

US Autos & Industrial Tech

1Q24 preview - Positioning for slower BEV and strong datacenter sales; Downgrade ST, CHPT

We believe not just end market but also customer and geographic exposures will be especially important this earnings season. For example, while headline global auto sales have been relatively solid YTD in the US (up 5% yoy in 1Q), Europe (up 11% YTD through February) and China (up 17% YTD through February), BEV sales slowed in particular in the US to just 3% yoy in 1Q (per Motor Intelligence). Moreover, fundamentals have varied by OEM. Tesla's global volumes declined by 9% yoy in 1Q24 and Ford announced in April that it will delay certain EV launches, while some China domestic OEMs are seeing solid volume growth (albeit with aggressive pricing in the market; e.g. BYD's EV sales were up 13% yoy in 1Q24).

Similarly, in the industrial market, we believe trends are choppy. The US ISM index has picked up which we see as a positive sign, but industrial automation demand faced headwinds (per comments from Siemens and Rockwell at investor events during the quarter). We believe that datacenter remains the strongest end market driven by AI investments.

We're lowering our Tesla estimates and price target post the weaker 1Q24 deliveries report, and what we think are both production and competitive/market headwinds. 1Q EV sales data in the US, Tesla's 1Q deliveries report, and recent OEM news on EV/hybrid plans (including from Ford in April) imply in our view that US EV sales may only be up 5-10% for 2024 (vs. our earlier up 25% yoy estimate). In addition, the updated EPA 2027-2032 emissions standards (allowing higher hybrid and lower BEV mix to comply) suggest that BEV mix could be about 40% in 2030 (below our earlier 50% penetration forecast).

We show net promoter scores and net future purchase intentions over time for Tesla, Ford and GM (Chevrolet) in this note, based on proprietary survey data of US respondents from HundredX. Note that the net promoter score measures the ratio of respondents who would recommend the brand/product to a friend. Tesla's scores have trended lower, which we believe is consistent with the slower EV data given Tesla's >50% share of the US EV market.

We believe that Sensata and ChargePoint will be impacted by the slower US EV market, and we believe that both companies have higher exposure to North America

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than other regions for their EV related businesses.

We downgrade ST to Neutral from Buy. We expect slower near to intermediate term revenue growth in its North America auto business tied to EVs, due to both weaker near-term EV sales, and from some traditional OEMs delaying certain EV launches. Recall that Sensata has about 1.5X the content on a BEV vs. an ICE vehicle in North America, compared to 0.5X in Europe and 1.25X in China (although we believe Sensata is more tied to multinationals than domestic OEMs like BYD within its China EV business). We see a potentially high ceiling longer-term for Sensata shares given the strong electrification related bookings from recent years, and its content opportunity is attractive for plug-in hybrids. However, we see modest downside to Street estimates, and we believe the company would need to be closer to an acceleration in fundamentals before the stock can outperform.

We downgrade CHPT shares to Sell from Neutral as we believe slower growth in the number of EVs on the road in the US, and rising competition in EV charging, will lead to less growth than is in Street consensus (FactSet). With about 80% of its revenue tied to North America, we believe ChargePoint will be impacted by slower US EV sales. In addition, we believe competition is increasing, including from Tesla (both from opening up most of its US network, which could limit demand for networks using ChargePoint, and also because Tesla has recently sold its chargers as a merchant business in select situations such as to BP - putting Tesla in more direct competition with ChargePoint) and more broadly (ChargePoint noted a shift to multi-sourcing in North America on its last conference call). We'd look to be more positive on the stock if we had a more constructive view of fundamentals, which could occur if ChargePoint has more success than we expect selling standalone software & services, makes faster progress with its cost reduction efforts, or if demand for its chargers is stronger than we anticipate.

We believe there is downside to Street estimates (FactSet) this earnings season for Magna (from its Fisker business and North American OEM EV exposure). We see some risk to estimates for BDC (on recent industrial automation datapoints) and APTV (given its EV exposure) but our estimates are relatively in line with consensus for the full year.

We are positive on FLEX, as we believe that the company will provide positive longer-term commentary on its F4Q call driven by its hyperscale exposure (we expect FY25 EPS guidance to be in line with the Street and comments management provided last quarter, but our FY26 EPS estimate is slightly above the Street). We also expect positive comments from Ford and GM on 2024 EBIT (although Ford has said its 1Q will be impacted by some F-Series wholesale shipments shifting to 2Q from 1Q). Finally, we believe Amphenol and Vertiv will benefit from their AI/datacenter exposure.

We adjust estimates and or/price targets for TSLA, ST, CHPT, RIVN, LEA, MGA, F, VRT, and APH in this report.

Stock Trading Recap — stocks in our coverage have traded lower YTD

driven by downward estimate revisions

Since the start of 2024, the stocks in our coverage are down 8% at the median vs. the S&P 500 up 9%. Established companies in our coverage are about flat while early-stage companies are down 27% at the median.

We believe the underperformance has been driven by factors including slowing EV volume growth, and inventory reductions.

Exhibit 1: Stock performance of covered companies since 4Q23 EPS reports and YTD

	Stock Performance			
	Since 4Q23 reports		2024 YTD	
	Absolute	Relative to S&P 500	Absolute	Relative to S&P 500
Auto OEMs				
GM	16.2%	10.6%	23.4%	14.4%
F	11.1%	6.1%	10.0%	0.9%
TSLA	-16.8%	-23.6%	-30.4%	-39.5%
RIVN	-32.2%	-36.6%	-55.5%	-64.6%
Tier 1 Suppliers				
BWA	11.6%	7.5%	-2.0%	-11.1%
LEA	4.6%	-0.4%	0.2%	-8.9%
GNTX	5.8%	-0.5%	9.9%	0.9%
MGA	-4.0%	-7.5%	-11.1%	-20.2%
APTIV	-6.5%	-13.8%	-15.2%	-24.3%
VC	-4.5%	-9.0%	-10.1%	-19.2%
Electronic Components				
APH	15.9%	9.0%	17.6%	8.6%
* TEL	0.8%	-6.1%	3.0%	-6.0%
ST	8.6%	3.6%	-4.5%	-13.5%
BDC	6.0%	1.9%	15.6%	6.5%
Lidar & Autonomy				
AUR	-2.7%	-6.8%	-26.8%	-35.8%
LAZR	-24.8%	-27.2%	-44.2%	-53.3%
INVZ	-12.4%	-15.0%	-44.3%	-53.3%
MBLY	11.8%	5.5%	-27.9%	-36.9%
EMS				
* FLEX	21.2%	13.8%	-5.5%	-14.6%
* JBL	-6.0%	-7.0%	8.8%	-0.3%
Test & Measurement				
* KEYS	2.8%	-1.8%	-0.2%	-9.3%
Power & Thermal Management				
VRT	43.7%	39.3%	75.2%	66.1%
Voice Technology				
* CRNC	-24.3%	-29.3%	-28.4%	-37.5%
Charging Infrastructure				
* CHPT	-7.5%	-9.9%	-20.9%	-30.0%
Warehouse Automation				
* SYM	-8.8%	-14.1%	-11.9%	-21.0%
EV Battery				
QS	-19.9%	-24.0%	-11.7%	-20.7%

*Since companies most recent FY quarterly reports

Source: FactSet

CY24/CY25 consensus EPS estimates for established companies in our coverage have been revised -4%/-3% YTD at the median.

Exhibit 2: 20243 and 20245 estimate revisions since before 4Q23 EPS reports, intraquarter, and YTD

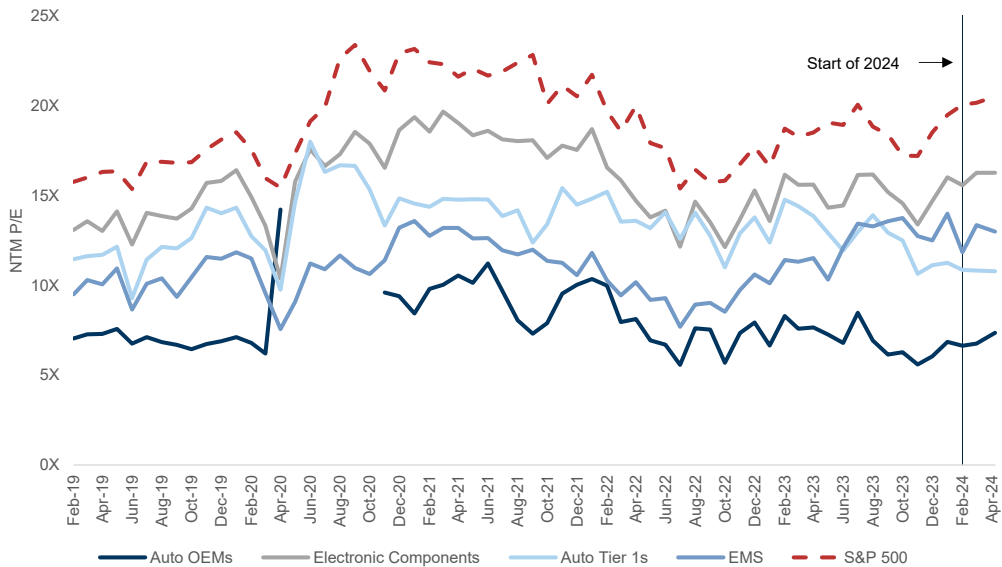
	Change in consensus EPS estimates					
	2024			2025		
	Since T-1 4Q23 reports	Since (EPS +7 days)	2024 YTD	Since T-1 4Q23 reports	Since (EPS +7 days)	2024 YTD
Auto OEMs						
GM	12.2%	1.7%	15.1%	11.5%	2.7%	18.1%
F	5.6%	0.6%	5.4%	5.1%	-0.1%	8.6%
TSLA	-24.5%	-11.9%	-27.5%	-25.0%	-13.1%	-28.3%
Tier 1 Suppliers						
LEA	-7.3%	-0.6%	-9.5%	-6.4%	0.7%	-7.7%
GNTX	-1.8%	0.1%	-2.0%	-3.7%	0.6%	-3.4%
MGA	-8.6%	-1.5%	-9.8%	-6.5%	-1.1%	-7.1%
APTV	-1.7%	-0.6%	-2.9%	-1.6%	-0.3%	-3.0%
VC	-4.1%	-0.6%	-6.5%	-5.0%	-0.6%	-7.4%
Electronic Components						
APH	2.0%	0.2%	2.1%	0.0%	0.5%	1.8%
* TEL	2.2%	0.1%	1.9%	1.4%	0.2%	0.9%
ST	-6.8%	-0.4%	-7.3%	-6.3%	-0.5%	-8.4%
BDC	2.6%	0.0%	1.8%	1.8%	0.0%	0.8%
Lidar & Autonomy						
MBLY	-6.6%	1.0%	-54.0%	-15.0%	-0.8%	-35.3%
EMS						
* FLEX	15.1%	0.2%	19.4%	8.9%	2.8%	19.2%
* JBL	-4.9%	0.0%	-5.5%	-0.7%	0.0%	0.1%
Test & Measurement						
* KEYS	-11.0%	-1.7%	-11.5%	-7.8%	-1.3%	-8.4%
Power & Thermal Management						
VRT	2.4%	0.2%	3.2%	3.2%	0.7%	5.0%
Voice Technology						
* CRNC	-4.6%	0.0%	-4.6%	-14.5%	0.0%	-14.7%
Warehouse Automation						
* SYM	-17.4%	4.4%	-18.9%	-6.3%	-1.7%	-12.9%

**Since companies most recent FY quarterly reports*

Source: FactSet

We show NTM P/E multiples by sub-sector over time in [Exhibit 3](#).

Exhibit 3: NTM median P/E by subsector since 2019



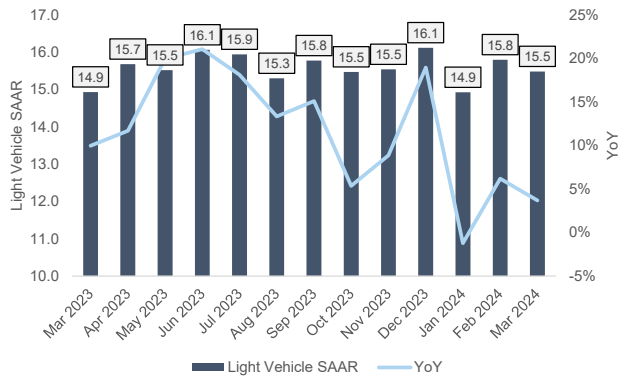
Source: FactSet

Automotive supply and demand trends

Auto sales have increased YTD yoy in all key regions, but are down qoq

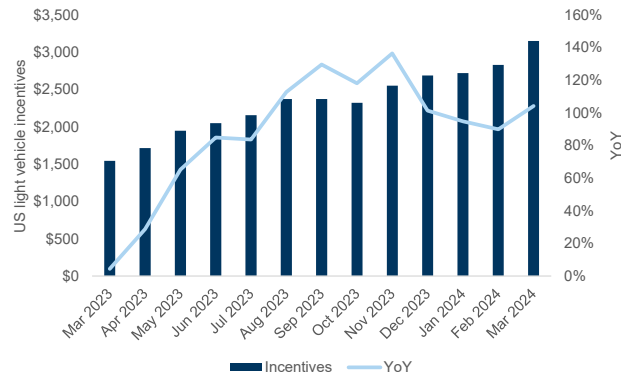
Auto sales have risen YTD. US light vehicle SAAR was in the mid 15 mn range in 1Q24, and sales in US were up 5% YTD and up 4% yoy in March, although we note that sales declined 4% qoq in 1Q24.

Exhibit 4: US LV SAAR



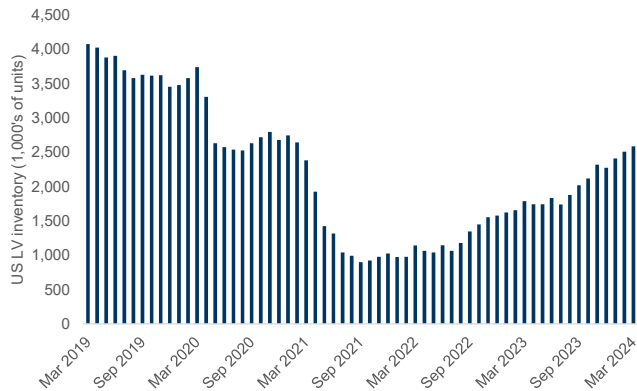
Source: Wards

Exhibit 5: Incentives in the US have continued to increase towards normalized levels



Source: Autodata

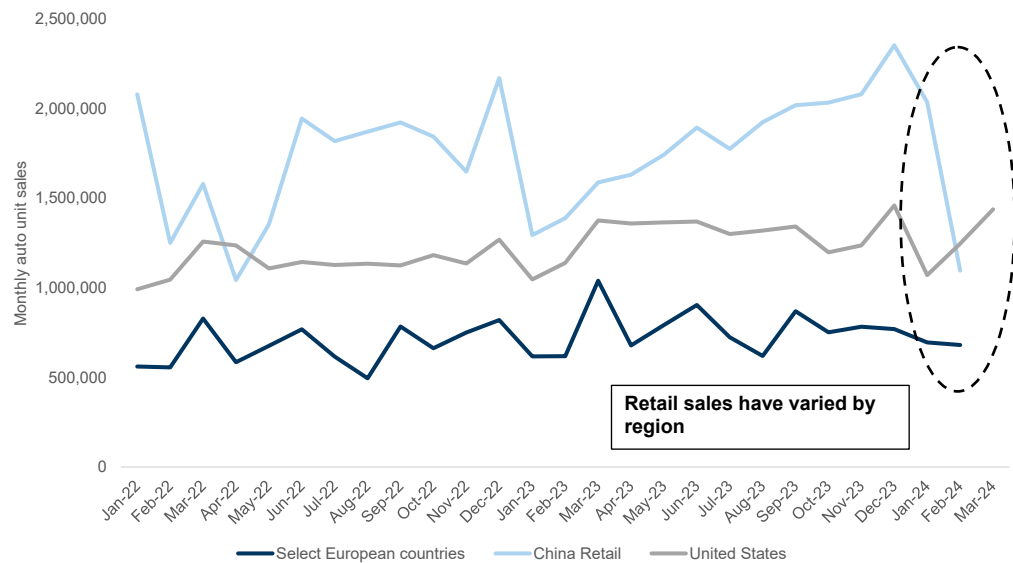
Exhibit 6: US LV inventory has continued to increase towards more normalized levels



Source: Autodata

European auto sales in key geographies were up 11% YTD and up 10% in February, but down 10% when comparing the first 2 months of 1Q24 with the first two months 4Q23. Sales in China are up 17% YTD.

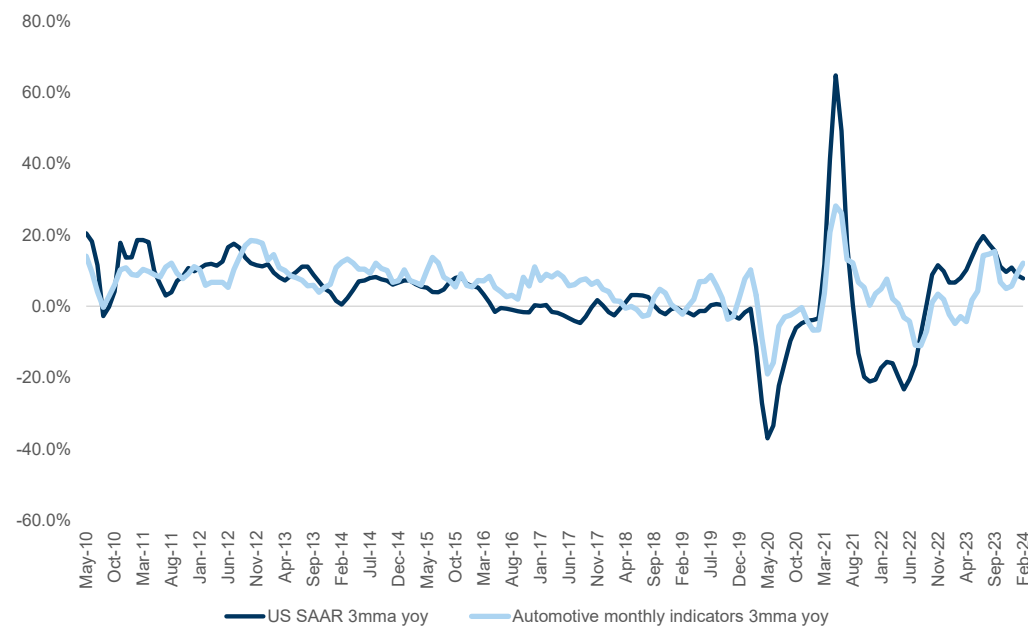
Exhibit 7: Monthly regional auto sales



Source: Goldman Sachs Global Investment Research, IHS, CPCA

We believe US auto sales could increase this year, albeit due in part to higher incentives. Our auto monthly indicators index (AMI) tracks key inputs including Google search traffic, housing starts, and consumer sentiment, and has an R-squared of 0.6 on a 2-month lead vs. the US SAAR yoy. It has recently shown signs of improvement ([Exhibit 8](#)).

Exhibit 8: Auto monthly indicators have begun to show signs of improvement
US SAAR vs. Auto Monthly Indicators

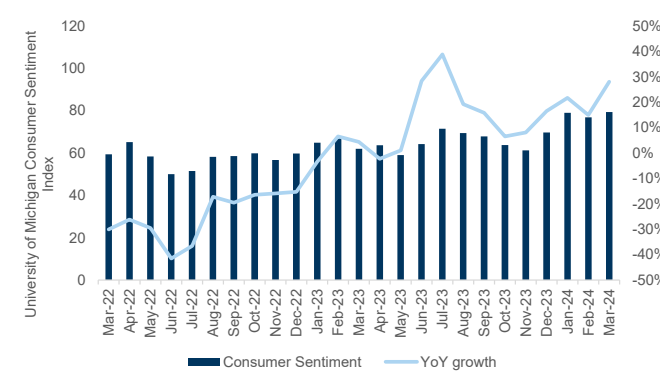


Source: Company data, Goldman Sachs Global Investment Research, University of Michigan, The Conference Board, St. Louis Federal Reserve

For example, the University of Michigan Consumer Sentiment index has been solid in

recent months. Consumer sentiment was up yoy in January, February, and March albeit from a low base (Exhibit 9). Additionally, housing starts have increased yoy since November 2023, including the most recent reading in February.

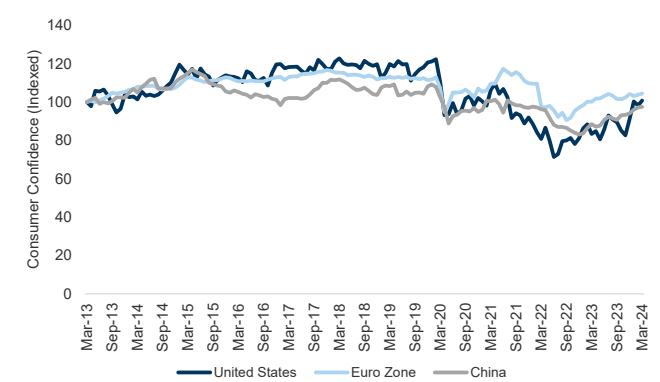
Exhibit 9: US consumer confidence increased by ~28% yoy in March
University of Michigan Consumer Sentiment Index



Source: University of Michigan

Consumer confidence continues to improve globally off the bottom, but is still at lower levels vs. history in key regions.

Exhibit 10: Consumer confidence remains low in key regions but has improved in recent months
Consumer Confidence Indexed to 100



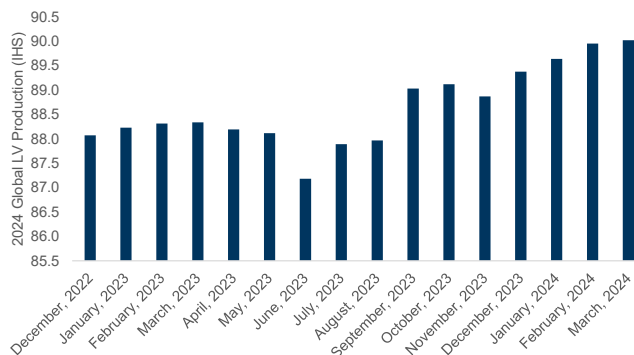
Source: FactSet

Auto production trending higher but varies by region

IHS has increased its global auto production outlook for 2024 in each month since November 2023 with some variation by region. Additionally, IHS is now forecasting that 2024 auto production will be up 1% yoy in North America, down 3% yoy in Europe, and up 2% yoy in China vs. its January 2024 outlook of +1%/-2%/about flat in North America/Europe/China.

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Exhibit 11: 2024 IHS production estimates have been revised higher the last several months
2024 Global LV production



Source: IHS

The auto tier 1s in our coverage are generally assuming flat to slightly lower global LVP yoy ([Exhibit 12](#)).

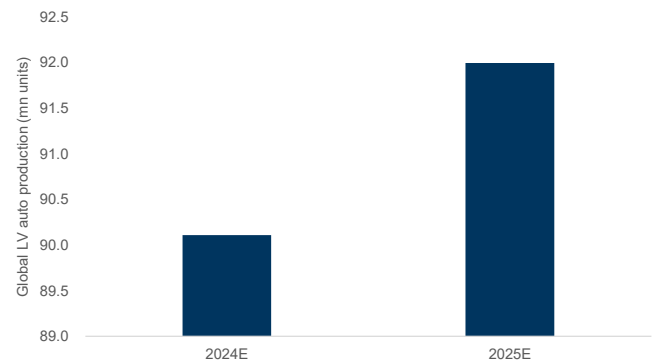
Exhibit 12: Select auto suppliers' LVP updated outlooks vs. IHS March update

Auto suppliers light vehicle production outlook vs. IHS				
Company		CY24 LVP most recent outlooks (YoY)	IHS forecast (YoY; as of Mar '24)	Δ
Aptiv				
^*	North America	+1%	+1%	0 pp
^*	Europe	-2%	-3%	1 pp
^*	China	0%	2%	-2 pp
^*	Global	0%	0%	0 pp
BorgWarner				
^*	North America	+1%	+1%	0 pp
^*	Europe	-2%	-3%	1 pp
^*	China	0%	2%	-2 pp
^*	Global	-1%	0%	-1 pp
Lear				
^	North America	+1%	+1%	0 pp
^	Europe and Africa	-2%	-2%	-0 pp
^	China	0%	2%	-2 pp
^	Global	-1%	0%	-1 pp
Magna				
	North America	+1%	+1%	0 pp
	Europe	-1%	-3%	2 pp
	China	-1%	2%	-3 pp
Visteon				
	Global	0%	0%	0 pp
*Adjusted for market exposure				
^Midpoint of outlook				

Source: Company data, Goldman Sachs Global Investment Research, IHS

Our 2024/2025 global production estimates are 90.1 mn/92.0 mn.

Exhibit 13: We maintain our 2024/2025 global production estimates



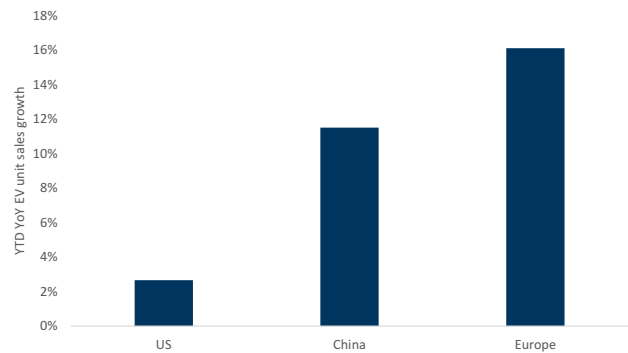
Source: Goldman Sachs Global Investment Research

We continue to expect increased electric vehicle adoption long-term, but at a moderated pace in the near to intermediate term

EV volumes are growing, but the pace has decelerated in 1Q especially in the US. EV sales were up 3% yoy in 1Q24 in the US per data from Motor Intelligence, and through February were up 11% YTD yoy in China and 16% YTD yoy in Europe (Exhibit 14).

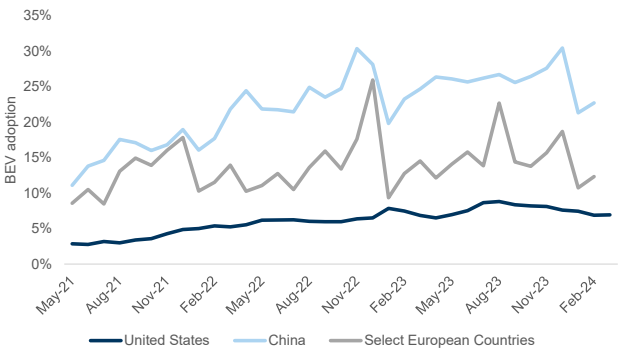
EV sales as a percent of new vehicles is running at about 7% in the US currently per Motor Intelligence, compared to China at >20% and Europe in the low to mid teens (Exhibit 15).

Exhibit 14: YTD yoy sales growth in EV units by region



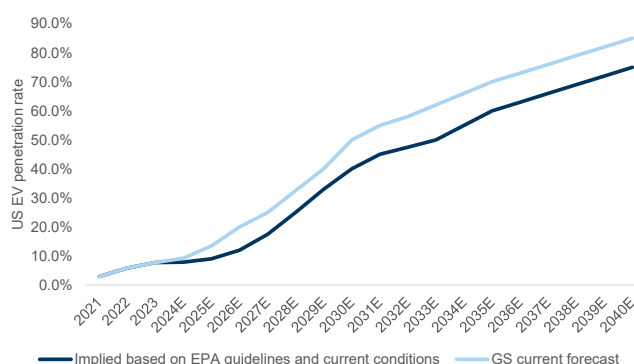
Source: Autodata, CPCA, Goldman Sachs Global Investment Research, ACEA

Exhibit 15: BEV adoption varies by region
Monthly BEV mix by geography



Source: Goldman Sachs Global Investment Research, CPA, ACEA, Autodata

1Q EV sales data in the US, Tesla’s 1Q deliveries report, and recent OEM news on EV/hybrid plans (including Ford in April) imply in our view that US EV sales may only be up 5-10% for 2024 (vs. our earlier up 25% yoy estimate), and that growth could remain more limited in 2025. In addition, the updated EPA 2027-2032 emissions standards (allowing higher hybrid and lower BEV mix to comply) suggest that BEV mix could be about 40% in 2030 (below our earlier 50% penetration forecast).

Exhibit 16: Illustrative example of US EV adoption to conform with EPA standards

Source: Goldman Sachs Global Investment Research, Autodata

Exhibit 17: Powertrain adoption scenarios under the finalized EPA standards and CARB requirements

			2027	2028	2029	2030	2031	2032
EPA Scenario 1 -	Higher BEV	ICE/HEV	68%	63%	53%	47%	38%	31%
		PHEV	6%	6%	8%	9%	11%	13%
		BEV	26%	31%	39%	44%	51%	56%
EPA Scenario 2 -	Moderate BEV	ICE/HEV	66%	59%	52%	45%	35%	28%
		PHEV	10%	12%	15%	18%	24%	29%
		BEV	24%	29%	33%	37%	41%	43%
EPA Scenario 3 -	Higher HEV/PHEV	ICE/HEV	66%	57%	48%	42%	34%	29%
		PHEV	10%	17%	22%	27%	32%	36%
		BEV	24%	26%	30%	31%	34%	35%
CARB requirement		ICE/HEV	57%	49%	41%	32%	24%	19%
		PHEV	9%	10%	12%	14%	15%	15%
		BEV/FCEV	34%	41%	47%	54%	61%	66%

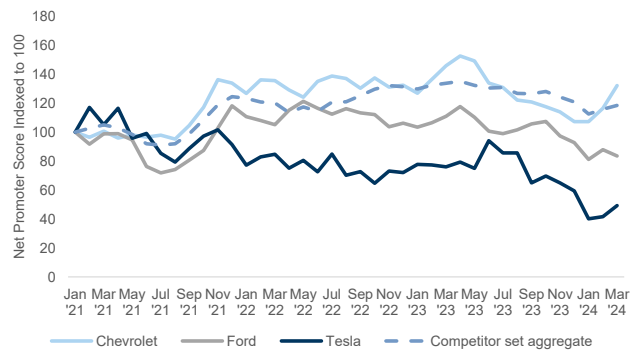
Source: EPA, CARB, Goldman Sachs Global Investment Research

We show net promoter scores and net future purchase intentions over time for Tesla, Ford and GM (Chevrolet) in this note, based on proprietary survey data of US respondents from HundredX. Note that the net promoter score measures the ratio of respondents who would recommend the brand/product to a friend.

We show indexed scores starting from both 2021 and 2022 to give context for brand sentiment changes over time.

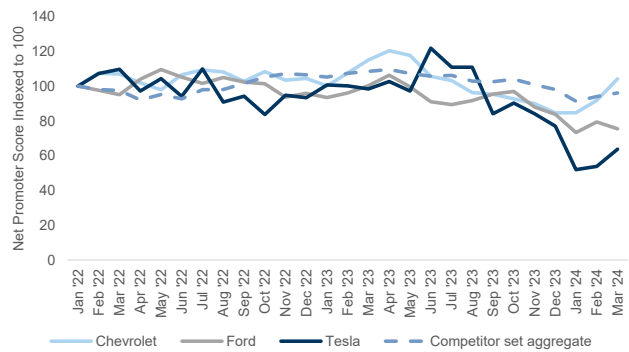
Tesla’s scores have trended lower, which we believe is consistent with the slower EV data given Tesla’s >50% share of the US EV market.

Exhibit 18: Net Promoter Score (trailing 3 months) Indexed to 100 starting in 2021



Source: HundredX

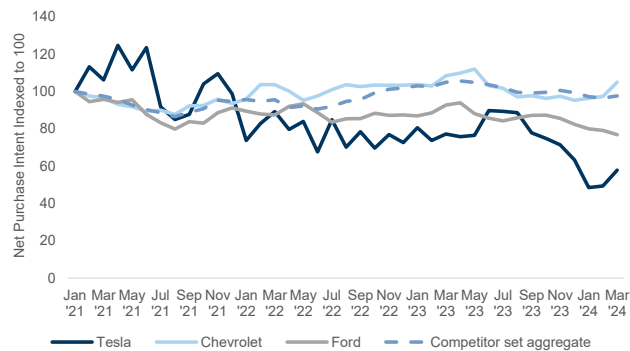
Exhibit 19: Net Promoter Score (trailing 3 months) Indexed to 100 starting in 2022



Source: HundredX

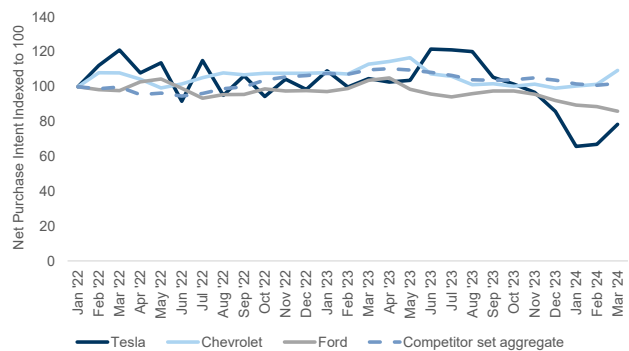
Net purchase intent can be used as an indicator for future demand, in our view.

Exhibit 20: Net Purchase Intent (trailing 3 months) Indexed to 100 starting in 2021



Source: HundredX

Exhibit 21: Net Purchase Intent (trailing 3 months) Indexed to 100 starting in 2022

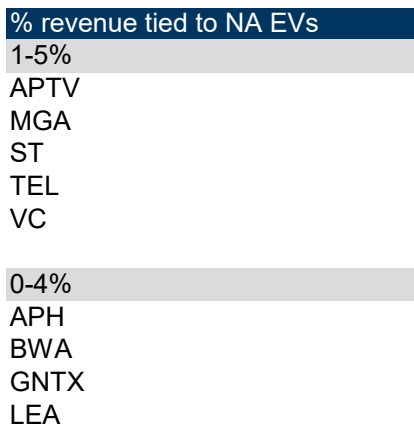


Source: HundredX

We show our estimates for revenue exposure related to North America EVs for tier 1 suppliers and electronic components companies below (in alphabetical order by segment).

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Exhibit 22: % revenue tied to EVs in North America for tier 1 suppliers and electronics components companies in our coverage

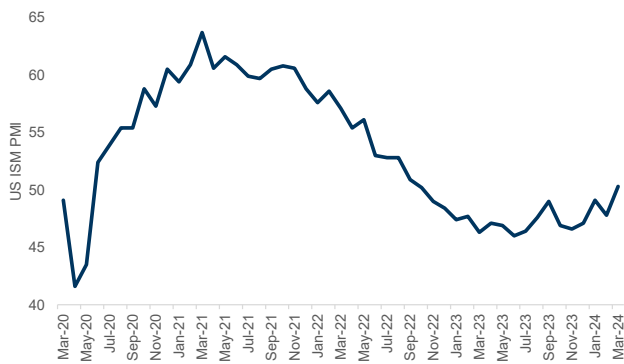


Source: Company data, Goldman Sachs Global Investment Research

Mixed demand trends in key non-auto markets

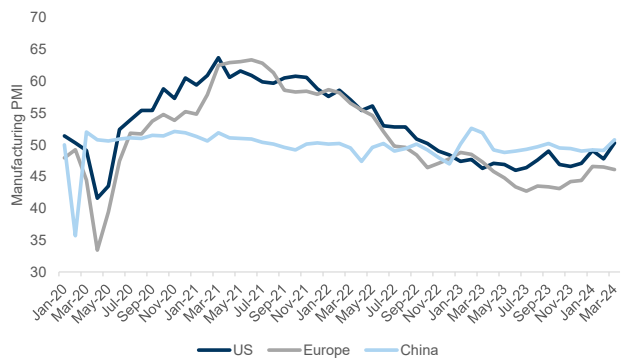
The US ISM PMI increased sequentially in March (to 50.3 from 47.8 in February) after declining mom in February. Prior to the decline in February, the US ISM PMI increased sequentially in December 2023 and January 2024. The manufacturing PMI in Europe has declined mom each month since the start of 2024 while the manufacturing PMI in China increased mom in March.

Exhibit 23: US ISM PMI



Source: FactSet

Exhibit 24: Manufacturing PMI in US, China, and Europe

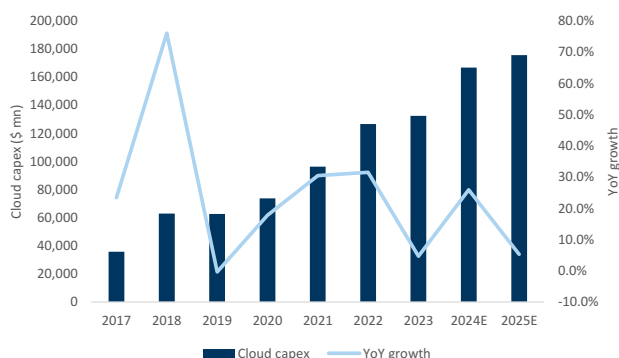


Source: FactSet

Separately, GS estimates for total capex from major cloud providers shows ~25% yoy growth in 2024E and single digit growth in 2025E. This is being driven by AI investments, as shown in [Exhibit 26](#), with high-powered AI servers (such as those used for generative AI) rising as a percent of the market.

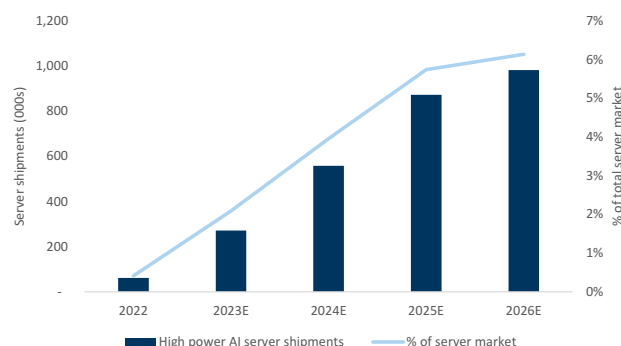
Exhibit 25: GS analysts expect ~25% growth yoy in total cloud capex in 2024E

Total cloud capex (\$ mn) of select hyperscale companies



Source: Company data, Goldman Sachs Global Investment Research

Exhibit 26: High power AI servers have ramped rapidly and are taking share as a % of the total server market



Source: Company data, Goldman Sachs Global Investment Research

Downgrade Sensata to Neutral from Buy

We downgrade Sensata (ST) shares to Neutral from Buy. We expect slower near to intermediate term revenue growth in its North America auto business tied to EVs, due to both weaker near-term EV sales, and from some traditional OEMs delaying certain EV launches. Recall that Sensata has about 1.5X the content on a BEV vs. an ICE vehicle in North America, compared to 0.5X in Europe and 1.25X in China (although we believe Sensata is more tied to multinationals than domestic OEMs like BYD within its China EV business).

We see a potentially high ceiling longer-term for Sensata shares given the strong electrification related bookings from recent years, and its content opportunity is attractive for plug-in hybrids. However, we see modest downside to Street estimates, and we believe the company would need to be closer to an acceleration in fundamentals before the stock may outperform.

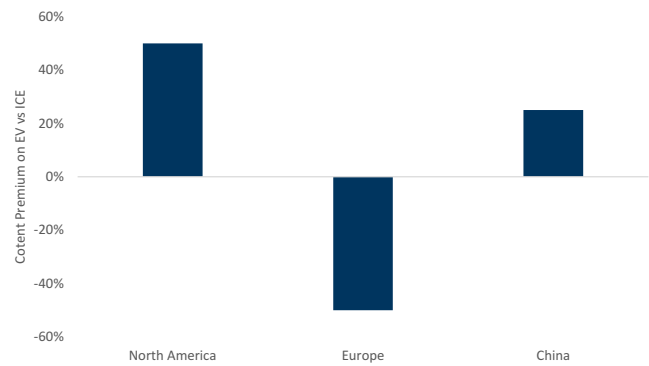
Since being added to the Buy list on 4/12/2020, ST shares are up 5% vs our broader coverage up 84% at the median and the S&P 500 up 86% in the same timeframe. We attribute the underperformance in the stock to margin headwinds that the company experienced.

Sensata has higher exposure in its EV business to North America

Sensata has higher exposure to North America for its EV business, with 1.5X the content on an EV compared to an ICE vehicle (we believe driven by its traction at Tesla). In Europe, Sensata's content is about 0.5X on a BEV vs. an ICE, and in China it is about 1.25X (although we believe Sensata is more tied to multinationals than domestic OEMs like BYD within its China EV business). Sensata noted that in China, it tends to have about 50% lower average content on domestic brands compared to multinationals. Based on IHS data, production for multinationals in China will decline in volume yoy by low to mid single digits in 2024 and 2025 compared to overall China production up 2%

and 3% respectively.

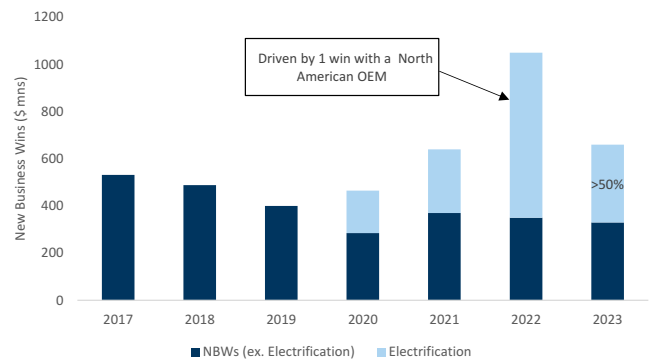
Exhibit 27: Sensata content premium on EV vs. ICE by region



Source: Company data, Goldman Sachs Global Investment Research

Sensata has reported strong business wins in electrification in recent years ([Exhibit 28](#)), and we expect this to lead to better long-term growth. However, the timing of when shipments will begin with these wins in electrification could be delayed. Recall that Sensata had its largest new win in the company’s history for a battery disconnect unit for a North American OEM in 2022, and Sensata had expected that to launch in 2025. While this could still occur, both GM and Ford have recently emphasized they will be more flexible and profit focused and therefore will delay some EV launches. For example, on [4/4/2024](#), Ford announced that it is delaying production of its 3-row SUV EV from 2025 to 2027, and its new EV pickup from late 2025 into 2026. We believe this creates both risk and uncertainty for suppliers such as Sensata.

Exhibit 28: Sensata new business wins 2017-2023



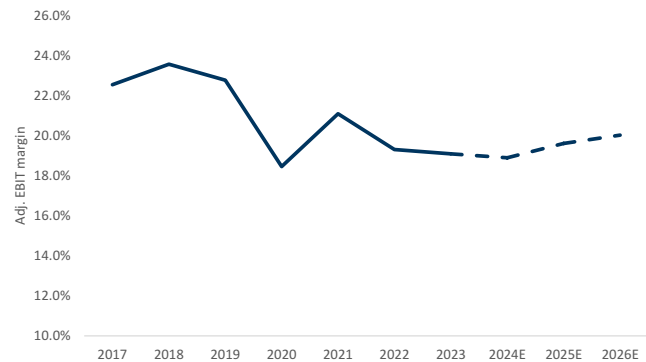
Source: Company data

Sensata’s margins have declined, although increased ICE/hybrid mix could mitigate slower EV volumes

Sensata’s margins have trended lower over time, partly on higher EV mix and partly due to cost/FX ([Exhibit 29](#)). Increased sales for hybrids and ICE vehicles could help Sensata to mitigate some of the EV weakness in our view, and these products have higher margins.

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Exhibit 29: Sensata adjusted EBIT margin 2017-2026E



Source: Company data, Goldman Sachs Global Investment Research

Sensata’s valuation multiple has compressed, which we attribute to the lower margins and growth headwinds. We expect the stock to continue to trade at a lower multiple while fundamentals are being pressured, although if growth/margins improve longer-term then we believe there is a high ceiling for the stock.

Exhibit 30: ST NTM P/E



Source: FactSet

We maintain our 2024/25/26 EPS (incl. SBC) estimates at \$3.65/\$4.15/\$4.75, with lower automotive revenues offset by higher margins. Excluding SBC, we model EPS for 2024/25/26 at \$3.92/\$4.42/\$5.04 respectively. Our EPS estimates are modestly below the Street.

We show our updated estimates vs. the Street (FactSet) below.

Exhibit 31: GS estimates are modestly below the Street (FactSet)

ST estimates GS vs. Street							
1QCY24E		2024E		2025E		2026E	
Revenue (\$ mn)							
GS	\$981	GS	\$4,047	GS	\$4,280	GS	\$4,515
Street	\$988	Street	\$4,128	Street	\$4,367	Street	\$4,688
% Dif	-1%	% Dif	-2%	% Dif	-2%	% Dif	-4%
EBIT (\$ mn)							
GS	\$181	GS	\$765	GS	\$839	GS	\$904
Street	\$183	Street	\$785	Street	\$856	Street	\$903
% Dif	-2%	% Dif	-3%	% Dif	-2%	% Dif	0%
EPS							
GS	\$0.84	GS	\$3.65	GS	\$4.15	GS	\$4.75
Street	\$0.85	Street	\$3.72	Street	\$4.20	Street	\$4.82
% Dif	-2%	% Dif	-2%	% Dif	-1%	% Dif	-1%

Source: FactSet, Goldman Sachs Global Investment Research

We lower our 12-month price target to \$36 from \$44 prior, based on 9X (from 11X prior to reflect what we think will be slower near to intermediate term growth and increased risk that programs get delayed) applied to our normalized EPS estimate of \$4.00 (unchanged).

Key upside/downside risks relate to ability to grow revenue, auto production trends (about 75% of Sensata's revenue is exposed to the automotive end market), supply and demand trends in other end markets (such as industrial, appliance & HVAC, and aerospace), Sensata's ability to increase content per vehicle especially in EVs and hybrids (and how this varies by geographic region), Sensata's customer exposure and ability to grow with the faster growing OEMs, margin expansion/compression, leverage, tax rate, and FX.

Downgrade ChargePoint to Sell from Neutral

We downgrade CHPT shares to Sell from Neutral as we believe slower growth in the number of EVs on the road in the US, and rising competition in EV charging, will lead to less growth than is in Street consensus (FactSet). We lower our 12-month price target to \$1.50, implying 19% downside compared to our coverage median of 9% upside.

With about 80% of its revenue tied to North America, we believe ChargePoint will be impacted by slower US EV sales. In addition, we believe competition is increasing, including from Tesla (both from opening up most of its US network, which could limit demand for networks using ChargePoint, and also because Tesla has recently sold its chargers as a merchant business in select situations such as to BP - putting Tesla in more direct competition with ChargePoint) and more broadly (ChargePoint noted a shift to multi-sourcing in North America on its last conference call, although this also creates an opportunity to sell standalone software).

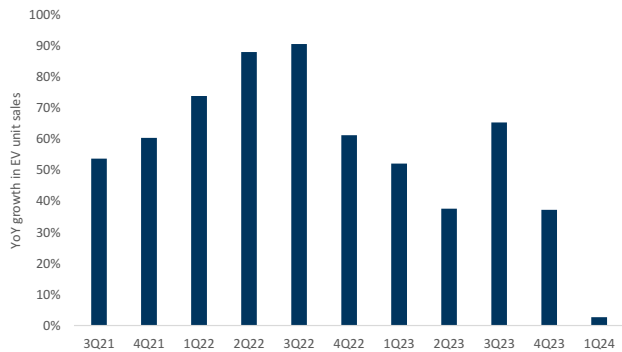
What would make us more positive: We'd look to be more positive on the stock if we had a more constructive view of fundamentals, which could occur if ChargePoint has

more success than we expect selling standalone software & services (and North American vendors looking to multi-source creates this opportunity), makes faster progress with its cost reduction programs (the company is now partnering with AcBel, which ChargePoint expects to meaningfully reduce its costs as it ramps this relationship and works off inventory of existing products), and if demand for its chargers is stronger than we anticipate (which could occur from a recovery in Enterprise/Commercial demand, better international demand, and/or more EVs on the road).

We expect slower EV volume growth in North America to negatively impact revenue

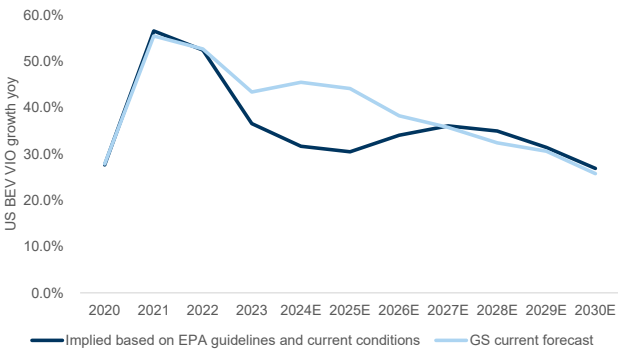
US EV sales growth yoy in 1Q24 slowed considerably versus prior quarters ([Exhibit 32](#)), and based on current market conditions, as well as the finalized EPA emissions standards for 2027-2032, EV vehicles in operation (VIO) growth is likely to be lower than our prior forecast ([Exhibit 33](#)). ChargePoint generates about 80% of its revenue from North America, with the balance from Europe.

Exhibit 32: YoY growth in US EV sales by quarter



Source: Autodata, Goldman Sachs Global Investment Research

Exhibit 33: EV VIO growth in the US is likely to be slower based on current market conditions and finalized EPA rules

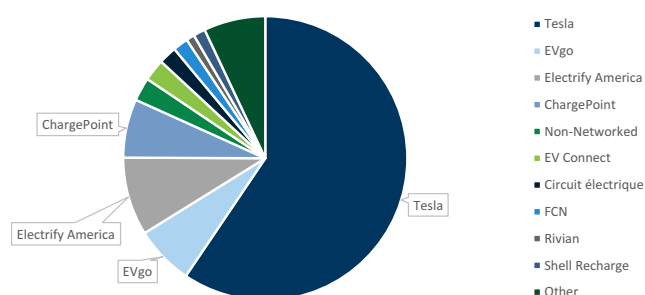


Source: Autodata, Goldman Sachs Global Investment Research

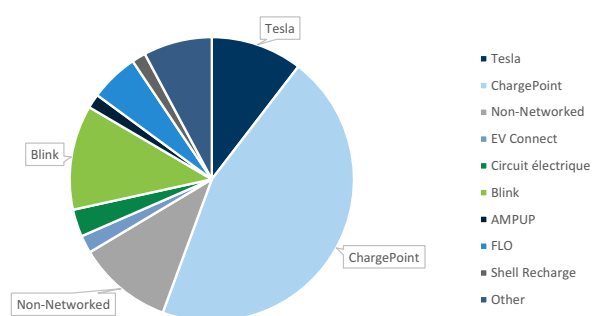
Increased competition

We see increased risk of market share loss, with Tesla opening up most of its Supercharger network to non-Tesla customers. This could limit spending plans from other networks/companies that may be considering using ChargePoint products. Additionally, Tesla has recently sold its chargers as a merchant business to customers like BP, putting it in direct competition with ChargePoint. Finally, ChargePoint commented that it is now seeing North American customers look to multi-source (creating both risk and opportunity).

We show ChargePoint’s share of the US DCFC and L2 charging markets in [Exhibit 34](#) and [Exhibit 35](#).

Exhibit 34: ChargePoint DCFC US market share as of 4/5/24

Source: AFDC, Goldman Sachs Global Investment Research

Exhibit 35: ChargePoint US L2 charging market share as of 4/5/24

Source: AFDC, Goldman Sachs Global Investment Research

As a result, we lower our estimates for ChargePoint EPS (incl. SBC) for FY25/26/27 to $-\$0.65/-\$0.50/-\$0.35$ from $-\$0.60/-\$0.35/-\$0.05$ prior, on lower revenue and margins. Excluding SBC, we now model $-\$0.40/-\$0.20/-\$0.05$.

Our EPS estimates excluding SBC are below the Street.

Exhibit 36: GS vs. Street estimates for CHPT

CHPT estimates GS vs. Street							
1QFY25E		FY2025E		FY2026E		FY2027E	
Revenue (\$ mn)							
GS	\$106	GS	\$535	GS	\$728	GS	\$923
Street	\$106	Street	\$559	Street	\$743	Street	\$984
% Dif	1%	% Dif	-4%	% Dif	-2%	% Dif	-6%
EPS (excluding SBC)							
GS	-\$0.13	GS	-\$0.40	GS	-\$0.20	GS	-\$0.05
Street	-\$0.13	Street	-\$0.34	Street	-\$0.16	Street	\$0.15

Source: Thomson Reuters Eikon, Goldman Sachs Global Investment Research

We lower our 12-month price target to \$1.50 from \$2.00 prior based on a 90% weight of our base case valuation of \$1.50 (from \$2 prior) using 1X (from 0.75X prior to better align with peer multiples) EV/CY2026E revenue discounted back; 2) a 5% weight of our bear case valuation of \$1 (unchanged) using 0.75X (from 0.5X to better align with peer multiples) EV/a downside CY2026E revenue scenario discounted back; 3) and 5% weight of our bull case valuation of \$3 (from \$4 prior) using 1.25X (from 1X prior) EV/an upside CY2026 revenue scenario discounted back.

Key upside risks to our Sell thesis include 1) ChargePoint gaining share, either with its charging solutions and/or standalone software revenue; 2) higher than anticipated EV adoption and/or regulatory support; 3) higher pricing and/or lower costs could result in margin upside; and 4) if ChargePoint can execute on its strategy to further expand its footprint in Europe (and potentially other geographies over time) through organic or inorganic measures faster than we expect, then this could drive upside.

Adjusting estimates and price targets for select auto OEMs in our coverage (TSLA, RIVN, F) to reflect 1Q delivery results and recent company

commentary

We update our 2024 estimates and price targets for Tesla and Rivian after each released its 1Q24 deliveries report, and we raise our price target for Ford to reflect its opportunity in hybrids.

Lowering Tesla estimates post weaker 1Q24 deliveries, and to better reflect market conditions

Tesla reported preliminary 1Q24 vehicle deliveries of about 387k (down 20% qoq and down 9% yoy), and production of about 433k vehicles. This compares to 4Q23 deliveries of about 485K and production of about 495K. 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.

Deliveries of about 387k in 1Q24 were about 15% below Visible Alpha Consensus at about 454k, and 11% below GSe at 435k. Whether deliveries could be at least flattish yoy in 1Q24 (~420K) had been a recent debate and discussion point for investors, in our view.

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).

Lease mix was 2% of deliveries in 1Q24 (vs. 2% in 4Q23).

As we wrote in our [4/2](#) first take, we believe key debates will shift to:

1) Volume growth, and the extent that Tesla can drive additional volumes off of the 1Q base while it is in a period that it has described as being between growth waves. Ramping Cybertruck and the new Model 3 could be helpful on that front, and we also believe a refreshed version of the Model Y could be a positive driver in the intermediate term. However, Tesla is also facing market and competitive headwinds, in our opinion.

The timing for Tesla to begin shipping a low-cost vehicle using its next generation platform, which Tesla had previously said was targeted for 2H25, will be a key focus on this upcoming earnings call for investors. Reuters suggested [in an article on 4/5/24](#) that Tesla was scrapping this program, but the CEO has since stated that this was inaccurate. The CEO also stated on 4/5/24 that Tesla will unveil its Robotaxi on 8/8/24, and we believe this product could be built on the same underlying platform. We assume that Tesla will start low-volume shipments of a vehicle using the low-cost platform for consumers in late 2025 (and ramping in 2026), and if this vehicle were delayed then we believe it would be a meaningful negative for the stock, all else equal.

2) Vehicle pricing and the automotive non-GAAP gross margin for Tesla. With Tesla raising prices on April 1st for Model Y in key geographies, whether Tesla will be more disciplined on pricing in a sustainable way going forward is likely to be a debate (after material price reductions over the last year), especially with Tesla having built inventory

with production ahead of deliveries.

As we articulated in our recent report, The price is right? The case for Tesla to be more selective on US price cuts; analysis on EV pricing and IRA, we believe that Tesla should be firm with pricing for Model 3/Y in the US as the vehicles are attractively priced particularly with IRA credits and our analysis shows that broad-based incremental price cuts would be negative for profits at least in the short term (although a more entry level SKU of the Model Y with a lower BOM could help Tesla to expand volumes while supporting overall margins/profits in our opinion). There is a higher degree of market competition in China, and we believe a somewhat more aggressive pricing strategy may be necessary there.

3) FSD (full self driving) and whether the latest version (V12) using neural nets will set Tesla up for a significant increase in self driving capabilities (as it can iterate more quickly on R&D with improved GPU/AI training tools), and in turn much higher software revenue. Our current view is that we see Tesla as a leader in AI and software technology in the auto space, and we see software & services as a potentially meaningful contributor to Tesla's 2030 earnings (as detailed in our report Contextualizing Tesla's AI and FSD opportunities), but we believe it will take Tesla more time to reach an L3 version (situationally eyes off) of FSD. Similarly, we believe a true robotaxi with no driver would need significant testing and validation, and we hope to learn more on where Tesla stands with this product during earnings and at the 8/8/24 event.

4) Growth in other segments, including Services and Energy. Tesla reported that it delivered a record level of storage capacity in 1Q24.

Based on the 1Q deliveries data and what we believe to be a more difficult competitive and market environment, we lower our 2024/25/26 vehicle delivery estimates to 1.83 mn/2.11 mn/2.50 mn from 1.98 mn/2.35 mn/2.75 mn prior.

We lower our 2024/2025/2026 EPS estimates including SBC to \$1.90/\$3.25/\$4.45 from \$2.15/\$3.80/\$5.00 prior, primarily on lower revenues and margins. Excluding SBC we model \$2.45/\$3.80/\$5.00 in 2024/2025/2026.

We lower our 12-month price target to \$175 from \$190 prior, which is based on 50X (unchanged) applied to our updated Q5-Q8 EPS estimate including SBC.

We maintain our Neutral rating on the stock, with our positive view of Tesla's long-term growth potential and position in the market offset by what we believe is full valuation and weaker near-term fundamentals.

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.

Rivian delivered 13,588 vehicles and produced 13,980 vehicles in 1Q24

Rivian announced that it delivered about 13.6K vehicles in 1Q24 (down about 3% qoq and up about 71% yoy), above both GSe at 12K and Visible Alpha Consensus at 12.4K. Rivian produced about 14.0K vehicles (down about 20% qoq and up 49% yoy) during the same period at its manufacturing facility in Normal, Illinois.

Per the press release, Rivian believes it remains on track to reach its 57K 2024 production guidance that it previously provided (recall this includes downtime the company expects to take in 2Q24 to implement changes to its factory and the R1).

We maintain our assumption for 2024 deliveries at 52.5K, with the stronger 1Q report compared to our expectations offset by lower 2Q and 3Q deliveries as we model a slightly slower ramp post the downtime.

We also update our estimates to reflect lower capex based on Rivian's commentary at the R2 launch event where it noted savings including from delaying its Georgia facility as we outlined in our note, [Initial thoughts on R2 \(and R3/R3X\) launch](#). Recall that Rivian commented it now expects to have cash to fund operations through the R2 launch (expected in 1H26).

We maintain our 2024 EPS including SBC estimate at -\$4.80 and update our 2025/26 EPS estimates including SBC to -\$3.85/\$3.00 from -\$3.80/-\$2.95 with changes driven by a somewhat lower sharecount (as we assume a raise occurring later than we did previously).

We remain Neutral rated on the stock given the long path to profitability (and price competition in the broader market) and ongoing cash use, offset by what we believe is Rivian's strong product offering and brand (and in turn ability to monetize its software and services longer-term).

We lower our 12-month price target to \$11 from \$13, which is based on 1.25X (from 1.5X prior on lower peer multiples) applied to our Q5-Q8 revenue estimate. Key upside/downside risks to our view relate to volumes, the production ramp, the competitive landscape, Rivian's high degree of vertical integration, cash burn, and the supply chain.

Ford delaying EV launches with increasing focus on hybrids

On 4/4/24, Ford announced that it was delaying production of its 3-row SUV EV from 2025 to 2027 and now expects its new EV pickup to start deliveries in 2026 with a measured ramp (from late 2025 prior). The company also highlighted an increased focus on hybrids, announcing that it expects to offer hybrids across the entire Ford Blue lineup in North America by the end of the decade. The company reiterated that it continues to work on its next-gen EV platform for future EVs through the previously announced skunkworks team. Hybrids accounted for about 8% of Ford's 1Q24 US vehicle deliveries. Additionally, at a recent conference, Ford noted that ~60K of F-series vehicle wholesales were pushed from 1Q into 2Q.

We maintain our 2024/25/26 EPS estimates including SBC at \$2.00/\$2.30/\$2.60, although we now assume a lower 1Q24 but higher 2Q24 to account for F-series wholesale timing. We raise our 12-month price target to \$14 (from \$12 prior) using 6X (from 5X prior to better reflect the hybrid opportunity) applied to our unchanged normalized EPS estimate of \$2.30. We remain Neutral rated on the stock. Key risks to our view relate to Ford's ability to profitably pivot to growth areas such as EVs, the auto cycle, market share, and margins (both margin pressure in a downturn and margin expansion longer term from company specific initiatives).

We update estimates for select tier 1 suppliers given recent company comments and industry events

Lear

We update our estimates to better reflect the quarterly revenue cadence based on management commentary at a recent conference in late March. Lear noted that production is tracking in-line with its expectations in North America, Europe, and China. The company said it has seen modest improvements in the production environment, but there are still disruptions such as software issues with certain customers, and the Red Sea disruptions in Europe.

On the 1Q24 outlook, Lear expects revenue to be up ~2.5% yoy with more growth in E-Systems than Seating. Lear expects margins to be flattish to slightly up vs. 1Q23 with E-Systems higher and Seating in-line or slightly down yoy. On share buybacks, Lear expects a similar level of repurchases in 2024 relative to 2023 (~4% of shares).

Lear also announced that it won its second wiring award with BMW, won its first Seating program with BYD outside of China in Thailand and is discussing opportunities in Hungary and Brazil, and was awarded another conquest program in Seating that launches just outside of the company's backlog window with a European luxury OEM.

Our FY2024/FY2025/FY2026 EPS estimates of \$15.00/\$20.00/\$23.75 are effectively unchanged.

We maintain our 12-month price target of \$171, based on 9X our normalized EPS estimate of \$19.00 (unchanged). We are Buy-rated on LEA shares. Key downside risks to our Buy thesis include: 1) The auto cycle, and more specifically Lear's ability to outgrow underlying auto production through content per vehicle growth in Seating/E-Systems; 2) Market share, including the company's ability to gain share in Seating; and 3) Margins (wages, supply chain issues, and competition could negatively impact Lear's margin targets).

Magna

For Magna, we lower estimates to reflect what we believe is weaker demand in its EV business, including with Fisker (which has raised substantial doubt as to its ability to continue as a going concern, per its filings). Recall that Fisker announced that it had

produced approximately 1K vehicles in 2024 through March 15, and would pause production starting the week of March 18th, implying downside to estimates for Magna production.

Magna noted in its [annual information form](#) released on 3/27 that its outlook issued at its 4Q23 EPS call on 2/9 assumed production volumes of the Fisker Ocean SUV at its facility in Graz, Austria of ~20K units and ~30K units for 2024 and 2026, respectively. Magna's 2024 sales outlook included consolidated sales associated with such Fisker production volumes of ~\$425 mn (~\$200 mn of assembly sales, including from fixed cost recoveries, and ~\$225 mn for the sale of systems and components). If Fisker is unable to meet its contractual commitments, Magna noted that the negative impact to its 2024 consolidated adjusted EBIT margin is expected to be ~25 bp, excluding the cost of any restructuring actions.

We also note that Magna is more exposed to OEM production in North America for megatrend areas (i.e. electrification).

We lower our 2024/2025/2026 EPS estimates to \$5.90/\$7.00/\$8.30 from \$6.10/\$7.60/\$9.00 prior driven by lower revenue and margins. Our updated estimates compare to the Street (FactSet) at \$6.07/\$7.39/\$8.30 for 2024/25/26.

We lower our 12-month price target to \$56 from \$58 which is based on an 8X (unchanged) multiple applied to our normalized EPS estimate (including SBC) of \$7.00 (from \$7.25 prior reflecting our updated estimates). Our 12-month price target for MG.TO listed in Canada moves to C\$76 from C\$78 using the current exchange rate.

Key risks relate to 1) the auto cycle (from potential supply chain disruptions, as well as debates around the demand environment), 2) market share (specifically Magna's customer exposure and ability to grow in key areas such as EVs/ADAS); 3) Magna's ability to outgrow industry unit production (and profitably pivot toward secular growth themes in megatrend areas); 4) Margins, and whether Magna can successfully improve its EBIT margins over time.

Updated estimates for Amphenol and Vertiv on likely datacenter strength

For Amphenol, we believe AI related demand will support stronger sales in the IT Datacom segment than we previously expected. We estimate that connectors for AI applications are now a mid single digit percent of total company revenue.

We raise our CY24/25/26 EPS estimates to \$3.30/\$3.70/\$4.00 from \$3.25/\$3.50/\$3.75 prior driven by higher revenue and margins.

We raise our 12-month price target to \$130 from \$119, which is now based on 35X (from 34X prior given the strong growth and margins) applied to our normalized EPS estimate of \$3.70 (from \$3.50 reflecting our updated estimates).

Key downside risks to our view relate to revenue growth, margins, the trade situation with China (given Amphenol's presence in the country with several manufacturing sites),

and Amphenol's ability to continue to execute well on M&A.

For Vertiv, we believe that ongoing planned investments from companies in the datacenter market for AI will support stronger results than we previously expected, and we raise estimates for 2025 and 2026. Per comments from its 2023 investor day, management estimates that Vertiv's opportunity from a high density workload increases to ~\$3.0-3.5 mn per MW as compared to \$2.5-3.0 mn per MW for a traditional compute workload.

We continue to believe that the strength in orders and the robust backlog (~\$5.5 bn) suggest that the company is well positioned for growth in 2024 and beyond. For example, management commented that its 2H23 bookings were influenced by large longer dated projects (including AI demand). Moreover, Vertiv has seen continued solid pricing, which we believe will support strong revenue/margins not only in 2024 but also into 2025 (with pricing flowing into backlog).

We maintain our 2024 EPS estimate (inc. SBC) at \$2.26 and raise our 2025/26 EPS estimates (inc. SBC) to \$2.95/\$3.55 from \$2.80/\$3.30 prior, primarily on higher revenue and margins. We raise our 12-month price target to \$98 from \$73, which is now based on 23X (from 18X prior reflecting peer multiples and Vertiv's faster growth) applied to our updated EV to Q5-Q8 EBITDA estimate.

Key downside risks to our view include: 1) Revenue growth – Vertiv has a portion of its datacenter revenue still tied to traditional on-premise datacenters, which is a part of the market that could be impacted by either enterprise spending weakness or by the shift to the cloud. In addition, Vertiv's ability to continue to improve its cloud/hyperscale revenue and grow in the channel will be important factors in how fast its revenue will grow. Also, market share will be a factor in revenue trends. 2) Margins – There are risks to our expectation for margin expansion. This could come from increased competitive pressure, mix, or execution. 3) Leverage – Leverage has come down but is still somewhat high.

Positive on Flex, and its ability to benefit from rising datacenter business

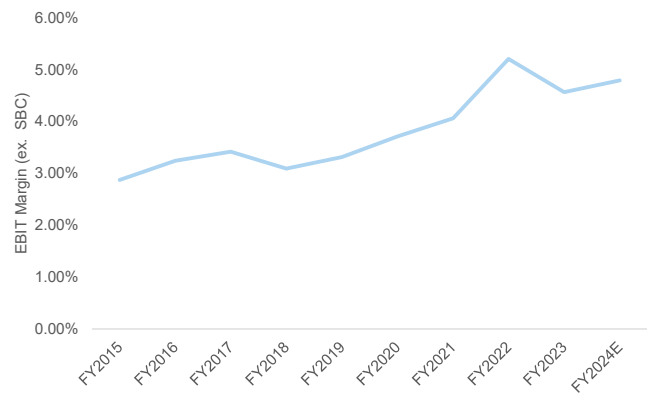
We are positive on FLEX, as we believe that the company will provide positive longer-term commentary on its F4Q call driven by its hyperscale business (we expect FY25 EPS guidance to be in line with the Street and comments management provided last quarter, but our FY26 EPS estimate is slightly above the Street).

Flex has been growing earnings in recent years driven in part by an increasing percent of revenue coming from non-traditional markets (e.g. medical, auto, A&D, and datacenter) with longer product cycles/higher margins/better growth, as well as customers looking to have more regional/resilient supply chains. In fact, we estimate that the hyperscale datacenter market now accounts for >10% of revenue for Flex.

This expansion has helped Flex to improve margins, and we believe EBIT margins can reach or exceed 6% longer-term.

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Exhibit 37: Flex (excluding Nextracker) adjusted EBIT margins over time

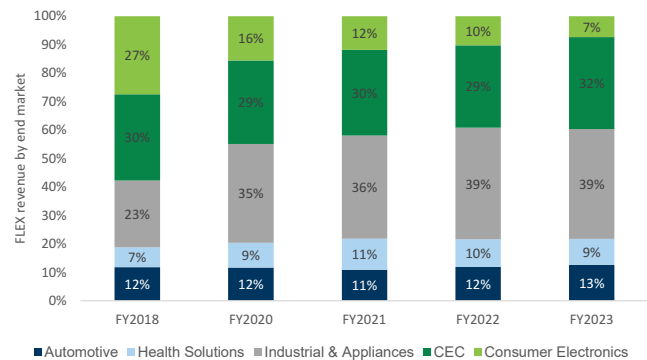


Source: Company data, Goldman Sachs Global Investment Research

Importantly, while the macro/cyclical backdrop remains choppy (including with recent weakness in the solar, industrial, telecom/networking, and consumer markets), margins are holding up well. For instance, while Flex implied its FY25 core EPS could be in the \$2.40-\$2.46 range vs. its prior \$2.65 target when it reported on 1/31/24, the company is seeing margin resiliency (it expects its 1QCY24 core EBIT margin to increase to ~5.4%, up from 4.9% in 4QCY23, even on lower revenue). Flex also has been increasing its exposure to non-traditional markets like datacenter, auto, A&D, and medical, and these end markets tend to have longer product cycles/higher margins/better through cycle growth. At the same time, Flex has been more selective with program/customer mix in traditional markets like consumer, telecom, and networking.

We estimate that hyperscale cloud is now >10% of Flex’s revenue, after having been relatively small 5 years ago. Auto accounted for 13% of revenue in FY23 (from 12% in FY18), and health solutions was 9% (up from 7% in FY18). Consumer devices was 7% of revenue in FY23, while the historical Consumer Technology Group (CTG) was 27% of revenue in FY18.

Exhibit 38: Flex’s revenue by end market over time



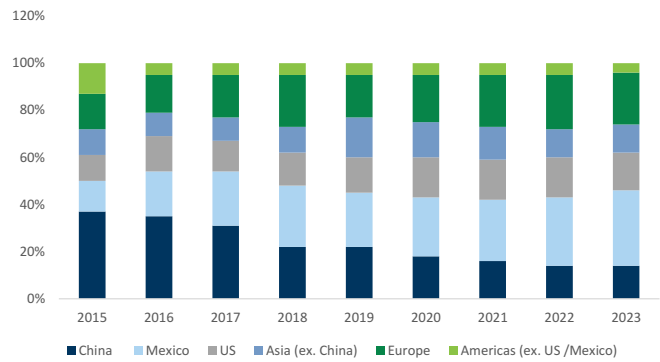
Does not include revenue from NXT

Source: Company data

As shown in [Exhibit 39](#), Flex has a global supply chain and an increasing amount of

business coming from North America (Mexico and the US). While this is partly reflecting the changing end market mix, it also is being driven by customers seeking more regional and resilient supply chains post years of supply chain and geopolitical challenges.

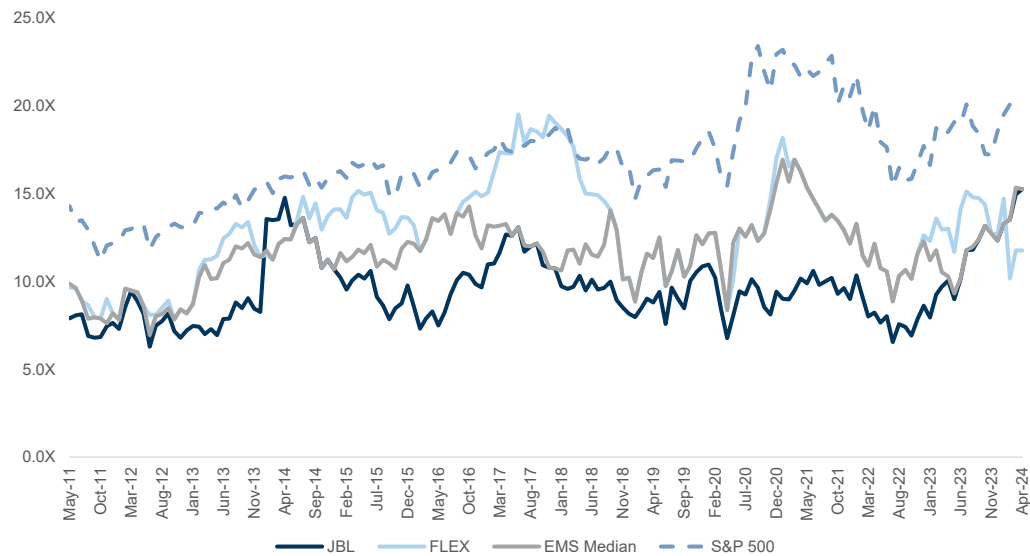
Exhibit 39: % of Flex Long Lived Assets by Region
% of Flex Long Lived Assets by Region for FY2015-2023



Source: Company data, Goldman Sachs Global Investment Research

We believe that Flex’s valuation multiple is reasonable relative to peers ([Exhibit 40](#)).

Exhibit 40: Historical NTM P/E for EMS companies and the S&P 500



Source: FactSet

While our forward EPS estimates are unchanged, we restated 1QFY24-3QFY24 to exclude Nextracker, taking full year EPS including SBC to \$1.85 and excluding SBC to \$2.12. Our EPS estimates including SBC remain \$2.06/\$2.57 for FY25/26, and excluding SBC remain \$2.45/\$3.00.

Our 12-month price target remains \$37, and is still based on 15X Q5-Q8E EPS including SBC. Key risks to our view relate to macroeconomic demand, supply/demand dynamics, Flex’s ability to expand margins, geopolitical uncertainty, and FCF.

Risk/reward screen, and key risks

In [Exhibit 41](#), we detail upside/downside scenarios for our coverage group

Exhibit 41: Upside/downside scenarios for select companies in our coverage

Upside/Downside Scenario									
	Current Price (4/8/2024)	Trough Multiple (NTM P/E)	NTM EPS (G\$e)	Downside Valuation (Trough Multiple on NTM EPS)	Downside %	Upside Multiple (NTM P/E)	FY2026 EPS (G\$e)	Upside Valuation (Trailing Typical Median Multiple on FY26 EPS)	Upside %
Tier-1 Suppliers									
BWA	\$35	7X	\$3.95	\$28	(21%)	12X	\$4.85	\$58	66%
GNTX	\$36	12X	\$2.10	\$25	(30%)	18X	\$2.50	\$45	25%
LEA	\$141	7X	\$15.05	\$105	(26%)	11X	\$23.75	\$261	85%
MGA	\$53	7X	\$5.90	\$41	(21%)	11X	\$8.30	\$87	66%
VC	\$112	11X	\$8.50	\$94	(17%)	18X	\$13.00	\$234	108%
APTV	\$76	12X	\$5.80	\$70	(9%)	20X	\$9.05	\$181	138%
Component Suppliers									
APH	\$117	19X	\$3.30	\$63	(46%)	40X	\$4.00	\$160	37%
BDC	\$89	7X	\$5.75	\$40	(55%)	16X	\$8.40	\$134	50%
ST	\$36	8X	\$3.65	\$29	(19%)	13X	\$4.75	\$62	72%
TEL	\$145	14X	\$7.75	\$109	(25%)	25X	\$9.55	\$239	65%
EMS									
FLEX	\$29	7X	\$2.35	\$16	(43%)	17X	\$3.00	\$51	77%
JBL	\$139	7X	\$9.00	\$63	(55%)	17X	\$11.50	\$195	41%
Test & Measurement									
KEYS	\$159	15X	\$6.20	\$93	(41%)	25X	\$8.85	\$221	39%
Power & Thermal Management									
VRT	\$84	20X	\$2.25	\$45	(47%)	30X	\$3.55	\$106	26%
* EPS estimates exclude SBC									

Upside/Downside Scenario									
	Current Price (4/8/2024)	Downside Multiple	NTM GSe	Downside Valuation	Downside %	Upside Multiple	2026 GSe	Upside Valuation	Upside %
Auto OEMs		Trough NTM P/E	NTM EPS	Trough Multiple on NTM EPS		Upside P/E View	2026 EPS	Upside Multiple on 2026 EPS	
F	\$13	4X	\$2.00	\$8	(40%)	7X	\$2.60	\$18	36%
GM	\$44	4X	\$9.10	\$36	(18%)	6X	\$10.50	\$63	42%
TSLA	\$173	30X	~\$2.15-\$2.75	~\$65-\$85	~(65%)-(50%)	60X	~\$4.45-\$5.00	~\$265-\$300	~50-75%

TSLA shows range for EPS including and excluding SBC

Source: FactSet, Goldman Sachs Global Investment Research

Price targets and key risks

In [Exhibit 42](#) we present our price targets and key risks.

Exhibit 42: Price targets and key risks

Company	Ticker	GS Rating	Current Price	Price Target	PT Methodology	Key upside/downside risks
Auto OEMs						
Tesla	TSLA	Neutral	\$172.98	\$175	Q5-Q8 EPS	EV adoption, margins, market share, the auto cycle, operational execution, key person risk
General Motors	GM	Buy	\$44.34	\$50	Norm. EPS	The auto cycle, market share, margins, FCF, and the ability to pivot to growth areas such as EVs and AVs
Ford	F	Neutral	\$13.41	\$14	Norm. EPS	The auto cycle, market share, margins, and the ability to pivot to growth areas such as EVs and AVs
Rivian	RIVN	Neutral	\$10.44	\$11	Q5-Q8 Sales	Pre-orders/sales volumes, production ramp, market share, margins, software/services mix, the auto cycle, and EV adoption
Tier 1 Suppliers						
BorgWarner	BWA	Neutral	\$35.13	\$34	Norm. EPS	Revenue growth including ability to outgrow market due to EV portfolio, diesel exposure, the auto cycle, margins, and market share
Gentex	GNTX	Neutral	\$35.90	\$35	Norm. EPS	Revenue growth, margins, and multiple expansion
Lear	LEA	Buy	\$141.44	\$171	Norm. EPS	The auto cycle, ability to benefit from increasing EV industry mix, margins, market share
Magna	MGA	Neutral	\$52.52	\$56	Norm. EPS	The auto cycle, market share, ability to outgrow production and capitalize on secular growth themes, capital allocation, and FCF
Visteon	VC	Buy	\$112.27	\$161	Norm. EPS	Ability to capitalize on EVs and AVs, margins, revenue, market share, general macroeconomic risk, multiple expansion/contraction
Aptiv	APTV	Buy	\$76.07	\$118	Norm. EPS	Ability to grow CPV, the auto cycle, market share, margins, debt
Electronic Components						
Amphenol	APH	Buy	\$116.62	\$130	Norm. EPS	Sales trends, margins, capital allocation
TE Connectivity	TEL	Buy	\$144.78	\$175	Norm. EPS	Revenue growth and auto demand, margins, and M&A
Belden	BDC	Buy	\$89.31	\$100	Norm. EPS	Industrial/macro trends, margins, leverage, and M&A
Sensata	ST	Neutral	\$35.89	\$36	Norm. EPS	Auto production, margins, leverage, tax rate, FX, and ability to increase CPV in EVs and hybrids
Lidar and Autonomy						
Aurora	AUR	Sell	\$3.20	\$2.00	2027 Sales (Discounted)	Time to market, industry pricing per mile, ability to expand geographic reach
Innoviz	INVZ	Buy	\$1.41	\$2.50	2026 Sales (Discounted)	Lidar adoption and ASPs, margins, market share, M&A, balance sheet
Luminar	LAZR	Sell	\$1.88	\$1.50	2026 Sales (Discounted)	Lidar adoption and ASPs, margins, market share, M&A, balance sheet
Mobileye	MBLY	Buy	\$31.26	\$40	Q5-Q8 EBITDA	ADAS/AV adoption, competition, geopolitics, market share, supply constraints and supplier/partner readiness
EMS						
Flex	FLEX	Buy	\$28.77	\$37	Q5-Q8 EPS	Tariff and geopolitical uncertainty, global macroeconomic demand, and margin and cash flow trends
Jabil	JBL	Buy	\$138.58	\$151	Q5-Q8 EPS	Revenue growth, trends at Apple and in key end markets, macroeconomic trends, margins, M&A, capital allocation
Test and Measurement						
Keysight	KEYS	Buy	\$158.75	\$172	Norm. EPS	Revenue growth (especially in 5G), margins, M&A, and the impact the US/China trade relations on fundamentals
Power and Thermal Management						
Vertiv	VRT	Buy	\$84.15	\$98	Q5-Q8 EBITDA	Revenue growth, margins, leverage
Voice Technology						
Cerence	CRNC	Neutral	\$14.07	\$19	Q5-Q8 Sales	Industry and macro environment, competition, margins, natural ASP degradation, mature contract with Toyota
EV Battery						
QuantumScape	QS	Sell	\$6.14	\$4.50	2028 Sales (Discounted)	Ability to hit its targeted battery specs and ramp production, technological breakthroughs in today's lithium-ion batteries
Charging Infrastructure						
ChargePoint	CHPT	Sell	\$1.85	\$1.50	2026 Sales (Discounted)	EV adoption/driver charging habits, margins, market share, European expansion, ASPs
Warehouse Automation						
Symbolic	SYM	Neutral	\$45.23	\$44	FY2026 EBITDA (Discounted)	Customer concentration, industry competition, warehouse automation investment trends, revenue growth

12-month price targets. Prices as of April 8, 2024.

Source: Goldman Sachs Global Investment Research, FactSet

Disclosure Appendix

Reg AC

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