

Japan Automobiles/Auto Parts

Revisiting our stock preferences: Focus on US growth potential

Price Objective Change

Oct-Dec results review

We highlight five takeaways from Japanese OEM Oct-Dec results: 1) winners and losers in the US market are becoming clearer as the competitive environment normalizes; 2) with supply chains still unstable in Oct-Dec, operational capabilities also had an impact on relative earnings performance; 3) expectations for an ASEAN sales recovery in FY3/25 are receding; 4) OEMs plan to continue providing support to suppliers in FY3/25 (higher parts procurement costs); and 5) while HEV sales are likely to rise near term, OEMs have not drastically revised their BEV strategies.

HEVs proving to be key asset in US as market normalizes

The competitive environment in the US is returning to normal. Sales competition intensified towards the end of 2023 as auto OEMs offered more generous incentives. The common factor in the dominant sales performance by **Toyota** and **Honda** was HEV models. Incentives for HEVs were very low, driving an improvement in profitability at both OEMs.

ASEAN slump and continued supplier support in FY3/25

Points 3) and 4) above are risk factors for FY3/25 earnings: 3) the outlook for the ASEAN has been deteriorating for some time now ([see our Year Ahead report](#)), with **Isuzu** now saying demand Thailand may not start to recover until CY25, and 4) while the increase in some input costs has leveled off, suppliers still face rising fixed costs, including labor costs in Japan and North America. As flagged by **Toyota**, OEMs are likely to bear quite a large share of the higher fixed costs, which will most likely impact earnings in FY3/25.

Share prices following momentum trend since results;

Honda/Mazda look attractive on low valuations

The momentum trend for auto sector stocks appears to have accelerated since Oct-Dec results, and investor views on **Honda** have diverged. As in 2Q **Honda** recognized considerable recall costs in 3Q, but these were only temporary expenses, since **Honda** will likely seek compensation from its supplier. **Honda's** auto and motorcycle businesses are firm and the announcement of another buyback was positive.

27 February 2024

Equity
Japan
Autos/Auto Parts

Kei Nihonyanagi >>
Research Analyst
BofAS Japan
+81 3 6225 7642
kei.nihonyanagi@bofa.com

Kentaro Hosoda >>
Research Analyst
BofAS Japan
+81 3 6225 6293
kentaro.hosoda@bofa.com

OEM: Original Equipment
Manufacturer
BEV: Battery Electric Vehicle
HEV: Hybrid Electric Vehicle

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 9 to 13. Analyst Certification on page 7. Price Objective Basis/Risk on page 7.

12664431

Timestamp: 27 February 2024 10:53AM EST

Contents

Honda: Buy, PO ¥2,000→¥2,100	3
Toyota: Buy, PO ¥3,600→¥3,900	5



Honda: Buy, PO ¥2,000→¥2,100

Exhibit 10: Honda: Our estimates and PO, background to changes

Steady improvement in underlying earnings

Honda Motor (7267)

Retail auto sales ('000s)					Comments (production, sales)	
Rating	24/3 E	25/3E	26/3E	24/3 CoE	We keep our sales assumptions for FY3/24, revise down slightly for FY3/25 onward. We assume group sales of 4.19mn units in FY3/24 (+14% YoY), 4.19mn in FY3/25 (flat). Temporary production capacity shortages in the US are a factor militating against FY3/25 volume growth.	
New C-1-7 BUY	New	4,151	4,222	4,443		
Old C-1-7 BUY	Old	4,151	4,273	4,468		
Operating profit (¥bn)					Comments (OP, NP)	
Price objective	24/3 E	25/3E	26/3E	24/3 CoE	We fine tune our estimates. We assume increases in N. American labor cost and incentives in FY3/25 and beyond but still see growth in profit on the dropout of FY3/24 one-off costs (¥200bn), and improvement in mix on growth in HEV sales. We still expect OPM to reach 7% in FY3/25 (¥145/\$).	
New 2,100	New	1,325	1,493	1,598		
Old 2,000	Old	1,322	1,492	1,585		
ROE					Price Objective	
2/27/2024	24/3 E	25/3E	26/3E	24/3 CoE	We revise our 12-month PO for Honda Motor from ¥2,000 to ¥2,100. We calculate a PO basis EV/EBITDA multiple of 1.6x by taking the FY3/18-20 average of 1.3x (ex finco) and adding a 10% decarbonization premium and 10% premium for potential efforts to remedy share price weakness (net +20%; we remove our 10% top-line visibility discount). We calculate fair-value market cap (ex finco) by applying this to 12-month forward EBITDA of ¥1.76tn (ex finco). We add back financial services shareholders' equity of ¥3.2tn less a 30% discount (¥2.2tn) to derive total market cap.	
Share price 1,777	New	9.1%	8.8%	8.8%		
+/- vs PO +18.2%	Old	9.0%	8.3%	8.4%		

Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 11: Honda: BofAe, CoE, consensus

Expect double-digit profit growth again in FY3/25

Honda Motor (7267)

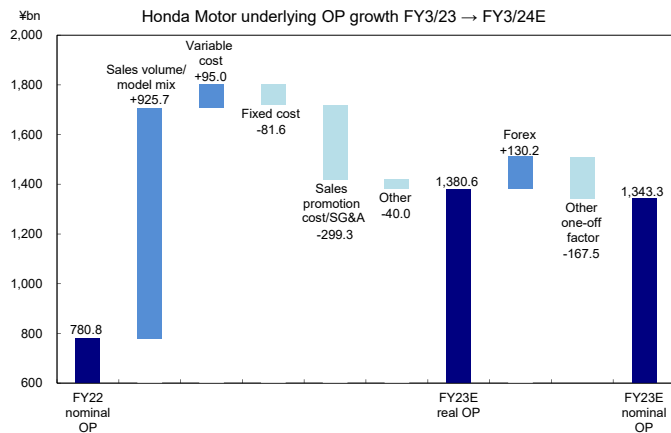
		Sales		OP		Net Profit Before Tax		Net Profit		EPS	P/E	P/B	ROE
		JPY mn	yoy %	JPY mn	yoy %	JPY mn	yoy %	JPY mn	yoy %	JPY	x	x	%
Fiscal Year													
FY3/23	Actual	16,907,725	+16.2%	780,769	-10.4%	897,565	-16.1%	651,416	-7.9%	384.0	4.6	0.3	6.0%
FY3/24	E New	21,373,700	+26.4%	1,325,300	+69.7%	1,538,300	+71.4%	1,039,600	+59.6%	212.7	8.4	0.7	9.1%
	E Old	21,230,400	+25.6%	1,321,500	+69.3%	1,516,500	+69.0%	1,025,900	+57.5%	210.3	8.4	0.7	9.0%
	IFIS E	20,516,291	+21.3%	1,324,036	+69.6%	1,523,710	+69.8%	1,028,615	+57.9%	217.9	8.2		
	CoE	20,000,000	+18.3%	1,250,000	+60.1%	1,445,000	+61.0%	960,000	+47.4%	189.6	9.4		
FY3/25	E New	21,717,600	+1.6%	1,493,000	+12.7%	1,580,900	+2.8%	1,063,600	+2.3%	207.1	8.6	0.7	8.8%
	E Old	21,299,600	+0.3%	1,492,300	+12.9%	1,614,800	+6.5%	1,004,500	-2.1%	206.0	8.6	0.7	8.3%
	IFIS E	21,277,391	+3.7%	1,434,373	+8.3%	1,583,230	+3.9%	1,058,009	+2.9%	213.0	8.3		
FY3/26	E New	22,499,900	+3.6%	1,598,100	+7.0%	1,681,300	+6.4%	1,131,400	+6.4%	224.1	7.9	0.7	8.8%
	E Old	22,069,300	+3.6%	1,584,700	+6.2%	1,719,000	+6.5%	1,069,600	+6.5%	219.3	8.1	0.7	8.4%
	IFIS E	21,783,070	+2.4%	1,465,240	+2.2%	1,612,978	+1.9%	1,082,040	+2.3%	220.1	8.1		
1H (Apr-Sep)													
FY3/23	Actual	8,085,304	+15.7%	453,452	+2.5%	515,831	-8.0%	338,514	-13.0%				
FY3/24	Actual	9,609,392	+18.9%	696,573	+53.6%	879,285	+70.5%	616,301	+82.1%				
2H (Oct-Mar)													
FY3/23	Actual	8,822,421	+16.6%	327,317	-23.7%	381,734	-25.1%	312,902	-1.6%				
FY3/24	E New	11,843,408	+34.2%	642,527	+96.3%	659,015	+72.6%	423,299	+35.3%				
	E Old	11,621,008	+31.7%	624,927	+90.9%	637,215	+66.9%	409,599	+30.9%				
1Q (Apr-Jun)													
FY3/23	Actual	3,829,550	+6.9%	222,216	-8.6%	237,404	-23.8%	149,219	-32.9%				
FY3/24	Actual	4,624,996	+20.8%	394,447	+77.5%	514,924	+116.9%	363,069	+143.3%				
2Q (Jul-Sep)													
FY3/23	Actual	4,255,754	+25.0%	231,236	+16.2%	278,427	+11.8%	189,295	+13.6%				
FY3/24	Actual	4,984,396	+17.1%	302,126	+30.7%	364,361	+30.9%	253,232	+33.8%				
3Q (Oct-Dec)													
FY3/23	Actual	4,438,186	+20.3%	280,491	+22.2%	343,546	+20.6%	244,655	+26.8%				
FY3/24	Actual	5,436,200	+22.5%	390,700	+39.3%	385,239	+12.1%	253,308	+3.5%				
4Q (Jan-Mar)													
FY3/23	Actual	4,384,235	+13.1%	46,826	-76.5%	38,188	-83.0%	68,247	-45.4%				
FY3/24	E New	6,407,208	+46.1%	251,827	+437.8%	273,776	+616.9%	169,991	+149.1%				
	E Old	6,230,908	+42.1%	245,115	+423.5%	251,976	+559.8%	156,291	+129.0%				

Source: Company data, IFIS Consensus, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 12: Honda: FY3/24 BofAe OP variance analysis (YoY)

High profit growth in FY3/24 yet significant one-off hits

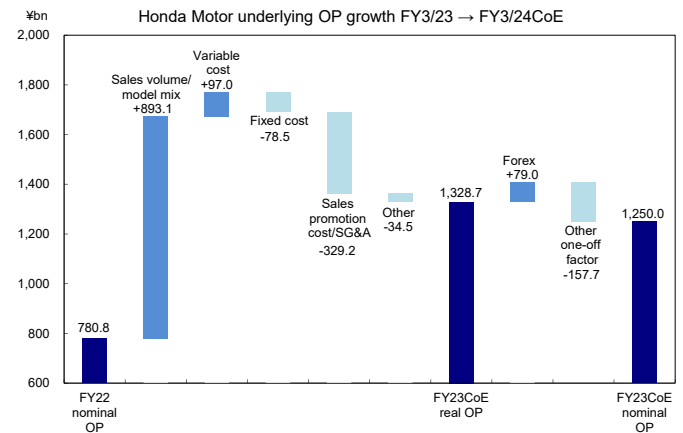


Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 13: Honda: FY3/24 CoE OP variance analysis (YoY)

Guidance still conservative, FX assumptions included

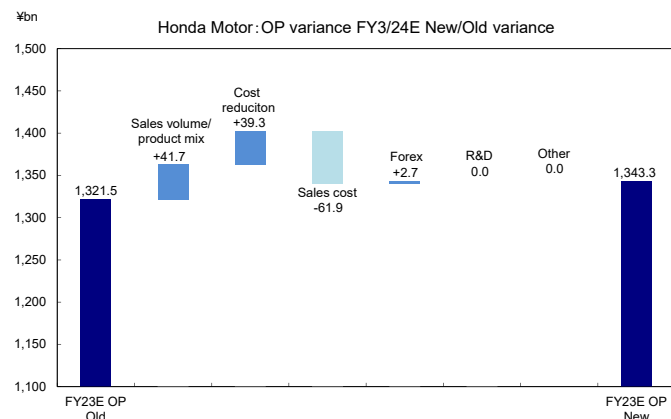


Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 14: Honda: FY3/24 BofAe OP variance analysis (vs previous BofAe)

Assume incentives rise with US market normalization, mix improvement a big factor

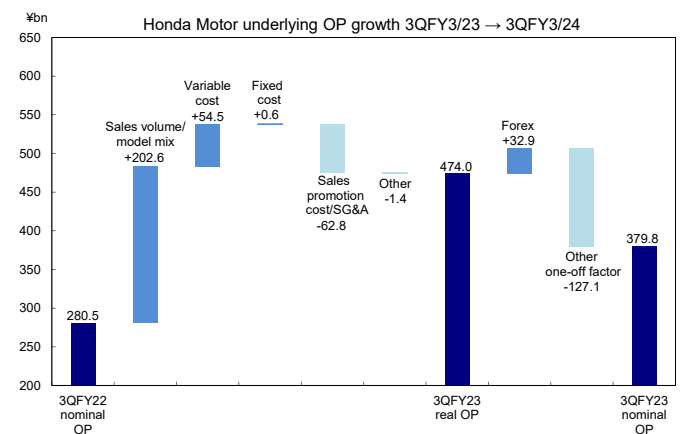


Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 15: Honda: 3Q FY3/24 OP variance analysis (YoY)

Yachiyo Industry restructuring costs in 3Q plus significant one-off recall costs



Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Toyota: Buy, PO ¥3,600→¥3,900

Exhibit 16: Toyota: Our estimates and PO, background to changes

Outstanding earnings levels and reliability

Toyota Motor (7203)

Retail auto sales ('000s)					Comments (production, sales)
Rating	24/3 E	25/3E	26/3E	24/3 CoE	We made our revisions at the time of 3Q results. In FY3/25 we assume Toyota/Lexus retail sales growth of only 2% YoY based on the company stance of keeping to sustainable production levels. We assume flat consolidated wholesale sales (with some lingering impact from Daihatsu irregularities). We still expect buoyant global demand.
New B-1-7 BUY	New 10,391	10,627	10,757	10,400	
Old B-1-7 BUY	Old 10,391	10,627	10,757	10,400	
Operating profit (¥bn)					Comments (OP, NP)
Price objective	24/3 E	25/3E	26/3E	24/3 CoE	We revise our estimates after following up on results. In FY3/25 we shift to an assumption of continued support for suppliers and revise down, but still see exceedingly high profits. The dropout of one-off costs is a factor but the basic FY3/25 profit growth drivers we see are improvement in mix on growth in HEV sales, and more widespread boosts from repricing.
New 3,900	New 4,655	5,031	5,117	4,900	
Old 3,600	Old 5,021	5,895	6,098	4,900	
ROE					Price Objective
2/27/2024	24/3 E	25/3E	26/3E	24/3 CoE	We revise our 12-month PO for Toyota Motor from ¥3,600 to ¥3,900. We calculate a PO basis EV/EBITDA multiple of 4.7x by taking the FY3/17-19 average of 3.9X (ex finco) and adding a 15% decarbonization premium and 5% premium for potential efforts to remedy share price weakness, with no discount for top-line visibility (previously -10%; net +20%). We calculate fair-value market cap (ex finco) by applying this to 12-month forward EBITDA of ¥7.5tn (ex finco). We then add back ¥5.0tn in financial services shareholders' equity to derive total market cap.
Share price 3,582	New 16.2%	15.4%	14.3%	NA	
+/- vs PO +8.9%	Old 15.2%	15.3%	14.4%	-	

Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 17: Toyota: Honda: BofAe, CoE, consensus

See double-digit profit growth as feasible in FY3/25 given factors such as Daihatsu production normalization

Toyota Motor (7203)

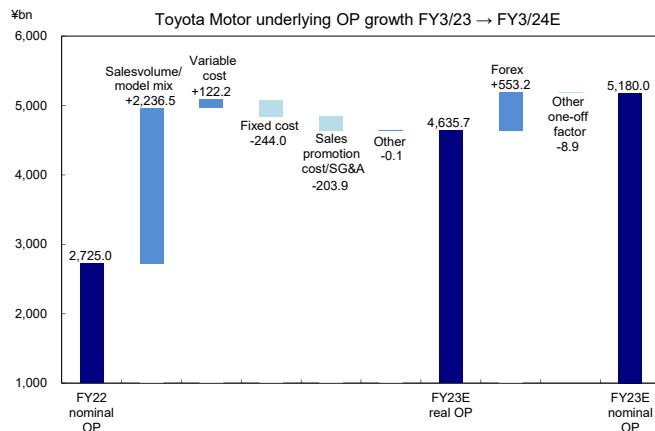
		Sales		OP		Net Profit Before Tax		Net Profit		EPS	P/E	P/B	ROE
		JPY mn	yoy %	JPY mn	yoy %	JPY mn	yoy %	JPY mn	yoy %	JPY	x	x	%
Fiscal Year													
FY3/23	Actual	37,154,298	+18.4%	2,725,025	-9.0%	3,668,733	-8.1%	2,451,318	-14.0%	179.5	20.0	1.7	9.0%
FY3/24	E New	43,282,000	+16.5%	4,655,000	+70.8%	6,534,000	+78.1%	4,821,300	+96.7%	311.8	11.5	1.5	16.2%
	E Old	43,367,000	+16.7%	5,021,000	+84.3%	6,104,800	+66.4%	4,501,900	+83.7%	332.8	10.8	1.6	15.2%
	IFIS E	44,136,100	+18.8%	4,958,871	+82.0%	6,231,693	+69.9%	4,473,586	+82.5%	329.4	10.9		
	CoE	43,000,000	+15.7%	4,900,000	+79.8%	6,200,000	+69.0%	4,500,000	+83.6%	292.0	12.3		
FY3/25	E New	43,545,000	+0.6%	5,031,000	+8.1%	6,848,200	+4.8%	5,047,400	+4.7%	339.8	10.5	1.4	15.4%
	E Old	43,129,000	-0.5%	5,895,000	+17.4%	6,958,800	+14.0%	4,989,800	+10.8%	370.9	9.7	1.4	15.3%
	IFIS E	45,850,200	+3.9%	5,106,986	+3.0%	6,233,164	+0.0%	4,420,750	-1.2%	326.2	11.0		
FY3/26	E New	43,968,000	+1.0%	5,117,000	+1.7%	7,014,500	+2.4%	5,170,200	+2.4%	350.0	10.2	1.3	14.3%
	E Old	43,788,000	+1.5%	6,098,000	+3.4%	7,193,100	+3.4%	5,157,800	+3.4%	385.6	9.3	1.3	14.4%
	IFIS E	47,400,000	+3.4%	5,233,685	+2.5%	6,388,508	+2.5%	4,524,215	+2.3%	335.0	10.7		
First Half (Apr-Sep)													
FY3/23	Actual	17,709,348	+14.4%	1,141,444	-34.7%	1,834,276	-14.4%	1,171,084	-23.2%				
FY3/24	Actual	21,981,617	+24.1%	2,559,294	+124.2%	3,521,525	+92.0%	2,589,428	+121.1%				
Second Half (Oct-Mar)													
FY3/23	Actual	19,444,950	+22.3%	1,583,581	+26.9%	1,834,457	-0.7%	1,280,234	-3.4%				
FY3/24	E New	20,836,383	+7.2%	2,228,706	+40.7%	3,012,475	+64.2%	2,231,872	+74.3%				
	E Old	21,385,383	+10.0%	2,461,706	+55.5%	2,583,275	+40.8%	1,912,472	+49.4%				
First Quarter (Apr-Jun)													
FY3/23	Actual	8,491,116	+7.0%	578,655	-42.0%	1,021,748	-18.7%	736,820	-17.9%				
FY3/24	Actual	10,546,831	+24.2%	1,120,900	+93.7%	1,720,553	+68.4%	1,311,372	+78.0%				
Second Quarter (Jul-Sep)													
FY3/23	Actual	9,218,232	+22.2%	562,789	-25.0%	812,528	-8.4%	434,264	-30.7%				
FY3/24	Actual	11,434,786	+24.0%	1,438,394	+155.6%	1,800,972	+121.7%	1,278,056	+194.3%				
Third Quarter (Oct-Dec)													
FY3/23	Actual	9,754,685	+25.3%	956,652	+22.0%	1,034,998	-5.4%	727,942	-8.1%				
FY3/24	Actual	11,404,000	+16.9%	1,264,000	+32.1%	1,835,540	+77.3%	1,357,814	+86.5%				
Fourth Quarter (Jan-Mar)													
FY3/23	Actual	9,690,265	+19.4%	626,929	+35.2%	799,459	+6.2%	552,292	+3.4%				
FY3/24	E New	9,432,383	-2.7%	964,706	+53.9%	1,176,935	+47.2%	874,058	+58.3%				
	E Old	9,344,280	-3.6%	780,763	+24.5%	747,735	-6.5%	554,658	+0.4%				

Source: Company data, IFIS Consensus, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 18: Toyota: FY3/24 BofAe OP variance analysis (YoY)

Volume growth, mix improvement, repricing boosts big factors in FY3/24

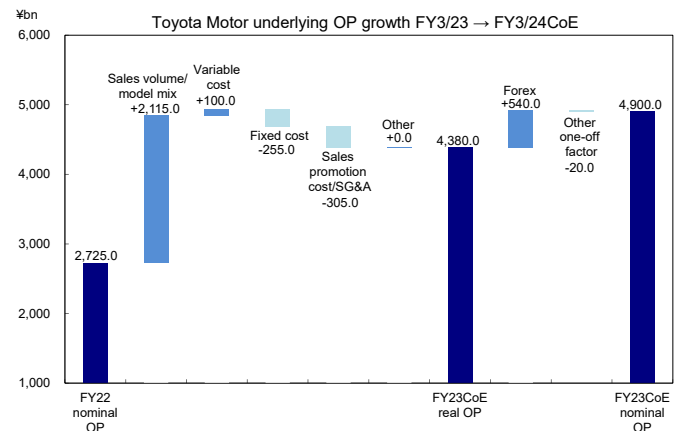


Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 19: Toyota: FY3/24 CoE OP variance analysis (YoY)

We take guidance to be a bare minimum

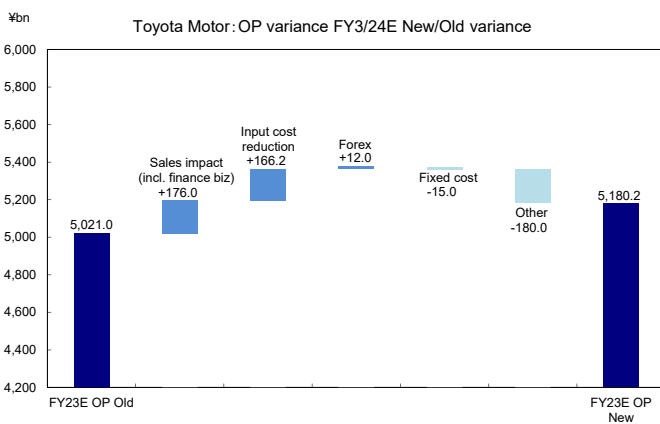


Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 20: Toyota: FY3/24 BofAe OP variance analysis (vs previous BofAe)

Assume ¥100bn in one-off costs related to Daihatsu

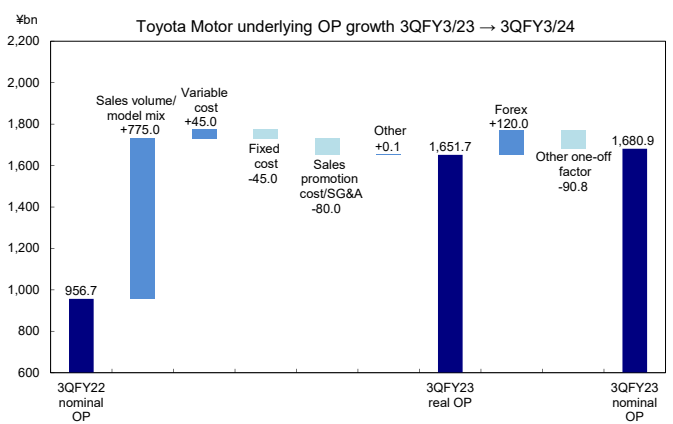


Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Exhibit 21: Toyota: 3Q FY3/24 OP variance analysis (YoY)

Superb sales performance again in 3Q, OPM reached astonishing 14%



Source: Company data, BofA Global Research estimate.

BofA GLOBAL RESEARCH

Price objective basis & risk

Toyota Motor (7203 / TOYOF / TM)

Our 12-month PO for Toyota is ¥3,900 (ADR: \$260.51). We calculate a fair-value EV/EBITDA multiple of 3.9x by taking the FY3/17-3/19 average EV/EBITDA of 3.9x (ex finco), applying a 15% decarbonization premium, 5% for potential action in response to share price weakness, and a 10% top-line visibility discount (net +10%). We calculate fair-value market cap (ex finco) by applying this to our FY3/25 EBITDA estimate of ¥7.6tn (ex finco). We then add back ¥5.0tn in financial services shareholders' equity to derive total market cap. Risks are forex swings, a prolonged semiconductor shortage, and an increase in material costs.

Honda Motor (7267 / HNDAF / HMC)

Our 12-month PO for Honda Motor is ¥2,100 (ADR US\$41.95). We derive a fair-value EV/EBITDA multiple of 1.4x by taking the average FY3/18-3/20 EV/EBITDA (ex finco) of 1.3x, applying a 10% decarbonization premium and 10% for potential from action in response to share price weakness, as well as a top-line visibility adjustment discount of 10% (net +10%). We calculate fair-value market cap (ex finco) by applying this to 12-month forward EBITDA of ¥1.7tn (ex finco). We add back financial services shareholders' equity of ¥3.0tn less a 30% discount (¥2.1tn) to derive all-company market cap. Downside risks are the speed of US recovery in demand, forex fluctuations, a prolonged semiconductor shortage, an increase in material costs, and changes in expectation for its aggressive BEV shift.

Analyst Certification

I, Kei Nihonyanagi, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Special Disclosures

BofA Securities is currently acting as financial advisor to Daimler Truck Holding AG in connection with the proposed business combination between its subsidiary Mitsubishi Fuso Truck and Bus Corporation and Hino Motors, Ltd., a subsidiary of Toyota Motor Corporation, which was announced on May 30, 2023. The proposed transaction is subject to approval by shareholders of Hino Motors, Ltd. This research report is not intended to (1) provide voting advice, (2) serve as an endorsement of the proposed transaction, or (3) result in the procurement, withholding or revocation of a proxy.

APR - Autos Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Aima Technology	XIHBF	603529 CH	Joey Yang, CFA
	Bajaj Auto	XBJBF	BJAUT IN	Gunjan Prithyani
	BYD	BYDDF	1211 HK	Ming Hsun Lee, CFA
	BYD	XYMPF	002594 CH	Ming Hsun Lee, CFA
	BYD	BYDDY	BYDDY US	Ming Hsun Lee, CFA
	CATL	XMOQF	300750 CH	Ming Hsun Lee, CFA
	DENSO	DNZOF	6902 JP	Kei Nihonyanagi
	EVE	XEVF	300014 CH	Ming Hsun Lee, CFA
	Fuyao Glass	XFGIF	600660 CH	Edward Leung, CFA
	Fuyao Glass	FIGIF	3606 HK	Edward Leung, CFA
	Great Wall Motor	GWLLF	2333 HK	Ming Hsun Lee, CFA
	GS Yuasa	GYUAF	6674 JP	Kentaro Hosoda
	Guangzhou Automobile Group	GNZUF	2238 HK	Ming Hsun Lee, CFA
	Hankook Tire	XHTRF	161390 KS	KJ Hwang
	Hero Motocorp	HRHDF	HMCL IN	Gunjan Prithyani
	Hesai	HSAL	HSAL US	Jessie Lo
	HL Mando	XMADF	204320 KS	KJ Hwang
	Honda Motor	HMC	HMC US	Kei Nihonyanagi
	Honda Motor	HNDAF	7267 JP	Kei Nihonyanagi
	Huayu	XHASF	600741 CH	Jessie Lo
	Hyundai Motor	HYMLF	005380 KS	KJ Hwang
	Isuzu Motors	ISUFZ	7202 JP	Kei Nihonyanagi
	Joyson	XQWVF	600699 CH	Jessie Lo
	Leapmotor	XZSSF	9863 HK	Ming Hsun Lee, CFA
	Li Auto	LI	LI US	Ming Hsun Lee, CFA
	Li Auto	LAAOF	2015 HK	Ming Hsun Lee, CFA
	Maruti	MUDGF	MSIL IN	Gunjan Prithyani
	Mazda Motor	MZDAF	7261 JP	Kei Nihonyanagi
	Minth	MNTHF	425 HK	Jessie Lo
	Ningbo Tuopu	XNCGF	601689 CH	Joey Yang, CFA
	Nissan Motor	NSANF	7201 JP	Kei Nihonyanagi
	Nissan Motor	NSANY	NSANY US	Kei Nihonyanagi
	PARK24	PKCOF	4666 JP	Kei Nihonyanagi
	SAMIL (Motherson International)	XMSUF	MOTHERSO IN	Gunjan Prithyani
	Shenzhen Kedali	XWCSF	002850 CH	Jessie Lo
	Shuanghuan Driveline	XZSHF	002472 CH	Jessie Lo
	Sumitomo Rubber Industries	SMTUF	5110 JP	Kentaro Hosoda
	Suzuki Motor	SZKMF	7269 JP	Kei Nihonyanagi
	Tata Motors	XTTSF	TTMT IN	Gunjan Prithyani
	Toyo Tire	TOTTF	5105 JP	Kentaro Hosoda
	Toyota Motor	TOYOF	7203 JP	Kei Nihonyanagi
	Toyota Motor	TM	TM US	Kei Nihonyanagi
	Wencan	XSCDF	603348 CH	Joey Yang, CFA
	Wuxi Lead	XZSRF	300450 CH	Ming Hsun Lee, CFA
	XPeng Inc	XPEV	XPEV US	Ming Hsun Lee, CFA
	XPeng Inc.	XPNGF	9868 HK	Ming Hsun Lee, CFA
	Yadea	YADGF	1585 HK	Joey Yang, CFA
	Yunnan Energy	XLGFF	002812 CH	Jessie Lo
	Zhejiang Sanhua	XZSIF	002050 CH	Jessie Lo
	Zhongsheng Auto	ZHSHF	881 HK	Joey Yang, CFA
NEUTRAL				
	Aisin	ASEKF	7259 JP	Kei Nihonyanagi
	Ashok Leyland	XDBVF	AL IN	Gunjan Prithyani
	Bridgestone	BRDCF	5108 JP	Kei Nihonyanagi
	Bridgestone	BRDCY	BRDCY US	Kei Nihonyanagi
	CALB	XCLSIF	3931 HK	Ming Hsun Lee, CFA
	Dong Feng	DNFGF	489 HK	Ming Hsun Lee, CFA
	Eicher Motors	XEIMF	EIM IN	Gunjan Prithyani
	Hino Motors	HINOF	7205 JP	Kei Nihonyanagi
	Hyundai Mobis	HYPLF	012330 KS	KJ Hwang
	Kia Corp	KIMTF	000270 KS	KJ Hwang
	Mahindra & Mahindra (M&M)	XKQRF	MM IN	Gunjan Prithyani
	MeiDong Auto	CMEIF	1268 HK	Joey Yang, CFA

APR - Autos Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Motherson Sumi Wiring	XMWDF	MSUMI IN	Gunjan Prithyani
	NIO	NIO	NIO US	Ming Hsun Lee, CFA
	NIO	NIOIF	9866 HK	Ming Hsun Lee, CFA
	NIO	XLTFW	NIO SP	Ming Hsun Lee, CFA
	Shenzhen Senior	XHYRF	300568 CH	Jessie Lo
	Subaru Corp	FUJHF	7270 JP	Kei Nihonyanagi
	Subaru Corp	FUJHY	FUJHY US	Kei Nihonyanagi
	Toyota Industries Corporation	TYIDF	6201 JP	Kentaro Hosoda
	Toyota Industries Corporation	TYIDY	TYIDY US	Kentaro Hosoda
	TVS Motors	XFKMF	TVSL IN	Gunjan Prithyani
	Yokohama Rubber	YORUF	5101 JP	Kentaro Hosoda
	Yongda	CYYHF	3669 HK	Joey Yang, CFA

UNDERPERFORM

	Astra International	PTAIF	ASII IJ	Paul Dewberry
	BAIC Motor	BMCLF	1958 HK	Ming Hsun Lee, CFA
	Bharat Forge	XUUVF	BHFC IN	Gunjan Prithyani
	China Grand Auto	XMURF	600297 CH	Joey Yang, CFA
	Desay SV	XGDFF	002920 CH	Jessie Lo
	Escorts Kubota	XSCOF	ESCORTS IN	Gunjan Prithyani
	GAC	XGNHF	601238 CH	Ming Hsun Lee, CFA
	Great Wall Motor	XGWMF	601633 CH	Ming Hsun Lee, CFA
	Hyundai Wia	XWHYF	011210 KS	KJ Hwang
	Mitsubishi Motors	MMTOF	7211 JP	Kei Nihonyanagi
	Nextage	NXAGF	3186 JP	Kentaro Hosoda
	Nexteer	NTXVF	1316 HK	Jessie Lo
	Putailai	XVHGF	603659 CH	Jessie Lo
	SAIC Motor	XZNF	600104 CH	Ming Hsun Lee, CFA
	Sona Comstar	XBNXF	SONACOMS IN	Gunjan Prithyani
	Tinci Materials	XCVHF	002709 CH	Miriam Chan, CFA
	Yamaha Motor	YAMHF	7272 JP	Kei Nihonyanagi

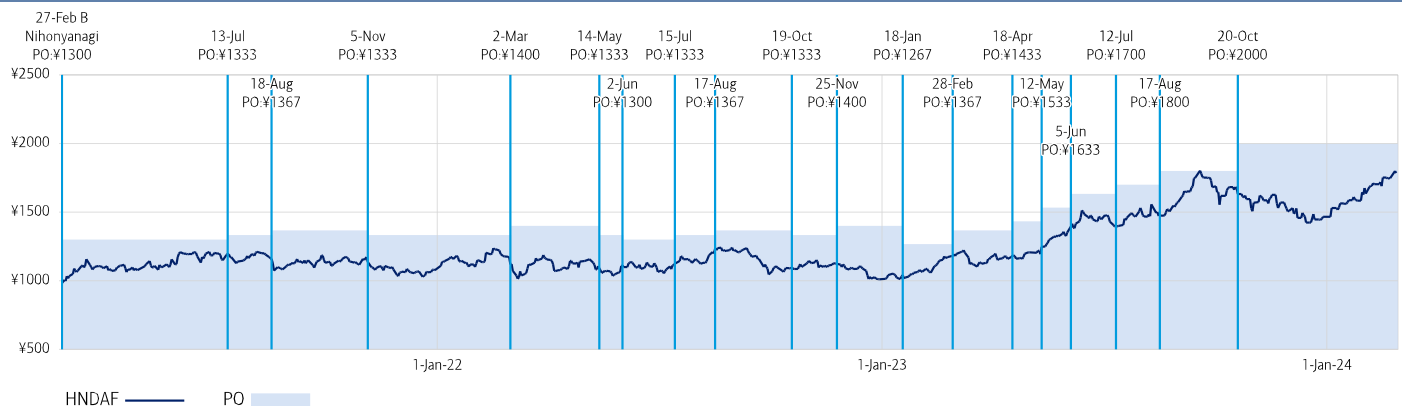
RVW

	Geely	GELYF	175 HK	Ming Hsun Lee, CFA
--	-------	-------	--------	--------------------

Disclosures

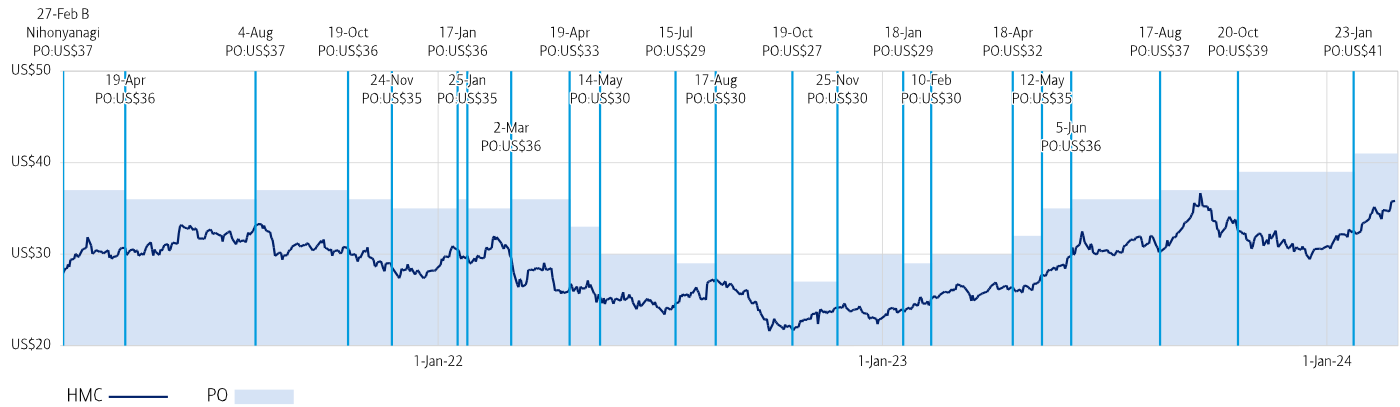
Important Disclosures

Honda Motor (HNDAF) Price Chart



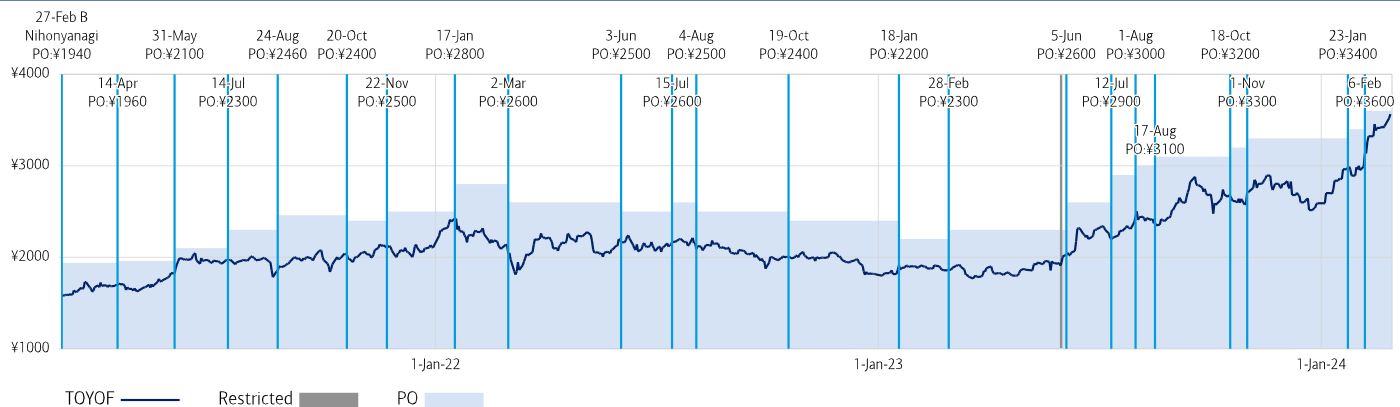
B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Honda Motor (HMC) Price Chart

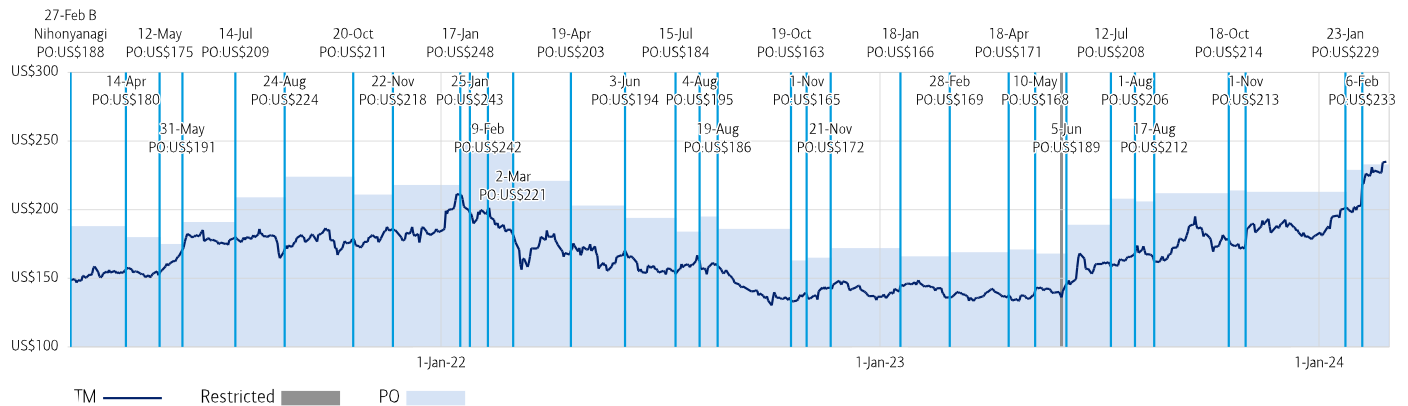
B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Toyota Motor (TOYOF) Price Chart

B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Toyota Motor (TM) Price Chart

B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Equity Investment Rating Distribution: Autos Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	67	55.83%	Buy	39	58.21%
Hold	30	25.00%	Hold	15	50.00%
Sell	23	19.17%	Sell	12	52.17%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Honda Motor, Toyota Motor.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Toyota Motor.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Honda Motor, Toyota Motor.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Honda Motor, Toyota Motor.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Honda Motor, Toyota Motor.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Honda Motor, Toyota Motor.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Honda Motor, Toyota Motor.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Honda Motor, Toyota Motor.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Honda Motor, Toyota Motor.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and



investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofA's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofA Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofA India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofA (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofA Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofA India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofA (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofA and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofA and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofA and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofA and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofA or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofA or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofA for the provision of research services for a separate fee, and in connection therewith BofA may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofA has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofA). If such recipient uses the services of BofA in connection with the sale or purchase of a security referred to herein, BofA may act as principal for its own account or as agent for another person. BofA is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure

is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.