

Tesla Inc. (TSLA)

Latest thoughts on vehicle deliveries and FSD

Neutral

TSLA	12m Price Target: \$320.00	Price: \$272.04	Upside: 17.6%
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We lower our below consensus delivery estimates for Tesla reflecting the quarter to date data for key regions (i.e. China, Europe, and the US), as well as what we believe are broader demand trends (including based on consumer surveys from HundredX).

We also discuss progress with FSD, including the recent release of FSD in China (and our thoughts on the competitive landscape in China informed in part by [our recent China field trip](#)). We believe FSD v13 has shown meaningful improvement from v12, and we see that as supporting better monetization in the US over the medium to longer term especially if Tesla can transition this to eyes-off capability. However, multiple competitors in China are also offering hands-free ADAS solutions without an incremental software package needing to be purchased (although sometimes it's only available on more premium vehicle trims), which we believe suggests that Tesla will have a harder time monetizing FSD in China especially if it continues to require driver supervision.

We remain Neutral rated on the stock, and we lower our 12-month price target to \$320 from \$345. We continue to expect Tesla to face difficult fundamental conditions in the near-term, and our EPS estimates are below the Street for 2025 (and to a much lesser extent for 2026). We expect Tesla's earnings growth to improve over the longer-term due in part to increased software revenue with FSD, although we have a more balanced view of Tesla's monetization potential than we believe the company is targeting.

Deliveries tracking softer in 1Q, we believe in part on the Model Y transition and partly due to weaker demand

Tesla delivery data for January and February in key regions has been

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Key Data

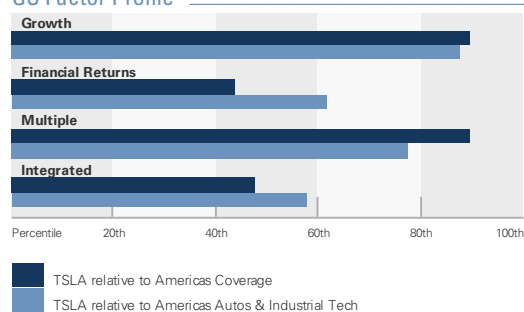
Market cap: \$956.8bn
Enterprise value: \$941.4bn
3m ADTV: \$33.0bn
United States
Americas Autos & Industrial Tech
M&A Rank: 3

GS Forecast

	12/24	12/25E	12/26E	12/27E
Revenue (\$ mn) New	97,690.0	106,017.8	127,635.5	142,723.3
Revenue (\$ mn) Old	97,690.0	108,745.1	130,523.2	145,635.5
EBITDA (\$ mn)	16,013.0	18,145.9	25,282.7	30,453.9
EBIT (\$ mn)	7,076.0	7,511.9	12,470.5	15,843.6
EPS (\$) New	2.04	2.05	3.20	3.95
EPS (\$) Old	2.04	2.20	3.45	4.20
P/E (X)	113.0	132.8	85.1	68.9
Dividend yield (%)	0.0	0.0	0.0	0.0
Net debt/EBITDA (X)	(0.7)	(0.8)	(0.9)	(1.2)

	12/24	3/25E	6/25E	9/25E
EPS (\$)	0.66	0.25	0.48	0.59

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

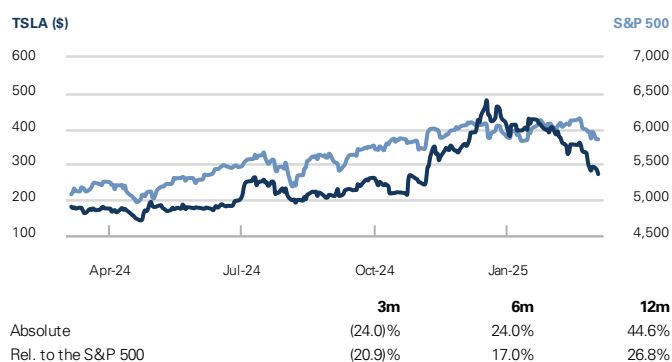
Ratios & Valuation

	12/24	12/25E	12/26E	12/27E
P/E (X)	113.0	132.8	85.1	68.9
EV/EBITDA (X)	45.3	47.5	34.0	27.9
EV/sales (X)	7.4	8.1	6.7	6.0
FCF yield (%)	0.4	0.5	0.9	1.7
EV/DACF (X)	53.0	58.7	41.8	34.0
CROCI (%)	21.6	18.5	22.2	23.7
ROE (%)	10.5	9.4	12.9	13.7
Net debt/EBITDA (X)	(0.7)	(0.8)	(0.9)	(1.2)
Net debt/equity (%)	(15.3)	(18.6)	(24.3)	(33.9)
Interest cover (X)	20.2	18.1	28.3	34.4
Inventory days	58.3	57.9	63.2	67.1
Receivable days	14.8	16.2	15.4	15.5
Days payable outstanding	61.2	56.8	55.2	55.2

Growth & Margins (%)

	12/24	12/25E	12/26E	12/27E
Total revenue growth	0.9	8.5	20.4	11.8
EBITDA growth	(8.2)	18.3	46.6	22.8
EPS growth	(21.7)	0.4	56.2	23.4
DPS growth	NM	NM	NM	NM
Gross margin	17.9	16.7	17.9	18.8
EBIT margin	7.2	7.1	9.8	11.1

Price Performance



Source: FactSet. Price as of 4 Mar 2025 close.

Income Statement (\$ mn)

	12/24	12/25E	12/26E	12/27E
Total revenue	97,690.0	106,017.8	127,635.5	142,723.3
Cost of goods sold	(80,240.0)	(88,348.6)	(104,739.9)	(115,933.7)
SG&A	(5,834.0)	(5,108.1)	(5,237.7)	(5,456.3)
R&D	(4,540.0)	(5,049.2)	(5,187.5)	(5,489.7)
Other operating inc./exp.)	—	—	—	—
EBITDA	12,444.0	14,715.9	21,577.7	26,486.9
Depreciation & amortization	(5,368.0)	(7,204.0)	(9,107.3)	(10,643.3)
EBIT	7,076.0	7,511.9	12,470.5	15,843.6
Net interest inc./exp.)	1,219.0	1,660.0	1,915.0	1,995.0
Income/(loss) from associates	—	—	—	—
Pre-tax profit	9,032.0	9,171.9	14,385.5	17,838.6
Provision for taxes	(1,837.0)	(1,834.4)	(2,877.1)	(3,567.7)
Minority interest	(65.0)	(73.0)	(90.0)	(100.0)
Preferred dividends	—	—	—	—
Net inc. (pre-exceptionals)	7,130.0	7,264.5	11,418.4	14,170.8
Net inc. (post-exceptionals)	7,130.0	7,264.5	11,418.4	14,170.8
EPS (basic, pre-except) (\$)	2.23	2.25	3.52	4.34
EPS (diluted, pre-except) (\$)	2.04	2.05	3.20	3.95
EPS (ex-ESO exp., dil.) (\$)	--	--	--	--
DPS (\$)	—	—	—	—
Div. payout ratio (%)	0.0	0.0	0.0	0.0
Wtd avg shares out. (basic) (mn)	3,197.0	3,225.1	3,245.1	3,265.1
Wtd avg shares out. (diluted) (mn)	3,494.8	3,546.8	3,570.1	3,590.1

Balance Sheet (\$ mn)

	12/24	12/25E	12/26E	12/27E
Cash & cash equivalents	17,037.0	21,140.1	29,047.0	43,799.8
Accounts receivable	4,418.0	5,009.5	5,756.9	6,359.3
Inventory	12,017.0	16,030.4	20,248.4	22,367.4
Other current assets	25,268.0	25,268.0	25,268.0	25,268.0
Total current assets	58,740.0	67,448.0	80,320.3	97,794.5
Net PP&E	40,996.0	43,856.0	45,812.7	46,233.4
Net intangibles	394.0	330.0	266.0	202.0
Total investments	0.0	0.0	0.0	0.0
Other long-term assets	22,320.0	22,420.0	22,520.0	22,620.0
Total assets	122,070.0	133,674.0	148,539.1	166,469.9
Accounts payable	12,474.0	15,028.5	16,675.2	18,420.2
Short-term debt	—	—	—	—
Current lease liabilities	2,456.0	2,456.0	2,456.0	2,456.0
Other current liabilities	13,891.0	13,891.0	13,891.0	13,891.0
Total current liabilities	28,821.0	31,375.5	33,022.2	34,767.2
Long-term debt	5,757.0	5,757.0	5,757.0	5,757.0
Non-current lease liabilities	—	—	—	—
Other long-term liabilities	13,812.0	13,812.0	13,812.0	13,812.0
Total long-term liabilities	19,569.0	19,569.0	19,569.0	19,569.0
Total liabilities	48,390.0	50,944.5	52,591.2	54,336.2
Preferred shares	—	—	—	—
Total common equity	72,913.0	81,962.5	95,180.9	111,366.7
Minority interest	767.0	767.0	767.0	767.0
Total liabilities & equity	122,070.0	133,674.0	148,539.1	166,469.9
BVPS (\$)	20.86	23.11	26.66	31.02

Cash Flow (\$ mn)

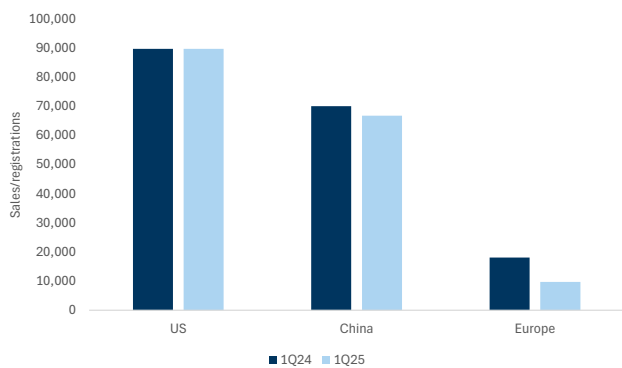
	12/24	12/25E	12/26E	12/27E
Net income	7,153.0	7,264.5	11,418.4	14,170.8
D&A add-back	5,368.0	7,204.0	9,107.3	10,643.3
Minority interest add-back	—	—	—	—
Net (inc)/dec working capital	81.0	(2,050.4)	(3,318.8)	(976.4)
Others	2,321.0	1,785.0	1,800.0	2,015.0
Cash flow from operations	14,923.0	14,203.1	19,006.9	25,852.8
Capital expenditures	(11,339.0)	(10,000.0)	(11,000.0)	(11,000.0)
Acquisitions	(7,445.0)	—	—	—
Divestitures	—	—	—	—
Others	(3.0)	(100.0)	(100.0)	(100.0)
Cash flow from investing	(18,787.0)	(10,100.0)	(11,100.0)	(11,100.0)
Dividends paid	—	—	—	—
Share issuance/(repurchase)	—	—	—	—
Inc/(dec) in debt	2,469.0	—	—	—
Others	1,534.0	—	—	—
Cash flow from financing	3,712.0	0.0	0.0	0.0
Total cash flow	(152.0)	4,103.1	7,906.9	14,752.8
Free cash flow	3,584.0	4,203.1	8,006.9	14,852.8
Free cash flow per share (basic) (\$)	1.03	1.30	2.47	4.55

Source: Company data, Goldman Sachs Research estimates.

soft, which we believe is partly due to the Model Y changeover and partly due to somewhat weaker underlying demand than we had expected (as we think growth has also been slower than we had previously estimated for Model 3 and Cybertruck per delivery data, consumer surveys, incentives that Tesla has been utilizing, and the competitive landscape). We expect shipments to be stronger in the month of March driven by the refreshed Model Y ramp. Overall, we now expect deliveries of 375K in 1Q25, down from our prior 399K view and well below Visible Alpha consensus at 426K.

Specifically on monthly datapoints by region: 1) *USA* - Through February, deliveries are tracking flattish yoy per Wards and Motor Intelligence (with Wards showing a slight decline and Motor Intelligence reporting slight growth) but down meaningfully qoq as 1Q24 was impacted by the Model 3 transition; 2) *Europe* - European registration data for January shows a >40% yoy decline, and registration data from daily reporting countries (i.e. UK, Spain, Netherlands, Denmark, Sweden, Norway) indicates a mid to high 20% decline through February (although we note that this daily reporting data does not include Germany, which has been a larger source of weakness for the more complete January data); 3) *China* - CPCA data in January and registration data through February indicates a mid single digit decline in China retail sales yoy QTD, but assuming a stronger March as production of the new Model Y ramps, we think China could end up being more flattish yoy for 1Q25 overall.

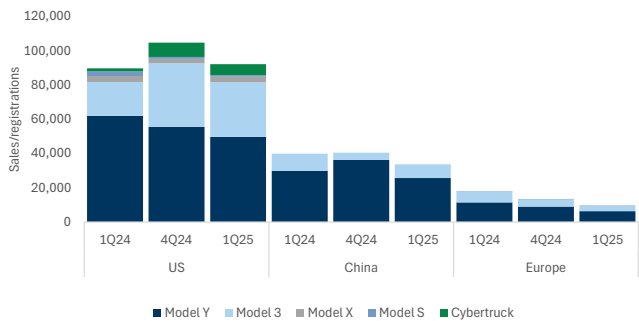
Exhibit 1: Sales/registrations by region QTD...



Data through February for US and China, through January for Europe

Source: Autodata/Wards, CPCA, CNEVPPost, Tesla Motors Club

Exhibit 2: ...with US flattish yoy but declines in China and Europe driven by Model 3 and Model Y

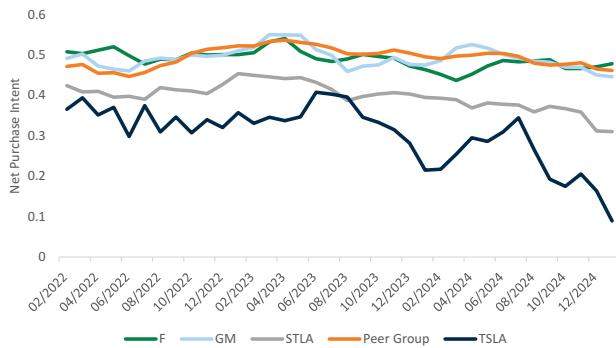


Data through February for US, through January for China and Europe

Source: Autodata, CPCA, Tesla Motors Club

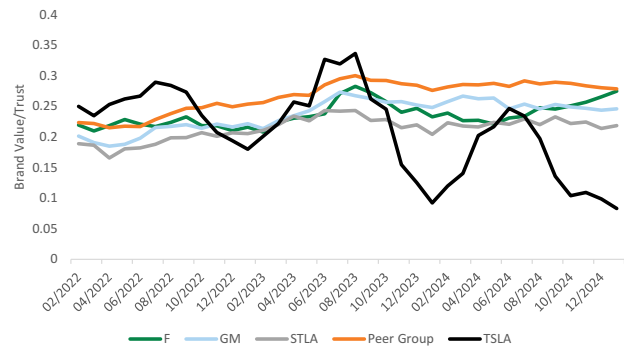
While the Model Y transition is a key driver of the weakness, we also believe that underlying demand is somewhat weaker than we had previously expected. For the US, we show data from HundredX (which aggregates survey responses from US consumers with a goal of having a representative demographic sample including by geography, age, income, gender, and ethnicity) on Tesla's net purchase intent and net positive perception of brand values/trust. The survey data shows a meaningful decline in recent months both overall and compared to peers ([Exhibit 3](#) and [Exhibit 4](#)).

Exhibit 3: Tesla's net purchase intent score has declined meaningfully per HundredX



Source: HundredX

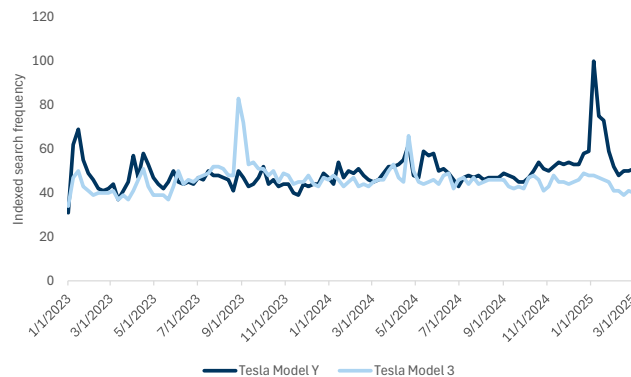
Exhibit 4: Perception of Tesla's brand has declined relative to peers per HundredX



Source: HundredX

More broadly, we highlight Google Search trends for Tesla Model 3 and Model Y worldwide, which shows relatively stable search volumes for Model 3, with Model Y searches spiking in January around the time that Tesla announced the refreshed Model Y but now having normalized.

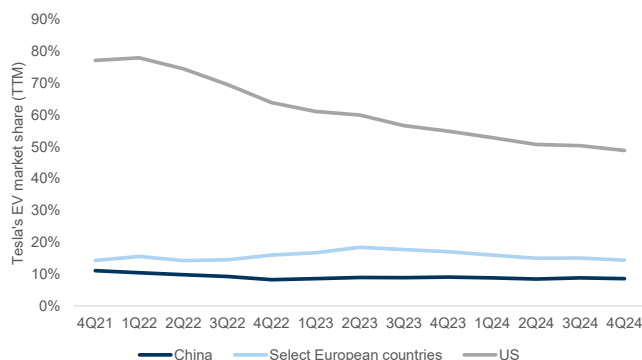
Exhibit 5: Google Search trends for Model 3 and Model Y worldwide



Source: Google Trends

We also believe Tesla is facing a strong competitive environment especially in China. We recently did a demo ride in the Xiaomi SU7 in Beijing, including the new Ultra SKU that has a faster 0-60 time than the Model S Plaid. The SU7 overall is experiencing robust demand and a large backlog per a note from our colleague Timothy Zhao.

To help contextualize Tesla's market share, as of 4Q24 Tesla had ~50% EV share in the US, mid teens share in Europe and high single digit share China. We show the share trend over time in [Exhibit 6](#).

Exhibit 6: Tesla EV market share in key regions

Source: CPCA, Autodata, Tesla Motors Club, ACEA

We lower our 2025 deliveries estimate to 1.91 mn (up 7% yoy) from 1.96 (up 10% yoy), and our 2026/27 estimates to 2.25 mn/2.50 mn from 2.30 mn/2.60 mn reflecting lower assumptions for Tesla's existing models and partly offset by a more positive view of shipments from Tesla's upcoming new model launches (which could benefit from new form factors and lower prices). Our estimates are below VisibleAlpha consensus at 1.98 mn/2.37 mn/2.68 mn respectively. Separately, we lower our energy gross margin assumptions, reflecting higher tariffs on imports from China that are already in effect (given the battery sourcing for Megapacks) and the competitive landscape. However, our estimates do not include tariffs on imports from Mexico or Canada, which are evolving and could still be adjusted per media reports.

We lower our 2025/26/27 EPS estimates including SBC to \$2.05/\$3.20/\$3.95 from \$2.20/\$3.45/\$4.20 prior, primarily reflecting lower vehicle deliveries and lower Energy margins. Excluding SBC, we now model 2025/26/27 EPS of \$2.45/\$3.60/\$4.40.

FSD-like features released in China; v13 performance in the US has improved from v12

On 2/25/25, media outlets and Tesla users in China reported that Tesla had pushed an update to some users who had previously purchased Tesla's FSD software (which costs ¥64,000, ~\$8,750) with several FSD-like features including automatic lane change, traffic light detection, and turning capabilities. Reviews, per media outlets, have been mixed, with some users commenting on good performance, and others noting several region-specific issues such as improper use of bike/bus lanes. Tesla has had less time to improve and iterate on FSD in China, which is why we believe it is described as FSD-like, although Tesla aims to increase performance over time in the region.

Our own recent demo rides in Navigate on Autopilot (NOA) equipped vehicles in China suggest that Tesla is facing a tough competitive environment for FSD. Key competitors in China do not generally require a separate software purchase for smart driving features, although sometimes it's only being offered on more premium vehicle trims (Exhibit 7).

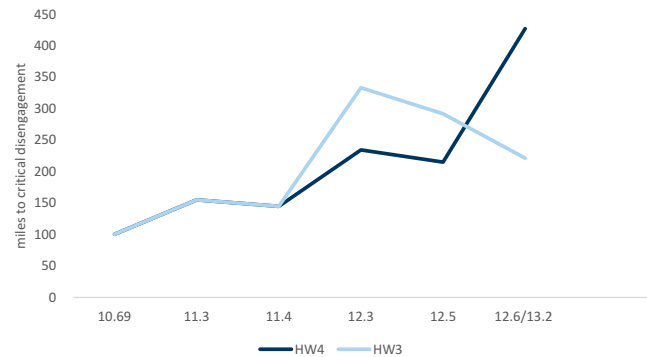
Exhibit 7: Competitive landscape of NOA offerings and pricing strategies in China

Brand	Models available with highway NOA	Models available with city NOA	Pricing
BYD	"God's Eye C" using pure-vision approach, equipped on BYD brand	"God's Eye A" equipped on Yangwang brand; "God's Eye B" equipped on high-spec versions of Denza and BYD brand (e.g. Seal/Seal Lion 07 EV/ Song L EV/Han/Tang DM-i)	Highway NOA and valet parking functions standard configuration to ~\$14k USD (Rmb100k) priced models and available to models priced around \$10k USD (Rmb70k); vehicle models priced above ~\$28k USD (Rmb200k) have "God's Eye B" to support city NOA
Li Auto	AD Pro for highway NOA; Pro and Air trim models of Li Auto's L series come standard with the Li AD Pro system	AD Max for urban NOA; available for high-spec versions with lidar (e.g. L6, L7, L8) and standard for the L9 and Li Mega	AD Pro vs. Max trim pricing difference of ~\$4-5k USD (Rmb 30k); Li L6 retails at ~\$35k USD (Rmb250k) for the Pro trim and ~\$39k (Rmb280k) for the Max trim
Xpeng		All scenario NOA is standard in higher-trim versions of G6, G9, P7, X9; available for configuration in MONA models, and standard for P7+	For the X9 model, there is a ~\$3k USD (Rmb 20k) difference between the premium and standard model trims
Nio		NOP+ (Nio's urban NOA system) is available for the NT 2.0 platform-based vehicle models (e.g. ET5, ET7, ES7, ES8, and EC7)	When Nio announced the NOP+ launch, it said subscriptions would be ~\$50-\$55/month (Rmb 380); Nio was also offering a free year to new vehicle owners
Huawei		City NOA available for Huawei Aito (e.g. M5, M7, M9 models) as well as Huawei backed models from other brands (e.g. Luxeed S7, Voyah Dream MPV)	Highway NOA is standard; city NOA features can be purchased for a one-time payment of ~\$5k USD (Rmb36k), monthly subscription of ~\$100 USD (Rmb720), or a yearly subscription of ~\$1k USD (Rmb7.2k); some more premium models (e.g. Voyah's Dream MPV) come standard with Huawei's Qiankun ADS 3.0 software with pricing ranging from ~\$49k-\$57k (Rmb360k-Rmb410k) depending on powertrain
Xiaomi	Xiaomi Pilot Pro has auto parking and highway NOA capabilities (for standard trim)	City NOA feature is available for eligible drivers who have the Xiaomi Pilot Max intelligent driving system (for Pro and Max trims)	The Xiaomi SU7 Standard edition comes with the Xiaomi Pilot Pro, while the other two more expensive versions come with the Xiaomi Pilot Max system. The Standard, Pro, and Max variants had starting prices of roughly \$29k (Rmb216k), ~\$34k (Rmb246k), and ~\$41k (Rmb300k), respectively. Customers who purchased an SU7 on or before Dec 31, 2024 received free lifetime access to the Xiaomi Pilot Pro or Xiaomi Pilot Max
Tesla		Autopilot on city streets is available for all Tesla models with purchase of Tesla FSD package	The update is available to Tesla owners who pay an extra ~\$8,750 (Rmb64k) for FSD capabilities

Source: Company data, Goldman Sachs Global Investment Research

In the US, we continue to see solid performance of FSD v13 on Hardware/AI4 vehicles. The latest crowdsourced data across ~26k miles of data indicates a critical intervention every 400-500 miles for v13 on AI4 and ~98% of drives having no critical interventions (Exhibit 8).

Exhibit 8: Tesla FSD miles to critical disengagement by version per crowdsourced data



v12.6 is only available on HW3 and v13 is only available on HW4

Source: TeslaFSDTracker

We believe that FSD is currently leading for performance in the US market relative to competitor eyes-on ADAS products, although Waymo has come to market ahead of Tesla in robotaxis. While Tesla's FSD miles between critical intervention in the US with v13 is good in our opinion, it is still meaningfully lower than the ~700k miles between accidents for a human driver on average in the US (with the crowd sourced data showing roughly 400-500 miles between critical intervention for v13, and company commentary on X implying that Tesla is closer to ~10K miles between critical interventions with its test fleet). As a result, we believe it will take Tesla some time before FSD can exceed human performance in wide domain, and we therefore do not expect a broad release of unsupervised FSD to occur soon. However, we now assume a

very small robotaxi deployment in 2H25 as we think Tesla could use a higher degree of geographic specific data and remote assistance to allow for a small operation.

Price target and key risks

We remain Neutral rated on the stock. We lower our 12-month price target to \$320 from \$345, which is based on 100X (unchanged) 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/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, 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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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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Quantum

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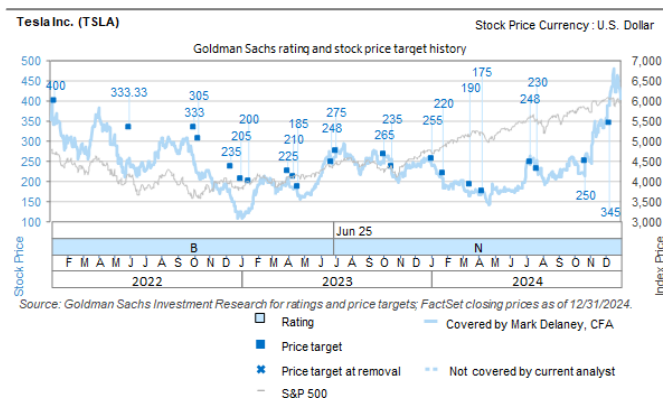
Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution				Investment Banking Relationships		
	Buy	Hold	Sell		Buy	Hold	Sell
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