JPX IR Day 2019



Cash Equities Market and Data Services Strategies

Total smart exchange

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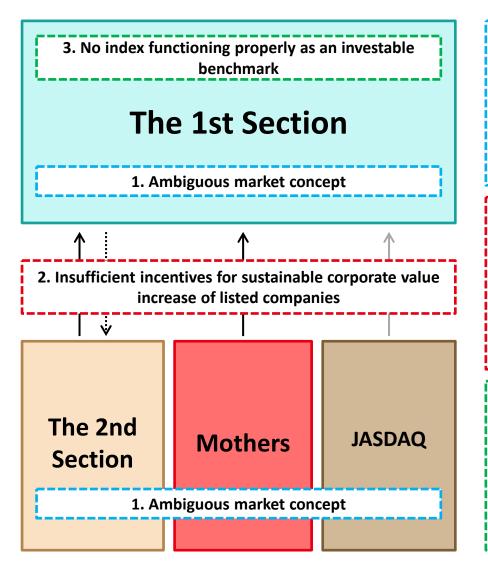
July 3, 2019



Review of Cash Market Structure Current Issues regarding TSE Cash Equity Market Structure

(Published on Mar. 27, 2019)





- 1. Ambiguous market concept impairing convenience of investors & losing attractiveness
- Concerns that the market concepts of the 2nd Section, Mothers, and JASDAQ overlap and are confusing
- ✓ Concerns that the market concept of the 1st Section is unclear, and the growth of TOPIX-linked passive investment is affecting price formation of issues with relatively low liquidity
- 2. Insufficient incentives for listed companies to sustainably grow and increase corporate value
- Concerns that listing criteria for "step-up "to the 1st Section are not functioning sufficiently to incentivize growth
- Concerns of the need to facilitate market participation of institutional investors and of the need to review disclosure frameworks appropriate for start-up companies
- 3. No index functioning properly as an investable index (there is no benchmark index that also represents wide investment opportunities)
- ✓ TOPIX, widely used by investors, is a benchmark of all companies listed on the 1st Section.
- ✓ Few investors use JPX-Nikkei 400 or TOPIX 500 as a benchmark.

• For the Japanese economy to grow sustainably, it is imperative and urgent that listed companies increase their corporate value over the medium to long term and that many start-up companies emerge and succeed

Review of Cash Market Structure Summary of the Review on Current Issues



(Published on Mar. 27, 2019)

• In order to provide various types of companies with opportunities to list, as well as to incentivize sustainable increase of their corporate value after listing, it is appropriate to re-design the market structure and respective criteria with a fresh perspective on what the ideal market structure in the future would look like; dividing the market into multiple segments according to features of companies (listed company's growth stage/life cycle, and investor type) and clarifying the concept of each market segment.

For well-established companies with appropriate business records as investment instruments for all investors, including retail investors

(Market Segment "A")



For companies with high growth potential (Market Segment "B")

(*) Name of each market is to be decided in the future.

(Criteria based on each Market Concept)

- OListing Criteria
- Market Segments "A" & "C": Criteria related to governance structure, liquidity, profits (earnings), market valuation (market cap), etc.
- Market Segment "B": Listing opportunities for companies with high growth potential, including investment-intensive companies; Less stringent criteria than those for Market Segments "A" and "C"
- OExit Criteria
- Criteria that factors market valuation, in addition to business and financial results (performance)

(Mechanism to Complement the Incentives for Sustainable Corporate Value Increase of Listed Companies)

- Standardized criteria for transfers between market segments, new listings, and exits from market segments
- Further consideration on schemes to facilitate market participation of institutional investors
- Optimize disclosure and other frameworks according to companies' growth stage and investor types
- Especially at Market Segment "C", further consideration on the investors' needs for indices or market segments with selection criteria that focuses even more on global institutional investors' perspective, etc.



- * Ensuring appropriate transition process that takes into consideration the impact on companies and investors sufficiently
- •Ensuring opportunities for listed companies to voluntarily apply and choose the market segment on which they intend to list and establishing sufficient transitional period (several years) and/or phased-in changes to the criteria, etc.

Improvements to Effectiveness of CG Code



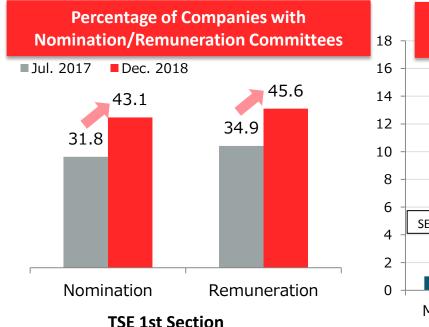
- Revised Corporate Governance Code to advance corporate governance reform (Jun. 1, 2018)
- Fomented environments conducive to dialogue between companies and shareholders with the aim of generating more substantial corporate governance

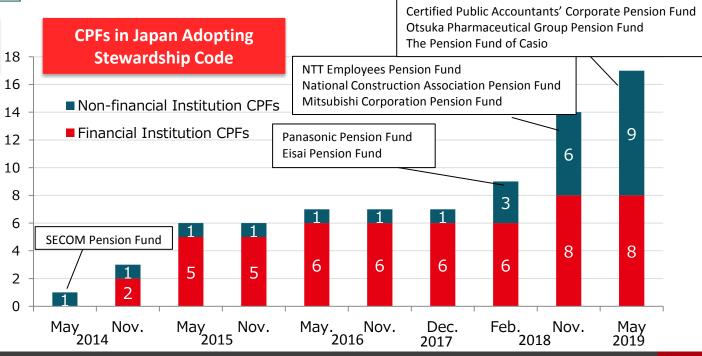
Main Revisions to CG Code

- Management that considers capital costs
- Board Effectiveness
 - Utilizing independent advisory committee
 - Ensuring board member diversity
- Cross-shareholdings
- Roles of Corporate Pension Funds (CPFs) as Asset Owners

Facilitating Dialogue

- Enhancements to contents of information disclosed in CG Reports
- ✓ Requiring listed companies to include information about job responsibilities of counselors, consultants, etc. who were formerly presidents/CEOs (in effect since Jan. 2018)
- ✓ Requiring listed companies to disclose information about the activities of the board and nomination or remuneration committees (for CG Reports submitted after AGMs for the fiscal year that ends in Mar. 2019 or later)





Evolution of ETF MM Incentive Scheme



- Launched ETF Market Making (MM) Incentive Scheme in July 2018
- Enhancements made starting in April 2019 after gauging effectiveness to date and garnering feedback from participants

2018 at launch

- Introduced scheme in July due to high concentration of liquidity on certain ETFs
- Initially designed for retail and smaller institutional investors
- Observed narrower spreads, greater depth, and higher trading value/AUM for some ETFs

Apr. 2019 Version 2.0

- Rising need among institutional investors for deeper liquidity
- Call from investors for even deeper liquidity for Nikkei 225 & TOPIX ETFs and enhancements for ETFs linked to foreign stocks/bonds
- In Version 2.0, narrowed ETF eligibility to provide liquidity that can accommodate demand from institutional investors

Current Status

- Observing higher trading value/AUM for S&P500 ETFs in particular
- Promoting scheme and examining results for future enhancements

ETF MM Incentive Scheme Version 2.0



- Launched Version 2.0 of ETF MM Scheme in April 2019
- Set obligations to accommodate demand from institutional investors and created new quoting obligations and relevant incentives for Star ETFs

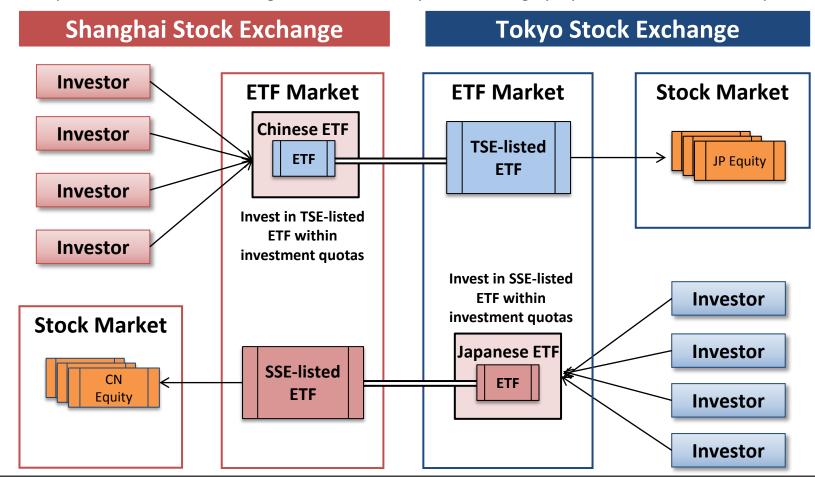
ETFs Eligible for Market Making under Version 2.0

Index	Obligation (Qty./Spread)	Code	Name	Asset Manager	
Nikkei 225	_	1321	Nikkei 225 Exchange Traded Fund	Nomura Asset Management	
TOPIX	1 bil./20bps *In this case, must display quotes for 1 bil. within a Maximum Bid-Ask Spread of 20bps	1305	Daiwa ETF-TOPIX	Daiwa Asset Management	
		1306	TOPIX Exchange Traded Fund	Nomura Asset Management	
		1473	One ETF TOPIX	Asset Management One	
S&P500 (unhedged)		1547	Listed Index Fund US Equity (S&P500)	Nikko Asset Management	
S&P500 (hedged)		2521	Listed Index Fund US Equity (S&P500) Currency Hedge	Nikko Asset Management	
MSCI KOKUSAI (unhedged)	100 mil./20 bps.	2513	NEXT FUNDS International Equity MSCI-KOKUSAI (Unhedged) Exchange Traded Fund	Nomura Asset Management	
MSCI KOKUSAI (hedged)		2514	NEXT FUNDS International Equity MSCI-KOKUSAI (Yen-Hedged) Exchange Traded Fund	Nomura Asset Management	
MSCI Emerging (unhedged)	100 mil./40bps	2520	NEXT FUNDS Emerging Market Equity MSCI-EM Unhedged Exchange Traded Fund	Nomura Asset Management	
U.S. Treasury: 7-10 Year (hedged)	500 mil./20bps	1487	Listed Index Fund US Bond (Currency Hedge)	Nikko Asset Management	
FTSE WGBI (unhedged)		2511	NEXT FUNDS International Bond FTSE World Government Bond Index (ex Japan Unhedged) Exchange Traded Fund	Nomura Asset Management	
FTSE WGBI (hedged)	100 mil./40bps	2512	NEXT FUNDS International Bond FTSE World Government Bond Index (ex Japan Yen-Hedged) Exchange Traded Fund	Nomura Asset Management	
Markit iBoxx USD Liquid Investment Grade Index (hedged)		1496	iShares USD Investment Grade Corporate Bond JPY Hedged ETF	BlackRock Japan	

Japan-China ETF Connectivity



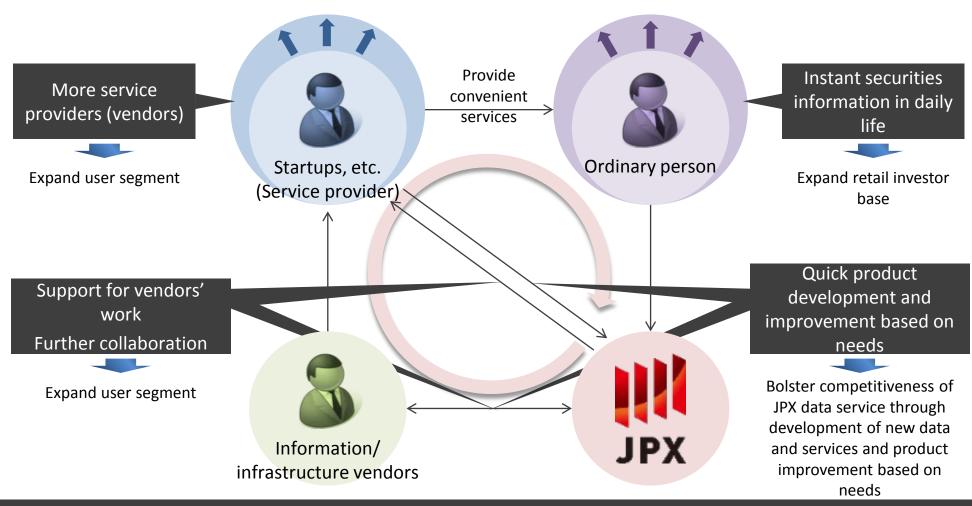
- An ETF feeder scheme for creating an ETF (feeder) that invests in a target ETF whose trust assets are Japanese or Chinese asset classes (*) based on additional QFII/RQFII or QDII quota specially created for this scheme.
- The scheme aims to increase opportunities for Chinese and Japanese investors to invest in Japanese and Chinese asset classes by linking ETFs listed on the two exchange markets.
- (*) An ETF of which at least 90% of AUM is invested in a target ETF listed on the other exchange market based on an agreement between the ETF providers. For the time being, the scheme is only limited to highly liquid ETFs that track stock price indices.



Data Business (1): Vision for Next-Generation Data Business



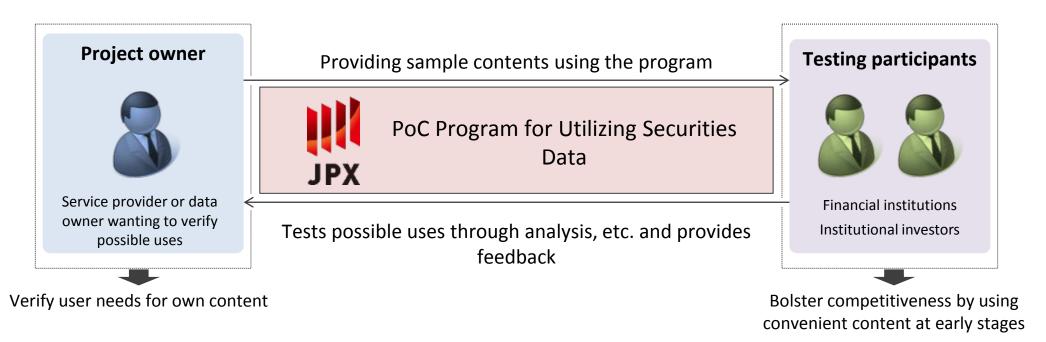
- The business model will shift from selling data to promoting data utilization. TSE aims at building a business ecosystem that includes new user segments in addition to existing stakeholders.
- In the course of building such business ecosystem, TSE will strengthen its data business by enhancing the JPX platform through industry collaboration, expanding user segments, and developing new data and services.



Data Business (2): PoC Program for Utilizing Data



- TSE launched a Proof of Concept (PoC) program in April 2019 to verify the possibilities of using new data and services ("content") with the potential to contribute to the development of the securities market. Such content is collected from within and outside of the company.
- After testing the new content, TSE will launch the program as a commercial service, aiming at contributing to the creation of new investment opportunities and businesses, the efficiency of business operations, and cost reductions.



Supplementary Information

ETF Trading after Launch of MM Incentive Scheme Version 2.0



- Observe an increase in quote quantities which can accommodate demand from institutional investors for foreign ETFs
- Observe an upward trend in trading value and AUM

Listed Index Fund US Equity (S&P500) (Code: 1547)

(as of May 13, 2019 10:00)

Listed Index Fund US Equity (S&P500) Currency Hedge (Code: 2521) (as of May 13, 2019 10:00)

(value)	Sell Orders		Buy Orders	(value)	_	(value)	Sell Orders		Buy Orders	(value)
122,316,700	35,870	3,410						1,010		
123,771,750	36,350	3,405				120,192,080	119,120	1,009		
123,624,000	36,360	3,400				120,435,840	119,480	1,008		
123,747,750	36,450	3,395				110,770,000	110,000	1,007		
255,606,000	75,400	3,390						1,006	119,110	119,824,6
		3,385	40,940	138,581,900				1,005	229,110	230,255,5
		3,380	75,680	255,798,400				1,004		
		3,375	36,370	122,748,750				1,003	10	10,0
		3,370	36,930	124,454,100				1,002		
		3,365	36,800	123,832,000				1,001	10	10,0

ETFs Created under Japan-China ETF Connectivity



■ ETFs listed in Shanghai

Chinese AM	Issue Name	Index	Listing Date	Partner Japanese AM
HuaAn Fund Management	HuaAn / Mitsubishi UFJ Nikkei 225 ETF	Nikkei 225	Jun. 25	Mitsubishi UFJ Kokusai AM
China Southern AM	China Southern AMOne TOPIX ETF (QDII)	TOPIX	Jun. 25	Asset Management One
China AMC	ChinaAMC NOMURA Nikkei 225 Exchange Traded Fund (QDII)	Nikkei 225	Jun. 25	Nomura AM
E Fund Management	E Fund Nikko AM Nikkei 225 ETF	Nikkei 225	Jun. 25	Nikko AM

■ ETFs listed in Tokyo

Japanese AM	Code	Issue Name	Index	Listing Date	Partner Chinese AM
Mitsubishi UFJ Kokusai AM	2530	MAXIS HuaAn China Equity (SSE 180 index) ETF	SSE180	Jun. 25	HuaAn Fund Management
Asset Management One	2553	One ETF Southern China A-Share CSI 500	CSI500	Jun. 25	China Southern AM
Nomura AM	1309	NEXT FUNDS ChinaAMC SSE50 Index Exchange Traded Fund	SSE50	Change in investment policy Effective: May 28	China AMC
Nikko AM	1322	Listed Index Fund China A Share (Panda) E Fund CSI300	CSI300	Change in investment policy Effective: May 29	E Fund Management

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