

Toyota Motor (7203)

Strengthening automatic batteries makes Primearth EV Energy a 100% subsidiary

Maintain Rating: BUY | PO: 3,900 JPY | Price: 3,729 JPY

Primearth EV Energy to become 100% subsidiary

After the 5 March market close Toyota announced that it is making Primearth EV Energy (PEVE), a joint venture with Panasonic (Toyota stake 80.5%, Panasonic 19.5%) a wholly-owned subsidiary. PEVE is to take on the production of BEV and PHEV batteries for Toyota in addition to supplying it with HEV batteries. Toyota has not disclosed how much it is paying for Panasonic's 19.5% holding, but we assume little impact on earnings given PEVE's end-FY3/23 equity capital of ¥91.2bn. We have a Buy rating on Toyota with a ¥3,900 price objective.

Flexible sourcing required for today's batteries, too

Toyota plan launches with next-generation batteries (Exhibit 1) from its dedicated BEV platform starting in 2026. The company has always said that inhouse production of BEV batteries would be mainstream as of 2026, which suggests to us that after PEVE has started producing next-generation batteries the ratio of batteries sourced externally might rise in the future depending on regional and battery characteristics. Currently, growing HEV demand along with slowing BEV demand require flexibility in gearing battery sourcing and production to demand. PEVE is central to HEV batteries and we envisage a step up in competitiveness based on the construction of a flexible supply structure for multiple battery categories at PEVE.

PEVE currently has estimated production capacity for 3.2mn HEV batteries (ranking it No. 1 globally). Given the small number of HEV battery suppliers globally, we see a strong competitive advantage for Toyota in the current phase of HEV demand growth.

Estimates (¥)	3/22A	3/23A	3/24E	3/25E	3/26E
	IFRS	IFRS	IFRS	IFRS	IFRS
EPS	205.23	179.47	356.24	374.67	385.58
EPS Change (YoY)	27.7%	-12.6%	98.5%	5.2%	2.9%
Dividend / Share	52	60	107	112	116
BPS	1,889.9	2,074.8	2,313.6	2,557.3	2,809.0
Valuation					
P/E	18.2x	20.8x	10.5x	10.0x	9.7x
Dividend Yield*	1.4%	1.6%	2.9%	3.0%	3.1%
P/B	2.0x	1.8x	1.6x	1.5x	1.3x
EV/ EBITDA*	15.8x	16.0x	10.4x	9.5x	9.3x
Free Cash Flow Yield*	0.4%	-0.8%	3.5%	3.1%	2.5%

* For full definitions of *IQmethod*SM measures, see page 6.

05 March 2024

Equity

Kentaro Hosoda >>
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Stock Data

Price (Common / ADR)	3,729 JPY / 243.84 USD
Price Objective	3,900 JPY / 260.51 USD
Date Established	27-Feb-2024/ 27-Feb-2024
Investment Opinion	B-1-7 / A-1-7
52-Week Range	1,764-3,742 JPY
Market Value (mn)	53,548,440 JPY
Market Value (\$mn)	355,815 USD
Shares Outstanding (mn)	14,360.0
Average Daily Value (\$mn)	934.5 USD
Free Float	49.9%
BofA Ticker / Exchange	TOYOF / TYO
BofA Ticker / Exchange	TM / NYS
Bloomberg / Reuters	7203 JP / 7203.T
ROE (2024E)	16.2%
Net Dbt to Eqty (Mar-2023A)	74.7%

BEV: Battery Electric Vehicle

HEV: Hybrid Electric Vehicle

PHEV: Plug-in Hybrid Electric Vehicle

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Refer to important disclosures on page 7 to 10. Analyst Certification on page 4. Price Objective Basis/Risk on page 4.

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Timestamp: 05 March 2024 10:58AM EST

iQprofileSM Toyota Motor (7203)

Key Income Statement Data	3/22A	3/23A	3/24E	3/25E	3/26E
(¥ Billions)	IFRS	IFRS	IFRS	IFRS	IFRS
Sales	31,379.5	37,154.3	43,367.0	43,265.0	43,788.0
% Change	15.3%	18.4%	16.7%	-0.2%	1.2%
Gross Profit	5,971.7	6,313.0	9,135.9	10,179.1	10,571.8
EBITDA	4,817.6	4,764.9	7,305.0	7,976.0	8,160.0
Operating Profit	2,995.7	2,725.0	5,180.0	5,800.0	5,932.0
% Change	36.3%	-9.0%	90.1%	12.0%	2.3%
Net Interest & Other Income	507.0	378.8	577.3	282.9	282.9
Pretax Income	3,990.5	3,668.7	6,534.0	6,848.2	7,014.5
% Change	36.1%	-8.1%	78.1%	4.8%	2.4%
Net Income	2,850.1	2,451.3	4,821.3	5,047.4	5,170.2

Key Cash Flow Statement Data					
Net Income from Cont Operations (GAAP)	2,850.1	2,451.3	4,821.3	5,047.4	5,170.2
Depreciation & Amortization	1,821.9	2,039.9	2,125.0	2,176.0	2,228.0
Change in Working Capital	22.1	236.6	329.4	(15.1)	(370.8)
Capital Expenditure	(3,484.2)	(3,357.6)	(3,775.0)	(3,851.0)	(3,928.0)
Free Cash Flow*	238.5	(402.5)	1,867.2	1,645.2	1,345.8
Share Issue / (Repurchase)	(404.7)	(431.1)	(200.0)	(200.0)	(200.0)
Cost of Dividends Paid	(761.6)	(813.0)	(1,448.1)	(1,508.8)	(1,555.4)

Key Balance Sheet Data					
Cash & Equivalents	6,113.7	7,517.0	7,215.6	9,704.6	11,878.8
Trade Receivables	10,324.2	11,865.9	11,711.2	11,787.0	11,911.8
Other Current Assets	7,284.5	7,076.9	7,266.8	7,051.5	7,136.7
Property, Plant & Equipment	12,326.6	12,634.0	13,237.0	13,852.0	14,480.0
Other Non-Current Assets	31,639.8	35,209.4	35,374.3	35,540.9	35,709.1
Total Assets	67,688.8	74,303.2	74,804.9	77,936.0	81,116.4
Short-Term Debt	11,187.8	12,305.6	9,721.3	9,721.3	9,721.3
Other Current Liabilities	10,654.3	11,654.1	11,687.8	11,591.5	11,466.5
Long-Term Debt	15,308.5	17,074.6	17,074.6	17,074.6	17,074.6
Other Non-Current Liabilities	3,383.3	4,004.6	4,004.6	4,004.6	4,004.6
Total Liabilities	40,534.0	45,039.0	42,488.3	42,392.1	42,267.0
Total Equity	27,154.8	29,264.2	32,316.6	35,543.9	38,849.3
Total Equity & Liabilities	67,688.8	74,303.2	74,804.9	77,936.0	81,116.4

Key Metrics

iQmethodSM – Business Performance*

Return On Capital Employed	4.4%	3.5%	7.0%	7.2%	7.0%
Return On Equity	11.5%	9.0%	16.2%	15.4%	14.3%
Operating Margin	9.5%	7.3%	11.9%	13.4%	13.5%

iQmethodSM – Quality of Earnings*

Cash Realization Ratio	1.3x	1.2x	1.2x	1.1x	1.0x
Asset Replacement Ratio	1.9x	1.6x	1.8x	1.8x	1.8x
Tax Rate (Reported)	28.0%	32.0%	25.0%	25.0%	25.0%
Net Debt-to-Equity Ratio	75.1%	74.7%	60.6%	48.1%	38.4%
Interest Cover	68.1x	21.8x	43.2x	50.7x	51.8x

* For full definitions of iQmethodSM measures, see page 6.
Other GAAP denotes Japanese Accounting Standards.

Company Sector

Autos/Car Manufacturers

Company Description

One of the world's largest automakers. Contends with global leaders VW Group and GM in sales volume. Following 2008 financial crisis, has struggled with quality issues in the US and production cutbacks due to Japan's earthquake, but regained top global market share in 2012. US market is its traditional earnings driver, but recently starting to tap into emerging markets such as ASEAN and India. Highest domestic production rates of Japan's big three (Toyota, Nissan, Honda). Established in 1937.

Investment Rationale

We rate Toyota Buy. We have high confidence in near-term earnings as the company has been able to minimize the impact of semiconductor shortages. We expect it to continue to post record-high profits from FY3/22 onwards. In the long term, amid calls for initiatives to promote decarbonization, we see Toyota as one of the rare companies that can contribute to decarbonization without relying solely on BEVs by utilizing its abundant technological capabilities.

Exhibit 1: BEV plans for bipolar, all-solid-state

Next-generation battery profiles disclosed by Toyota

Toyota: Next generation battery technologies

		Next generation Performance version (prismatic)	Low-price version Bipolar LFP	High performance/Low-price combination Bipolar	All-solid-state battery	All-solid-state battery (more advanced version)
Application timing		2026	Trying for 2026-27	Trying for 2027-28	Trying for 2027-28	Around 2030
vs Current bz4X	EV cruising range	+100%	+20%	+110%	+120%	+150%
	Cost	-20%	-40%	-28%	TBD	TBD
Vs next- generation PF	EV cruising range	0%	-80%	+10%	+20%	+50%
	Cost	0%	-25%	-10%	TBD	TBD
Rapid charging time		less than 20-min	less than 30-min	less than 20-min	less than 10-min	less than 10-min
Remarks		Development almost complete Can be used with current E- TNGA platform in theory	Simple structure. LFP to hold down cost. 25% the number of parts of next-generation PF	May be NMC base (8:1:1 ratio) 20% the number of parts of next-generation PF	Overcoming durability issues, accelerating development for BEVs Material decided	

Note) PPES: Prime Planet Energy & Solutions Battery development, manufacturing, sales joint venture between Toyota (51%) and Panasonic (49%).**Source:** Company data, BofA Global Research.

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 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 (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. Risks are forex swings, a prolonged semiconductor shortage, and an increase in material costs.

Analyst Certification

I, Kentaro Hosoda, 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	XIHB	603529 CH	Joey Yang, CFA
	Bajaj Auto	XBJF	BJAUT IN	Gunjan Prithyani
	BYD	BYDD	1211 HK	Ming Hsun Lee, CFA
	BYD	XYMP	002594 CH	Ming Hsun Lee, CFA
	BYD	BYDD	BYDDY US	Ming Hsun Lee, CFA
	CATL	XMOQ	300750 CH	Ming Hsun Lee, CFA
	DENSO	DNZO	6902 JP	Kentaro Hosoda
	EVE	XEVF	300014 CH	Ming Hsun Lee, CFA
	Fuyao Glass	XGIF	600660 CH	Edward Leung, CFA
	Fuyao Glass	FIGI	3606 HK	Edward Leung, CFA
	Great Wall Motor	GWLL	2333 HK	Ming Hsun Lee, CFA
	GS Yuasa	GYUA	6674 JP	Kentaro Hosoda
	Guangzhou Automobile Group	GNZU	2238 HK	Ming Hsun Lee, CFA
	Hankook Tire	XHTR	161390 KS	KJ Hwang
	Hero Motocorp	HRHD	HMCL IN	Gunjan Prithyani
	Hesai	HSAL	HSAI US	Jessie Lo
	HL Mando	XMAF	204320 KS	KJ Hwang
	Honda Motor	HMC	HMC US	Kentaro Hosoda
	Honda Motor	HNDAL	7267 JP	Kentaro Hosoda
	Huayu	XHAS	600741 CH	Jessie Lo
	Hyundai Motor	HYML	005380 KS	KJ Hwang
	Joyson	XQMW	600699 CH	Jessie Lo
	Leapmotor	XZSS	9863 HK	Ming Hsun Lee, CFA
	Li Auto	LI	LI US	Ming Hsun Lee, CFA
	Li Auto	LAAO	2015 HK	Ming Hsun Lee, CFA
	Maruti	MUDG	MSIL IN	Gunjan Prithyani
	Mazda Motor	MZDA	7261 JP	Kentaro Hosoda
	Minth	MNTH	425 HK	Jessie Lo

APR - Autos Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Ningbo Tuopu	XNCGF	601689 CH	Joey Yang, CFA
	Nissan Motor	NSANF	7201 JP	Kentaro Hosoda
	Nissan Motor	NSANY	NSANY US	Kentaro Hosoda
	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	Kentaro Hosoda
	Tata Motors	XTTSF	TTMT IN	Gunjan Prithyani
	Toyo Tire	TOTTF	5105 JP	Kentaro Hosoda
	Toyota Motor	TOYOF	7203 JP	Kentaro Hosoda
	Toyota Motor	TM	TM US	Kentaro Hosoda
	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	Kentaro Hosoda
	Ashok Leyland	XDBVF	AL IN	Gunjan Prithyani
	Bridgestone	BRDCF	5108 JP	Kentaro Hosoda
	Bridgestone	BRDCY	BRDCY US	Kentaro Hosoda
	CALB	XCLSF	3931 HK	Ming Hsun Lee, CFA
	Dong Feng	DNFGF	489 HK	Ming Hsun Lee, CFA
	Eicher Motors	XEIMF	EIM IN	Gunjan Prithyani
	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
	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	Kentaro Hosoda
	Subaru Corp	FUJHY	FUJHY US	Kentaro Hosoda
	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	XGDF	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	Kentaro Hosoda
	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

RVW

Geely	GELYF	175 HK	Ming Hsun Lee, CFA
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APR - Autos Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

iQmethodSM is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

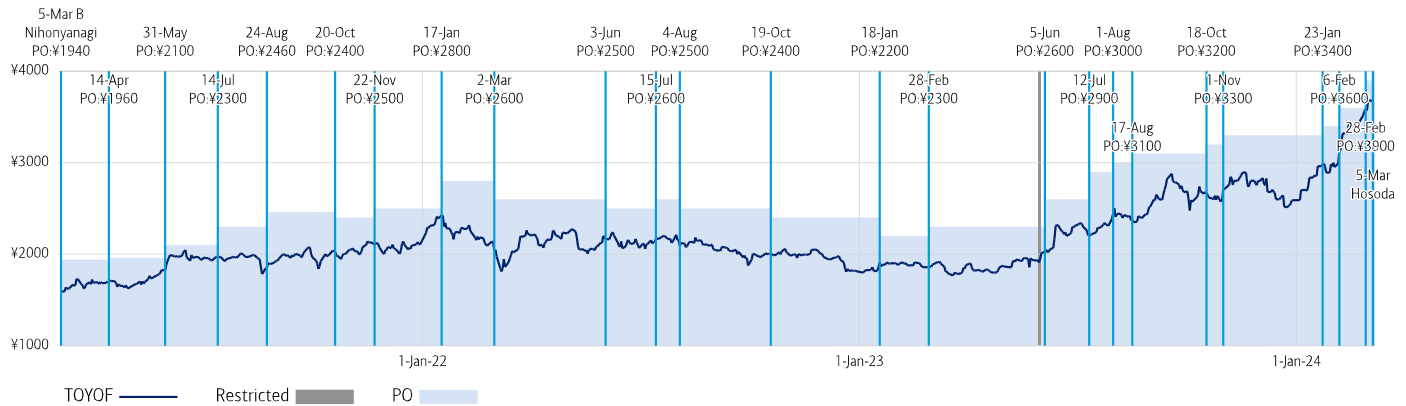
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Important Disclosures

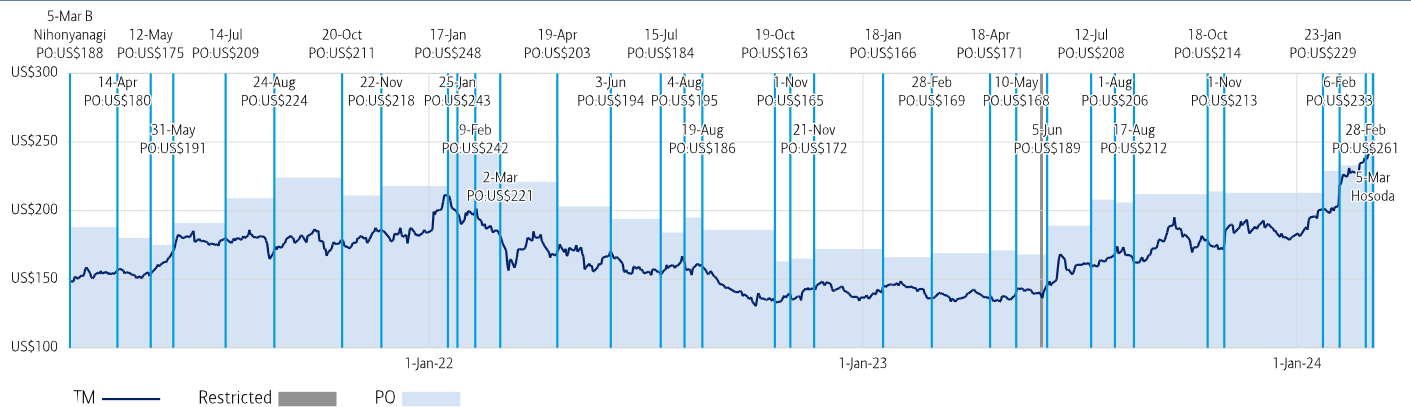
Toyota Motor (TOYOF) Price Chart



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

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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.



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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.

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