	(6,686.0)	(2,307.0)	—	—
Divestitures	—	—	—	—
Others	0.0	(79.0)	(100.0)	(100.0)
Cash flow from investing	(15,584.0)	(13,059.0)	(10,100.0)	(11,100.0)
Dividends paid	—	—	—	—
Share issuance/(repurchase)	—	—	—	—
Inc/(dec) in debt	2,580.0	0.0	—	—
Others	477.0	117.0	—	—
Cash flow from financing	2,593.0	117.0	0.0	0.0
Total cash flow	265.0	(553.3)	9,601.0	12,068.0
Free cash flow	4,358.0	1,715.7	9,701.0	12,168.0
Free cash flow per share (basic) (\$)	1.23	0.54	3.02	3.76

Source: Company data, Goldman Sachs Research estimates.

approach coupled with improved GPU capabilities could allow this to happen faster than our base case view.

In terms of new vehicle models using elements of the low-cost platform, while Tesla declined to share details, given the relatively quick launch timeframes Tesla is targeting (as soon as late 2024 or early 2025) and the use of existing manufacturing lines, we assume that the initial new model(s) could be similar to Tesla's current offerings from a form factor perspective (e.g. a refreshed version of Model Y). Longer-term, we believe there is scope for more meaningful design changes, and we expect some contribution from more significant new models in 2H26 (although less than we had previously estimated). Our 2024/2025 delivery assumptions are effectively unchanged at 1.83 mn/2.12 mn (we had already contemplated a refreshed version of Model Y in our forecast). We lower our 2026 vehicle deliveries forecast to ~2.4 mn from ~2.5 mn prior reflecting lower volumes coming from new models with a more significant design change (now 50K from 150K prior).

We raise 2024 EPS on a higher automotive gross margin (reflecting better cost and a slower pricing decline than we'd previously assumed) and on Energy, and we maintain our 2025/2026 EPS estimates. Our 12-month price target remains \$175.

1Q24 financial results

Tesla reported 1Q24 revenue of \$21,301 mn (down 15% qoq and down 9% yoy) which was about in line with GS at \$21,253 mn and 4% below the Street (FactSet) at \$22,220 mn. Tesla reported the following by segment:

- **Automotive** revenue of \$17,378 mn (down 19% qoq and down 13% yoy) compared to GS at \$17,184 mn and the Street at \$18,894 mn. Implied vehicle ASP was about \$43.5K and above our \$42.8K estimate. Sales of regulatory credits were \$442 mn in the quarter vs. our estimate of \$425 mn, up slightly from \$433 mn last quarter but down from \$521 mn in 1Q23.
- **Energy Generation and Storage** revenue of \$1,635 mn (up 14% qoq and up 7% yoy) compared to GS at \$1,705 mn. The company reported storage deployments of 4,053 MWh (up 4% yoy). Tesla commented that energy storage deployments increased sequentially in 1Q to a record 4.1 GWh, and Energy Generation and Storage revenue and gross profit also achieved an all-time high in 1Q, driven by increased Megapack deployments, partially offset by a decrease in solar deployments. Energy is Tesla's highest margin business. Tesla also noted that its second general assembly line is now commissioned, and it continues to ramp its 40 GWh Megafactory in Lathrop, CA toward full capacity.
- **Service and Other** revenue of \$2,288 mn (up 6% qoq and up 25% yoy) compared to GS at \$2,365 mn.

As previously reported, total vehicle deliveries in the quarter were about 387k (down 20% qoq and down 9% yoy). Model 3/Y deliveries in the quarter were about 370k (down 20% qoq and down 10% yoy), and other model deliveries (e.g., S/X/Cybertruck) were about 17k (down 26% qoq and up 59% yoy). Tesla commented that the decline was partially due to the early phase of the production ramp of the updated Model 3 at

its Fremont factory, and factory shutdowns resulting from shipping diversions caused by the Red Sea conflict and an arson attack at Gigafactory Berlin.

Tesla produced about 433k vehicles (down 12% qoq and down 2% yoy), of which 412k were Model 3/Y (down 14% qoq and down 2% yoy) and 21k were other models (e.g., Model S/X/Cybertruck) (up 15% qoq and up 8% yoy).

The total company gross margin (including SBC) was 17.4%, above both GS at 15.4% and the Street at 17.1%. The 4Q23 margin was 17.6%, and 1Q23 was 19.3%.

The non-GAAP automotive gross margin (including SBC and excluding the revenue from regulatory credits) was 16.4%, compared to GS at 14.5%. The 4Q23 margin was 17.2%, and 1Q23 was 19.0%.

Tesla commented that EBIT margins were impacted by a reduced vehicle ASP due to pricing and mix, an increase in operating expenses partly driven by AI, the cost of the Cybertruck production ramp, and the decline in vehicle deliveries. These headwinds were partially offset by certain lower costs (including raw materials, freight and duties), gross profit growth in Energy, and higher FSD revenue recognition YoY due to the release of the Autopark feature in North America.

Non-GAAP diluted EPS (excluding SBC) was \$0.45, just above GS at \$0.44 but below the Street at \$0.49.

Including SBC, EPS was \$0.34 vs. GS at \$0.31. Relative to our estimate, EPS upside was driven primarily by ~200 bp higher gross margin and higher other income. This was partially offset by higher opex (on a dollars and percentage basis) and a higher tax rate (a \$0.02-\$0.03 headwind).

Cash and cash equivalents and investments decreased by \$2.2 bn qoq to \$26.9 bn, with FCF of -\$2.5 bn in 1Q (Tesla noted that AI infrastructure capex was \$1.0 bn in 1Q). Inventory dollars were up \$2.4 bn qoq to \$16.0 bn.

Additional product updates

On FSD, Tesla commented that it has rolled out V12 to all vehicles with cameras and Hardware 3 and on (~1.8 mn vehicles). Moreover, over 300 bn miles have been driven so far with FSD V12 with about half of vehicles using it so far. Tesla said it is in discussion with one major auto OEM on potentially licensing FSD, and believes it could potentially sign one or more deals by the end of the year (but noted that it would still take multiple years for another OEM to deploy the FSD technology). Tesla also suggested that progress on licensing could track with FSD technology.

Tesla is also currently working on unsupervised FSD and a ride-hailing functionality that will be available in the future. Tesla commented that it expects to own and operate a portion of a robotaxi fleet with some vehicles also owned by end users.

On 4680, Tesla commented that the ramp continued in 1Q (with an 18-20% increase qoq in production) and remains ahead of the Cybertruck ramp. Costs have continued to come down sequentially as scrap, yield and production rate improved, and Tesla expects the cost structure to be better than supplier costs of nickel based cells by the end of the

year.

Company Outlook

The company reiterated that it is currently between two major growth waves: the first one began with the global expansion of the Model 3/Y platform, and Tesla believes the next one will be initiated by advances in autonomy and the introduction of new products, including those built on the next generation vehicle platform.

In 2024, Tesla continues to expect that the vehicle volume growth rate may be notably lower than the growth rate achieved in 2023, as the company works on the launch of the next generation vehicle and other products. Importantly, Tesla expects vehicle volumes to increase in 2024 vs 2023. We continue to estimate deliveries will be ~1.83 mn (up 1.5% yoy) vs. Visible Alpha Consensus Data at ~1.91 mn prior to the report.

In 2024, Tesla continues to expect the growth rate of deployments and revenue in its Energy Storage business to outpace the Automotive business. Tesla expects energy storage deployments to grow 75%+ yoy in 2024 but noted that there could be some lumpiness in storage deployments quarter to quarter.

Tesla commented that it has updated its future vehicle line-up to accelerate the launch of new models ahead of its previously communicated start of production in the second half of 2025. Importantly, Tesla believes that these future vehicles can now be launched in 1H25 or possibly later in 2024. These new vehicles, including more affordable models, will utilize aspects of the next generation platform as well as aspects of Tesla's current platforms and will be able to be produced on the same manufacturing lines as its current vehicle line-up. This update may result in achieving less cost reduction than previously expected but enables Tesla to grow its vehicle volumes in a more capex efficient manner and would help Tesla to fully utilize its current expected maximum capacity of close to 3 mn vehicles, per the company.

Tesla believes its purpose-built robotaxi product will continue to pursue a revolutionary "unboxed" manufacturing strategy.

Furthermore, Tesla said it would manage the business such that it maintains a strong balance sheet during this uncertain period. The company plans to stay FCF positive on an annual basis, even if it is more aggressive with pricing.

Implications

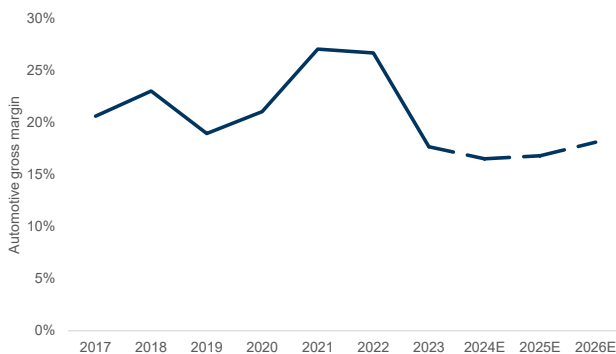
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In terms of new vehicle models using elements of the low-cost platform, while Tesla declined to share details, given the relatively quick launch timeframes Tesla is targeting (as soon as late 2024 or early 2025) and the use of existing manufacturing lines, we assume that the initial new model(s) could be similar to Tesla's current offerings from a form factor perspective (e.g. a refreshed version of Model Y). Longer-term, we believe there is scope for more meaningful design changes, and we expect some contribution from more significant new models in 2H26 (although less than we had previously estimated). Our 2024/2025 delivery assumptions are effectively unchanged at 1.83 mn/2.12 mn (we had already contemplated a refreshed version of Model Y in our forecast). We lower our 2026 vehicle deliveries forecast to ~2.4 mn from ~2.5 mn prior reflecting lower volumes coming from new models with a more significant design change (now 50K from 150K prior).

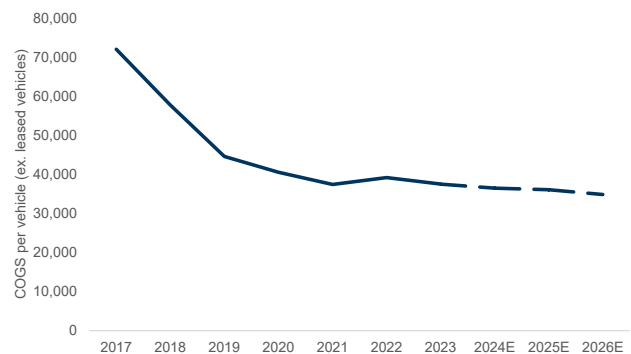
We believe the company's margin trajectory will also remain a focus given indications that Tesla will remain flexible on pricing and seek to pass on lower costs to consumers. Tesla is also making progress on cost, aided by lower raw materials and battery costs.

Exhibit 1: Tesla's automotive gross margin (including SBC and excluding automotive regulatory credits)



Source: Company data, Goldman Sachs Global Investment Research

Exhibit 2: Tesla's COGS per vehicle have trended downward over time



Source: Company data, Goldman Sachs Global Investment Research

For FSD and robotaxis, we continue to view Tesla as a leader in autonomy/ADAS technology, and in the long-term we believe that software & digital services can be a meaningful driver of its business (as we framed in our 2030 EPS scenarios from our November 2023 report, "[Contextualizing Tesla's AI and FSD opportunities](#)," and in our April 2024 report, "[Initial framing of robotaxi opportunity, and updated FSD scenarios](#)"). However, we believe it will take time before Tesla can drive more significant growth in either robotaxi or FSD revenue, as we believe Tesla would need to reach at least L3 (situationally eyes-off, for example on the highway) capability with FSD to drive material

adoption at \$99 per month, and we think Tesla's efforts specific to robotaxis (L4/L5) are likely in the earlier phases based on permitting requests (and this is a technology that has historically faced difficulties including with respect to R&D and regulations). We appreciate that the latest GPUs in addition to Tesla's end to end neutral net approach could allow Tesla to iterate and develop the technology faster than we currently expect, although our base case view is that developing and growing these businesses will take time. If Tesla reaches L3/L4 sooner than we expect, or even an L2/L2+ product that is materially better than competitor offerings, then we think this could eventually lead to an FSD licensing deal. However, our base case view is that a licensing agreement with a major auto OEM would take time and track with product improvements, and we think there would be a high bar for another OEM to license FSD. We'll look to learn more from the 8/8/24 event.

Estimate changes

We raise our 2024 EPS estimate including SBC to \$2.20 from \$1.90 prior reflecting better cost and a slower pricing decline than we'd previously assumed and on higher Energy deployments. We maintain our 25/26 EPS estimates including SBC of \$3.25/\$4.45. Our CY24/25/26 non-GAAP EPS estimates (ex. SBC) are now \$2.70/\$3.80/\$5.00.

Exhibit 3: GS estimate revisions

TSLA estimate revisions	2024E		2025E		2026E	
	Old GSe	New GSe	Old GSe	New GSe	Old GSe	New GSe
Revenue	\$99,802	\$102,068	\$122,946	\$122,166	\$146,945	\$143,027
Automotive non-GAAP gross margin excl. credits	15.3%	16.5%	16.5%	16.8%	17.8%	18.1%
EBIT margin including SBC	7.1%	8.3%	10.3%	10.4%	12.3%	12.5%
Non-GAAP EPS including SBC	\$1.90	\$2.20	\$3.25	\$3.25	\$4.45	\$4.45
Non-GAAP EPS excluding SBC	\$2.45	\$2.70	\$3.80	\$3.80	\$5.00	\$5.00

Source: Goldman Sachs Global Investment Research

Valuation, price target, and key risks

We maintain our 12-month price target of \$175, which is still based on 50X applied to Q5-Q8E EPS including SBC.

We believe an upside scenario for the stock over the next 12-24 months could be ~\$220-\$300 using a multiple of 50X-60X applied to 2026E EPS (note we model 2026 EPS including SBC of \$4.45 and excluding SBC of \$5.00), and the market could be more forward looking/ascribe a higher multiple should Tesla demonstrate improved traction with software and services products such as FSD. We believe a downside scenario, including if investors become less optimistic on the software and services opportunity, could be ~\$65-\$85 using a multiple of ~30X applied to 2024 EPS (note that we model 2024E EPS including SBC at \$2.20 and excluding SBC at \$2.70).

Key downside risks to our view relate to potentially larger vehicle price reductions than we expect, increased competition in EVs, slower EV demand, delays with products/capabilities like FSD/the third generation platform/4680, key person risk, the internal control environment, margins, and operational risks associated with Tesla's high degree of vertical integration. Upside risks include faster EV adoption and/or share gain by Tesla, a stronger macroeconomic environment for new vehicle sales more generally,

earlier new product launches than we expect (e.g., a vehicle using the third generation platform), and an earlier/larger impact from AI enabled products (e.g., FSD, Optimus and robotaxis) than we currently anticipate.

Disclosure Appendix

Reg AC

We, Mark Delaney, CFA, Will Bryant, Morgan Leung and Aman Gupta, 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.

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GS Factor Profile

The Goldman Sachs Factor Profile provides investment context for a stock by comparing key attributes to the market (i.e. our coverage universe) 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).

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Quantum

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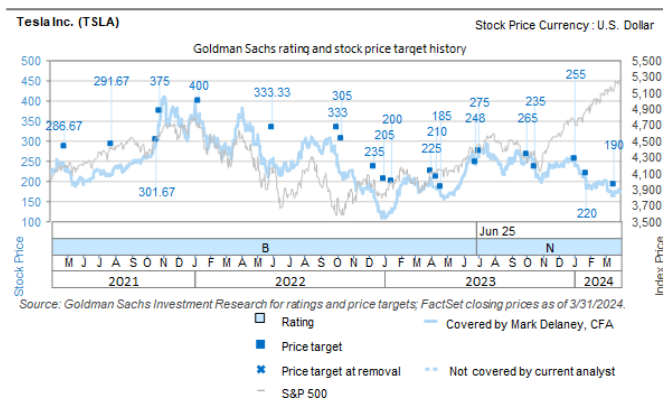
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