# **Outlook for FY16–17 corporate earnings**

# **Quarterly Update**

28 February 2017

Equity Research Dept Nomura Securities Co Ltd, Tokyo

# **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 indicators
Recurring profits by sector12
Percentage change in quarterly sales and profits13
Valuation indicators14
What are the Russell/Nomura Japan Equity Indexes?

# Summary and major assumptions

# **Overview of FY16 corporate earnings outlook**

In this report, we collate and analyze earnings forecast data issued by our analysts. For FY16, our analysts forecast a sales decline of 3.7% y-y and recurring profit growth of 1.6% for companies in the Russell/Nomura Large Cap Index (ex financials). These forecasts represent upward revisions versus our previous forecasts issued in December 2016 (based on data collated on 24 November 2016) of 0.8ppt for sales and 1.6ppt for recurring profits. Combined upward revisions to our FY16 recurring profit forecasts came to ¥516.4bn.

Our forex assumptions for FY16 are USD/JPY of 108.4 (previously 104.1) and EUR/JPY of 118.5 (previously 116.0). Our WTI assumption is \$47.5/bbl (\$47.6/bbl). Our assumption is that the yen will be just under ¥12 stronger versus the US dollar in FY16 than in FY15.

In FY16 Q3, recurring profits at companies in the Russell/Nomura Large Cap Index (ex financials) rose 6.9% y-y on a 2.6% decrease in sales. This follows a 9.0% decline in recurring profits on a 7.8% decline in sales in Q2. While the decline in sales was roughly two-thirds smaller, the trend of sales decline persists. At the same time, recurring profit growth improved by 15.9ppt, returning to positive growth for the first time in five quarters. In Q2, recurring profits increased in only eight of the 19 sectors in the Russell/Nomura Large Cap Index, but profits increased in 13 sectors in Q3. Profit improvement through Q2 was mainly centered in commodity sectors such as chemicals, steel & nonferrous metals, and trading companies, while in Q3, earnings began to improve in other sectors as well even as improvement continued in commodity sectors.

# Overview of the FY17 corporate earnings outlook

For FY17, our analysts look for sales growth of 5.4% y-y and recurring profit growth of 14.6% for companies in the Russell/Nomura Large Cap Index (ex financials). The current figures represent upward revisions of 2.1ppt for sales growth and 2.8ppt for recurring profit growth versus our previous forecasts. Combined upward revisions to our FY17 recurring profit forecasts came to ¥1,551.4bn. As discussed below, these upward revisions are larger than those to our FY16 forecasts as we expect a full-year contribution from the weaker yen.

Our forex assumptions for FY17 are USD/JPY of 114.0 (previously 103.0) and EUR/JPY of 120.0 (previously 114.0). Our WTI assumption is \$50.0/bbl (\$50.0/bbl). Our assumption is that the yen will be just under ¥11 weaker versus the US dollar in FY17 than in FY16.

The average ROE for Russell/Nomura Large Cap Index stocks was 7.7% in FY15, and we now forecast 8.3% in FY16 and 8.9% in FY17. Our FY16 ROE forecast is unchanged, but we revise up our FY17 ROE forecast by 0.3ppt.

							(% y-y	/, except wh	iere noted
		No.			New			0	ld
		of cos	FY13	FY14	FY15	FY16E	FY17E	FY16E	FY17E
	Russell/Nomura Large Cap (ex financials)	298	12.5	4.6	-0.4	-3.7	5.4	-4.5	3.3
	Manufacturing	174	12.3	4.3	0.2	-4.5	6.6	-5.5	3.6
Sales	Basic materials	44	13.2	0.6	-9.0	-6.3	11.4	-6.7	3.4
Sales	Processing	79	13.2	5.7	3.1	-4.4	5.4	-5.7	3.8
	Nonmanufacturing (ex financials)	124	12.7	5.0	-1.2	-2.6	3.7	-3.1	3.0
	Russell/Nomura Small Cap (ex financials)	943	9.3	3.6	1.8	-0.6	4.1	0.2	3.5
	Russell/Nomura Large Cap (ex financials)	298	34.3	5.2	8.7	-2.8	14.7	-3.4	10.9
	Manufacturing	174	37.1	5.8	2.9	-5.0	20.0	-5.4	13.8
Operating profits	Basic materials	44	35.6	-14.0	8.6	8.8	18.7	-1.5	16.2
Operating profits	Processing	79	44.4	14.7	-2.0	-10.4	25.5	-7.7	16.0
	Nonmanufacturing (ex financials)	124	29.6	4.2	18.6	0.1	7.8	-0.6	7.3
	Russell/Nomura Small Cap (ex financials)	943	28.4	4.3	10.5	4.4	10.8	4.0	10.0
	Russell/Nomura Large Cap	335	37.4	6.9	-0.6	0.8	12.7	-0.3	9.7
	Russell/Nomura Large Cap (ex financials)	298	39.7	7.0	1.5	1.6	14.6	0.0	11.8
	Manufacturing	174	43.3	7.2	-1.9	-3.5	21.0	-5.0	15.7
	Basic materials	44	33.5	-8.9	-7.4	10.7	24.2	1.2	20.0
Recurring profits	Processing	79	58.2	15.3	-4.2	-8.5	25.0	-7.5	17.2
	Nonmanufacturing	161	31.9	6.5	0.6	4.8	5.6	4.1	4.6
	Nonmanufacturing (ex financials)	124	34.0	6.6	7.1	9.0	6.6	7.1	6.9
	Russell/Nomura Small Cap	1,029	29.7	3.1	3.7	1.8	11.9	1.3	10.5
	Russell/Nomura Small Cap (ex financials)	943	27.3	5.0	4.1	4.1	13.4	3.6	12.7
	Russell/Nomura Large Cap	335	62.7	7.4	-3.9	9.8	11.6	9.4	8.2
	Russell/Nomura Large Cap (ex financials)	298	79.8	8.0	-4.7	11.1	15.2	10.8	11.2
	Manufacturing	174	80.9	10.2	-4.8	0.7	22.1	0.1	17.0
	Basic materials	44	85.9	-11.0	-27.1	53.3	25.0	37.8	21.0
Net profits	Processing	79	116.1	15.7	-3.0	-9.2	28.5	-7.0	20.1
	Nonmanufacturing	161	48.2	4.6	-3.0	18.5	2.8	18.4	0.8
	Nonmanufacturing (ex financials)	124	78.1	4.2	-4.6	28.0	6.2	28.3	3.8
	Russell/Nomura Small Cap	1,029	74.2	2.2	1.9	11.7	18.9	14.4	12.5
	Russell/Nomura Small Cap (ex financials)	943	80.6	3.9	0.0	15.1	21.8	18.3	15.5

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

Note: Latest estimates as of 20 February 2017. Previous estimates as of 24 November 2016. Source: Nomura

#### Fig. 2: Major assumptions

		As of 17 January	2017	As of 12 October	2016						
		Industrial production 2010 base year	Overnight call rate / Policy rate (FY-end)	WTI	Exchange rate (avg)		Industrial production 2010 base year	Overnight call rate / Policy rate (FY-end)	WTI		nge rate vg)
		% у-у	%	\$/bbl	USD/JPY	EUR/JPY	% у-у	%	\$/bbl	USD/JPY	EUR/JPY
FY15		-1.0	-0.10	45.0	120.0	132.5	-1.0	-0.10	45.0	120.0	132.5
FY16E		0.8	-0.10	47.5	108.4	118.5	-0.2	-0.20	47.6	104.1	116.0
FY17E		2.2	-0.10	50.0	114.0	120.0	1.3	-0.20	50.0	103.0	114.0
FY15	H1	-0.4	0-0.10	52.2	121.7	135.1	-0.4	0-0.10	52.2	121.7	135.1
FY15	H2	-2.2	-0.10	37.8	118.4	129.9	-2.2	-0.10	37.8	118.4	129.9
FY16	H1	-1.1	-0.20	45.3	105.2	118.1	-1.1	-0.20	45.3	105.2	118.1
FY16E	H2	2.3	-0.10	49.6	111.7	119.0	0.7	-0.20	50.0	103.0	114.0
FY17E	H1	2.9	-0.10	50.0	114.0	120.0	1.6	-0.20	50.0	103.0	114.0
FY17E	H2	1.6	-0.10	50.0	114.0	120.0	1.1	-0.20	50.0	103.0	114.0

Note: We use the call rate for interest rate data through FY15 H1 and the policy rate for FY15 H2 and beyond since the BOJ introduced a negative interest rate component in its policy on 29 January 2016. Call rate is the overnight uncollateralized call rate target, WTI is term-average WTI crude oil futures price (near-term delivery). The above assumptions are not Nomura estimates but the assumptions on which Nomura analysts base their earnings estimates.

# Contributions to recurring profit growth by sector

# Overview of the FY16 corporate earnings outlook

For FY16, we project that recurring profits will increase in 10 of the 19 sectors and decline in nine.

Sectors from which we expect large contributions to overall profit growth include trading companies, chemicals, housing & real estate, and telecommunications. For many of the sectors where we expect sharp growth, the growth is largely due to a rebound from earnings deterioration in FY15. For chemicals, we forecast roughly flat earnings in FY16 when excluding the oil sector, which has recorded weak earnings over the past two years. In the housing & real estate sector, housing demand has been gradually recovering against a backdrop of low interest rates. At the same time, while some companies in the telecommunications sector have seen an impact from scaled-back spending on sales promotions in response to policies by the Ministry of Internal Affairs and Communications and from the growing presence of competitors offering discounted rates, many companies are shoring up earnings with cost cuts and expansion in non-telecoms business. As some internet services companies have been investing aggressively in other companies, fluctuations in the value of these investments can now have a major impact on earnings for the entire sector.

Sectors that we expect to make large negative contributions to profit growth include autos, utilities, machinery, and transportation. While the yen weakened versus the dollar from late 2016, we assume USD/JPY of 108.4 for full-year FY16 versus 120.0 for FY15, representing a severe headwind for external demand-oriented sectors. In the automobiles sector, global automobile demand increased 4.9% y-y in 2016, but increased only 1.5% when excluding China. Sales growth in the US was sluggish at only 0.4%. We expect some degree of profit boost from cost savings and increased selling volumes in Europe and the US, but we do not think these will be sufficient to offset the negative impact from yen appreciation. In the utilities sector, we expect fallout from delays in restarting nuclear power stations and electricity rate cuts triggered by the full deregulation of the electricity retail market. In the machinery sector, shipbuilding and heavy machinery companies are being impacted by reduced production and delays in reducing costs in commercial aircraft businesses, and ship & offshore structure businesses are being burdened by additional expenses. At the same time, while we had seen major disparities in business conditions for machinery by region, we now see improvement both in terms of the regional breakdown and in terms of earnings. In the transportation sector, we expect the marine transport subsector to swing to losses as we expect containership rates to deteriorate further due to excess supply.

# Overview of the FY17 corporate earnings outlook

For FY17, we project that recurring profits will increase in 17 of the 19 sectors and decrease in two.

Sectors from which we expect large contributions to overall profit growth include electrical machinery & precision equipment, automobiles, steel & nonferrous metals, chemicals, and machinery. We expect the rapid appreciation of the yen seen in FY16 to quiet down in FY17, with the yen weakening by ¥5.6 y-y versus the dollar. The US and Chinese economies remain strong, and we expect a positive boost to the Japanese economy from the government's large-scale economic stimulus package. Against this backdrop, we expect the negative effects of yen appreciation to drop off and expect a return to profit growth, particularly in the manufacturing sector.

We expect profits to decline in the utilities and media sectors. We expect earnings in the utilities sector to be hobbled by a rise in fixed costs, which sector companies have been working to keep down, and by deterioration in gains/losses under the fuel cost adjustment system stemming from the weaker yen.

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

(%)

-6.9

-12.2

-12.3

-20.7

-42.1

-63.2

-116.4

-149.2

Utilities

\_

Contribution (ex financials)

FY16E			
Increase in profits			(%)
	Growth	Contribution	Contribution
10 sectors			(ex financials)
Trading companies	242.7	481.4	295.1
Chemicals	15.7	123.1	75.4
Housing, real estate	17.5	79.7	48.9
Telecommunications	7.1	72.6	44.5
Food	7.2	29.9	18.3
Software	24.5	20.8	12.8
Construction	13.3	19.0	11.6
Electrical machinery, precision equipment	1.7	16.4	10.1
Household goods	5.9	10.1	6.2
Media	0.3	0.3	0.2

Growth

-2.6

-11.4

-4.3

-7.0

-2.8

-9.8

-15.5

-38.7

-10.6

Contribution

-11.3

-20.0

-20.1

-33.7

-63.2

-68.8

-103.1

-189.9

-243.5

FY17	E		
Increase in profits			(%)
	Growth	Contribution	Contribution
17 sectors			(ex financials)
Electrical machinery, precision equipment	45.3	28.1	29.5
Automobiles	16.2	20.7	21.8
Steel, nonferrous metals	87.8	8.6	9.1
Chemicals	13.4	7.8	8.2
Machinery	21.6	7.7	8.1
Retailing	18.1	5.0	5.3
Financials	3.5	4.9	-
Telecommunications	6.8	4.8	5.0
Transportation	7.6	3.0	3.2
Trading companies	6.8	3.0	3.1
Housing, real estate	7.4	2.5	2.7
Software	28.4	2.2	2.3
Food	5.7	1.7	1.8
Household goods	10.5	1.2	1.3
Pharmaceuticals, healthcare	1.9	0.5	0.6
Construction	3.7	0.4	0.4
Services	0.7	0.2	0.2
Decrease in profits			(%)
	Growth	Contribution	Contribution
2 sectors			(ex financials)
Media	-1.9	-0.1	-0.1

-2.2

-11.6

-2.3

Source	Nomura

Decrease in profits

Steel, nonferrous metals

Pharmaceuticals, healthcare

9 sectors Retailing

Services

Financials

Machinery

Automobiles

Utilities

Transportation

# Revisions to recurring profit estimates (versus old estimates)

# Overview of the FY16 corporate earnings outlook

We have raised our FY16 recurring profit forecasts for 14 of the 19 sectors and lowered them for 5. We have revised our USD/JPY assumption for FY16 from 104.1 to 108.4, and the weaker yen tends to push up earnings forecasts for external demand-oriented sectors.

Upward revisions were comparatively large in the automobiles, chemicals, and trading companies sector. Upward revisions to automobiles sector forecasts mainly reflected the change in forex assumptions. In Chemicals, yen depreciation and higher oil prices accounted for most of the upward revisions in the oil subsector, and these upward revisions accounted for slightly under 80% of the upward revisions for the entire sector. Trading companies' Q3 earnings were strong, mainly on a rise in resource prices, including for coking coal and iron ore.

Sectors for which we have made large downward revisions include electrical machinery & precision equipment. While there were more upward revisions in some subsectors such as electronic parts, even when excluding one-time factors such as gains on the sale of businesses by some companies, some industrial electronics and consumer electronics companies were hit hard by impairment.

# Overview of the FY17 corporate earnings outlook

We have raised our FY17 recurring profit forecasts for 13 of the 19 sectors and lowered them for six. We revised our USD/JPY assumption for FY17 from 103.0 to a weaker 114.0. This is a further move toward a weaker yen than seen in FY16, and this implies higher upward revisions in external demand-related sectors.

The largest upward revisions were for our estimates for sectors such as automobiles, chemicals, trading companies, and steel & nonferrous metals. Most of the upward revisions in the automobiles and trading companies sectors were extensions of the upward revisions we made to our FY16 forecasts. In chemicals as well, most of the upward revisions stemmed from market price factors in the oil subsector, but we also saw upward revisions in electronic materials from higher prices or alleviation of downward pressure on prices. In steel & nonferrous metals, much of the downward revisions to FY16 forecast for nonferrous metals and wire & cable stemmed from temporary factors such as impairment, so the winding down of these factors pushed up forecasts for FY17 by a comparatively large amount across the sector.

The utilities sector saw comparatively large downward revisions. These stem mainly from deterioration in gains/losses under the fuel cost adjustment system resulting from yen depreciation.

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

FY16E				
[Upward revisions]	14 secto	ors		
	New	Old	Revision	Change
	¥bn	¥bn	¥bn	%
Automobiles	6,779	6,419	360	5.6
Chemicals	3,012	2,727	284	10.4
Trading companies	2,253	2,062	191	9.2
Telecommunications	3,627	3,559	69	1.9
Pharmaceuticals, healthcare	1,479	1,417	62	4.4
Machinery	1,867	1,842	25	1.3
Steel, nonferrous metals	515	495	20	4.0
Housing, real estate	1,771	1,754	17	1.0
Household goods	605	591	14	2.3
Services	1,477	1,464	13	0.9
Media	323	316	6	2.0
Software	351	345	6	1.7
Construction	536	531	5	0.9
Retailing	1,418	1,413	5	0.3

[Upward revisions]	13 secto	ors		
	New	Old	Revision	Change
	¥bn	¥bn	¥bn	%
Automobiles	7,742	7,089	653	9.2
Chemicals	3,429	3,022	407	13.5
Trading companies	2,407	2,146	261	12.1
Financials	7,432	7,215	216	3.0
Steel, nonferrous metals	962	846	116	13.8
Machinery	2,250	2,150	99	4.6
Retailing	1,712	1,661	51	3.1
Food	1,637	1,607	30	1.8
Housing, real estate	1,929	1,902	27	1.4
Electrical machinery, precision equipment	4,697	4,672	24	0.5
Telecommunications	3,894	3,872	22	0.6
Media	316	313	4	1.2
Construction	545	543	3	0.5

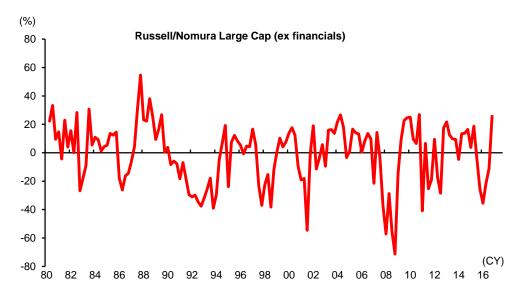
FY17E

[Downward revisions]	5 sector	s		
	New	Old	Revision	Change
	¥bn	¥bn	¥bn	%
Food	1,472	1,474	-1	-0.1
Utilities	998	1,023	-25	-2.4
Transportation	2,097	2,129	-32	-1.5
Financials	7,333	7,443	-111	-1.5
Electrical machinery, precision equipment	3,169	3,670	-502	-13.7

[Downward revisions]	6 sector	S		
	New	Old	Revision	Change
	¥bn	¥bn	¥bn	%
Pharmaceuticals, healthcare	1,554	1,559	-5	-0.3
Household goods	679	688	-9	-1.4
Transportation	2,240	2,250	-10	-0.4
Software	515	533	-18	-3.4
Services	1,492	1,519	-27	-1.8
Utilities	865	941	-76	-8.1

Note: Latest estimates as of 20 February 2017, previous estimates as of 24 November 2016. Source: Nomura

								(%)
(yy/m)	15/6	15/9	15/12	16/3	16/6	16/9	16/12	17/3
Russell/Nomura Large Cap	4.2	21.8	-3.6	-24.0	-36.4	-22.1	-9.6	26.0
Russell/Nomura Large Cap (ex financials)	3.7	18.7	-4.3	-25.6	-35.6	-21.5	-11.1	25.8
Manufacturing	0.0	19.4	-19.4	-38.5	-41.4	-33.9	-18.4	40.1
Basic materials	28.3	19.6	-17.4	-27.3	-29.5	-20.5	-13.6	32.5
Processing	-12.6	-1.1	-35.6	-75.9	-73.4	-59.5	-22.8	61.3
Nonmanufacturing (ex financials)	9.2	17.5	18.3	-7.3	-27.4	-4.0	-0.8	5.6



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

										except who	
		No. of	FY11	FY12	FY13	FY14	FY15	FY16E	FY16E	FY17E	FY17E
		COS						Old	New	Old	New
	Russell/Nomura Large Cap (ex financials)	298	1.4	2.7	12.5	4.6	-0.4	-4.5	-3.7	3.3	5.4
	Manufacturing	174	0.2	3.0	12.3	4.3	0.2	-5.5	-4.5	3.6	6.6
Industrial groups	Basic materials	44	4.8	-0.5	13.2	0.6	-9.0	-6.7	-6.3	3.4	11.4
	Processing	79	-2.0	4.8	13.2	5.7	3.1	-5.7	-4.4	3.8	5.4
	Nonmanufacturing (ex financials)	124	3.0	2.2	12.7	5.0	-1.2	-3.1	-2.6	3.0	3.7
	Materials	44	4.8	-0.5	13.2	0.6	-9.0	-6.7	-6.3	3.4	11.4
	Machinery, autos	46	-0.1	10.0	15.4	7.8	5.7	-5.4	-3.8	4.5	6.4
Broad sectors	Electronics	33	-4.3	-1.6	10.1	2.7	-0.9	-6.2	-5.3	2.5	3.8
DIDAU SECIDIS	Consumer, distribution	93	3.3	0.8	11.2	3.7	-1.4	-3.9	-3.1	2.8	3.7
	Information	22	1.5	3.4	20.1	9.6	5.7	0.3	0.6	5.5	5.9
	Utilities, infrastructure	60	2.2	5.3	10.0	5.2	-1.3	-2.8	-3.1	2.2	3.4
	Chemicals	36	6.5	0.8	12.5	-1.1	-9.9	-7.1	-6.8	1.7	10.5
	Steel, nonferrous metals	8	0.7	-4.3	15.1	4.7	-6.8	-6.0	-5.2	7.7	13.8
	Machinery	24	5.0	2.2	15.4	11.1	3.3	-4.3	-3.5	5.0	5.8
	Autos	22	-1.6	12.5	15.5	6.9	6.5	-5.8	-3.9	4.4	6.5
	Electrical machinery, precision equipment	33	-4.3	-1.6	10.1	2.7	-0.9	-6.2	-5.3	2.5	3.8
	Pharmaceuticals, healthcare	22	3.0	2.0	7.8	0.6	5.2	-2.9	-2.4	2.9	3.3
	Food products	16	-0.9	3.3	5.4	6.7	1.6	-1.0	-1.9	2.3	6.5
	Household goods	13	2.9	4.4	9.9	11.5	6.0	-4.9	-5.1	4.5	4.0
Castan	Trading companies	7	6.1	-1.0	14.0	2.7	-9.7	-9.6	-7.1	2.9	3.3
Sectors	Retailing	22	-2.5	3.7	10.0	5.7	7.3	1.2	1.1	3.8	4.6
	Services	13	-2.4	1.5	3.5	-0.4	4.1	-1.1	-1.1	1.4	1.3
	Software	9	-14.9	-4.0	3.6	1.4	-0.1	3.8	1.9	13.6	15.5
	Media	5	1.9	4.8	10.5	5.1	12.0	0.0	-0.8	1.6	2.2
	Telecommunications	8	3.5	3.8	24.4	10.9	5.5	0.0	0.7	5.0	5.3
	Construction, engineering	5	7.7	7.5	6.8	7.2	1.7	-0.6	-0.7	2.8	3.0
	Housing, real estate	17	2.7	6.1	14.5	7.9	4.3	5.0	5.1	3.3	3.4
	Transportation	25	-0.7	3.4	7.2	3.4	0.3	-2.7	-3.2	1.6	2.4
	Utilities	13	3.4	5.9	11.0	4.7	-7.7	-9.3	-9.8	1.5	4.7

Note: Figures exclude listed consolidated subsidiaries. Latest estimates as of 20 February 2017, previous estimates as of 24 November 2016. Source: Nomura

## Fig. 7: Percentage change in recurring profits by sector

		(% y-y, except when										
		No. of	FY11	FY12	FY13	FY14	FY15	FY16E	FY16E	FY17E	FY17E	
	D II/N	COS	40.4	40.0	07.4	0.0	0.0	Old	New	Old	New	
	Russell/Nomura Large Cap	335	-12.1	12.8	37.4	6.9	-0.6	-0.3	0.8	9.7	12.7	
	Russell/Nomura Large Cap (ex financials)	298	-19.5	7.7	39.7	7.0	1.5	0.0	1.6	11.8	14.6	
	Manufacturing	174	-17.9	10.3	43.3	7.2	-1.9	-5.0	-3.5	15.7	21.0	
Industrial groups	Basic materials	44	-7.1	-19.2	33.5	-8.9	-7.4	1.2	10.7	20.0	24.2	
	Processing	79	-29.3	36.4	58.2	15.3	-4.2	-7.5	-8.5	17.2	25.0	
	Nonmanufacturing	161	-5.9	15.2	31.9	6.5	0.6	4.1	4.8	4.6	5.6	
	Nonmanufacturing (ex financials)	124	-21.7	3.5	34.0	6.6	7.1	7.1	9.0	6.9	6.6	
	Materials	44	-7.1	-19.2	33.5	-8.9	-7.4	1.2	10.7	20.0	24.2	
	Machinery, autos	46	-11.5	42.5	47.6	16.2	1.9	-15.6	-11.7	13.5	17.4	
	Electronics	33	-54.9	19.7	92.9	13.0	-19.7	17.9	1.7	25.2	45.3	
Broad sectors	Consumer, distribution	93	5.9	-4.1	15.7	-9.0	-7.6	16.4	21.0	7.0	6.9	
	Information	22	0.0	7.3	16.2	8.0	4.3	5.8	7.8	10.0	8.2	
	Utilities, infrastructure	60	-70.2	30.2	102.6	28.3	37.3	-8.4	-8.9	4.2	3.6	
	Financials	37	33.7	34.8	29.3	6.5	-8.6	-1.3	-2.8	-0.1	3.5	
	Chemicals	36	1.8	-19.2	16.3	-21.7	21.6	4.7	15.7	10.7	13.4	
	Steel, nonferrous metals	8	-34.3	-18.9	119.5	24.0	-54.6	-14.8	-11.4	71.8	87.8	
	Machinery	24	7.9	-5.1	31.9	23.7	-6.6	-16.6	-15.5	17.6	21.6	
	Autos	22	-20.8	72.8	53.0	13.9	4.7	-15.3	-10.6	12.3	16.2	
	Electrical machinery, precision equipment	33	-54.9	19.7	92.9	13.0	-19.7	17.9	1.7	25.2	45.3	
	Pharmaceuticals, healthcare	22	-9.0	-4.9	14.0	-15.3	39.2	-8.9	-4.3	6.3	1.9	
	Food products	16	5.2	9.1	13.0	4.9	-0.5	5.1	7.2	4.4	5.7	
	Household goods	13	1.9	0.1	20.3	11.0	3.3	2.9	5.9	14.6	10.5	
	Trading companies	7	22.6	-15.1	25.9	-20.6	-62.2	213.7	242.7	4.1	6.8	
Sectors	Retailing	22	7.9	-2.5	5.6	-4.8	13.4	-2.9	-2.6	14.9	18.1	
	Services	13	-14.7	16.6	12.8	-2.4	-5.6	-7.9	-7.0	3.5	0.7	
	Software	9	-53.5	8.4	14.9	22.6	-11.4	22.4	24.5	35.0	28.4	
	Media	5	14.5	7.6	10.8	11.0	10.4	-1.7	0.3	-1.1	-1.9	
	Telecommunications	8	6.2	7.2	16.8	6.5	5.6	5.1	7.1	8.2	6.8	
	Construction, engineering	5	49.0	-1.0	25.3	38.4	92.4	12.2	13.3	4.2	3.7	
	Housing, real estate	17	-0.9	20.8	29.5	4.6	11.3	16.4	17.5	7.1	7.4	
	Transportation	25	-18.9	30.9	15.1	10.4	13.3	-8.4	-9.8	6.4	7.6	
	Utilities	13	SL	LI	SP	1,682.0	146.7	-37.1	-38.7	-5.5	-11.6	
	Financials	37	33.7	34.8	29.3	6.5	-8.6	-1.3	-2.8	-0.1	3.5	

Note: (1) Figures exclude listed consolidated subsidiaries. Latest estimates as 20 February 2017, previous estimates as of 24 November 2016. (2) LI = losses increasing; LS = losses shrinking; SL = switch to losses; SP = switch to profits.

# Fig. 8: Recurring profits by sector

										except wh	
		No. of	FY11	FY12	FY13	FY14	FY15	FY16E	FY16E	FY17E	FY17E
		COS						Old	New	Old	New
	Russell/Nomura Large Cap	335	23,168	26,521	36,708	38,488	39,670	40,675	41,081	44,529	46,296
	Russell/Nomura Large Cap (ex financials)	298	18,302	20,556	28,994	30,350	32,151	33,232	33,748	37,313	38,864
	Manufacturing	174	11,132	12,917	18,323	19,085	19,524	18,637	18,898	21,634	22,950
Industrial groups	Basic materials	44	3,588	3,101	3,931	3,325	3,177	3,222	3,527	3,868	4,392
	Processing	79	5,052	7,167	11,295	12,834	12,880	11,932	11,815	13,912	14,688
	Nonmanufacturing	161	12,037	13,604	18,385	19,403	20,146	22,038	22,183	22,895	23,346
	Nonmanufacturing (ex financials)	124	7,170	7,639	10,671	11,265	12,627	14,595	14,851	15,679	15,915
	Materials	44	3,588	3,101	3,931	3,325	3,177	3,222	3,527	3,868	4,392
	Machinery, autos	46	3,731	5,480	8,052	9,213	9,835	8,262	8,646	9,240	9,992
	Electronics	33	1,321	1,687	3,243	3,621	3,045	3,670	3,169	4,672	4,697
Broad sectors	Consumer, distribution	93	5,869	5,829	6,841	6,151	6,048	8,421	8,704	9,181	9,481
	Information	22	2,783	3,039	3,645	3,841	4,087	4,220	4,301	4,717	4,725
	Utilities, infrastructure	60	1,010	1,419	3,281	4,198	5,959	5,436	5,402	5,635	5,579
	Financials	37	4,867	5,965	7,714	8,138	7,519	7,443	7,333	7,215	7,432
	Chemicals	36	2,959	2,606	2,851	2,059	2,583	2,727	3,012	3,022	3,429
	Steel, nonferrous metals	8	629	495	1,080	1,266	594	495	515	846	962
	Machinery	24	1,472	1,416	1,855	2,306	2,264	1,842	1,867	2,150	2,250
	Autos	22	2,260	4,064	6,197	6,908	7,571	6,419	6,779	7,089	7,742
	Electrical machinery, precision equipment	33	1,321	1,687	3,243	3,621	3,045	3,670	3,169	4,672	4,697
	Pharmaceuticals, healthcare	22	1,215	1,170	1,314	1,113	1,578	1,417	1,479	1,559	1,554
	Food products	16	938	1,107	1,306	1,341	1,383	1,474	1,472	1,607	1,637
	Household goods	13	338	371	477	471	507	591	605	688	679
	Trading companies	7	1,993	1,706	2,026	1,740	657	2,062	2,253	2,146	2,407
Sectors	Retailing	22	1,071	1,110	1,277	1,087	1,386	1,413	1,418	1,661	1,712
	Services	13	313	364	441	399	538	1,464	1,477	1,519	1,492
	Software	9	148	173	245	324	352	345	351	533	515
	Media	5	239	227	251	271	322	316	323	313	316
	Telecommunications	8	2,396	2,639	3,150	3,246	3,414	3,559	3,627	3,872	3,894
	Construction, engineering	5	123	122	181	212	462	531	536	543	545
	Housing, real estate	17	737	956	1,264	1,363	1,604	1,754	1,771	1,902	1,929
	Transportation	25	1,049	1,406	1,799	1,963	2,267	2,129	2,097	2,250	2,240
	Utilities	13	-898	-1,065	37	660	1,627	1,023	998	941	865
	Financials	37	4,867	5,965	7,714	8,138	7,519	7,443	7,333	7,215	7,432

Note: Figures exclude listed consolidated subsidiaries. Latest estimates as 20 February 2017, previous estimates as of 24 November 2016. Source: Nomura

## Fig. 9: Percentage change in quarterly sales and profits (FY15 Q4-FY16 Q3)

		% у-у															
			Sal	es		C	peratin	g profits	5	R	ecurring	g profit	s	Net profits			
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Russell/Nomura Large Cap	-	-	-	-	-	-	-	-	-23.6	-18.9	-5.6	6.9	-40.0	-20.5	1.4	21.9
	Russell/Nomura Large Cap (ex financials)	-5.3	-6.6	-7.8	-2.6	-16.3	-8.8	-9.9	-2.7	-26.5	-16.7	-9.0	6.9	-51.0	-19.8	-2.9	23.1
ا مان مان	Manufacturing	-5.3	-7.9	-8.9	-3.8	-12.3	-10.6	-17.7	-17.2	-18.4	-21.5	-16.3	-5.0	-11.8	-22.5	-15.5	8.1
Industrial groups	Basic materials	-12.2	-14.4	-12.3	-2.2	-11.1	-28.1	-2.0	36.8	-30.2	-43.4	0.1	68.0	SL	-47.5	12.2	200.8
groupo	Processing	-4.2	-7.1	-9.1	-4.3	-26.0	-13.4	-22.7	-34.1	-29.0	-23.3	-21.1	-22.6	-10.9	-24.8	-19.7	-20.7
	Nonmanufacturing	-	-	-		-	-	-		-28.6	-16.7	4.2	18.6	-69.7	-18.8	17.7	33.8
	Nonmanufacturing (ex financials)	-5.2	-4.9	-6.3	-0.9	-22.8	-6.6	0.2	18.4	-39.6	-10.3	0.5	25.0	SL	-16.1	15.0	44.5
	Basic materials	-12.2	-14.4	-12.3	-2.2	-11.1	-28.1	-2.0	36.8	-30.2	-43.4	0.1	68.0	SL	-47.5	12.2	200.8
	Machinery, autos	-1.4	-6.0	-8.4	-3.1	-11.7	-12.0	-29.0	-21.2	-11.5	-20.5	-24.7	-9.8	-21.6	-26.0	-26.4	-12.9
Dread	Electronics	-8.4	-8.9	-10.1	-6.2	-58.4	-17.7	-7.6	-64.8	-82.1	-31.3	-12.6	-57.0	55.0	-20.9	-1.8	-87.8
Broad sectors	Consumption, distribution	-5.2	-5.1	-7.4	-1.6	-27.1	-1.0	-6.5	21.8	-63.3	-5.7	-2.8	22.1	SL	-8.1	-3.9	50.3
3001013	Information	5.3	2.1	-1.8	-1.2	17.3	17.3	6.3	12.7	18.7	4.6	1.1	32.5	39.5	17.0	65.8	27.1
	Utilities, infrastructure	-6.1	-5.6	-4.7	-1.3	-2.0	-14.2	-2.9	4.5	-2.7	-13.9	-2.9	9.2	-95.9	-26.9	-12.3	39.9
	Financials	-	-	-	-	-	-	-	-	-11.0	-27.5	12.9	6.9	15.6	-23.4	23.4	17.7
	Chemicals	-12.4	-14.5	-12.9	-2.1	22.3	-19.3	8.3	48.4	-2.0	-32.7	9.2	64.6	LS	-31.3	36.7	182.7
	Steel, nonferrous metals	-11.6	-14.2	-10.5	-2.7	-59.1	-65.8	-34.1	-8.3	-75.2	-84.2	-28.9	93.1	SL	-95.9	-30.1	452.3
	Machinery	-4.5	-6.3	-6.6	-3.3	-5.6	-19.6	-35.0	-20.2	-9.3	-39.7	-30.0	0.3	0.0	-34.6	-38.9	0.9
	Automobiles	-0.4	-5.9	-8.9	-3.1	-14.2	-9.8	-27.3	-21.4	-12.4	-15.1	-23.4	-12.6	-28.0	-23.7	-23.3	-16.2
	Electrical machinery, precision equipment	-8.4	-8.9	-10.1	-6.2	-58.4	-17.7	-7.6	-64.8	-82.1	-31.3	-12.6	-57.0	55.0	-20.9	-1.8	-87.8
	Pharmaceuticals, healthcare	4.7	0.4	-4.3	-3.4	SP	42.0	-29.3	-5.5	SP	31.2	-28.6	4.3	34.3	38.4	-19.3	9.7
	Food products	1.1	-2.8	-1.7	-2.9	24.8	2.2	-0.7	11.0	11.6	0.6	-2.4	12.4	7.1	-8.3	-25.6	148.0
	Household goods	-1.8	-2.7	-3.8	-7.6	16.9	4.5	10.5	-14.0	12.1	-5.9	18.0	-8.9	45.3	19.3	29.1	-13.0
Sectors	Trading companies	-14.9	-14.3	-15.2	-1.0	SL	-23.4	10.4	193.3	SL	-23.3	26.3	133.8	SL	-28.5	22.6	282.9
Sectors	Retailing	3.3	1.4	-0.6	2.9	-3.6	5.8	10.0	6.7	-10.3	-0.4	6.3	13.0	-21.4	-7.8	-22.4	20.0
	Services	5.1	0.3	-7.0	-3.9	13.3	-25.9	-18.9	-5.5	20.3	-26.3	-18.4	-4.3	57.0	-31.0	17.0	-4.3
	Software	0.4	1.4	-4.4	0.9	-0.7	21.0	-19.4	28.4	-7.7	-64.5	-0.1	71.9	49.0	-48.3	154.9	103.2
	Media	7.0	5.2	1.3	-7.0	51.0	44.2	-4.8	-2.8	51.1	46.5	-2.3	-7.0	90.9	63.5	-1.6	-8.9
	Telecommunications	5.5	1.8	-1.9	-0.6	16.4	15.8	9.0	12.9	18.5	7.1	1.4	33.1	33.1	19.2	63.3	21.2
	Construction, engineering	-4.6	-2.0	-3.9	-2.7	144.3	44.6	47.8	27.9	130.9	23.7	53.9	33.8	287.2	25.9	67.8	35.0
	Housing, real estate	-1.1	4.1	1.7	8.5	-9.1	11.1	7.6	24.2	-18.9	25.3	7.3	29.2	-30.7	25.3	6.7	28.6
	Transportation	-3.7	-4.8	-6.2	-2.6	-3.4	-11.6	-10.8	1.5	2.9	-14.5	-11.5	5.9	SL	-19.0	-49.4	20.4
	Utilities	-12.4	-13.8	-8.3	-6.9	-19.1	-31.5	-10.6	-36.3	-14.7	-31.9	-11.2	-45.0	SL	-53.4	7.9	162.2
	Financials	-	-	-	-	-	-	-	-	-11.0	-27.5	12.9	6.9	15.6	-23.4	23.4	17.7

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 20 February 2017. (3) Excludes consolidated subsidiaries. (4) LI = losses increasing; LS = losses shrinking; SL = switch to losses; SP = switch to profits.

# Fig. 10: Valuation indicators

			P/E	E P/CF		Р	/B	Div	vidend vi	ROE						
		FY16E	FY17E	FY18E	FY16E	FY17E	FY18E		FY16E		FY17E		FY15			FY18F
		x	X	x	X	X	X	X	X	%	%	%	%	%	%	%
	Russell/Nomura Large Cap	16.7	15.0	13.8	-	-	-	1.45	1.36	1.95	2.10	2.23	7.7	8.3	8.9	9.1
	Russell/Nomura Large Cap (ex loss-making cos)	15.8	14.7	13.5	-	-	-	1.50	1.36	1.97	2.13	2.27	8.8	8.8	9.0	9.1
	Russell/Nomura Large Cap (ex financials)	18.2	15.8	14.3	8.9	8.3	7.8	1.63	1.52	1.89	2.05	2.19	7.9	8.5	9.5	9.8
Industrial groups	Manufacturing	19.8	16.1	14.5	10.2	9.0	8.4	1.66	1.62	1.94	2.13	2.30	8.1	8.3	9.8	10.2
groups	19.0	14.3	12.8	7.7	6.6	6.1	1.22	1.19	1.65	1.85	1.98	3.8	6.3	8.1	8.4	7.2
	18.5	14.4	12.9	9.7	8.3	7.6	1.60	1.54	2.05	2.28	2.50	9.3	8.5	10.4	10.9	10.4
	Nonmanufacturing	14.2	13.9	13.0	-	-	-	1.25	1.14	1.96	2.06	2.15	7.3	8.2	8.2	8.2
	Nonmanufacturing (ex financials)	16.1	15.2	14.1	7.4	7.3	6.9	1.58	1.38	1.81	1.91	2.01	7.6	8.8	8.9	9.1
	Basic materials	19.0	14.3	12.8	7.7	6.6	6.1	1.22	1.19	1.65	1.85	1.98	3.8	6.3	8.1	8.4
	Machinery, autos	14.7	12.6	11.3	8.6	7.6	7.0	1.46	1.41	2.40	2.65	2.92	11.0	9.8	10.9	11.4
Dural	Electronics	31.2	18.4	16.3	12.1	9.5	8.8	1.87	1.81	1.51	1.73	1.88	5.8	6.0	9.6	10.1
Broad sectors	Consumption, distribution	21.2	19.6	18.5	12.6	11.9	11.4	1.97	1.64	1.97	2.06	2.15	6.2	7.9	8.3	8.4
3001013	Information	14.3	15.5	14.1	6.2	6.6	6.2	1.97	1.85	1.76	1.86	2.02	10.8	13.2	11.7	12.0
	Utilities, infrastructure	15.5	14.3	13.1	6.5	6.3	6.0	1.38	1.31	1.56	1.68	1.75	8.9	8.6	9.0	9.2
	Financials	10.8	11.0	10.7	-	-	-	0.81	0.79	2.36	2.47	2.55	7.0	7.4	7.0	6.8
	Chemicals	17.3	14.6	13.0	8.0	7.2	6.6	1.36	1.30	1.80	1.79	1.89	4.0	7.7	8.7	9.1
	Steel, nonferrous metals	29.1	13.6	12.2	6.8	5.2	4.9	0.91	0.90	1.15	2.02	2.30	3.4	3.1	6.5	6.9
	Machinery	22.8	18.8	17.1	12.6	11.2	10.4	1.82	1.80	1.61	1.75	1.87	9.0	8.0	9.3	9.5
	Automobiles	12.5	10.8	9.6	7.4	6.6	6.1	1.33	1.27	2.79	3.10	3.44	11.8	10.4	11.4	12.0
	Electrical machinery, precision equipment	31.2	18.4	16.3	12.1	9.5	8.8	1.87	1.81	1.51	1.73	1.88	5.8	6.0	9.6	10.1
	Pharmaceuticals, healthcare	27.3	27.1	26.1	17.1	17.1	16.9	2.28	2.29	1.94	2.00	2.03	8.6	8.5	8.3	8.3
	Food products	21.3	21.6	20.2	13.2	13.4	12.8	2.61	2.53	1.94	2.17	2.32	10.4	12.0	11.0	11.0
	Household goods	24.3	23.1	21.1	16.0	15.2	14.2	2.86	2.82	1.34	1.36	1.49	10.0	11.8	12.6	12.7
<b>.</b> .	Trading companies	9.4	8.7	8.3	6.0	5.6	5.4	0.96	0.91	2.99	3.19	3.31	0.8	9.9	10.1	9.8
Sectors	Retailing	32.8	22.3	20.1	14.5	12.0	11.1	2.09	2.13	1.54	1.57	1.69	7.7	6.5	9.7	10.1
	Services	25.8	25.0	23.9	14.6	14.2	13.6	2.45	0.99	2.04	2.05	2.10	6.1	3.9	4.0	4.1
	Software	26.1	25.0	22.1	19.1	18.8	17.2	2.98	2.52	1.81	1.94	2.16	7.8	10.0	10.5	11.2
	Media	18.2	18.6	18.2	12.7	12.8	12.5	1.32	1.34	1.51	1.48	1.48	7.4	7.3	6.8	6.4
	Telecommunications	12.6	13.8	12.5	5.0	5.3	5.0	1.92	1.81	1.77	1.88	2.04	11.9	14.8	12.8	13.0
	Construction	9.9	9.8	9.3	8.5	8.4	8.1	1.64	1.38	2.02	2.23	2.33	13.4	14.7	14.2	13.4
	Housing, real estate	15.8	14.5	13.9	11.1	10.4	10.0	1.65	1.58	1.83	1.96	2.06	8.4	10.3	10.6	10.3
	Transportation	18.8	15.1	14.1	7.5	6.8	6.5	1.54	1.48	1.20	1.36	1.40	8.0	8.0	9.5	9.4
	Utilities	12.2	14.4	11.3	2.8	2.9	2.7	0.81	0.77	1.79	1.71	1.76	9.5	6.4	5.2	6.4
	Financials	10.8	11.0	10.7	-	-	-	0.81	0.79	2.36	2.47	2.55	7.0	7.4	7.0	6.8
Russell/Nomura Small Cap		18.4	15.7	15.1	-	-	-	1.30	1.25	1.70	1.77	1.81	6.5	6.9	7.3	7.2
Russell/No	omura Small Cap (ex financials)	19.2	16.1	15.5	10.0	8.6	8.4	1.42	1.37	1.67	1.74	1.77	6.6	7.3	7.9	7.8

Note: Estimates and share prices as of 20 February 2017 close.

# 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

#### **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 <a href="http://www.nomuraholdings.com/report/">http://www.nomuraholdings.com/report/</a>. Please contact the Research Product Management Dept. of Nomura Securities Co., Ltd. for additional information.

#### Online availability of research and conflict-of-interest disclosures

Nomura Group research is available on <u>www.nomuranow.com/research</u>, Bloomberg, Capital IQ, Factset, MarkitHub, Reuters and ThomsonOne. Important disclosures may be read at <u>http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx</u> 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 <u>grpsupport@nomura.com</u> 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; 39% 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; 52% 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

8% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; 7% 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 2016.

\*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:

53% 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.

42% 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.

5% 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: <u>http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx;</u> 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 'Bearish' 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 International plc ('NIplc'), 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; P.T. Nomura Indonesia ('PTNI'), Indonesia; 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 : BSE INB011299030, NSE INB231299034, INF231299034, INE 231299034, MCX: INE261299034; SEBI Registration No. for Merchant Banking : INM000011419; SEBI Registration No. for Research: INH000001014 and NIplc, Madrid Branch ('NIplc, Madrid'). '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, 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 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.

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.

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 and European Economic Area 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 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 'professional clients' (as defined by the Dubai Financial Services Authority) in the United Arab Emirates ('UAE') or a 'Market Counterparty' or 'Business Customers' (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 'professional clients' in the UAE or a 'Market Counterparty' or 'Business Customers' in Qatar . By accepting to receive this document, you represent that you are not located in Saudi Arabia or that you are an 'Authorised Person', an 'Exempt Person' or an 'Institution' in Saudi Arabia or that you are a 'professional client' in the UAE or a 'Market Counterparty' or 'Business Customers' in Qatar and agree to comply with these restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the UAE or Saudi Arabia or Qatar.

<u>Notice to Canadian Investors:</u> This research report is not a personal recommendation and does not take into account the investment objectives, financial situation or particular needs of any particular individual or account. It is made available to you in reliance on NI 31-103, section 8.25. 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 of up to 1.404% on a tax-inclusive basis 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 and at least ¥300,000 is required. With margin transactions, an amount up to roughly 3.3x the margin 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 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 5.4% 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 © 2017 Nomura Securities Co., Ltd. All rights reserved.

Disclosures as of 24-Feb-2017.