Outlook for FY22–23 corporate earnings

Quarterly Update

6 March 2023

For inquiries:
Market Strategy Research Dept
Equity Research Dept
Nomura Securities Co., Ltd.

Contents

Summary and major assumptions3
Contributions to recurring profit growth by sector5
Revisions to recurring profit estimates (versus old estimates)7
Revision index for the Russell/Nomura Large Cap Index9
Reference
Russell/Nomura Large Cap Index: earnings indicators10
Recurring profits by sector12
Percentage change in quarterly sales and profits13
Valuation indicators14
What are the Russell/Nomura Japan Equity Indexes?15

Summary and major assumptions

For FY22 we forecast aggregate growth of 16.7% in sales, 6.5% in operating profits, and 8.2% in recurring profits

Our analysts have revised their FY22–23 earnings forecasts for Russell/Nomura Large Cap constituents. For all sectors (excluding financials), on an aggregate basis, our analysts forecast y-y growth in FY22 of 16.7% for sales, 6.5% for operating profits, and 8.2% for recurring profits. While this represents an upward revision of 0.4ppt versus our aggregate sales growth forecast as of 1 December 2022, it represents downward revisions of 2.9ppt and 3.5ppt, respectively, to our aggregate forecasts for operating and recurring profits.

Impact from global economic slowdown, slow recovery in automobile production, and forex assumption revision

The main factors behind the downward revisions to our FY22 profit growth forecasts are a decline in demand caused by the global economic slowdown, the sluggish recovery in automobile production owing to semiconductor shortages and other supply chain issues, and a revision to our forex assumptions in the direction of a stronger yen versus the dollar. In addition, a number of companies have booked impairment losses and other one-time losses in FY22.

For FY23 we forecast a 0.2% decline in sales but 10.8% growth in operating profits and 4.3% growth in recurring profits

On an all-industry (ex financials) basis, our analysts forecast a 0.2% aggregate decline in sales, 10.8% growth in operating profits, and 4.3% growth in recurring profits in FY23. Compared with our previous aggregate forecasts for FY23, as of 1 December 2022, these new forecasts represent downward revisions of 1.7ppt for sales, 1.4ppt for operating profits, and 0.8ppt for recurring profits. As the revision to our USD/JPY assumption for FY23 in the direction of a stronger yen (from 140.00 to 127.00) is larger than the change in our assumption for FY22 (from 137.04 to 134.15), it has resulted in larger downward revisions to our forecasts, particularly for manufacturers with high export weightings. As we also lower our profit forecasts for FY22, the basis for y-y comparisons, these downward revisions for FY23 are actually even more substantial than they appear at first glance.

Number of companies for which our analysts have lowered their forecasts exceeds number for which they have raised their forecasts, for first time in three quarters

The Revision Index (RI) for the Russell/Nomura Large Cap Index (ex financials) (which shows the difference between the percentage of companies for which estimates were raised and the percentage for which estimates were lowered) is -27.1% for March 2023, indicating that downward revisions to FY23 forecasts outstripped upward revisions in the period from 2 December 2022 through 1 March 2023. This is the first time in three quarters that downward revisions have outstripped upward revisions. As we have already noted, we revised our USD/JPY rate assumptions in the direction of a stronger yen, and this has resulted in an increase in downward revisions to earnings estimates, mainly for manufacturers.

Fig. 1: Overview of consolidated earnings forecasts for the Russell/Nomura Large Cap Index

(%)Old No. New **FY19** FY20 FY21 FY22E FY23E FY22E FY23E of cos Items Category Actual **Actual Actual** Ε Ε Ε Russell/Nomura Large Cap (exfinancials) 265 -7.5 14.1 16.7 16.3 1.5 Manufacturing 145 -8.0 15.2 16.7 1.8 17.4 3.2 29 Sales Basic materials 28.8 23.5 23.4 74 (% y-y) Processing -4.5 13.3 15.6 3.4 17.0 5.0 Nonmanufacturing (exfinancials) 120 -6.8 12.8 16.7 14.9 -0.7 Russell/Nomura Small Cap (exfinancials) 1,085 0.3 -6.1 7.3 10.8 4.5 10.4 4.1 Russell/Nomura Large Cap (exfinancials) 265 18.9 58.3 6.5 10.8 9.4 12.2 Manufacturing 145 58.2 4.2 6.3 -23.2 -3.4 6.1 11.3 Operating profits Basic materials 29 -48.7 13.7 148.5 -0.9 4.2 10.1 (% y-y) 74 Processing 7.2 -20.1 52.9 7.6 12.9 11.7 Nonmanufacturing (ex financials) 120 58.5 7.4 24.3 25.2 Russell/Nomura Small Cap (exfinancials) 1,085 37.8 4.9 19.4 17.6 Russell/Nomura Large Cap 4.5 287 34.1 3.9 8.7 9.6 5.8 Russell/Nomura Large Cap (exfinancials) 265 8.2 4.3 11.7 5.1 5.6 34.5 145 Manufacturing 3.9 -27.2 7.6 56.9 4.7 3.5 10.7 29 Basic materials -52.0 13.7 164.2 4.7 11.7 Recurring profits 74 Processing -24.5 47.8 5.0 6.3 10.6 8.7 (% y-y) 142 Nonmanufacturing -14.3 2.0 14.7 2.9 14.7 8.4 7.9 Nonmanufacturing (exfinancials) 120 -16.0 3.3 8.8 13.7 5.4 13.3 7.0 Russell/Nomura Small Cap 1,170 45.0 2.8 13.8 6.0 11.4 Russell/Nomura Small Cap (exfinancials) 1,085 7.0 50.1 2.2 14.7 5.6 12.1 Russell/Nomura Large Cap 287 -31.6 16.3 38.9 2.8 6.7 7.9 4.5 Russell/Nomura Large Cap (exfinancials) 265 -35.6 3.2 3.7 18.3 39.5 6.4 10.8 145 Manufacturing -40.3 16.4 66.8 -0.3 4.1 6.7 3.2 Basic materials 29 -82.6 73.7 308.5 -10.4 12.7 After-tax profits Processing 74 -37.9 18.9 51.4 9.0 6.2 8.7 (% y-y) Nonmanufacturing 142 16.2 15.1 6.4 9.6 9.2 6.0 Nonmanufacturing (exfinancials) 120 20.7 7.6 18.0 1.9 17.8 4.6 -28.8 Russell/Nomura Small Cap 1,170 -12.0 5.6 16.8 9.5 10.1 2.1 72.2 Russell/Nomura Small Cap (exfinancials) 1,085 -13.9 1.2 84.9 4.1 19.8 8.2 12.1

Note: Latest estimates as of 1 March 2023, previous estimates as of 1 December 2022.

Source: Nomura

Fig. 2: Key earnings estimate assumptions

		As of 19 Jan 2023					As of 17 Oct 2022				
		Industrial production 2015se year	Policy rate (FY-end)	WTI		ige rate vg)	Industrial production 2015 base year	Policy rate (FY-end)	WTI	Exchan (a)	ge rate vg)
		%у-у	%	\$/bbl	USD/JPY	EUR/JPY	%у-у	%	\$/bbl	USD/JPY	EUR/JPY
FY	FY21	5.7	-0.10	77.0	112.34	130.51	5.7	-0.10	77.0	112.34	130.51
	FY22	0.1	-0.10	90.7	134.15	139.67	-1.0	-0.10	92.2	137.04	136.84
	FY23	0.9	-0.10	78.0	127.00	137.00	0.8	-0.10	76.0	140.00	135.00
Half-yearly	FY21 H1	12.2	-0.10	68.3	109.75	130.80	12.2	-0.10	68.3	109.75	130.80
	FY21 H2	0.1	-0.10	85.7	114.93	130.23	0.1	-0.10	85.7	114.93	130.23
	FY22 H1	0.3	-0.10	100.0	134.07	138.68	-1.9	-0.10	100.0	134.07	138.68
	FY22 H2	0.0	-0.10	81.3	134.23	140.66	0.0	-0.10	84.5	140.00	135.00
	FY23 H1	0.0	-0.10	79.5	127.00	137.00	1.1	-0.10	78.0	140.00	135.00
	FY23 H2	1.8	-0.10	76.5	127.00	137.00	0.6	-0.10	74.0	140.00	135.00

Note: WTI is the term-average WTI crude oil futures price. The above assumptions are not Nomura forecasts but the assumptions on which Nomura analysts base their earnings forecasts.

Contributions to recurring profit growth by sector

Overview of the corporate earnings outlook for FY22

For FY22, our analysts expect recurring profits to increase in 12 of 19 sectors and fall in 7.

Sectors that we expect to make large contributions to overall profit growth include transportation, trading companies, telecommunications, pharmaceuticals & healthcare, and electrical machinery & precision equipment. In the transportation sector, earnings from travel have been recovering as people have started moving around again now that COVID-related restrictions on movement have been eased. At trading companies, energy trading and automobile-related businesses have been seeing strong sales. The expected large contribution to overall profits from the telecommunications sector is mainly due to our forecast of an improvement in gains/losses on investments at SoftBank Group [9984]. In the pharmaceuticals & healthcare sector, profits have been boosted by factors including a weak yen and an increase in COVID-19 drug sales and royalty revenues. In the electrical machinery & precision equipment sector, while we think the decline in consumer equipment-related demand will have an impact, we nevertheless expect profits to grow, mainly on sales of products for automotive and industrial applications.

Sectors that we expect to make large negative contributions to overall profits include financials, utilities, services, and steel & nonferrous metals. In the financials sector, profits have been hit in FY22 by substantial accounting costs arising from the sale of subsidiary company shares. The sector's profits have also been weighed down by an increase in insurance benefit payouts for hospitalizations owing to a resurgence in COVID-19 infections in Japan. At utilities companies, we see an increase in electric power procurement costs stemming from higher JEPX prices, in addition to which losses have arisen because companies have been unable to fully pass on the increase in costs as average fuel prices have exceeded the ceilings in the fuel cost adjustment system. In the services sector we think intense competition will result in a fall in profits on postal and logistics operations. Meanwhile, we think the steel & nonferrous metals sector is likely to be hit by a combination of a deterioration in inventory valuation gains/losses and a fall in sales volumes.

Overview of the corporate earnings outlook for FY23

For FY23, our analysts expect recurring profits to increase in 14 out of 19 sectors and fall in 5.

Sectors that we expect to make large contributions to overall profit growth in FY23 include financials, utilities, automobiles, telecommunications, pharmaceuticals & healthcare, and services. In the financials sector, we expect the one-time losses noted above, for FY22, to drop out of the picture, and think that earnings from client-facing operations at major banks will start to improve and that steady progress will also be made in controlling costs. At utilities companies, losses related to the fuel cost adjustment system should drop out of the picture, and we also expect profits to be boosted by electricity rate hikes and a fall in fuel costs as a result of the restart of nuclear reactors. In the automobiles sector, we think automakers will be able to increase production substantially as the semiconductor shortage is resolved. We also expect demand to remain high given the pent-up demand in the US, even in the event of a recession. At telecommunications companies, we expect an improvement in gains/losses on investment at SoftBank Group to boost sector profits. In the pharmaceuticals & healthcare sector, we think profits will receive a substantial boost from disappearance of the one-time factors, such as impairment losses, that we expect to be recorded in FY22. In the services sector, we forecast a recovery in demand in the leisure, restaurant, and recruitment industries as the COVID pandemic winds down.

Sectors that we expect to make large negative contributions to overall profits include trading companies, transportation, chemicals, and steel & nonferrous metals. At trading companies, we expect profits to decline mainly in resource fields, as a result of a decline in market prices for resources such as iron ore and crude oil. The shipping subsector accounts for a large proportion of the profit decline we forecast for the transportation sector. Containership spot rates have been falling, and we expect rates to fall at Ocean Network Express (ONE), the equity-method affiliate of the three major Japanese shipping companies. For the chemicals sector, expected profit declines in the petroleum subsector account for much of the forecast decline. In addition to the dropping out of inventory gains booked in FY22, we also assume that crude oil prices will fall through FY23. We also forecast a y-y deterioration in PVC margins in FY23 as a result of a slowdown in housing demand in North America. In steel & nonferrous metals, the disappearance of one-time factors such as forex translation gains is a major factor.

Fig. 3: Contributions to recurring profit growth by sector for the Russell/Nomura Large Cap Index

FY22E			
Increase in profits			(%)
	Growth	Contribution	Contribution
12 sectors			(ex financials)
Transportation	83.9	84.9	46.6
Trading companies	18.5	46.7	25.6
Telecommunications	29.7	29.9	16.4
Pharmaceuticals, healthcare	22.5	20.8	11.4
Electrical machinery, precision equipment	5.5	19.7	10.8
Retailing	20.7	15.2	8.4
Automobiles	3.7	13.5	7.4
Food	18.6	12.7	7.0
Housing, real estate	8.8	10.5	5.8
Machinery	6.9	8.9	4.9
Chemicals	1.9	4.6	2.5
Construction	11.6	2.2	1.2

Decrease in profits	(%)		
7 sectors	Growth	Contribution	Contribution (ex financials)
Softw are	-6.8	-4.3	-2.3
Household goods	-11.2	-4.4	-2.4
Media	-36.3	-5.8	-3.2
Steel, nonferrous metals	-13.7	-11.3	-6.2
Services	-13.5	-13.7	-7.5
Utilities	SL	-48.0	-26.3
Financials	-23.3	-82.2	-

FIZSE			
Increase in profits			(%)
	Growth	Contribution	Contribution
14 sectors			(ex financials)
Financials	48.9	55.7	-
Utilities	SP	36.5	82.4
Automobiles	13.7	22.6	51.1
Telecommunications	36.4	20.0	45.1
Pharmaceuticals, healthcare	11.5	5.5	12.4
Services	13.7	4.9	11.2
Housing, real estate	4.0	2.2	4.9
Food	6.1	2.1	4.7
Media	27.7	1.2	2.7
Electrical machinery, precision equipment	0.7	1.1	2.5
Retailing	2.3	0.9	2.0
Household goods	6.3	0.9	2.0
Construction	4.1	0.4	0.9
Machinery	0.3	0.2	0.4

Decrease in profits						
	Grow th	Contribution	Contribution			
5 sectors			(ex financials)			
Softw are	-2.8	-0.7	-1.5			
Steel, nonferrous metals	-16.2	-5.1	-11.4			
Chemicals	-5.5	-5.7	-12.9			
Transportation	-19.4	-15.5	-35.1			
Trading companies	-21.6	-27.2	-61.3			

Note: SP = switch to profits; SL = switch to losses; LS = losses shrinking; LI = losses increasing.

Revisions to recurring profit estimates (versus old estimates)

Overview of the corporate earnings outlook for FY22

Our analysts have raised their FY22 recurring profit forecasts for 6 out of 19 sectors, lowered them for 12, and left them unchanged for 1.

The upward revisions (in value terms) are particularly large for sectors such as utilities, trading companies, and transportation. The upward revisions to our forecasts for utilities companies are partly due to revisions to earnings forecasts for subsidiaries and the resale of LNG. For the trading companies sector, our upward revisions factor in the recovery in iron ore prices as a result of the easing of COVID restrictions in China, as well as strong performance at LNG trading operations. For the transportation sector, we have raised our earnings forecasts for air transportation and railways, as passenger numbers are recovering.

Sectors for which our analysts have made large downward revisions include financials, telecommunications, automobiles, chemicals, and electrical machinery & precision equipment. In the financials sector, the downward revisions reflect accounting losses on the transfer of subsidiary company shares. In telecommunications, we have lowered our forecasts for investment gains/losses at SoftBank Group. For automobiles, we have factored in the impact of revisions to our forex assumptions towards a stronger yen, as well as a lowering of our production volume forecasts. For chemicals companies, the global economic slowdown has made operating conditions more difficult for petrochemicals businesses, and our revisions also reflect the sale of mining interests by some companies and a slowdown in demand for electronic materials used in smartphones. For electrical machinery & precision equipment, we have lowered our forecasts for products for consumer electric goods such as smartphones and PCs. Our revisions also factor in restructuring costs at some companies and a fall in demand in China.

Overview of the corporate earnings outlook for FY23

Our analysts have raised their FY23 recurring profit forecasts for 8 out of 19 sectors and lowered them for 11.

The upward revisions (in value terms) were particularly large for sectors such as financials, utilities, steel & nonferrous metals, and trading companies. For financial companies, our revisions reflect our view that asset management earnings will increase because of a rise in interest rates overseas, as well as insurance premium hikes around the world. We expect losses to arise at utilities companies in FY22 because average fuel prices have exceeded the ceilings in the fuel cost adjustment system, but we expect these losses to disappear, in part, in FY23, because we have revised our forex and crude oil price assumptions in the direction of a stronger yen and lower crude oil prices. For steel and nonferrous metals companies, we have raised our forecasts for domestic steel operations owing in part to an expected improvement in spreads. For trading companies, as in the case of our FY22 forecast revisions, we have raised our FY23 assumptions for iron ore and coking coal prices to reflect the easing of COVID restrictions in China.

Sectors for which our analysts have made large downward revisions include automobiles, electrical machinery & precision equipment, transportation, and chemicals. Revisions to our forex assumptions for FY23 in the direction of a stronger yen have had a major impact on our forecasts for external demand-oriented sectors such as automobiles. Our downward revisions for the electrical machinery & precision equipment sector reflect our view that inventory adjustments will continue for electronic parts for consumer goods. In the transportation sector, we have lowered our estimates for containership operations at marine transportation companies. For the chemicals sector, our downward revisions largely reflect the impact of our revised assumptions in the direction of a stronger yen and lower crude oil prices on our earnings forecasts for upstream petroleum companies. Expectations of a slowdown in demand for electronic materials for smartphones, and a slowdown in housing demand in the US, have also led us to lower our forecasts.

Fig. 4: Revisions to recurring profit estimates for the Russell/Nomura Large Cap Index

	FY22E			
[Upw ard revisions]	6 sectors			
	New	Old	Revision	Change
	¥bn	¥bn	¥bn	%
Utilities	-709	-1,249	539.5	-
Trading companies	6,164	5,933	231.3	3.9
Transportation	3,836	3,722	114.9	3.1
Steel, nonferrous metals	1,468	1,430	38.0	2.7
Retailing	1,827	1,812	14.8	0.8
Services	1,807	1,804	2.6	0.1

[Dow nw ard revisions]	12 sectors			
	New Old Revision		Revision	Change
	¥bn	¥bn	¥bn	%
Food	1,672	1,680	-7.9	-0.5
Housing, real estate	2,671	2,688	-17.3	-0.6
Household goods	721	758	-36.9	-4.9
Media	208	253	-44.8	-17.7
Machinery	2,864	2,952	-88.7	-3.0
Softw are	1,202	1,292	-90.2	-7.0
Pharmaceuticals, healthcare	2,336	2,487	-151.7	-6.1
Electrical machinery, precision equipment	7,737	8,067	-329.9	-4.1
Chemicals	5,069	5,559	-489.1	-8.8
Automobiles	7,802	8,376	-573.9	-6.9
Telecommunications	2,696	3,370	-673.6	-20.0
Financials	5,590	7,043	-1,453.1	-20.6

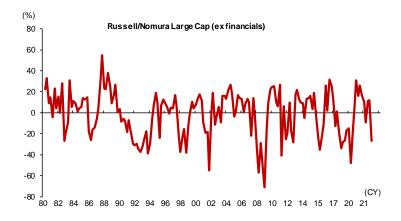
	FY23E			
[Upw ard revisions]	8 sectors			
	New Old		Revision	Change
	¥bn	¥bn	¥bn	%
Financials	8,300	7,775	525.2	6.8
Utilities	1,387	1,221	166.0	13.6
Steel, nonferrous metals	1,278	1,148	130.0	11.3
Trading companies	4,835	4,708	126.6	2.7
Food	1,800	1,677	123.0	7.3
Retailing	1,952	1,921	30.8	1.6
Construction	465	456	8.5	1.9
Services	2,005	1,998	6.7	0.3

[Dow nw ard revisions]	11 sectors			
	New	Old	Revision	Change
	¥bn	¥bn	¥bn	%
Media	266	287	-20.8	-7.2
Housing, real estate	2,803	2,827	-23.5	-0.8
Machinery	2,897	2,965	-67.8	-2.3
Softw are	1,164	1,237	-72.4	-5.9
Pharmaceuticals, healthcare	2,603	2,687	-83.6	-3.1
Household goods	741	925	-183.9	-19.9
Telecommunications	3,666	3,875	-209.0	-5.4
Chemicals	4,821	5,092	-271.2	-5.3
Transportation	3,165	3,469	-303.9	-8.8
Electrical machinery, precision equipment	7,773	8,114	-341.5	-4.2
Automobiles	9,199	10,313	-1,113.9	-10.8

Note: No change to FY22 forecasts for construction sector. Latest estimates as of 1 March 2023, previous estimates as of 1 December 2022. Source: Nomura

Fig. 5: Revision index for the Russell/Nomura Large Cap Index

								(%)
(yy/m)	21/6	21/9	21/12	22/3	22/6	22/9	22/12	23/3
Russell/Nomura Large Cap	16.2	25.7	17.1	11.5	-8.7	11.5	9.1	-24.7
Russell/Nomura Large Cap (ex financials)	16.1	26.1	16.1	10.2	-9.1	13.2	11.7	-27.1
Manufacturing	18.5	32.4	20.8	6.2	-13.1	22.1	4.1	-43.1
Basic materials	61.1	36.1	47.2	48.3	-17.2	44.8	0.0	-30.0
Processing	27.8	46.8	24.1	2.7	-10.8	10.8	2.7	-50.7
Nonmanufacturing (ex financials)	13.1	18.2	10.2	15.0	-4.2	2.5	20.8	-8.2



Note: (1) Calculated by Nomura based on revisions to recurring profit forecasts. Excludes consolidated subsidiaries. (2) Revision index = (number of upward revisions - number of downward revisions) ÷ number of constituent companies.

Russell/Nomura Large Cap Index: earnings indicators

Fig. 6: Percentage change in sales by sector (% y-y)

(%) FY22E FY22E No. of FY18 FY19 FY20 FY21 FY23E FY23E Old Old New 16.7 Russell/Nomura Large Cap (ex financials) 265 6.5 -2.5 -7.5 14.1 16.3 1.5 -0.2Manufacturing 145 3.0 -2.7 -8.0 15.2 17.4 16.7 3.2 1.8 Industrial 28.8 23.5 Basic materials 29 7.0 -2.0 -12.1 23.4 -1.5 -2.8 groups Processing 74 1.7 -4.5 13.3 17.0 15.6 5.0 3.4 Nonmanufacturing (ex financials) 120 11.5 -6.8 12.8 14.9 16.7 -0.7 Materials 29 7.0 -2.0 -12.1 28.8 23.4 23.5 -1.5 -2.8 Machinery, autos 38 2.2 -4.4 -10.4 13.9 21.2 19.1 7.4 5.9 Broad 36 Electronics 0.8 -4.8 -3.0 12.5 10.5 10.3 0.6 -1.0 sectors Consumer, distribution 84 15.5 -0.6 -4.4 15.6 12.6 14.8 -4.0 -5.4 Information 27 3.7 -7.4 -0.6 6.0 6.5 6.8 3.6 3.0 51 0.2 -12.2 Utilities, infrastructure 3.8 6.0 21.3 22.6 5.7 2.9 25 8.0 -12.4 27.8 25.3 25.8 Chemicals -1.2 -2.8 -4.5 Steel, nonferrous metals 4.7 -3.9 -11.3 31.5 18.0 17.1 2.3 2.3 23 3.0 17.8 15.1 17.3 1.5 Machinery -3.6 -5.5 1.0 Autos 15 2.0 -4.6 -11.8 12.8 23.2 19.7 9.1 7.4 36 Electrical machinery, precision equipment 0.8 -4.8 -3.0 12.5 10.5 10.3 0.6 -1.0 Pharmaceuticals, healthcare 16 3.5 9.7 -2.1 7.4 10.3 11.2 2.0 -0.1 Food products 13 2.5 0.7 -3.9 2.0 10.5 12.4 3.4 3.9 10.0 4.6 Household goods 13 3.5 -0.8 -7.49.2 8.9 2.8 45.0 20.1 Trading companies 8 -5.0 -5.8 30.3 15.9 -13.0 -13.8 Sectors Retailing 15 3.1 2.5 -3.413.7 14.6 14.8 4.5 1.1 Services 19 -2.5 -4.0 4.3 5.0 0.9 0.5 1.9 3.1 Software 13 7.5 9.2 9.5 3.8 4.0 2.8 0.4 -0.9 Media 3 6.4 0.8 -12.9 19.7 9.5 10.5 7.1 2.9 Telecommunications 11 2.7 10.7 -0.6 5.4 3.9 3.7 6.7 7.3 Construction, engineering 5 8.0 5.1 -9.8 5.8 13.3 13.6 3.5 4.0 18 4.0 Housing, real estate 5.4 2.3 -4.384 3.9 8.1 7.7 Transportation 20 -1.1 -2.2 -28.2 15.5 22.5 23.0 4.3 3.7 Utilities 6.6 43.6 9.3 0.9

Note: (1) Figures exclude listed consolidated subsidiaries. (2) Latest estimates as of 1 March 2023; previous estimates as of 1 December 2022.

Fig. 7: Percentage change in recurring profits by sector (% y-y)

(%) No. of FY18 FY19 FY20 FY21 FY22E FY22E FY23E FY23E Old Old cos New New Russell/Nomura Large Cap 4.5 34.1 287 1.1 -20.5 9.6 3.9 5.8 8.7 Russell/Nomura Large Cap (ex financials) 265 3.1 -22.3 5.6 34.5 11.7 8.2 5.1 4.3 56.9 Manufacturing 145 -27.2 7.6 10.7 4.7 3.9 3.5 -1.5 Industrial Basic materials 29 2.1 -52.0 13.7 164.2 4.7 -2.1 -11.7 -8.0 groups Processing 74 -2.6 -24.5 8.7 47.8 10.6 5.0 8.7 6.3 14.7 142 14.7 Nonmanufacturing 3.7 -14.32.0 8.4 2.9 7.9 Nonmanufacturing (ex financials) 120 9.7 -16.0 3.3 8.8 13.3 13.7 7.0 5.4 Materials 29 2.1 -52.0 13.7 164.2 4.7 -2.1 -11.7 -8.0 Machinery, autos 38 -8.9 -23.9 10.2 -7.057.8 11.0 4.5 13.7 Electronics 36 9.3 -25.3 34.8 36.0 10.0 5.5 1.3 0.7 Broad Consumer, distribution 84 56.6 2.8 -9.5 -12.012.4 12.3 -4.0 -4.3 sectors Information 27 33.1 -35.2 157.0 -60.0 33.0 11.1 10.1 24.5 Utilities, infrastructure 51 -2.5 -2.6 -68.8 137.7 7.4 19.6 30.9 17.3 Financials 22 -10.5 10.7 48.9 31.9 -9.1 -1.4 -3.3-23.3Chemicals 25 4.5 -34.2 -11.6 119.1 11.7 1.9 -8.8 -5.5 Steel, nonferrous metals 4 -7.3 SL SP 555.9 -15.9 -13.7 -22.8 -16.2 Machinery 23 -30.0 9.6 -5.0 61.7 6.9 -0.4 0.3 10.2 15 -14.6 -21.5 -7.7 56.5 18.6 13.7 11.3 3.7 Electrical machinery, precision equipment 36 9.3 -25.3 34.8 36.0 10.0 5.5 1.3 0.7 Pharmaceuticals, healthcare 16 30.4 -3.58.0 11.8 6.5 22.5 8.0 11.5 -3.7 Food products 13 -15.6 10.0 19.1 18.6 6.1 0.6 -1.8 Household goods 13 6.9 -7.5 -23.6 30.0 0.0 -11.2 26.0 6.3 Trading companies 8 10.4 -27.9 -26.8 208.6 14.0 18.5 -20.6 -21.6 Sectors Retailing 15 3.3 4.1 -17.7 20.0 19.7 20.7 2.3 1.8 Services 19 36.1 13.7 0.0 1.7 -14.3-13.6-13.514.2 Software 13 16.7 20.1 39.6 14.4 0.2 -6.8 -4.0 -2.8 Media 3 4.1 -57.5 SL SP -22.7 -36.3 13.3 27.7 11 38.5 -41.4 15.3 36.4 Telecommunications 207.6 -74.9 62.1 29.7 Construction, engineering 5 0.6 -1.1 -13.4 -22.8 11.6 11.6 2.2 4.1 Housing, real estate 18 -2.7 5.4 -10.8 24.1 9.5 8.8 4.2 4.0 Transportation 20 2.2 SP 78.4 83.9 -19.4 -17.4SL -9.7 Utilities 8 SL SL SP SP -12.8 17.7 -15.3 -61.2 Financials 10.7 22 -10.5 -9.1 -1.4 31.9 -3.3 -23.3 48.9

Note: (1) SP = switch to profits, SL = switch to losses. LS = losses shrinking. (2) Figures exclude listed consolidated subsidiaries. (3) Latest estimates as of 1 March 2023; previous estimates as of 1 December 2022.

Fig. 8: Recurring profits by sector (Unit: ¥1bn)

		No. of	FY18	FY19	FY20	FY21	FY22E	FY22E	FY23E	FY23E
		cos	40.400		10.1-0		Old	New	Old	New
	Russell/Nomura Large Cap	287	48,162	38,542	40,173	53,958	58,424	55,409	62,694	61,119
	Russell/Nomura Large Cap (ex financials)	265	41,796	32,757	34,590	46,630	51,381	49,818	54,919	52,819
Industrial	Manufacturing	145	23,510	17,180	18,613	29,038	31,309	29,669	32,921	31,112
groups	Basic materials	29	4,963	2,453	2,721	7,020	6,989	6,537	6,240	6,099
groupo	Processing	74	14,552	10,942	12,114	17,723	19,395	18,403	21,391	19,868
	Nonmanufacturing	142	24,652	21,362	21,560	24,920	27,115	25,739	29,773	30,007
	Nonmanufacturing (ex financials)	120	18,286	15,578	15,977	17,592	20,072	20,149	21,998	21,707
	Materials	29	4,963	2,453	2,721	7,020	6,989	6,537	6,240	6,099
	Machinery, autos	38	8,911	6,745	6,492	10,244	11,328	10,665	13,277	12,096
Broad	Electronics	36	5,641	4,197	5,622	7,479	8,067	7,737	8,114	7,773
sectors	Consumer, distribution	84	10,312	9,397	8,260	13,236	14,475	14,527	13,916	13,935
3601013	Information	27	5,753	3,728	9,589	3,820	4,915	4,107	5,398	5,096
	Utilities, infrastructure	51	6,216	6,236	1,906	4,831	5,607	6,244	7,973	7,820
	Financials	22	6,366	5,785	5,583	7,328	7,043	5,590	7,775	8,300
	Chemicals	25	4,036	2,758	2,425	5,218	5,559	5,069	5,092	4,821
	Steel, nonferrous metals	4	927	-305	296	1,802	1,430	1,468	1,148	1,278
	Machinery	23	2,539	1,781	1,670	2,637	2,952	2,864	2,965	2,897
	Autos	15	6,372	4,964	4,822	7,608	8,376	7,802	10,313	9,199
	Electrical machinery, precision equipment	36	5,641	4,197	5,622	7,479	8,067	7,737	8,114	7,773
	Pharmaceuticals, healthcare	16	1,540	1,632	1,810	1,983	2,487	2,336	2,687	2,603
	Food products	13	1,625	1,387	1,373	1,533	1,680	1,672	1,677	1,800
	Household goods	13	830	765	596	778	758	721	925	741
	Trading companies	8	3,148	2,271	1,663	5,203	5,933	6,164	4,708	4,835
Sectors	Retailing	15	1,497	1,612	1,310	1,651	1,812	1,827	1,921	1,952
	Services	19	1,672	1,731	1,509	2,086	1,804	1,807	1,998	2,005
	Software	13	620	813	1,172	1,381	1,292	1,202	1,237	1,164
	Media	3	364	154	-2	327	253	208	287	266
	Telecommunications	11	4,769	2,761	8,419	2,112	3,370	2,696	3,875	3,666
	Construction, engineering	5	696	734	636	501	446	446	456	465
	Housing, real estate	18	2,055	2,165	1,878	2,509	2,688	2,671	2,827	2,803
	Transportation	20	2,474	2,170	-1,573	1,446	3,722	3,836	3,469	3,165
	Utilities	8	992	1,167	965	375	-1,249	-709	1,221	1,387
	Financials	22	6,366	5,785	5,583	7,328	7,043	5,590	7,775	8,300

Note: Figures exclude listed consolidated subsidiaries. Index composition for period through FY21 differs from index composition from FY22 onwards. Accordingly, prior-year comparison base for y-y changes has altered, thereby resulting in different y-y figures than before. Latest estimates as of 1 March 2023; previous estimates as of 1 December 2022.

Fig. 9: Percentage change in quarterly sales and profits (FY21 Q4-FY22 Q3)

		%у-у															
			Sale	es		Operating profits			Recurring profits				Net profits				
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Industrial groups R R R R R R R R R R R R R R R R R R R	Russell/Nomura Large Cap	-	-	-	-	-	-	-	-	-14.5	-17.6	30.8	-12.3	-21.6	-26.1	35.0	-22.7
	Russell/Nomura Large Cap (exfinancials)	11.4	17.2	23.7	17.1	23.0	5.9	3.6	3.3	-15.8	-16.9	44.2	-12.6	-21.8	-24.2	51.9	-23.8
	Manufacturing	10.4	14.3	23.9	18.8	18.1	2.5	11.3	2.5	10.1	7.9	15.6	-8.1	3.7	4.3	5.2	-9.4
	Basic materials	26.0	35.5	32.8	21.9	57.5	50.3	4.4	-39.5	58.9	57.0	8.2	-51.2	74.7	60.4	-12.2	-63.9
	Processing	6.3	8.9	23.1	18.8	9.5	-14.6	19.8	14.3	-0.2	-7.6	23.6	1.6	-7.9	-12.4	14.8	0.9
	Nonmanufacturing	-	-	-	-	-	-	-	-	-42.3	-42.4	46.7	-16.4	-55.6	-55.6	68.1	-35.2
	Nonmanufacturing (ex financials)	12.7	21.0	23.5	14.9	36.4	13.7	-11.3	4.7	-52.3	-50.3	87.9	-18.7	-65.9	-64.0	129.0	-42.5
	Basic materials	26.0	35.5	32.8	21.9	57.5	50.3	4.4	-39.5	58.9	57.0	8.2	-51.2	74.7	60.4	-12.2	-63.9
	Machinery, autos	6.2	9.7	26.9	24.0	-7.0	-24.0	18.4	27.5	-12.5	-10.7	25.1	7.5	-24.3	-17.3	12.7	11.6
Broad	Electronics	6.4	7.7	17.4	11.2	32.6	0.6	21.4	0.1	19.8	-2.0	21.9	-6.1	18.2	-3.8	17.1	-10.9
	Consumption, distribution	15.3	19.7	21.6	12.9	11.2	2.3	-1.4	16.7	55.6	23.9	5.6	13.4	81.6	30.0	8.1	12.7
Seciois	Information	5.3	6.0	8.3	7.1	7.1	-8.0	-18.6	-6.3	SL	SL	362.9	-68.5	SL	SL	837.3	SL
	Utilities, infrastructure	7.9	24.7	29.9	22.8	144.0	68.0	-17.5	14.6	363.8	101.4	10.0	-12.0	SP	118.3	23.9	-53.1
	Financials	-	-	-	-	-	-	-	-	-2.4	-21.8	-43.9	-10.0	-20.0	-36.5	-56.1	-16.7
	Chemicals	25.2	38.5	36.5	23.6	59.6	56.8	5.0	-42.5	62.8	65.8	9.8	-58.1	100.4	68.3	-9.7	-75.2
	Steel, nonferrous metals	28.2	26.9	21.9	16.8	51.1	33.4	2.4	-32.1	46.8	33.4	2.2	-33.6	30.8	41.7	-19.3	-40.1
	Machinery	13.7	13.3	25.3	19.6	17.0	-2.5	36.5	11.6	0.5	12.5	45.9	-2.3	5.0	9.3	49.7	-9.1
	Automobiles	4.1	8.6	27.4	25.4	-15.7	-31.2	11.5	33.6	-17.1	-17.4	18.4	10.8	-32.6	-24.6	0.7	19.2
	Electrical machinery, precision equipment	6.4	7.7	17.4	11.2	32.6	0.6	21.4	0.1	19.8	-2.0	21.9	-6.1	18.2	-3.8	17.1	-10.9
	Pharmaceuticals, healthcare	10.9	5.5	10.5	16.7	-12.8	-24.2	2.8	37.1	-26.1	-15.4	5.4	40.0	-41.5	-13.7	6.6	48.5
	Food products	-0.6	12.8	17.2	12.3	-9.0	31.6	11.0	27.1	-10.2	27.3	18.1	21.0	-3.5	34.5	2.8	15.7
	Household goods	7.4	10.3	15.5	11.3	48.5	12.7	-37.6	10.9	46.6	23.2	-34.5	-3.1	118.3	31.7	-29.5	6.9
	Trading companies	26.0	32.4	32.4	12.7	31.7	43.9	42.8	7.7	267.2	58.4	18.8	10.7	286.1	61.1	19.1	13.3
Sectors	Retailing	18.7	18.0	22.0	14.1	23.0	12.1	16.9	11.9	20.8	29.2	31.5	5.6	47.8	42.4	20.6	-4.4
	Services	8.0	4.3	4.1	9.7	17.2	-17.4	-28.6	2.5	19.7	-12.3	-27.2	3.2	284.7	-2.6	-0.9	-8.9
	Software	3.9	1.2	11.4	2.2	16.2	-12.1	3.3	-13.9	22.6	14.2	18.3	-29.2	10.7	8.4	22.7	-29.5
	Media	21.0	15.2	9.4	13.7	27.1	-33.7	-70.6	-7.8	47.8	-13.1	-70.2	-32.5	154.1	-21.4	-59.8	-23.8
	Telecommunications	4.3	6.3	7.6	7.8	-1.3	-4.0	-15.4	-2.2	SL	SL	608.9	-88.4	SL	SL	2,469.6	SL
	Construction, engineering	8.1	7.5	18.8	14.1	-25.5	-27.3	48.8	-12.6	-20.1	-9.5	47.1	-13.3	-22.0	-7.9	34.3	-18.0
	Housing, real estate	10.9	12.1	8.4	5.1	24.8	19.6	-3.2	-3.0	34.2	26.0	-0.1	-6.6	30.9	25.0	7.6	-5.4
	Transportation	14.8	30.2	33.3	18.7	LS	SP	SP	58.2	SP	909.5	228.1	-4.6	SP	528.3	203.6	-15.8
	Utilities	0.4	43.6	57.5	52.6	SL	SL	SL	LI	LS	SL	SL	LI	LS	SL	SL	LI
	Financials	-	-	-	-	-	-	-	-	-2.4	-21.8	-43.9	-10.0	-20.0	-36.5	-56.1	-16.7

Note: (1) Q1 = Feb-Apr, Mar-May, or Apr-Jun; Q2 = May-Jul, Jun-Aug, or Jul-Sep; Q3 = Aug-Oct, Sep-Nov, or Oct-Dec; Q4 = Nov-Jan, Dec-Feb, or Jan-Mar. (2) Figures are for companies that had announced results (either full-year, Q1, Q2, or Q3) by 1 March 2023. (3) Excludes listed consolidated subsidiaries. (4) SP = switch to profits; SL = switch to losses; LS = losses shrinking; LI = losses increasing.

Fig. 10: Valuation indicators

		P/E			P/CF			P/I	В	Dividend yield			ROE		
		FY22E	FY23E	FY24E	FY22E I	FY23E I	FY24E	FY21	FY22E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
		х	Х	х	Х	х	Х	Х	Х	%	%	%	%	%	%
Industrial groups	Russell/Nomura Large Cap	14.8	13.6	13.1	-	-	-	1.39	1.33	2.66	2.63	2.74	9.2	9.4	9.5
	Russell/Nomura Large Cap (ex loss-making cos)	13.5	13.2	12.7	-	-	-	1.43	1.35	2.70	2.71	2.82	10.2	9.5	9.5
	Russell/Nomura Large Cap (ex financials)	15.0	14.3	13.7	8.5	8.1	7.9	1.52	1.44	2.56	2.49	2.56	9.9	9.8	9.7
	Manufacturing	15.6	14.7	14.1	9.0	8.7	8.4	1.58	1.50	2.61	2.54	2.61	9.9	9.9	10.0
	Basic materials	9.3	10.1	9.3	5.0	5.1	4.8	1.03	0.95	3.42	3.47	3.59	10.7	9.1	9.4
	Processing	16.0	14.3	14.0	9.4	8.7	8.5	1.56	1.48	2.58	2.40	2.52	9.5	10.0	9.9
	Nonmanufacturing	14.0	12.5	12.0	-	-	-	1.20	1.16	2.71	2.75	2.89	8.5	9.0	9.0
	Nonmanufacturing (ex financials)	14.2	13.6	13.0	7.7	7.4	7.2	1.43	1.36	2.47	2.41	2.49	9.8	9.6	9.4
Broad sectors	Basic materials	9.3	10.1	9.3	5.0	5.1	4.8	1.03	0.95	3.42	3.47	3.59	10.7	9.1	9.4
	Machinery, autos	13.9	11.8	11.0	8.3	7.4	7.0	1.24	1.17	2.95	3.13	3.51	8.6	9.6	9.7
	Electronics	18.7	18.0	19.0	10.8	10.4	10.8	2.09	1.99	2.22	1.68	1.52	10.9	10.7	10.2
	Consumption, distribution	15.4	17.0	16.6	9.9	10.5	10.3	1.85	1.73	2.25	2.27	2.27	11.7	9.8	9.8
	Information	31.1	19.5	17.4	10.6	8.6	8.2	1.87	1.88	2.27	2.36	2.46	6.0	9.3	9.9
	Utilities, infrastructure	10.1	9.3	9.0	5.3	5.1	4.9	0.99	0.93	3.19	2.92	3.06	9.5	9.7	9.4
	Financials	13.1	9.7	9.5	-	-	-	0.77	0.78	3.55	3.94	4.30	5.9	7.8	8.1
	Chemicals	10.4	10.7	9.9	5.5	5.5	5.1	1.12	1.04	3.14	3.29	3.39	10.4	9.4	9.7
	Steel, nonferrous metals	6.3	8.1	7.7	3.5	4.0	3.9	0.79	0.69	4.67	4.26	4.42	11.7	8.4	8.3
	Machinery	19.2	18.6	16.9	11.7	11.4	10.6	1.83	1.72	3.09	2.93	3.39	9.2	8.9	9.2
	Automobiles	11.9	9.7	9.1	7.1	6.1	5.8	1.03	0.98	2.86	3.26	3.59	8.5	9.8	9.9
	Electrical machinery, precision equipment	18.7	18.0	19.0	10.8	10.4	10.8	2.09	1.99	2.22	1.68	1.52	10.9	10.7	10.2
	Pharmaceuticals, healthcare	20.4	21.6	18.9	12.6	13.5	12.5	2.20	2.22	2.12	2.20	2.28	11.2	10.1	10.9
	Food products	18.1	16.6	15.5	10.7	10.3	9.8	1.87	1.75	3.12	3.44	3.64	10.3	10.4	10.8
	Household goods	30.6	28.7	43.1	17.7	16.9	27.4	3.23	2.95	1.70	1.62	0.86	10.0	9.9	11.6
	Trading companies	6.5	8.3	8.5	4.7	5.5	5.6	1.20	1.04	3.68	3.76	3.78	17.3	12.1	10.9
Sectors	Retailing	24.2	23.4	21.6	12.0	11.4	10.7	2.63	2.54	1.29	1.37	1.44	11.1	9.8	10.0
	Services	24.7	25.3	24.1	15.5	15.4	14.9	1.54	1.52	1.52	1.24	1.26	6.3	6.0	6.1
	Software	21.6	22.0	21.3	18.2	18.3	17.7	3.68	3.60	2.34	2.22	2.29	17.0	15.4	14.7
	Media	21.6	18.6	17.7	12.3	11.2	10.9	1.66	1.60	2.44	2.48	2.55	7.5	8.4	8.4
	Telecommunications	40.7	18.6	16.1	8.8	6.8	6.5	1.51	1.55	2.22	2.42	2.53	3.8	8.1	9.0
	Construction	10.6	10.3	9.6	8.5	8.3	7.9	0.89	0.84	3.55	3.73	4.04	8.1	8.0	8.2
	Housing, real estate	10.2	9.8	9.3	7.2	6.9	6.6	1.10	1.00	3.19	3.46	3.67	10.1	10.0	9.9
	Transportation	6.6	10.1	9.8	4.2	5.4	5.2	1.24	1.08	3.37	2.47	2.50	17.5	10.3	9.9
	Utilities	-	6.1	6.2	5.4	2.2	2.2	0.52	0.56	2.32	2.63	2.87	-5.3	8.6	7.8
	Financials	13.1	9.7	9.5	-	-	-	0.77	0.78	3.55	3.94	4.30	5.9	7.8	8.1
Russell/Nomura Small Cap		14.2	13.3	12.8	-	-	-	1.00	0.97	2.43	2.45	2.48	7.0	7.3	7.2
Russell/Nomura Small Cap (ex financials)		15.0	13.9	13.4	7.8	7.5	7.4	1.11	1.08	2.37	2.38	2.40		7.7	7.7

Note: As of 1 March 2023.

What are the Russell/Nomura Japan Equity Indexes?

The Russell/Nomura Japan Equity Indexes are Japanese equity indexes developed jointly by FTSE Russell Indexes and the Global Research Division, Financial Engineering & Technology Research Center, Nomura Securities Co., Ltd.

Russell/Nomura Japan Equity Indexes should be useful in:

- Determining investment strategies (strategic asset allocation)
- Determining manager structures
- Devising asset management benchmarks
- Supporting portfolio management activities
- Evaluating the performance of various investment styles
- Managing risk

Russell/Nomura Japan Equity Indexes have the following characteristics:

- They are share price indexes that are weighted by free-float-adjusted market capitalization and cover the top 98% of all listed stocks in terms of float-adjusted market capitalization, thereby offering broad market coverage
- Stocks are chosen from the whole Japanese stock market
- Because the indexes take into consideration the stable shareholding ratio, they reflect the stocks that are actually
 available for investment
- · There are style indexes for large and small companies and for value and growth stocks
- The Prime Index consists of the top 1,000 stocks in the Total Market Index by market cap excluding stable shareholdings
- Stocks are selected quantitatively based on clearly defined criteria
- The composition of each index is reviewed once a year.

Complete details of rules for the Russell/Nomura Japan Equity Index can be found in the Russell/Nomura Japan Equity Index Rulebook.

The intellectual property right and any other rights, in Russell/Nomura Japan Equity Index belong to Nomura Securities Co., Ltd. ("Nomura") and Frank Russell Company ("Russell"). Nomura and Russell do not guarantee accuracy, completeness, reliability, usefulness, marketability, merchantability or fitness of the Index, and do not account for business activities or services that any index user and/or its affiliates undertakes with the use of the Index.

Analyst Certification

I, Japan Equity Research, hereby certify (1) that the views expressed in this Research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of my compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

Important Disclosures

The lists of issuers that are affiliates or subsidiaries of Nomura Holdings Inc., the parent company of Nomura Securities Co., Ltd., issuers that have officers who concurrently serve as officers of Nomura Securities Co., Ltd., issuers in which the Nomura Group holds 1% or more of any class of common equity securities and issuers for which Nomura Securities Co., Ltd. has lead managed a public offering of equity or equity linked securities in the past 12 months are available at https://www.nomuraholdings.com/report/. Please contact the Research Production Operation Dept. of Nomura Securities Co., Ltd. for additional information.

Online availability of research and conflict-of-interest disclosures

Nomura Group research is available on www.nomuranow.com/research, Bloomberg, Capital IQ, Factset, Reuters and ThomsonOne. Important disclosures may be read at http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx or requested from Nomura Securities International, Inc. If you have any difficulties with the website, please email grpsupport@nomura.com for help.

The analysts responsible for preparing this report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by Investment Banking activities. Unless otherwise noted, the non-US analysts listed at the front of this report are not registered/qualified as research analysts under FINRA rules, may not be associated persons of NSI, and may not be subject to FINRA Rule 2241 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Nomura Global Financial Products Inc. (NGFP) Nomura Derivative Products Inc. (NDP) and Nomura International plc. (NIplc) are registered with the Commodities Futures Trading Commission and the National Futures Association (NFA) as swap dealers. NGFP, NDPI, and NIplc are generally engaged in the trading of swaps and other derivative products, any of which may be the subject of this report.

Distribution of ratings (Nomura Group)

The distribution of all ratings published by Nomura Group Global Equity Research is as follows:

54% have been assigned a Buy rating which, for purposes of mandatory disclosures, are classified as a Buy rating; 40% of companies with this rating are investment banking clients of the Nomura Group*. 0% of companies (which are admitted to trading on a regulated market in the EEA) with this rating were supplied material services** by the Nomura Group.

42% have been assigned a Neutral rating which, for purposes of mandatory disclosures, is classified as a Hold rating; 61% of companies with this rating are investment banking clients of the Nomura Group*. 0% of companies (which are admitted to trading on a regulated market in the EEA) with this rating were supplied material services by the Nomura Group

4% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; 4% of companies with this rating are investment banking clients of the Nomura Group*. 0% of companies (which are admitted to trading on a regulated market in the EEA) with this rating were supplied material services by the Nomura Group.

As at 31 December 2022.

*The Nomura Group as defined in the Disclaimer section at the end of this report.

Definition of Nomura Group's equity research rating system and sectors

The rating system is a relative system, indicating expected performance against a specific benchmark identified for each individual stock, subject to limited management discretion. An analyst's target price is an assessment of the current intrinsic fair value of the stock based on an appropriate valuation methodology determined by the analyst. Valuation methodologies include, but are not limited to, discounted cash flow analysis, expected return on equity and multiple analysis. Analysts may also indicate expected absolute upside/downside relative to the stated target price, defined as (target price - current price)/current price.

STOCKS

A rating of 'Buy', indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of 'Reduce', indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of 'Reduce', indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of 'Suspended', indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies. Securities and/or companies that are labelled as 'Not rated' or shown as 'No rating' are not in regular research coverage. Investors should not expect continuing or additional information from Nomura relating to such securities and/or companies. Benchmarks are as follows: United States/Europe/Asia ex-Japan: please see valuation methodologies for explanations of relevant benchmarks for stocks, which can be accessed at: http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx; Global Emerging Markets (ex-Asia): MSCI Emerging Markets ex-Asia, unless otherwise stated in the valuation methodology; Japan: Russell/Nomura Large Cap.

SECTORS

A 'Bullish' stance, indicates that the analyst expects the sector to outperform the Benchmark during the next 12 months. A 'Neutral' stance, indicates that the analyst expects the sector to perform in line with the Benchmark during the next 12 months. A 'Bearish' stance, indicates that the analyst expects the sector to underperform the Benchmark during the next 12 months. Sectors that are labelled as 'Not rated' or shown as 'N/A' are not assigned ratings. Benchmarks are as follows: United States: S&P 500; Europe: Dow Jones STOXX 600; Global Emerging Markets (ex-Asia): MSCI Emerging Markets ex-Asia. Japan/Asia ex-Japan: Sector ratings are not assigned.

Target Price

A Target Price, if discussed, indicates the analyst's forecast for the share price with a 12-month time horizon, reflecting in part the analyst's estimates for the company's earnings. The achievement of any target price may be impeded by general market and macroeconomic trends, and by other risks related to the company or the market, and may not occur if the company's earnings differ from estimates.

^{**} As defined by the EU Market Abuse Regulation

Disclaimers

This publication contains material that has been prepared by the Nomura Group entity identified on page 1 and, if applicable, with the contributions of one or more Nomura Group entities whose employees and their respective affiliations are specified on page 1 or identified elsewhere in this publication. The term "Nomura Group" used herein refers to Nomura Holdings, Inc. and its affiliates and subsidiaries including: (a) Nomura Securities Co., Ltd. ('NSC') Tokyo, Japan, (b) Nomura Financial Products Europe GmbH ('NFPE'), Germany, (c) Nomura International plc ('NIplc'), UK, (d) Nomura Securities International, Inc. ('NSI'), New York, US, (e) Nomura International (Hong Kong) Ltd. ('NIHK'), Hong Kong, (f) Nomura Financial Investment (Korea) Co., Ltd. ('NFIK'), Korea (Information on Nomura analysts registered with the Korea Financial Investment Association ('KOFIA') can be found on the KOFIA Intranet at http://dis.kofia.or.kr, (g) Nomura Singapore Ltd. ('NSL'), Singapore (Registration number 197201440E, regulated by the Monetary Authority of Singapore) (h) Nomura Australia Ltd. ('NAL'), Australia (ABN 48 003 032 513), regulated by the Australian Securities and Investment Commission ('ASIC') and holder of an Australian financial services licence number 246412, (i) Nomura Securities Malaysia Sdn. Bhd. ('NSM'), Malaysia, (j) NIHK, Taipei Branch ('NITB'), Taiwan, (k) Nomura Financial Advisory and Securities (India) Private Limited ('NFASL'), Mumbai, India (Registered Address: Ceejay House, Level 11, Plot F, Shivsagar Estate, Dr. Annie Besant Road, Worli, Mumbaì- 400 018, India; Tel: 91 22 4037 4037, Fax: 91 22 4037 4111; CIN No: U74140MH2007PTC169116, SEBI Registration No. for Stock Broking activities: INZ000255633; SEBI Registration No. for Merchant Banking: INM000011419; SEBI Registration No. for Research: INH000001014, (I) Nomura Fiduciary Research & Consulting Co., Ltd. ('NFRC') Tokyo, Japan, 'CNS Thailand' next to an analyst's name on the front page of a research report indicates that the analyst is employed by Capital Nomura Securities Public Company Limited ('CNS') to provide research assistance services to NSL under an agreement between CNS and NSL. 'NSFSPL' next to an employee's name on the front page of a research report indicates that the individual is employed by Nomura Structured Finance Services Private Limited to provide assistance to certain Nomura entities under inter-company agreements. 'Verdhana' next to an individual's name on the front page of a research report indicates that the individual is employed by PT Verdhana Sekuritas Indonesia ('Verdhana') to provide research assistance to NIHK under a research partnership agreement and neither Verdhana nor such individual is licensed outside of Indonesia. For the avoidance of doubt and for the purpose of disclosure, Nomura Orient International Securities Co., Ltd ("NOI"), a joint venture amongst Nomura Group, Orient International (Holding) Co., Ltd and Shanghai Huangpu Investment Holding (Group) Co., Ltd is excluded from the definition of Nomura Group. An individual name printed next to NOI on the front page of a research report indicates that individual is employed by NOI to provide research assistance to NIHK under a research partnership agreement and neither NOI or such individual is licensed outside of Mainland China, PRC.

THIS MATERIAL IS: (I) FOR YOUR PRIVATE INFORMATION, AND WE ARE NOT SOLICITING ANY ACTION BASED UPON IT; (II) NOT TO BE CONSTRUED AS AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SECURITIES IN ANY JURISDICTION WHERE SUCH OFFER OR SOLICITATION WOULD BE ILLEGAL; AND (III) OTHER THAN DISCLOSURES RELATING TO THE NOMURA GROUP, BASED UPON INFORMATION FROM SOURCES THAT WE CONSIDER RELIABLE, BUT HAS NOT BEEN INDEPENDENTLY VERIFIED BY NOMURA GROUP.

Other than disclosures relating to the Nomura Group, the Nomura Group does not warrant, represent or undertake, express or implied, that the document is fair, accurate, complete, correct, reliable or fit for any particular purpose or merchantable, and to the maximum extent permissible by law and/or regulation, does not accept liability (in negligence or otherwise, and in whole or in part) for any act (or decision not to act) resulting from use of this document and related data. To the maximum extent permissible by law and/or regulation, all warranties and other assurances by the Nomura Group are hereby excluded and the Nomura Group shall have no liability (in negligence or otherwise, and in whole or in part) for any loss howsoever arising from the use, misuse, or distribution of this material or the information contained in this material or otherwise arising in connection therewith.

Opinions or estimates expressed are current opinions as of the original publication date appearing on this material and the information, including the opinions and estimates contained herein, are subject to change without notice. The Nomura Group, however, expressly disclaims any obligation, and therefore is under no duty, to update or revise this document. Any comments or statements made herein are those of the author(s) and may differ from views held by other parties within Nomura Group. Clients should consider whether any advice or recommendation in this report is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The Nomura Group does not provide tax advice.

The Nomura Group, and/or its officers, directors, employees and affiliates, may, to the extent permitted by applicable law and/or regulation, deal as principal, agent, or otherwise, or have long or short positions in, or buy or sell, the securities, commodities or instruments, or options or other derivative instruments based thereon, of issuers or securities mentioned herein. The Nomura Group companies may also act as market maker or liquidity provider (within the meaning of applicable regulations in the UK) in the financial instruments of the issuer. Where the activity of market maker is carried out in accordance with the definition given to it by specific laws and regulations of the US or other jurisdictions, this will be separately disclosed within the specific issuer disclosures.

This document may contain information obtained from third parties, including, but not limited to, ratings from credit ratings agencies such as Standard & Poor's. The Nomura Group hereby expressly disclaims all representations, warranties or undertakings of originality, fairness, accuracy, completeness, correctness, merchantability or fitness for a particular purpose with respect to any of the information obtained from third parties contained in this material or otherwise arising in connection therewith, and shall not be liable (in negligence or otherwise, and in whole or in part) for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use or misuse of any of the information obtained from third parties contained in this material or otherwise arising in connection therewith. Reproduction and distribution of third-party content in any form is prohibited except with the prior written permission of the related third-party. Third-party content providers do not, express or implied, guarantee the fairness, accuracy, completeness, correctness, timeliness or availability of any information, including ratings, and are not in any way responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use or misuse of such content. Third-party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third-party content providers shall not be liable (in negligence or otherwise, and in whole or in part) for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use or misuse of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice. Any MSCI sourced information in this document is the exclusive property of MSCI Inc. ('MSCI'). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be duplicated, reproduced, re-disseminated, redistributed or used, in whole or in part, for any purpose whatsoever, including creating any financial products and any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all representations, warranties or undertakings of originality, fairness, accuracy, completeness, correctness, merchantability or fitness for a particular purpose with respect to any of this material or the information contained in this material or otherwise arising in connection therewith. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability (in negligence or otherwise, and in whole or in part) for any damages of any kind. MSCI and the MSCI indexes are services marks of MSCI and its affiliates.

The intellectual property rights and any other rights, in Russell/Nomura Japan Equity Index belong to Nomura Fiduciary Research & Consulting Co., Ltd. ("NFRC") and Frank Russell Company ("Russell"). NFRC and Russell do not guarantee fairness, accuracy, completeness, correctness, reliability, usefulness, marketability, merchantability or fitness of the Index, and do not account for business activities or services that any index user and/or its affiliates undertakes with the use of the Index.

Investors should consider this document as only a single factor in making their investment decision and, as such, the report should not be viewed as identifying or suggesting all risks, direct or indirect, that may be associated with any investment decision. Nomura Group produces a number of different types of research product including, among others, fundamental analysis and quantitative analysis; recommendations contained in one type of research product may differ from recommendations contained in other types of research product, whether as a result of differing time horizons, methodologies or otherwise. The Nomura Group publishes research product in a number of different ways including the posting of product on the Nomura Group portals and/or distribution directly to clients. Different groups of clients may receive different products and services from the research department depending on their individual requirements.

Figures presented herein may refer to past performance or simulations based on past performance which are not reliable indicators of future or likely performance. Where the information contains an expectation, projection or indication of future performance and business prospects, such forecasts may not be a reliable indicator of future or likely performance. Moreover, simulations are based on models and simplifying assumptions which may oversimplify and not reflect the future distribution of returns. Any figure, strategy or index created and published for illustrative purposes within this document is not intended for "use" as a "benchmark" as defined by the European Benchmark Regulation. Certain securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of, or income derived from, the investment.

With respect to Fixed Income Research: Recommendations fall into two categories: tactical, which typically last up to three months; or strategic, which typically last from 6-12 months. However, trade recommendations may be reviewed at any time as circumstances change. 'Stop loss' levels for trades are also provided; which, if hit, closes the trade recommendation automatically. Prices and yields shown in recommendations are taken at the time of submission for publication and are based on either indicative Bloomberg, Reuters or Nomura prices and yields at that time. The prices and yields shown are not necessarily those at which the trade recommendation can be implemented.

The securities described herein may not have been registered under the US Securities Act of 1933 (the '1933 Act'), and, in such case, may not be offered or sold in the US or to US persons unless they have been registered under the 1933 Act, or except in compliance with an exemption from the registration requirements of the 1933 Act. Unless governing law permits otherwise, any transaction should be executed via a Nomura entity in your home jurisdiction.

This document has been approved for distribution in the UK as investment research by NIplc. NIplc is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. NIplc is a member of the London Stock Exchange. This document does not constitute a personal recommendation within the meaning of applicable regulations in the UK, or take into account the particular investment objectives, financial situations, or needs of individual investors. This document is intended only for investors who are 'eligible counterparties' or 'professional clients' for the purposes of applicable regulations in the UK, and may not, therefore, be redistributed to persons who are 'retail clients' for such purposes.

This document has been approved for distribution in the European Economic Area as investment research by Nomura Financial Products Europe GmbH ("NFPE"). NFPE is a company organized as a limited liability company under German law registered in the Commercial Register of the Court of Frankfurt/Main under HRB 110223. NFPE is authorized and regulated by the German Federal Financial Supervisory Authority (BaFin).

This document has been approved by NIHK, which is regulated by the Hong Kong Securities and Futures Commission, for distribution in Hong Kong by NIHK. This document is intended only for investors who are 'professional investors' for the purposes of applicable regulations in Hong Kong and may not, therefore, be redistributed to persons who are not 'professional investors' for such purposes.

This document has been approved for distribution in Australia by NAL, which is authorized and regulated in Australia by the ASIC. This document has also been approved for distribution in Malaysia by NSM.

In Singapore, this document has been distributed by NSL, an exempt financial adviser as defined under the Financial Advisers Act (Chapter 110), among other things, and regulated by the Monetary Authority of Singapore. NSL may distribute this document produced by its foreign affiliates pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the recipient of this document is not an accredited, expert or institutional investor as defined by the Securities and Futures Act (Chapter 289), NSL accepts legal responsibility for the contents of this document in respect of such recipient only to the extent required by law. Recipients of this document in Singapore should contact NSL in respect of matters arising from, or in connection with, this document. THIS DOCUMENT IS INTENDED FOR GENERAL CIRCULATION. IT DOES NOT TAKE INTO ACCOUNT THE SPECIFIC INVESTMENT OBJECTIVES, FINANCIAL SITUATION OR PARTICULAR PERSON. RECIPIENTS SHOULD TAKE INTO ACCOUNT THEIR SPECIFIC INVESTMENT OBJECTIVES, FINANCIAL SITUATION OR PARTICULAR NEEDS BEFORE MAKING A COMMITMENT TO PURCHASE ANY SECURITIES, INCLUDING SEEKING ADVICE FROM AN INDEPENDENT FINANCIAL ADVISER REGARDING THE SUITABILITY OF THE INVESTMENT, UNDER A SEPARATE ENGAGEMENT, AS THE RECIPIENT DEEMS FIT.

Unless prohibited by the provisions of Regulation S of the 1933 Act, this material is distributed in the US, by NSI, a US-registered broker-dealer, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6, under the US Securities Exchange Act of 1934. The entity that prepared this document permits its separately operated affiliates within the Nomura Group to make copies of such documents available to their clients.

This document has not been approved for distribution to persons other than 'Authorised Persons', 'Exempt Persons' or 'Institutions' (as defined by the Capital Markets Authority) in the Kingdom of Saudi Arabia ('Saudi Arabia') or a 'Market Counterparty' or a 'Professional Client' (as defined by the Dubai Financial Services Authority) in the United Arab Emirates ('UAE') or a 'Market Counterparty' or a 'Business Customer' (as defined by the Qatar Financial Centre Regulatory Authority) in the State of Qatar ('Qatar') by Nomura Saudi Arabia, NIplc or any other member of the Nomura Group, as the case may be. Neither this document nor any copy thereof may be taken or transmitted or distributed, directly or indirectly, by any person other than those authorised to do so into Saudi Arabia or in the UAE or in Qatar or to any person other than 'Authorised Persons', 'Exempt Persons' or 'Institutions' located in Saudi Arabia or a 'Market Counterparty' or a 'Professional Client' in the UAE or a 'Market Counterparty' or a 'Business Customer' in Qatar. Any failure to comply with these restrictions may constitute a violation of the laws of the UAE or Saudi Arabia or Qatar.

For report with reference of TAIWAN public companies or authored by Taiwan based research analyst:

THIS DOCUMENT IS SOLELY FOR REFERENCE ONLY. You should independently evaluate the investment risks and are solely responsible for your investment decisions. NO PORTION OF THE REPORT MAY BE REPRODUCED OR QUOTED BY THE PRESS OR ANY OTHER PERSON WITHOUT WRITTEN AUTHORIZATION FROM NOMURA GROUP. Pursuant to Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers and/or other applicable laws or regulations in Taiwan, you are prohibited to provide the reports to others (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities in connection with the reports which may involve conflicts of interests. INFORMATION ON SECURITIES / INSTRUMENTS NOT EXECUTABLE BY NOMURA INTERNATIONAL (HONG KONG) LTD., TAIPEI BRANCH IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT BE CONSTRUED AS A RECOMMENDATION OR A SOLICITATION TO TRADE IN SUCH SECURITIES / INSTRUMENTS.

This material may not be distributed in Indonesia or passed on within the territory of the Republic of Indonesia or to persons who are Indonesian citizens (wherever they are domiciled or located) or entities of or residents in Indonesia in a manner which constitutes a public offering under the

laws of the Republic of Indonesia. The securities mentioned in this document may not be offered or sold in Indonesia or to persons who are citizens of Indonesia (wherever they are domiciled or located) or entities of or residents in Indonesia in a manner which constitutes a public offering under the laws of the Republic of Indonesia.

This document is prepared by Nomura Group or its subsidiary or affiliate (collectively, "Offshore Issuers") that is not licensed in the People's Republic of China ("PRC", excluding Hong Kong, Macau and Taiwan, for the purpose of this document) to provide securities research and this research report is not approved or intended to be circulated in the PRC. The A-share related analysis (if any) is not produced for any persons located or incorporated in the PRC. The recipients should not rely on any information contained in the research report in making investment decisions and Offshore Issuers take no responsibility in this regard.

NO PART OF THIS MATERIAL MAY BE (I) COPIED, PHOTOCOPIED, REPRODUCED OR DUPLICATED IN ANY FORM, BY ANY MEANS; OR (II) REDISSEMINATED, REPUBLISHED OR REDISTRIBUTED WITHOUT THE PRIOR WRITTEN CONSENT OF A MEMBER OF THE NOMURA GROUP. If this document has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability (in negligence or otherwise, and in whole or in part) for any errors or omissions in the contents of this document, which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version.

Disclaimers required in Japan

Credit ratings in the text that are marked with an asterisk (*) are issued by a rating agency not registered under Japan's Financial Instruments and Exchange Act ("Unregistered Ratings"). For details on Unregistered Ratings, please contact the Research Production Operation Dept. of Nomura Securities Co., Ltd.

Investors in the financial products offered by Nomura Securities may incur fees and commissions specific to those products (for example, transactions involving Japanese equities are subject to a sales commission (all figures on a tax-inclusive basis) of up to 1.43% of the transaction amount or a commission of ¥2,860 for transactions of ¥200,000 or less, while transactions involving investment trusts are subject to various fees, such as commissions at the time of purchase and asset management fees, such as commissions at the time of purchase and asset management fees (trust fees), specific to each investment trust).

In addition, all products carry the risk of losses owing to price fluctuations or other factors. Fees and risks vary by product. Please thoroughly read the written materials provided, such as documents delivered before making a contract, listed securities documents, or prospectuses. Transactions involving Japanese equities (including Japanese REITs, Japanese ETFs, and Japanese ETNs, Japanese Infrastructure Funds) are subject to a sales commission of up to 1.43% (tax included) of the transaction amount (or a commission of ¥2,860 (tax included) for transactions of ¥200,000 or less). When Japanese equities are purchased via OTC transactions (including offerings), only the purchase price shall be paid, with no sales commission charged. However, Nomura Securities may charge a separate fee for OTC transactions, as agreed with the customer. Japanese equities carry the risk of losses owing to price fluctuations. Japanese REITs carry the risk of losses owing to fluctuations in price and/or earnings of underlying real estate. Japanese ETFs and ETNs carry the risk of losses owing to fluctuations in the underlying indexes or other benchmarks. Japanese Infrastructure Funds carry out the risk of losses owing to fluctuations in price and/or earnings of underlying infrastructures.

Transactions involving foreign equities are subject to a domestic sales commission of up to 1.045% (tax included) of the transaction amount (which equals the local transaction amount plus local fees and taxes in the case of a purchase or the local transaction amount minus local fees and taxes in the case of a sale) (for transaction amounts of ¥750,000 and below, maximum domestic sales commission is ¥7,810 (tax included)). Local fees and taxes in foreign financial instruments markets vary by country/territory. When foreign equities are purchased via OTC transactions (including offerings), only the purchase price shall be paid, with no sales commission charged. However, Nomura Securities may charge a separate fee for OTC transactions, as agreed with the customer. Foreign equities carry the risk of losses owing to factors such as price fluctuations and foreign exchange rate fluctuations.

Margin transactions are subject to a sales commission of up to 1.43% (tax included) of the transaction amount (or a commission of ¥2,860 (tax included) for transactions of ¥200,000 or less), as well as management fees and rights handling fees. In addition, long margin transactions are subject to interest on the purchase amount, while short margin transactions are subject to fees for the lending of the shares borrowed. A margin equal to at least 30% of the transaction amount (at least 33% for online transactions) and at least ¥300,000 is required. With margin transactions, an amount up to roughly 3.3x the margin (roughly 3x for online transactions) may be traded. Margin transactions therefore carry the risk of losses in excess of the margin owing to share price fluctuations. For details, please thoroughly read the written materials provided, such as listed securities documents or documents delivered before making a contract.

Transactions involving convertible bonds are subject to a sales commission of up to 1.10% (tax included) of the transaction amount (or a commission of ¥4,400 (tax included) if this would be less than ¥4,400). When convertible bonds are purchased via OTC transactions (including offerings), only the purchase price shall be paid, with no sales commission charged. However, Nomura Securities may charge a separate fee for OTC transactions, as agreed with the customer. Convertible bonds carry the risk of losses owing to factors such as interest rate fluctuations and price fluctuations in the underlying stock. In addition, convertible bonds denominated in foreign currencies also carry the risk of losses owing to factors such as foreign exchange rate fluctuations.

When bonds are purchased via public offerings, secondary distributions, or other OTC transactions with Nomura Securities, only the purchase price shall be paid, with no sales commission charged. Bonds carry the risk of losses, as prices fluctuate in line with changes in market interest rates. Bond prices may also fall below the invested principal as a result of such factors as changes in the management and financial circumstances of the issuer, or changes in third-party valuations of the bond in question. In addition, foreign currency-denominated bonds also carry the risk of losses owing to factors such as foreign exchange rate fluctuations.

When Japanese government bonds (JGBs) for individual investors are purchased via public offerings, only the purchase price shall be paid, with no sales commission charged. As a rule, JGBs for individual investors may not be sold in the first 12 months after issuance. When JGBs for individual investors are sold before maturity, an amount calculated via the following formula will be subtracted from the par value of the bond plus accrued interest: (1) for 10-year variable rate bonds, an amount equal to the two preceding coupon payments (before tax) x 0.79685 will be used, (2) for 5-year and 3-year fixed rate bonds, an amount equal to the two preceding coupon payments (before tax) x 0.79685 will be used. When inflation-indexed JGBs are purchased via public offerings, secondary distributions (uridashi deals), or other OTC transactions with Nomura Securities, only the purchase price shall be paid, with no sales commission charged. Inflation-indexed JGBs carry the risk of losses, as prices fluctuate in line with changes in market interest rates and fluctuations in the nationwide consumer price index. The notional principal of inflation-indexed JGBs changes in line with the rate of change in nationwide CPI inflation from the time of its issuance. The amount of the coupon payment is calculated by multiplying the coupon rate by the notional principal at the time of payment. The maturity value is the amount of the notional principal when the issue becomes due. For JI17 and subsequent issues, the maturity value shall not undercut the face amount. Purchases of investment trusts (and sales of some investment trusts) are subject to a purchase or sales fee of up to 5.5% (tax included) of the transaction amount. Also, a direct cost that may be incurred when selling investment trusts is a fee of up to 2.0% of the unit price at the time of redemption. Indirect costs that may be incurred during the course of holding investment trusts include, for domestic investment trusts, an asset management fee (trust fee) of up to 5.5% (tax included/annualized basis) of the net assets in trust, as well as fees based on investment performance. Other indirect costs may also be incurred. For foreign investment trusts, indirect fees may be incurred during the course of holding such as investment company compensation.

Investment trusts invest mainly in securities such as Japanese and foreign equities and bonds, whose prices fluctuate. Investment trust unit prices fluctuate owing to price fluctuations in the underlying assets and to foreign exchange rate fluctuations. As such, investment trusts carry the risk of losses. Fees and risks vary by investment trust. Maximum applicable fees are subject to change; please thoroughly read the written materials provided, such as prospectuses or documents delivered before making a contract.

In interest rate swap transactions and USD/JPY basis swap transactions ("interest rate swap transactions, etc."), only the agreed transaction payments shall be made on the settlement dates. Some interest rate swap transactions, etc. may require pledging of margin collateral. In some of these cases, transaction payments may exceed the amount of collateral. There shall be no advance notification of required collateral value or collateral ratios as they vary depending on the transaction. Interest rate swap transactions, etc. carry the risk of losses owing to fluctuations in market prices in the interest rate, currency and other markets, as well as reference indices. Losses incurred as such may exceed the value of margin collateral, in which case margin calls may be triggered. In the event that both parties agree to enter a replacement (or termination) transaction, the interest rates received (paid) under the new arrangement may differ from those in the original arrangement, even if terms other than the interest rates are identical to those in the original transaction. Risks vary by transaction. Please thoroughly read the written materials provided, such as documents delivered before making a contract and disclosure statements.

In OTC transactions of credit default swaps (CDS), no sales commission will be charged. When entering into CDS transactions, the protection buyer will be required to pledge or entrust an agreed amount of margin collateral. In some of these cases, the transaction payments may exceed the amount of margin collateral. There shall be no advance notification of required collateral value or collateral ratios as they vary depending on the financial position of the protection buyer. CDS transactions carry the risk of losses owing to changes in the credit position of some or all of the referenced entities, and/or fluctuations of the interest rate market. The amount the protection buyer receives in the event that the CDS is triggered by a credit event may undercut the total amount of premiums that he/she has paid in the course of the transaction. Similarly, the amount the protection seller pays in the event of a credit event may exceed the total amount of premiums that he/she has received in the transaction. All other conditions being equal, the amount of premiums that the protection buyer pays and that received by the protection seller shall differ. In principle, CDS transactions will be limited to financial instruments business operators and qualified institutional investors. Transfers of equities to another securities company via the Japan Securities Depository Center are subject to a transfer fee of up to ¥11,000 (tax included) per issue transferred depending on volume. No account fee will be charged for marketable securities or monies deposited.

Nomura Securities Co., Ltd.

Financial instruments firm registered with the Kanto Local Finance Bureau (registration No. 142)

Member associations: Japan Securities Dealers Association; Japan Investment Advisers Association; The Financial Futures Association of Japan; and Type II Financial Instruments Firms Association.

The Nomura Group manages conflicts with respect to the production of research through its compliance policies and procedures (including, but not limited to, Conflicts of Interest, Chinese Wall and Confidentiality policies) as well as through the maintenance of Chinese Walls and employee training.

Additional information regarding the methodologies or models used in the production of any investment recommendations contained within this document is available upon request by contacting the Research Analysts of Nomura listed on the front page. Disclosures information is available upon request and disclosure information is available at the Nomura Disclosure web

page: http://go.nomuranow.com/research/m/Disclosures

Copyright © 2023 Nomura Securities Co., Ltd. All rights reserved.