

## Global Automobiles

## LVS tracker Jan 24: Global SAAR +21% y/y but pricing weakening; MBC vs BMW

Industry Overview

## Jan 24: Strong c90.1m SAAR (+21% y/y) but flat m/m

The overall global SAAR looks very strong for January 2024, and the industry has got off to a good start. Since October 2023, the global SAAR keeps tracking between 90m and 91m units. The strong 21% y/y increase has been driven largely by a weak comparison base as the industry was just coming out of the semiconductor shortage in Q1 23. In China, the base is also still low, as the country was just coming out of the last Coronavirus wave in Q1 23 (January 24 China SAAR +56% y/y, -1% m/m). As of February, we expect LV sales growth to slow vs a year-ago in most regions (to c+5/+10% y/y), mainly due to a normalizing comparison base. We expect global LVS to grow by +8% y/y in Q1 24. Nevertheless, we think that the industry got off to a good start this year. Volumes remain supported by higher price discounts around the world, particularly for BEVs. We even slightly increase our global LVS forecast for FY24 from 87.4m units (+1.8% y/y) to 88.1m units (+2.0% y/y, driven by a higher forecast for West- and Central Europe, where we now expect LVS to grow by 1.3% y/y (old: -0.2%); see Exhibit 1.

## MBC loses vs BMW in Jan; Chinese OEMs strong

Key highlights from January 2024 in terms of global market share are as follows (see Exhibit 6): **1) Chinese OEMs** benefited in January from the strong sales in their home country, but we note that this is also because Chinese New Year occurred this year on 10 February (vs 22 January in 2023). Hence, alongside a weak comparison base, there is also a sales day effect; therefore, we do not pay too much attention to the fact that Chinese OEMs increased their global market share from c16% in December 2023 to c19% in January 2024, which marks a historical record. Particularly, Geely and Chang'An have benefitted, whereas **BYD** (and XPeng, Nio) lost market share. **2) Mercedes vs BMW:** Mercedes' CFO also guided at the FY analyst call for declining sales in Q1 24 (while the market is up by c8% globally) due to ongoing supply-chain issues. We calculate a sales decline of -2% y/y for MBC in January 2024 (globally), which is in stark contrast to the +19% y/y we calculate for BMW (against a weak January 2023 base). BMW still lost 0.2% global market share vs December 2023, but MBC lost 0.6%. **3) VW** has had a good start to the year, boasting a sales increase of +13% y/y, mainly driven by VW passenger cars and China, but vs December 2023, the company lost c1% of global market share. In comparison, **Stellantis** gained 0.3% share sequentially.

## Other data points: Orders, pricing, inventories, sentiment

**1) Strong European orders:** Surprisingly, the order intake for cars is picking up again (+42% y/y in France, +19% y/y in Germany). This is more due to a weak comp base, but it seems that orders are not likely to deteriorate further on a sequential basis (a positive). **2) EU pricing** still weak: While volumes and orders have been not that bad, pricing continues to deteriorate. Used car pricing continue to decline (Exhibit 27-28). Average new car price rebates in Germany are now back to the level of 2021 (Exhibit 40). **3) US inventories** are now above the 5-year trailing average again, transaction prices declined by c-3.5% y/y in January (led by Tesla and Ford) and used car prices fell (Exhibits 48-52).

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## Jargon buster

ATP = average transaction price  
(B)EV = (battery) electric vehicle  
c = circa  
FX = foreign exchange  
ICE(V) = internal combustion engine (vehicle)  
LV(S/P) = light vehicle (sales/production)  
MBC = Mercedes Benz Cars  
M/S = market share

OEM = original equipment manufacturer

SAAR = seasonally adjusted annualised rate  
STLA = Stellantis  
TSLA = Tesla  
vs = versus  
VW = Volkswagen

W

vEV = BEV + PHEV (= plug-in hybrid EV)

# BofA LVS & LVP forecasts

## Exhibit 1: BofAe Global sales forecasts by region

We raise our global light vehicle sales forecast to 2.0% from 1.8%, following upward revisions in all major regions, except East Europe and South America

Sales forecasts	2021	2022	2023	Q1 2024e	Q2 2024e	Q3 2024e	Q4 2024e	2024E	2025E	2026E
<b>West Europe</b>	<b>12,468,153</b>	<b>11,689,337</b>	<b>13,339,565</b>	<b>3,450,021</b>	<b>3,484,123</b>	<b>3,251,485</b>	<b>3,323,706</b>	<b>13,509,335</b>	<b>13,547,896</b>	<b>13,761,023</b>
y-o-y %	-0.3%	-6.2%	14.1%	3.1%	0.3%	1.1%	0.5%	1.3%	0.3%	1.6%
<b>Central Europe</b>	<b>1,390,916</b>	<b>1,305,720</b>	<b>1,467,049</b>	<b>359,763</b>	<b>376,724</b>	<b>376,599</b>	<b>369,776</b>	<b>1,482,862</b>	<b>1,479,643</b>	<b>1,523,247</b>
y-o-y %	4.1%	-6.1%	12.4%	-2.5%	-1.1%	6.8%	1.4%	1.1%	-0.2%	2.9%
<b>EU 28</b>	<b>13,859,069</b>	<b>12,995,057</b>	<b>14,806,614</b>	<b>3,809,784</b>	<b>3,860,847</b>	<b>3,628,084</b>	<b>3,693,482</b>	<b>14,992,197</b>	<b>15,027,539</b>	<b>15,284,271</b>
y-o-y %	0.2%	-6.2%	13.9%	2.6%	0.2%	1.7%	0.6%	1.3%	0.2%	1.7%
<b>East Europe</b>	<b>2,895,737</b>	<b>1,968,840</b>	<b>2,929,974</b>	<b>559,234</b>	<b>612,595</b>	<b>674,256</b>	<b>829,697</b>	<b>2,675,783</b>	<b>2,652,406</b>	<b>2,640,550</b>
y-o-y %	-0.2%	-32.0%	48.8%	2.3%	-16.0%	-13.1%	-5.6%	-8.7%	-0.9%	-0.4%
<b>North America</b>	<b>17,749,302</b>	<b>16,496,597</b>	<b>18,653,673</b>	<b>4,494,104</b>	<b>5,042,018</b>	<b>4,852,108</b>	<b>4,964,518</b>	<b>19,352,749</b>	<b>20,281,902</b>	<b>21,169,050</b>
y-o-y %	3.8%	-7.1%	13.1%	5.5%	2.6%	1.6%	5.4%	3.7%	4.8%	4.4%
<b>Asia ex-China</b>	<b>12,608,338</b>	<b>13,762,181</b>	<b>14,604,762</b>	<b>3,955,341</b>	<b>3,304,716</b>	<b>3,770,023</b>	<b>4,007,196</b>	<b>15,037,276</b>	<b>15,443,906</b>	<b>15,808,395</b>
y-o-y %	7.1%	9.2%	6.1%	2.9%	-4.0%	3.9%	8.6%	3.0%	2.7%	2.4%
<b>China</b>	<b>24,368,132</b>	<b>24,556,604</b>	<b>25,957,649</b>	<b>6,344,354</b>	<b>6,341,397</b>	<b>6,287,732</b>	<b>7,530,547</b>	<b>26,504,030</b>	<b>26,903,435</b>	<b>27,390,727</b>
y-o-y %	1.0%	0.8%	5.7%	21.4%	2.8%	-7.5%	-3.0%	2.1%	1.5%	1.8%
<b>Asia-Pacific (incl China)</b>	<b>36,976,470</b>	<b>38,318,785</b>	<b>40,562,411</b>	<b>10,299,695</b>	<b>9,646,113</b>	<b>10,057,755</b>	<b>11,537,743</b>	<b>41,541,306</b>	<b>42,347,340</b>	<b>43,199,122</b>
y-o-y %	3.0%	3.6%	5.9%	13.6%	0.4%	-3.6%	0.7%	2.4%	1.9%	2.0%
<b>South America</b>	<b>3,763,004</b>	<b>3,839,571</b>	<b>3,936,622</b>	<b>871,338</b>	<b>921,475</b>	<b>1,061,926</b>	<b>1,079,030</b>	<b>3,933,769</b>	<b>4,119,468</b>	<b>4,328,289</b>
y-o-y %	16.8%	2.0%	2.5%	-0.9%	-2.4%	3.3%	-0.6%	-0.1%	4.7%	5.1%
<b>MEA</b>	<b>3,834,788</b>	<b>4,137,210</b>	<b>4,170,611</b>	<b>1,116,018</b>	<b>978,893</b>	<b>1,076,504</b>	<b>1,121,165</b>	<b>4,292,581</b>	<b>4,446,444</b>	<b>4,645,492</b>
y-o-y %	18.8%	7.9%	0.8%	0.2%	-3.5%	7.1%	8.0%	2.9%	3.6%	4.5%
<b>Oceania</b>	<b>1,202,243</b>	<b>1,215,355</b>	<b>1,336,850</b>	<b>323,218</b>	<b>354,677</b>	<b>324,797</b>	<b>335,426</b>	<b>1,338,119</b>	<b>1,290,087</b>	<b>1,240,043</b>
y-o-y %	18.2%	1.1%	10.0%	7.9%	1.3%	-3.4%	-4.5%	0.1%	-3.6%	-3.9%
<b>Global LV Sales</b>	<b>80,280,613</b>	<b>78,971,415</b>	<b>86,396,755</b>	<b>21,473,391</b>	<b>21,416,619</b>	<b>21,675,431</b>	<b>23,561,061</b>	<b>88,126,503</b>	<b>90,165,187</b>	<b>92,506,817</b>
y-o-y %	4.0%	-1.6%	9.4%	8.0%	0.0%	-1.1%	1.6%	2.0%	2.3%	2.6%

Source: BofA Global Research estimates, S&P, incl = including.

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## Exhibit 2: Summary of BofA LV production forecasts (units)

We have updated in our last LVP tracker our production forecast at a growth rate of +1.0%/y for 2024e; we are 1.4ppts above S&P, and for 2025e, we forecast a 1.3% decline

Region	2021	2022	2023	2024E	S&P 2024E	2025E	S&P 2025E	2026E	2027E
<b>Western Europe</b>	<b>9,420,503</b>	<b>9,886,735</b>	<b>11,181,347</b>	<b>10,829,594</b>	<b>10,776,000</b>	<b>10,583,169</b>	<b>10,804,668</b>	<b>10,407,820</b>	<b>10,347,811</b>
Growth	-6.3%	4.9%	13.1%	-3.1%	-3.6%	-2.3%	0.3%	-1.7%	-0.6%
<b>Central Europe</b>	<b>3,407,964</b>	<b>3,638,830</b>	<b>4,102,379</b>	<b>3,986,412</b>	<b>4,027,270</b>	<b>3,811,295</b>	<b>3,907,963</b>	<b>3,749,625</b>	<b>4,025,564</b>
Growth	-3.5%	6.8%	12.7%	-2.8%	-1.8%	-4.4%	-3.0%	-1.6%	7.4%
<b>EU 28</b>	<b>12,828,467</b>	<b>13,525,565</b>	<b>15,283,726</b>	<b>14,816,006</b>	<b>14,803,270</b>	<b>14,394,463</b>	<b>14,712,631</b>	<b>14,157,444</b>	<b>14,373,375</b>
Growth	-5.6%	5.4%	13.0%	-3.1%	-3.1%	-2.8%	-0.6%	-1.6%	1.5%
<b>Eastern Europe</b>	<b>3,062,886</b>	<b>2,301,114</b>	<b>2,578,604</b>	<b>2,493,736</b>	<b>2,560,755</b>	<b>2,634,477</b>	<b>2,671,522</b>	<b>2,696,851</b>	<b>2,697,536</b>
Growth	2.5%	-24.9%	12.1%	-3.3%	-0.7%	5.6%	4.3%	2.4%	0.0%
<b>Total Europe</b>	<b>15,891,353</b>	<b>15,826,679</b>	<b>17,862,330</b>	<b>17,309,742</b>	<b>17,364,025</b>	<b>17,028,940</b>	<b>17,384,153</b>	<b>16,854,295</b>	<b>17,070,911</b>
Growth	-4.1%	-0.4%	12.9%	-3.1%	-2.8%	-1.6%	0.1%	-1.0%	1.3%
<b>North America</b>	<b>13,047,059</b>	<b>14,296,207</b>	<b>15,682,812</b>	<b>16,569,340</b>	<b>15,771,346</b>	<b>17,228,897</b>	<b>16,174,121</b>	<b>18,001,663</b>	<b>18,092,115</b>
Growth	0.2%	9.6%	9.7%	5.7%	0.6%	4.0%	2.6%	4.5%	0.5%
<b>China</b>	<b>24,585,919</b>	<b>26,150,230</b>	<b>28,764,452</b>	<b>29,287,351</b>	<b>29,451,359</b>	<b>28,239,713</b>	<b>30,382,211</b>	<b>28,751,521</b>	<b>29,326,319</b>
Growth	5.3%	6.4%	10.0%	1.8%	2.4%	-3.6%	3.2%	1.8%	2.0%
<b>Asia ex-China</b>	<b>19,011,783</b>	<b>21,005,000</b>	<b>22,815,609</b>	<b>22,863,710</b>	<b>22,214,606</b>	<b>22,021,165</b>	<b>22,339,003</b>	<b>22,066,724</b>	<b>22,144,209</b>
Growth	7.9%	10.5%	8.6%	0.2%	-2.6%	-3.7%	0.6%	0.2%	0.4%
<b>South America</b>	<b>2,606,481</b>	<b>2,824,287</b>	<b>2,912,479</b>	<b>2,954,826</b>	<b>2,890,614</b>	<b>3,140,607</b>	<b>3,086,505</b>	<b>3,263,676</b>	<b>3,403,650</b>
Growth	16.1%	8.4%	3.1%	1.5%	-0.8%	6.3%	6.8%	3.9%	4.3%
<b>Middle East</b>	<b>1,064,127</b>	<b>1,174,304</b>	<b>1,097,036</b>	<b>1,100,969</b>	<b>1,135,020</b>	<b>1,176,053</b>	<b>1,187,932</b>	<b>1,246,140</b>	<b>1,292,682</b>
Growth	13.4%	10.4%	-6.6%	0.4%	3.5%	6.8%	4.7%	6.0%	3.7%
<b>Africa</b>	<b>988,536</b>	<b>1,067,465</b>	<b>1,186,691</b>	<b>1,110,404</b>	<b>1,124,981</b>	<b>1,159,035</b>	<b>1,180,180</b>	<b>1,295,787</b>	<b>1,355,022</b>
Growth	17.5%	8.0%	11.2%	-6.4%	-5.2%	4.4%	4.9%	11.8%	4.6%
<b>World</b>	<b>77,195,258</b>	<b>82,344,172</b>	<b>90,321,409</b>	<b>91,196,342</b>	<b>89,951,951</b>	<b>89,994,409</b>	<b>91,734,105</b>	<b>91,479,808</b>	<b>92,684,909</b>
Growth	3.5%	6.7%	9.7%	1.0%	-0.4%	-1.3%	2.0%	1.7%	1.3%

Source: BofA Global Research estimates, S&P

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# Global Sales forecasts of OEMs by S&P

## Exhibit 3: Light vehicle sales forecast by S&P and recent changes in forecast by OEMs (February-24 vs January-23)

Volvo Cars and Honda benefitted from the greatest positive revisions, while Toyota, Nissan, and MBG saw the most negative revisions

Retail sales (units)	2020	2021	2022	2023	2024e	2025e	2026e	2027e	2028e
<b>Latest IHS forecasts</b>									
<b>VW Group</b>	8,792,139	8,220,624	7,697,434	8,386,746	8,002,967	8,279,656	8,220,737	8,284,045	8,176,605
y-o-y %		-6.5%	-6.4%	9.0%	-4.6%	3.5%	-0.7%	0.8%	-1.3%
<b>Mercedes Benz Cars</b>	2,128,041	2,005,972	2,003,190	2,081,410	2,250,930	2,246,475	2,354,363	2,406,890	2,424,371
y-o-y %		-5.7%	-0.1%	3.9%	8.1%	-0.2%	4.8%	2.2%	0.7%
<b>BMW Group</b>	2,327,912	2,494,393	2,378,431	2,566,655	2,594,892	2,668,137	2,663,294	2,596,554	2,586,144
y-o-y %		7.2%	-4.6%	7.9%	1.1%	2.8%	-0.2%	-2.5%	-0.4%
<b>Stellantis</b>	6,282,254	6,527,127	5,775,380	6,119,787	6,211,867	6,504,031	6,640,690	6,641,954	6,503,580
y-o-y %		3.9%	-11.5%	6.0%	1.5%	4.7%	2.1%	0.0%	-2.1%
<b>Renault Group</b>	2,361,166	2,238,502	2,045,694	2,193,311	2,268,262	2,252,557	2,487,652	2,631,534	2,586,683
y-o-y %		-5.2%	-8.6%	7.2%	3.4%	-0.7%	10.4%	5.8%	-1.7%
<b>Volvo Cars</b>	661,005	679,483	618,202	696,724	706,888	732,795	795,982	831,739	817,109
y-o-y %		2.8%	-9.0%	12.7%	1.5%	3.7%	8.6%	4.5%	-1.8%
<b>EU Car Makers in total</b>	22,552,517	22,166,101	20,518,331	22,044,633	22,035,806	22,683,651	23,162,718	23,392,716	23,094,492
y-o-y %		-1.7%	-7.4%	7.4%	0.0%	2.9%	2.1%	1.0%	-1.3%
<b>Ford</b>	4,251,976	3,966,297	3,736,528	3,947,313	3,824,860	3,976,301	3,825,273	3,738,147	3,649,418
y-o-y %		-6.7%	-5.8%	5.6%	-3.1%	4.0%	-3.8%	-2.3%	-2.4%
<b>GM</b>	5,004,125	4,348,432	4,288,070	4,534,121	4,402,537	4,309,113	4,272,133	4,176,205	4,133,602
y-o-y %		-13.1%	-1.4%	5.7%	-2.9%	-2.1%	-0.9%	-2.2%	-1.0%
<b>Tesla</b>	499,550	927,255	1,321,697	1,804,370	2,254,674	2,842,397	3,493,713	4,179,142	4,512,967
y-o-y %		85.6%	42.5%	36.5%	25.0%	26.1%	22.9%	19.6%	8.0%
<b>Toyota</b>	8,519,161	9,422,584	9,375,559	10,001,690	9,748,031	9,684,072	9,695,416	9,712,704	9,746,594
y-o-y %		10.6%	-0.5%	6.7%	-2.5%	-0.7%	0.1%	0.2%	0.3%
<b>Honda</b>	4,471,860	4,454,016	3,798,392	3,933,474	4,160,780	4,179,382	3,974,754	3,881,972	3,951,287
y-o-y %		-0.4%	-14.7%	3.6%	5.8%	0.4%	-4.9%	-2.3%	1.8%
<b>Nissan</b>	4,638,957	4,632,063	3,924,822	3,990,040	3,884,699	3,718,838	3,765,592	3,948,735	3,996,759
y-o-y %		-0.1%	-15.3%	1.7%	-2.6%	-4.3%	1.3%	4.9%	1.2%
<b>Hyundai Group</b>	6,253,431	6,795,068	6,549,730	6,901,517	6,970,443	6,846,648	6,917,616	7,041,711	6,953,996
y-o-y %		8.7%	-3.6%	5.4%	1.0%	-1.8%	1.0%	1.8%	-1.2%
<b>Changes in IHS forecasts (Jan'24 vs Dec'23)</b>									
<b>VW Group</b>					2,894	-78,896	-77,260	-114,609	-80,812
% change					0.0%	-0.9%	-0.9%	-1.4%	-1.0%
<b>Mercedes-Benz</b>					-50,060	-32,415	-26,337	-28,997	-24,280
% change					-2.2%	-1.4%	-1.1%	-1.2%	-1.0%
<b>BMW Group</b>					15,803	7,015	-9,794	16,735	-3,679
% change					0.6%	0.3%	-0.4%	0.6%	-0.1%
<b>Stellantis</b>					-23,827	-54,309	-37,345	-47,669	-9,424
% change					-0.4%	-0.8%	-0.6%	-0.7%	-0.1%
<b>Renault Group</b>					10,419	-2,842	-2,654	1,121	-7,078
% change					0.5%	-0.1%	-0.1%	0.0%	-0.3%
<b>Volvo Cars</b>					13,591	-19,949	3,465	10,760	18,435
% change					2.0%	-2.7%	0.4%	1.3%	2.3%
<b>Ford</b>					-15,678	-12,078	-15,497	468	-13,673
% change					-0.4%	-0.3%	-0.4%	0.0%	-0.4%
<b>GM</b>					-75,811	-845	17,935	-24,558	-58,856
% change					-1.7%	0.0%	0.4%	-0.6%	-1.4%
<b>Tesla</b>					16,700	-37,741	-48,741	-96,058	-87,631
% change					0.7%	-1.3%	-1.4%	-2.2%	-1.9%
<b>Toyota</b>					-127,184	-134,276	-128,510	-124,418	-126,046
% change					-1.3%	-1.4%	-1.3%	-1.3%	-1.3%
<b>Honda</b>					61,271	51,340	-20,379	-33,398	-27,474
% change					1.5%	1.2%	-0.5%	-0.9%	-0.7%
<b>Nissan</b>					-57,403	-219,618	-156,444	-52,308	-10,816
% change					-1.5%	-5.6%	-4.0%	-1.3%	-0.3%
<b>Hyundai Group</b>					86,661	34,776	8,985	11,855	12,828
% change					1.3%	0.5%	0.1%	0.2%	0.2%

Source: S&P; all the numbers above are NOT BofA estimates, but reflect the S&P view; we consider S&P as the most used data source in the automotive industry (by suppliers, OEMs, consultants, etc)

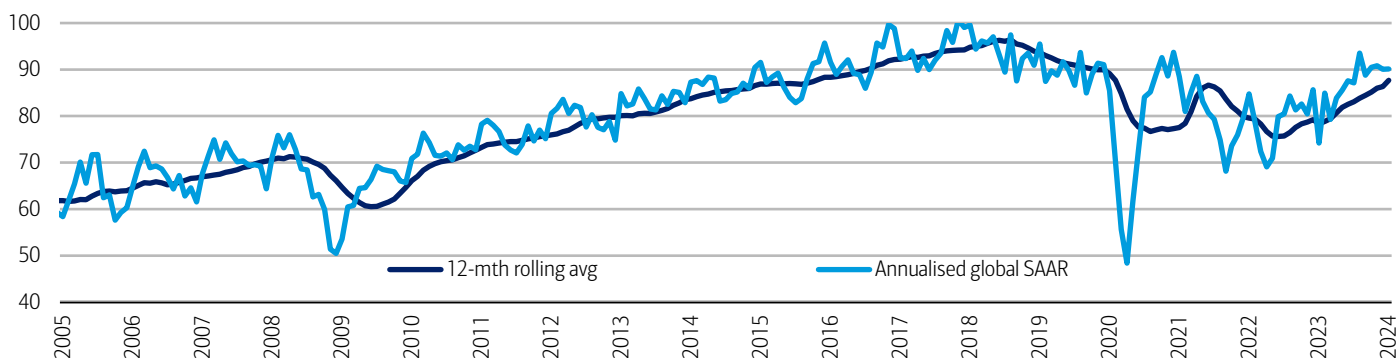
BofA GLOBAL RESEARCH

# BofA Global Auto Sales SAAR

We have built a global SAAR indicator from our analysis of over 70% of global auto sales tracked market by market, assuming that the rest of the world markets develop similarly to countries we track. The sales have weakened since 2021 due to the global supply shortage, but we are seeing a reversal now. January 2024 was another strong month, with a SAAR of 90.1m (+21% y/y, +0.1% m/m), driven by higher sales across regions. Global light vehicle sales seem to be stabilizing now around a SAAR level of 90m units. However, ongoing high vehicle prices probably prevent another strong increase for the time being.

## Exhibit 4: Global autos sales SAAR based on tracked sales (light vehicles)

Global SAAR pushed up +21% YoY to 90.1m in January 2024, in line with December 2023 and remaining above the 12-month rolling SAAR

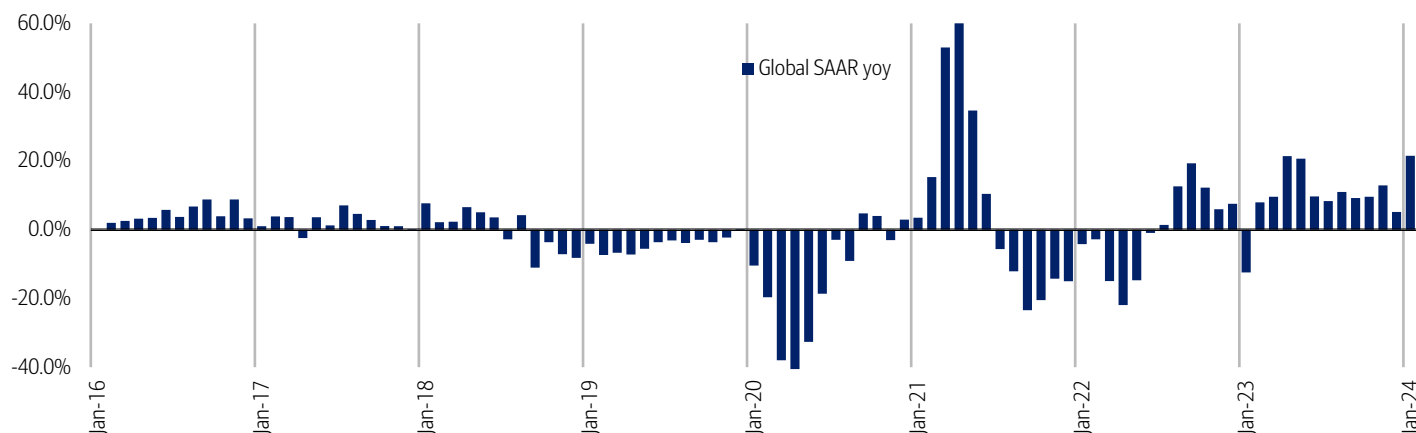


**Source:** BofA Global Research. The indicator identified as Global auto sales SAAR above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark. Note: data is estimate for Europe sales for July

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## Exhibit 5: Global auto SAAR based on tracked sales (y/y%)

January SAAR y/y growth (+21% y/y) driven by a weak comparison base from a year ago and also by calendar effects around China New Year



**Source:** BofA Global Research. The indicator identified as Global auto sales SAAR above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark. Note: data is estimate for Europe sales for July

BofA GLOBAL RESEARCH

# Global Sales & Market share (I) by OEM

## Exhibit 6: Sales and market share of key OEMs (Monthly)

Suzuki, Chang'An and Geely (+1.8, +1.5, +1.3ppts) gained the most market share m/m in February 2024, mainly over VW, BYD, Tesla and GM (-1.1, -1.0, -0.8, -0.6ppts)

Units Sales	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
BMW	143,295	135,104	190,092	157,248	179,226	178,673	166,925	160,320	175,039	172,455	191,763	211,072	171,028
Mercedes-Benz	116,260	128,040	163,320	131,152	142,445	159,466	137,654	139,398	160,524	130,035	134,623	165,529	113,479
Stellantis	316,764	354,721	485,755	383,315	432,871	443,991	378,375	352,204	396,370	360,811	353,982	371,773	337,209
RNO	120,041	120,252	163,266	126,518	136,578	170,264	128,305	111,867	130,811	139,292	132,217	152,197	119,201
VW	511,252	498,516	676,103	594,736	633,719	701,692	648,020	615,096	673,117	626,354	671,784	770,369	613,806
Ford	195,883	218,660	250,938	247,055	238,820	248,818	244,285	220,269	242,608	207,943	210,815	258,907	206,920
GM	258,778	255,126	319,450	328,294	331,735	341,084	323,776	338,153	334,017	292,281	302,858	320,254	249,790
Tesla	85,789	117,697	196,388	109,851	128,893	181,453	109,078	157,214	129,038	97,315	152,753	171,259	111,204
TOYOTA	461,663	511,943	621,888	537,702	553,489	596,150	563,186	563,249	615,026	576,201	574,860	610,880	531,716
NISSAN	172,435	197,960	265,213	198,657	201,589	219,730	199,666	189,159	226,182	211,605	203,146	239,385	197,520
HONDA	211,536	222,631	296,068	266,815	273,539	287,792	268,052	276,981	304,560	319,054	294,825	336,484	300,741
SUZUKI	232,812	221,983	230,060	202,529	232,087	223,215	244,053	242,235	255,114	230,930	228,070	193,498	263,001
Hyundai	241,108	247,508	312,893	274,199	288,194	294,885	281,852	269,521	278,072	266,239	299,048	291,388	247,746
KIA	180,348	191,799	224,652	208,937	207,931	214,588	202,914	185,485	203,543	185,773	187,354	165,115	174,339
Chang'An	117,023	92,802	93,073	100,637	109,710	118,057	117,424	120,002	124,619	137,521	118,370	125,088	189,330
BYD	139,755	176,662	192,289	193,902	220,735	231,230	230,882	241,592	257,736	258,011	263,066	300,215	206,904
Geely	108,789	109,887	115,846	108,850	119,041	130,412	125,242	127,622	149,121	154,732	169,061	137,053	189,218
<b>Global sales</b>	<b>4,295,662</b>	<b>4,550,577</b>	<b>5,722,203</b>	<b>4,987,831</b>	<b>5,280,983</b>	<b>5,707,145</b>	<b>5,313,160</b>	<b>5,323,198</b>	<b>5,777,084</b>	<b>5,548,889</b>	<b>5,627,322</b>	<b>5,985,262</b>	<b>5,214,047</b>
YoY growth	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
BMW	-21.0%	7.9%	21.7%	24.0%	20.4%	9.8%	10.4%	12.2%	7.2%	10.7%	12.2%	9.5%	19.4%
Mercedes-Benz	-19.5%	18.5%	10.6%	5.5%	11.4%	4.8%	-0.3%	5.3%	10.2%	-2.2%	-2.8%	1.0%	-2.4%
Stellantis	-6.1%	2.1%	19.2%	6.6%	10.4%	3.2%	3.6%	7.0%	6.2%	2.5%	-2.4%	-3.3%	6.5%
RNO	-8.0%	-9.9%	4.9%	24.6%	23.6%	-1.5%	10.6%	12.0%	2.3%	20.5%	-0.8%	-5.8%	-0.7%
VW	-15.6%	9.5%	23.8%	44.3%	14.4%	3.3%	7.0%	6.0%	9.4%	11.3%	21.3%	11.6%	20.1%
Ford	-7.9%	16.3%	8.5%	4.7%	8.0%	14.8%	8.5%	-0.5%	6.1%	-8.5%	-4.5%	3.0%	5.6%
GM	-5.3%	1.7%	8.9%	21.0%	24.4%	10.7%	8.7%	5.0%	5.6%	-8.4%	2.4%	-11.1%	-3.5%
Tesla	42.1%	43.7%	25.6%	123.8%	145.6%	26.1%	104.8%	78.4%	-21.5%	47.0%	10.7%	20.0%	29.6%
TOYOTA	-4.6%	11.6%	2.0%	12.5%	13.7%	9.3%	5.1%	12.2%	12.6%	5.9%	13.7%	5.8%	15.2%
NISSAN	-22.0%	4.6%	7.1%	7.8%	21.9%	6.2%	0.5%	-1.1%	10.0%	1.1%	19.0%	21.4%	14.5%
HONDA	-27.6%	-16.0%	-3.5%	7.1%	25.6%	2.3%	-1.9%	4.9%	19.2%	27.0%	28.8%	13.4%	42.2%
SUZUKI	20.5%	7.7%	1.4%	10.0%	13.4%	7.4%	10.3%	16.0%	5.4%	2.9%	2.4%	-1.7%	13.0%
Hyundai	-2.8%	2.3%	23.7%	9.4%	8.8%	5.5%	4.1%	2.4%	-0.7%	1.6%	10.6%	-0.4%	2.8%
KIA	1.3%	9.0%	8.7%	6.9%	10.6%	2.6%	0.1%	0.4%	4.4%	1.2%	-2.2%	-9.4%	-3.3%
Chang'An	-18.4%	58.5%	-19.5%	113.8%	73.7%	22.2%	17.0%	33.4%	19.7%	12.1%	17.7%	-24.6%	61.8%
BYD	47.1%	98.3%	86.3%	85.1%	94.0%	74.4%	45.2%	43.1%	34.8%	25.4%	20.9%	34.2%	48.0%
Geely	-24.5%	27.6%	-2.3%	55.8%	35.3%	9.3%	2.2%	15.7%	23.5%	4.5%	20.6%	-9.9%	73.9%
<b>Global sales</b>	<b>-11.9%</b>	<b>9.4%</b>	<b>10.4%</b>	<b>23.2%</b>	<b>22.0%</b>	<b>10.7%</b>	<b>8.6%</b>	<b>11.9%</b>	<b>10.3%</b>	<b>10.7%</b>	<b>14.4%</b>	<b>6.4%</b>	<b>21.4%</b>
Market Share	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
BMW	3.3%	3.0%	3.3%	3.2%	3.4%	3.1%	3.1%	3.0%	3.0%	3.1%	3.4%	3.5%	3.3%
Mercedes-Benz	2.7%	2.8%	2.9%	2.6%	2.7%	2.8%	2.6%	2.6%	2.8%	2.3%	2.4%	2.8%	2.2%
Stellantis	7.4%	7.8%	8.5%	7.7%	8.2%	7.8%	7.1%	6.6%	6.9%	6.5%	6.3%	6.2%	6.5%
RNO	2.8%	2.6%	2.9%	2.5%	2.6%	3.0%	2.4%	2.1%	2.3%	2.5%	2.3%	2.5%	2.3%
Total VW	11.9%	11.0%	11.8%	11.9%	12.0%	12.3%	12.2%	11.6%	11.7%	11.3%	11.9%	12.9%	11.8%
Ford	4.6%	4.8%	4.4%	5.0%	4.5%	4.4%	4.6%	4.1%	4.2%	3.7%	3.7%	4.3%	4.0%
GM	6.0%	5.6%	5.6%	6.6%	6.3%	6.0%	6.1%	6.4%	5.8%	5.3%	5.4%	5.4%	4.8%
Tesla	2.0%	2.6%	3.4%	2.2%	2.4%	3.2%	2.1%	3.0%	2.2%	1.8%	2.7%	2.9%	2.1%
TOYOTA	10.7%	11.3%	10.9%	10.8%	10.5%	10.4%	10.6%	10.6%	10.6%	10.4%	10.2%	10.2%	10.2%
NISSAN	4.0%	4.4%	4.6%	4.0%	3.8%	3.9%	3.8%	3.6%	3.9%	3.8%	3.6%	4.0%	3.8%
HONDA	4.9%	4.9%	5.2%	5.3%	5.2%	5.0%	5.0%	5.2%	5.3%	5.7%	5.2%	5.6%	5.8%
SUZUKI	5.4%	4.9%	4.0%	4.1%	4.4%	3.9%	4.6%	4.6%	4.4%	4.2%	4.1%	3.2%	5.0%
Hyundai	5.6%	5.4%	5.5%	5.5%	5.5%	5.2%	5.3%	5.1%	4.8%	4.8%	5.3%	4.9%	4.8%
KIA	4.2%	4.2%	3.9%	4.2%	3.9%	3.8%	3.8%	3.5%	3.5%	3.3%	3.3%	2.8%	3.3%
Chang'An	2.7%	2.0%	1.6%	2.0%	2.1%	2.1%	2.2%	2.3%	2.2%	2.5%	2.1%	2.1%	3.6%
BYD	3.3%	3.9%	3.4%	3.9%	4.2%	4.1%	4.3%	4.5%	4.5%	4.6%	4.7%	5.0%	4.0%
Geely	2.5%	2.4%	2.0%	2.2%	2.3%	2.3%	2.4%	2.4%	2.6%	2.8%	3.0%	2.3%	3.6%

**Source:** BofA Global Research. ACEA, Autodata, CPCA, Anfavea, S&P, local car authorities. Note: Market share is calculated as total sales of each OEM in tracked regions divide by total sales of all the tracked regions.

These include EU, US, China, Korea, Japan, Russia, India, Türkiye, Singapore. Note: Europe sales figure are estimated for July for market share calculation

# Global Sales & Market share (II) by OEM

## Exhibit 7: Sales and market share of key OEMs (Quarterly and Annually)

BYD and Tesla y/y growth in 2023 outpaced competition (+c50% & +c37%), with strong market share gains (1.1 ppts and 0.6 ppts, respectively)

Unit Sales	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	FY 2021	FY 2022	FY 2023
BMW	443,228	462,833	438,419	457,384	519,459	468,491	515,147	502,284	575,290	1,914,299	1,878,095	2,061,212
Mercedes-Benz	390,453	400,075	404,219	416,199	435,344	407,620	433,063	437,576	430,187	1,602,878	1,655,837	1,708,446
Stellantis	1,137,727	1,092,145	1,181,805	1,067,801	1,098,988	1,157,240	1,260,177	1,126,949	1,086,566	4,935,157	4,440,739	4,630,932
RNO	499,251	419,443	384,804	343,818	410,414	403,559	433,360	370,983	423,706	1,976,432	1,558,479	1,631,608
VW	1,643,972	1,607,468	1,645,543	1,801,112	1,806,356	1,685,871	1,930,147	1,936,233	2,068,507	7,467,895	6,860,479	7,620,758
Ford	717,123	632,073	673,858	675,105	699,407	665,481	734,693	707,162	677,665	2,877,965	2,680,443	2,785,001
GM	812,730	817,456	845,970	936,342	975,022	833,354	1,001,113	995,946	915,393	3,707,406	3,574,790	3,745,806
Tesla	283,416	298,667	245,477	305,796	346,874	399,874	420,197	395,330	421,327	825,716	1,196,814	1,636,728
TOYOTA	1,543,777	1,552,044	1,510,542	1,583,916	1,626,961	1,595,494	1,687,341	1,741,461	1,761,941	6,630,130	6,273,463	6,786,237
NISSAN	667,739	657,928	556,382	595,435	577,150	635,608	619,976	615,007	654,136	2,941,091	2,386,895	2,524,727
HONDA	939,618	863,974	748,281	792,985	776,692	730,235	828,146	849,593	950,363	3,889,251	3,181,932	3,358,337
SUZUKI	548,585	626,121	596,667	672,195	644,022	684,855	657,831	741,402	652,498	2,198,088	2,539,005	2,736,586
Hyundai	784,451	742,869	794,936	814,136	825,152	801,509	857,278	829,445	856,675	3,382,390	3,177,093	3,344,907
KIA	528,305	560,623	592,600	582,533	557,433	596,799	631,456	591,942	538,242	2,343,043	2,293,189	2,358,439
Chang'An	258,151	317,535	206,842	294,448	389,187	302,898	328,404	362,045	380,979	1,116,033	1,208,012	1,374,326
BYD	282,266	287,363	351,091	519,079	647,091	508,706	645,867	730,210	821,292	723,697	1,804,624	2,706,075
Geely	405,402	348,717	277,226	353,553	440,351	334,522	358,303	401,985	460,846	1,466,725	1,419,847	1,555,656
<b>Global sales</b>	<b>14,684,740</b>	<b>14,217,236</b>	<b>13,533,093</b>	<b>14,881,510</b>	<b>15,556,361</b>	<b>14,568,442</b>	<b>15,975,959</b>	<b>16,413,442</b>	<b>17,161,473</b>	<b>59,896,782</b>	<b>58,188,200</b>	<b>64,119,316</b>
YoY growth	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	FY 2021	FY 2022	FY 2023
BMW	-16.1%	-5.3%	-19.4%	4.4%	17.2%	1.2%	17.5%	9.8%	10.7%	6.4%	-1.9%	9.8%
Mercedes-Benz	-21.5%	-10.1%	-10.2%	31.2%	11.5%	1.9%	7.1%	5.1%	-1.2%	-9.5%	3.3%	3.2%
Stellantis	-20.0%	-16.8%	-15.5%	-1.7%	-3.4%	6.0%	6.6%	5.5%	-1.1%	0.9%	-10.0%	4.3%
RNO	-20.2%	-12.5%	-30.8%	-22.1%	-17.8%	-3.8%	12.6%	7.9%	3.2%	-5.7%	-21.1%	4.7%
VW	-31.3%	-22.0%	-22.4%	9.5%	9.9%	4.9%	17.3%	7.5%	14.5%	-6.3%	-8.1%	11.1%
Ford	-18.7%	-21.1%	-7.4%	6.8%	-2.5%	5.3%	9.0%	4.7%	-3.1%	-9.6%	-6.9%	3.9%
GM	-39.8%	-23.2%	-22.0%	25.5%	20.0%	1.9%	18.3%	6.4%	-6.1%	-14.7%	-3.6%	4.8%
Tesla	77.2%	75.6%	39.8%	55.6%	22.4%	33.9%	71.2%	29.3%	21.5%	87.4%	44.9%	36.8%
TOYOTA	-14.4%	-11.3%	-14.6%	1.0%	5.4%	2.8%	11.7%	9.9%	8.3%	8.8%	-5.4%	8.2%
NISSAN	-22.8%	-23.8%	-26.5%	-8.9%	-13.6%	-3.4%	11.4%	3.3%	13.3%	-1.5%	-18.8%	5.8%
HONDA	-19.1%	-12.8%	-30.9%	-9.6%	-17.3%	-15.5%	10.7%	7.1%	22.4%	1.3%	-18.2%	5.5%
SUZUKI	4.2%	-7.0%	22.4%	37.6%	17.4%	9.4%	10.3%	10.3%	1.3%	32.5%	15.5%	7.8%
Hyundai	-10.8%	-12.6%	-13.5%	-1.9%	5.2%	7.9%	7.8%	1.9%	3.8%	12.8%	-6.1%	5.3%
KIA	-1.7%	-1.1%	-10.5%	-0.5%	5.5%	6.5%	6.6%	1.6%	-3.4%	17.4%	-2.1%	2.8%
Chang'An	-15.7%	-8.8%	-22.0%	20.3%	50.8%	-4.6%	58.8%	23.0%	-2.1%	18.5%	8.2%	13.8%
BYD	82.6%	182.8%	157.0%	155.4%	129.2%	77.0%	84.0%	40.7%	26.9%	73.5%	149.4%	50.0%
Geely	-16.9%	-10.0%	-20.6%	8.9%	8.6%	-4.1%	29.2%	13.7%	4.7%	-4.5%	-3.2%	9.6%
<b>Global sales</b>	<b>-16.9%</b>	<b>-9.7%</b>	<b>-14.4%</b>	<b>9.0%</b>	<b>5.9%</b>	<b>2.5%</b>	<b>18.1%</b>	<b>10.3%</b>	<b>10.3%</b>	<b>2.7%</b>	<b>-2.9%</b>	<b>10.2%</b>
Market Share	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	FY 2021	FY 2022	FY 2023
BMW	3.0%	3.3%	3.2%	3.1%	3.3%	3.2%	3.2%	3.1%	3.4%	3.2%	3.2%	3.2%
Mercedes-Benz	2.7%	2.8%	3.0%	2.8%	2.8%	2.8%	2.7%	2.7%	2.5%	2.7%	2.8%	2.7%
Stellantis	7.7%	7.7%	8.7%	7.2%	7.1%	7.9%	7.9%	6.9%	6.3%	8.2%	7.7%	7.2%
RNO	3.4%	3.0%	2.8%	2.3%	2.6%	2.8%	2.7%	2.3%	2.5%	3.3%	2.7%	2.5%
Total VW	11.2%	11.3%	12.2%	12.1%	11.6%	11.6%	12.1%	11.8%	12.1%	12.4%	11.8%	11.9%
Ford	4.9%	4.4%	5.0%	4.5%	4.5%	4.6%	4.6%	4.3%	3.9%	4.8%	4.6%	4.3%
GM	5.5%	5.7%	6.3%	6.3%	6.3%	5.7%	6.3%	6.1%	5.3%	6.2%	6.2%	5.8%
Tesla	1.9%	2.1%	1.8%	2.1%	2.2%	2.7%	2.6%	2.4%	2.5%	1.4%	2.0%	2.6%
TOYOTA	10.5%	10.9%	11.2%	10.6%	10.5%	11.0%	10.6%	10.6%	10.3%	11.1%	10.8%	10.6%
NISSAN	4.5%	4.6%	4.1%	4.0%	3.7%	4.4%	3.9%	3.7%	3.8%	4.9%	4.1%	3.9%
HONDA	6.4%	6.1%	5.5%	5.3%	5.0%	5.0%	5.2%	5.2%	5.5%	6.5%	5.5%	5.2%
SUZUKI	3.7%	4.4%	4.4%	4.5%	4.1%	4.7%	4.1%	4.5%	3.8%	3.7%	4.4%	4.3%
Hyundai	5.3%	5.2%	5.9%	5.5%	5.3%	5.5%	5.4%	5.1%	5.0%	5.7%	5.5%	5.2%
KIA	3.6%	3.9%	4.4%	3.9%	3.6%	4.1%	4.0%	3.6%	3.1%	3.9%	4.0%	3.7%
Chang'An	1.8%	2.2%	1.5%	2.0%	2.5%	2.1%	2.1%	2.2%	2.2%	1.9%	2.0%	2.1%
BYD	1.9%	2.0%	2.6%	3.5%	4.2%	3.5%	4.0%	4.4%	4.8%	1.2%	3.1%	4.2%
Geely	2.8%	2.5%	2.0%	2.4%	2.8%	2.3%	2.2%	2.4%	2.7%	2.5%	2.4%	2.4%

**Source:** BofA Global Research. ACEA, Autodata, CPCA, Anfavea, S&P, local car authorities. Note: Market share is calculated as total sales of each OEM in tracked regions divide by total sales of all the tracked regions. These include EU, US, China, Korea, Japan, Russia, India, Türkiye, Singapore. Note: Europe sales figure are estimated for July for market share calculation



# Global auto sales by country

## Exhibit 8: Monthly Sales by Country (PV)

Sales declined in January, while y/y growth re-accelerated on the back of strong Chinese demand

Sales	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Europe	911,036	902,775	1,422,147	964,932	1,121,644	1,265,678	1,022,468	904,509	1,166,728	1,039,253	1,075,755	1,048,727	1,015,381
Germany	179,247	206,210	281,361	202,947	246,966	280,139	243,277	273,417	224,502	218,959	245,701	241,883	213,553
Italy	128,329	130,365	168,294	125,805	149,111	138,927	119,207	79,756	136,283	139,052	139,278	111,136	141,946
France	111,939	126,237	182,713	132,509	145,538	190,848	128,947	113,599	156,304	152,383	152,710	181,011	122,285
Spain	64,147	74,001	99,524	74,749	92,025	101,085	81,205	55,957	68,803	77,892	78,314	81,772	68,685
UK	131,994	74,441	287,825	132,990	145,204	177,266	143,921	85,657	272,610	153,529	156,525	141,092	142,876
USA	1,058,967	1,160,895	1,375,518	1,361,289	1,375,248	1,385,862	1,322,447	1,341,169	1,339,581	1,209,805	1,243,695	1,464,293	1,082,620
Korea	100,448	125,151	140,814	128,360	130,300	133,803	114,818	106,482	106,386	117,012	132,021	114,290	102,719
Japan	382,338	426,726	572,494	349,592	326,730	392,719	379,053	340,342	437,493	397,672	411,089	362,839	334,838
Brazil	103,894	95,867	146,244	118,177	127,508	142,037	176,769	153,500	145,717	163,198	160,718	187,783	118,523
Russia	32,499	41,851	48,414	54,270	51,466	87,357	100,343	111,272	116,324	119,864	110,935	70,922	82,671
India	401,991	381,554	405,281	372,277	387,590	385,229	409,804	423,531	422,304	443,934	388,297	347,362	442,719
China	1,304,489	1,415,758	1,611,291	1,638,934	1,760,497	1,914,460	1,787,458	1,942,393	2,042,551	2,058,151	2,104,812	2,389,046	2,034,576
<b>Total</b>	<b>4,295,662</b>	<b>4,550,577</b>	<b>5,722,203</b>	<b>4,987,831</b>	<b>5,280,983</b>	<b>5,707,145</b>	<b>5,313,160</b>	<b>5,323,198</b>	<b>5,777,084</b>	<b>5,548,889</b>	<b>5,627,322</b>	<b>5,985,262</b>	<b>5,214,047</b>
YoY (%)	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Europe	10.8%	12.2%	26.1%	16.1%	18.2%	18.7%	16.9%	20.7%	11.1%	14.1%	6.0%	-3.8%	11.5%
Germany	-2.6%	2.8%	16.6%	12.6%	19.2%	24.8%	18.1%	37.3%	-0.1%	4.9%	-5.7%	-23.0%	19.1%
Italy	19.0%	17.6%	40.8%	29.2%	22.9%	9.2%	8.8%	12.0%	22.8%	20.0%	16.2%	5.9%	10.6%
France	8.8%	9.4%	24.2%	21.9%	14.8%	11.6%	19.9%	24.3%	10.7%	21.9%	14.0%	14.5%	9.2%
Spain	51.4%	19.2%	66.1%	8.2%	8.3%	13.3%	10.7%	7.8%	2.3%	18.1%	7.0%	10.6%	7.1%
UK	14.7%	26.2%	18.2%	11.6%	16.7%	25.8%	28.3%	24.4%	21.0%	14.3%	9.5%	9.8%	8.2%
USA	5.6%	9.6%	8.7%	8.0%	22.9%	20.8%	15.4%	16.2%	19.2%	1.9%	8.9%	13.8%	2.2%
Korea	7.0%	21.2%	26.8%	7.4%	8.8%	10.5%	-5.8%	1.5%	-6.2%	-2.3%	4.1%	-12.9%	2.3%
Japan	16.0%	20.3%	11.6%	16.7%	25.0%	19.8%	8.5%	17.3%	10.7%	10.7%	9.0%	5.4%	-12.4%
Brazil	12.6%	-1.8%	35.1%	7.7%	-8.6%	6.2%	30.5%	-0.8%	1.8%	19.2%	1.3%	14.4%	14.1%
Russia	-64.5%	-63.4%	-12.2%	65.9%	112.1%	214.7%	209.6%	166.9%	149.1%	165.0%	139.1%	10.7%	154.4%
India	19.9%	7.7%	5.7%	9.5%	10.3%	2.0%	3.6%	10.5%	3.0%	15.5%	3.1%	1.1%	10.1%
China	-38.1%	11.5%	-0.5%	55.3%	29.0%	-2.0%	-2.6%	3.4%	4.6%	10.1%	25.7%	8.5%	56.0%
<b>YoY (%)</b>	<b>-11.9%</b>	<b>9.4%</b>	<b>10.4%</b>	<b>23.2%</b>	<b>22.0%</b>	<b>10.7%</b>	<b>8.6%</b>	<b>11.9%</b>	<b>10.3%</b>	<b>10.7%</b>	<b>14.4%</b>	<b>6.4%</b>	<b>21.4%</b>
YTD (%)	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Europe	10.8%	11.5%	17.5%	17.2%	17.4%	17.6%	17.5%	17.8%	17.0%	16.7%	15.6%	13.8%	11.5%
Germany	-2.6%	0.2%	6.5%	7.9%	10.2%	12.8%	13.6%	16.5%	14.5%	13.5%	11.4%	7.3%	19.1%
Italy	19.0%	18.3%	26.3%	26.9%	26.0%	22.9%	21.0%	20.2%	20.5%	20.5%	20.0%	18.9%	10.6%
France	8.8%	9.1%	15.2%	16.7%	16.3%	15.3%	15.8%	16.6%	15.9%	16.5%	16.2%	16.1%	9.2%
Spain	51.4%	32.2%	44.6%	33.8%	27.0%	24.0%	21.9%	20.6%	18.5%	18.5%	17.3%	16.7%	7.1%
UK	14.7%	18.6%	18.4%	16.9%	16.8%	18.4%	19.6%	20.0%	20.2%	19.6%	18.6%	17.9%	8.2%
USA	5.6%	7.7%	8.1%	8.0%	11.0%	12.6%	13.0%	13.4%	14.0%	12.8%	12.4%	12.6%	2.2%
Korea	7.0%	14.4%	18.9%	15.7%	14.2%	13.5%	10.5%	9.5%	7.7%	6.7%	6.4%	4.6%	2.3%
Japan	16.0%	18.2%	15.4%	15.7%	17.0%	17.5%	16.2%	16.3%	15.6%	15.1%	14.5%	13.8%	-12.4%
Brazil	12.6%	5.2%	16.1%	13.8%	8.1%	7.7%	11.5%	9.5%	8.5%	9.7%	8.8%	9.3%	14.1%
Russia	-64.5%	-63.9%	-53.0%	-39.8%	-28.2%	-8.7%	10.0%	25.6%	38.0%	49.2%	56.6%	51.9%	154.4%
India	19.9%	13.6%	10.8%	10.5%	10.5%	9.0%	8.1%	8.5%	7.8%	8.6%	8.1%	7.5%	10.1%
China	-38.1%	-19.5%	-13.3%	-1.4%	4.2%	2.9%	2.0%	2.2%	2.5%	3.4%	5.4%	5.7%	56.0%
<b>YTD (%)</b>	<b>-11.9%</b>	<b>-2.1%</b>	<b>2.5%</b>	<b>7.1%</b>	<b>9.9%</b>	<b>10.1%</b>	<b>9.9%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>10.2%</b>	<b>10.6%</b>	<b>10.2%</b>	<b>21.4%</b>

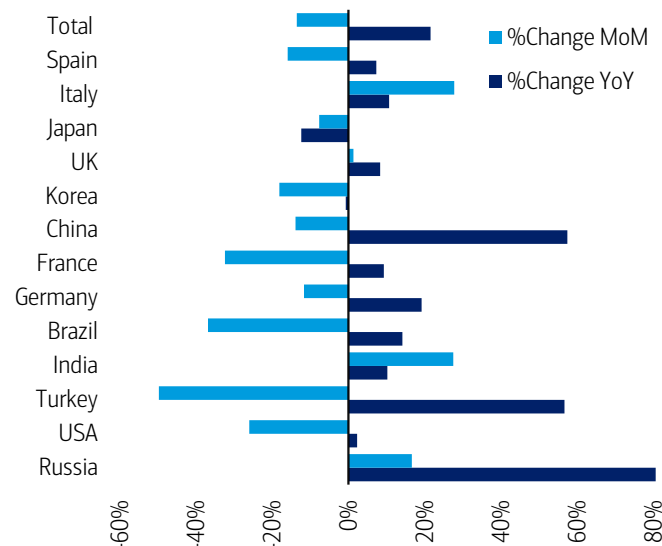
Source: BofA Global Research. ACEA, Autodata, CPCA, Anfavea, S&P, local car authorities. \*Note: Europe sales figure are estimated for July

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# Global sales summary by country

## Exhibit 9: Sales % Change YoY & MoM in January 2024

All regions except Korea and Japan reported positive YoY growth

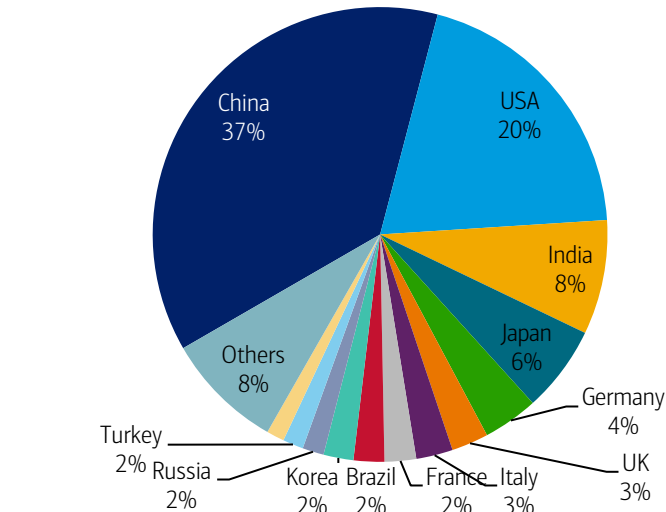


Source: BofA Global Research. Note: Russia grew by 154.4% yoy.

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## Exhibit 10: 2024 YTD sales volume split

China & US continue to dominate global LVS with c60% share



Source: BofA Global Research

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## Exhibit 11: Global markets monthly sales (in units)

Russia and China noted the strongest y/y growth in January 2024

Country	Jan-24	Jan-23	Dec-23	% YoY	% MoM
Russia	82,671	32,499	70,922	154.4%	16.6%
USA	1,082,620	1,058,967	1,464,293	2.2%	-26.1%
Türkiye	79,701	50,894	158,653	56.6%	-49.8%
India	442,719	401,991	347,362	10.1%	27.5%
Brazil	118,523	103,894	187,783	14.1%	-36.9%
Germany	213,553	179,247	241,883	19.1%	-11.7%
France	122,284	111,939	181,005	9.2%	-32.4%
China	2,034,576	1,293,138	2,364,201	57.3%	-13.9%
Korea	115,802	116,670	141,513	-0.7%	-18.2%
UK	142,876	131,994	141,092	8.2%	1.3%
Japan	334,838	382,338	362,839	-12.4%	-7.7%
Italy	141,885	128,259	111,111	10.6%	27.7%
Spain	68,685	64,038	81,772	7.3%	-16.0%
<b>Total</b>	<b>5,438,209</b>	<b>4,476,172</b>	<b>6,293,120</b>	<b>21.5%</b>	<b>-13.6%</b>

Source: BofA Global Research

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## Exhibit 12: Global markets YTD sales (in units)

Volume recovery is under way, trending back above 2022 levels

Country	Jan-24	Jan-23	% YoY	Jan-22	% YoY
Russia	82,671	32,499	154.4%	91,662	-64.5%
USA	1,082,620	1,058,967	2.2%	1,002,933	5.6%
Türkiye	79,701	50,894	56.6%	38,131	33.5%
Brazil	118,523	103,894	14.1%	92,238	12.6%
Germany	213,553	179,247	19.1%	184,112	-2.6%
France	122,284	111,939	9.2%	102,899	8.8%
China	2,034,576	1,293,138	57.3%	2,078,208	-37.8%
India	442,719	401,991	10.1%	335,255	19.9%
Korea	115,802	116,670	-0.7%	116,221	0.4%
UK	142,876	131,994	8.2%	115,087	14.7%
Japan	334,838	382,338	-12.4%	329,699	16.0%
Italy	141,885	128,259	10.6%	107,814	19.0%
Spain	68,685	64,038	7.3%	42,377	51.1%
<b>Total</b>	<b>5,438,209</b>	<b>4,476,172</b>	<b>21.5%</b>	<b>5,031,689</b>	<b>-11.0%</b>

Source: BofA Global Research

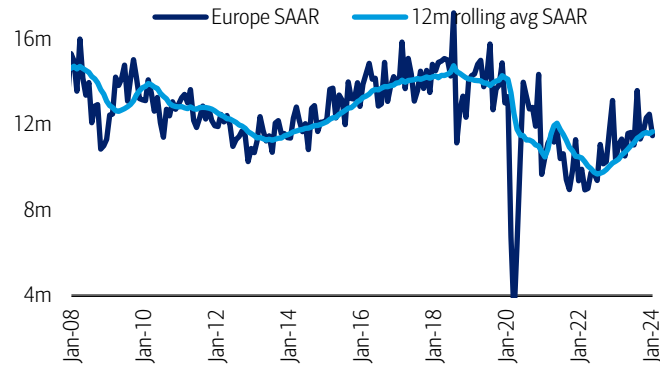
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# Regional Auto SAARs

## Exhibit 13: Europe SAAR trend

EU SAAR rose by 11% y/y while down 8% m/m in January 2024

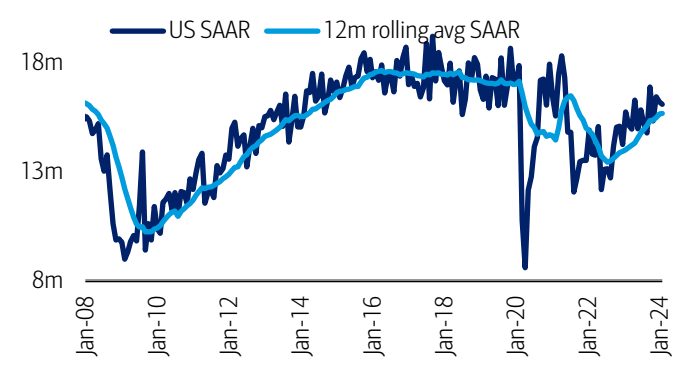


Source: BofA Global Research

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## Exhibit 14: US SAAR trend

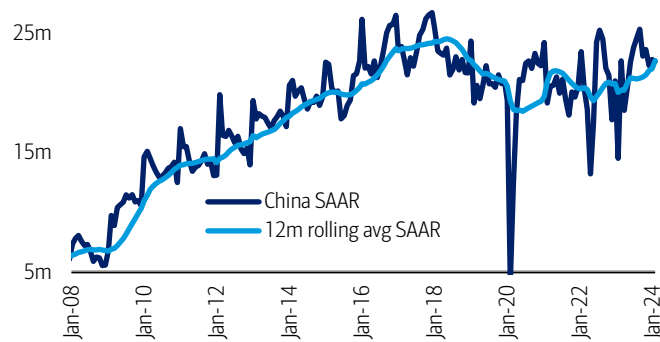
US SAAR rose by 2% y/y, while it was down 1% m/m in January 2024



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## Exhibit 15: China SAAR trend

China SAAR spiked 56% y/y, while it was down 1% m/m in January 2024

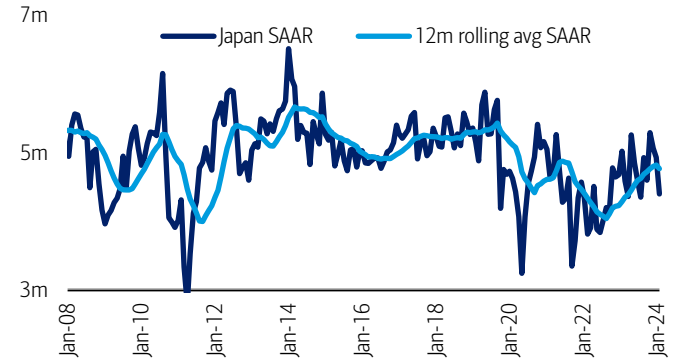


Source: BofA Global Research

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## Exhibit 16: Japan SAAR trend

Japan SAAR declined by 12% y/y and fell 11% m/m in January 2024

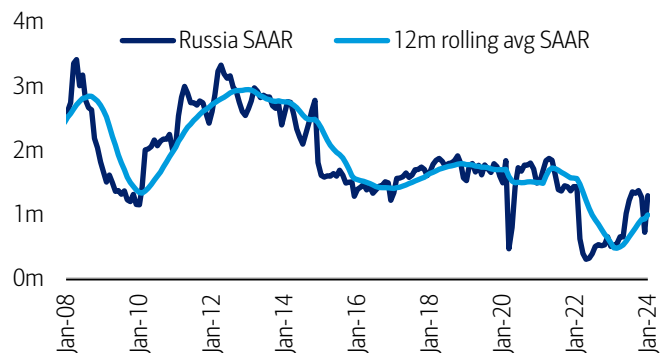


Source: BofA Global Research

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## Exhibit 17: Russia SAAR trend

Russia SAAR spiked 154% y/y and increased 78% m/m in January 2024

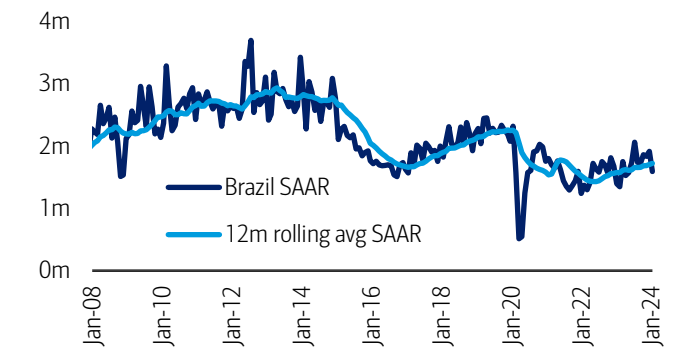


Source: BofA Global Research

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## Exhibit 18: Brazil SAAR trend

Brazil SAAR rose by 14% y/y, while it was down 17% m/m in January 2024



Source: BofA Global Research

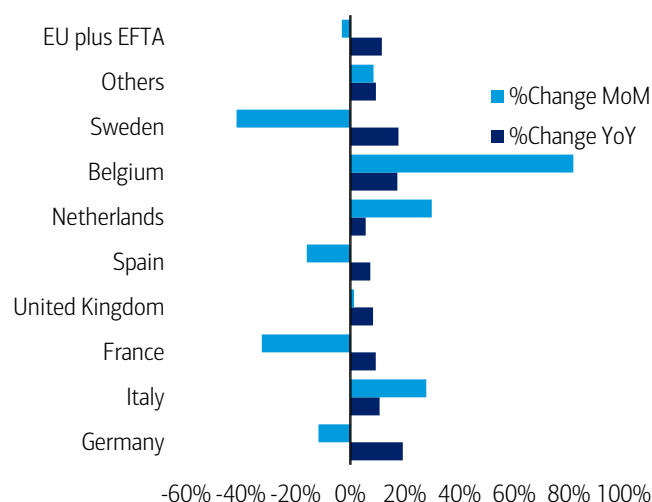
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# Sales: Major geographies

## Europe by Country: New passenger car registrations

### Exhibit 19: Europe monthly sales % Change YoY & MoM in January 2024

Sales growth MoM has been strongest in Belgium, Italy and the Netherlands, while weakest in Sweden, France and Spain

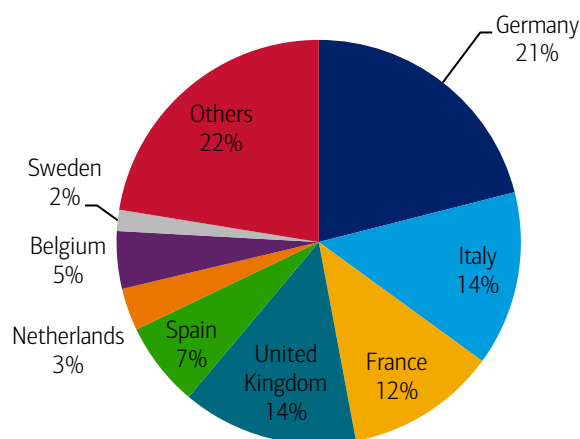


Source: www.acea.be, BofA Global Research.

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### Exhibit 20: YTD sales volume split

The top 5 countries account for c70% of European sales



Source: BofA Global Research, ACEA, LMC

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### Exhibit 21: European countries monthly new passenger car registration (in units)

Strong European sales growth (c12% y/y) has been underpinned by positive YoY growth across all regions

Country	Jan-24	Jan-23	Dec-23	% YoY	% MoM
Germany	213,553	179,247	241,883	19.1%	-11.7%
Italy	141,885	128,259	111,111	10.6%	27.7%
France	122,284	111,939	181,005	9.2%	-32.4%
United Kingdom	142,876	131,994	141,092	8.2%	1.3%
Spain	68,685	64,038	81,772	7.3%	-16.0%
Netherlands	34,477	32,666	26,577	5.5%	29.7%
Belgium	46,667	39,847	25,715	17.1%	81.5%
Sweden	17,164	14,601	29,436	17.6%	-41.7%
Others	227,790	208,445	210,136	9.3%	8.4%
<b>EU plus EFTA</b>	<b>1,015,381</b>	<b>911,036</b>	<b>1,048,727</b>	<b>11.5%</b>	<b>-3.2%</b>

Source: BofA Global Research, www.acea.be.

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### Exhibit 22: European countries YTD new passenger car registration (in units)

Similarly EU performance is also improving YTD across countries

Country	Jan-24	Jan-23	% YoY	Jan-22	% YoY
Germany	213,553	179,247	19.1%	184,112	-2.6%
Italy	141,885	128,259	10.6%	107,814	19.0%
France	122,284	111,939	9.2%	102,899	8.8%
United Kingdom	142,876	131,994	8.2%	115,087	14.7%
Spain	68,685	64,038	7.3%	42,377	51.1%
Netherlands	34,477	32,666	5.5%	30,984	5.4%
Belgium	46,667	39,847	17.1%	33,947	17.4%
Sweden	17,164	14,601	17.6%	19,893	-26.6%
Others	227,790	208,445	9.3%	185,310	12.5%
<b>EU plus EFTA</b>	<b>1,015,381</b>	<b>911,036</b>	<b>11.5%</b>	<b>822,423</b>	<b>10.8%</b>

Source: BofA Global Research, www.acea.be.

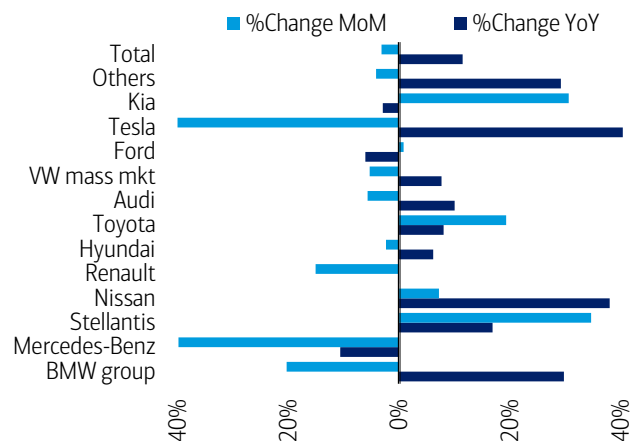
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## Europe

### Passenger car registrations by company

#### Exhibit 23: Monthly sales % change Y/Y & M/M – Jan-24

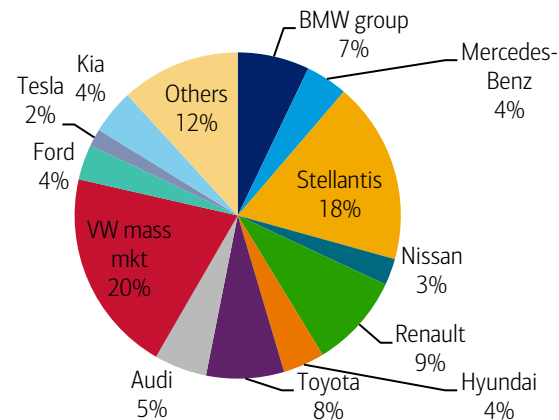
Stellantis and Kia note the strongest growth m/m in January 2024, while Tesla and MBG sales fell the most



Source: BofA Global Research, ACEA. Note: Tesla grew 86.3% y/y and down by 55.1% m/m  
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#### Exhibit 24: YTD sales volume split

Stellantis, VW Group, & RNO account for c 47% of sales in Europe



Source: BofA Global Research, ACEA

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#### Exhibit 25: Europe OEM monthly passenger car registrations

Tesla, Nissan and BMW market post biggest y/y growth in January 2024

OEM	Jan-24	Jan-23	Dec-23	% YoY	% MoM
BMW group	72,259	55,696	90,663	29.7%	-20.3%
Mercedes-Benz	42,258	47,286	70,223	-10.6%	-39.8%
Stellantis	183,120	156,702	136,016	16.9%	34.6%
Nissan	26,839	19,451	25,041	38.0%	7.2%
Renault	94,790	94,899	111,635	-0.1%	-15.1%
Hyundai	41,788	39,372	42,807	6.1%	-2.4%
Toyota	78,314	72,500	65,637	8.0%	19.3%
Audi	53,065	48,231	56,272	10.0%	-5.7%
VW mass mkt	205,337	190,774	216,904	7.6%	-5.3%
Ford	35,603	37,914	35,318	-6.1%	0.8%
Tesla	17,493	9,390	38,973	86.3%	-55.1%
Kia	44,737	46,094	34,252	-2.9%	30.6%
Others	119,778	92,727	124,986	29.2%	-4.2%
<b>Total</b>	<b>1,015,381</b>	<b>911,036</b>	<b>1,048,727</b>	<b>11.5%</b>	<b>-3.2%</b>

Source: BofA Global Research

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#### Exhibit 26: Europe OEM YTD passenger car registrations (in units)

Similarly, Tesla and Nissan sales growth stand out on YTD basis

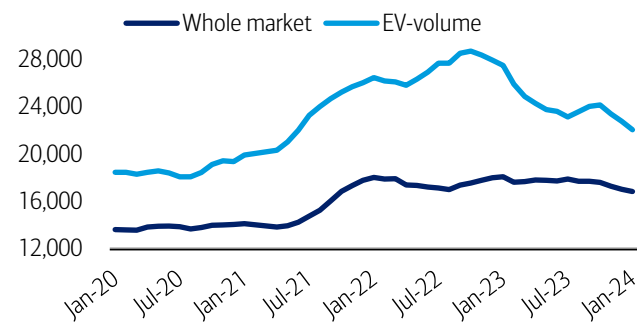
OEM	Jan-24	Jan-23	% YoY	Jan-22	% YoY
BMW group	72,259	55,696	29.7%	61,934	-10.1%
Mercedes-Benz	42,258	47,286	-10.6%	47,280	0.0%
Stellantis	183,120	156,702	16.9%	156,673	0.0%
Nissan	26,839	19,451	38.0%	15,879	22.5%
Renault	94,790	94,899	-0.1%	77,395	22.6%
Hyundai	41,788	39,372	6.1%	37,652	4.6%
Toyota	78,314	72,500	8.0%	67,674	7.1%
Audi	53,065	48,231	10.0%	43,638	10.5%
VW mass mkt	205,337	190,774	7.6%	162,380	17.5%
Ford	35,603	37,914	-6.1%	38,180	-0.7%
Tesla	17,493	9,390	86.3%	864	986.8%
Kia	44,737	46,094	-2.9%	47,137	-2.2%
Others	119,778	92,727	29.2%	65,737	41.1%
<b>Total</b>	<b>1,015,381</b>	<b>911,036</b>	<b>11.5%</b>	<b>822,423</b>	<b>10.8%</b>

Source: BofA Global Research

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**Exhibit 27: Auto Trader Used Car Price Index for the UK market**

Prices have remained flat for wholesale market in UK but have been recently declining again for EVs

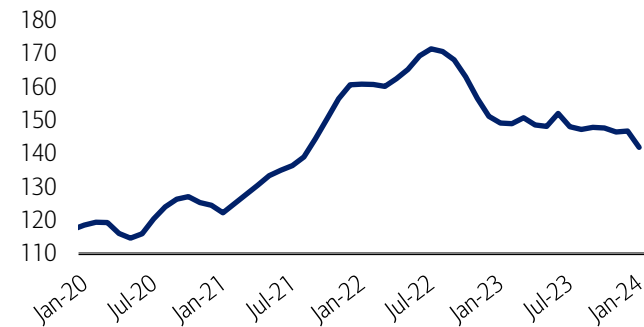


Source: Auto Trader

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**Exhibit 28: AUTO1 EU Group price index for used cars (base = 2015)**

Prices have been continued to fall since August-22 highs

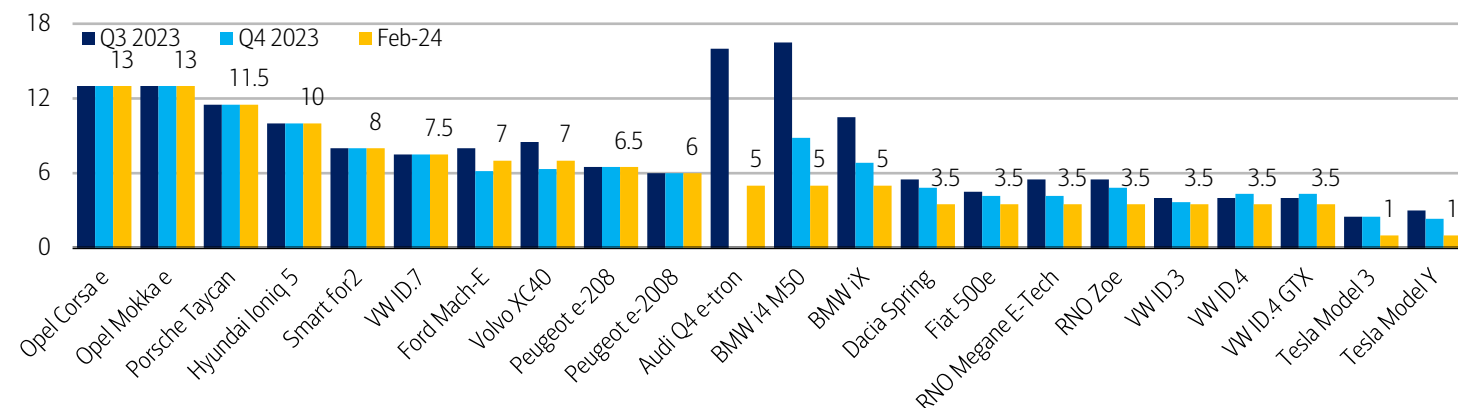


Source: AUTO1 (European Used Car Price Report), BofA Global Research

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**Exhibit 29: Germany: Waiting periods for new EV (months)**

Waiting periods for new EVs have started to decline

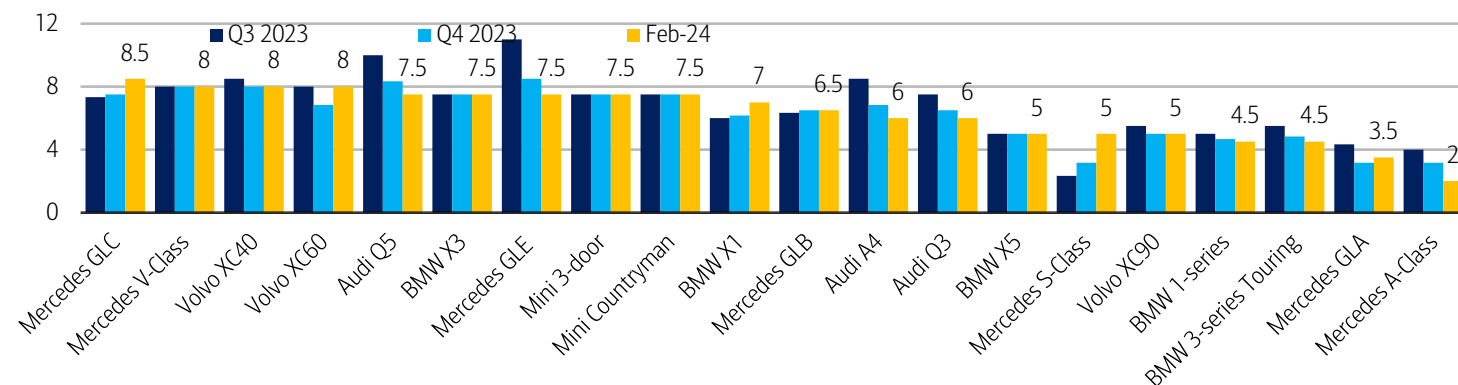


Source: BofA Global Research, carwow.de, \*0 = Not available

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**Exhibit 30: Germany: How many months you need to wait until you get your ICE premium car**

Waiting times are fairly stable for ICE

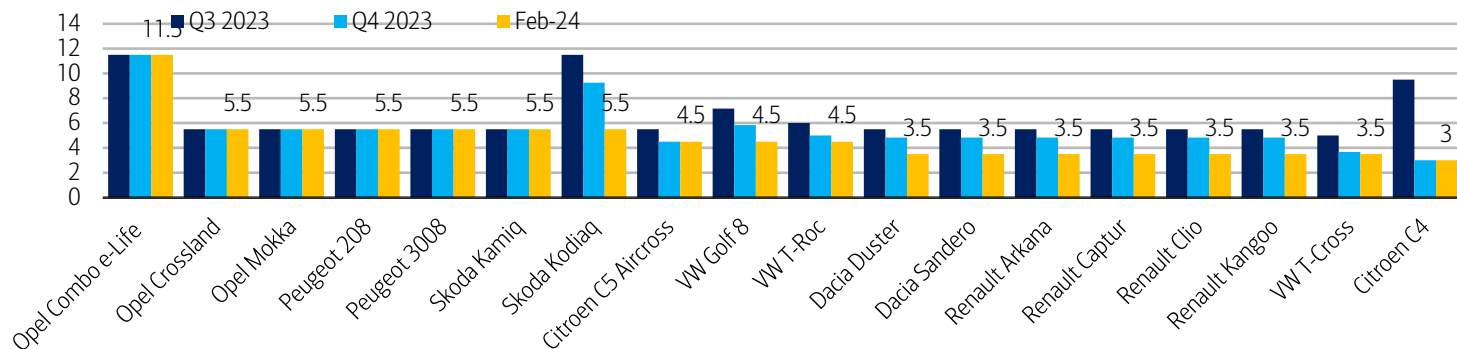


Source: BofA Global Research, carwow.de, \*0 = Not available

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**Exhibit 31: Germany: How many months you need to wait until you get your ICE mass market car**

Waiting times have fallen for mass market

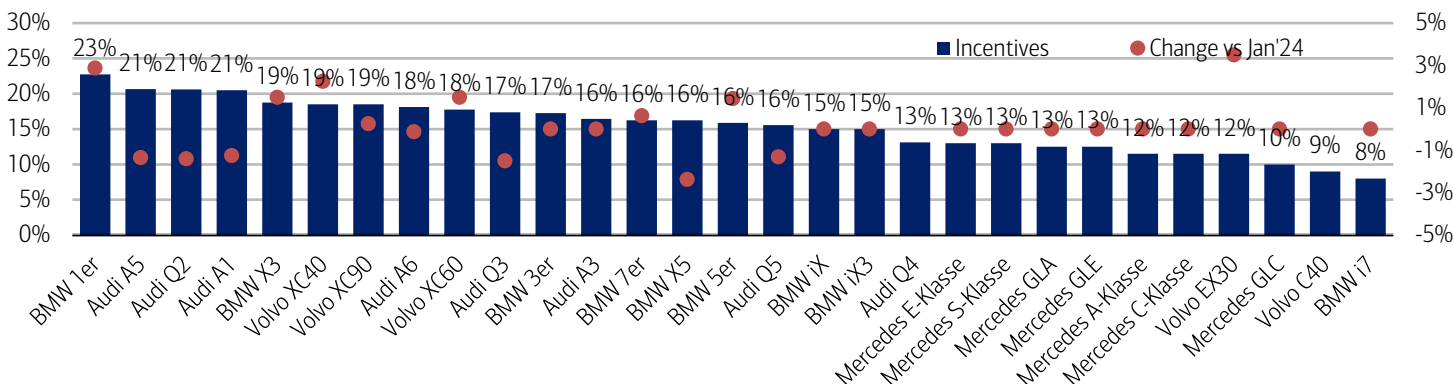


Source: BofA Global Research, carwow.de, \*0 = Not available

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**Exhibit 32: PKW-Rabatt premium cars rebates in Germany (February 2024) and changes vs January 2024 (rhs)**

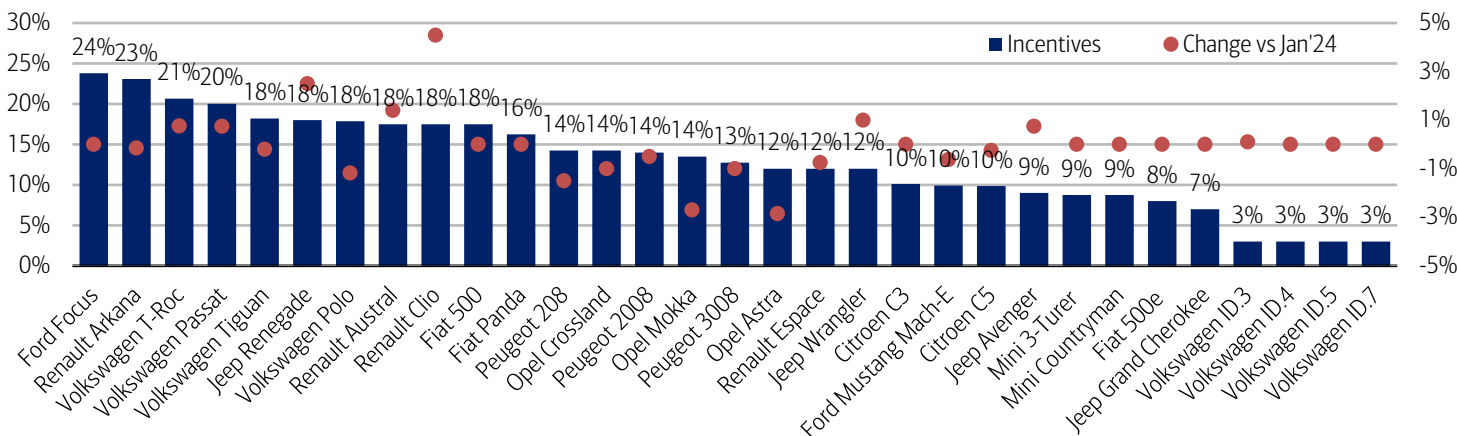
Audi Cars appear to be offering the highest level of rebates, followed by BMW and Volvo, while MBG provide the lowest rebates

Source: BofA Global Research, PKW-Rabatt: <https://www.pkw-rabatt.de/de/Deutsche-Neuwagen.htm>

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**Exhibit 33: PKW-Rabatt mass market car rebates in Germany (February 2024) and changes vs January 2024 (rhs)**

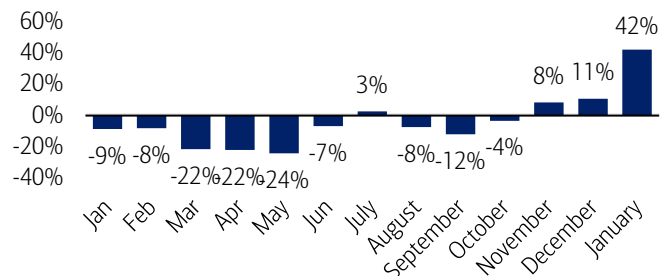
VW mass market ICE models have the highest rebates, while discounts on most of VW BEV models are still very low

Source: BofA Global Research, PKW-Rabatt: <https://www.pkw-rabatt.de/de/Deutsche-Neuwagen.htm>

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**Exhibit 34: Order intake in France (French OEMs) y/y growth**

French order intake grew y/y in January as momentum improves for the third month in a row

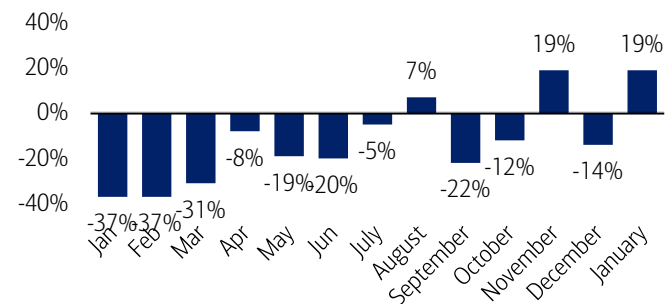


Source: BofA Global Research, CCFA

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**Exhibit 35: Order intake in Germany (German OEMs) y/y growth**

German order intake saw a sharp uptick in January

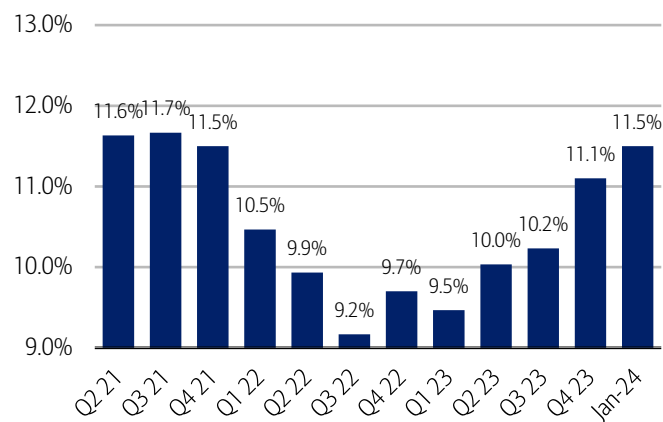


Source: BofA Global Research, VDA

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**Germany – car pricing at a glance****Exhibit 36: Average price rebate on list price – Germany**

Price rebates have reached the greatest level since Q4 21

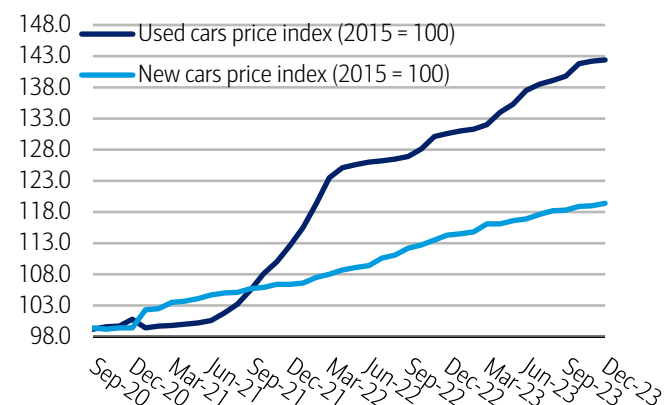


Source: BofA Global Research, Autohaus Pulsschlag

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**Exhibit 37: New vs used car prices**

Used car prices increased more than new car prices in the past months

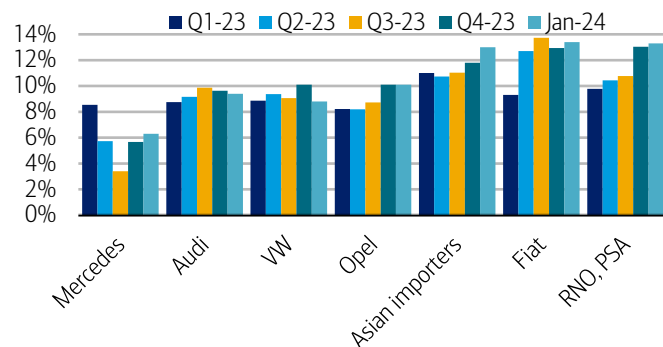


Source: Destatis

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**Exhibit 38: Incentives for car sales in Germany**

Incentives came down in January for MBG and VW but increased for others

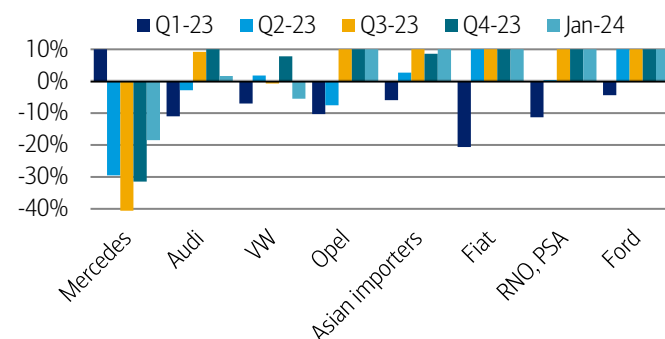


Source: BofA Global Research, Autohaus Pulsschlag

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**Exhibit 39: Change in incentives y/y**

January 2024 incentives moved higher vs a year ago for all OEMs except VW, Mercedes



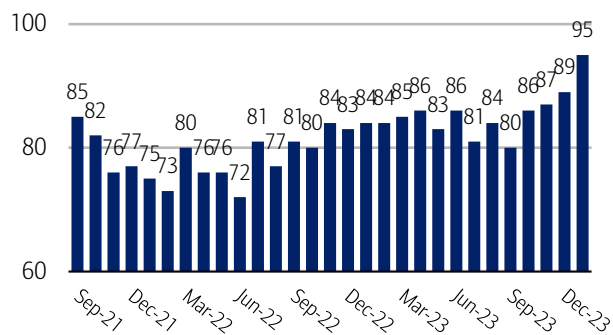
Source: BofA Global Research, Autohaus Pulsschlag

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**Exhibit 40: How many days used cars remain at the dealer lot?**

Number of days has reached highest since March 2021

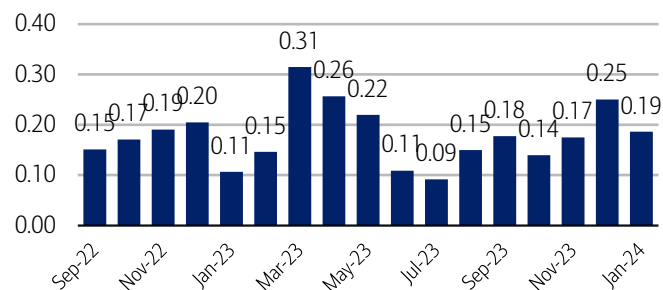


Autohaus Pulsschlag, Sample size : 1,000 BofA Global Research Note: Q4 22 includes Oct-22 and Nov-22

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**Exhibit 41: Dealers' happiness indicator in Germany (Monthly)**

Dealers' happiness remains depressed, with the majority of dealers unhappy



■ Happiness Indicator (Ratio of happy to unhappy dealers in Germany)

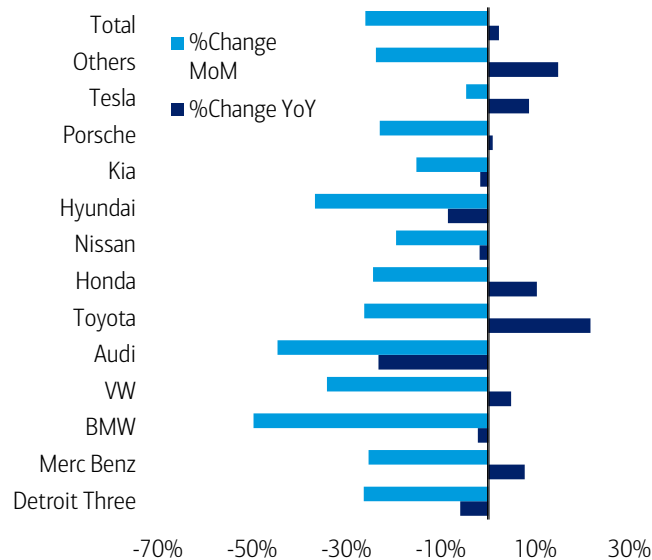
Autohaus Pulsschlag, Sample size : 1,000 BofA Global Research

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## US

**Exhibit 42: US monthly sales % Change YoY & MoM in January 2024**

MoM sales declined for all OEMs in US- (also due to seasonal pattern)

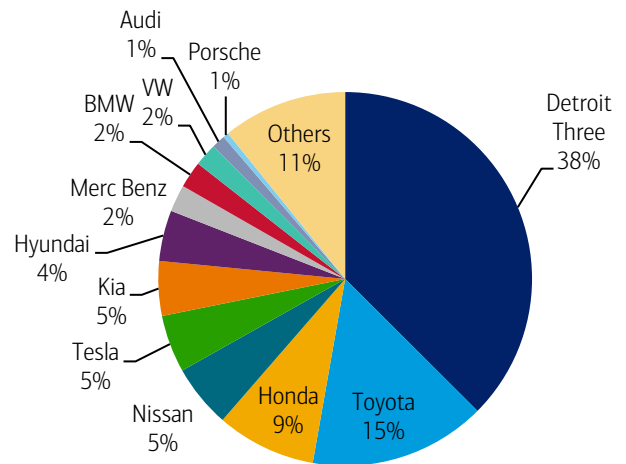


Source: AutoWards

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**Exhibit 43: YTD sales volume split**

Detroit 3 and Toyota account for &gt;50% of US volumes



Source: AutoWards

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**Exhibit 44: US monthly registrations by OEM in January 2024**

Toyota, Honda and Tesla grew the most YoY

OEM	Jan-24	Jan-23	Dec-23	% YoY	% MoM
Detroit Three	405,753	431,520	551,443	-6.0%	-26.4%
Merc Benz	25,377	23,560	34,020	7.7%	-25.4%
BMW	24,888	25,459	49,561	-2.2%	-49.8%
VW	21,454	20,465	32,602	4.8%	-34.2%
Audi	12,688	16,538	22,940	-23.3%	-44.7%
Toyota	165,626	136,177	224,753	21.6%	-26.3%
Honda	93,210	84,514	123,388	10.3%	-24.5%
Nissan	59,125	60,251	73,500	-1.9%	-19.6%
Hyundai	47,543	52,001	75,164	-8.6%	-36.7%
Kia	51,090	51,983	60,275	-1.7%	-15.2%
Porsche	5,289	5,240	6,869	0.9%	-23.0%
Tesla	53,830	49,556	56,481	8.6%	-4.7%
Others	116,747	101,703	153,297	14.8%	-23.8%
<b>Total</b>	<b>1,082,620</b>	<b>1,058,967</b>	<b>1,464,293</b>	<b>2.2%</b>	<b>-26.1%</b>

Source: AutoWards

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**Exhibit 45: US OEM YTD registrations (in units)**

Honda and Porsche are growing the most YTD, followed by Tesla

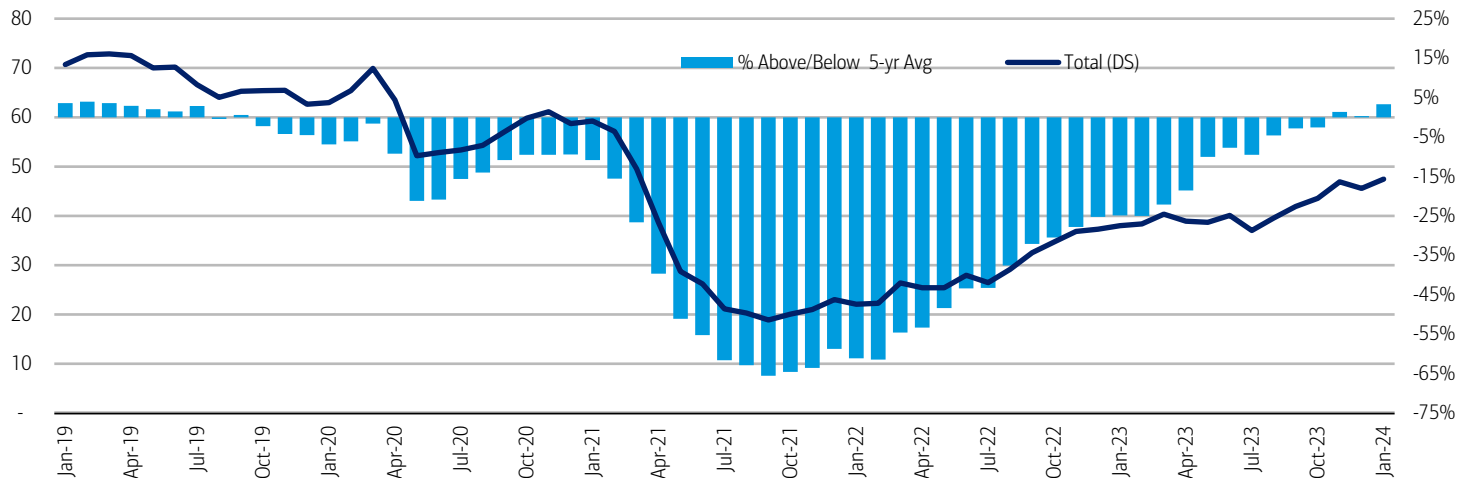
OEM	Jan-24	Jan-23	% YoY	Jan-22	% YoY
Detroit Three	405,753	431,520	-6.0%	410,915	5.0%
Merc Benz	25,377	23,560	7.7%	22,927	2.8%
BMW	24,888	25,459	-2.2%	23,955	6.3%
VW	21,454	20,465	4.8%	22,092	-7.4%
Audi	12,688	16,538	-23.3%	11,427	44.7%
Toyota	165,626	136,177	21.6%	158,676	-14.2%
Honda	93,210	84,514	10.3%	73,949	14.3%
Nissan	59,125	60,251	-1.9%	59,742	0.9%
Hyundai	47,543	52,001	-8.6%	47,872	8.6%
Kia	51,090	51,983	-1.7%	42,488	22.3%
Porsche	5,289	5,240	0.9%	4,077	28.5%
Tesla	53,830	49,556	8.6%	40,165	23.4%
Others	116,747	101,703	14.8%	84,648	20.1%
<b>Total</b>	<b>1,082,620</b>	<b>1,058,967</b>	<b>2.2%</b>	<b>1,002,933</b>	<b>5.6%</b>

Source: AutoWards

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**Exhibit 46: US inventory – total (DS)**

January days' supply of 47DS came in marginally above the 5-year average of 46DS



Source: WardsAuto InfoBank

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**Exhibit 47: January 2024 inventory summary**

January inventory was ~2.40mm units, with days' supply of 47 above the 5-year average of 46

	Inventory	Days	5-year	% Above	
	Units	Supply	Average DS	/Below	Note
Detroit 3 -- Cars	99,893	77	50	53%	Detroit 3 OEM's total inventory was up 12k MoM and increased 239k units YoY. Aggregate supply remains less constrained than the industry average, across both cars and light trucks.
Detroit 3 -- Lt Trucks	1,195,011	66	59	12%	
<b>Detroit 3 -- Total</b>	<b>1,294,904</b>	<b>66</b>	<b>58</b>	<b>15%</b>	
Japanese -- Cars	188,696	37	39	-4%	Supply at Japanese OEMs was up 58k MoM and increased 316k units YoY. Aggregate supply is more constrained than the industry average across both cars and light trucks.
Japanese -- Lt Trucks	493,957	38	38	-1%	
<b>Japanese -- Total</b>	<b>682,653</b>	<b>38</b>	<b>38</b>	<b>-2%</b>	
European -- Cars	56,148	43	46	-6%	European OEM's inventory was down 4k units MoM but increased 56k units YoY. Aggregate supply is less constrained than the industry average across both cars and light trucks.
European -- Lt Trucks	165,340	52	48	7%	
<b>European -- Total</b>	<b>221,488</b>	<b>49</b>	<b>48</b>	<b>3%</b>	
Korean -- Cars	43,431	27	35	-22%	Inventory at Korean OEMs was up 26k units MoM and increased 70k units YoY. Both car and truck inventories remain well below the industry average.
Korean -- Lt Trucks	113,365	30	36	-16%	
<b>Korean -- Total</b>	<b>156,796</b>	<b>29</b>	<b>35</b>	<b>-17%</b>	
Industry -- Cars	393,428	39	39	0%	Total inventory increased 93k units MoM, and was up 691k units YoY. Car supply tighter than light truck, as OEMs continue to prioritize production and inventory build of high ASP/margin vehicles.
Industry -- Lt Trucks	2,006,443	50	48	3%	
<b>Industry -- Total</b>	<b>2,399,871</b>	<b>47</b>	<b>46</b>	<b>3%</b>	

Source: WardsAuto InfoBank, BofA Global Research. k = thousand.

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**Exhibit 48: Most recent month US incentive and ATP trends – major automakers**

Industry average incentive pushed up 94.6% YoY in January, while the average transaction price was down 3.5% YoY

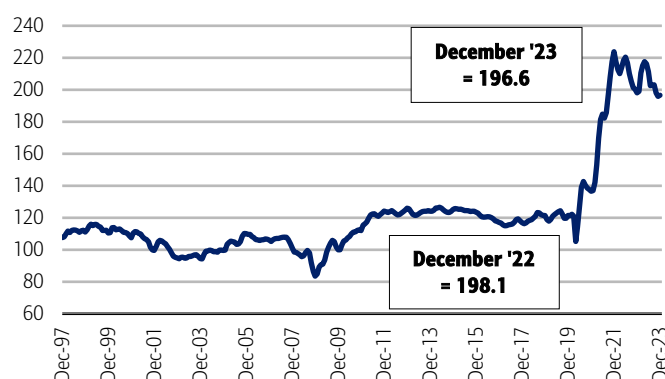
AutoData/KBB	Average Incentive					Average Transaction Price				
	Jan-24	Dec-23	MoM % Chg	Jan-23	YoY % Chg	Jan-24	Dec-23	MoM % Chg	Jan-23	YoY % Chg
GM	\$2,843	\$2,657	7.0%	\$1,964	44.8%	\$50,680	\$52,452	-3.4%	\$51,648	-1.9%
Ford	\$2,154	\$2,054	4.9%	\$2,083	3.4%	\$53,755	\$55,035	-2.3%	\$56,751	-5.3%
Stellantis	\$4,099	\$4,363	-6.1%	\$2,044	100.5%	\$58,531	\$58,678	-0.3%	\$56,680	3.3%
Toyota	\$1,154	\$1,051	9.8%	\$678	70.2%	\$42,686	\$43,084	-0.9%	\$41,474	2.9%
Honda	\$2,137	\$1,658	28.9%	\$1,335	60.1%	\$36,890	\$37,620	-1.9%	\$37,444	-1.5%
Nissan	\$3,062	\$2,992	2.3%	\$1,860	64.6%	\$34,927	\$35,932	-2.8%	\$37,377	-6.6%
Hyundai	\$2,439	\$2,563	-4.8%	\$856	184.9%	\$37,049	\$38,106	-2.8%	\$35,648	3.9%
BMW	\$3,445	\$4,442	-22.4%	\$2,552	35.0%	\$68,191	\$69,082	-1.3%	\$68,598	-0.6%
Volkswagen	\$3,738	\$3,875	-3.5%	\$1,916	95.1%	\$56,514	\$57,222	-1.2%	\$57,190	-1.2%
Tesla	\$4,666	\$5,032	-7.3%	\$1,036	350.4%	\$49,518	\$49,802	-0.6%	\$62,350	-20.6%
<b>Industry</b>	<b>\$2,716</b>	<b>\$2,687</b>	<b>1.1%</b>	<b>\$1,396</b>	<b>94.6%</b>	<b>\$47,401</b>	<b>\$48,652</b>	<b>-2.6%</b>	<b>\$49,125</b>	<b>-3.5%</b>

Source: Kelley Blue Book (ATPs do not include applied incentives), AutoData. Chg = change.

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**Exhibit 49: NADA Used Vehicle Price Index**

NADA Used Vehicle Price Index was down 0.7% YoY in December 2023 and increased 0.4% on a MoM basis

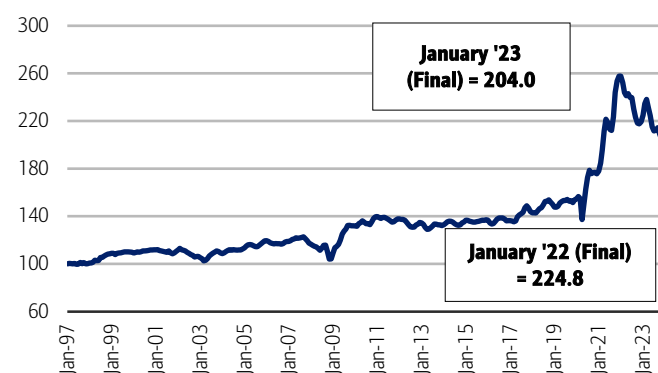


Source: NADA

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**Exhibit 50: Manheim Used Vehicle Value Index**

Manheim Used Vehicle Value Index was down 9.3% YoY in January 2024 (Final) and was flat on a MoM basis

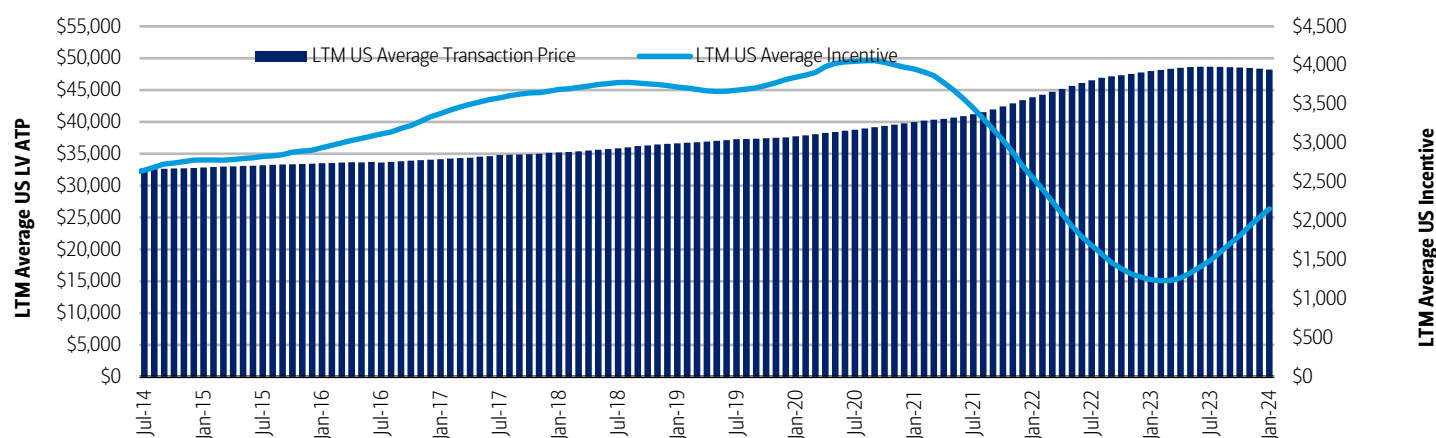


Source: Manheim

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**Exhibit 51: Industry average transaction price & average incentive**

US average ATPs fall from record highs in January, while incentives continue to climb



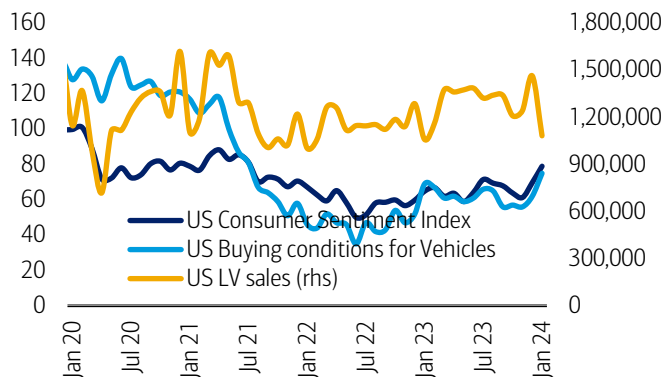
Source: Kelley Blue Book (ATPs do not include applied incentives), AutoData

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## US consumer confidence (University of Michigan)

### Exhibit 52: US Consumer Confident Index vs LV Sales (rhs)

US Consumer confidence index remains low relative to historical levels but is beginning to show signs of improvement

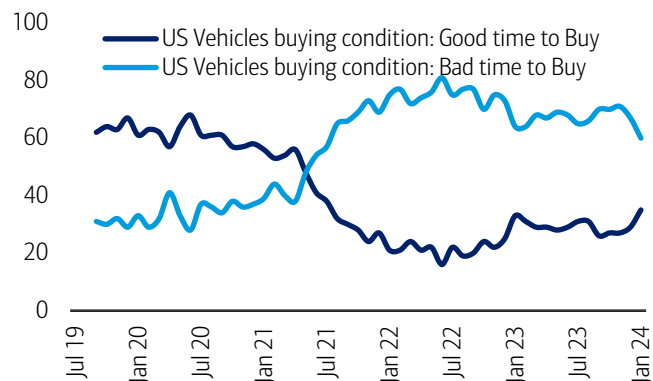


Source: Bloomberg, AutoWards, BofA Global Research

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### Exhibit 53: Good time vs bad time to buy Vehicles

Consensus is that it is a bad time to buy vehicle, though the level has trended down over recent months

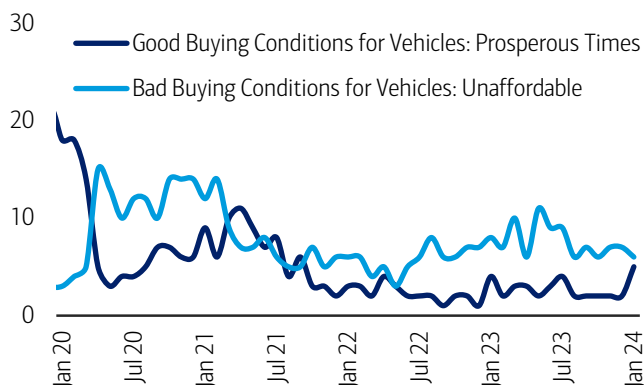


Source: Bloomberg, BofA Global Research

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### Exhibit 54: Prosperous Times vs Unaffordable times

Vehicles are becoming more affordable for consumers

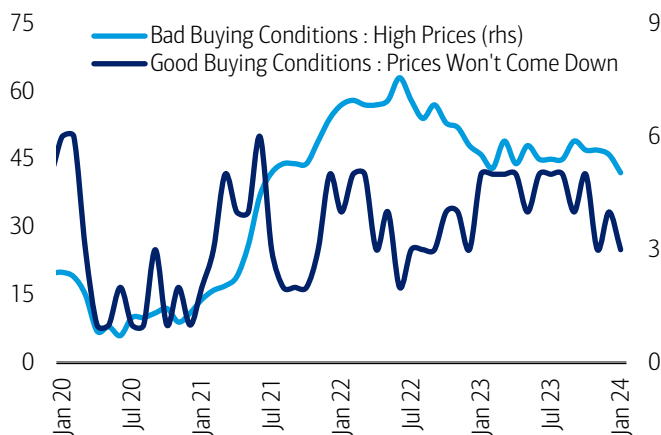


Source: Bloomberg, BofA Global Research

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### Exhibit 55: Vehicle pricing expectations

Consumers expectations that car prices will remain high are softening

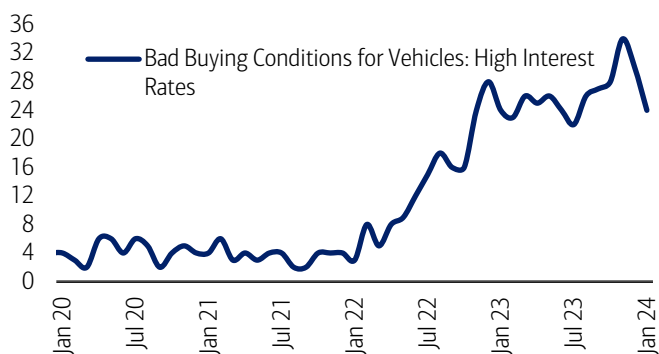


Source: Bloomberg, BofA Global Research

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### Exhibit 56: Rising interest rates further hurting buying sentiment

The proportion of consumers that expect rising interest rates to slow demand has dropped in recent months but remains elevated

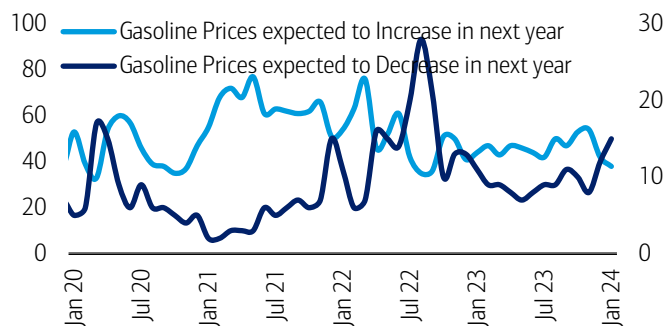


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

### Exhibit 57: Gasoline prices

Most consumers now think that gas prices could decrease in 2025



Source: Bloomberg, BofA Global Research

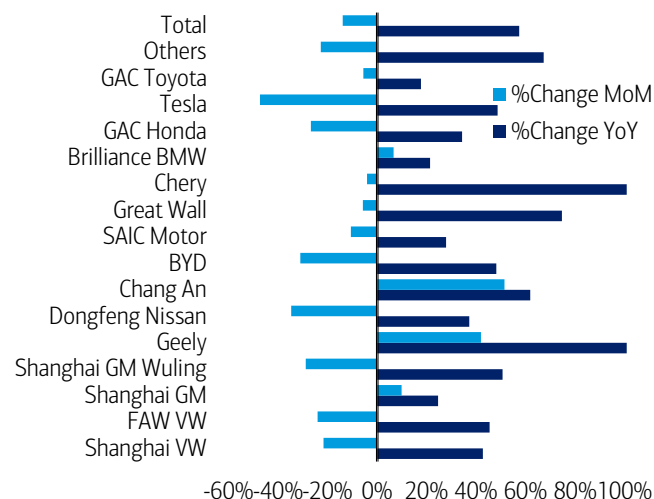
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## China

### Passenger Car sales including mini-bus

#### Exhibit 58: China monthly sales % Change YoY & MoM in January 2024

YoY sales spiked across all OEMs

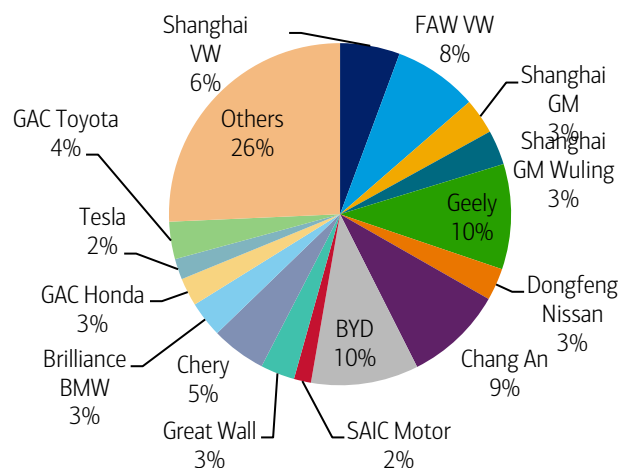


Source: BofA Global Research, Company data. Note: Chery sales grew by 159.2% y/y.

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#### Exhibit 59: YTD sales volume split

China market is very competitive, with BYD and Geely competing for leadership



Source: BofA Global Research, Bloomberg

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#### Exhibit 60: China PC monthly sales (in units)

Sales improved YoY in January, mainly driven by Chery and Geely

OEM	Jan-24	Jan-23	Dec-23	% YoY	% MoM
Shanghai VW	115,003	80,618	146,969	42.7%	-21.8%
FAW VW	162,021	111,435	213,433	45.4%	-24.1%
Shanghai GM	68,521	55,021	62,380	24.5%	9.8%
Shanghai GM Wuling	66,663	44,265	93,749	50.6%	-28.9%
Geely	202,432	98,057	142,700	106.4%	41.9%
Dongfeng Nissan	61,938	45,162	94,924	37.1%	-34.7%
Chang An	189,330	117,023	125,088	61.8%	51.4%
BYD	206,904	139,755	300,215	48.0%	-31.1%
SAIC Motor	32,846	25,700	36,761	27.8%	-10.6%
Great Wall	65,878	37,733	69,961	74.6%	-5.8%
Chery	105,447	40,675	109,985	159.2%	-4.1%
Brilliance BMW	68,873	56,767	64,609	21.3%	6.6%
GAC Honda	54,082	40,294	73,939	34.2%	-26.9%
Tesla	39,881	26,843	75,805	48.6%	-47.4%
GAC Toyota	71,875	61,113	76,150	17.6%	-5.6%
Others	522,882	312,677	677,533	67.2%	-22.8%
<b>Total</b>	<b>2,034,576</b>	<b>1,293,138</b>	<b>2,364,201</b>	<b>57.3%</b>	<b>-13.9%</b>

Source: BofA Global Research, CAAM

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#### Exhibit 61: China PC YTD sales (in units)

Despite a considerable rebound YoY, January 2024 sales were marginally below the level seen in January 2022

OEM	Jan-24	Jan-23	% YoY	Jan-22	% YoY
Shanghai VW	115,003	80,618	42.7%	137,617	-41.4%
FAW VW	162,021	111,435	45.4%	190,771	-41.6%
Shanghai GM	68,521	55,021	24.5%	120,021	-54.2%
Shanghai GM Wuling	66,663	44,265	50.6%	85,771	-48.4%
Geely	202,432	98,057	106.4%	144,754	-32.3%
Dongfeng Nissan	61,938	45,162	37.1%	110,026	-59.0%
Chang An	189,330	117,023	61.8%	143,327	-18.4%
BYD	206,904	139,755	48.0%	95,032	47.1%
SAIC Motor	32,846	25,700	27.8%	70,520	-63.6%
Great Wall	65,878	37,733	74.6%	89,741	-58.0%
Chery	105,447	40,675	159.2%	75,819	-46.4%
Brilliance BMW	68,873	56,767	21.3%	89,083	-36.3%
GAC Honda	54,082	40,294	34.2%	80,291	-49.8%
Tesla	39,881	26,843	48.6%	19,346	38.8%
GAC Toyota	71,875	61,113	17.6%	87,637	-30.3%
Others	522,882	312,677	67.2%	538,452	-41.9%
<b>Total</b>	<b>2,034,576</b>	<b>1,293,138</b>	<b>57.3%</b>	<b>2,078,208</b>	<b>-37.8%</b>

Source: BofA Global Research, CAAM

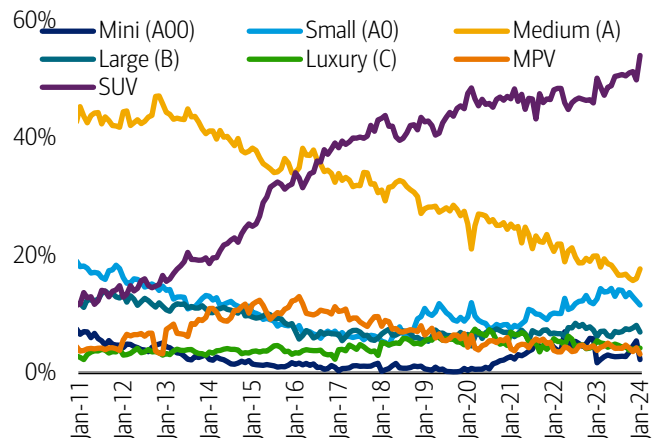
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## China sales break-up by segment and price

### Exhibit 62: Break-up by Segment

SUV share remains the highest, with small cars (A0) gaining the second most share since 2021, though this trend appears to be reversing

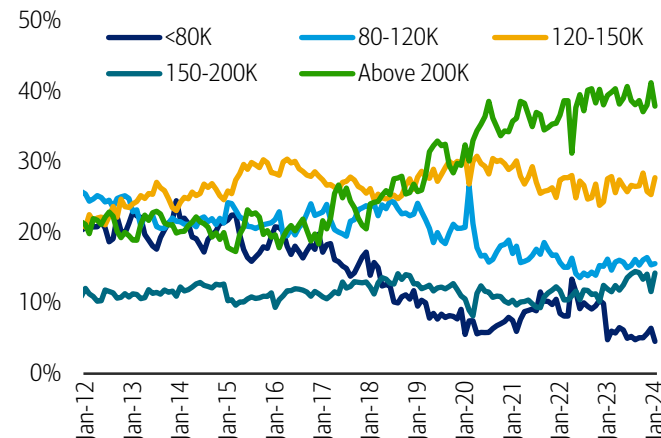


Source: BofA Global Research, Company data, China Auto Market

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### Exhibit 63: Break-up by Price

Share of cars sold with price of CNY >200k remains elevated relative to historical levels

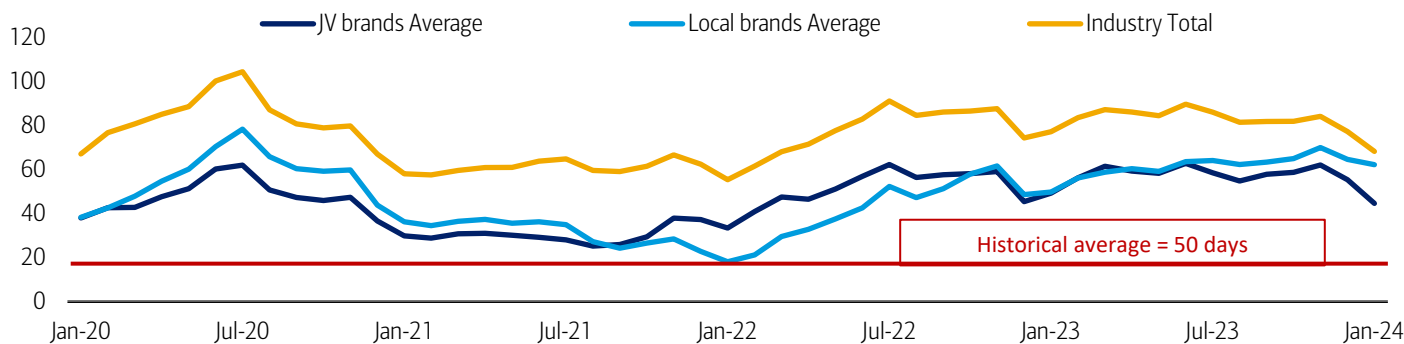


Source: BofA Global Research, Company data, China Auto Market

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### Exhibit 64: China inventories level rising

Inventory levels fell in January 2024, though remain too high, which suggests that further de-stocking is required in China



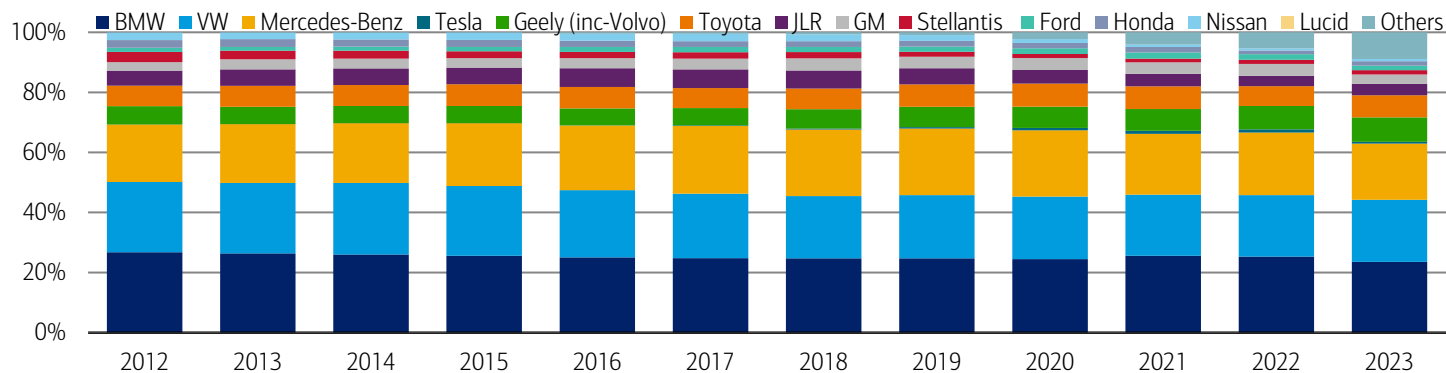
Source: China Auto Market

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## Premium Market segment

### Exhibit 65: Global Premium market share

Traditional OEMs share in premium cars segment falling due to rise of Tesla, China OEMs – the trend should continue in 2024



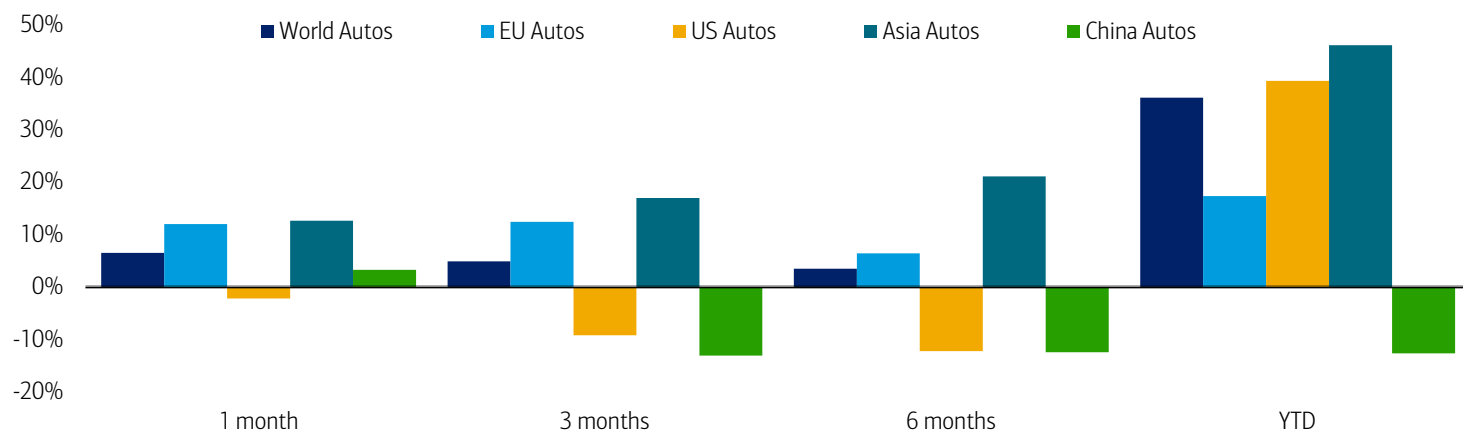
Source: BofA Global Research, S&P

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# Global auto share price performances

## Exhibit 66: Global Auto stock performance

Autos Worldwide have gained in the last month, driven by Asian and EU Autos

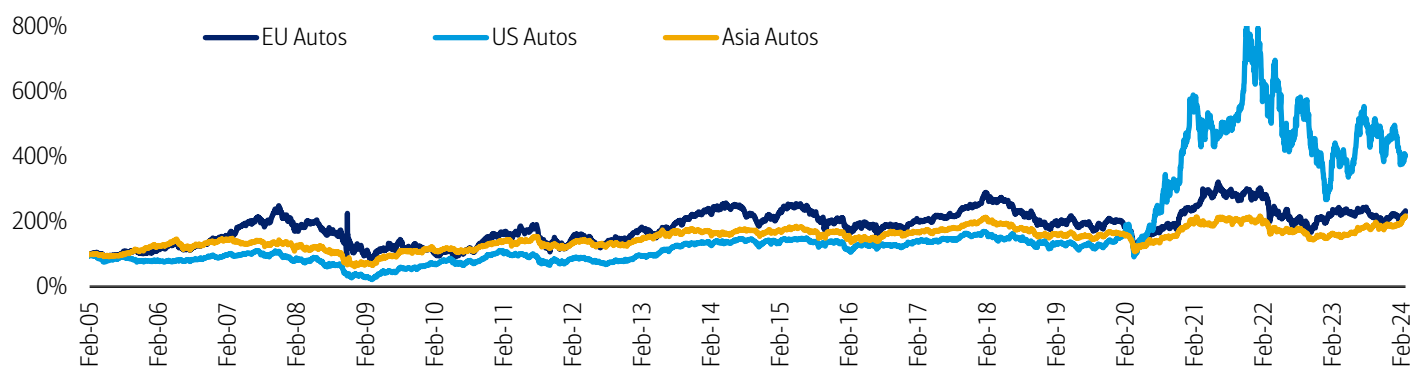


Source: BofA Global Research, Refinitiv Eikon

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## Exhibit 67: EU Autos index vs US and Asia

US Auto index remains volatile

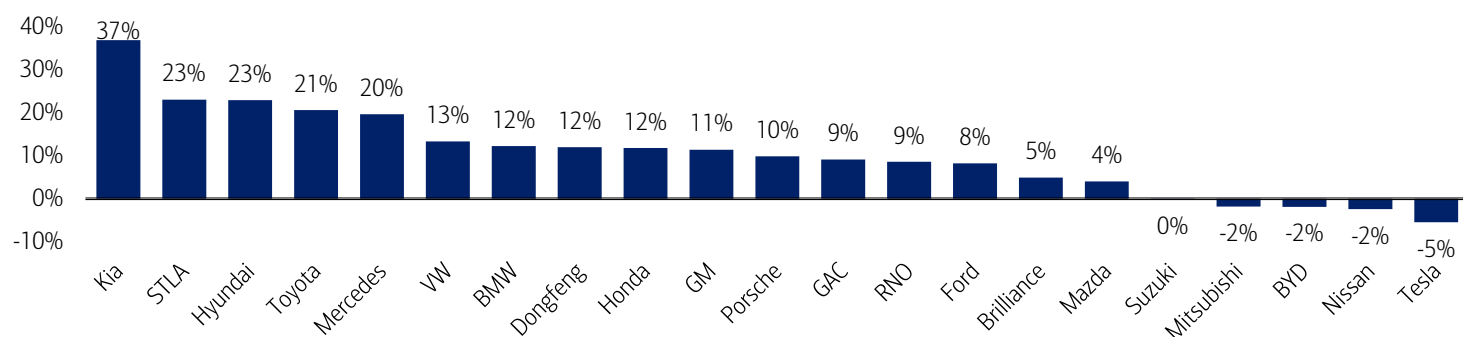


Source: BofA Global Research, Refinitiv Eikon

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## Exhibit 68: Auto OEMs' stock price change in the last month

Kia, STLA and Hyundai have outperformed, while share price of Tesla has declined the most



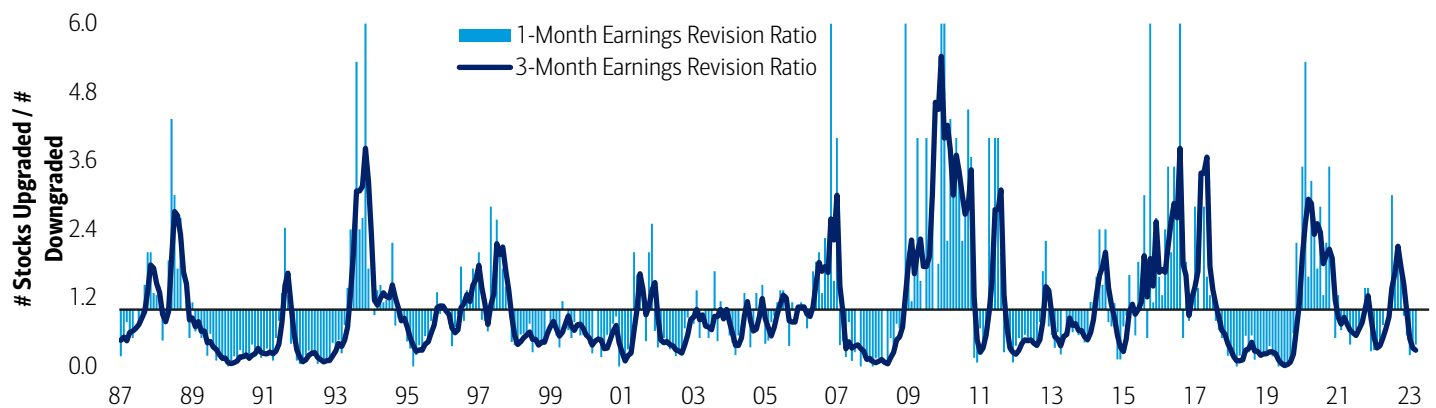
Source: BofA Global Research, Refinitiv Eikon

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## EU Autos: Estimate revision trend & investor sentiment

### Exhibit 69: European Autos: 12-month forward EPS revision trend

EPS revision are still positive in Auto, but momentum has deteriorated

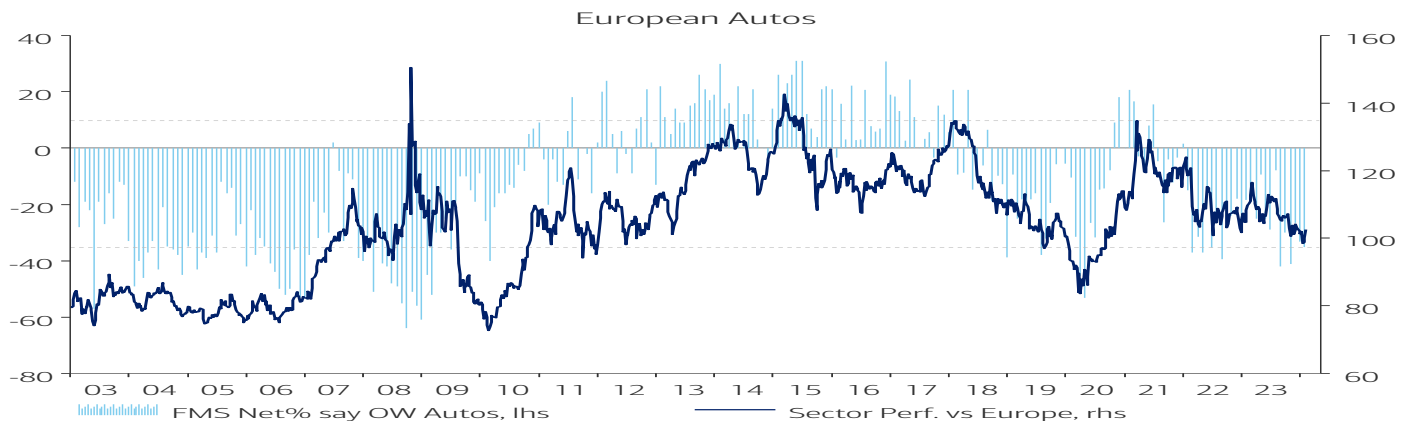


Source: BofA European Equity Quant Strategy

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### Exhibit 70: Net % saying they are overweight European Autos

Net 35% of managers said that they are underweight the sector, and net 8% of them see it as undervalued

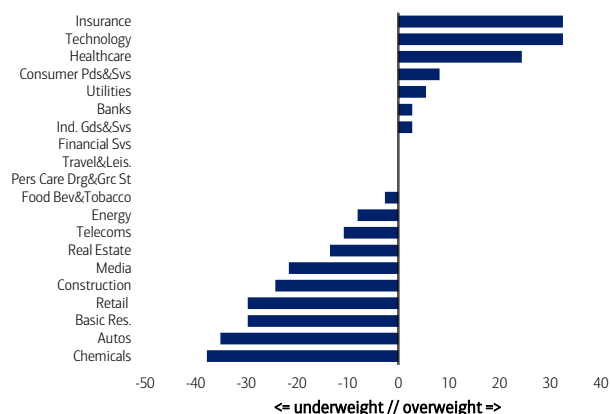


Source: BofA Regional Fund Manager Survey, DataStream

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### Exhibit 71: Current European sector snapshot

% saying overweight - % saying underweight

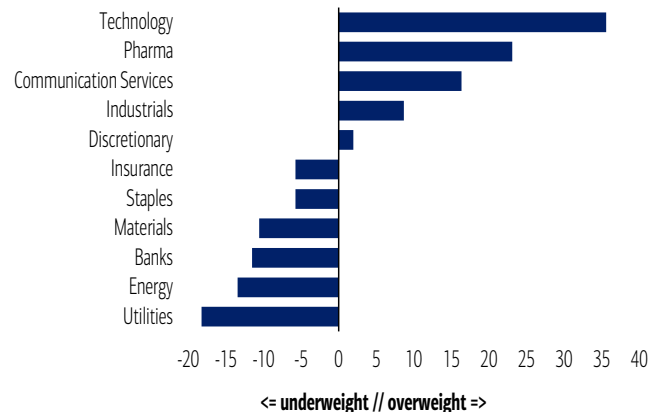


Source: BofA Regional Fund Manager Survey

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### Exhibit 72: Global sector sentiment

% saying overweight - % saying underweight



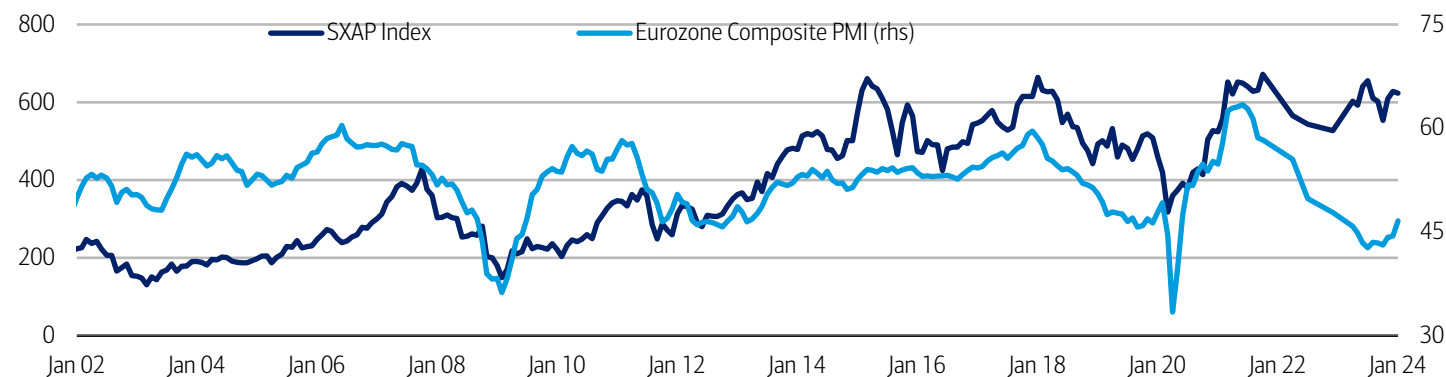
Source: BofA Global Fund Manager Survey

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## EU share prices & valuation still in crisis mode

### Exhibit 73: SXAP Index (=EU Autos) vs PMI

Historically, the SXAP index moves in tandem with the PMI but has been decoupled since past couple of years

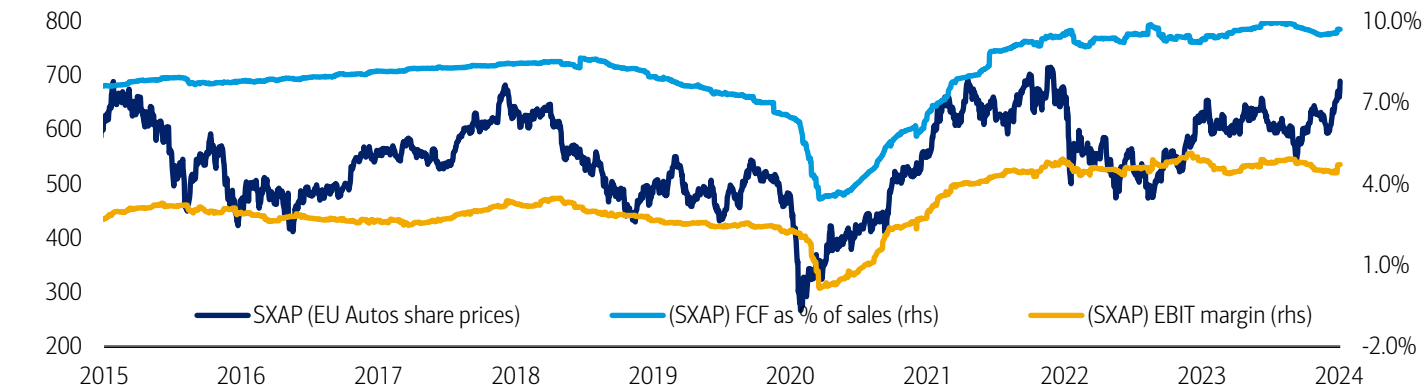


Source: Bloomberg, BofA Global Research

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### Exhibit 74: SXAP performance relative to margin

The SXAP remains resilient as EBIT margins are not dropping off yet

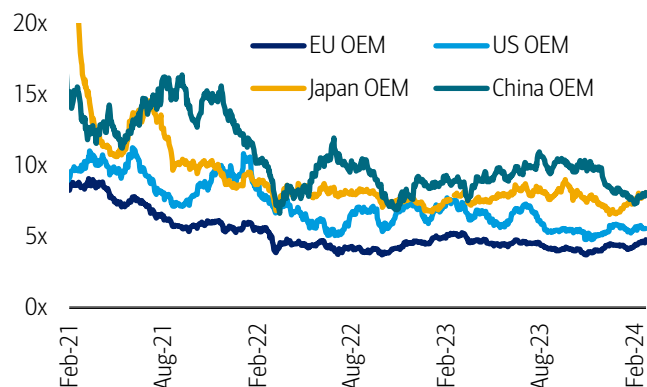


Source: BofA Global Research, FactSet

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### Exhibit 75: 12-month forward PE valuation by region for car makers (OEMs)

European Autos now valued so low that they hardly can de-rate further

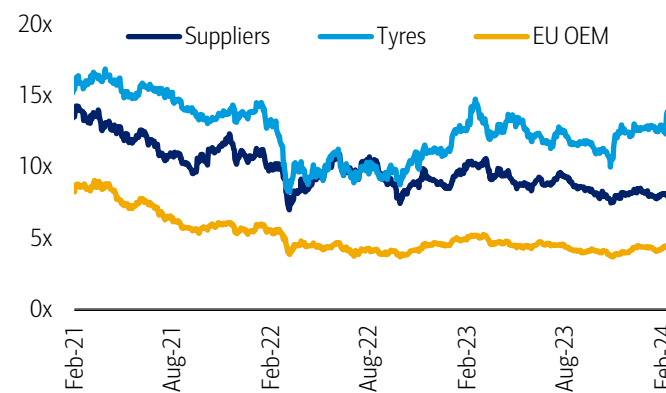


Source: FactSet, BofA Global Research

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### Exhibit 76: 12-month forward PE by auto sub-segment in Europe

Car makers at trough levels, suppliers and tires are de-rating



Source: FactSet, BofA Global Research

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