

Tesla Inc. (TSLA)

Expect slower growth in near to intermediate term to be an overhang on the stock; 4Q23 EPS recap

TSLA	12m Price Target: \$220.00	Price: \$207.83	Upside: 5.9%
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Tesla reported revenue/non-GAAP EPS (excluding SBC) of \$25.2 bn/\$0.71, which was 2%/\$0.02 below both the Street (FactSet) and GS. The non-GAAP automotive gross margin (including SBC and excluding the revenue from regulatory credits) was 17.2%, about in line with GS at 17.25%. This was up from 16.3% in 3Q23 as Tesla reduced its COGS per vehicle to about \$36.3K (down 3% qoq and down 8% yoy).

The company commented that its vehicle volume growth rate may be notably lower in 2024 than the growth rate achieved in 2023, and it expects the growth rate of deployments and revenue in its Energy Storage business to outpace the Automotive business in 2024. Vehicle deliveries were up 38% yoy in 2023, and consensus had already implied a deceleration in volumes in 2024. We now model ~2.08 mn units in 2024, or +15% yoy (from 2.125 mn and +17.5% yoy prior), and below Visible Alpha prior to the report at 2.176 mn.

While we continue to believe that Tesla is well positioned for longer-term growth given its leading position in the EV and clean energy markets, we believe that slower growth over the near to intermediate term both in terms of vehicle deliveries and EPS will be an overhang on the stock. On units, we expect a more meaningful re-acceleration in growth as production of its low-cost next generation vehicle (we believe at around a \$25K-\$30K price point) ramps, and Tesla said it is targeting start-of-production for this in 2H25 (but noted it has sometimes been too optimistic on timelines historically). On margins, Tesla suggested that cost reductions may slow in 2024 and that it will continue to monitor interest rates and vehicle affordability to help determine price (implying potential further price reductions in our view especially given the pricing actions the company took in January for certain geographies and models).

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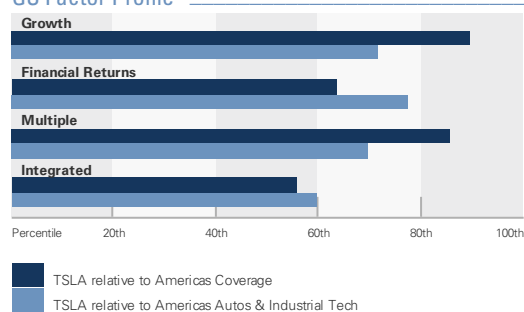
Key Data

Market cap: \$725.7bn
Enterprise value: \$706.4bn
3m ADTV: \$27.0bn
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	109,041.4	141,058.6	168,679.5
Revenue (\$ mn) Old	97,379.7	115,017.4	148,008.5	—
EBITDA (\$ mn)	16,633.0	18,159.3	28,825.6	35,551.5
EBIT (\$ mn)	8,891.0	9,154.1	17,115.0	21,493.0
EPS (\$) New	2.60	2.45	4.40	5.40
EPS (\$) Old	2.63	3.20	5.10	—
P/E (X)	83.5	84.9	47.2	38.5
Dividend yield (%)	0.0	0.0	0.0	0.0
Net debt/EBITDA (X)	(0.9)	(1.1)	(1.1)	(1.5)
	12/23	3/24E	6/24E	9/24E
EPS (\$)	0.57	0.48	0.54	0.62

GS Factor Profile



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

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Neutral

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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	84.9	47.2	38.5
EV/EBITDA (X)	40.6	35.4	22.0	17.4
EV/sales (X)	7.0	5.9	4.5	3.7
FCF yield (%)	0.6	0.8	2.1	2.9
EV/DACF (X)	45.2	43.4	26.8	21.0
CROCI (%)	33.9	25.3	33.8	36.1
ROE (%)	16.9	12.6	19.0	18.9
Net debt/EBITDA (X)	(0.9)	(1.1)	(1.1)	(1.5)
Net debt/equity (%)	(22.5)	(26.1)	(36.1)	(46.2)
Interest cover (X)	57.0	38.1	71.3	89.6
Inventory days	61.1	57.9	53.6	53.6
Receivable days	12.2	14.2	14.8	15.3
Days payable outstanding	68.5	64.3	63.5	65.7

Growth & Margins (%)

	12/23	12/24E	12/25E	12/26E
Total revenue growth	18.8	12.7	29.4	19.6
EBITDA growth	(22.1)	8.6	68.0	26.8
EPS growth	(28.2)	(6.0)	79.7	22.6
DPS growth	NM	NM	NM	NM
Gross margin	18.2	17.3	19.3	19.4
EBIT margin	9.2	8.4	12.1	12.7

Price Performance



Source: FactSet. Price as of 24 Jan 2024 close.

Income Statement (\$ mn)

	12/23	12/24E	12/25E	12/26E
Total revenue	96,773.0	109,041.4	141,058.6	168,679.5
Cost of goods sold	(79,113.0)	(90,205.9)	(113,790.8)	(135,960.2)
SG&A	(4,800.0)	(5,187.6)	(5,375.2)	(5,843.2)
R&D	(3,969.0)	(4,493.7)	(4,787.6)	(5,383.2)
Other operating inc./exp.)	—	—	—	—
EBITDA	13,558.0	14,729.3	24,740.6	31,366.5
Depreciation & amortization	(4,667.0)	(5,575.2)	(7,625.6)	(9,873.6)
EBIT	8,891.0	9,154.1	17,115.0	21,493.0
Net interest inc./exp.)	910.0	1,320.0	1,810.0	1,960.0
Income/(loss) from associates	—	—	—	—
Pre-tax profit	9,975.0	10,474.1	18,925.0	23,453.0
Provision for taxes	(926.0)	(1,833.0)	(3,311.9)	(4,104.3)
Minority interest	23.0	(75.0)	(75.0)	(175.0)
Preferred dividends	—	—	—	—
Net inc. (pre-exceptionals)	9,072.0	8,566.2	15,538.1	19,173.7
Net inc. (post-exceptionals)	9,072.0	8,566.2	15,538.1	19,173.7
EPS (basic, pre-except) (\$)	2.86	2.69	4.84	5.94
EPS (diluted, pre-except) (\$)	2.60	2.45	4.40	5.40
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	3,188.9	3,208.9	3,228.9
Wtd avg shares out. (diluted) (mn)	3,482.8	3,499.9	3,532.2	3,553.9

Balance Sheet (\$ mn)

	12/23	12/24E	12/25E	12/26E
Cash & cash equivalents	17,189.0	22,208.7	35,984.9	55,091.7
Accounts receivable	3,508.0	5,005.6	6,417.9	7,702.7
Inventory	13,626.0	15,016.8	18,397.9	21,567.5
Other current assets	15,498.0	15,498.0	15,498.0	15,498.0
Total current assets	49,821.0	57,729.1	76,298.7	99,859.9
Net PP&E	33,905.0	39,401.8	43,356.2	45,562.6
Net intangibles	431.0	359.0	279.0	199.0
Total investments	0.0	0.0	0.0	0.0
Other long-term assets	22,666.0	22,766.0	22,866.0	22,966.0
Total assets	106,618.0	120,050.9	142,594.9	168,382.6
Accounts payable	14,431.0	17,352.8	22,248.6	26,702.6
Short-term debt	—	—	—	—
Current lease liabilities	2,373.0	2,373.0	2,373.0	2,373.0
Other current liabilities	11,944.0	11,944.0	11,944.0	11,944.0
Total current liabilities	28,748.0	31,669.8	36,565.6	41,019.6
Long-term debt	2,857.0	2,857.0	2,857.0	2,857.0
Non-current lease liabilities	—	—	—	—
Other long-term liabilities	11,404.0	11,404.0	11,404.0	11,404.0
Total long-term liabilities	14,261.0	14,261.0	14,261.0	14,261.0
Total liabilities	43,009.0	45,930.8	50,826.6	55,280.6
Preferred shares	—	—	—	—
Total common equity	62,634.0	73,145.2	90,793.3	112,126.9
Minority interest	975.0	975.0	975.0	975.0
Total liabilities & equity	106,618.0	120,050.9	142,594.9	168,382.6
BVPS (\$)	17.98	20.90	25.70	31.55

Cash Flow (\$ mn)

	12/23	12/24E	12/25E	12/26E
Net income	14,974.0	8,566.2	15,538.1	19,173.7
D&A add-back	4,667.0	5,575.2	7,625.6	9,873.6
Minority interest add-back	—	—	—	—
Net (inc)/dec working capital	(2,564.0)	33.3	102.5	(0.4)
Others	(3,821.0)	1,945.0	2,110.0	2,160.0
Cash flow from operations	13,256.0	16,119.7	25,376.2	31,206.8
Capital expenditures	(8,898.0)	(11,000.0)	(11,500.0)	(12,000.0)
Acquisitions	(6,685.0)	—	—	—
Divestitures	—	—	—	—
Others	(1.0)	(100.0)	(100.0)	(100.0)
Cash flow from investing	(15,584.0)	(11,100.0)	(11,600.0)	(12,100.0)
Dividends paid	—	—	—	—
Share issuance/(repurchase)	—	—	—	—
Inc/(dec) in debt	2,591.0	0.0	—	—
Others	342.0	—	—	—
Cash flow from financing	2,593.0	0.0	0.0	0.0
Total cash flow	265.0	5,019.7	13,776.2	19,106.8
Free cash flow	4,358.0	5,119.7	13,876.2	19,206.8
Free cash flow per share (basic) (\$)	1.27	1.61	4.32	5.95

Source: Company data, Goldman Sachs Research estimates.

We lower our EPS estimates, and maintain our Neutral-rating on the stock. We could be more positive on the stock if Tesla were closer to ramping a vehicle with the third generation platform at the \$25-\$30K price point (which we believe could be disruptive in the market) or made faster progress with AI enabled technologies than we currently expect (such as FSD or Optimus).

4Q23 financial results

Tesla reported 4Q23 revenue of \$25,167 mn (up 8% qoq and up 3% yoy) which was 2% below GS at \$25,774 mn and 2% below the Street (FactSet) at \$25,640 mn. Tesla reported the following by segment:

- **Automotive** revenue of \$21,563 mn (up 10% qoq and up 1% yoy) compared to GS at \$21,842 mn and the Street at \$21,493 mn. Implied vehicle ASP was about \$43.5K and below our \$44.2K estimate. Sales of regulatory credits were \$433 mn in the quarter vs. our estimate of \$325 mn, down from \$554 mn last quarter and \$467 mn in 4Q22.
- **Energy Generation and Storage** revenue of \$1,438 mn (down 8% qoq and up 10% yoy) compared to GS at \$1,445 mn. The company reported storage deployments of 3,202 MWh (up 30% yoy). Tesla commented that while it expects deployments will continue to be volatile on a sequential basis, impacted by logistics and the global distribution of projects at any given time, the company expects continued growth on a trailing twelve-month basis going forward. Tesla continues to ramp its 40 GWh Megafactory in Lathrop, CA toward full capacity.
- **Service and Other** revenue of \$2,166 mn (about flat qoq and up 27% yoy) compared to GS at \$2,486 mn.

As previously reported, total vehicle deliveries in the quarter were about 485k (up 11% qoq and up 20% yoy). Model 3/Y deliveries in the quarter were about 462k (up 10% qoq and up 19% yoy), and other models (e.g. Model S/X, Cybertruck) deliveries were about 23k (up 44% qoq and up 34% yoy).

Tesla produced about 495k vehicles (up 15% qoq and up 13% yoy), of which 477k were Model 3/Y (up 14% qoq and up 14% yoy) and 18k were other models (e.g. Model S/X/Cybertruck) (up 33% qoq and down 12% yoy).

The total company gross margin (including SBC) was 17.6%, above GS at 17.3% but below the Street at 18.0%. The 3Q23 margin was 17.9%, and 4Q22 was 23.8%.

The non-GAAP automotive gross margin (including SBC and excluding the revenue from regulatory credits) was 17.2%, about in line with GS at 17.25%. The 3Q23 margin was 16.3%, and 4Q22 was 24.3%.

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 and other R&D projects, lower FSD revenue recognition yoy due to the FSD Beta wide release in North America in 4Q22, and the cost of the Cybertruck production ramp. These headwinds were partially offset by lower cost per vehicle, including lower raw material costs, logistics costs and IRA credit benefit, growth in vehicle deliveries, and gross profit

growth in Energy Generation and Storage.

Non-GAAP diluted EPS (excluding SBC) was \$0.71, below both GS and the Street at \$0.73.

Including SBC, EPS was \$0.57 vs. GS at \$0.60. Relative to our estimate, EPS downside was driven primarily by 2% lower revenue, and lower interest and other income (a \$0.04 headwind vs. our forecast), partially offset by a roughly 30 bp higher gross margin and \$87 mn lower opex. The overall EBIT margin was about 50 bps higher than our forecast. We estimate that higher sales of regulatory credits vs. our estimate added \$0.02-\$0.03 to EPS.

Cash and cash equivalents and short-term marketable securities increased by \$3 bn qoq to \$29.1 bn, with FCF of \$2.1 bn (8% of revenue). Inventory dollars were down \$0.1 bn qoq to \$13.6 bn.

By region, Tesla commented that:

- **US:** Tesla commented that in 2023, the Tesla Fremont factory produced nearly 560K vehicles. At Gigafactory Texas, Tesla began production of the Cybertruck and delivered the first units to customers. The company expects the ramp of Cybertruck to take longer than other models given its manufacturing complexity.
- **China:** Tesla commented that Shanghai resumed normal rate production in 4Q, rebounding from the scheduled downtime in 3Q. Production of the updated Model 3 ramped to full speed in less than two months, per the company.
- **Europe:** Tesla commented that Model Y production in Berlin continued to grow in Q4, achieving both a record weekly production rate and a sequential increase in total production volume for the seventh consecutive quarter.

Tesla's stated installed annual capacity estimates across its factories was 650K in California, >950K in Shanghai, and at 375K in Berlin and >325K in Texas, including >125k for Cybertruck in Texas (vs. 3Q23 at 650K in California, >950K in Shanghai, and at 375K in Berlin and >375K (including >125k for Cybertruck) in Texas).

Tesla commented that in Q4 it released FSD Beta V12 (which now uses AI neural net training for object detection, path planning and vehicles as a replacement for coding) to select customers.

Company Outlook

The company commented that in 2024, its 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 at Gigafactory Texas.

In 2024, Tesla expects the growth rate of deployments and revenue in its Energy Storage business to outpace the Automotive business.

Tesla commented that Cybertruck production and deliveries will ramp throughout this year. In addition, the company continues to make progress on its next generation platform.

Additionally, Tesla commented that it continues to execute on innovations to reduce the cost of manufacturing and operations. Over time, it expects its hardware-related profits to be accompanied by an acceleration of AI, software and fleet-based profits.

Tesla expects a tax rate starting in 1Q24 that is more in-line with companies in the S&P 500.

Implications

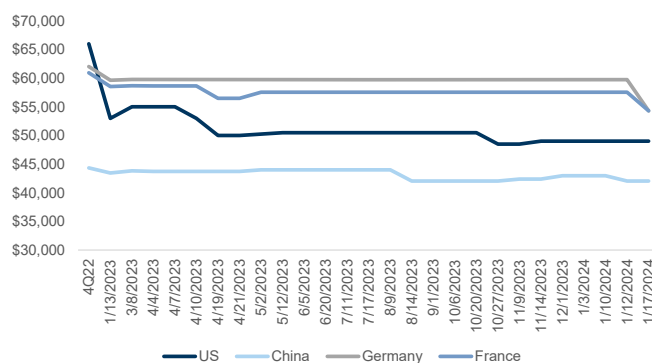
We maintain our Neutral rating on the stock.

While we continue to believe that Tesla is well positioned for longer-term growth given its leading position in the EV and clean energy markets (which we attribute to factors including its ability to offer full solutions including charging, storage, software/FSD and services, and with a strong cost structure), we believe that slower growth over the near to intermediate term both in terms of vehicle deliveries and EPS growth will be an overhang on the stock.

On vehicle deliveries, we expect a more meaningful re-acceleration in volume growth as production of its low-cost next generation vehicle (we believe selling for around a \$25K-\$30K price point, consistent with recent media reports) ramps. Tesla commented that it is targeting to begin production on its lower-cost gen 3 platform in 2H25, but the company noted it has sometimes been too optimistic with timelines (which we believe implies that a ramp may not occur until late 2025 or even 2026). We model very limited 4Q25 volumes, and 150K units in 2026, of a vehicle using the third generation platform. Overall, we reduce our 2024/2025 vehicle delivery assumptions to ~2.08 mn/2.525 mn from 2.125 mn/2.65 mn, and we introduce a 2026 estimate of 3.0 mn.

On margins, Tesla suggested that cost reductions could slow in 2024 (after making better progress than we expected in 4Q23), and that it will continue to monitor interest rates and affordability to help determine price (which we believe implies vehicle pricing could continue to decline, consistent with Tesla lowering prices in January in countries such as China, Germany and France; Exhibit 1). Overall we believe this suggests margin headwinds will continue in 2024.

Exhibit 1: Tesla Pricing on Model Y Long Range from 4Q22-1/17/2024



Source: Company data, Goldman Sachs Global Investment Research

While we believe Tesla is a leader in software and services, as discussed in our 11/13/23

report, “Contextualizing Tesla’s AI and FSD opportunities,” we do not currently expect the company to provide its software at scale to other OEMs at least in the near-term, and the company suggested on the 4Q23 call that licensing FSD software to other OEMs does not have momentum currently. Tesla also said that its Dojo technology was doing AI training, but also described the project as a long-shot (but one that had a very high potential return if successful).

We could be more positive on the stock if Tesla were closer to ramping a third gen vehicle at the \$25-\$30K price point (which we believe could be disruptive in the market) or made faster progress than we currently expect with AI enabled technologies (such as FSD or Optimus).

While Tesla expects a higher tax rate starting in 2024, in terms of implications for long-term EPS growth, note that we had already contemplated a ~20% tax rate in the 2030 EPS scenarios outlined in our 11/13/23 report.

Estimate changes

We lower our 2024/2025 EPS estimates including SBC to \$2.45/\$4.40 from \$3.20/\$5.10 prior on lower vehicle revenue and margins, as well as higher taxes, and partly offset by higher sales of regulatory credits than we previously assumed. We introduce our 2026E EPS estimate including SBC of \$5.40.

Our CY24/25 non-GAAP EPS estimates (ex. SBC) are now \$3.00/\$5.00 (vs. \$3.75/\$5.65 prior). We introduce our 2026 EPS estimate (ex. SBC) of \$6.00.

Exhibit 2: GS estimate revisions

TSLA estimate revisions	2024E		2025E		2026E
	Old GSe	New GSe	Old GSe	New GSe	New GSe
Revenue	\$115,017	\$109,041	\$148,009	\$141,059	\$168,679
Automotive non-GAAP gross margin excl. credits	18.6%	16.5%	20.4%	18.5%	19.0%
EBIT margin including SBC	9.8%	8.4%	12.7%	12.1%	12.7%
Non-GAAP EPS including SBC	\$3.20	\$2.45	\$5.10	\$4.40	\$5.40
Non-GAAP EPS excluding SBC	\$3.75	\$3.00	\$5.65	\$5.00	\$6.00

Source: Goldman Sachs Global Investment Research

Valuation, price target, and key risks

We lower our 12-month price target to \$220 from \$255, which is based on 50X (unchanged) applied to our updated Q5-Q8 EPS estimate including SBC.

On our updated estimates we believe an upside scenario for the stock over the next 12-24 months could be ~\$300 using a multiple of 50X-55X applied to 2026E EPS (note we now model 2026 EPS including SBC of \$5.40 and excluding SBC of \$6.00). We believe a downside scenario could be ~\$70-\$90 using a multiple of ~30X applied to 2024 EPS (note that we model 2024E EPS including SBC at \$2.45 and excluding SBC at \$3.00).

Key downside risks to our view relate to potentially larger vehicle price reductions than we expect, increased competition in EVs, 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 from 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 and Optimus) 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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Quantum

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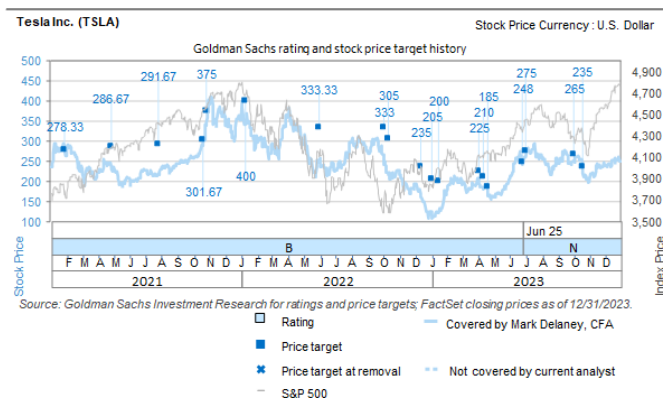
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Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution				Investment Banking Relationships		
	Buy	Hold	Sell		Buy	Hold	Sell
Global	48%	35%	17%		62%	55%	43%

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