

Russell/Nomura Japan Equity Indexes

Global Markets Research
24 April 2020

Equity: Equity Quantitative Research (Index)

FY20 handbook

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This report constitutes the Russell/Nomura Japan Equity Indexes FY20 handbook.

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.

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1. Introduction

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

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- 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 all of Japan's stock exchanges¹⁾
- 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.

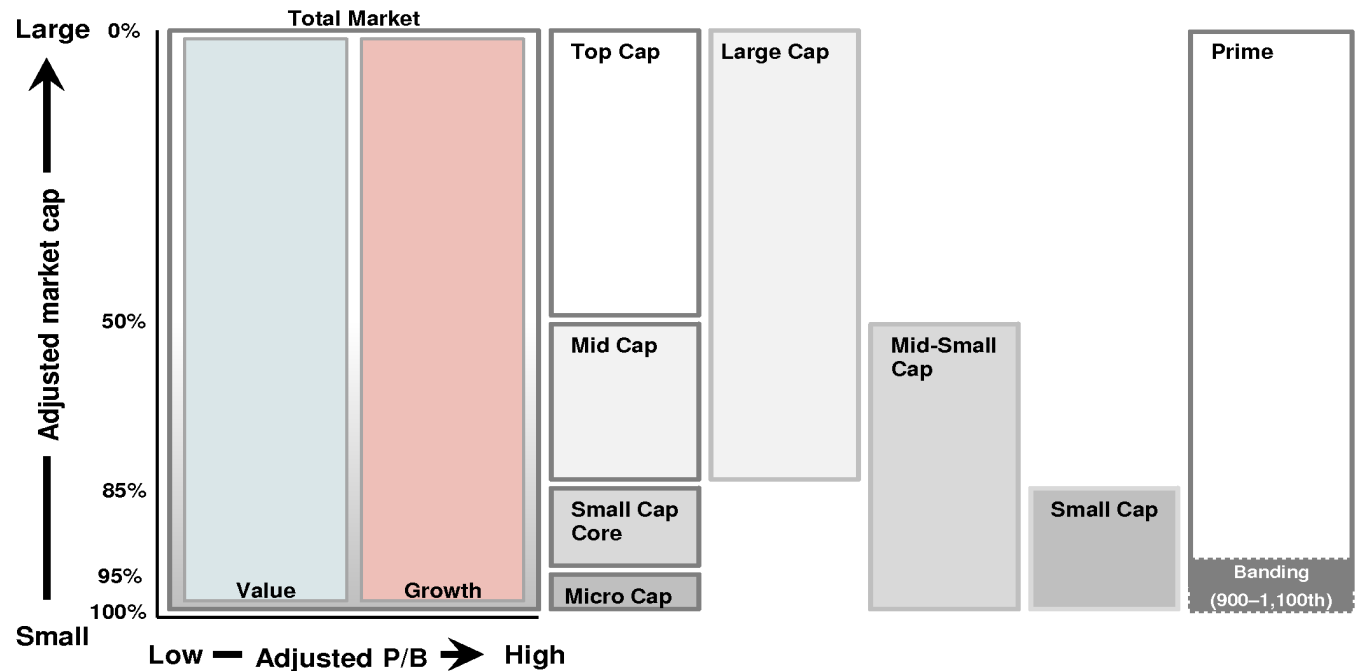
Complete details of rules for the Russell/Nomura Japan Equity Index can be found in the Russell/Nomura Japan Equity Index Rulebook.

1. Tokyo Stock Exchange (1st Section, 2nd Section, Mothers, JASDAQ, TOKYO PRO Market), Nagoya Stock Exchange, Sapporo Securities Exchange, and Fukuoka Stock Exchange

2. Russell/Nomura Japan Equity Indexes

The Russell/Nomura Japan Equity Indexes cover the top 98% of stocks listed on all markets in terms of float-adjusted market value. Size-based and investment style indexes are published separately as subindexes. Stocks are divided between the size-based indexes on the basis of their float-adjusted market capitalization, while the adjusted market capitalization of constituent stocks is divided between Value and Growth investment style indexes on the basis of their adjusted P/B ratios.

Fig. 1: Russell/Nomura Japan Equity Indexes



Source: Nomura

- The Russell/Nomura Total Market Index contains the top 98% of all stocks listed on Japan's stock exchanges in terms of float-adjusted market capitalization
- The Russell/Nomura Large Cap Index contains the top 85% of the Russell/Nomura Total Market Index in terms of float-adjusted market capitalization
- The Russell/Nomura Small Cap Index contains the bottom 15% of the Russell/Nomura Total Market Index in terms of float-adjusted market capitalization
- The Russell/Nomura Top Cap Index contains the top 50% of the Russell/Nomura Total Market Index in terms of float-adjusted market capitalization
- The Russell/Nomura Mid Cap Index contains the middle 35% of the Russell/Nomura Total Market Index in terms of float-adjusted market capitalization
- The Russell/Nomura Mid-Small Cap Index contains the bottom 50% of the Russell/Nomura Total Market Index in terms of float-adjusted market capitalization
- The Russell/Nomura Small Cap Core Index comprises stocks in the Small Cap Index, excluding the Micro Cap Index, and represents the bottom 15% of the Russell/Nomura Total Market Index in terms of float-adjusted market capitalization minus the bottom 5%
- The Russell/Nomura Micro Cap Index contains the bottom 5% of the Russell/Nomura Total Market Index in terms of float-adjusted market capitalization
- The Russell/Nomura Prime Index contains the top 1,000 stocks in the Total Market Index in terms of float-adjusted market capitalization, taking into account "banding" and the "negative list"

3. Russell/Nomura Japan Equity Indexes: composition

3.1. Number of stocks and market capitalization

Figure 2 shows the number and market capitalization of the stocks in the Russell/Nomura Total Market Index and in the total market.

Fig. 2: Russell/Nomura Total Market Index and the total market

	Number of stocks		Market cap (¥trn)		
	Russell/Nomura	Total market	Russell/Nomura (adjusted for stable shareholdings)	Russell/Nomura (not adjusted for stable shareholdings)	Total market (not adjusted for stable shareholdings)
TSE-1	1,478	2,153	420	637	646
Other	122	1,635	5	11	24
Total	1,600	3,788	426	649	670

Note: Market cap data as of 19 Nov 2019. The Russell/Nomura Total Market Index (Russell/Nomura) is as of the Nov 2019 regular reconstitution. Market selection was the TSE, followed by the Nagoya Stock Exchange, the Fukuoka Stock Exchange, and the Sapporo Securities Exchange, in that order.

Source: Nomura

Figure 3 shows the number of stocks for each index as of the date of its regular reconstitution, together with the percentage of total market capitalization, and the market capitalization of the largest and smallest stocks.

Fig. 3: Number of stocks in each index and % of total market capitalization

Index	Number of stocks	% of total market cap	Market cap of largest and smallest stock (¥bn)	
			Largest	Smallest
Total Market	1,600	100.0%	10,902.3	9.7
Value	1,141	49.9%	9,996.5	0.6
Growth	812	50.1%	8,472.1	1.1
Large	350	85.2%	10,902.3	186.6
Large Value	218	40.9%	9,996.5	11.9
Large Growth	225	44.3%	8,472.1	15.9
Top	70	51.5%	10,902.3	1,384.7
Top Value	45	25.0%	9,996.5	252.8
Top Growth	50	26.5%	8,472.1	146.0
Mid	280	33.7%	1,835.4	186.6
Mid Value	173	15.9%	1,361.3	11.9
Mid Growth	175	17.8%	1,835.4	15.9
Mid-Small	1,530	48.5%	1,835.4	9.7
Mid-Small Value	1,096	25.0%	1,361.3	0.6
Mid-Small Growth	762	23.5%	1,835.4	1.1
Small	1,250	14.8%	271.1	9.7
Small Value	923	9.1%	212.2	0.6
Small Growth	587	5.8%	271.1	1.1
Small Core	400	9.7%	271.1	43.8
Small Core Value	288	5.8%	212.2	4.0
Small Core Growth	202	4.0%	271.1	2.9
Micro	850	5.1%	64.3	9.7
Micro Value	635	3.3%	60.9	0.6
Micro Growth	385	1.8%	64.3	1.1
Prime	1,000	97.2%	10,902.3	24.5
Prime Value	708	48.2%	9,996.5	2.3
Prime Growth	528	49.0%	8,472.1	2.3

Note: Based on constituent stocks as of regular reconstitutions in Nov 2019. Market cap data as of 19 Nov 2019. Number of stocks for Value and Growth indexes is the number of stocks for which all or part of the market capitalization is allocated to the Value or Growth indexes. Market cap of stocks in Value and Growth indexes is the market capitalization for these stocks that is allocated to the Value or Growth indexes.

Source: Nomura

3.2. Number of stocks as of date of regular reconstitution

Figure 4 shows the number of stocks in each index as of the date of past regular reconstitutions.

Fig. 4: Number of constituent stocks

(yyymm)	Total		Growth	Large	Small	Prime
	Value					
198101	1,091	656	713	400	691	—
198201	1,091	708	642	400	691	—
198301	1,091	766	592	400	691	—
198401	1,091	738	630	400	691	—
198501	1,104	706	672	400	704	—
198601	1,142	733	762	400	742	—
198701	1,142	833	672	400	742	—
198801	1,199	860	765	400	799	—
198901	1,267	877	778	400	867	—
199001	1,381	827	972	500	881	—
199101	1,561	920	1,118	500	1,061	—
199201	1,585	1,017	1,070	500	1,085	—
199301	1,586	1,092	954	500	1,086	—
199401	1,586	1,118	940	500	1,086	—
199501	1,749	1,111	1,090	500	1,249	—
199601	1,754	1,191	1,006	500	1,254	—
199701	1,854	1,251	1,082	500	1,354	—
199801	1,854	1,575	701	500	1,354	1,000
199901	1,854	1,584	616	500	1,354	1,000
200001	1,854	1,551	656	500	1,354	1,000
200101	1,854	1,544	642	500	1,354	1,000
200202	1,853	1,573	578	300	1,553	1,000
200212	1,500	1,225	527	300	1,200	1,000
200312	1,600	1,233	677	350	1,250	1,000
200412	1,700	1,231	796	400	1,300	1,000
200512	1,799	1,218	915	400	1,399	1,000
200612	1,700	1,241	766	350	1,350	1,000
200712	1,500	1,164	668	300	1,200	1,000
200812	1,400	1,111	519	300	1,100	1,000
200912	1,500	1,139	669	350	1,150	1,000
201012	1,400	1,081	589	300	1,100	1,000
201112	1,400	1,044	719	350	1,050	1,000
201212	1,500	1,159	712	350	1,150	1,000
201312	1,400	1,043	686	300	1,100	1,000
201412	1,500	1,103	806	350	1,150	1,000
201512	1,400	1,000	760	350	1,050	1,000
201611	1,500	1,104	801	350	1,150	1,000
201711	1,600	1,132	919	350	1,250	1,000
201811	1,600	1,108	877	350	1,250	1,000
201911	1,600	1,141	812	350	1,250	1,000

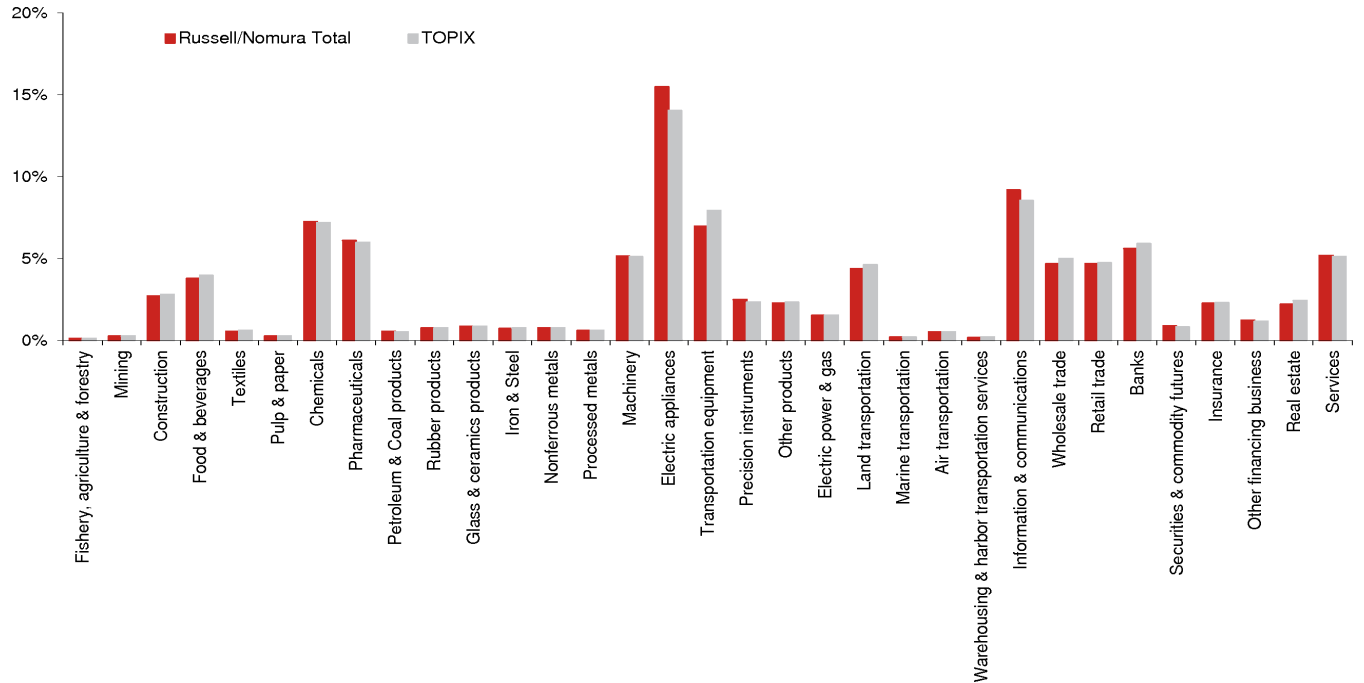
Note: As of regular reconstitution date each year.

Source: Nomura

3.3. Sector allocation

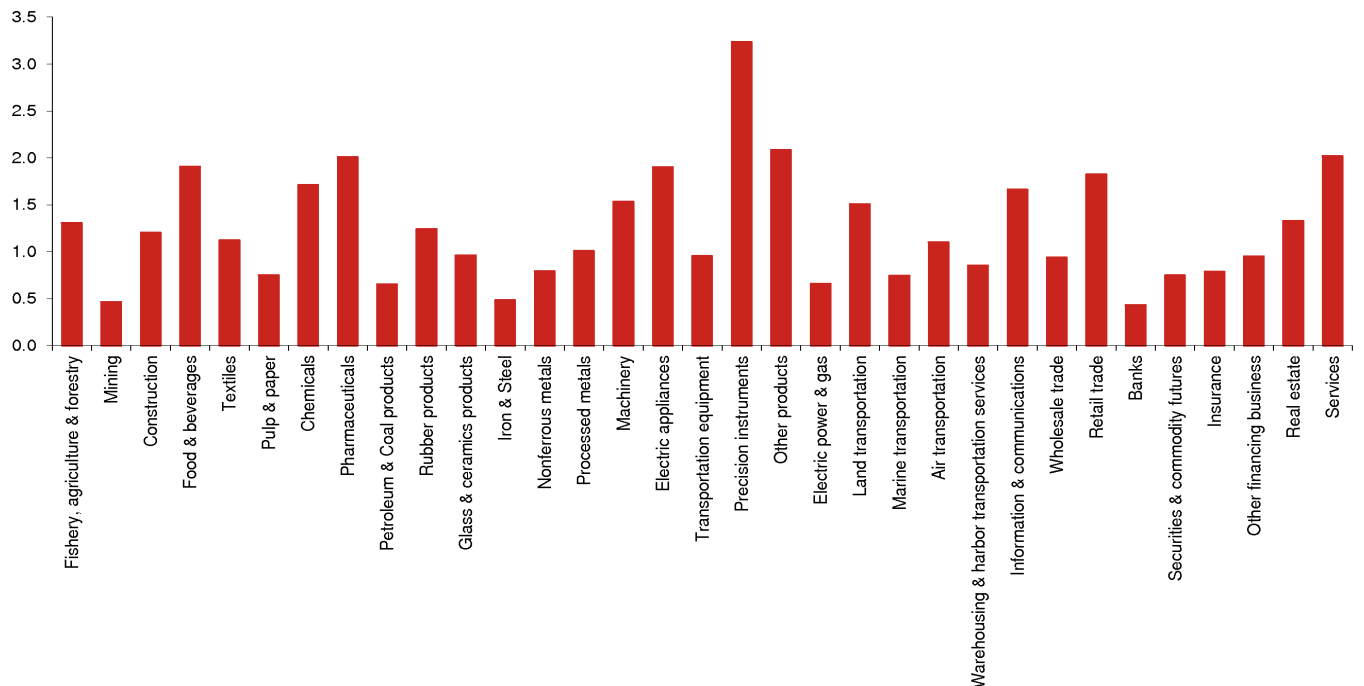
Figure 5 shows the percentage of Russell/Nomura Total Market Index market capitalization in each of 33 sectors. Compared with the TOPIX, the Russell/Nomura Total Market Index is more heavily weighted toward the electric appliances sector and the information & communications sector and less heavily weighted toward the transportation equipment sector.

Fig. 5: Sector allocation of Russell/Nomura Total Market Index and TOPIX



Note: Figures for Russell/Nomura Total Market Index are based on constituent stocks as of the regular reconstitution date in Nov 2019. Market cap data as of 19 Nov 2019. Source: Nomura

Fig. 6: Average adjusted P/B ratio by sector for the Russell/Nomura Total Market Index



Note: Figures for Russell/Nomura Total Market Index are based on constituent stocks as of the regular reconstitution date in Nov 2019. Market cap data as of 15 Oct 2019, the date of determination for the regular reconstitution. Average adjusted P/B = [sum of share prices of stocks included] / (sum of BPS adjusted for unrealized gains/losses of stocks included)]. Source: Nomura

3.4. Top 10 stocks by market capitalization

Figure 7 shows the top 10 stocks by weighting in each index.

Fig. 7: Top 10 stocks by weighting in each index

TOP			TOP Value			TOP Growth		
Rank	TOP		TOP Value			TOP Growth		
1	7203	Toyota Motor	7203	Toyota Motor		6758	Sony	
2	6758	Sony	9984	SoftBank Group		6861	Keyence	
3	9984	SoftBank Group	9432	Nippon Telegraph and Telephone		7974	Nintendo	
4	9432	Nippon Telegraph and Telephone	8306	Mitsubishi UFJ FG		4063	Shin-Etsu Chemical	
5	6861	Keyence	8316	Sumitomo Mitsui FG		6098	Recruit HD	
6	8306	Mitsubishi UFJ FG	7267	Honda Motor		6954	Fanuc	
7	4502	Takeda Pharmaceutical	4502	Takeda Pharmaceutical		4452	Kao	
8	8316	Sumitomo Mitsui FG	8411	Mizuho FG		4568	Daiichi Sankyo	
9	9433	KDDI	6501	Hitachi		9433	KDDI	
10	7267	Honda Motor	8766	Tokio Marine HD		8035	Tokyo Electron	
Mid			Mid Value			Mid Growth		
Rank	Mid		Mid Value			Mid Growth		
1	8630	Sompo HD	8630	Sompo HD		4523	Eisai	
2	4523	Eisai	7011	Mitsubishi Heavy Industries		7832	Bandai Namco HD	
3	7832	Bandai Namco HD	8309	Sumitomo Mitsui Trust HD		9983	Fast Retailing	
4	9983	Fast Retailing	3407	Asahi Kasei		8113	Unicharm	
5	8267	Aeon	5401	Nippon Steel		8267	Aeon	
6	3407	Asahi Kasei	8002	Marubeni		6645	Omron	
7	6762	TDK	9201	Japan Airlines		9843	Nitori HD	
8	1928	Sekisui House	9502	Chubu Electric Power		7309	Shimano	
9	7011	Mitsubishi Heavy Industries	4188	Mitsubishi Chemical HD		9041	Kintetsu Group HD	
10	8113	Unicharm	9202	ANA HD		6857	Advantest	
Small Core			Small Core Value			Small Core Growth		
Rank	Small Core		Small Core Value			Small Core Growth		
1	7164	Zenkoku Hosho	8369	Bank of Kyoto		7164	Zenkoku Hosho	
2	3349	Cosmos Pharmaceutical	8227	Shimamura		3349	Cosmos Pharmaceutical	
3	6753	Sharp	5214	Nippon Electric Glass		6753	Sharp	
4	8369	Bank of Kyoto	1911	Sumitomo Forestry		3360	Ship Healthcare HD	
5	9003	Sotetsu HD	5714	Dowa HD		9003	Sotetsu HD	
6	2206	EZAKI GLICO	8233	Takashimaya		8111	GOLDWIN	
7	2212	Yamazaki Baking	6592	Mabuchi Motor		9706	Japan Airport Terminal	
8	3360	Ship Healthcare HD	4540	Tsumura		2201	Morinaga	
9	8227	Shimamura	5406	Kobe Steel		2175	SMS	
10	8439	Tokyo Century	4272	Nippon Kayaku		7458	Daiichikoshi	
Micro			Micro Value			Micro Growth		
Rank	Micro		Micro Value			Micro Growth		
1	6376	NIKKISO	6376	NIKKISO		3397	Toridoll HD	
2	3397	Toridoll HD	6632	JVCKenwood		9928	Miroku Jyoho Service	
3	4559	Zeria Pharmaceutical	6804	Hosiden		3673	BroadLeaf	
4	6632	JVCKenwood	6810	Maxell HD		7717	V TECHNOLOGY	
5	9928	Miroku Jyoho Service	8098	INABATA		4708	Relia	
6	6804	Hosiden	9882	Yellow Hat		6289	GIKEN	
7	6810	Maxell HD	5186	Nitta		2120	LIFULL	
8	3673	BroadLeaf	8600	TOMONY HD		8200	Ringer Hut	
9	6455	Morita HD	3201	Japan Wool Textile		7447	Nagaileben	
10	8098	INABATA	3569	SEIREN		7839	Shoei	
Prime			Prime Value			Prime Growth		
Rank	Prime		Prime Value			Prime Growth		
1	7203	Toyota Motor	7203	Toyota Motor		6758	Sony	
2	6758	Sony	9984	SoftBank Group		6861	Keyence	
3	9984	SoftBank Group	9432	Nippon Telegraph and Telephone		7974	Nintendo	
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9	9433	KDDI	6501	Hitachi		9433	KDDI	
10	7267	Honda Motor	8766	Tokio Marine HD		8035	Tokyo Electron	

Note: As of 15 Oct 2019, the date of determination for the regular reconstitution. FG = Financial Group, HD = Holdings.

Source: Nomura

4. Performance analysis

4.1. Annual returns

Fig. 8: Annual returns on individual indexes

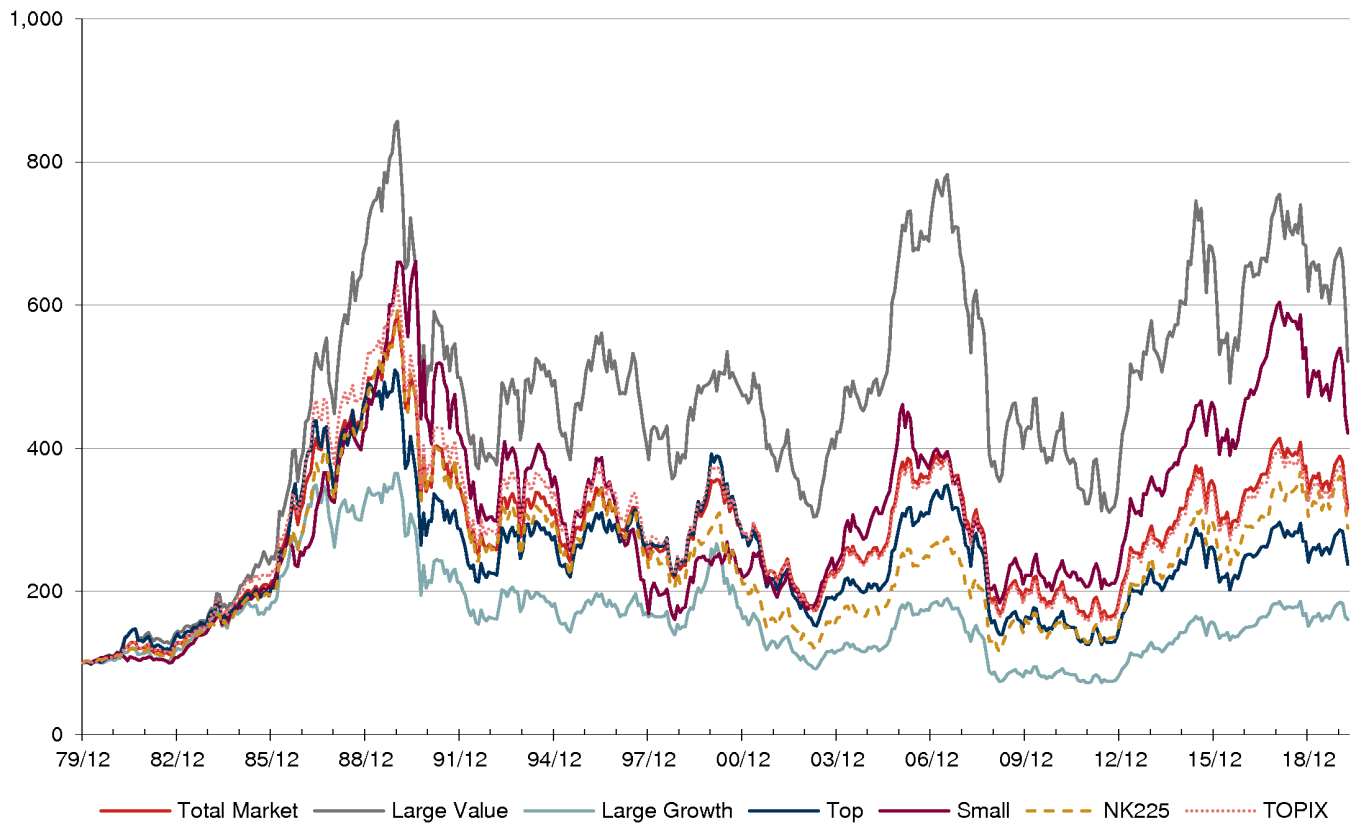
Index	Excluding dividends					Including dividends				
	1 yr	2 yrs	5 yrs	10 yrs	Jan 2001–	1 yr	2 yrs	5 yrs	10 yrs	Jan 2001–
Total Market	-10.94%	-8.56%	-0.45%	5.09%	2.22%	-8.36%	-6.09%	1.78%	7.27%	4.00%
Value	-19.05%	-12.93%	-2.36%	3.54%	2.96%	-15.75%	-9.85%	0.38%	6.06%	4.96%
Growth	-2.94%	-4.08%	1.63%	6.75%	1.54%	-1.06%	-2.22%	3.40%	8.61%	3.10%
Large	-10.19%	-7.68%	-0.65%	4.79%	1.80%	-7.60%	-5.17%	1.63%	7.01%	3.59%
Large Value	-19.76%	-12.53%	-2.79%	2.92%	2.28%	-16.38%	-9.35%	0.02%	5.51%	4.30%
Large Growth	-1.46%	-3.07%	1.52%	6.62%	1.52%	0.41%	-1.21%	3.30%	8.50%	3.09%
Top	-6.91%	-6.03%	-0.51%	4.53%	0.93%	-4.12%	-3.32%	1.98%	6.97%	2.85%
Top Value	-15.20%	-10.63%	-2.41%	2.75%	1.36%	-11.65%	-7.22%	0.67%	5.60%	3.51%
Top Growth	0.89%	-1.51%	1.53%	6.31%	0.93%	2.95%	0.54%	3.50%	8.38%	2.66%
Mid	-15.19%	-10.13%	-0.84%	5.23%	3.16%	-12.89%	-7.95%	1.12%	7.14%	4.77%
Mid Value	-26.84%	-15.52%	-3.39%	3.12%	3.38%	-23.71%	-12.68%	-0.93%	5.36%	5.23%
Mid Growth	-4.94%	-5.36%	1.56%	7.21%	2.56%	-3.34%	-3.77%	3.08%	8.81%	3.92%
Mid-Small	-15.20%	-11.18%	-0.38%	5.69%	3.65%	-12.84%	-8.98%	1.59%	7.63%	5.29%
Mid-Small Value	-22.80%	-15.13%	-2.29%	4.23%	4.28%	-19.75%	-12.37%	0.11%	6.45%	6.14%
Mid-Small Growth	-7.22%	-6.87%	1.83%	7.38%	2.42%	-5.61%	-5.28%	3.34%	8.99%	3.77%
Small	-15.13%	-13.39%	0.93%	6.86%	4.86%	-12.69%	-11.17%	2.97%	8.87%	6.58%
Small Value	-15.58%	-14.57%	-0.25%	6.09%	5.84%	-12.63%	-11.96%	2.09%	8.32%	7.73%
Small Growth	-14.39%	-11.42%	2.89%	8.27%	2.30%	-12.74%	-9.83%	4.46%	9.89%	3.66%
Small Core	-16.00%	-13.43%	0.55%	6.59%	4.44%	-13.50%	-11.20%	2.58%	8.58%	6.13%
Small Core Value	-17.71%	-15.06%	-0.99%	5.40%	5.36%	-14.71%	-12.43%	1.33%	7.58%	7.21%
Small Core Growth	-13.44%	-10.85%	3.02%	8.64%	2.30%	-11.70%	-9.19%	4.63%	10.32%	3.68%
Micro	-13.21%	-13.26%	1.80%	7.49%	5.66%	-10.91%	-11.12%	3.82%	9.51%	7.41%
Micro Value	-11.27%	-13.63%	1.20%	7.41%	6.70%	-8.47%	-11.05%	3.56%	9.69%	8.65%
Micro Growth	-16.52%	-12.63%	2.82%	7.50%	2.38%	-15.06%	-11.22%	4.25%	8.99%	3.66%
Prime	-10.88%	-8.37%	-0.50%	5.04%	2.16%	-8.28%	-5.91%	1.75%	7.23%	3.93%
Prime Value	-19.38%	-12.93%	-2.47%	3.42%	2.85%	-16.06%	-9.82%	0.28%	5.96%	4.85%
Prime Growth	-2.57%	-3.77%	1.64%	6.74%	1.55%	-0.71%	-1.92%	3.41%	8.61%	3.11%
TOPIX	-11.15%	-8.64%	-0.58%	5.02%	1.99%	-8.55%	-6.14%	1.68%	7.22%	3.77%

Note: As of end-Mar 2020. Returns are annualized and based on average monthly yen-based returns for each period.

Source: Nomura

4.2. Performance

Fig. 9: Index performance



Note: Shows monthly index values (yen basis, excluding dividends) in Dec 1979–Mar 2020, rebased so that end-Dec 1979 = 100.

Source: Nomura

Fig. 10: Average returns, standard deviation, and correlation coefficients

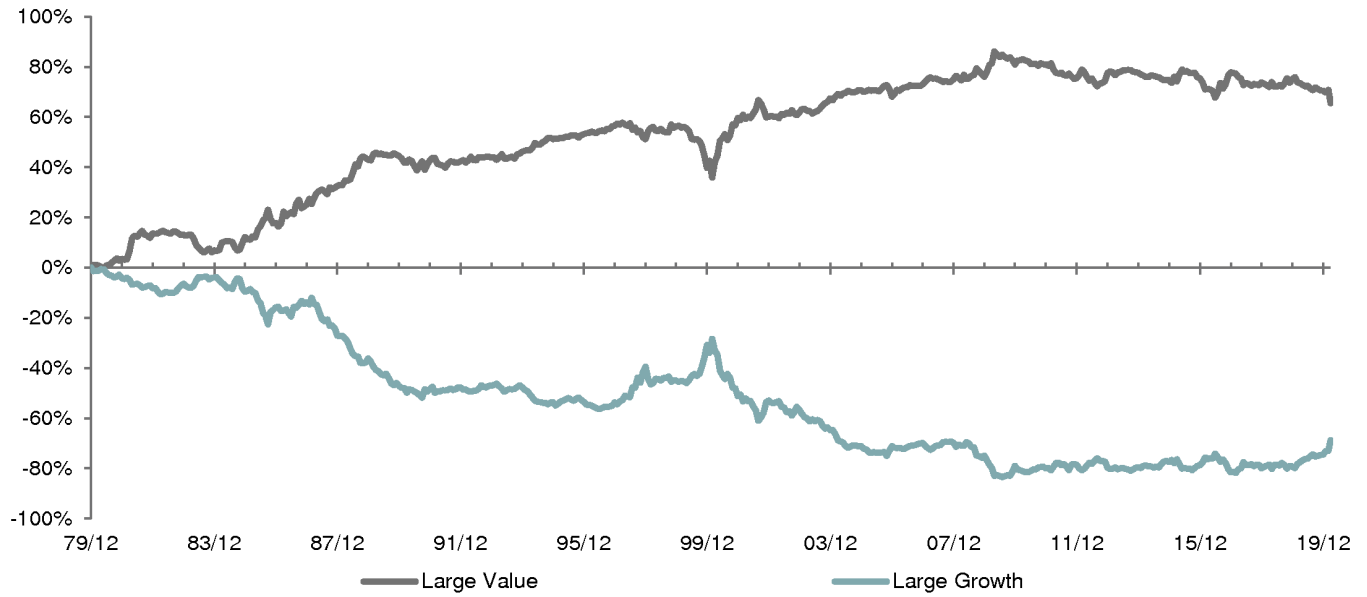
	Average return	Standard deviation	Russell/Nomura	TOPIX	Nikkei 225
Russell/Nomura	4.48%	17.93%	1		
TOPIX	4.45%	18.27%	0.9950	1	
Nikkei 225	4.56%	19.53%	0.9619	0.9608	1

Note: Russell/Nomura is Russell/Nomura Total Market Index. Based on monthly returns (yen basis, excluding dividends) in Jan 1980–Mar 2020. Average return and standard deviation data are annualized.

Source: Nomura

4.3. Relative performance of style indexes

Fig. 11: Cumulative excess returns on value and growth indexes



Note: Shows cumulative excess monthly returns (including dividends) on each index versus the Russell/Nomura Total Market Index, Jan 1980–Mar 2020.

Source: Nomura

Fig. 12: Cumulative excess returns on size-based indexes

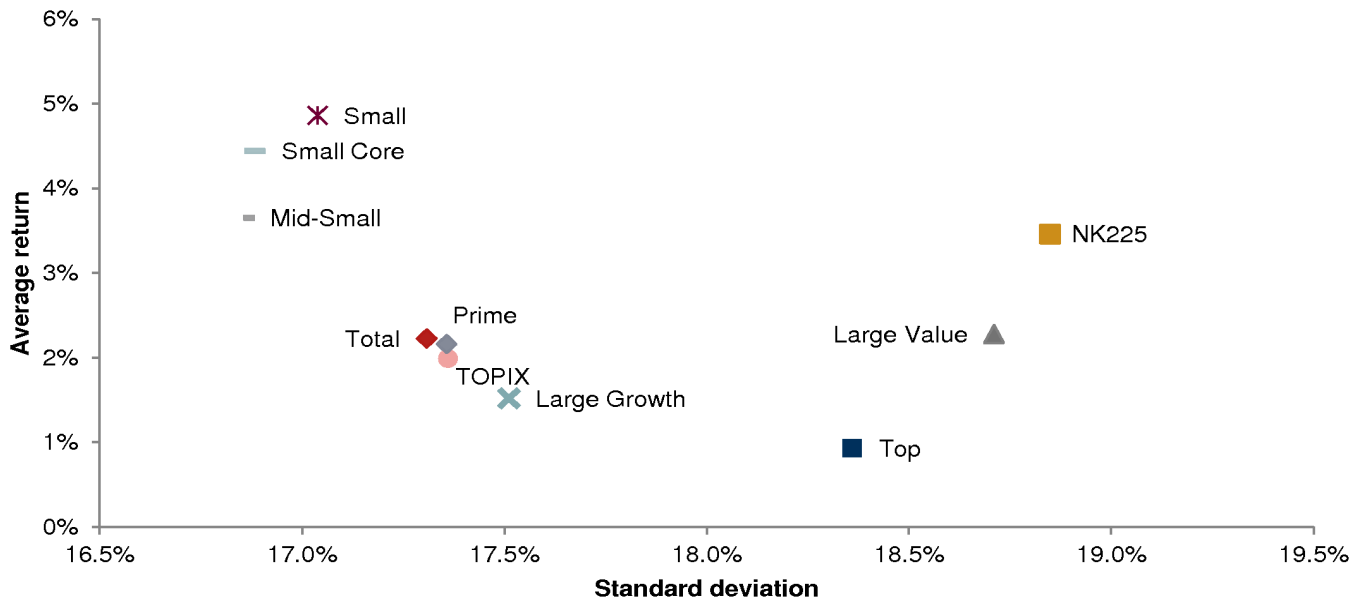


Note: Shows cumulative excess monthly returns (including dividends) on each index versus the Russell/Nomura Total Market Index, Jan 1980–Mar 2020.

Source: Nomura

4.4. Risk-return characteristics of individual indexes

Fig. 13: Average return and standard deviation of individual indexes

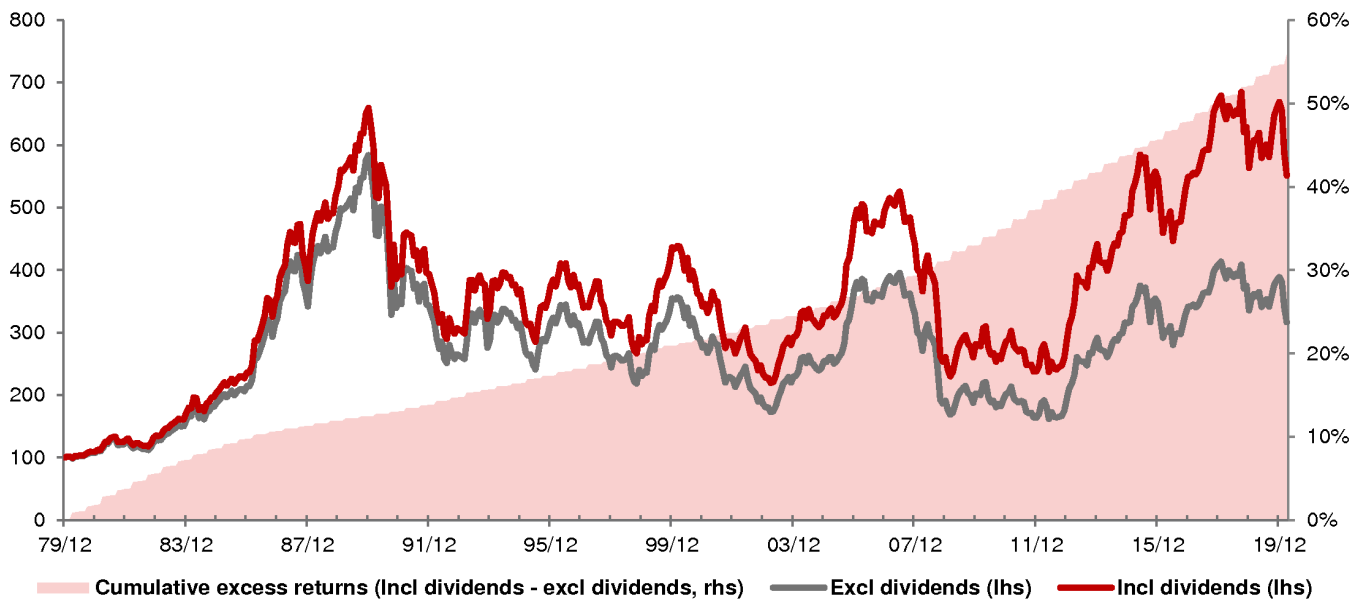


Note: Shows average returns and standard deviation on annualized basis, calculated from monthly returns (excluding dividends) in Jan 2001–Mar 2020.

Source: Nomura

4.5. Impact of dividends

Fig. 14: Impact of dividends on performance of Russell/Nomura Total Market Index



Note: Shows monthly values of Russell/Nomura Total Market Index in Dec 1979–Mar 2020, rebased so that end-Dec 1979 = 100. Cumulative excess returns are the sum of index returns (including dividends) in excess of index returns (excluding dividends).

Source: Nomura

5. Index investability

5.1. Turnover ratios as of regular reconstitutions

Figure 15 shows turnover ratios as of the date of regular reconstitutions.

Fig. 15: Turnover ratios at time of regular reconstitutions

Date (yyyymm)	Total	Value		Growth	Large	Small	Prime
198101	2.4%	11.2%	12.9%	3.5%	13.1%	—	
198201	2.1%	15.7%	17.8%	3.1%	12.1%	—	
198301	2.1%	15.2%	15.1%	3.1%	13.5%	—	
198401	2.6%	14.2%	15.6%	4.3%	16.2%	—	
198501	2.9%	16.3%	19.1%	4.1%	17.5%	—	
198601	3.7%	15.6%	16.7%	4.8%	16.2%	—	
198701	2.3%	17.5%	17.7%	3.3%	18.4%	—	
198801	3.5%	12.4%	16.9%	5.1%	16.8%	—	
198901	3.7%	17.1%	22.1%	4.9%	15.8%	—	
199001	3.0%	15.9%	18.2%	7.2%	27.3%	—	
199101	3.4%	19.0%	20.8%	4.6%	20.9%	—	
199201	1.9%	13.1%	13.5%	3.1%	13.6%	—	
199301	1.9%	12.0%	12.8%	3.2%	13.3%	—	
199401	1.5%	11.7%	12.2%	2.6%	12.0%	—	
199501	3.3%	13.6%	17.0%	4.0%	15.4%	—	
199601	2.2%	13.1%	13.6%	2.5%	9.8%	—	
199701	2.2%	18.0%	19.2%	2.3%	10.7%	—	
199801	1.4%	18.4%	14.8%	2.5%	16.6%	1.4%	
199901	3.1%	12.9%	14.2%	4.1%	12.3%	3.0%	
200001	3.4%	31.3%	25.5%	5.4%	31.8%	3.5%	
200101	2.8%	18.6%	21.3%	3.8%	18.3%	2.7%	
200202	2.5%	16.7%	16.2%	7.6%	43.0%	2.4%	
200212	3.3%	15.5%	13.5%	4.7%	15.8%	2.2%	
200312	2.5%	19.6%	20.7%	4.6%	20.2%	2.1%	
200412	3.5%	17.5%	20.9%	4.9%	18.9%	3.4%	
200512	3.2%	21.0%	22.8%	3.8%	15.8%	3.1%	
200612	2.5%	18.6%	17.6%	3.1%	16.4%	2.5%	
200712	1.8%	20.5%	20.8%	3.5%	18.8%	1.7%	
200812	1.6%	29.3%	31.7%	3.8%	17.6%	1.7%	
200912	1.6%	26.8%	26.5%	4.2%	21.6%	1.5%	
201012	1.8%	14.5%	14.6%	3.1%	15.8%	1.8%	
201112	1.6%	16.2%	15.7%	4.6%	20.6%	1.5%	
201212	1.9%	13.2%	11.7%	2.7%	11.9%	1.7%	
201312	1.6%	16.1%	16.5%	3.2%	20.1%	1.7%	
201412	1.7%	11.9%	11.7%	3.9%	19.0%	1.5%	
201512	1.7%	13.1%	13.3%	2.7%	12.2%	1.7%	
201611	1.3%	14.6%	13.9%	2.3%	12.9%	1.1%	
201711	1.6%	9.2%	9.7%	2.2%	9.9%	1.5%	
201811	1.8%	12.5%	12.2%	2.8%	10.9%	1.8%	
201911	2.0%	11.8%	10.8%	2.7%	9.1%	2.0%	
Average	2.4%	16.3%	16.9%	3.8%	16.8%	2.1%	

Note: Turnover ratio is $[\Sigma | \text{market cap weighting before reconstitution} - \text{market cap weighting after reconstitution} | / 2]$, based on share price on business day before regular reconstitution. The figures thus show one-way turnover for an index fund constructed using the full replication approach. A change in all of the constituent stocks would give a turnover ratio of 100%.

Source: Nomura

5.2. Estimated number of days' impact in the case of regular reconstitutions

Figure 16 shows the estimated number of days' impact in the case of regular reconstitutions for passive funds that track each index using the full replication approach. The higher the turnover ratio on the date of the regular reconstitution, and the greater the number of stocks with low liquidity that are added, the greater the number of days' impact.

Fig. 16: No. of days' impact in case of regular reconstitutions

Index	No. of days of impact Maximum (days)	Turnover ratio (one-way)	Index market cap (¥trn)	Number of stocks				
				Before	After	Change	Out	In
Total Market	1	2.0%	426	1,590	1,600	10	80	90
Value	2	11.8%	213	1,102	1,141	39	76	115
Growth	2	10.8%	213	874	812	-62	162	100
Large	1	2.7%	362	350	350	0	17	17
Large Value	1	12.7%	174	223	218	-5	26	21
Large Growth	1	11.4%	189	231	225	-6	32	26
Top	1	5.1%	219	71	70	-1	5	4
Top Value	1	14.2%	106	47	45	-2	6	4
Top Growth	1	14.0%	113	46	50	4	4	8
Mid	1	8.7%	143	279	280	1	21	22
Mid Value	1	16.3%	68	176	173	-3	26	23
Mid Growth	1	17.0%	76	185	175	-10	35	25
Mid-Small	2	5.4%	206	1,519	1,530	11	84	95
Mid-Small Value	3	13.0%	106	1,055	1,096	41	76	117
Mid-Small Growth	3	14.2%	100	828	762	-66	165	99
Small	5	9.1%	63	1,240	1,250	10	97	107
Small Value	8	13.2%	39	879	923	44	68	112
Small Growth	10	20.8%	25	643	587	-56	150	94
Small Core	15	16.7%	41	446	400	-46	88	42
Small Core Value	18	17.0%	25	319	288	-31	61	30
Small Core Growth	12	27.4%	17	242	202	-40	81	41
Micro	27	20.4%	22	794	850	56	103	159
Micro Value	31	23.7%	14	560	635	75	63	138
Micro Growth	34	29.7%	8	401	385	-16	118	102
Prime	1	2.0%	414	992	1,000	8	29	37
Prime Value	1	11.9%	205	700	708	8	44	52
Prime Growth	1	10.8%	209	548	528	-20	81	61

Note: Based on constituent stocks as of regular reconstitution in Nov 2019. Market cap data as of 19 Nov 2019. We estimated the number of days' impact (maximum) for each index as the number of days required for a scheduled reconstitution of a ¥100bn passive fund that tracks the index using the full replication approach, based on $[\max(|\text{market cap before reconstitution} - \text{market cap after reconstitution}| / \text{average daily trading value})]$. Average daily trading value is the average over the year to 15 Oct 2019, the date of determination for the regular reconstitution of the Russell/Nomura indexes. Turnover ratio is $[\sum |\text{market cap weighting before reconstitution} - \text{market cap weighting after reconstitution}| / 2]$.

Source: Nomura

5.3. Estimating number of days of impact and minimum unit of investment when a fund is established

Figure 17 shows the minimum unit of investment and number of days of impact when passive funds are established that track indices using the full replication approach.

The minimum unit of investment is calculated as shown below. Our calculation assumes at least 50% of shares in a stock trading unit are included, as we round up for incomplete trading units.

$$\text{Minimum unit of investment} = \max_{i=1..n} \left\{ \frac{\text{trading unit } i \times 50\% \times \text{transaction price } i}{\text{index weighting } i} \right\}$$

Here the notation "n" represents the number of stocks in the index and the notation "i" indicates the *i*th stock in the index.

As the minimum unit of investment is calculated by dividing the minimum investment amount for each constituent stock by its weighting, the smaller the minimum investment amount for the constituent stock, or the larger its weighting, the smaller the minimum unit of investment will be. The method for calculating the number of impact days is the same as in 5.2.

Fig. 17: Number of days of impact and minimum unit of investment when a fund is established

Index	No. of days of impact Maximum (days)	Minimum unit of investment (¥bn)	Index market cap (¥trn)	Number of stocks
Total Market	2	21.5	426	1,600
Value	3	31.0	213	1,141
Growth	2	81.9	213	812
Large	1	0.9	362	350
Large Value	1	3.2	174	218
Large Growth	1	2.2	189	225
Top	1	0.2	219	70
Top Value	1	0.2	106	45
Top Growth	1	0.2	113	50
Mid	1	0.4	143	280
Mid Value	1	1.3	68	173
Mid Growth	1	0.9	76	175
Mid-Small	3	10.4	206	1,530
Mid-Small Value	6	15.5	106	1,096
Mid-Small Growth	4	38.5	100	762
Small	10	3.2	63	1,250
Small Value	15	5.6	39	923
Small Growth	15	9.4	25	587
Small Core	3	0.3	41	400
Small Core Value	5	0.9	25	288
Small Core Growth	4	1.1	17	202
Micro	27	1.1	22	850
Micro Value	41	2.1	14	635
Micro Growth	46	2.9	8	385
Prime	1	4.5	414	1,000
Prime Value	1	18.1	205	708
Prime Growth	1	13.0	209	528

Note: Based on constituent stocks as of regular reconstitution in Nov 2019. Market cap data as of 19 Nov 2019. We estimated the number of days of impact (maximum) for each index as the number of days required to set up a new ¥100bn passive fund that tracks the index using the full replication approach, based on [max (market cap / average daily trading value)]. Average daily trading value is the average over the year to 15 Oct 2019, the date of determination for the regular reconstitution of the Russell/Nomura indexes.

Source: Nomura

6. Data publication services

Data for the Russell/Nomura Japan Equity Indexes can be obtained via the following channels.²⁾

Index values are published in the following media:

- Bloomberg (RNJI)
- Jiji (RNSI/12400, RNSIIDV/12400)
- QUICK (NRIJ500–503, 510–517)
- Reuters (FRCNRI01, FRCNRI02, FRCNRI03, FRCNRI04, .JRNP, .JRNS)
- Our website (<http://qr.nomuraholdings.com/en/frcnri/index.html>)

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- Bloomberg (RNPJ <INDEX>)
- Jiji (RNP/NOMURA)
- QUICK (140)

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- QUICK (130)
-

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- More detailed data on index values and individual stock information can be obtained through Nomura Research Institute services e-Aurora and IDS.

For information, contact:

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E-mail: ids-sales@nri.co.jp

Other reports:

Russell/Nomura Japan Equity Indexes rulebook

Russell/Nomura Japan Equity Indexes - Performance summary (monthly reports)

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Appendix A-1

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

carry the risk of losses owing to factors such as foreign exchange rate fluctuations.

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

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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.

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