

Outlook for FY19-20 corporate earnings

Quarterly Update

4 June 2019

For inquiries:
Market Strategy Research Dept
Equity Research Dept

Contents

Summary and major assumptions.....	3
Contributions to recurring profit growth by sector.....	5
Revisions to recurring profit estimates (versus old estimates)	7
Revision index for the Russell/Nomura Large Cap Index.....	9
Reference	
Russell/Nomura Large Cap Index: earnings indicators	10
Recurring profits by sector.....	12
Percentage change in quarterly sales and profits	13
Valuation indicators	14
What are the Russell/Nomura Japan Equity Indexes?	15

Summary and major assumptions

Overview of FY18 corporate earnings

In this report, we collate and analyze earnings forecast data issued by our analysts.

In FY18, companies in the Russell/Nomura Large Cap Index (ex financials) posted sales growth of 6.5% y-y and recurring profit growth of 3.1%. While sales growth came in largely in line with our analysts' previous forecast (announced in March based on analyst estimates as of 25 February), the recurring profit growth result fell 1.8ppt short of our analysts' forecast. According to our analysts' comments, the lower-than-expected recurring growth reflects the posting of one-time expenses, delays in margin improvements, and higher material prices.

FY18 is the seventh straight year of recurring profit growth since FY12, the longest such streak on record, surpassing the six straight years of growth during FY02-07. However, the rise in material prices and other cost increases weighed on profit growth. As a result, slower sales growth was accompanied by a 0.2ppt y-y drop in the recurring margin, to 8.0%, the first deterioration in the margin in seven years.

FY18 Q4 sales and profits at companies in the Russell/Nomura Large Cap Index (ex financials) both increased y-y, with sales up 4.1% y-y and recurring profits up 2.3%. Amid slowing external demand and other factors, sales growth fell below Q3's 5.8%, marking the third straight quarter of slowing in growth. Recurring profits, however, returned to a growth track after falling in Q3.

Overview of the FY19 corporate earnings outlook

For FY19, our analysts look for sales growth of 2.6% y-y and recurring profit growth of 4.4% for companies in the Russell/Nomura Large Cap Index (ex financials).

Our forex assumptions for FY19 are USD/JPY of 111.0 (previously 108.0) and EUR/JPY of 125.0 (previously 123.0), reflecting our expectation that the yen will weaken.

The current forecasts represent an upward revision of 0.8ppt for sales growth and downward revision of 3.1ppt for recurring profit growth, versus our previous forecasts. Looking at companies with large downward revisions to recurring profit and excluding special factors such as changes in planned asset sales, the companies appear to be facing a more difficult business environment, including sales difficulties, cost increases due to high raw material prices, and deteriorating market conditions.

While analysts are still factoring this deterioration in the business environment into their forecasts, the revision index for companies in the Russell/Nomura Large Cap Index (ex financials) as of the start of June 2019 is -28.0%, a slight improvement from -33.8% in March. Nonetheless, downward revisions are still in the majority by far. If US-China trade frictions become more serious, causing a delay in China's economic recovery and/or diminishing the outlook for the US economy, the risk of another downward revision to our forecast will increase.

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

(% y-y, except where noted)

		No. of cos	New					Old	
			FY16	FY17	FY18	FY19E	FY20E	FY18E	FY19E
Sales	Russell/Nomura Large Cap (ex financials)	307	-3.3	8.2	6.5	2.6	2.4	6.4	1.8
	Manufacturing	179	-4.3	9.3	3.0	2.7	2.5	3.2	1.6
	Basic materials	41	-5.6	17.1	7.0	6.9	1.0	7.3	-1.0
	Processing	83	-4.4	7.9	1.7	0.7	3.2	1.8	1.8
	Nonmanufacturing (ex financials)	128	-1.8	6.7	11.5	2.5	2.1	11.2	2.1
	Russell/Nomura Small Cap (ex financials)	1,132	-0.5	6.1	4.6	3.7	2.2	4.9	3.7
Operating profits	Russell/Nomura Large Cap (ex financials)	307	2.9	16.3	3.6	-0.4	9.3	3.8	5.4
	Manufacturing	179	-0.5	17.8	0.3	2.2	12.4	1.6	8.3
	Basic materials	41	9.4	34.9	0.1	4.0	6.0	2.1	3.5
	Processing	83	-3.6	15.9	0.2	3.3	11.3	0.8	10.3
	Nonmanufacturing (ex financials)	128	7.5	14.3	8.0	-3.5	5.4	6.7	1.8
	Russell/Nomura Small Cap (ex financials)	1,132	7.2	6.8	-2.4	11.9	6.9	2.3	10.5
Recurring profits	Russell/Nomura Large Cap	333	1.4	15.3	1.1	5.0	6.8	3.8	7.1
	Russell/Nomura Large Cap (ex financials)	307	3.6	17.5	3.1	4.4	6.7	5.0	7.5
	Manufacturing	179	0.2	21.6	-1.5	3.3	12.8	0.1	9.2
	Basic materials	41	12.1	43.6	2.1	3.1	6.0	3.9	2.4
	Processing	83	-3.1	19.6	-2.6	5.6	11.7	-1.3	12.3
	Nonmanufacturing	154	2.5	9.7	3.7	6.5	1.3	7.6	5.1
	Nonmanufacturing (ex financials)	128	8.4	12.2	9.7	5.7	-0.9	12.0	5.2
	Russell/Nomura Small Cap	1,229	5.8	9.0	-1.8	10.0	6.3	1.7	10.1
Russell/Nomura Small Cap (ex financials)	1,132	8.8	8.4	0.3	9.0	6.9	3.6	9.3	
Net profits	Russell/Nomura Large Cap	333	8.5	32.2	-4.5	0.4	7.5	-0.8	2.4
	Russell/Nomura Large Cap (ex financials)	307	10.8	38.5	-1.1	-2.7	8.0	0.7	1.5
	Manufacturing	179	-1.5	53.1	-4.3	-6.6	15.1	-3.4	1.4
	Basic materials	41	58.4	49.6	0.9	-1.0	4.6	2.3	0.1
	Processing	83	-14.0	68.5	-5.9	-6.3	13.4	-5.1	1.2
	Nonmanufacturing	154	18.2	15.1	-4.7	8.0	0.4	2.1	3.4
	Nonmanufacturing (ex financials)	128	30.9	20.4	3.9	2.9	-1.2	7.1	1.8
	Russell/Nomura Small Cap	1,229	17.3	14.5	-5.9	19.2	5.5	3.1	11.5
	Russell/Nomura Small Cap (ex financials)	1,132	21.7	10.1	-3.4	21.1	6.1	6.4	12.4

Note: Latest estimates as of 27 May 2019; previous estimates as of 25 February 2019.

Source: Nomura

Fig. 2: Major assumptions

As of 18 April 2019						As of 18 January 2019				
	Industrial production 2010 base year	Policy rate (FY-end)	WTI	Exchange rate (avg)		Industrial production 2010 base year	Policy rate (FY-end)	WTI	Exchange rate (avg)	
				% y-y	%				\$/bbl	USD/JPY
FY18	Estimate 0.1	-0.1	62.8	110.9	128.4	0.4	-0.1	61.5	110.4	127.9
FY19E	-0.9	-0.1	65.0	111.0	125.0	0.7	-0.1	50.0	108.0	123.0
FY20E	0.7	-0.1	65.0	111.0	125.0	0.6	-0.1	50.0	108.0	123.0
FY18 H1	0.5	-0.1	68.7	110.3	129.9	0.5	-0.1	68.7	110.3	129.9
FY18 H2	Estimate -0.4	-0.1	56.9	111.5	126.9	0.3	-0.1	54.4	110.4	125.8
FY19E H1	-0.9	-0.1	65.0	111.0	125.0	1.3	-0.1	50.0	108.0	123.0
FY19E H2	-0.8	-0.1	65.0	111.0	125.0	0.1	-0.1	50.0	108.0	123.0
FY20E H1	0.2	-0.1	65.0	111.0	125.0	-0.1	-0.1	50.0	108.0	123.0
FY20E H2	1.3	-0.1	65.0	111.0	125.0	1.2	-0.1	50.0	108.0	123.0

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.

Source: Nomura

Contributions to recurring profit growth by sector

Overview of FY18 corporate earnings

In FY18, 11 of 19 sectors achieved increases in recurring profits, with the other eight sectors showing declines.

Sectors that made particularly large contributions to overall profit growth include telecommunications, electrical machinery & precision equipment, trading companies, and machinery. The large increase in telecoms sector profits reflects the recording of unrealized gains by SoftBank Group [9984] on its Softbank Vision Fund and Delta Fund. Excluding the Softbank Group, the sector's recurring profits fell 1.8% as the absence of arbitration settlement income received in FY18 offset steady growth in telecom services and settlement services. The electrical machinery & precision equipment sector benefited from past growth of the memory chip market driven by increased investment in data centers and other factors. Sector profit growth was also supported by expanding demand for electronic parts used in electrification of automobiles, smartphones and PCs with increasingly high functionality. Trading companies' resource businesses did well, with the prices of crude oil up and coal at high levels. Profits also increased in some non-resource businesses, such as pulp and autos-related business.

Sectors contributing substantially to profit declines include automobiles, financials, utilities, and steel and nonferrous metals. The decline in automobiles sector profits reflects difficult business environments in China and Europe as well as a variety of one-time factors, such as unrealized losses on equity securities, responses to quality issues, and production network reorganization. Foreign exchange, higher R&D costs, and increased amortization expenses also weighed on profits. Companies in the financials sector faced an operating environment made difficult by prolonged monetary easing. Sector profits were depressed by weak sales of investment trusts and other financial products as well as customers' reduced trading in stocks and bonds. In the utilities sector, earnings were weighed down by higher fuel expenses and intensified competition arising from the deregulation of the retail electricity and gas market. The steel and nonferrous metals sector enjoyed strong demand for steel from automakers in Japan and higher steel prices boosted by overseas prices. However, profits were weighed down by one-off factors, such as natural disasters caused by heavy rains and typhoons, production facility troubles, and reorganization.

Overview of the FY19 corporate earnings outlook

For FY19, our analysts project that recurring profits will increase in 16 of 19 sectors and decrease in 3.

Sectors expected to make large contributions to overall profit growth include automobiles, financials, trading companies, and telecommunications. We expect the automobiles sector to benefit from the dropping out of one-off expenses and losses booked in FY18. Despite a difficult business environment shaped by stagnant automobile demand, profits are expected to increase as a result of efforts by each company to expand market share, improve product mixes, and reduce costs. The financials sector had a rough year in FY18 but we expect one-off losses to fall out of the picture in FY19 and look for the major banks to see a rebound in profits from client-facing operations. Trading companies' FY19 profits will get a boost from the absence of the one-off costs booked in FY18, and resource businesses are expected to remain firm, given current market conditions for such resources as coking coal and crude oil.

We expect profit declines in the pharmaceuticals & healthcare, media, and foods sectors. The pharmaceuticals & healthcare sector's profits are expected to take a big hit from merger costs associated with Takeda Pharmaceutical's [4502] Shire acquisition and related business combination accounting. Excluding that factor, however, real sector profit should advance steadily. In the media sector, the bulk of the expected profit decline is from the dropping out of one-time profits, including gains on the sale of stocks of affiliated companies and the sale of securities in FY18. In the food sector, profit on domestic business is expected to be weighed down by rising raw material costs and higher logistics expenses, while some overseas operations are expected to struggle.

Revisions to recurring profit estimates (versus old estimates)

Overview of FY18 corporate earnings

In FY18, recurring profits in seven of 19 sectors beat our estimates and in 12 sectors missed.

Results beat by the most in sectors including the electrical machinery & precision equipment, transportation, construction, and services. Results in the electrical machinery & precision equipment sector were largely in line with our forecast when excluding asset sales and other special factors. In the transportation sector, expenses were held down more than expected. In the construction sector, gross margins on building construction work exceeded our forecast. In the services sector, expenses were held down in postal and domestic logistics businesses and in the OTC financial services business.

The biggest misses were in sectors including financials, automobiles, telecommunications, and steel & nonferrous metals. In the financials sector, it was mainly owing to recognition of expenses and the like accompanying efforts to improve the health of securities portfolios. In the automobiles sector, it was owing to recognition of one-time expenses such as for quality controls, as well as some automakers that had weaker-than-expected auto sales in Europe and North America owing to factors including a reduction in discounting. At some auto parts manufacturers, margin improvement took longer than expected. In the telecommunications sector, it was mainly because, counter to our assumption, derivatives-related gains were not recognized; if this factor is excluded, results were largely in line with our forecast. In the steel & nonferrous metals segment, production volumes fell short of our expectations owing to troubles at blast furnace steelmakers and other factors. Also, steel spreads were worse than we had assumed in Oct-Dec 2018 as steel prices in China and other parts of the world fell and as coking coal prices remained high.

Overview of the FY19 corporate earnings outlook

We raised our FY19 recurring profit forecasts for two of the 19 sectors and lowered them for 16. We revised our USD/JPY assumption for FY19 to 111.0, from 108.0, as we expect the yen to weaken.

We raised our forecasts for the telecommunications and trading companies sectors. For the former, we analyzed the effect of new pricing plans released by the companies and decided the adverse effect on revenues was likely to be more muted than we previously anticipated. For the latter, we reflected improvement in business conditions in resource businesses and one-time gains, such as from asset sales.

Our downward revisions were largest for sectors including automobiles, electrical machinery & precision equipment, and pharmaceuticals & healthcare. For the automobiles sector, we took a harsher view than previously of sales in European and North American markets by some automakers. We also think COGS reductions benefits will be more muted than we previously anticipated. We further reflected yen strength against emerging-market currencies and weak sales in emerging markets. For the electrical machinery & precision equipment sector, we reflected recent further deterioration in market prices for memory devices. In multilayer ceramic capacitors (MLCCs), which remained strong, driven by automotive applications, we factored in the effect of reductions in prices of commodity MLCCs sold to trading companies and capacity utilization losses accompanying efforts to keep inventory from rising. For the pharmaceuticals & healthcare sector, the main factors were asset impairment losses and deduction of gains on asset sales that had previously been assumed. Excluding this, our sector view was raised.

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

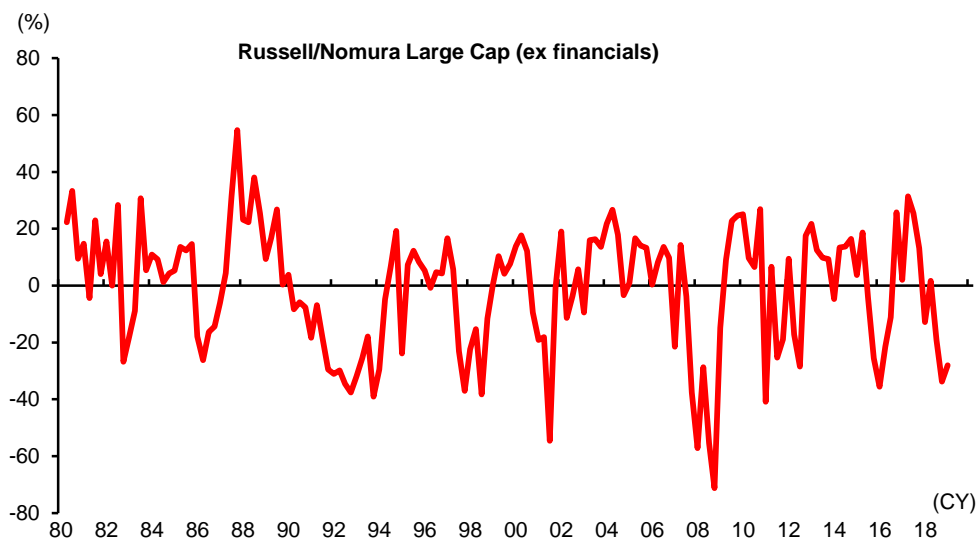
FY18					FY19E				
[Upward revisions] 7 sectors					[Upward revisions] 2 sectors				
	New	Old	Revision	Change		New	Old	Revision	Change
	¥bn	¥bn	¥bn	%		¥bn	¥bn	¥bn	%
Electrical machinery, precision equipment	5,641	5,423	217	4.0	Telecommunications	4,895	4,783	111	2.3
Transportation	2,474	2,425	49	2.0	Trading companies	3,463	3,435	28	0.8
Construction	696	649	48	7.4					
Services	1,672	1,645	27	1.6	[Downward revisions] 16 sectors				
Utilities	992	973	19	1.9		New	Old	Revision	Change
Food	1,625	1,609	16	1.0		¥bn	¥bn	¥bn	%
Media	364	359	4	1.2	Media	302	320	-18	-5.7
[Downward revisions] 12 sectors					Housing, real estate	2,185	2,212	-26	-1.2
	New	Old	Revision	Change	Transportation	2,676	2,715	-39	-1.4
	¥bn	¥bn	¥bn	%	Retailing	1,686	1,726	-40	-2.3
Software	620	623	-3	-0.5	Household goods	899	939	-40	-4.3
Household goods	830	835	-5	-0.6	Services	1,771	1,814	-44	-2.4
Housing, real estate	2,055	2,071	-17	-0.8	Software	795	867	-73	-8.4
Machinery	2,539	2,587	-48	-1.9	Chemicals	4,338	4,458	-120	-2.7
Retailing	1,497	1,567	-70	-4.5	Machinery	2,593	2,760	-166	-6.0
Pharmaceuticals, healthcare	1,540	1,646	-106	-6.4	Steel, nonferrous metals	941	1,111	-170	-15.3
Chemicals	4,036	4,166	-130	-3.1	Food	1,599	1,773	-174	-9.8
Trading companies	3,148	3,294	-146	-4.4	Utilities	1,114	1,310	-195	-14.9
Steel, nonferrous metals	927	1,079	-152	-14.1	Financials	6,919	7,228	-310	-4.3
Telecommunications	4,769	5,083	-314	-6.2	Pharmaceuticals, healthcare	1,296	1,654	-357	-21.6
Automobiles	6,372	6,803	-431	-6.3	Electrical machinery, precision equipment	5,719	6,085	-366	-6.0
Financials	6,366	6,910	-544	-7.9	Automobiles	6,990	7,722	-732	-9.5

Note: Latest estimates as of 27 May 2019; previous estimates as of 25 February 2019. No change to FY19 estimate for construction sector.

Source: Nomura

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

	(yy/m)	17/9	17/12	18/3	18/6	18/9	18/9	19/3	19/6
Russell/Nomura Large Cap		27.5	23.7	14.4	-11.4	0.9	-17.4	-31.4	-27.6
Russell/Nomura Large Cap (ex financials)		31.5	25.5	13.2	-12.9	1.7	-19.1	-33.8	-28.0
Manufacturing		42.6	24.4	13.3	-23.8	7.2	-26.0	-47.8	-34.1
Basic materials		56.4	28.2	26.8	-17.1	9.8	-36.6	-42.9	-31.7
Processing		53.8	26.3	17.9	-33.3	14.3	-29.8	-57.8	-41.0
Nonmanufacturing (ex financials)		15.9	27.0	13.1	3.3	-6.6	-9.0	-14.1	-19.5



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.

Source: Nomura

Russell/Nomura Large Cap Index: earnings indicators

Fig. 6: Percentage change in sales by sector

(% y-y, except where noted)

		No. of cos	FY16	FY17	FY18 Old	FY18 New	FY19E Old	FY19E New	FY20E New
Industrial groups	Russell/Nomura Large Cap (ex financials)	307	-3.3	8.2	6.4	6.5	1.8	2.6	2.4
	Manufacturing	179	-4.3	9.3	3.2	3.0	1.6	2.7	2.5
	Basic materials	41	-5.6	17.1	7.3	7.0	-1.0	6.9	1.0
	Processing	83	-4.4	7.9	1.8	1.7	1.8	0.7	3.2
	Nonmanufacturing (ex financials)	128	-1.8	6.7	11.2	11.5	2.1	2.5	2.1
Broad sectors	Materials	41	-5.6	17.1	7.3	7.0	-1.0	6.9	1.0
	Machinery, autos	45	-3.1	9.0	2.5	2.2	1.6	1.3	3.3
	Electronics	38	-6.3	6.0	0.5	0.8	2.0	-0.2	3.2
	Consumer, distribution	98	-2.2	6.7	15.6	15.5	2.9	3.7	2.3
	Information	23	0.1	6.3	3.8	3.7	2.4	1.5	2.3
	Utilities, infrastructure	62	-2.5	6.0	2.9	3.8	2.1	2.0	1.6
Sectors	Chemicals	33	-5.8	18.0	8.4	8.0	-2.2	8.4	1.2
	Steel, nonferrous metals	8	-5.1	15.0	4.9	4.7	2.3	3.1	0.2
	Machinery	26	-2.9	13.9	3.8	3.0	2.6	3.1	3.5
	Autos	19	-3.2	7.7	2.2	2.0	1.3	0.7	3.2
	Electrical machinery, precision equipment	38	-6.3	6.0	0.5	0.8	2.0	-0.2	3.2
	Pharmaceuticals, healthcare	22	-2.7	3.2	3.5	3.5	8.2	9.0	1.8
	Food products	20	-1.8	6.7	2.2	2.5	1.2	1.1	0.8
	Household goods	13	-4.1	7.5	3.5	3.5	5.3	3.7	5.5
	Trading companies	7	-4.6	13.1	44.8	45.0	1.7	4.0	1.4
	Retailing	20	2.2	5.1	4.8	3.1	3.0	3.6	4.5
	Services	16	-2.7	0.7	1.0	1.9	2.0	1.0	2.5
	Software	11	2.9	20.8	10.5	9.5	7.6	5.9	8.5
	Media	5	-1.3	5.3	6.7	6.4	2.0	2.2	2.6
	Telecommunications	7	0.0	4.7	2.6	2.7	1.7	0.8	1.3
	Construction, engineering	7	0.2	1.9	7.1	8.0	4.0	3.1	1.0
	Housing, real estate	19	5.1	5.1	5.5	5.4	3.2	3.1	2.6
	Transportation	25	-3.1	5.8	-1.4	-1.1	2.2	2.4	2.2
Utilities	11	-8.2	8.5	4.0	6.6	0.1	0.1	0.4	

Note: Figures exclude listed consolidated subsidiaries. Latest estimates as of 27 May 2019; previous estimates as of 25 February 2019.

Source: Nomura

Fig. 7: Percentage change in recurring profits by sector

(% y-y, except where noted)

		No. of cos	FY16	FY17	FY18 Old	FY18 New	FY19E Old	FY19E New	FY20E New
Industrial groups	Russell/Nomura Large Cap	333	1.4	15.3	3.8	1.1	7.1	5.0	6.8
	Russell/Nomura Large Cap (ex financials)	307	3.6	17.5	5.0	3.1	7.5	4.4	6.7
	Manufacturing	179	0.2	21.6	0.1	-1.5	9.2	3.3	12.8
	Basic materials	41	12.1	43.6	3.9	2.1	2.4	3.1	6.0
	Processing	83	-3.1	19.6	-1.3	-2.6	12.3	5.6	11.7
	Nonmanufacturing	154	2.5	9.7	7.6	3.7	5.1	6.5	1.3
	Nonmanufacturing (ex financials)	128	8.4	12.2	12.0	9.7	5.2	5.7	-0.9
Broad sectors	Materials	41	12.1	43.6	3.9	2.1	2.4	3.1	6.0
	Machinery, autos	45	-13.0	16.5	-4.8	-8.9	12.1	8.0	9.6
	Electronics	38	27.8	26.1	5.2	9.3	12.8	1.9	15.2
	Consumer, distribution	98	19.8	14.8	5.6	2.8	6.4	3.2	12.4
	Information	23	0.2	6.1	39.8	33.1	-1.4	4.2	-13.9
	Utilities, infrastructure	62	-3.8	9.6	-4.0	-2.5	10.9	4.7	5.0
	Financials	26	-8.1	4.4	-2.9	-10.5	4.7	8.7	7.6
Sectors	Chemicals	33	16.1	34.2	5.7	4.5	2.2	3.4	5.2
	Steel, nonferrous metals	8	-5.5	93.4	-2.4	-7.3	3.2	1.8	9.7
	Machinery	26	-17.9	29.3	7.6	9.6	6.6	2.0	9.5
	Autos	19	-11.6	12.9	-8.8	-14.6	14.2	10.4	9.6
	Electrical machinery, precision equipment	38	27.8	26.1	5.2	9.3	12.8	1.9	15.2
	Pharmaceuticals, healthcare	22	-5.4	5.9	3.1	-3.5	2.8	-14.2	59.3
	Food products	20	8.3	4.8	-4.7	-3.7	8.9	-2.7	8.6
	Household goods	13	5.8	20.8	7.6	6.9	12.4	8.3	12.2
	Trading companies	7	233.4	31.2	15.5	10.4	4.3	10.0	-0.2
	Retailing	20	-1.4	12.4	8.2	3.3	6.7	8.9	10.1
	Services	16	-9.6	10.9	-1.6	0.0	8.4	4.1	8.6
	Software	11	21.1	44.2	17.2	16.7	27.6	17.4	19.0
	Media	5	-1.0	9.6	2.9	4.1	-10.9	-17.0	10.8
	Telecommunications	7	-1.4	1.4	47.0	38.5	-4.7	3.9	-20.7
	Construction, engineering	7	30.5	9.8	-7.9	-1.1	7.2	0.0	2.4
	Housing, real estate	19	22.4	9.9	-1.9	-2.7	6.8	6.4	5.1
	Transportation	25	-5.2	9.0	0.1	2.2	6.2	1.9	6.7
	Utilities	11	-36.2	10.2	-14.5	-12.8	34.6	12.4	2.4
Financials	26	-8.1	4.4	-2.9	-10.5	4.7	8.7	7.6	

Note: (1) Figures exclude listed consolidated subsidiaries. Latest estimates as of 27 May 2019; previous estimates as of 25 February 2019.

Source: Nomura

Fig. 8: Recurring profits by sector

(¥bn, except where noted)

		No. of cos	FY16	FY17	FY18 Old	FY18 New	FY19E Old	FY19E New	FY20E New
Industrial groups	Russell/Nomura Large Cap	333	41,339	47,681	49,746	48,162	53,642	50,911	54,372
	Russell/Nomura Large Cap (ex financials)	307	34,408	40,521	42,836	41,796	46,414	43,993	46,926
	Manufacturing	179	19,641	23,855	24,148	23,510	26,502	24,376	27,491
	Basic materials	41	3,551	4,971	5,245	4,963	5,569	5,279	5,594
	Processing	83	12,524	14,790	14,813	14,552	16,567	15,303	17,086
	Nonmanufacturing	154	21,698	23,826	25,598	24,652	27,140	26,535	26,881
	Nonmanufacturing (ex financials)	128	14,766	16,666	18,688	18,286	19,912	19,617	19,435
Broad sectors	Materials	41	3,551	4,971	5,245	4,963	5,569	5,279	5,594
	Machinery, autos	45	8,528	9,755	9,390	8,911	10,482	9,583	10,499
	Electronics	38	3,996	5,035	5,423	5,641	6,085	5,719	6,587
	Consumer, distribution	98	8,630	10,162	10,596	10,312	11,341	10,714	12,047
	Information	23	3,999	4,317	6,065	5,753	5,971	5,991	5,159
	Utilities, infrastructure	62	5,704	6,280	6,117	6,216	6,966	6,706	7,040
	Financials	26	6,931	7,160	6,910	6,366	7,228	6,919	7,446
Sectors	Chemicals	33	3,002	3,911	4,166	4,036	4,458	4,338	4,562
	Steel, nonferrous metals	8	549	1,061	1,079	927	1,111	941	1,032
	Machinery	26	1,813	2,336	2,587	2,539	2,760	2,593	2,840
	Autos	19	6,716	7,419	6,803	6,372	7,722	6,990	7,659
	Electrical machinery, precision equipment	38	3,996	5,035	5,423	5,641	6,085	5,719	6,587
	Pharmaceuticals, healthcare	22	1,465	1,616	1,646	1,540	1,654	1,296	2,065
	Food products	20	1,487	1,723	1,609	1,625	1,773	1,599	1,737
	Household goods	13	613	755	835	830	939	899	1,009
	Trading companies	7	2,192	2,852	3,294	3,148	3,435	3,463	3,458
	Retailing	20	1,435	1,545	1,567	1,497	1,726	1,686	1,856
	Services	16	1,437	1,671	1,645	1,672	1,814	1,771	1,922
	Software	11	341	564	623	620	867	795	946
	Media	5	318	349	359	364	320	302	334
	Telecommunications	7	3,339	3,404	5,083	4,769	4,783	4,895	3,879
	Construction, engineering	7	617	664	649	696	730	730	748
	Housing, real estate	19	1,845	2,054	2,071	2,055	2,212	2,185	2,296
	Transportation	25	2,204	2,450	2,425	2,474	2,715	2,676	2,855
	Utilities	11	1,038	1,112	973	992	1,310	1,114	1,141
Financials	26	6,931	7,160	6,910	6,366	7,228	6,919	7,446	

Note: Figures exclude listed consolidated subsidiaries. Latest estimates as of 27 May 2019; previous estimates as of 25 February 2019.

Source: Nomura

Fig. 9: Percentage change in quarterly sales and profits (FY18 Q1–FY18 Q4)

		% y-y															
		Sales				Operating profits				Recurring profits				Net profits			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Industrial groups	Russell/Nomura Large Cap	-	-	-	-	-	-	-	-	14.1	6.2	-17.0	0.8	22.3	11.2	-27.4	-21.0
	Russell/Nomura Large Cap (ex financials)	8.2	7.4	5.8	4.1	10.9	4.6	-5.7	2.2	16.5	9.7	-16.6	2.3	26.6	15.5	-27.6	-12.9
	Manufacturing	5.9	3.7	2.1	-0.4	11.8	4.5	-9.5	-10.5	16.0	5.7	-25.1	-5.4	36.3	16.0	-38.9	-23.4
	Basic materials	10.4	9.8	7.3	0.1	25.9	9.8	-22.9	-9.9	28.3	13.4	-23.8	-8.9	37.9	16.6	-33.4	-11.9
	Processing	5.2	2.2	0.6	-1.4	13.0	2.4	-6.2	-10.2	18.8	3.7	-29.5	-1.5	52.7	15.9	-44.1	-27.1
	Nonmanufacturing	-	-	-	-	-	-	-	-	12.3	6.6	-9.0	8.0	7.8	6.7	-15.0	-17.6
	Nonmanufacturing (ex financials)	11.6	12.6	11.4	10.4	9.8	4.8	-0.3	21.2	17.3	15.0	-4.7	15.2	11.4	14.8	-10.8	9.7
Broad sectors	Basic materials	10.4	9.8	7.3	0.1	25.9	9.8	-22.9	-9.9	28.3	13.4	-23.8	-8.9	37.9	16.6	-33.4	-11.9
	Machinery, autos	5.6	2.0	2.5	-1.1	8.2	-3.4	-8.8	-22.2	9.4	0.8	-31.0	-13.8	6.3	7.3	-53.0	-20.4
	Electronics	4.4	2.5	-2.4	-1.9	23.1	11.2	-2.2	14.3	40.1	8.3	-26.7	24.8	160.0	32.0	-22.7	-34.6
	Consumption, distribution	15.9	16.4	14.9	13.8	7.4	3.7	-7.0	1.0	7.7	3.6	-7.5	-0.1	6.7	10.4	-14.5	1.0
	Information	3.0	4.4	3.3	4.2	18.9	21.7	18.8	52.2	46.7	62.0	0.8	39.2	51.8	63.3	-13.2	-14.1
	Utilities, infrastructure	2.7	4.0	3.3	4.7	-6.2	-5.9	-6.5	14.3	-6.0	-6.0	-8.4	11.8	-21.6	-7.6	-9.7	21.5
	Financials	-	-	-	-	-	-	-	-	1.6	-14.9	-19.7	-7.8	0.7	-13.5	-26.4	-71.0
Sectors	Chemicals	11.0	12.1	8.0	0.4	36.7	12.8	-24.0	-8.7	40.9	15.6	-26.8	-7.1	54.2	14.7	-38.5	-25.7
	Steel, nonferrous metals	9.2	4.8	5.8	-0.5	-7.3	-4.2	-18.2	-13.4	-4.2	3.7	-12.9	-20.7	5.1	24.4	-16.3	SP
	Machinery	7.1	4.0	2.4	-0.9	16.0	9.1	-4.5	18.3	18.5	3.1	-7.9	29.6	15.0	1.1	-0.9	30.1
	Automobiles	5.1	1.5	2.5	-1.1	5.7	-8.1	-10.2	-35.2	6.8	0.1	-38.6	-25.9	3.9	9.5	-62.7	-33.8
	Electrical machinery, precision equipment	4.4	2.5	-2.4	-1.9	23.1	11.2	-2.2	14.3	40.1	8.3	-26.7	24.8	160.0	32.0	-22.7	-34.6
	Pharmaceuticals, healthcare	2.2	0.2	1.3	10.2	-11.8	9.2	2.7	11.0	-12.7	8.6	-4.6	-3.7	-9.1	21.4	-15.2	43.6
	Food products	2.5	2.5	0.2	-1.5	-6.9	3.1	-15.3	-22.5	-5.5	-0.2	-19.2	-27.9	-24.4	-1.3	-19.3	-46.8
	Household goods	5.3	3.3	2.9	-0.2	23.4	2.4	2.4	-20.2	24.7	3.5	-3.6	-16.3	26.9	60.5	-45.2	-12.2
	Trading companies	46.6	47.2	42.7	43.6	30.2	3.6	-8.7	20.2	27.0	3.9	-3.4	19.7	30.8	-3.2	-8.5	23.9
	Retailing	5.4	6.3	6.0	-3.1	13.8	-0.5	-2.8	-4.9	14.4	2.0	-2.6	-1.7	26.3	5.1	-5.6	28.0
	Services	0.6	2.9	2.1	1.6	3.0	3.3	-14.4	8.8	3.2	4.3	-12.6	10.2	12.6	38.8	-11.2	-25.8
	Software	1.2	5.8	17.5	12.2	-3.3	1.8	23.6	43.0	-1.4	4.1	12.4	96.0	1.1	-12.7	20.1	85.5
	Media	5.2	4.5	6.1	8.9	29.0	-8.2	-13.4	-6.6	-7.8	73.8	-19.6	-22.2	-22.9	113.5	-31.2	-28.1
	Telecommunications	3.0	4.2	0.9	2.7	20.4	25.0	21.9	59.1	57.1	68.5	1.1	40.9	67.0	73.6	-15.3	-27.6
	Construction, engineering	2.5	7.7	9.4	10.9	-25.7	3.7	-5.8	11.4	-23.0	7.3	-6.4	10.8	-21.2	1.7	-3.4	24.1
	Housing, real estate	7.1	4.6	1.0	7.2	0.5	6.2	-7.7	-8.9	1.2	7.1	-7.5	-13.7	-0.6	11.0	-11.7	-14.5
	Transportation	-0.4	-1.4	-0.3	-2.3	0.9	-0.3	7.9	7.9	-2.6	-1.7	5.9	13.6	-15.8	-3.7	1.4	107.5
	Utilities	2.5	8.3	7.8	7.4	-22.1	-29.1	-52.8	127.3	-15.6	-29.7	-60.4	156.2	-50.2	-35.9	-62.0	88.6
	Financials	-	-	-	-	-	-	-	-	1.6	-14.9	-19.7	-7.8	0.7	-13.5	-26.4	-71.0

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 27 May 2019. (3) Excludes consolidated subsidiaries. (4) SP = switch to profits; SL = switch to losses; LS = losses shrinking; LI = losses increasing.

Source: Nomura

Fig. 10: Valuation indicators

		P/E			P/CF			P/B		Dividend yield			ROE			
		FY18	FY19E	FY20E	FY18	FY19E	FY20E	FY18	FY19E	FY18	FY19E	FY20E	FY17	FY18	FY19E	FY20E
		x	x	x	x	x	x	x	x	%	%	%	%	%	%	%
Industrial groups	Russell/Nomura Large Cap	13.5	13.4	12.5	-	-	-	1.22	1.17	2.40	2.56	2.71	10.3	9.3	9.0	9.1
	Russell/Nomura Large Cap (ex loss-making cos)	13.1	13.0	12.3	-	-	-	1.22	1.16	2.43	2.54	2.76	10.5	9.5	9.2	9.1
	Russell/Nomura Large Cap (ex financials)	13.9	14.3	13.2	7.4	7.7	7.3	1.39	1.32	2.25	2.44	2.59	11.1	10.3	9.5	9.7
	Manufacturing	14.0	15.0	13.0	7.5	8.3	7.6	1.43	1.36	2.38	2.54	2.70	11.8	10.5	9.3	10.1
	Basic materials	9.7	9.5	9.1	4.9	4.6	4.4	0.85	0.80	3.09	3.29	3.42	9.5	9.0	8.7	8.5
	Processing	12.2	13.1	11.6	6.5	7.8	7.1	1.34	1.27	2.53	2.60	2.81	12.7	11.2	10.0	10.6
	Nonmanufacturing	13.0	12.0	11.9	-	-	-	1.04	1.00	2.43	2.59	2.72	9.1	8.2	8.6	8.2
	Nonmanufacturing (ex financials)	13.8	13.4	13.6	7.3	6.9	6.9	1.33	1.26	2.05	2.30	2.42	10.2	9.9	9.7	9.0
Broad sectors	Basic materials	9.7	9.5	9.1	4.9	4.6	4.4	0.85	0.80	3.09	3.29	3.42	9.5	9.0	8.7	8.5
	Machinery, autos	12.2	11.4	10.2	5.9	6.9	6.4	1.14	1.08	3.10	3.14	3.37	12.4	9.4	9.7	10.2
	Electronics	12.2	16.0	13.8	7.3	9.1	8.2	1.70	1.62	1.83	1.93	2.12	13.2	14.5	10.4	11.3
	Consumption, distribution	19.6	19.9	17.2	12.4	11.4	10.5	1.72	1.66	1.99	2.22	2.31	9.6	9.1	8.5	9.4
	Information	12.5	13.4	16.0	6.2	6.1	6.6	1.63	1.55	1.98	2.52	2.72	13.4	13.9	12.0	9.5
	Utilities, infrastructure	13.7	12.5	12.0	6.4	6.2	6.0	1.18	1.12	1.96	2.07	2.14	10.1	8.9	9.2	9.1
	Financials	10.4	8.2	7.8	-	-	-	0.55	0.53	4.01	3.83	4.03	7.2	5.3	6.7	6.6
Sectors	Chemicals	9.9	9.6	9.2	5.5	4.9	4.8	0.97	0.89	2.96	3.28	3.39	11.0	10.0	9.7	9.3
	Steel, nonferrous metals	8.8	9.4	8.6	3.4	3.5	3.3	0.59	0.57	3.57	3.33	3.55	6.1	6.7	6.2	6.4
	Machinery	15.5	15.8	14.4	9.4	9.6	9.0	1.54	1.43	2.62	2.13	2.24	9.5	10.1	9.5	9.6
	Automobiles	10.9	9.9	8.8	4.9	6.0	5.5	0.99	0.95	3.36	3.71	4.01	13.4	9.2	9.8	10.4
	Electrical machinery, precision equipment	12.2	16.0	13.8	7.3	9.1	8.2	1.70	1.62	1.83	1.93	2.12	13.2	14.5	10.4	11.3
	Pharmaceuticals, healthcare	29.3	44.3	24.3	18.3	17.3	14.5	2.19	2.22	1.77	2.05	2.08	9.6	8.4	5.0	8.9
	Food products	18.6	20.0	17.8	11.3	11.6	10.7	2.04	1.96	2.46	2.80	3.01	13.0	10.9	10.0	10.8
	Household goods	31.7	27.6	24.5	21.7	19.0	17.1	4.14	3.85	1.21	1.41	1.49	14.1	13.3	14.5	15.1
	Trading companies	6.8	6.3	6.3	4.8	3.9	3.8	0.79	0.74	4.38	4.79	4.91	12.0	12.0	12.2	11.3
	Retailing	26.5	24.3	21.7	13.8	13.0	12.0	2.27	2.18	1.35	1.40	1.54	8.7	8.8	9.3	9.7
	Services	25.4	24.1	21.9	15.4	15.8	14.5	1.29	1.25	1.54	1.70	1.74	5.2	5.1	5.3	5.6
	Software	27.3	22.7	19.2	22.2	18.8	16.3	3.52	3.18	1.82	2.52	2.94	12.0	13.2	14.5	15.9
	Media	14.7	16.7	15.2	10.0	11.2	10.5	1.07	1.04	1.86	1.86	1.86	7.7	7.3	6.3	6.7
	Telecommunications	10.3	11.3	15.1	4.8	4.7	5.2	1.44	1.35	2.05	2.59	2.73	14.6	15.0	12.3	8.8
	Construction	7.9	8.3	8.1	6.9	7.3	7.1	1.05	0.98	3.06	3.17	3.28	16.8	14.0	12.3	11.7
	Housing, real estate	13.5	12.6	12.0	9.5	8.8	8.4	1.32	1.25	2.46	2.55	2.64	11.1	10.0	10.2	10.0
	Transportation	16.6	14.8	13.8	7.4	7.1	6.8	1.41	1.34	1.26	1.39	1.47	9.6	8.8	9.4	9.3
	Utilities	11.6	10.2	10.0	2.9	3.0	2.9	0.70	0.67	2.47	2.62	2.65	8.2	6.2	6.7	6.5
	Financials	10.4	8.2	7.8	-	-	-	0.55	0.53	4.01	3.83	4.03	7.2	5.3	6.7	6.6
		Russell/Nomura Small Cap	16.2	14.2	13.4	-	-	-	1.06	0.98	2.03	2.52	2.56	7.4	6.7	7.1
	Russell/Nomura Small Cap (ex financials)	17.4	14.8	14.0	9.0	8.1	7.8	1.20	1.13	1.94	2.06	2.10	7.6	7.0	7.9	7.9

Note: Share prices and forecasts are as of 27 May 2019.

Source: Nomura

What are the Russell/Nomura Japan Equity Indexes?

The Russell/Nomura Japan Equity Indexes are Japanese equity indexes developed jointly by Frank Russell Company 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
- In addition to stocks listed on the First Section of the Tokyo Stock Exchange (TSE-1), they include stocks listed on other exchanges
- 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.

Any Authors named on this report are Research Analysts unless otherwise indicated

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., or Instinet, LLC on 1-877-865-5752. 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 or ILLC, 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. ("NDPI") 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:

50% have been assigned a Buy rating which, for purposes of mandatory disclosures, are classified as a Buy rating; 44% 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.

44% have been assigned a Neutral rating which, for purposes of mandatory disclosures, is classified as a Hold rating; 53% 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

6% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; 13% 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 March 2019.

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

** As defined by the EU Market Abuse Regulation

Distribution of ratings (Instinet, LLC)

The distribution of all ratings published by Instinet, LLC Equity Research is as follows:

55% have been assigned a Buy rating which, for purposes of mandatory disclosures, are classified as a Buy rating; Instinet LLC has provided investment banking services to 0% of companies with this rating within the previous 12 months.

41% have been assigned a Neutral rating which, for purposes of mandatory disclosures, is classified as a Hold rating; Instinet LLC has provided investment banking services to 0% of companies with this rating within the previous 12 months.

4% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; Instinet LLC has provided investment banking services to 0% of companies with this rating within the previous 12 months.

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 '**Neutral**', 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.

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 the publication. The term "Nomura Group" used herein refers to Nomura Holdings, Inc. and its affiliates and subsidiaries including: Nomura Securities Co., Ltd. ('NSC') Tokyo, Japan; Nomura Financial Products Europe GmbH ('NFPE'), Germany; Nomura International plc ('Nlplc'), UK; Nomura Securities International, Inc. ('NSI'), New York, US; Instinet, LLC ('ILLC'); Nomura International (Hong Kong) Ltd. ('NIHK'), Hong Kong; 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>); Nomura Singapore Ltd. ('NSL'), Singapore (Registration number 197201440E, regulated by the Monetary Authority of Singapore); 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; PT Nomura Sekuritas Indonesia ('PTNSI'); Nomura Securities Malaysia Sdn. Bhd. ('NSM'), Malaysia; NIHK, Taipei Branch ('NITB'), Taiwan; 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, Mumbai- 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. '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. The "BDO-NS" (which stands for "BDO Nomura Securities, Inc.") placed next to an analyst's name on the front page of a research report indicates that the analyst is employed by BDO Unibank Inc. ("BDO Unibank") who has been seconded to BDO-NS, to provide research assistance services to NSL under an agreement between BDO Unibank, NSL and BDO-NS. BDO-NS is a Philippines securities dealer, which is a joint venture between BDO Unibank and the Nomura Group.

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 SECURITY 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 or represent that the document is accurate, complete, reliable, fit for any particular purpose or merchantable and does not accept liability for any act (or decision not to act) resulting from use of this document and related data. To the maximum extent permissible all warranties and other assurances by the Nomura Group are hereby excluded and the Nomura Group shall have no liability for the use, misuse, or distribution of this information.

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 is under no duty to update 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 and employees, 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 ratings from credit ratings agencies such as Standard & Poor's. 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 guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use 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 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 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 reproduced, re-disseminated or used to create any financial products, including 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 warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. 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 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 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.

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 performance. Where the information contains an indication of future performance, such forecasts may not be a reliable indicator of future 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 Nlplc. Nlplc is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Nlplc 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 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. NSL accepts legal responsibility for the content of this document, where it concerns securities, futures and foreign exchange, issued by their foreign affiliates in respect of recipients who are not accredited, expert or institutional investors as defined by the Securities and Futures Act (Chapter 289). Recipients of this document in Singapore should contact NSL in respect of matters arising from, or in connection with, this document. 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, Nlplc 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 Canadian Investors: This research report was approved for distribution to Canadian investors by Instinet Canada Limited ("ICL"), member of the Investment Industry Regulatory Organization of Canada ("IIROC") and member of the Canadian Investor Protection Fund. An affiliate of ICL prepared the research report (an "Affiliate Research Report") in accordance with the regulatory requirements applicable to research in the affiliate's local jurisdiction, which include conflict of interest disclosure. ICL reviewed this Affiliate Research Report for the purpose of ensuring Canadian disclosures required by IIROC are included. ICL does not receive compensation in respect of the distribution of Affiliate Research Reports. Pursuant to ICL's policies and procedures regarding the dissemination of research, ICL makes available Affiliate Research Reports to ICL clients and prospective clients only, in electronic and/or in printed form. ICL endeavours to make available and/or distribute Affiliate Research Reports to all intended recipients at the same time. This Affiliate Research Report is not a recommendation and does not take into account the investment objectives, financial situation or particular needs of any particular account.

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.

NO PART OF THIS MATERIAL MAY BE (I) COPIED, PHOTOCOPIED, OR DUPLICATED IN ANY FORM, BY ANY MEANS; OR (II) 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 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 Product Management 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 1.404% of the

transaction amount or a commission of ¥2,808 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 (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) are subject to a sales commission of up to 1.404% of the transaction amount (or a commission of ¥2,808 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 carry the risk of losses owing to fluctuations in the underlying indexes or other benchmarks.

Transactions involving foreign equities are subject to a domestic sales commission of up to 1.026% 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 ¥7,668). 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 1.404% of the transaction amount (or a commission of ¥2,808 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 1.08% of the transaction amount (or a commission of ¥4,320 if this would be less than ¥4,320). 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 J17 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 5.4% 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 5.4% (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.

No account fee will be charged for marketable securities or monies deposited. Transfers of equities to another securities company via the Japan Securities Depository Center are subject to a transfer fee of up to ¥10,800 per issue transferred depending on volume.

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 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/globalresearchportal/pages/disclosures/disclosures.aspx>

Copyright © 2019 Nomura Securities Co., Ltd. All rights reserved.