

# Tesla Inc. (TSLA)

Weaker auto gross margin ex. credits; key debates likely to be on trajectory of auto business and FSD/robotaxis

Neutral

<b>TSLA</b>	12m Price Target: <b>\$230.00</b>	Price: <b>\$246.38</b>	Downside: <b>6.6%</b>
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Tesla reported revenue/non-GAAP diluted EPS (excluding SBC) of \$25.5 bn/\$0.52, which was 4% above/\$0.09 below the Street (FactSet) and 1%/\$0.10 below GS. We estimate that a \$622 mn restructuring charge in opex that was not excluded from non-GAAP earnings was a \$0.13 headwind after tax, but incremental regulatory credit sales vs. our forecast was a \$0.10 tailwind to EPS after tax.

The underlying gross margin in Tesla's auto business was weaker than we had expected and below consensus, with headwinds from both price/incentives and cost qoq. Specifically, the automotive non-GAAP gross margin (including SBC and excluding the revenue from regulatory credits) was 14.6%, below GS at 15.3% and consensus (StreetAccounts) in the mid 16% range. The margin declined from 16.4% in 1Q24 and 18.1% in 2Q23. Until Tesla is able to begin production of new lower cost models, which the company expects in 1H25, we believe pricing/incentives could remain a key demand lever and weigh on margins. We believe a key debate from here will be around the extent that new models are differentiated enough on price and/or features compared to current offerings to drive improved volume growth.

On Full Self Driving (FSD), we continue to view Tesla as a leader in autonomous technology for automotive, and Tesla stated that miles per intervention continues to improve. Tesla is now planning to have its robotaxi unveil on 10/10 (and also show off a few other things). However, we expect it to take two to three years for Tesla to reach conditionally unsupervised eyes-off or level 3 ADAS capability at scale (for example on highways). We also continue to believe it will take longer for Tesla to provide a broad-based robotaxi service (L4), and we think operational aspects needed for such a business like permitting/logistics could still be in the early phases. However, as Tesla is able to offer L3/L4 capabilities, we believe it can drive more

## Mark Delaney, CFA

+1(212)357-0535 | mark.delaney@gs.com  
Goldman Sachs & Co. LLC

## Will Bryant

+1(212)934-4705 | will.bryant@gs.com  
Goldman Sachs & Co. LLC

## Morgan Leung

+1(212)934-4683 | morgan.leung@gs.com  
Goldman Sachs & Co. LLC

## Aman Gupta

+1(212)357-1549 | aman.s.gupta@gs.com  
Goldman Sachs & Co. LLC

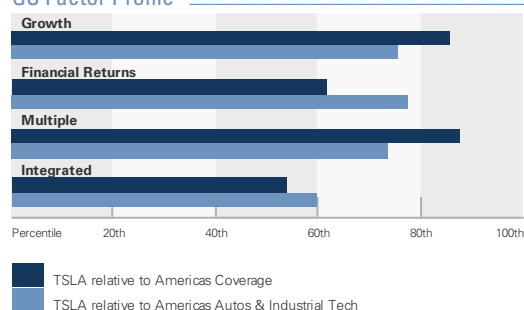
## Key Data

Market cap: \$857.6bn  
Enterprise value: \$845.8bn  
3m ADTV: \$20.2bn  
United States  
Americas Autos & Industrial Tech  
M&A Rank: 3

## GS Forecast

	12/23	12/24E	12/25E	12/26E
<b>Revenue (\$ mn) New</b>	<b>96,773.0</b>	<b>101,993.9</b>	<b>119,092.9</b>	<b>140,341.7</b>
Revenue (\$ mn) Old	96,773.0	103,311.9	121,616.8	143,269.8
EBITDA (\$ mn)	16,633.0	15,517.1	21,975.8	29,532.8
EBIT (\$ mn)	8,891.0	7,179.1	11,436.8	16,807.4
<b>EPS (\$) New</b>	<b>2.60</b>	<b>1.90</b>	<b>2.95</b>	<b>4.20</b>
EPS (\$) Old	2.60	2.05	3.20	4.45
P/E (X)	83.5	129.7	83.4	58.7
Dividend yield (%)	0.0	0.0	0.0	0.0
Net debt/EBITDA (X)	(0.9)	(0.8)	(0.9)	(1.1)
	<b>6/24</b>	<b>9/24E</b>	<b>12/24E</b>	<b>3/25E</b>
EPS (\$)	0.42	0.54	0.59	0.53

## 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

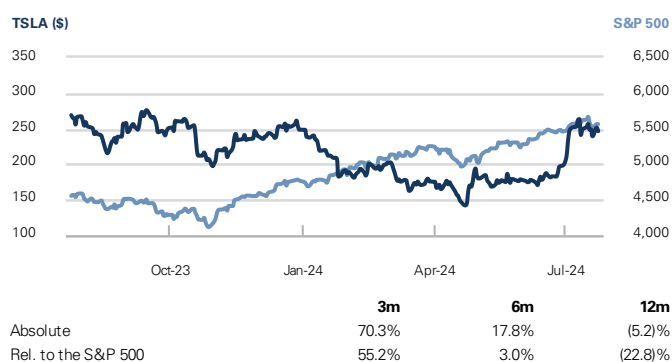
## Ratios &amp; Valuation

	12/23	12/24E	12/25E	12/26E
P/E (X)	83.5	129.7	83.4	58.7
EV/EBITDA (X)	40.6	49.9	35.1	25.9
EV/sales (X)	7.0	7.6	6.5	5.5
FCF yield (%)	0.6	0.1	1.1	1.4
EV/DACF (X)	46.2	60.5	43.3	31.8
CROCI (%)	33.2	20.7	23.6	27.2
ROE (%)	16.9	9.9	13.5	16.3
Net debt/EBITDA (X)	(0.9)	(0.8)	(0.9)	(1.1)
Net debt/equity (%)	(22.5)	(16.4)	(24.2)	(31.0)
Interest cover (X)	57.0	21.6	33.6	49.4
Inventory days	61.1	64.9	62.6	63.3
Receivable days	12.2	15.2	16.2	15.4
Days payable outstanding	68.5	66.0	61.3	57.0

## Growth &amp; Margins (%)

	12/23	12/24E	12/25E	12/26E
Total revenue growth	18.8	5.4	16.8	17.8
EBITDA growth	(22.1)	(8.2)	49.4	39.0
EPS growth	(28.2)	(27.1)	55.5	42.1
DPS growth	NM	NM	NM	NM
Gross margin	18.2	17.0	17.6	19.0
EBIT margin	9.2	7.0	9.6	12.0

## Price Performance



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

## Income Statement (\$ mn)

	12/23	12/24E	12/25E	12/26E
Total revenue	96,773.0	101,993.9	119,092.9	140,341.7
Cost of goods sold	(79,113.0)	(84,685.2)	(98,119.7)	(113,704.3)
SG&A	(4,800.0)	(5,708.5)	(4,910.1)	(5,013.0)
R&D	(3,969.0)	(4,421.1)	(4,626.4)	(4,817.1)
Other operating inc./exp.)	—	—	—	—
<b>EBITDA</b>	<b>13,558.0</b>	<b>12,451.6</b>	<b>18,603.8</b>	<b>25,867.8</b>
Depreciation & amortization	(4,667.0)	(5,272.5)	(7,167.0)	(9,060.4)
<b>EBIT</b>	<b>8,891.0</b>	<b>7,179.1</b>	<b>11,436.8</b>	<b>16,807.4</b>
Net interest inc./exp.)	910.0	1,216.0	1,710.0	1,980.0
Income/(loss) from associates	—	—	—	—
<b>Pre-tax profit</b>	<b>9,975.0</b>	<b>8,565.1</b>	<b>13,146.8</b>	<b>18,787.4</b>
Provision for taxes	(926.0)	(1,869.5)	(2,629.4)	(3,757.5)
Minority interest	23.0	(65.5)	(74.0)	(95.0)
Preferred dividends	—	—	—	—
<b>Net inc. (pre-exceptionals)</b>	<b>9,072.0</b>	<b>6,630.2</b>	<b>10,443.4</b>	<b>14,934.9</b>
<b>Net inc. (post-exceptionals)</b>	<b>9,072.0</b>	<b>6,630.2</b>	<b>10,443.4</b>	<b>14,934.9</b>
<b>EPS (basic, pre-exception)</b>	<b>2.86</b>	<b>2.08</b>	<b>3.25</b>	<b>4.62</b>
<b>EPS (diluted, pre-exception)</b>	<b>2.60</b>	<b>1.90</b>	<b>2.95</b>	<b>4.20</b>
<b>EPS (ex-ESO exp., dil.) (\$)</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
DPS (\$)	—	—	—	—
Div. payout ratio (%)	0.0	0.0	0.0	0.0
Wtd avg shares out. (basic) (mn)	3,173.5	3,193.8	3,214.2	3,234.2
Wtd avg shares out. (diluted) (mn)	3,482.8	3,489.8	3,535.8	3,559.2

## Balance Sheet (\$ mn)

	12/23	12/24E	12/25E	12/26E
Cash & cash equivalents	17,189.0	17,306.1	25,886.0	36,755.1
Accounts receivable	3,508.0	4,982.2	5,595.9	6,233.4
Inventory	13,626.0	16,503.5	17,160.9	22,262.0
Other current assets	15,541.0	19,987.0	19,987.0	19,987.0
<b>Total current assets</b>	<b>49,864.0</b>	<b>58,778.7</b>	<b>68,629.8</b>	<b>85,237.5</b>
Net PP&E	33,905.0	39,898.5	42,795.5	44,799.1
Net intangibles	431.0	381.0	317.0	253.0
Total investments	0.0	0.0	0.0	0.0
Other long-term assets	22,666.0	22,027.0	22,127.0	22,227.0
<b>Total assets</b>	<b>106,618.0</b>	<b>120,789.2</b>	<b>133,573.4</b>	<b>152,220.6</b>
Accounts payable	14,431.0	16,192.1	16,787.8	18,700.1
Short-term debt	—	—	—	—
Current lease liabilities	2,373.0	1,388.0	1,388.0	1,388.0
Other current liabilities	11,944.0	13,285.0	13,285.0	13,285.0
<b>Total current liabilities</b>	<b>28,748.0</b>	<b>30,865.1</b>	<b>31,460.8</b>	<b>33,373.1</b>
Long-term debt	2,857.0	5,481.0	5,481.0	5,481.0
Non-current lease liabilities	—	—	—	—
Other long-term liabilities	11,404.0	12,359.0	12,359.0	12,359.0
<b>Total long-term liabilities</b>	<b>14,261.0</b>	<b>17,840.0</b>	<b>17,840.0</b>	<b>17,840.0</b>
<b>Total liabilities</b>	<b>43,009.0</b>	<b>48,705.1</b>	<b>49,300.8</b>	<b>51,213.1</b>
Preferred shares	—	—	—	—
<b>Total common equity</b>	<b>62,634.0</b>	<b>71,289.2</b>	<b>83,477.6</b>	<b>100,212.5</b>
Minority interest	975.0	795.0	795.0	795.0
<b>Total liabilities &amp; equity</b>	<b>106,618.0</b>	<b>120,789.2</b>	<b>133,573.4</b>	<b>152,220.6</b>
BVPS (\$)	17.98	20.43	23.61	28.16

## Cash Flow (\$ mn)

	12/23	12/24E	12/25E	12/26E
Net income	14,974.0	6,619.2	10,443.4	14,934.9
D&A add-back	4,667.0	5,272.5	7,167.0	9,060.4
Minority interest add-back	—	—	—	—
Net (inc)/dec working capital	(2,248.0)	(2,940.6)	(675.4)	(3,826.3)
Others	(4,137.0)	2,055.0	1,745.0	1,800.0
<b>Cash flow from operations</b>	<b>13,256.0</b>	<b>11,006.1</b>	<b>18,680.0</b>	<b>21,969.0</b>
Capital expenditures	(8,898.0)	(10,193.0)	(10,000.0)	(11,000.0)
Acquisitions	(6,686.0)	(3,260.0)	—	—
Divestitures	—	—	—	—
Others	0.0	(56.0)	(100.0)	(100.0)
<b>Cash flow from investing</b>	<b>(15,584.0)</b>	<b>(13,509.0)</b>	<b>(10,100.0)</b>	<b>(11,100.0)</b>
Dividends paid	—	—	—	—
Share issuance/(repurchase)	—	—	—	—
Inc/(dec) in debt	2,580.0	2,783.0	—	—
Others	477.0	(57.0)	—	—
<b>Cash flow from financing</b>	<b>2,593.0</b>	<b>2,620.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total cash flow</b>	<b>265.0</b>	<b>117.1</b>	<b>8,580.0</b>	<b>10,869.0</b>
Free cash flow	4,358.0	813.1	8,680.0	10,969.0
Free cash flow per share (basic) (\$)	1.23	0.22	2.70	3.39

Source: Company data, Goldman Sachs Research estimates.

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Tesla said that it could show off a couple other things besides the robotaxi at the 10/10 event, and whether this includes a new consumer vehicle(s) will likely be of interest to investors. We believe the 10/10 event, and the potential for this to give investors more visibility on the new vehicles and FSD, could limit the degree of downside in the stock in the near-term despite the weaker automotive non-GAAP gross margin. We framed how impactful new vehicle model(s) could be for Tesla's volumes in our June 2024 note, ["Framing the market size for lower cost vehicles"](#).

Overall, we are lowering our EPS estimates driven primarily by a lower automotive non-GAAP gross margin. We maintain our Neutral rating on the stock, and our 12-month price target moves to \$230 from \$248 reflecting our reduced estimates.

## 2024 financial results

Tesla reported 2Q24 revenue of \$25,500 mn (up 20% qoq and up 2% yoy) which was 1% below GS at \$25,844 mn but 4% above the Street (FactSet) at \$24,540 mn. Tesla reported the following by segment:

- **Automotive** revenue of \$19,878 mn (up 14% qoq and down 7% yoy) compared to GS at \$19,476 mn and the Street at \$20,177 mn. Implied vehicle ASP was about \$42.7K and slightly above our \$42.5K estimate. Sales of regulatory credits were \$890 mn in the quarter vs. our estimate of \$425 mn, up from \$442 mn last quarter and from \$282 mn in 2Q23.
- **Energy Generation and Storage** revenue of \$3,014 mn (up 84% qoq and up 100% yoy) compared to GS at \$3,697 mn. Tesla commented that energy storage deployments increased sequentially in 2Q to a record 9.4 GWh, and Energy Generation and Storage revenue and gross profit also achieved an all-time high in 2Q. Energy was Tesla's highest margin business in 2Q.
- **Service and Other** revenue of \$2,608 mn (up 14% qoq and up 21% yoy) compared to GS at \$2,672 mn.

As previously reported, total vehicle deliveries in the quarter were about 444k (up 15% qoq and down 5% yoy). Model 3/Y deliveries in the quarter were about 422k (up 14% qoq and down 5% yoy), and other model deliveries (e.g., S/X/Cybertruck) were about 22k (up 27% qoq and up 12% yoy). Tesla produced about 411k vehicles (down 5% qoq and down 14% yoy).

The total company gross margin (including SBC) was 18.0%, above both GS at 17.0% and the Street at 17.4%. The 1Q24 margin was 17.4%, and 2Q23 was 18.2%. We estimate that higher regulatory credit revenue was about a 150 bp tailwind to the consolidated gross margin vs. our forecast.

The non-GAAP automotive gross margin (including SBC and excluding the revenue from regulatory credits) was 14.6%, compared to GS at 15.3% and StreetAccounts

consensus in the mid 16% range. The 1Q24 margin was 16.4%, and 2Q23 was 18.1%. Both pricing and COGS weighed on the automotive non-GAAP gross margin qoq, although the downside vs. our forecast was driven by cost.

EBIT of ~\$1.6 bn was below our forecast of ~\$2.1 bn, driven by a \$622 mn restructuring charge included in GAAP opex.

Non-GAAP diluted EPS (excluding SBC) was \$0.52, below both GS at \$0.62 and the Street at \$0.61. Excluding the ~\$622 mn restructuring charge (with a marginal tax rate of ~25%), we estimate that EPS would have been \$0.65. However, we estimate that the incremental regulatory credit revenue (\$890 mn vs. our \$425 mn forecast) was a \$0.10 tailwind after tax.

EPS was \$0.42 on a GAAP basis.

Cash and cash equivalents and investments increased by \$3.9 bn qoq to \$30.7 bn, with FCF of \$1.3 bn in 2Q. Inventory dollars were down \$1.8 bn qoq to \$14.2 bn.

By region, Tesla commented that:

- **US:** Tesla commented that the refreshed Model 3 ramp continued successfully, including the introduction of Model 3 Performance in 2Q and Long Range RWD in July. Cybertruck production more than tripled sequentially and remains on track to achieve profitability by the end of the year.
- **China:** Tesla commented that the company significantly increased deliveries in several markets supplied by Gigafactory Shanghai including South Korea. While the auto market in China remains among the most competitive globally, the company believes its cost structure positions it well.
- **Europe:** Gigafactory Berlin began producing vehicles for right-hand drive markets and delivered its first units to the UK. Tesla believes its regional production strategy provides flexibility as needs change across markets.

### **Additional product updates**

On FSD, Tesla commented that there are a few major OEMs who have expressed interest in licensing the technology but noted that given the need to integrate Tesla AI computers and speed of the industry, it would take several years to see production of a vehicle under this agreement at volume. It also stated that the next-gen FSD (Supervised) model has 5X the parameters of the current version and would merge the highway and city software stacks which it believes would help improve functionality in highway settings.

Tesla commented that it now expects to unveil the robotaxi (along with a few other updates) on 10/10 (from 8/8 prior).

Tesla stated it could reach unsupervised FSD as early as the end of this year, while acknowledging that it has historically been too optimistic on FSD timelines.

On 4680 battery cells, Tesla commented that the ramp continued in 1Q (with a 51% increase qoq in production), and it can now supply cells for more than 1.4k Cybertrucks

per week. Costs have continued to come down sequentially and the company expects to launch production with a dry coated cathode in 4Q which the company believes will result in a major cost reduction once ramped.

### 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.

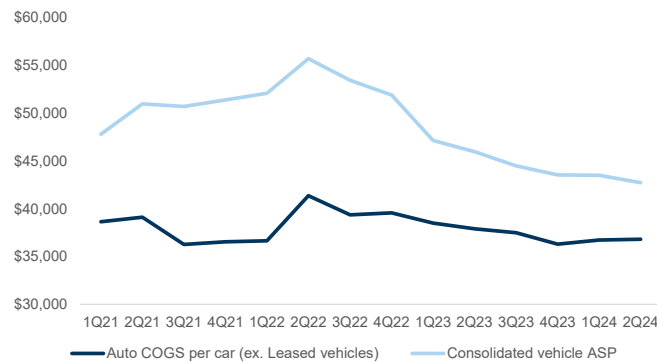
In 2024, Tesla continues to expect that the vehicle volume growth rate may be notably lower than the growth rate achieved in 2023, as the company works on the launch of the next generation vehicle and other products. On production, Tesla commented that it expects 3Q production to increase sequentially after declining in 2Q.

In 2024, Tesla continues to expect the growth rate of deployments and revenue in its Energy Storage business to outpace the Automotive business. Tesla further commented that the company expects Energy Storage production to continue to grow sequentially, though deployments will continue to fluctuate depending on several factors including project milestones and logistics timing.

Tesla noted that plans for new vehicles, including more affordable models, remain on track for start of production in 1H25. Recall that these vehicles will utilize aspects of the next-gen platform while being produced on the same manufacturing lines as the current vehicle line-up. The Robotaxi product will continue to pursue the “unboxed” manufacturing strategy.

### Implications

The underlying gross margin in Tesla’s auto business was weaker than we had expected and below consensus, with headwinds from both price/incentives and cost qoq. Specifically, the automotive non-GAAP gross margin (including SBC and excluding the revenue from regulatory credits) was 14.6%, below GS at 15.3% and consensus (StreetAccounts) in the mid 16% range. The margin declined from 16.4% in 1Q24 and 18.1% in 2Q23. Until Tesla is able to begin production of new lower cost models, which the company expects in 1H25, we believe pricing/incentives could remain a key demand lever and weigh on margins. We believe a key debate from here will be around the extent that new models are differentiated enough on price and/or features compared to current offerings to drive improved volume growth.

**Exhibit 1: Tesla's auto ASP and COGS per vehicle (ex leasing) over time**

Source: Company data, Goldman Sachs Global Investment Research

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In Energy, Tesla reported record storage deployments and profits. However, Energy revenue came in lower than our forecast, implying a lower ASP per kWh in our opinion.

**Estimate changes**

Our 2024/2025/2026 delivery assumptions are effectively unchanged at 1.81 mn/2.10 mn/2.40 mn.

Overall, we are lowering our EPS estimates driven primarily by a lower automotive non-GAAP gross margin and to a lesser extent lower Energy revenue (on a lower ASP per kWh), but partly offset by higher regulatory credit revenue.

We lower our 2024/2025/2026 EPS estimates including SBC to \$1.90/\$2.95/\$4.20 from \$2.05/\$3.20/\$4.45. Our CY24/25/26 non-GAAP EPS estimates (ex. SBC) are now \$2.30/\$3.35/\$4.60.

#### Exhibit 2: GS estimate revisions

TSLA estimate revisions	2024E		2025E		2026E	
	Old GSe	New GSe	Old GSe	New GSe	Old GSe	New GSe
Revenue	\$103,312	\$101,994	\$121,617	\$119,093	\$143,270	\$140,342
Automotive non-GAAP gross margin excl. credits	15.7%	15.0%	16.6%	15.8%	18.1%	17.3%
EBIT margin including SBC	7.9%	7.0%	10.2%	9.6%	12.4%	12.0%
Non-GAAP EPS including SBC	\$2.05	\$1.90	\$3.20	\$2.95	\$4.45	\$4.20
Non-GAAP EPS excluding SBC	\$2.55	\$2.30	\$3.75	\$3.35	\$5.00	\$4.60

Source: Goldman Sachs Global Investment Research

#### Valuation, price target, and key risks

We maintain our Neutral rating on the stock. We lower our 12-month price target to \$230 from \$248, which is still based on 65X applied to our updated Q5-Q8E EPS including SBC.

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).

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

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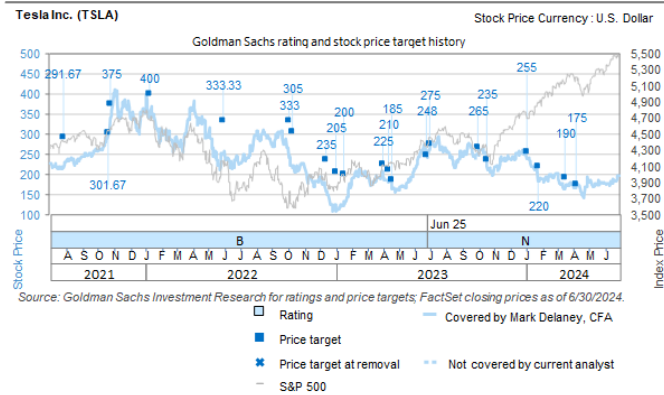
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