



Japan International Cooperation Agency

Eligibility for Dual Listing

A securities company's perspective

18 May 2017

Sumio Otsuka, Executive Managing Director
Daiwa Institute of Research

1. Dual Listing on MSE and an Overseas Exchange

- ✓ One of advantages of a dual listing is possibility of raising capital overseas.
- ✓ If your company wants to dual list on MSE and another stock exchange overseas, your company needs support from a securities company, usually an underwriter.
- ✓ An underwriter helps a company to dual list, but there are certain conditions if your company can find an underwriter. The most important factor from an underwriter's point of view is **if your underwriter can be confident in promoting your company to overseas institutional investors.**

1. Dual Listing on MSE and an Overseas Exchange – cont.

✓ Overseas institutional investors always seek opportunity for a good investment. Good investment means that a company where investors can expect a return of higher-than-average.

✓ Overseas institutional investors prefer companies with:

- i) growth potential
- ii) strong balance sheet
- iii) transparency (easy to understand what the company is)
- iv) good corporate governance
- v) sufficient disclosure after listing
- vi) liquidity (higher free float)

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1. Dual Listing on MSE and an Overseas Exchange – cont.

✓ In our view, Japanese institutional investors are expected to be interested in investments in Mongolian companies such as:

- i. Major mining companies with rich reserve that can be comparable with world-class mines
- ii. Top banks
- iii. Large-sized utility players

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1. Dual Listing on MSE and an Overseas Exchange – cont.

✓ Once a company is listed to gain overseas institutional investors, your company needs to meet their requirements:

- i. frequent communications with overseas investors;
- ii. reply to investors' questions on your company;
- iii. assign an English-speaking investor relations officer;
- iv. disclose IR information on your company's website;
- v. provide not only financial statements, but also explanation;
- vi. demonstrate company's policy to be friendly to your shareholders etc.

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2. Dual Listing of Overseas-Listed Companies on MSE

✓ Another potential to MSE is to promote listing of overseas-listed companies with Mongolian assets.

✓ There are around thirty listed companies with Mongolian assets as far as we know. Most of them, however, are incorporated in Australia or Canada, with most of board members being non-Mongolian.

✓ In our view, those Australian or Canadian companies are not motivated to list their shares on MSE, in addition to ASX or TMX.

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2. Dual Listing of Overseas-Listed Companies on MSE - cont.

✓ Mongolian Mining Corp, or MMC, is one of Mongolia-origin companies, listed on HKEx, but the company is incorporated in Bermuda. Two of key considerations that we can think of are:

i) if a Bermuda-incorporated company, in other words a foreign company, is eligible for listing on MSE and;

ii) If MMC wants to list its shares on MSE.

✓ Another candidate is Petro Matad, listed on LSE AIM. Petro Matad is incorporated in Isle of Man.

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Summary

✓ It is quite crucial to find a securities company as your partner when your company wants to be dual listed on MSE and an overseas exchange. Securities companies can help a listing candidate only if they are confident in promoting to investors.

✓ We think that there are opportunities to promote Mongolian companies such as major mining companies, top banks and large-sized utility players.

✓ Once it is listed on an overseas exchange, in addition to MSE, your company needs to be careful about your investors.

✓ We think there is limited opportunity for overseas-listed companies to dual list on MSE.

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What we need for bond market

18th May 2017

Kenichi Tazawa
Managing Director
Global Markets Planning Dept.
Daiwa Securities

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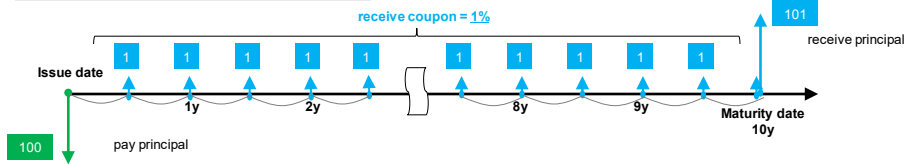
- Summary
- Product Features
- Functions of Securities Firms
- Japanese Government Bond (JGB) Market
- From a Perspective of Investor - Portfolio Construction
- Conclusion
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Product Features

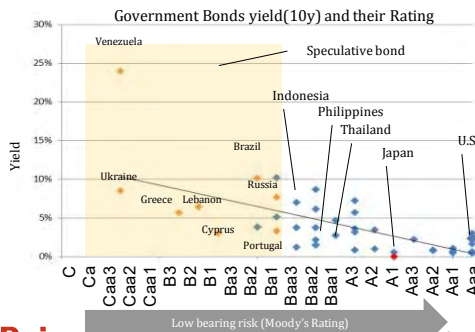
What is a Bond?

Bond's Cash Flow form Investor's side

Example: 10year Bond, Coupon 2%, Semi-annual



Risk & Return of Bond Investment - Rate of return (yield) is a premium for bearing risks



- Yield correlates with bearing risk.
Lower bearing risk ⇒ lower yield
- If rating is below "Baa3", it is speculative-grade bond.
- Negative rate in Japan due to monetary easing.
- Other Asian Countries;

Korea	Aa3	2.2%
Indonesia	Baa3	7.0%
Thailand	Baa1	2.7%
Philippines	Baa2	4.7%

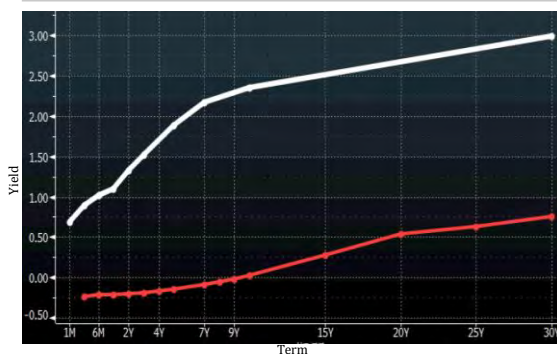
What are Major Differences between Bond and Equity?

* From a perspective of holders	Bond	Equity
When in economic upturn	Negative (Bond price drops) since inflationary expectation rises	Positive (Stock price rises)
Income Gain	Receive interest on terms and conditions decided when issued	Dividend
Evaluation	Issuer's ability to fulfill an obligation (Issuer's credit capability)	Issuer's growth ability
When liquidated	Residual assets are allocated to Bond holders before Equity holders	Allocated to Equity holders after Bond holders
Trade	Over the counter (without exchange) Traded mostly through securities firms	Stock exchange
Management Control	Unable	Able

What is a Yield Curve? – Products with Various Terms

- Yield curve is a line plotting several interest rates across different terms (e.g., 3 month, 1 year, 20 year, etc...) for bonds having equal credit quality.
- Therefore, we see various terms (tenor/period to maturity) for bonds issued by the same name.
- Negative rate in Japan due to BOJ's money-easing since January 2016.

Yield Curve – US Treasury and Japanese Government Bond



Source: Bloomberg

Different terms in JGB

JGB	Term (Tenor)
Super-Long-Term	20y, 30y, 40y, (15y FRN)
Long-Term	10y
Medium-Term	2y, 5y
Short-Term	2m, 3m, 6m, 1y
Inflation-Indexed	10y
JGB for Retail Investors	3y, 5y, 10y FRN

Why do we need to develop the bond market?

1. Prevention of financial crisis

- One of the cause of Asian currency crisis was the double miss-match (currency and term)
Funding (Liability) ⇒ Short term / Foreign Currency
Investment (Asset) ⇒ Long Term / Local Currency
- If the local currency drops or pullouts of money, it bring serious financial crisis
- The local currency bond market is very effective for the prevention of financial crisis

2. Effectively use of the domestic money

- Investment is necessary for the achievement of economic growth
- Bond market is one of the intermediary function for investing money instead of saving
- Good independent funding tool from neighboring countries economy

3. Diversity of financing method

- Indirect financing (loan) is the main financing method in Asia traditionally so far
- It's important to improve direct financing method (equity, bond, etc.) for the funding diversity
- Possible to finance with lower cost

Functions of Securities Firms

Securities Firm can provide liquid Bond Market

Equity Market

- Stock Exchange is an exchange where stock brokers and traders can buy/sell equity.
- Investors can check the stock price at the exchange market and also can trade through the exchange market.



Bond Market

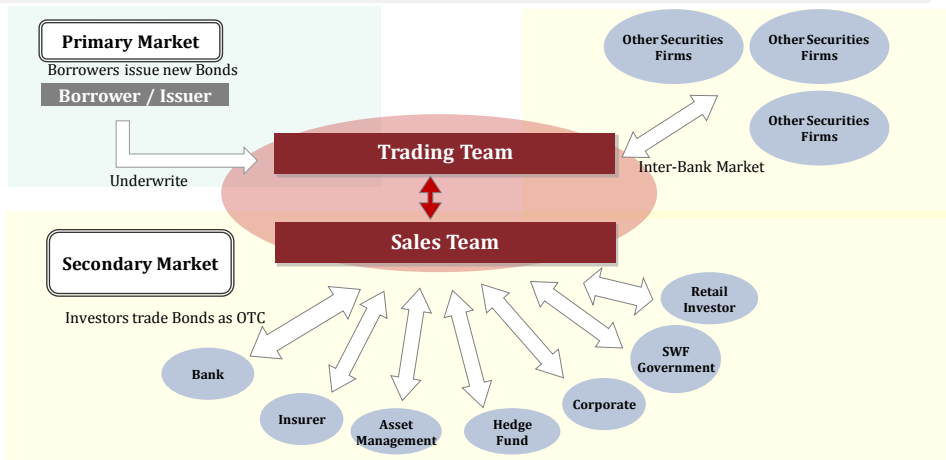
- Bond is traded as OTC (Over the Counter)**, so Securities firms need to be intermediary function.
- Securities Firms always shows the bond price instead of Exchanges. (**Market Maker**)
- If there is no counter, Securities Firms will take positions. (If there is no buyer, Securities Firm will take long position then Seller can sell the bond.)

⇒ **Securities Firms can provide market liquidity and stabilize the OTC market.**



How do we make the market?

- Securities firms act as an important bridge between Primary and Secondary Market
- Trading Team underwrites new issue bond and trades at inter-bank market. They also trades with customers.
- Sales Team contacts with their customers. If their customer has buying/selling interest, the sales ask trading team to show the price.

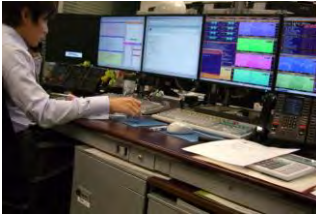


Trading Floor (FICC Division) in Daiwa Securities Headquarters (Tokyo)



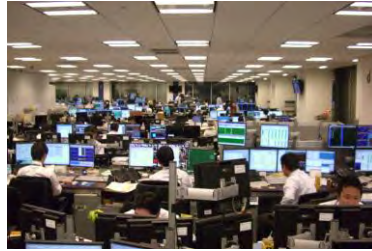
**THIS IS THE
CENTER of FIELD in
THE SECONDARY
MARKET**

Gigantic Trading Floor



**Phone Calls from
All over the World**

**Numerous Screens
capturing Every
Moment of Market**



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Introduction for Trading JGB in Daiwa

Short Movie

Source: Ministry of Finance Japan

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What are important things for liquidity market?

1. Market Making

- Bond trading is OTC, so securities firms have the responsibility to provide market liquidity.
 - showing the offer/bid price to the investors.
- Securities Firm takes the position if necessary. (**Securities Firm is NOT investor**)
 - If a investor wants to sell the bond and no buyers, market maker will take its position.

2. Good communication with Investors

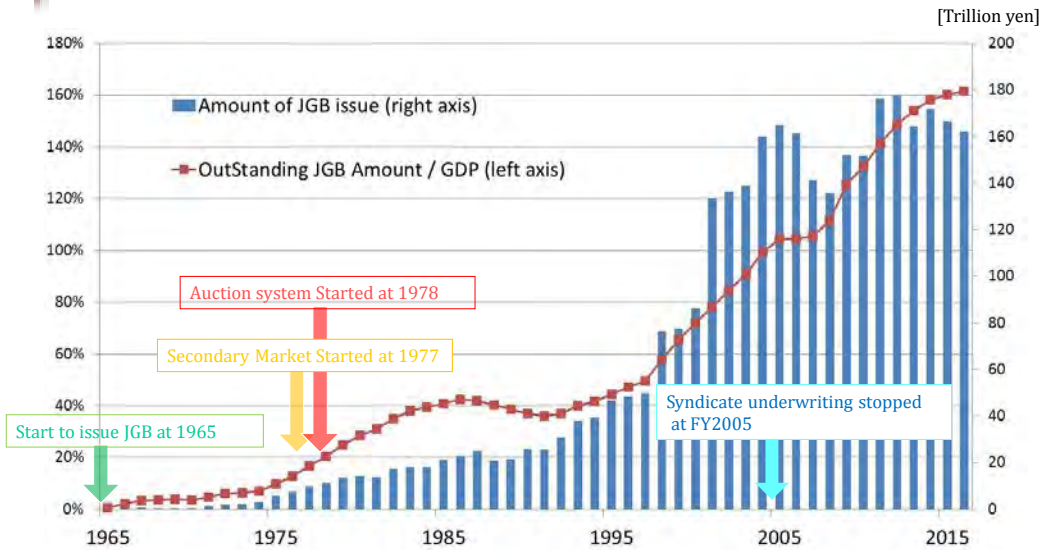
- Need to get the demand from investors
 - this is quite important to be market maker
 - If demand might be strong, we need to underwrite a huge amount of bonds through auction.
- Securities Firm also have the responsibility to promote the bonds for the investors around the world.
 - Securities Firm drives the demand for investors.

3. Good communication with Finance Ministry/ Central Bank

- Need to understand the supply side (Finance Ministry) as well.
- Need to give the investor's demand.
- **Securities firms act as an important bridge between Primary (Finance Ministry) and Secondary Market (Investors) .**

Japanese Government Bond (JGB) Market

Japan Government Bond (JGB) history



Source: Ministry of Finance Japan

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JGB Auction System

- MOF (Ministry of Finance Japan) limits the participants for the JGB auction. (Primary Dealer)

Primary Dealer	21
Securities Firm	19
Domestic	7
Foreign	12
Bank	2

- JGB auction has 2 different systems; Conventional and *Yield Dutch.

	Conventional	Dutch
Coupon	MOF fix the coupon rate in advance	not fixed
Bidding	Bond Price	Yield
Successful Bid Price	Depend on the bidder	*Same
maturity	except for 40y	40y

*Yield Dutch has benefit for illiquid market (especially long term maturity)

*Coupon and Bond Price are calculated with the highest yield in the successful bid. And every successful price is same.

- Successful bid ranking is below. (last latter half FY2016)

Total	Super Long Term		Long Term		Middle Term		T-Bill	
Rank	Name	Rank	Name	Rank	Name	Rank	Name	
1	Mitubishi Securities	1	Nomura	1	Mitubishi Securities	1	Daiwa	
2	Daiwa	2	Mitubishi Securities	2	Daiwa	2	Mizuho	
3	Nomura	3	Daiwa	3	Nomura	3	Mitubishi Securities	
4	BNP	4	BNP	4	SMBC Nikko	4	JP	
5	Mizuho	5	Merrill Lynch	5	GS	5	Nomura	
6	Merrill Lynch							
7	DB							
8	SMBC Nikko							
9	GS							
10	Citi							

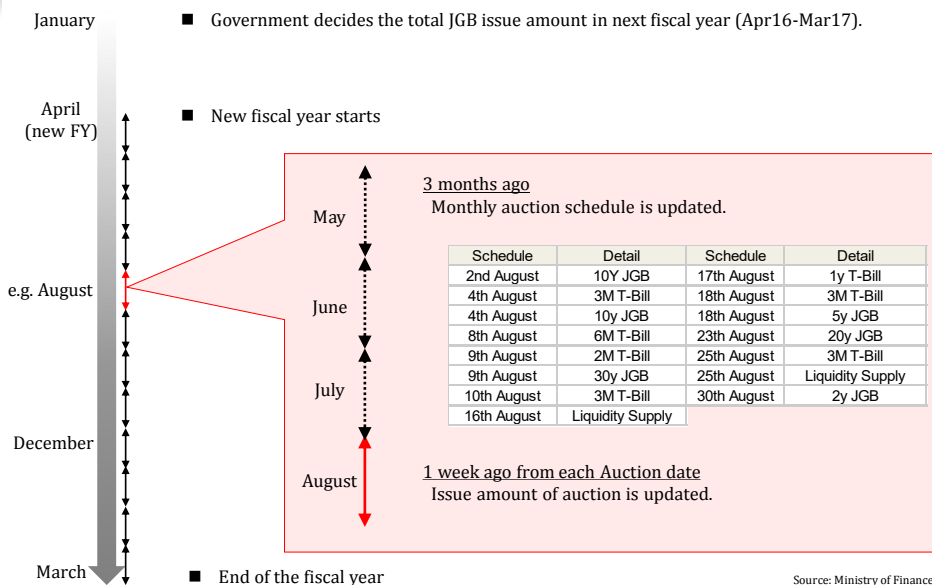
Source: Ministry of Finance Japan

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JGB Auction Schedule



Source: Ministry of Finance Japan

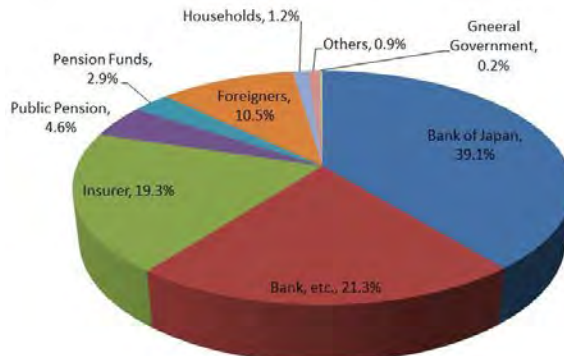
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Breakdown of JGB Holders: Banks are Major Investors

- Banks are major investors (21.3%)
- Foreigners account for a small percentage of JGB (10.5%)



Source: Bank of Japan

* JGB includes FLP Bonds and T-Bills

* "Banks, etc." includes Japan Post Bank, "Securities investment trust" and "Securities Companies"

* "Insurer" includes Japan Post Insurance

Total 1,075 trillion yen (December, 2016)

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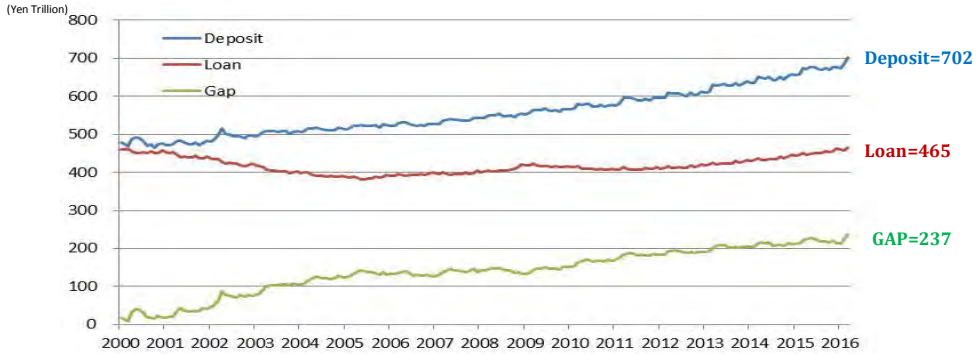
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Major Reason Why Banks are Dominant Players in JGB Market

- Huge gap between deposit and loan in domestic banks
- JGBs are highly liquid and regarded as risk-free (or low-risk) products
- This is one of reasons why banks invest in JGB

Deposit - Loan Gap in Domestic Banks



Source: Bank of Japan
 • Total Deposits/End of Period/Banking Accounts/Domestically Licensed Banks
 • Outstanding Loans and Bills Discounted/End of Period/Banking Accounts/Domestically Licensed Banks

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Ministry of Finance (JGB issuer) Communicates Closely with the Market

- MOF and BOJ listen to voices of market in order to achieve JGB issuance plan and operate market smoothly
- MOF actively promotes JGB to foreign investors through IR (Investor Relations) road-shows or seminars
- Daiwa Securities, one of Primary Dealers, support MOF's IR, arranging meetings with MOF and our clients

MOF's Communication with the market

Meeting	Target
Primary Dealers (PD) Meeting (22 institutions)	Securities firms (including Daiwa) and major banks
JGB Investors Meeting (15 institutions)	Institutional investors (banks, insurance companies etc.)
The Advisory Council on Government Debt Management (16 individuals)	Experts (including Tadao Sakashima, Executive Managing Director in Daiwa) and academics
JGB Top Retailer Meeting (25 institutions)	Securities firms (including Daiwa) and banks
JGB IR (Investor Relations) Road-Show	A variety of overseas investors (e.g., central bank, SWE, asset management, and etc...) all over the world

Source: Ministry of Finance Japan

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From a Perspective of Investor - Portfolio Construction

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How to Select Investment Assets

Product		Pros	Cons	
Domestic Bond	Interest Rate Risk	<ul style="list-style-type: none"> ▶ JGB ▶ Municipal ▶ Government-guaranteed 	<ul style="list-style-type: none"> ▶ Good credit ▶ Good liquidity ▶ Positive correlation between yield and tenor 	<ul style="list-style-type: none"> ▶ Relatively low yield = low return
	Credit Risk	<ul style="list-style-type: none"> ▶ Corporate ▶ Credit Derivative 	<ul style="list-style-type: none"> ▶ Various yield (relatively high rate) ▶ Good balance of risk & return at ordinary times 	<ul style="list-style-type: none"> ▶ Credit risk = Default risk ▶ Possibility of decrease in liquidity
Foreign Bond	Denominated in Yen	<ul style="list-style-type: none"> ▶ Samurai ▶ MTN ▶ Repackage 	<ul style="list-style-type: none"> ▶ Enjoy higher return than that of domestic bond 	<ul style="list-style-type: none"> ▶ Relatively low liquidity
	Denominated in Non-Yen	<ul style="list-style-type: none"> ▶ Foreign Government ▶ Corporate 	<ul style="list-style-type: none"> ▶ Enjoy higher return than that of domestic bond ▶ Get capital gain for bearing FX risk 	<ul style="list-style-type: none"> ▶ Difficult to select names ▶ FX risk
Others	Equity, Alternative	<ul style="list-style-type: none"> ▶ Equity, ETF ▶ Mutual Fund ▶ REIT 	<ul style="list-style-type: none"> ▶ Good dividend yield ▶ Aim at capital gain expecting upside in securities 	<ul style="list-style-type: none"> ▶ Higher volatility/risk than that of bonds

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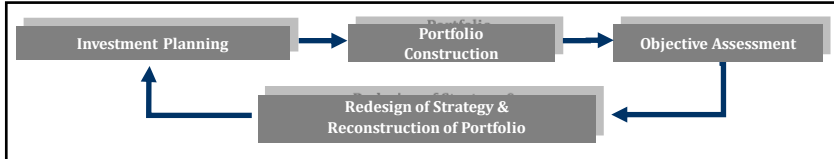
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How to Construct a Portfolio

- A portfolio is a collection of investment assets
- Investors (portfolio managers) make a decision about investment mix and asset allocation

Cycle of Portfolio Construction



Most Important Part - Investment Planning

1. Setting priorities about safety, liquidity, and profitability of bond investment
2. Analyze the internal & external environment, and asset features
3. Design portfolio strategy



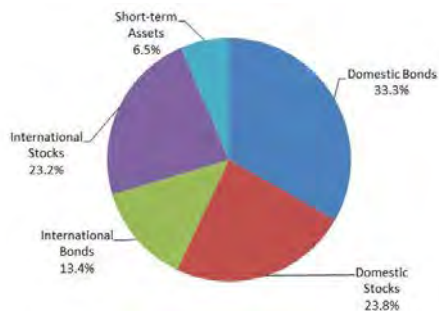
Reference - Portfolio of One of the Most Major Investors in the World

- Government Pension Investment Fund, called GPIF, manages and invests the Reserve Funds of the Employees' Pension Insurance and the National Pension of Japan.
- GPIF has one of the world largest portfolio.
- Total amount of investment assets is JPY 144.8 trillion (USD 1.3 trillion)

Reference - Investment Assets and Portfolio Allocation (GPIF website)

Asset allocation at the end of Dec 2016

	Market Value (¥ trillion)	Allocation
Domestic Bonds	48.2	33.3%
Domestic Stocks	34.4	23.8%
International Bonds	19.4	13.4%
International Stocks	33.5	23.2%
Short-term Assets	9.4	6.5%
Total	144.8	100.0%



Source: GPIF - Investment results for the 3Q of fiscal 2015

Conclusion

Q & A Session

Notification Items Regarding Advertising etc.
(Notification items pursuant to Article 37 of the Financial Instruments and Exchange Law)

If you decide to enter into a business arrangement with our company based on the information described in materials presented along with this cover letter, we ask you to pay close attention to the following items.

- In addition to the purchase price of a financial instrument, our company will collect a trading commission* for each transaction as agreed beforehand with you. Since commissions may be included in the purchase price or may not be charged for certain transactions, we recommend that you confirm the commission for each transaction.

In some cases, our company also may charge a maximum of ¥2 million (including tax) per year as a standing proxy fee for our deposit of your securities, if you are a non-resident.

- For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements.
- There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
- There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
- Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

When making an actual transaction, please be sure to carefully read the materials presented to you prior to the execution of agreement, and to take responsibility for your own decisions regarding the signing of the agreement with our company.

Corporate Name: Daiwa Securities Co. Ltd.
Financial instruments firm: chief of Kanto Local The Finance Bureau (Kin-sho) No.108
Memberships: Japan Securities Dealers Association
The Financial Futures Association of Japan
Japan Investment Advisers Association
Type II Financial Instruments Firms Association

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JCCH's profile (As of April 3, 2017)

(1) Trade Name

Japan Commodity Clearing House Co.,Ltd.

(2) Date of Incorporation December 24 , 2004

On April 25,2005 JCCH got permission from the two competent ministries, which are MAFF(Ministry of Agriculture, Forestry and Fisheries)and METI(Ministry of Economy, Trade and Industry)

(3) Capital 634.35 million Yen

(4) Commencement of Operations May 2 , 2005

(5) Officers

9 Directors 3 Auditors
 Takehide Takahashi CEO, Chairman
 Yuichi Ikemizu Director
 Hiroshi Usami Director
 Takamichi Hamada Director
 Kazumichi Okachi Director
 Yasuaki Okamoto Director
 Toshitsugu Shimizu Director
 Jitsuo Tatara Director
 Etsuji Ohishi Director
 Fuminobu Aruga Auditor
 Jun Masuda Auditor
 Kenichi Sasakura Standing Auditor

(6) Staff 20

(7) Shareholders (shareholding ratio)

The Tokyo Commodity Exchange Inc. 100%

(8) Clearing Margins & Clearing Funds

Clearing Margins 158 Billion Yen
 Clearing Funds 8.8 Billion Yen

(9) Clearing Participants

Individual Clearing Participants 25
 General Clearing Participant 2

(10) Designated commodity market

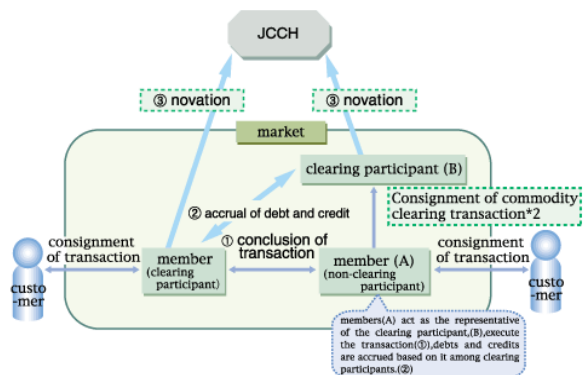
The Tokyo Commodity Exchange Inc.
 Osaka Dojima Commodity Exchange

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Clearing Participants

Clearing participants at JCCH are designated either as an "Individual clearing participant" or as a "General clearing participant" in accordance with each designated commodity market.

- (1) Individual Clearing Participants can accept and clear trades on their own behalf and on behalf of their customers.
- (2) General Clearing Participant can accept and clear trades on their own behalf, on behalf of their customers and non-clearing participants based upon "commodity clearing transaction".



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List of Clearing Participants (As of April 3, 2017)

1	ALPHIX Co.,Ltd.	15	Nissan Century Securities Co.,Ltd.
2	COMTEX LTD.	16	OKACHI & CO.,LTD.
3	Credit Suisse Securities (Japan) Limited.	17	Okato Shoji Co.,Ltd.
4	EVOLUTION JAPAN Co., Ltd.	18	OKAYASU SHOJI CO.,LTD.
5	DAIICHI COMMODITIES CO.,LTD.	19	Osaka Dojima Shoutori Daiko Co.,Ltd.
6	Fujitomi Co.,Ltd.	20	Phillip Securities Japan,Ltd.
7	HOXSIN BUSSAN Co., LTD.	21	SANWARD TRADING INC.
8	Idemitsu Kosan Co., Ltd.	22	Sojitz Corporation
9	ITOCHU ENEX CO.,LTD.	23	Societe Generale Securities Japan Limited
10	ICBC Standard Bank Plc	24	Sumitomo Corporation
11	JX Nippon Oil & Energy Corporation	25	Taiyo Oil Co.,Ltd.
12	Marubeni Corporation	26	YUTAKA SHOJI Co.,Ltd.
13	Mitsubishi Corporation RtM Japan Ltd.	27	Rakuten Securities,Inc.
14	Mitsui & Co.,Ltd.		

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Adopting SPAN® by JCCH

Role of JCCH

JCCH decide the parameter to calculate SAPN® margin requirement

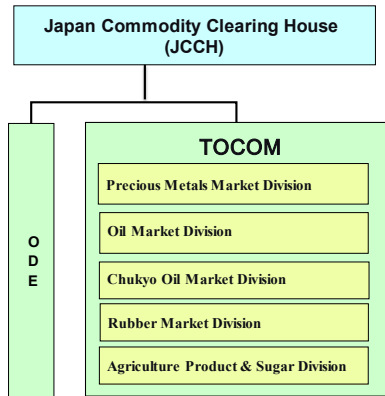
- JCCH calculates SPAN parameter as a value covering 99% of price volatility of 120 days from the basis date of calculation.
- SPAN parameter is reviewed periodically, twice a month and JCCH performs provisional review when the market faces a huge volatility.

Benchmark for JCCH to perform provisional reviews

- When applying SPAN parameter is not able to cover margins due to price volatility, JCCH executes a provisional review. (price-volatility range base)
- As value rises in moderate price-volatility conditions, parameter becomes less volatile.

Risk Waterfall at JCCH

Loss compensation against default



Default Loss Compensation Funds

(Listed in order of appropriation)

1	Defaulting clearing member(CM)'s margin and clearing funds etc. for the defaulting market segment . (total deposited amount in all markets by all CMEs as of April '17: margin =JPY 158 billion, clearing funds =JPY 8.8 billion)	Defaulter's Pay
2	JCCH's Default Funds for Default (JPY 2.3 billion as of April '17)	
3	Funds etc. reserved by each exchange against default [Case of TOCOM] ①TOCOM Security Reserve Fund against Default (JPY 2.1 billion as of April 2017) ②TOCOM Default Insurance (JPY 5 billion as of April 2017)	Third Party's Pay
4	Clearing funds deposited by other CMs for the defaulting market segment .	
5	Other CM's profit for the defaulting market segment .	Survivor's Pay

- JCCH has agreements on line of credit of JPY 30 billion with its designated clearing banks, to meet urgent needs in case of CM default.



Mongolian Capital Market Regulator Group

May 18, 2017

Tokyo Commodity Exchange, Inc.

2

TOCOM GROUP OUTLOOK

1. Corporate History and Listed Products
2. Business Overview
3. Organization

TOCOM Corporate History and Listed Products

3

Overview of Corporate History		Market Division	Listed Products
Nov. 1984	Established after the merger of three exchanges	Precious Metals	Gold, Gold Mini, Silver, Platinum, Platinum Mini, Palladium, Gold Options, Gold Rolling Spot, Platinum Rolling Spot
May 2005	Japan Commodity Clearing House (JCCH) commenced operations	Oil	Dubai Crude Oil, Gasoline, Kerosene, Gas Oil, Cash-settled Gasoline, Cash-settled Kerosene, Cash-settled Gas Oil
Dec. 2008	Demutualized for to for-profit company	Chukyo-Oil	Chukyo-Gasoline, Chukyo-Kerosene
May 2009	3 rd generation system (Nasdaq OMX products) went live	Rubber	RSS3
Oct. 2010	JCCH became a subsidiary of TOCOM (wholly-owned subsidiary in Dec. 2012)	Agricultural and Sugar	Corn, Soybean, Azuki (Red Bean)
Feb. 2013	Launched agricultural and sugar market		
Nov. 2013	Established JAPAN OTC EXCHANGE (JOE) (June 2014 : Launched TOCOM Swap, RIM Swap) (Sept. 2014 : Launched LNG Non-derivable forward)		
Jan. 2015	Granted as Foreign Board of Trade (FBOT) by Commodity Futures Trading Commission (CFTC)		

	TOCOM	JCCH
Representative	Takamichi Hamada, President & CEO	Takehide Takahashi, CEO, Chairman
Establishment	November 1984	December 2004
Capital	1,989 million yen	634 Million yen
Employees	72 (incl. 7 temporary staff)	21 (incl. 2 temporary staff)

2014年3月末日現在

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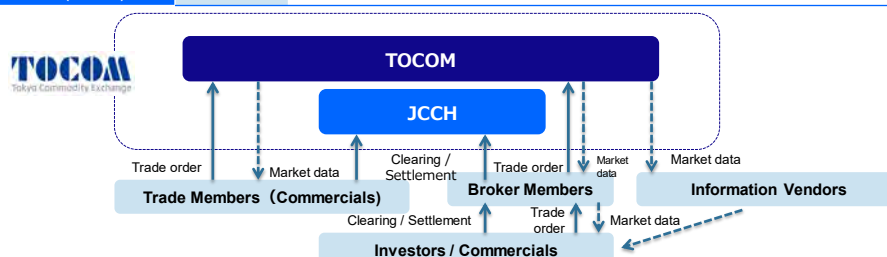
TOCOM
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Business Overview

4

TOCOM Group consists of the Tokyo Commodity Exchange (TOCOM) and its wholly-owned subsidiary Japan Commodity Clearing House (JCCH)

Business Outlook		
Tokyo Commodity Exchange, Inc. (TOCOM)	Exchange operations	<ul style="list-style-type: none"> Open and operate markets necessary for futures and spot transaction of the commodities listed on the markets and commodity indexes based on the Commodity Derivatives Act. Implement appraisal of the quality of the listed commodities, research and study, publication and PR/publicity of commodities, commodity indexes and economy general, dispute mediation, alliance or cooperation with domestic and foreign exchanges and other organizations
Japan Commodity Clearing House, Co. Ltd. (JCCH)	Clearing	<ul style="list-style-type: none"> Provides clearing and settlement services for the transactions of all commodity exchanges in Japan Provides clearing and settlement services for the OTC derivatives transactions.

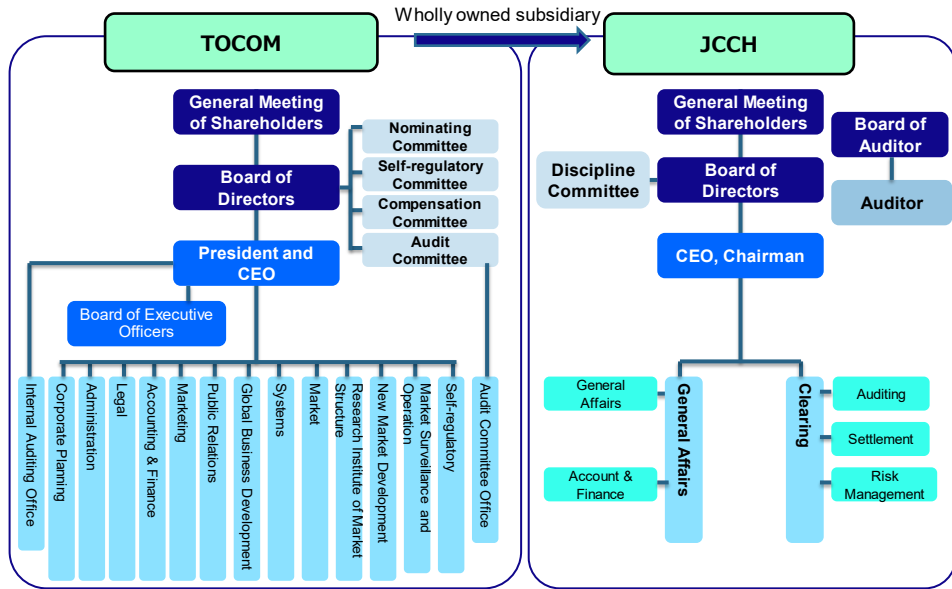


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Organization

5



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6

INTRODUCTION TO TOCOM

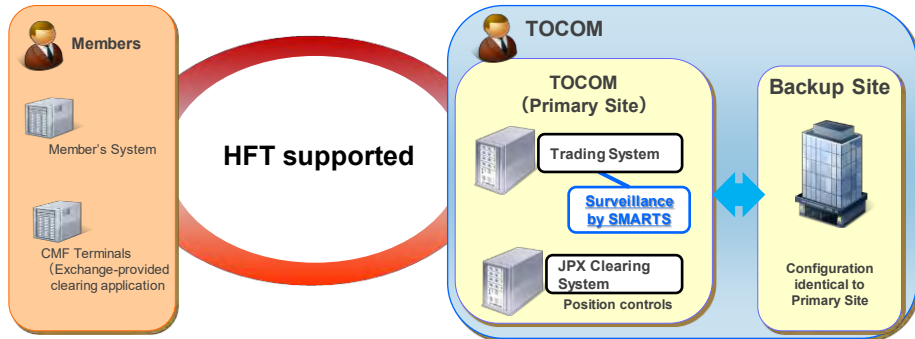
1. Trading System
2. Trading Participants
3. Market Operations
4. Public Relations and Marketing
5. Research and Development
6. Efforts to Open TOCOM Market to Global Market Participants
7. Internal Control

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Trading System Outlook

- ① **World-class processing capacity:** System shared with Osaka Exchange
- ② **User-friendly and high efficient network :** Connectivity available to other market-related facilities
- ③ **Primary and backup sites constructed at a robust data center :** Tier 4-equivalent quality
- ④ **Pre-trade and at-trade risk management by TradeGuard:** Enhanced reliability
- ⑤ **High scalability**
- ⑥ **“Spread Trade” supported to cater energy market participant needs:** Trades of differentials between the prices of crude oil and gasoline, etc. and different contract months
- ⑦ **Smooth execution of block trades :** Members may submit order off floor trades
- ⑧ **Robust market surveillance by SMARTS**



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Membership

Membership is granted following approval by the self-regulatory committee, consisting of 2 external directors and 1 full-time director

TOCOM Membership		
Membership Types	Trade Members	Qualified to execute proprietary transactions (11 firms)
	Broker Members	Qualified to execute proprietary and customer transactions (16 firms)
	Remote Trade Members	Based outside Japan and qualified to execute proprietary transactions (only based on consignment of commodity clearing transactions (4 firms)
	Remote Broker Members	Based outside Japan and qualified to execute proprietary and customer transactions (only based on consignment of commodity clearing transactions (1 firm)
	Others	Other trading participants (58 firms)
Membership Qualifications	<ul style="list-style-type: none"> ① Applicant is eligible to become a Member <ul style="list-style-type: none"> • Commercials that engage in physical trading activities of TOCOM listed commodities • Foreign entities licensed as equivalent to Commodity Derivatives Business Operators (i.e., FCMs) in the country where the office is located • Specified OTC Commodity Derivative Dealers • CTAs, proprietary firms, financial institutions, etc. ② Applicant (company or individual) and its officers do not falling under the disqualifying conditions ③ Applicant has legitimate operational organization ④ Applicant enjoys adequate social credibility and operates stably ⑤ Applicant's business demonstrates continuity without asset deficiency 	
Obligations	<ul style="list-style-type: none"> ■ Submit statutory books, where necessary ■ Submit position report and trade monitoring ■ Submit financial reporting, financial statements, securities or equivalents. 	

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Market Operations (Surveillance and management)

9

TOCOM implements real-time and post-trade surveillance and post-trade to prevent illicit trading and excessive speculation

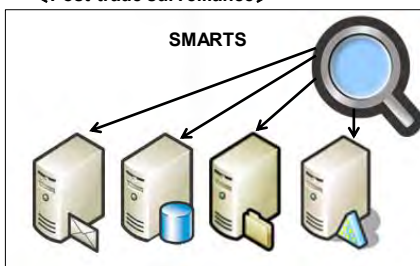
Market surveillance and management

Real-time surveillance	Monitor system's operational status and oversee trade executions, etc., throughout session
Post-trade surveillance (SMARTS)	Investigate the cases SMARTS alerted to detect trades showing unusual trends in comparison to records of the past, or those suspected illicit
Position control (Position/planned delivery reports)	Investigate position reports for excessive speculation and gain insight for the future of the market from the planned delivery report.

<Real-time Surveillance>



<Post-trade surveillance>



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Market Operations (Delivery)

10

TOCOM strengthens linkage between futures and physical markets with assured delivery process

	Precious Metals	Rubber	Oil	
Delivery Type	Basic Delivery	Basic Delivery	Basic Delivery	Delivery at negotiated conditions
Feature	Delivery by warehouse receipt	Delivery by warehouse receipt	※ Seller deliver the deliverable to the arranged delivery point (refinery or oil tank) load to the inland water vessel prepared by the buyer.	
Delivery Day	Last business day of each even month	Last business day of each month	From 1 st to the last business day of the current contract month	
Delivery Method	Seller Submits the warehouse receipt issued by an Exchange-designated warehouse to the Exchange and receive delivery payment	Seller Submits the warehouse receipt issued by an Exchange-designated warehouse to the Exchange and receive delivery payment	Seller and buyer respectively prepare documents and submit to the Exchange	
	Buyer Makes payment to the Exchange and receive the warehouse receipt	Buyer Makes payment to the Exchange and receive the warehouse receipt	Delivery point: Choice of Seller	Delivery point: Agreement between two parties
			Delivery method: Inland water vessel	Delivery method: Inland water vessel, lorry or ITT depending on the agreement between two parties
			Delivery day: Choice of buyer, in principle	Delivery day: Agreement between two parties
Point of Delivery	Exchange-designated warehouses in Tokyo and Kanagawa 8 warehouses operated by the six companies	Exchange-designated warehouses in Tokyo, Kanagawa, Chiba, Saitama, Gunma, Tochigi, Ibaraki, Shizuoka and Aichi 29 warehouses operated by 49 companies	Refineries with shipment facilities by sea in Kanagawa, Tokyo and Chiba or Exchange-designated oil tanks 3 designated tanks, 3 tanks operated by 3 companies <Breakdown> 2 tanks operated by 2 companies in Kanagawa 1 tank operated by a company	The refinery or tank to which two parties agreed to choose
			Divided delivery: Delivery may be made in installments	Payment: Buyer makes payment to the Exchange until one business day in prior to the delivery day. Seller makes receives payment after delivery day

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Public Relations and Marketing

11

TOCOM implements diverse communications and marketing activities to raise public awareness of commodity trades as well as to attract a diverse set of new market participants

	Contents
Market data and other related information dissemination	<ul style="list-style-type: none"> ■ Publicize market data and related information on TOCOM website, etc. ■ Provide market analysis (fundamentals, market structure analysis)
Media relations	<ul style="list-style-type: none"> ■ Disseminate information by monthly press conference and press releases ■ Hold briefings to present new listed commodities, etc. ■ Maintain close relationship with commodity and financial journalists
Public awareness programs	<ul style="list-style-type: none"> ■ Provide educational information including case studies and seminars to commercial players ■ Hold educational events for retail investors ■ Offer voluntary lectures at universities (Kobe University, Chuo University, etc.) ■ Conduct certification exam system for improving expertise of commodity futures salespersons
New market participant recruitment	<ul style="list-style-type: none"> ■ Induce globally-operating financial institutions, online securities brokers and FX brokerages to enter TOCOM market ■ Invite new market intermediaries and general clearing participants in order to diversify participants of TOCOM market ■ Introduce reforms to meet the needs of large investors and commercial players

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Research and Development

12

TOCOM enforces research and development to produce new listed products and enhance market system in order to support hedge-needs of Japan's industry

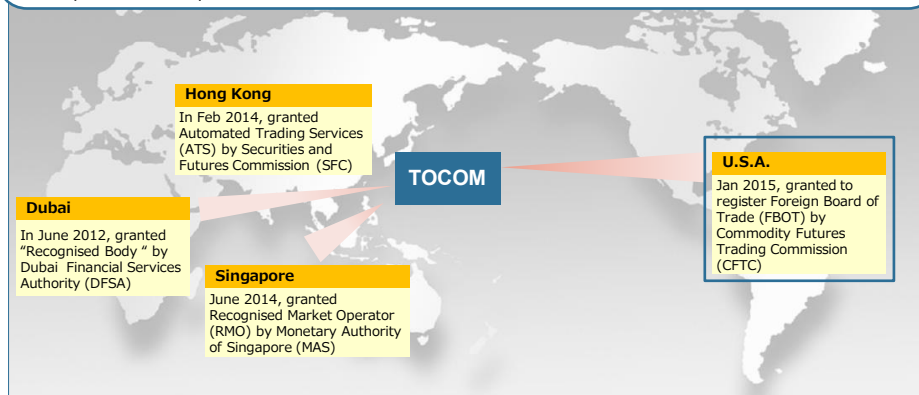
	Contents
Research on commodity trades and related economic issues	<ul style="list-style-type: none"> ■ Independent research <ul style="list-style-type: none"> • Global warming Emission trading • Power market deregulation Market research on electricity, LNG and coal • Gas market deregulation Study for the development of an Asian hub for natural gas trading • IFRS compliance Hedge accounting, hedge taxation, demand for taxation reform ■ Commissioned researches <ul style="list-style-type: none"> • METI Electricity forward curve model, status of energy commodity futures market, emission trade system development, CDM purchase system development • JOGMEC Sophistication of overseas coal development • JCCME Basic study of how futures market and financial factors may impact crude oil price formation
Research on new listed commodities	<ul style="list-style-type: none"> ■ Power market deregulation <ul style="list-style-type: none"> • Consideration of listing electricity and power generation fuels (coal and LNG) • Consideration of OTC trade services to support spot markets for electricity and power generation fuels ■ Other commodities for prospective listing <ul style="list-style-type: none"> • Heavy oil, LPG, banker oil, copper, etc.
Research on commodity futures trades	<ul style="list-style-type: none"> ■ Consideration of listing foreign currency-denominated products ■ Consideration of measures to activate OTC market ■ Consideration of credit risk management

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In efforts to attract global market participants and improve trading opportunities for existing participants, TOCOM has worked with foreign regulatory bodies such as CFTC/U.S.A, MAS/Singapore, SFC/Hong Kong and DFSA/Dubai to acquire their approval to provide DMA

- DMA=Direct Market Access (allowing participants to directly access exchange system without going through third party trading system)
- These regulatory approvals require proven reliability and security of a market. TOCOM is now recognized to possess such qualities



MIDTERM BUSINESS MANAGEMENT (FISCAL 2017-2019)

1. Stabilize business base
2. Develop a comprehensive commodity market
3. Strengthen coordination with other exchanges

1. Stabilize business base

- Expand the product portfolio based on the needs of the market. Focus on launching an electricity market and developing the options products.
- Swiftly implement market rejuvenation measures specific to market divisions and investor groups
- Enhance market reliability and convenience to attract a diverse set of domestic and overseas participants

2. Develop a comprehensive commodity market

Drive forward initiatives to develop a “comprehensive commodity market,” – a one-stop marketplace for commodities futures, options, OTC and physicals on our highly reliable trading and clearing platforms.

3. Strengthen coordination with other exchanges

- (1) Strengthen coordination with JPX
Leverage the J-GATE platform and expand coordination with JPX to increase the competitiveness of Japan’s derivatives market
- (2) Increase coordination with exchanges and regulators
Increase coordination with exchanges and regulators in the U.S., Europe and Asia (including China) to expand cross-border trading and arbitrage to further expand the Exchange’s global presence.

Management Strategy 1: Stabilize business base

1. Grow revenues

- (1) Initiatives to increase volume
 - ① Attract a diverse set of market participants
 - ② Further expand the listed product portfolio
 - ③ Enhance market reliability and convenience, market rules and regulations
- (2) Initiatives to increase open interest size and asset on deposit
 - ① Continue efforts to support commercial hedge transactions
 - ② Encourage financial institutions to organize financial products (ETF and ETN) based on TOCOM commodities and support active trading of such products.
- (3) Strategic planning of the fee schedule

2. Improve trading system operations for the JPX derivative system

- Update and improve trading system operations and specification of J-GATE

3. Improve financial capability

- (1) Continue cost reduction efforts
- (2) Raise fees across TOCOM group

4. Strengthen PR to improve the recognition and perception of commodity futures trading

- (1) Implement measures in conjunction with industry associations
- (2) Utilize TOCOM Square to deliver information in person and online, and support FCM marketing activities

5. Improve market convenience and reliability

- Move forward efforts towards regulatory reforms in accounting and taxation systems to respond hedging needs

6. Address the tightening of risk management regulations

- Respond to the tightening of cross-border risk management regulations

Management Strategy 2: Create a comprehensive commodity market

1. Create an electricity market

- Push forward preparations for the launch of an electricity market

2. Start preparations for LNG and Coal futures listing as well as researching the potential LPG futures

- Prepare for listing LNG and Coal futures used by power generators in support of the new electricity market
- Research the potential listing of other energy products including LPG and banker oil

3. Activate the Japan OTC Exchange (JOE) markets

- Attract new LNG OTC market participants in support of the launch of an upcoming futures contract. Closely coordinate OTC clearing with CME
- Absorb JOE fully into TOCOM as a full subsidiary and establish a flexible management structure

4. Expand physical markets

- Expand physical markets for Gold and Oil by enhancing reliability and convenience of the marketplace

5. Research and develop future business plan

- Research the use of fintech such as blockchain
- Research subsidized premium program policy for options
- Research the potential for listing of long-term contracts (3-year and 5-year) for Crude Oil and other products
- Research the market for imported rice, etc.

Management Strategy 3: Strengthen coordination with other exchanges

1. Strengthen coordination with JPX

Leverage the use of J-GATE and pursue coordination with JPX to increase competitiveness of Japan's derivatives market

2. Strengthen coordination with exchanges and regulators in other countries

- (1) Coordination with CME and SGX
 - Support LNG clearing at JOE and establish an electricity market
 - Discuss collaboration for physical delivery for gold in Hong Kong
 - Promote a joint study on cross-listing LNG derivatives based on LNG related benchmark pricing
- (2) Coordination with exchanges in mainland China
 - Extend work with Chinese exchanges and brokers to promote arbitrage in anticipation of the opening of the Chinese market.
- (3) Information exchange with overseas exchanges and regulators
 - Strengthen communications with exchanges and regulators abroad to support remote membership

Products		Japan			
		Financial products	Agricultural commodities	Industrial commodities	
Regulator	Physical and OTC markets	FSA	MOFA	METI	
	Futures market	FAX	MOFA	METI	FSA
Law		Financial Instruments and Exchange Act	Commodity Derivatives Act		Financial Instruments and Exchange Act
Futures Exchange		Japan Exchange Group, Tokyo Financial Exchange	— (planned comprehensive exchange)	Osaka Dojima Commodity Exchange	— (planned comprehensive exchange)
		TOCOM			

		U.S.A.			
		Securities	Commodities, etc.		
Regulator	Physical market	SEC	USDA	Dept of Commerce	Dept of Energy, etc.
	Futures markets	CFTC (Commodity Futures Trading Commission) *Individual stock futures are regulated jointly by SEC and CFTC			
Law		Commodity Exchange Act			
Futures Exchanges		CME Group (CME, NYMEX, CBOT), NYSE Liffe US, ICE Futures US, etc.			

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<Eligibility of Commodity Derivatives As Listed Products>
 “Basics of Commodity Derivatives”, pp. 52~53 (tentative translation)

- Underlying commodities should have strong trade volume.
- Underlying commodities should be minimally regulated
- Underlying commodities should be non-CITES type
- There is likely high volatility to support hedging needs
- There is likely the presence of speculative investors
- Underlying commodity can be traded with standard specifications to concentrate trading, increase liquidity and reduce costs
- Related information accumulated

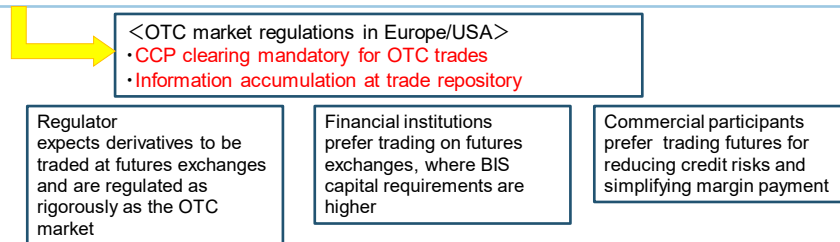
In recent years, eligibilities for prospective listed commodities are not limited to those listed above... =>

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Reference: Recent developments around the derivatives market 21

The Lehman shock showed the risk of a chain reaction of financial institution failures. Authorities in Europe and the U.S.A imposed regulations on OTC trades that matched on-exchange products.



Renewing OTC Clearing (Clearing against OTC trades)
to Block Futures Clearing = Futures market incorporating OTC trades

Notes: In "block futures" trades, off-exchange transactions negotiated between two parties are replaced in futures positions upon request of contracting parties, and they are cleared as futures trades at clearing house. This treatment requires listing of futures contracts that trade in the same specifications as the off-exchange OTC contracts. OTC transactions are more commonly cleared as block futures than treated in OTC clearing overseas. Exchanges in Europe and the U.S.A. list numerous kinds of futures contracts in response.

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Reference: Recent developments around the derivatives market 22

① Emergence of financial derivatives and its expansion

The first financial derivatives were listed in Chicago as currency futures in 1972. This was concurrent with the floatation of international currencies. Currency futures have shorter history than commodities, but volume is rapidly increasing. This has further progressed with the financial deregulation of industrialized countries.

② Electronic trading

As information and communication technology advanced, exchanges transitioned from open outcry to computerized processing. Starting in the early 1990's, the transition was mostly complete by the beginning of the 21st century. This transition required exchanges to make significant investments in systems that changed its business considerably.



The TOCOM rubber market trading floor was abolished, and trading was computerized in 2004.

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Reference: Recent developments around the derivatives market 23

③ Competition between exchanges

As economy globalized and flow of information became uninterrupted around the clock, market prices now fluctuate day or night. In response to such changes, most exchanges adopted night session. As a result, cross border competition between exchanges intensified and consolidation of exchanges advanced.

④ Speeding up trades

The 21st century saw the emergence of high frequency trade (HFQ), which is a computer program trading platform using algorithms to execute a large number of orders based on market conditions in a short period of time. Flash crash, or sudden market crash, named so after the incident in which Dow Industrial Average fell 9%, biggest one-day loss equivalent of 1,000 USD, in a few minutes on May 6, 2010. Futures market plunged following an American investment manager executed large selling orders for stock index futures. It is perceived that algorithm trades including HFT escalated the situation. This prompted regulators to tighten regulations.

⑤ Concept of “comprehensive exchange”

For investor convenience, it is best that all assets can be traded at one exchange. Due in part to increased competition between exchanges, financial exchanges and commodity exchange have been consolidated to form comprehensive marketplace offering a wide variety listed assets in other countries. There have been discussions to follow suit in Japan.

⑥ Exchanges involvement in OTC market (See p.21 for details)

Some regulated exchanges now offer clearing services to hedge credit risk in OTC trades (OTC clearing). This has led to activated OTC market as part of regulated exchange.



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Reference: Recent developments around the derivatives market 24

FSA of Japan now considering regulating HFT (April 20, 2017 Yomiuri Shimbun, Asahi Shimbun)

朝日 16.04.20

超高速取引など議論へ

厚生労働省・金融庁は19日、金融取引の超高速取引に対し、日本の市場・取引所を巡る信頼を確保するよう訴求した。1秒間に1千回前後の取引を繰り返す超高速取引(HFT)の被害を軽減するために、上場取引所(証券取引所)の取引の窓口でも取崩しできるようにすることなどが議論になる。金融庁は5月にも作業部会を開き、年内に報告書をまとめたという。

読売 16.04.20

「超高速取引」規制を検討

金融庁 株乱高下の一因見方も

金融庁は「超高速取引」の急増による市場の急激な変動や、取引の公平性の確保が図れないなどの問題がある。超高速取引の急増は、取引の公平性を損ない、市場の急激な変動や、取引の公平性の確保が図れないなどの問題がある。超高速取引の急増は、取引の公平性を損ない、市場の急激な変動や、取引の公平性の確保が図れないなどの問題がある。

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Thank you for listening!

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<http://www.tocom.or.jp/jp/>

Overview of Japan Exchange Group

19 May 2017



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Establishment of JPX

- The January 2013 merger combined the complementary strengths of TSE and OSE in the cash equity and derivatives markets.
- JPX aims at market expansion and improved efficiency to improve user convenience and raise competitiveness.



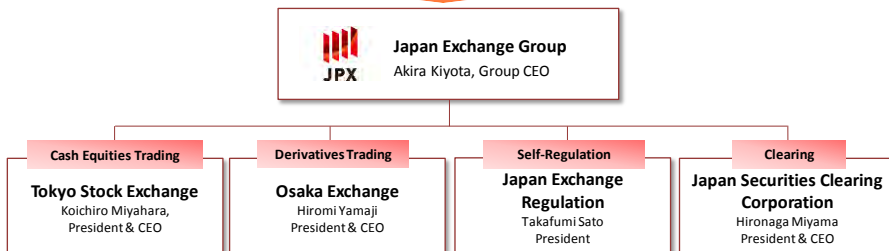
[Tokyo Stock Exchange Group]

- A global leader boasting a comprehensive exchange centered on the TSE 1st Section, TOPIX futures and JGB futures
- Vertically integrated group offering listing, trading, and clearing & settlement services
- Dominant domestic stock market with strong brand image



[Osaka Securities Exchange]

- Largest derivatives market in Japan with leading Nikkei 225 futures and options
- Operates the JASDAQ venture market
- Japan's only listed exchange



- Change in trade/corporate names : Osaka Securities Exchange → Osaka Exchange (March 24, 2014), Tokyo Stock Exchange Regulation → Japan Exchange Regulation (April 1, 2014)

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History of JPX

■ Historical milestones

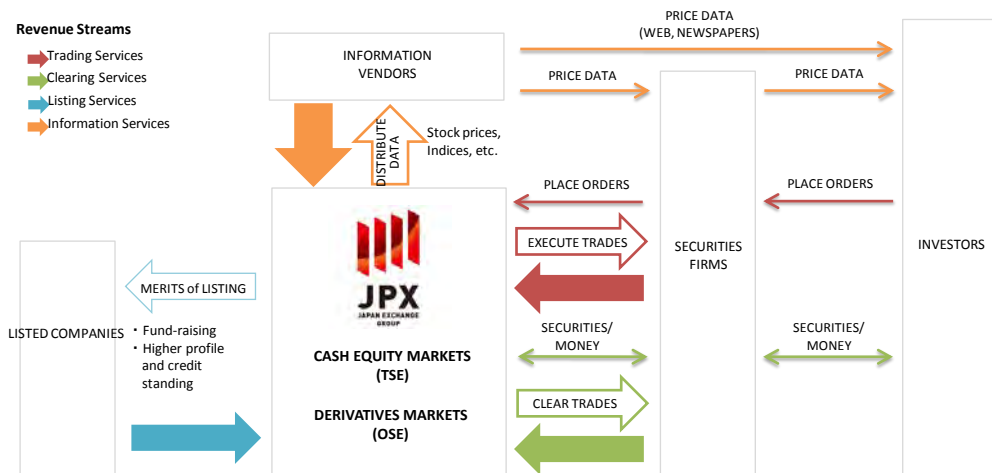
1874	The stock trading ordinance is enacted (the nation's first securities law).
1878	Tokyo Stock Exchange Co. Ltd. is established.
1890's	The Exchange Law is promulgated. (1893) The Commercial Code is promulgated (the basic law of today's Joint Stock Companies Act). (1899)
1922	The Exchange Law is amended. (development of exchange as securities membership organization)
1947	The Securities and Exchange Law is promulgated. / The Securities and Exchange Commission is established.
1949	Tokyo Stock Exchange (TSE) is founded in its present form / JSDA is established.
1951	Margin trading begins
1956	Bond market is established (TSE/OSE)
1968	Regulations for securities companies changes to a license-based system
1973	Foreign Stock Section opens
1980	A new Foreign Exchange Law is enforced and in/out bound securities investment is liberalized, in principle.
1985 – 97	Derivatives trading comes to Japan: JGB futures (1985) / TOPIX futures (1988) / TOPIX options (1989) / Options on JGB futures (1990) / Equity options (1997)
2001	Trading in ETF (Exchange Traded Funds) and REIT (Real Estate Investment Trusts) begins TSE demutualizes and is converted into a stock company.
2004	The ban on banking institutions engaging in securities agent business is lifted.
2006	The Financial Instruments and Exchange Act is enacted.
2013	Japan Exchange Group, Inc.(JPX) is established.

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2



JPX Business Model



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3



Financial Performance of JPX

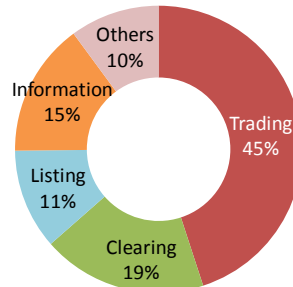
(JPY bil.)

FY 2015 Financial Results	
Operating Revenue	114.7
Operating Expenses	50.9
Operating Income	66.2
Net Income	45.1
ROE	18.2%

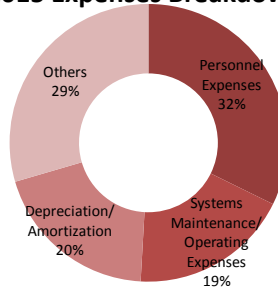
(JPY bil.)

Fast Figures	
Market Capitalization	866
PER	22.5x
PBR	3.4x
Dividend Yield	2.66%

FY2015 Revenue Breakdown



FY2015 Expenses Breakdown

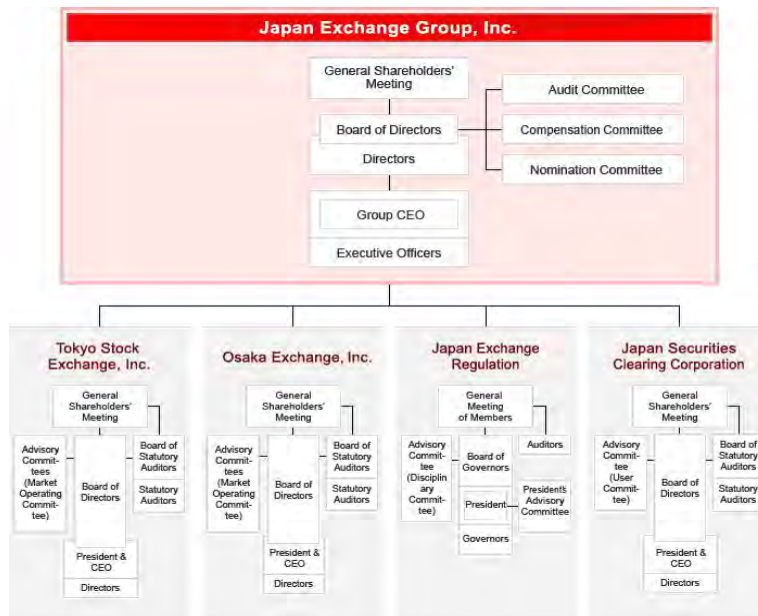


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4



Corporate Governance

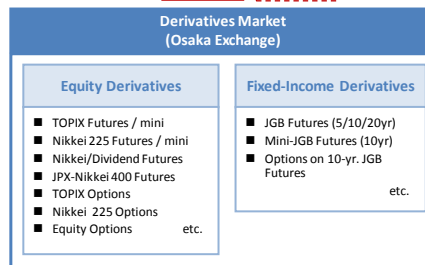
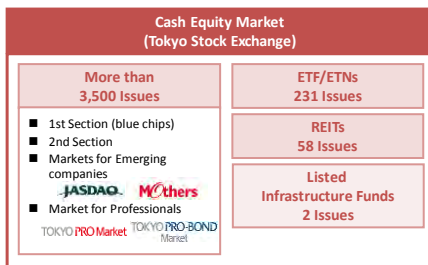
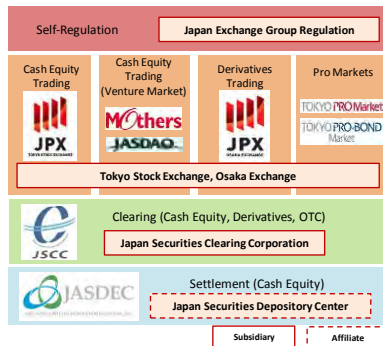


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Markets and Products on JPX



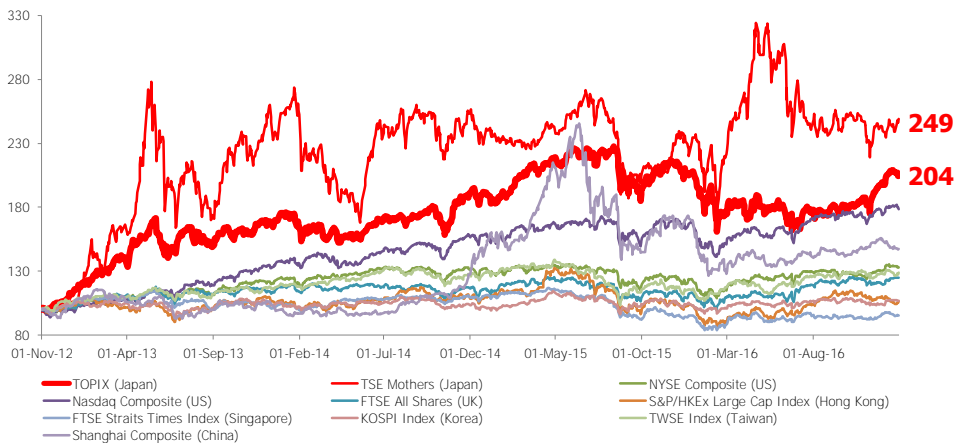
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Stock Market Index Performance

■ TOPIX, which represents the movement of the Tokyo market overall, and Mothers Index are recording a high growth rate as compared with other markets.



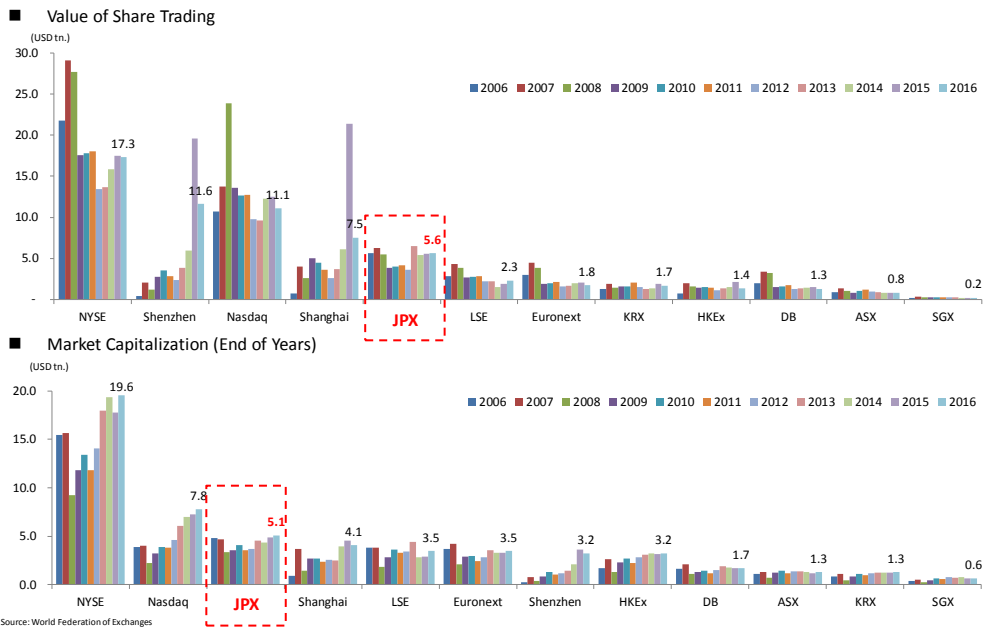
Source: Bloomberg
Note: As of December 30, 2016. Indices rebased to 100 as of November 1, 2012.

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JPX's Position in Relation to Major Exchanges (Cash Equity)



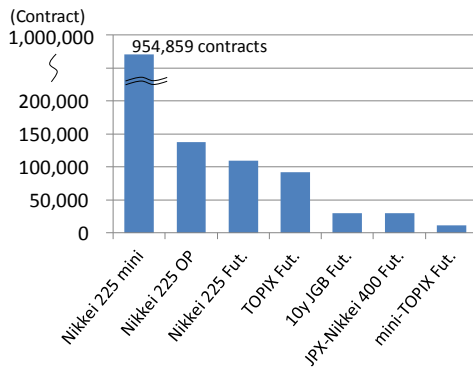
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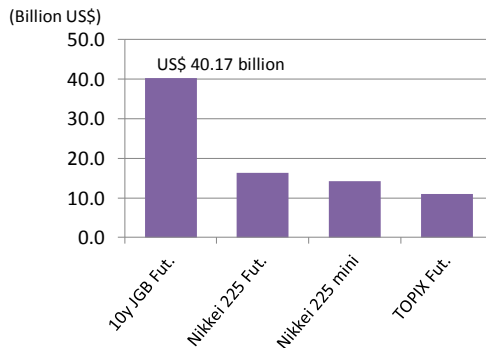
Nikkei 225 mini and 10y-JGB Futures are the most traded

- The most traded product by ADV is Nikkei 225mini (over 950,000 contracts)
- The most traded product by average daily trading value is 10y JGB Futures (US\$ 40 billion)

By Daily Trading **Volume** in 2016



By Daily Trading **Value** in 2016



Source: JPX

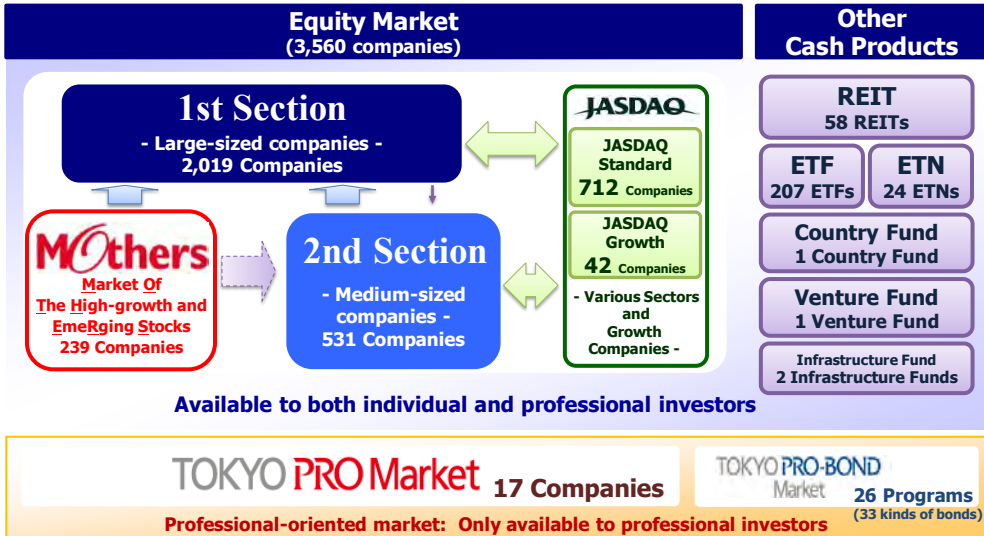
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Structure of TSE Cash Equity Market

- JPX offers several markets with different concepts to allow companies to make an optimal choice.



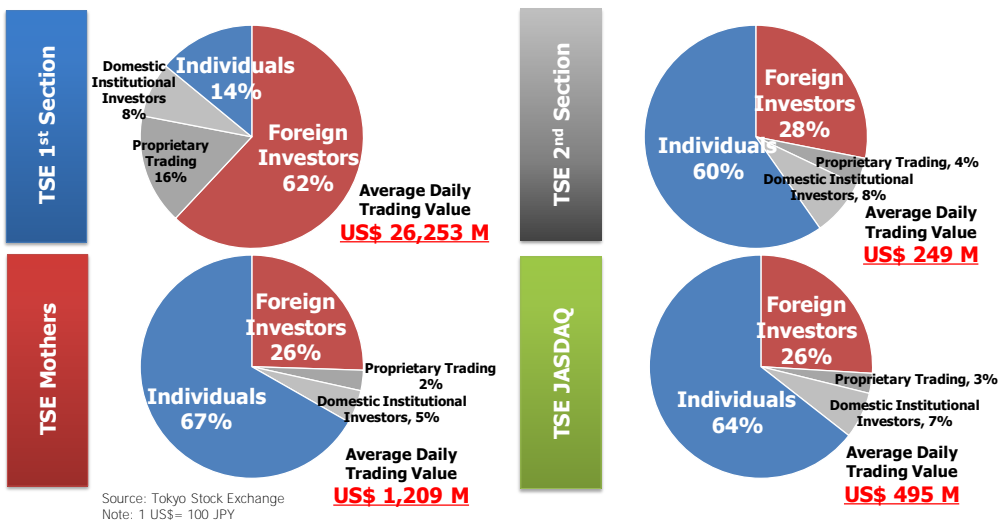
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Stock Trading Value by Investor Category (2016)

- Foreign investors account for more than half of trading in the TSE 1st Section.
- By contrast, individual investors make up the majority in the TSE 2nd Section, Mothers, and JASDAQ.



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Global Position of JPX Cash Equity Market (2016)

#	Exchange	No. of Companies
1	BSE India Limited	5,821
2	JPX	3,541
3	BME Spanish Exchanges	3,506
4	TMX Group	3,419
5	Nasdaq - US	2,897

#	Exchange	Equity Market Capitalization (USD mil.)
1	NYSE	19,573,074
2	Nasdaq - US	7,779,127
3	JPX	5,061,537
4	Shanghai Stock Exchange	4,103,990
5	LSE Group	3,496,170

#	Exchange	Equity Trading Value (USD mil.)
1	NYSE	17,317,928
2	BATS Global Markets	13,682,527
3	Shenzhen Stock Exchange	11,605,946
4	Nasdaq - US	11,070,939
5	Shanghai Stock Exchange	7,492,287
6	JPX	5,618,264

Source: WFE, as of end Dec .2016

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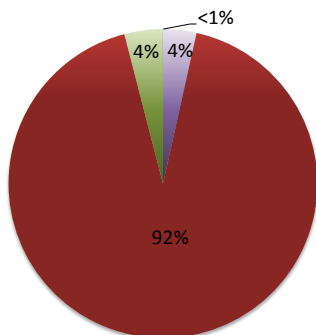
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Competitive Position of TSE in Japan

Market Share

■ OTC ■ Tokyo ■ PTS ■ Regional Exchanges



Source: Fidessa

According to Fidessa, TSE accounts for nearly 96% of total trading of Nikkei 225 stocks in Japan. Besides overall market qualities and investor confidence in TSE markets, the following factors also contribute to a high market share of TSE.

Well-established and simple market structure

Competitive fee rates

World-class arrowhead matching engine and optimized tick structure

Best execution not solely focused on execution prices

Regulation on Proprietary Trading Systems (PTS)

If the trading volume at a PTS is 10% or more of exchange-traded volume for the past 6 months, the PTS is required to obtain an exchange license.

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Global Position of JPX Derivatives Market (2016)

Rank	Exchange	2016 Volume (contracts)	% YoY
1	CME Group	3,942,202,299	11.6%
2	National Stock Exchange of India	2,119,462,820	-30.1%
3	Intercontinental Exchange	2,037,932,884	1.9%
4	Moscow Exchange	1,950,145,218	17.5%
5	Eurex	1,727,766,695	3.3%
6	Shanghai Futures Exchange	1,680,711,841	60.0%
7	Nasdaq	1,575,700,250	-4.4%
8	Dalian Commodity Exchange	1,537,479,768	37.7%
9	BM&FBovespa	1,487,305,788	9.5%
10	CBOE Holdings	1,184,553,418	0.9%
11	Zhengzhou Commodity Exchange	901,297,047	-15.8%
12	Korea Exchange	692,990,540	-12.8%
13	BSE India	543,058,508	-11.7%
14	JSE Securities Exchange	479,202,245	-1.9%
15	BATS Exchange	448,443,108	12.7%
16	Hong Kong Exchanges and Clearing	344,642,173	-4.1%
17	JPX	337,537,333	-6.6%
30	Tokyo Financial Exchange	52,086,497	6.3%
33	Tokyo Commodity Exchange	26,917,289	10.3%

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Source: FIA

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JPX Derivatives Product Lineup

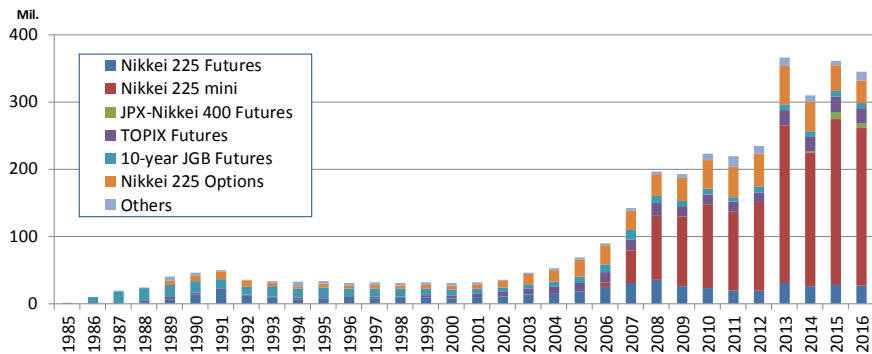
JPX Derivatives Products			
Equity	Composite Index	Nikkei 225 (Large & mini) futures TOPIX (Large & mini) futures JPX-Nikkei 400 futures Russell/Nomura Prime Index futures TSE Mothers Index futures	Nikkei 225(Regular & Weekly) Options TOPIX Options JPX-Nikkei 400 Options
	Size based Index	TOPIX Core30 futures	
	Sector Index	TOPIX Bank futures	
	REIT Index	TSE REIT Index futures	
	Volatility Index	Nikkei 225 V1 futures	
	Dividend Index	Nikkei 225 Dividend Index futures TOPIX Dividend Index futures TOPIX Core30 Dividend Index futures	
	Non Japanese index	DJIA Futures India Nifty50 Futures TAIEX Futures FTSE China 50 Index	
	Single Stock		Single Stock Options
Fixed Income	Government Bond	5-year JGB futures 10-year JGB futures (Large & mini) 20-year JGB Futures	Options on 10-year JGB futures

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JPX Derivatives Market Performance (2016)



- Strong franchise in Japanese equity indices and JGB-related products with 2016 traded volume dipping but still near record levels.
- New J-Gate matching engine enabled timely product expansion, trading hours extension from 3 a.m. to 5:30 a.m. for the Night Session, and enhanced risk management.
 - Night Session trading vol.: Peaked at nearly 40% in Jan. 2016, averaged 30.5% in 2016.
- Aiming to add more interest rate-related products and expand into commodities business, subject to regulatory approval.

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Overview of the Japanese Market



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Deep and Diverse Investor Base

- Participation by various types of investors in the TSE market creates fair and reliable valuations of its listed companies.

2 The World's Largest Institutional Investor

- Japan is the primary investment focus for the Government Pension Investment Fund, Japan (GPIF), the largest institutional investor in the world.
- Assets under management at GPIF was valued at US\$1.4 trillion¹ (Sep. 2015). GPIF's investments in foreign stocks accounted for 21.6% of its entire portfolio, an amount valued at US\$292 billion¹ (Sep. 2015).
- There are also other pension funds that manage huge amounts of funds.

3 The Huge Pool of Financial Assets Held by Japanese Individuals

- Financial assets held by Japanese individuals stood at US\$17.0 trillion as of September 30, 2015.
- This is comparable to 3 times of Japan's GDP. This is a very high level worldwide.

4 Accessibility to Japanese Markets for International Investors

- Foreign investors are the largest players in Japan. The increase in investments by foreign investors can be seen from their trading value, which reached US\$6.8 trillion^{1,2} in 2014.
- Globally reputable investors from many countries have shown interest in the Tokyo market. A TSE listing promises a company access to investment by international investors.

Source: GPIF web site, BOJ, World Bank
 Note: 1 US\$= 100 JPY
 2 Total amount of buy and sell

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Top 11 Pension Funds

- GPIF (Government Pension Investment Fund) is the largest investor in the world.

Rank	Fund	Market	Total Asset (US\$ billion)
1	Government Pension Investment	Japan	1,144
2	Government Pension Fund	Norway	884
3	National Pension	South Korea	430
4	Federal Retirement Thrift	U.S.	422
5	ABP	Netherlands	419
6	California Public Employees	U.S.	297
7	National Social Security	China	247
8	Canada Pension	Canada	228
9	PFZW	Netherlands	215
10	Central Provident Fund	Singapore	208
11	Local Government OfficialsJapan\$	Japan	180

Source: P&I / TW Top 300 Pension Funds Analysis - Year end 2014

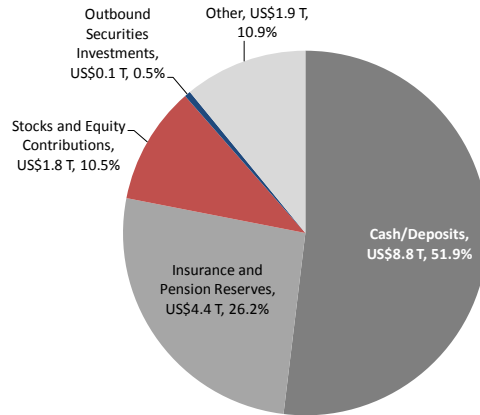
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The Huge Pool of Financial Assets Held by Japanese Individuals

- Financial assets held by Japanese individuals stood at US\$17.0 trillion at the end of 2015 and is comparable to 3 times' Japan's GDP. This is a very high level worldwide.



Source: Bank of Japan
 Note: US\$ = JPY 100. As of September 30, 2015

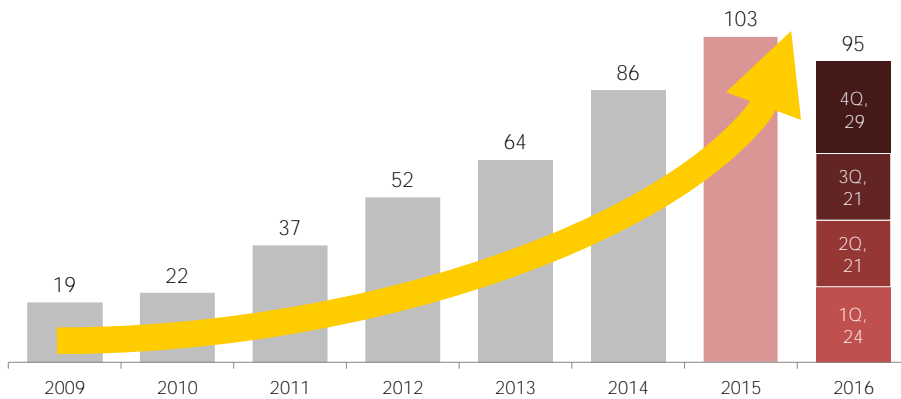
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Number of IPOs in Japan

- Number of IPO in 2016 showed that IPO activity in Japan maintained almost same levels achieved in 2015.



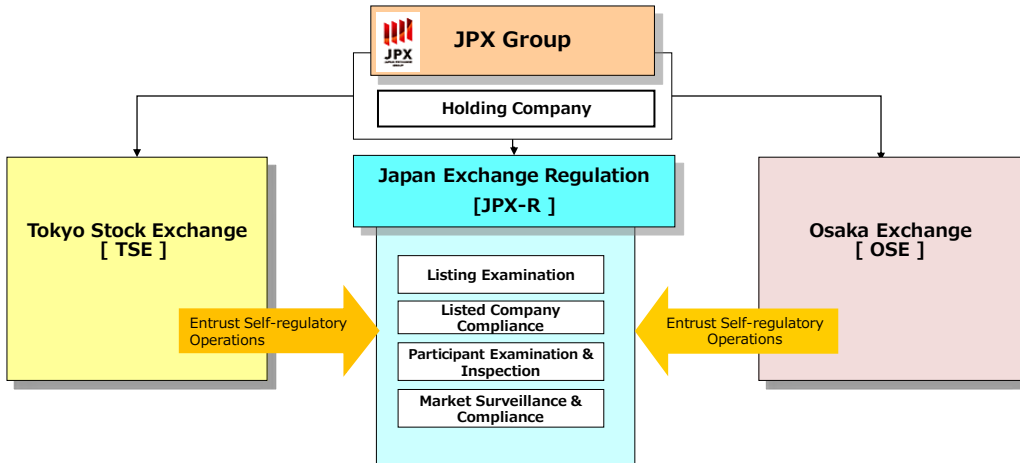
Note: The number includes Tokyo Pro Market, REITs and Infrastructure Funds.

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Cooperation Framework on Self-regulatory Functions



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Regulation by Authorities and SROs

	Regulation by Executive Authorities	Self-regulation of Stock Exchange
Purpose	<ul style="list-style-type: none"> • Ensure fairness and transparency in the securities market • Protect investors 	<ul style="list-style-type: none"> • Ensure fairness and transparency in the securities market • Protect investors • Ensure confidence of trading participants or listed companies
Rule	Laws and sub-rules	Rules by Stock Exchange
Sanctions	<ul style="list-style-type: none"> • Accusation⇒Criminal Penalties • Administrative Penalties (Suspension or Revocation of License, Management Improvement Order, Revision Order, Surcharge Payment Order, etc.) 	<ul style="list-style-type: none"> • Suspension or Revocation of License as a Participants or Listed company • Improvement Report, Financial Penalty
Tools	Inspection, Surveillance, Search, Attachment, etc. (with Legal Force)	Inquiry, Hearing, Onsite Monitoring, etc. (by Contract between Stock Exchange and Participants or Listed Companies)

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Formal Requirements for Listing

	Main Market		Mothers	JASDAQ		TOKYO PRO Market
	1st Section	2nd Section		Standard	Growth	
Number of shareholders	2,200 or more	800 or more	200 or more	200 or more		—
Tradable shares						
Number of tradable shares	20,000 units or more	4,000 units or more	2,000 units or more	—		—
Market capitalization of tradable shares	JPY 1 billion (USD 10m) or more	JPY 1 billion (USD 10m) or more	JPY 500 million (USD 5m) or more	JPY 500 million (USD 5m) or more		—
Ratio of tradable shares to listed shares	35% or more	30% or more	25% or more	—		—
Public offering	—	—	500 trading units or more	10 percent or more or 1,000 trading units		—
Market capitalization of listed shares	JPY 25 billion (USD 250m) or more	JPY 2 billion (USD 20m) or more	JPY 1 billion (USD 10m) or more	—		—
Number of years of business operation	3 years or more		1 year or more	—		—
Shareholders' equity	JPY 1 billion (USD 10m) or more		—	JPY 200 million (USD 2m) or more	Not negative	—
Amount of profits or Market capitalization	[Ordinary profit] Total amount of JPY500 million (USD 5m) or more in the last 2 fiscal years [Market cap] Market cap: JPY 50 billion (USD 500m) or more Sales: JPY 10 billion (USD 100m) or more		—	[Ordinary profit] JPY100 million (USD 1m) or more [Market cap] JPY5 billion (USD 50m) or more	—	—

Note: 1US\$ = 100JPY





Listed Company Regulation and Supervision

- Maintaining and Enhancing the Quality of Financial Products -

May 19, 2017

**Listed Company Compliance Department
Japan Exchange Regulation**

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Table of contents

- **Overview of Listed Company Compliance Department (LCCD)**
- **Examination on Delisting**
- **Improvement Measures and Penalty Measures**
- **Case Study**

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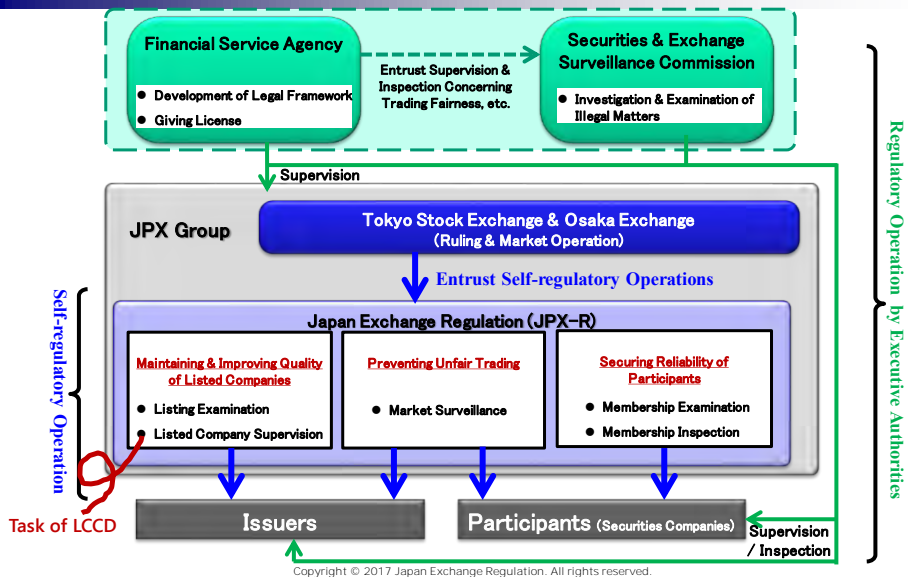


Overview of Listed Company Compliance Department (LCCD)

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Overview Of Regulation over Capital Market



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Self-regulation

Comparison between Regulation by Executive Authorities & Self-regulation

	Regulation by Executive Authorities	Self-regulation of Stock Exchange
Purpose	<ul style="list-style-type: none"> Ensure fairness and transparency in the securities market Protect investors 	<ul style="list-style-type: none"> Ensure fairness and transparency in the securities market Protect investors Ensure confidence of trading participants or listed companies
Rule	Laws and sub-rules	Rules by Stock Exchange
Sanctions	<ul style="list-style-type: none"> Accusation⇒Criminal Penalties Administrative Penalties (Suspension or Revocation of License, Management Improvement Order, Revision Order, Surcharge Payment Order, etc.) 	<ul style="list-style-type: none"> Suspension or Revocation of License as a Participants or Listed company Improvement Report, Financial Penalty,
Tools	Inspection, Surveillance, Search, Attachment, etc. (with Legal Force)	Inquiry, Hearing, Onsite Monitoring, etc. (by Contract between Stock Exchange and Participants or Listed Companies)

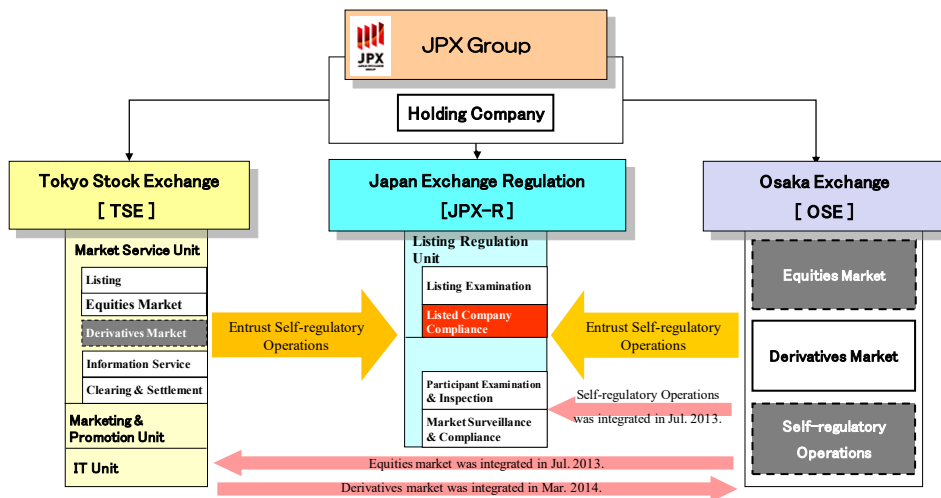
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Listed Company Compliance Department (LCCD)

Organization



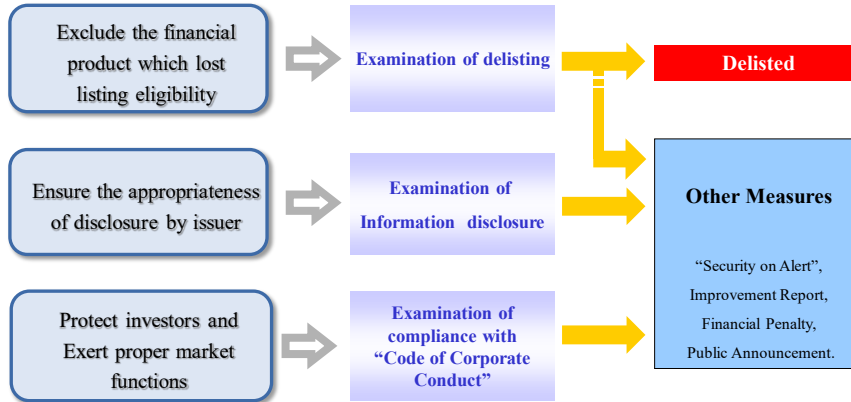
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LCCD Mission & Roles

Strives to maintain and enhance the quality of listed financial products in order to ensure confidence in the financial instrument exchange market.

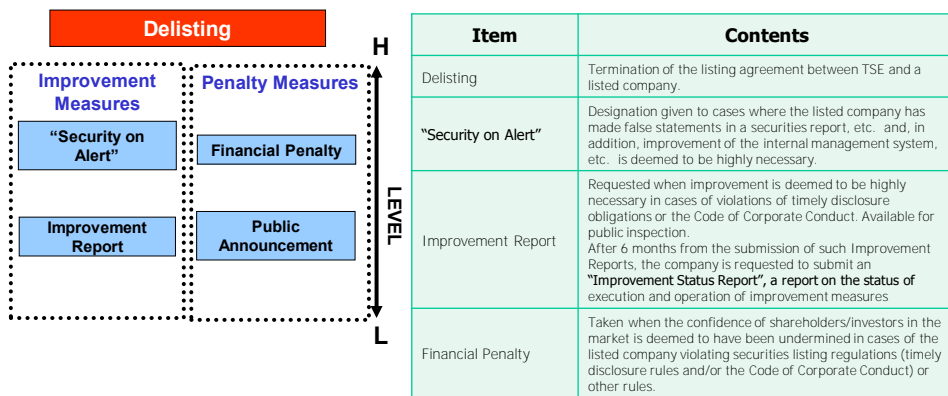


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Types of Measures



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Examination on Delisting

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Summary of Delisting Criteria

Type	Formal Requirements - Based on figures and events	Qualitative Examination - Based on LCCD's discretion
Criteria	<ul style="list-style-type: none"> ■ Numbers of shares listed ■ Distribution of shares ■ Trading volume ■ Market capitalization ■ Bankruptcy ■ Delay in filing annual/semiannual reports ■ Becoming a wholly-owned subsidiary company, etc. 	<ul style="list-style-type: none"> ■ False statements ■ Adverse opinion, etc. issued by accounting firm ■ Violation of Listing Agreement ■ Undermining public interest & investor protection ■ Inappropriate merger (backdoor listing) ■ Involvement of Anti-Social Forces, etc.
Means of Discovery	Periodical reports by listed companies, and consultation before disclosure, etc.	Disclosure, reports by listed companies, tips, and media, etc.

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Actual Examination of False Statements, etc.

Overview of Examination of False Statements, etc.

A listed company shall be delisted if it is found to have submitted a Securities Report, etc. **which contains "false statements" and it becomes clear that it will be difficult to maintain order in the market if the company is not delisted immediately.**

* A company is deemed to have made false statements in its Securities Report, etc., when it falls under any of the following cases:

- when it received an order to correct its Securities Report, etc. from the Prime Minister, etc.
- when it received an order for payment of surcharge from the Prime Minister, etc.
- when it was indicted by the Securities and Exchange Surveillance Commission
- when it submitted an amendment report which was found to contain material content.

* The same shall apply to the case of "adverse opinion" or "opinions not expressed."

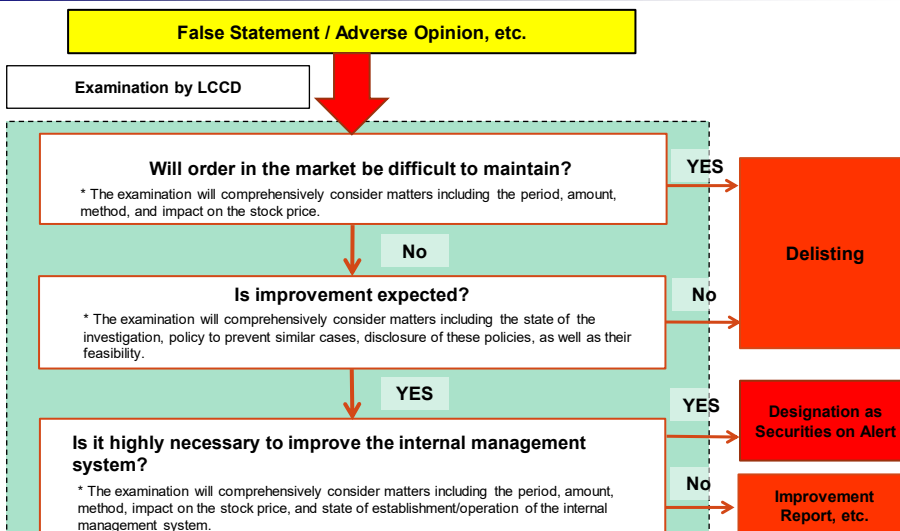
- The situation where "it becomes clear that it will be difficult to maintain order in the market if the company is not delisted immediately" means such a situation where investors' confidence in the TSE market is deemed to be significantly undermined if the listing is maintained.
- (Eg.) Cases where the listed company substantially circumvents the listing criteria by making false statements on situations, etc. at the company such as liabilities in excess of assets prior to listing, or where the listed company caused material misjudgments in investment decisions by making false statements in which the most part of its sales were fictitious.

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Actual Examination of False Statements, etc.



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Improvement measures and Penalty measures

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“Security on Alert”

Overview of Security on Alert

A company may be designated as a Security on Alert if falls under any of the following 1 to 5 and it is deemed highly necessary to improve its internal management system.

Matter	
1	- when a listed company was deemed likely to fall under delisting criteria such as damage to sound transactions with controlling shareholder, false statements, etc. violation of listing agreement, etc., or involvement of anti-social forces or other cases in light of the public interest or the protection of investors (and thus designated as a security under supervision (examination)) but later deemed not to fall under such criteria.
2	- when a listed company is found to have made false statement in securities reports, etc. or have been expressed an “adverse opinion” or “opinions are not expressed” in audit report.
3	- when a listed company is found to have violated the timely disclosure rules.
4	- when a listed company is found to have violated the Code of Corporate Conduct.
5	- when a listed company fails to improve the execution of improvement measures and the operation of such measures following the submission of an Improvement Report.

⇒ A listed company designated as a Security on Alert is required to promptly submit a “Written Confirmation of Internal Management System” which reports the improvement progress of its internal management system after one year elapses following designation.



The designation shall be canceled if no problems are found with the internal management system, etc. after examination by the LCCD.

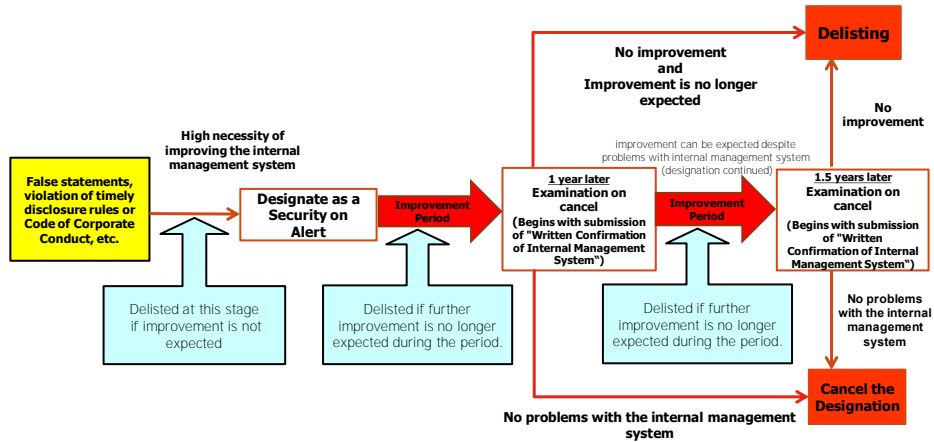
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“Security on Alert”

Flow of Examination of Securities on Alert



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List of Listed companies designated as “Security on Alert” (Since 2012)

Designation Date	Company Name	Code	Market Division	Cancel of Designation	Remarks
Mar. 16, 2016	Food Planet, Inc.	7853	2nd Section	-	*Delisted (May 29, 2017) due to no improvement of internal management system and no possibility of improvement.
Sep. 15, 2015	TOSHIBA CORPORATION	6502	1st section		
Apr. 01, 2015	Aisei Pharmacy Co., Ltd.	3170	JASDAQ	-	*Delisted (May 2, 2016) due to acquisition by a demand for share, etc. cash-out.
Feb. 25, 2015	SJI Inc.	2315	JASDAQ	Sep. 24, 2016	
Jan. 29, 2015	Ishiyama Gateway Holdings Inc.	7708	JASDAQ	-	*Delisted (Aug. 1, 2015) due to public interest and for investor's protection.
Jan. 29, 2015	ENERES Co., Ltd.	6079	Mothers	Sep. 24, 2016	
Jul. 01, 2014	JALCO Holdings Inc.	6625	JASDAQ	Sep. 26, 2015	
Mar. 11, 2014	RISO KYOIKU CO., LTD.	4714	1st section	Oct. 31, 2015	
Feb. 8, 2014	LCA Holdings Corporation	4798	2nd section	-	*Delisted (Dec. 1, 2015) due to no improvement of internal management system.
May 15, 2013	MATSUYA CO., LTD.	7452	JASDAQ	-	*Delisted (Dec. 28, 2015) due to acquisition by a demand for share, etc. cash-out.
Jun. 20, 2012	Princi-baru Corporation	3587	JASDAQ	-	*Delisted (Sep. 12, 2015) due to no improvement of internal management system.
Jan. 21, 2012	OLYMPUS CORPORATION	7733	1st section	Jun. 11, 2013	
Jan. 18, 2012	KEIOZU HOLDINGS COMPANY	3731	Mothers	-	*Delisted (May. 29, 2015) due to no improvement of internal management system.

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Improvement Report and Improvement Status Report

~Improvement Measures~

Improvement Report

- The improvement report is a measure for cases less severe than those designated as Securities on Alert.
- In an improvement report, the listed company describes the background, reasons, and improvement measures regarding failure to conduct timely disclosure, etc.
- Such reports are available for public inspection.
- When the listed company does not respond to a request to submit an improvement report, the company commits a material violation of the listing agreement and will result in a **delisting**.
- In cases where TSE is unable to confirm an improvement in the status of execution and operation of improvement measures at the listed company that submitted an improvement report, TSE is able to designate its stock as "**Securities on Alert**".

Improvement Status Report

- After 6 months from the submission of such Improvement Reports, a listed company is required to submit an improvement status report.
- LCCD normally conduct hearings and on-site examination to make sure the improvement.
- Such reports are also available for public inspection.

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Financial Penalty and Public Announcement

~Penalty Measures~

Financial Penalty (Listing Agreement Violation Penalty)

- Introduced in July 2008.
- TSE may request payment of the penalty in cases where it deems that shareholder/investor confidence in the market and listed companies has been undermined in cases of a listed company deemed in violation of the securities listing regulations (timely disclosure rules and/or the Code of Corporate Conduct) or other rules.
- The penalty for a violation of the listing agreement is 20 times annual listing fee.

Public Announcement

- TSE may make a public announcement where it deems necessary in cases of violation of timely disclosure rules and/or the Code of Corporate Conduct by a listed company.

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Case Study - TOSHIBA CORPORATION -

Company Outline as of July 31, 2016

Company Name	TOSHIBA CORPORATION
President and CEO	Satoshi Tsunakawa
Founding	1875
Location of Head Office	Tokyo
Outline of the Company	electric/electronic manufacturer composed of four Companies: - Energy Systems & Solutions Company, - Infrastructure Systems & Solutions Company, - Storage & Electronic Devices Solutions Company - Industrial ICT Solutions Company.
Employees	187,809(consolidated) 36,601(individual)
Total Assets	JPY 5,433.3 billion (US\$ 48,082.7 million)
Net Sales	JPY 5,668.7 billion (US\$ 50,165.4 million)
Number of Shareholders	437,466
Listings	1 st Section of TSE Nagoya Stock Exchange

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Case Study - TOSHIBA CORPORATION -

Resolution

- Designation as a Security on Alert (from Sep.15, 2015)
- Imposition of Financial Penalty (JPY 91.2 million)

Reason

TOSHIBA CORPORATION (hereinafter "the Company") established a Independent Investigation Committee on May 22, 2015, and revealed that there were matters requiring investigation about the financial statements which is announced in the past.

On Sep. 7, 2015, the Company submitted the securities report for the fiscal year ended Mar. 2015 and amendment reports to the securities reports and quarterly reports for the period from the fiscal year ended Mar. 2010 to the 3rd quarter of the fiscal year ended Mar. 2015.

These disclosures revealed that the Company conducted inappropriate accounting, including postponing the recording of losses from the fiscal year ended Mar. 2009 through to the third quarter of the fiscal year ended Mar. 2015, and that the total income from continuing operations before income taxes and the total net income were overstated by JPY 224.8 billion and by JPY 155.2 billion respectively.

In the Company's excessive pursuit of recording short-term profit, the management demanded profit improvement from the business divisions, which was considered difficult to achieve in the course of ordinary business activities.

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Case Study - TOSHIBA CORPORATION -

Reason (continuation)

The business divisions conducted inappropriate accounting, including postponing the recording of provisions and recording profits in accordance with channel stuffing of parts to companies to which PC, etc. manufacturing was outsourced. TSE also deemed that there were actions possibly taken as a result of instruction from the management to the business divisions to continue or expand the inappropriate accounting.

The board of directors and the audit committee that were supposed to supervise business execution and audit respectively did not accurately recognize the inappropriate accounting and discuss the matter due to insufficient understanding of the realities of the business and lack of coordination on information with the business divisions. Even though some directors and audit committee members had knowledge of the beginnings of the inappropriate accounting, the information was not shared. As such, the board of directors and the audit committee did not make the business divisions swiftly rectify the inappropriate accounting, which led to the inappropriate accounting continuing at the Company for a long time.

In addition, TSE deems that the inappropriate accounting was conducted because divisions that should have monitoring functions such as the finance division and the corporate audit department did not function adequately, and that there was scant awareness of conducting appropriate accounting processing throughout the Company, among others.

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Case Study - TOSHIBA CORPORATION -

Reason (continuation)

TSE deems that there are serious issues in the Company's internal management system, etc. and that improvement is highly necessary. Thus, TSE shall designate the stock as a security on alert.

In addition, given the fact that inappropriate accounting was carried out for a long time due to the inadequate functions of the Company's internal control system, TSE deems that this case has undermined the confidence of shareholders and investors in the TSE market. As such, TSE shall impose a listing agreement violation penalty on the Company.



Contact

THANK YOU

**Listed Company Compliance Department
Japan Exchange Regulation**



Website: <http://www.jpx.co.jp/english/regulation/index.html>

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Overview of TSE Equity Market

May, 2017

Tokyo Stock Exchange, Inc.

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1. Executive Summary

2. Overview of the Japanese Market

3. Deep and Diverse Investor Base

4. Listing Requirements of Tokyo Stock Exchange



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Advantages of Listing on TSE

- **The Largest Exchange in Asia by Market Capitalization**
 - Tokyo Stock Exchange is the **Asia's** largest exchange with a market capitalization \$5.1 trillion as of Dec. 2016.
 - Tokyo Stock Exchange is one of the most liquid Asian Stock Exchange with an average daily trading value US\$ 26,253 million in 2016 in terms of TSE 1st Section.
- **The Huge Pool of Cash and Deposits Held by Japanese Retail Investors**
 - The huge pool of cash and deposits held by Japanese retail investors amounting to JPY 916,007 billion (As of June 2016) is seeking tools and opportunities for investment.
- **High IPO Allocation to Retail Investors**
 - More than 80% of stocks are allocated to retail investors through IPOs in Japan.
- **The Largest IPO in 2016**
 - Kyushu Railway offered JPY 416 billion, US\$ 4.16 billion in total.
- **The Largest IPO in 2015**
 - Japan Post Holdings and its two subsidiaries offered JPY 1.4 trillion, US\$ 14 billion in total.
- **Long-Term Investment by Retail Investors**
 - The risk appetite of retail investors is much different from institutional investors. They tend to hold stocks much longer than institutional investors.
- **The largest Institutional Investor**
 - The Government Pension Investment Fund, Japan (GPIF), the largest institutional investor in the world with AUM totaling almost US\$ 1.44 trillion (Dec. 2016). GPIF's investments in foreign stocks accounted for 23.1% of its entire portfolio, an amount valued at US\$331 billion¹ (Dec. 2016)

Note: 1 US\$= 100 JPY

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1. Executive Summary

2. Overview of the Japanese Market

3. Deep and Diverse Investor Base

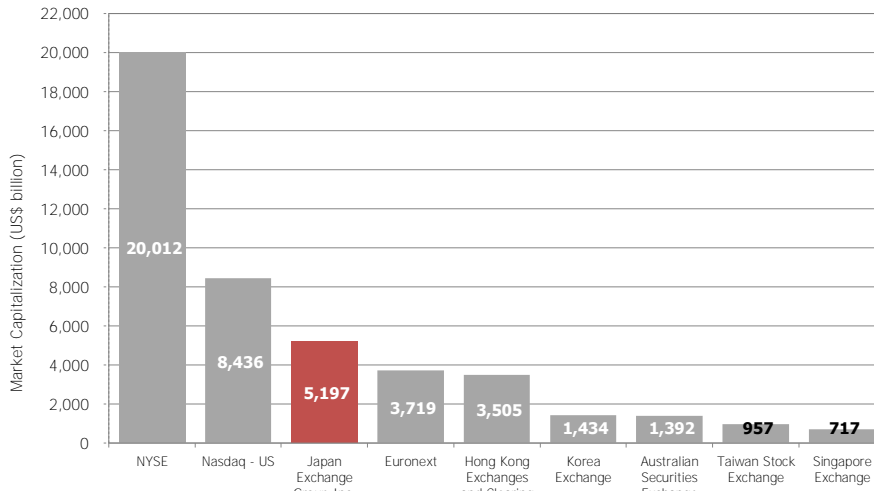
4. Listing Requirements of Tokyo Stock Exchange

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3

Market Capitalization

Tokyo Stock Exchange ranks No. 1 in Asia by market capitalization.



Source: WFE

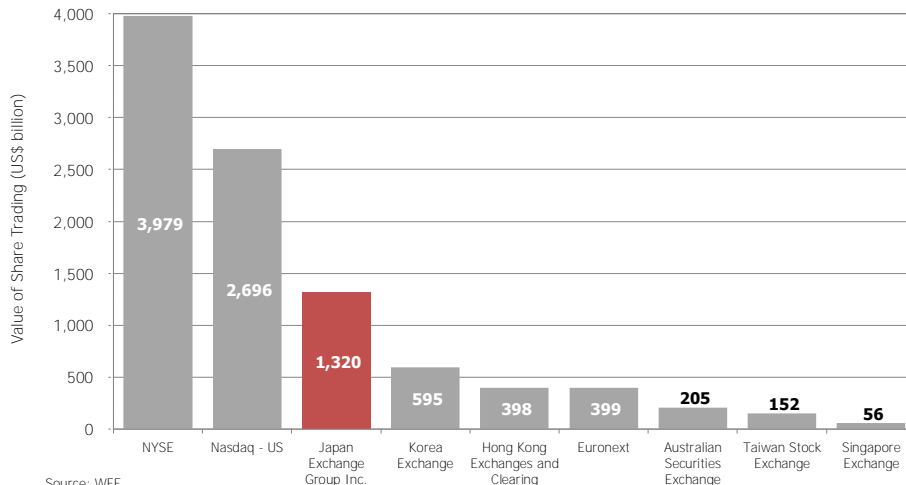
Note: Domestic market capitalization as of the end of March 2017

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Value of Share Trading in the World

Tokyo Stock Exchange is about 6.7 times larger than Hong Kong Exchanges by value of share trading.



Source: WFE

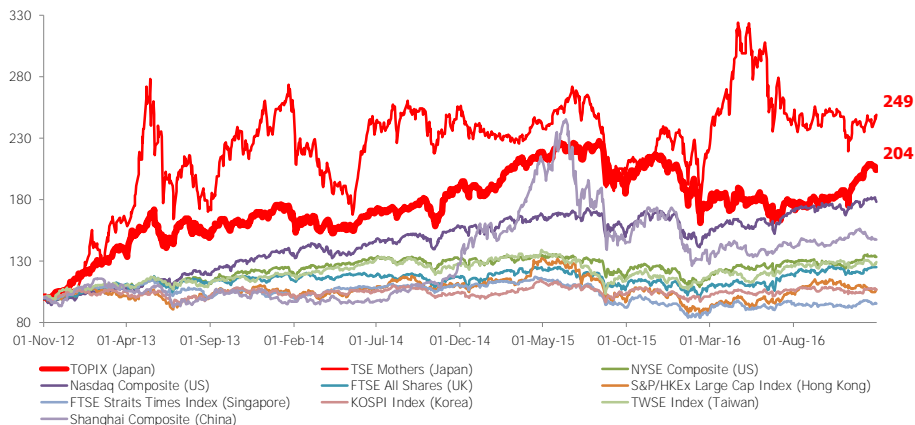
Note: Value of share trading - Electronic order book trades from January to March 2017

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Stock Market Index Performance

Japan has enjoyed a high performance since Mr. Abe became Prime Minister. Also Japan is free from a political risk while there are a lot of political events in Europe and the U.S.

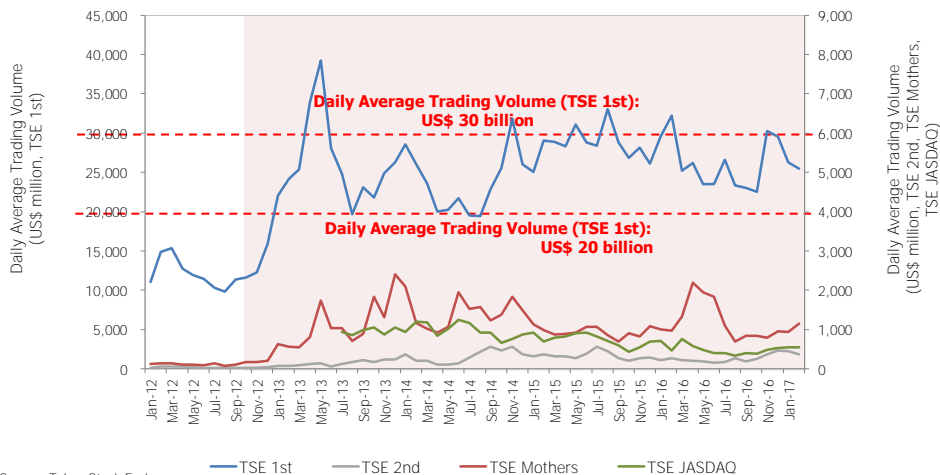


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Daily Average Trading Volume

Daily average trading volume has exceeded US\$ 20 billion on an ongoing basis since January 2013.

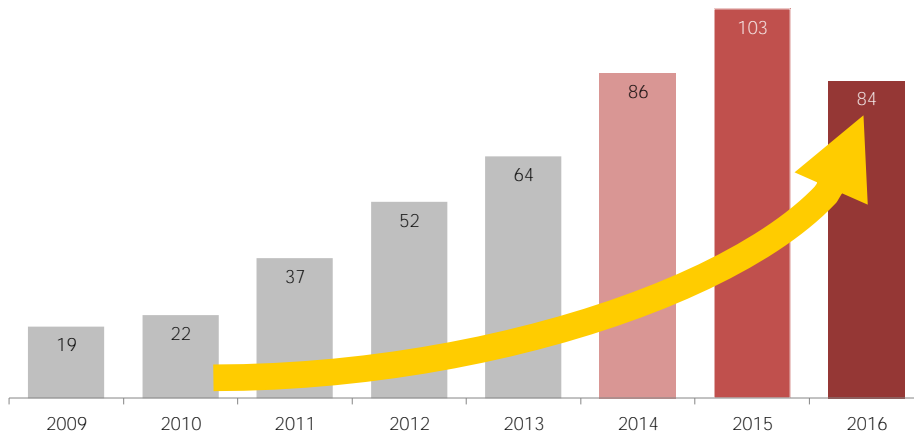


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Number of IPOs in Japan

Number of IPO showed that IPO activity in Japan are increasing since 2009.



Source: TSE

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IPO Case Study (Dual IPO): LINE Corporation



On July 15, 2016, Japanese chat app LINE Corp, a subsidiary of South Korean internet search giant NAVER, successfully completed dual IPO in Tokyo and New York. Its offering amount was US\$ 1.3 billion¹ and its market capitalization reached US\$ 10 billion¹ during Tokyo Stock Exchange's first trading day.

Company Profile/IPO summary

Company Name	LINE Corporation [TSE 1st: 3938, NYSE: LN]
CEO	Takeshi Idezawa
Foundation	Sep. 4, 2000
IPO Date	Jul. 14, 2016 [NYSE] Jul. 15, 2016 [TSE 1st]
Underwriter	Nomura Securities
Offering Price	JPY3,300 (US\$32.84) (NYSE First Price: US\$ 42.00) (TSE 1st First Price: JPY 4,900)
IPO Amount (New Shares / Sale)	US\$1,328 million (US\$1,155 million/US\$173 million)
Market Cap (offering price/first price)	US\$6,930 million /US\$8,820 million (NYSE) US\$10,290million (TSE 1st)
WEB	http://linecorp.com/en/

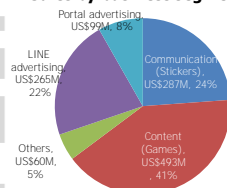
Business

LINE Corporation is a Japan-based company mainly engaged in the operation of LINE business portal business. Its LINE business portal segment includes communication and content service and advertising service. Communication and content service provides communication, contents and other services, such as LINE Pay, LINE FRIENDS and LINE Mobile. Advertising service provides LINE advertising and portal advertising services.

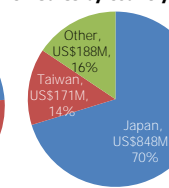
Note: 1 1US\$ = 100 JPY.

Segment (FY Dec 2015)

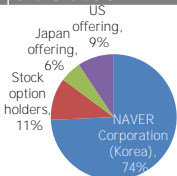
Sales by business segment



Sales by country

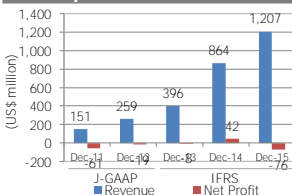


Shareholders



Note: After IPO. Dilutive shares. Source: Company disclosure.

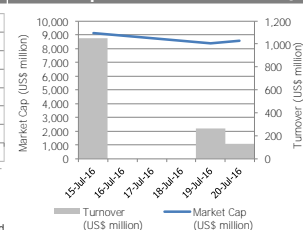
Summary of Financial Data



Source: Annual report

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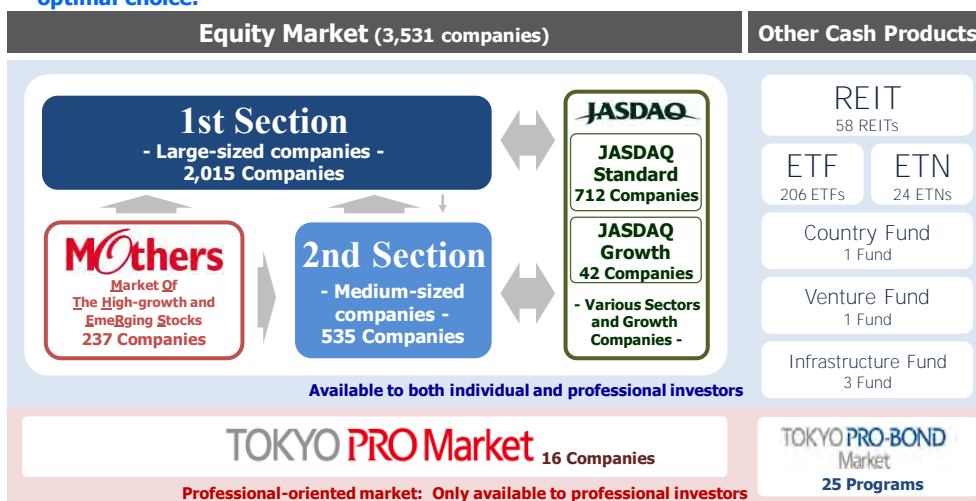
Market Cap Chart



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Structure of TSE Cash Equity Market

JPX offers several markets with different concepts to allow companies to make an optimal choice.



Note: As of March, 2017

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IPO Companies Size in 2016

	Revenue	Net Profit	Net Asset	Market Cap (First Price)	Actual PER (First Price)	IPO Amount ²
TSE 1st [8 IPOs]	US\$ 3,779M us\$ 861M US\$ 217M	US\$ 77M us\$ 28M US\$ -4,330M	US\$ 3,057M us\$ 190M US\$ 58M	US\$ 10,289M us\$ 576M US\$ 207M	23.8x 14.8x 6.2x	US\$ 4,160M us\$ 347M US\$ 30M
TSE 2nd [5 IPOs]	US\$ 915M us\$ 307M US\$ 20M	US\$ 18M us\$ 10M US\$ 6.0M	US\$ 143M us\$ 91M US\$ 33M	US\$ 270M us\$ 116M US\$ 58M	14.7x 9.9x 7.4x	US\$ 48M us\$ 18M US\$ 13M
Mothers [54 IPOs]	US\$ 158M us\$ 20M US\$ 6.0M	US\$ 18M us\$ 1.5M US\$ -5.5M	US\$ 93M us\$ 5.3M US\$ 0.5M	US\$ 303M us\$ 79M US\$ 29M	1,665.3x 65.8x 10.4x	US\$ 283M us\$ 10M US\$ 3.0M
JASDAQ [14 IPOs]	US\$ 190M us\$ 60M US\$ 15M	US\$ 5.6M us\$ 2.0M US\$ 0.9M	US\$ 49M us\$ 13M US\$ 7.1M	US\$ 110M us\$ 40M US\$ 22M	75.0x 19.3x 6.5x	US\$ 21M us\$ 5.4M US\$ 3.5M
All [83 IPOs]	US\$ 3,779M us\$ 36M US\$ 6.0M	US\$ 77M us\$ 1.8M US\$ -4,330M	US\$ 3,057M us\$ 10M US\$ 0.5M	US\$ 10,289M us\$ 78M US\$ 16M	1,665.3x 41.0x 6.2x	US\$ 4,160M us\$ 11M US\$ 3.0M

Source: TSE

Note: 1 Excluding Tokyo Pro Market, REITs and Infrastructure Fund. US\$ = 100JPY.

2 Including Nagoya Stock Exchange's IPOs

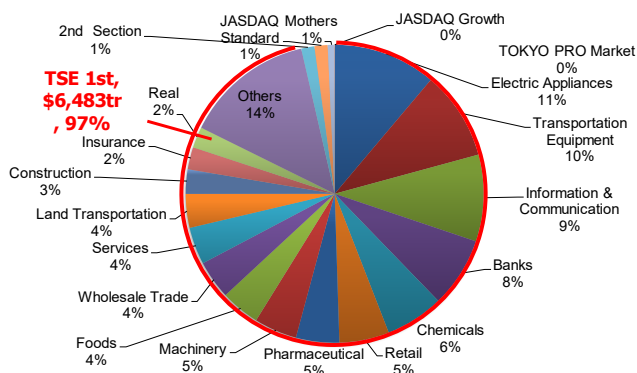
3 Total of offering and sales.

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Market Capitalization by Industrial Sectors in TSE 1st & Sections

Market Capitalization
by Industrial Sectors in TSE 1st & Sections



Source: TSE
Note: As of February 28, 2017

Million Yen

Sector	Market Cap.	Ratio
Electric Appliances	65,488,192	11.16%
Transportation Equipment	56,391,055	9.61%
Information & Communication	55,256,468	9.41%
Banks	44,566,627	7.59%
Chemicals	37,127,795	6.32%
Retail	31,738,690	5.41%
Pharmaceutical	27,569,366	4.70%
Machinery	27,299,490	4.65%
Foods	24,916,315	4.24%
Wholesale Trade	24,577,768	4.19%
Services	23,740,228	4.04%
Land Transportation	21,519,504	3.67%
Construction	15,572,966	2.65%
Insurance	14,126,598	2.41%
Real	13,372,167	2.28%
Others	82,562,030	14.06%
2nd Section	8,410,998	1.43%
JASDAQ Standard	8,358,330	1.42%
Mothers	4,058,612	0.69%
JASDAQ Growth	333,040	0.06%
TOKYO PRO Market	37,164	0.01%

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Mining Sector

Company Name	Code	Market Division	Daily Average Value (Yen)	Market Cap. (Yen)	Dividend yield	Consolidated PER
NIPPON COKE & ENGINEERING COMPANY,LIMITED	3315	First Section	109,528,143	28,723,197,655	2.1	15.9
SHOWA SHELL SEKIYU K.K.	5002	First Section	1,771,311,442	424,710,400,800	3.37	9.8
TOA OIL COMPANY,LIMITED	5008	Second Section	23,643,445	17,047,595,000	2.91	7.4
NIPPON SEIRO CO.,LTD.	5010	Second Section	6,803,946	6,652,800,000	3.36	8.8
NICHIREKI CO.,LTD.	5011	First Section	40,541,870	28,802,533,095	8.4	10
Yushiro Chemical Industry Co.,Ltd.	5013	First Section	16,818,790	19,112,589,375	2.9	11.6
BP Castrol K.K.	5015	First Section	59,289,821	38,506,416,764	4.23	23.6
Fuji Oil Company Ltd.	5017	First Section	154,856,552	29,397,062,552	1.59	2.9
MORESCO	5018	First Section	47,403,567	16,435,600,000	2.35	9.9
Idemitsu Kosan Co.,Ltd	5019	First Section	2,346,612,492	619,200,000,000	1.29	8.8
JXTG Holdings, Inc.	5020	First Section	5,753,551,720	1,364,282,157,384	2.92	9
COSMO ENERGY HOLDINGS COMPANY,LIMITED	5021	First Section	535,061,073	162,081,211,296	2.61	4.8

Source: Quick
Note: Market Cap: As of March, 2017. Daily average value: From April to March 2017.

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Privatization

Company Name	Code	Market Division	Daily Average Value (Yen)	Market Cap. (Yen)	Dividend yield	Consolidated PER
INPEX CORPORATION	1605	First Section	6,155,829,784	1,600,513,180,200	1.64	33.2
Japan Petroleum Exploration Co.,Ltd.	1662	First Section	885,229,243	145,687,524,024	1.17	29.3
Electric Power Development Co.,Ltd.	9513	First Section	2,540,445,798	476,848,115,500	2.68	12.8
NIPPON TELEGRAPH AND TELEPHONE CORPORATION	9432	First Section	18,366,909,013	9,962,066,521,440	2.52	12.4
NTT DOCOMO,INC.	9437	First Section	13,147,604,393	10,109,617,077,500	3.08	14.6
JAPAN TOBACCO INC.	2914	First Section	16,363,459,613	7,236,000,000,000	3.86	16.1
East Japan Railway Company	9020	First Section	9,390,806,632	3,774,920,182,600	1.34	14.1
Central Japan Railway Company	9022	First Section	8,098,043,188	3,736,840,000,000	0.71	9.8
West Japan Railway Company	9021	First Section	5,423,797,072	1,402,835,135,000	1.93	13.6
JAPAN POST HOLDINGS Co.,Ltd.	6178	First Section	3,409,455,826	6,286,500,000,000	3.57	17.9
JAPAN POST BANK Co.,Ltd.	7182	First Section	3,536,988,976	6,214,500,000,000	3.62	17.2
JAPAN POST INSURANCE Co.,Ltd.	7181	First Section	1,163,397,176	1,530,600,000,000	2.35	17.7

Source: Quick
 Note: Market Cap: As of March, 2017. Daily average value: From April to March 2017.

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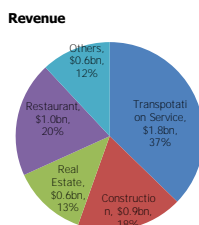
Kyushu Railway Company



Company Profile/IPO summary

Company Name	Kyushu Railway Company [TSE 1st: 9142]
President	Toshiniko Aoyagi
Foundation	Apr. 1, 1987
IPO Date	Oct. 25, 2016
Underwriter	Mitsubishi UFJ Morgan Stanley
Offering Price	JPY2,600 (First Price: JPY3,100)
IPO Amount (New Shares / Sale)	US\$4,160 million (NA/US\$4,160 million)
Market Cap (offering price/first price)	US\$4,160 million /US\$4,960 million
WEB	http://www.jrkyushu.co.jp/english/index.jsp

Business Segment (FY Mar. 2016, US\$ billion)



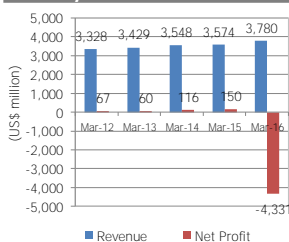
Business

Source: Reuters.com

Kyushu Railway Company is a Japan-based company mainly engaged in transportation, construction, station buildings and real estate, distribution and food business, as well as other business around Kyushu in Japan. The Company has 4 business segments. Transportation segment operates railway business, bus business, marine business and car rental business. Construction segment operates construction business, vehicle mechanical equipment engineering business, and electrical construction business. Station Buildings and Real Estate segment engages in leasing of station buildings and other real estate, as well as sale of condominium unit and other real estate. Distribution and Food segment engages in retail industry, catering industry and agriculture industry.

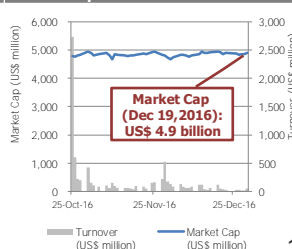
Note: 1 US\$ = 100 JPY.

Summary of Financial Data



Market Cap Chart

Source: Bloomberg



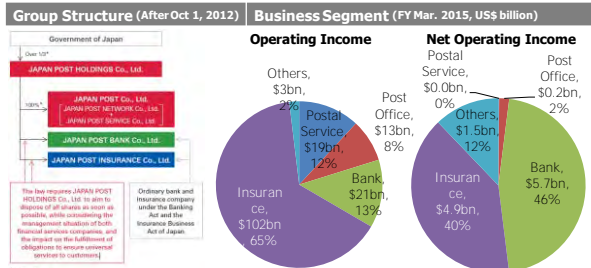
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Japan Post Holdings Co Ltd

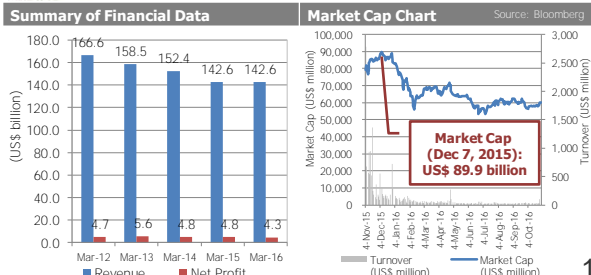


Company Profile/IPO summary	
Company Name	Japan Post Holdings Co Ltd [TSE 1st: 6178]
President/CEO	Taizo Nishimuro
Foundation	Jan. 23, 2006
IPO Date	Nov. 4, 2015
Underwriter	Nomura
Offering Price	JPY1,400 (First Price: JPY1,631)
IPO Amount (New Shares / Sale)	US\$6,930 million (NA/US\$6,930 million)
Market Cap (offering price/first price)	US\$63,000 million /US\$73,395 million
WEB	http://www.japanpost.jp/en/



Business Source: Reuters.com

Japan Post Holdings Co., Ltd. is a Japan-based company mainly engaged in postal and logistics business, financial window business, banking business and life insurance business. The Company operates five business segments. The Postal and Logistics Business segment engages in postal business, logistics business as well as other businesses. The Financial Counter Business segment engages in postal and logistics business related counter services, bank counter services, insurance counter services, product sales business, real estate business, partner financial services and other businesses. The Banking segment engages in fund management, financing, asset and liability management, fee-based businesses. The Life Insurance Business segment engages in life insurance business, work proxy and business agent services, as well as simple insurance management business. The Other segment engages in group shared business, hospital business and accommodation business.



Note: 1 US\$ = 100 JPY.

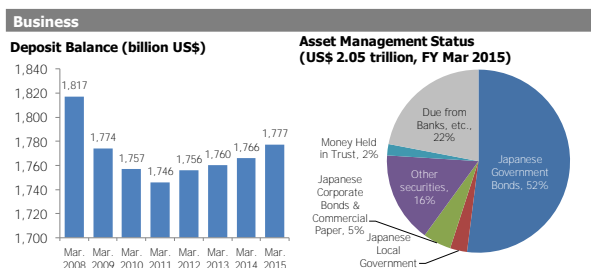
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Japan Post Bank Co Ltd

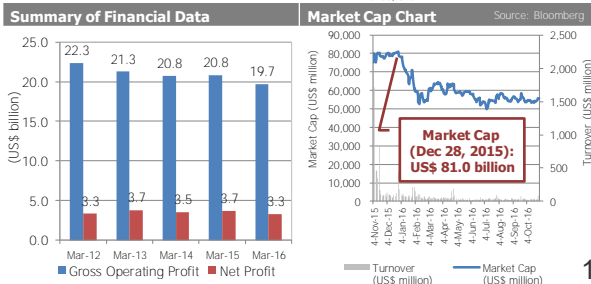


Company Profile/IPO summary	
Company Name	Japan Post Bank Co Ltd [TSE 1st: 7182]
President	Masatsugu Nagato
Foundation	Sep. 1, 2006
IPO Date	Nov. 4, 2015
Underwriter	Nomura
Offering Price	JPY1,450 (First Price: JPY1,680)
IPO Amount (New Shares / Sale)	US\$5,980 million (NA/US\$5,980 million)
Market Cap (offering price/first price)	US\$65,250 million /US\$75,600 million
WEB	http://www.jp-bank.japanpost.jp/en_index.html



Business Source: Reuters.com

Japan Post Bank Co., Ltd. is a Japan-based company mainly engaged in banking business. The Bank operates banking business segment. It primarily engages in deposit business, lending business, securities investment business, exchange business, government bonds, investment trust and counter sales of insurance products, intermediary business as well as credit card business. The Bank's main businesses include financing, asset and liability management, as well as fee-based business.



Note: 1 US\$ = 100 JPY.

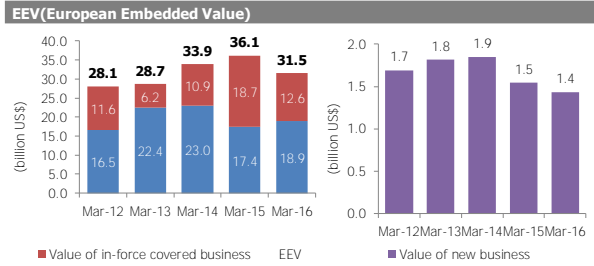
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Japan Post Insurance Co Ltd

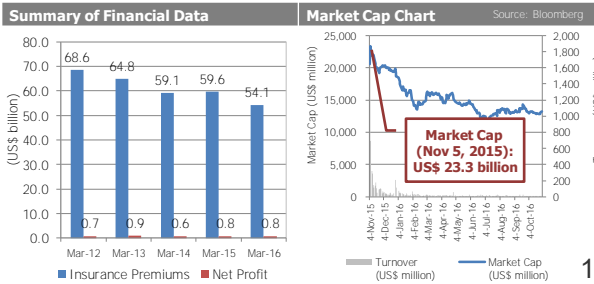


Company Profile/IPO summary	
Company Name	Japan Post Insurance Co Ltd [TSE 1st: 7181]
President/CEO	Masami Ishii
Foundation	Oct. 1, 2007
IPO Date	Nov. 4, 2015
Underwriter	Nomura
Offering Price	JPY1,450 (First Price: JPY1,680)
IPO Amount (New Shares / Sale)	US\$1,452 million (NA/US\$1,452 million)
Market Cap (offering price/first price)	US\$13,200 million /US\$17,574 million
WEB	http://www.jp-ife.japanpost.jp/en/index.html



Business Source: Reuters.com

JAPAN POST INSURANCE Co., Ltd. is a Japan-based company principally engaged in the insurance business. The Company is engaged in the provision of insurance products, the business agency for other insurance and financial companies, as well as the simple life insurance management business which is commissioned by the management unit, among others.



Note: 1 US\$ = 100 JPY.

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1. Executive Summary

2. Overview of the Japanese Market

3. Deep and Diverse Investor Base

4. Listing Requirements of Tokyo Stock Exchange

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Deep and Diverse Investor Base

Participation by various types of investors in the TSE market creates fair and reliable valuations of its listed companies.

1 The World's Largest Institutional Investor

- Japan is the primary investment focus for the Government Pension Investment Fund, Japan (GPIF), the largest institutional investor in the world.
- Assets under management at GPIF was valued at US\$1.4 trillion¹ (Sep. 2015). GPIF's investments in foreign stocks accounted for 21.6% of its entire portfolio, an amount valued at US\$292 billion¹ (Sep. 2015).
- There are also other pension funds that manage huge amounts of funds.

2 High Net Worth Individuals

- Financial assets held by Japanese individuals stood at US\$17.0 trillion as of September 30, 2015.
- This is comparable to 3 times of Japan's GDP. This is a very high level worldwide.

3 Accessibility to Japanese Markets for International Investors

- Foreign investors are the largest players in Japan. The increase in investments by foreign investors can be seen from their trading value, which reached US\$6.8 trillion^{1, 2} in 2014.
- Globally reputable investors from many countries have shown interest in the Tokyo market. A TSE listing promises a company access to investment by international investors.

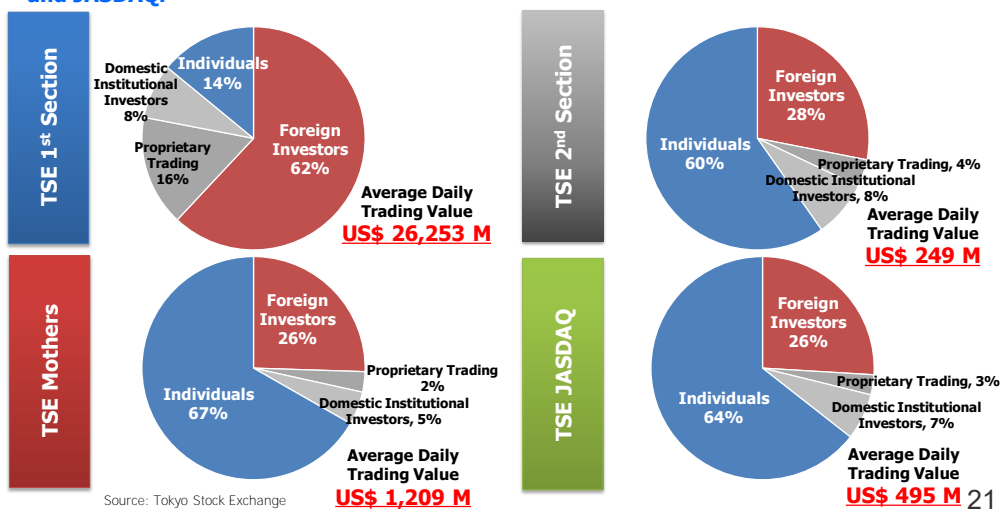
Source: GPIF web site, BOJ, World Bank
 Note: 1 US\$= 100 JPY
 2 Total amount of buy and sell

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Stock Trading Value by Investor Category (2016)

Foreign investors account for more than half of trading in the TSE 1st Section. By contrast, individual investors make up the majority in the TSE 2nd Section, Mothers, and JASDAQ.



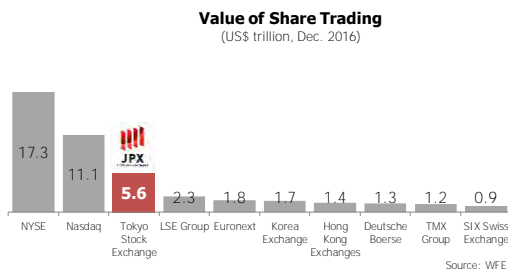
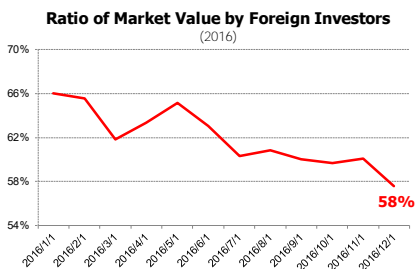
Source: Tokyo Stock Exchange
 Note: 1 US\$= 100 JPY

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International Investors

Foreign investors are the largest players in Japan. The increase of investments by foreign investors can be evidenced by their turnover and share-ownership ratio. Listing on TSE enables a company to access to international investors.



TSE is the one of the most liquid Asian Stock Exchanges.

You can list your company smoothly on the market based on your fundraising demand.

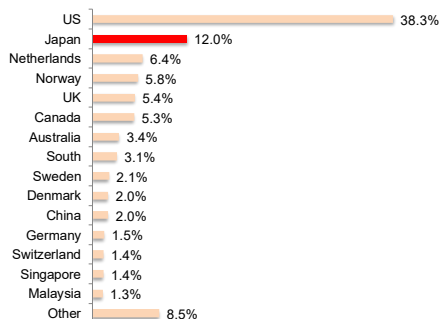
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The Largest Institutional Investor in the World

The Government Pension Investment Fund (GPIF) is the largest institutional investor in the world.

- GPIF managed investments valued at JPY134 trillion (US\$1.2 trillion) as of the end of March, 2016. GPIF's investments in foreign stocks accounted for 22% of its entire portfolio, an amount valued at JPY30 trillion (US\$296 billion) at the end of March, 2016.
- GPIF (Japan) remained at the top of the ranking, where it has been since 2002, with AUM totaling almost US\$ 1.2 trillion in 2015. This fund is 34% larger than the second fund in the ranking, the Government Pension Fund of Norway (US\$ 866 billion).

Percentage of total value of fund assets by country



Top 15 World's Largest Pension Funds

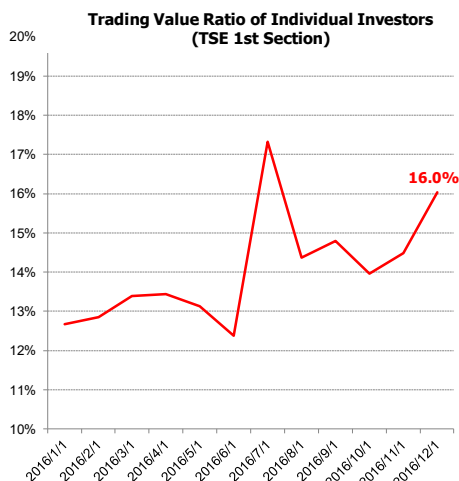
Rank	Fund	Market	Total Assets
1	Government Pension Investment	Japan	\$1,163,203
2	Government Pension Fund	Norway	\$865,943
3	Federal Retirement Thrift	U.S.	\$443,328
4	National	South Korea	\$435,405
5	ABP	Netherlands	\$384,271
6	National Social Security	China	\$294,939
7	California Public Employees	U.S.	\$285,774
8	Central Provident Fund	Singapore	\$211,373
9	Canada Pension	Canada	\$201,871
10	PFZW	Netherlands	\$186,471
11	California State Teachers	U.S.	\$181,875
12	Local Government Officials	Japan	\$176,160
13	New York State Common	U.S.	\$173,541
14	Employees Provident Fund	Malaysia	\$161,707
15	New York City Retirement	Retirement	\$155,120

Source: Pensions & Investments / Willis Towers Watson 300 Analysis - Year end 2015

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Equity Purchase by Individual Investors

As more than 80% of stocks are allocated to retail investors through IPOs in Japan and 10% - 20% of trading value are coming from retail investors, the stock price will be valued by not only institutional investors but also individual investors.



Total amount allocated to individual investors
(100 million yen)

Period	Initial Public Offerings (IPO)		
	Total Amount (A)	Approx. Individual Investor Purchases (B)	Ratio (B/A)
2013	3,739	3,310	89%
2014	7,910	6,885	87%
2015	14,585	12,339	85%
2016	6,487	5,642	87%
2013.1 - 3	548	490	89%
2013.4 - 6	167	142	85%
2013.7 - 9	2,250	1,992	89%
2013.10 - 12	774	686	89%
2014.1 - 3	3,268	2,802	86%
2014.4 - 6	621	537	86%
2014.7 - 9	321	297	93%
2014.10 - 12	3,700	3,248	88%
2015.1 - 3	349	317	91%
2015.4 - 6	656	587	89%
2015.7 - 9	890	777	87%
2015.10 - 12	12,690	10,658	84%
2016.1 - 3	437	378	86%
2016.4 - 6	936	836	89%
2016.7 - 9	904	750	83%
2016.10 - 12	4,209	3,678	87%

Source: JSDA

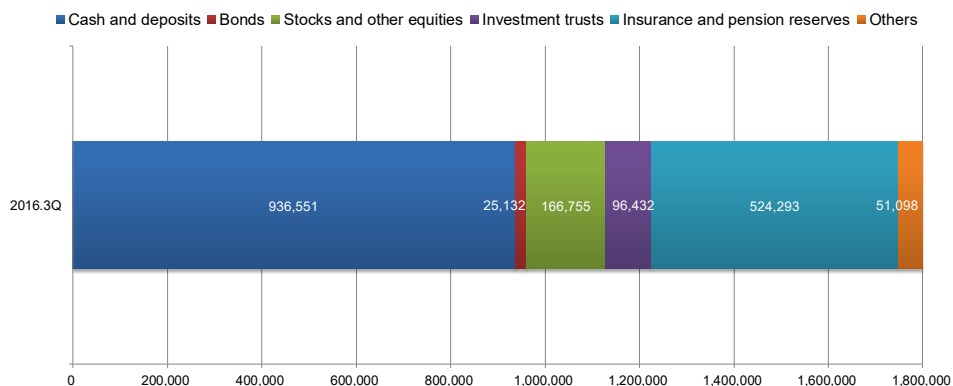
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Household Financial Assets

As household has its financial assets as cash and deposits, which account for 52%, it is seeking for opportunities of investment. The total amount of household financial assets is 18,000 billion USD.

(Billion yen)



Note: 1 US\$ = 100 JPY
Source: JSDA

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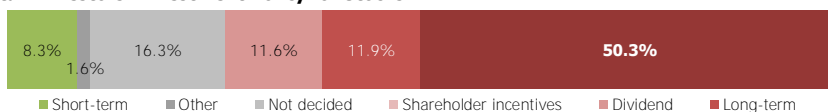
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Long-Term Investment by Retail Investors

Japanese retail investors behave in a different way from institutional investors. They have risk propensities clearly different from those of institutional investors in Europe and the US.

- The investment held by retail investors for the purpose of short-term trading was only 8% as a percentage of total investments, while long term holding was 50% and holding for dividend payment or loyalty program specific to investors was 24%.
- 51% of retail investors hold investments for the average period over 5 years while 32% hold them for the average period of 10 years or more.

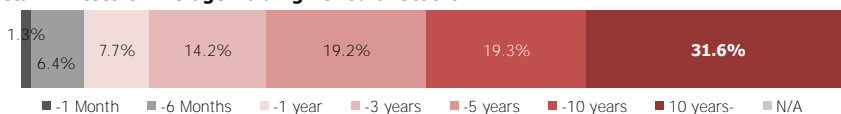
Retail Investors' Investment Policy for Stocks



■ Short-term means "Focus on gains from price increase by trading on a short term basis".

■ Long-term means "Mostly holding on a long-term basis, with possible sales at the time of price appreciation".

Retail Investors' Average Holding Period of Stocks



Source: "Survey on securities investment of individual investors" published by Japan Securities Dealers Association on September 15, 2015

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1. Executive Summary

2. Overview of the Japanese Market

3. Deep and Diverse Investor Base

4. Listing Requirements of Tokyo Stock Exchange

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Formal Requirements for Listing

In the case of dual listing on Main Market, requirements of "market capitalization of tradable shares" and "ratio of tradable shares to listed shares" do not apply for applicants.

	Main Market		Mothers	JASDAQ		TOKYO PRO Market
	1st Section	2nd Section		Standard	Growth	
Number of shareholders	2,200 or more	800 or more	200 or more	200 or more		—
Tradable shares						
Number of tradable shares	20,000 units or more	4,000 units or more	2,000 units or more	—		—
Market capitalization of tradable shares	JPY 1 billion (USD 10m) or more	JPY 1 billion (USD 10m) or more	JPY 500 million (USD 5m) or more	JPY 500 million (USD 5m) or more		—
Ratio of tradable shares to listed shares	35% or more	30% or more	25% or more	—		—
Public offering	—	—	500 trading units or more	10 percent or more or 1,000 trading units		—
Market capitalization of listed shares	JPY 25 billion (USD 250m) or more	JPY 2 billion (USD 20m) or more	JPY 1 billion (USD 10m) or more	In the case of dual listing, these requirements do not apply for applicants.		—
Number of years of business operation	3 years or more		1 year or more			—
Shareholders' equity	JPY 1 billion (USD 10m) or more		—	JPY 200 million (USD 2m) or more	Not negative	—
Amount of profits or Market capitalization	[Ordinary profit] Total amount of JPY500 million (USD 5m) or more in the last 2 fiscal years [Market cap] Market cap: JPY 50 billion (USD 500m) or more Sales: JPY 10 billion (USD 100m) or more		—	[Ordinary profit] JPY100 million (USD 1m) or more [Market cap] JPY5 billion (USD 50m) or more	—	—

Note: 1US\$ = 100JPY

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Overview of Listing Examination for Main Board

TSE examines the company, which meets "Formal Requirements" and conducts an examination based on the "Eligibility Requirements."

When applying TSE rules to a foreign country or a foreign corporation where the foreign country or the foreign corporation is an issuer of a listed security, TSE shall also take into account the legal systems, practices and customs in such foreign country or the country of the foreign corporation.

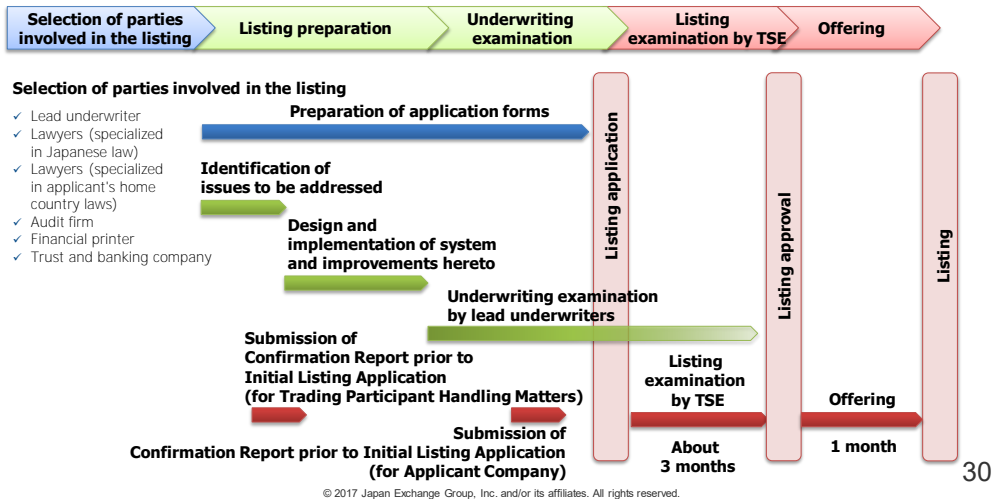
- 1 Corporate Continuity and Profitability**
 - The applicant company must conduct its business continuously and have a stable revenue base.
- 2 Sound Corporate Management**
 - The applicant company must conduct its business in a fair and honest manner.
- 3 Effective Corporate Governance and Internal Control System**
 - The applicant company has built an appropriate framework for corporate governance and internal control.
- 4 Appropriate Disclosure of Corporate Information**
 - The applicant company is capable of appropriately disclosing corporate information, etc.
- 5 Other Matters deemed necessary in light of Public Interest and Investor Protection**
 - a. Shareholders' rights and exercise of such rights are not unduly restricted.
 - b. Relationship with a parent company is deemed appropriate.
 - c. Other matters are deemed appropriate in light of public interest and investor protection.

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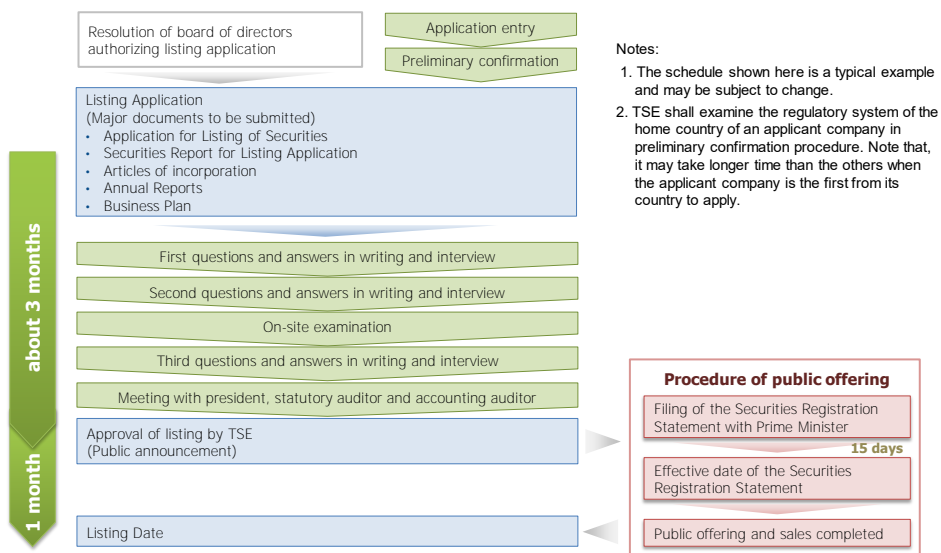
Listing Schedule

Depending on the internal systems of the company, however, it takes about one year from kick-off to listing. Note that the company needs to be audited for two business years.



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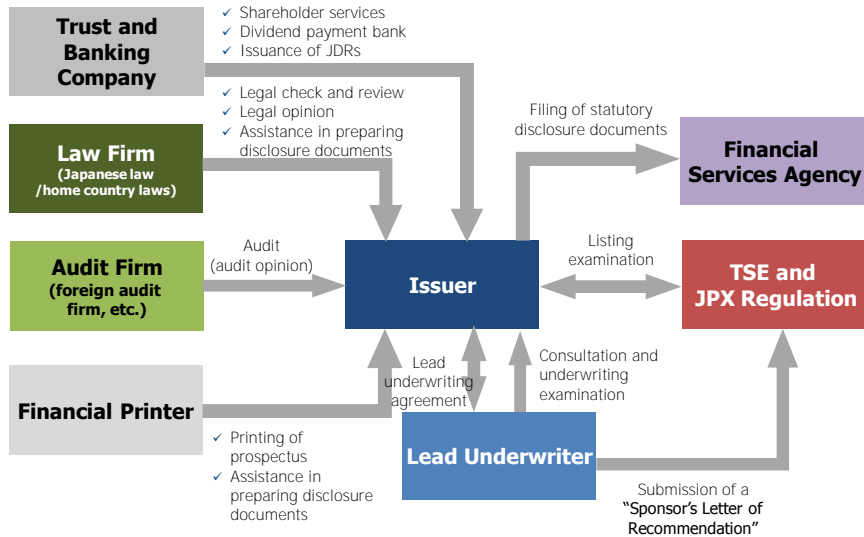
Listing Examination Schedule



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Roles of Each Party Involved in an IPO

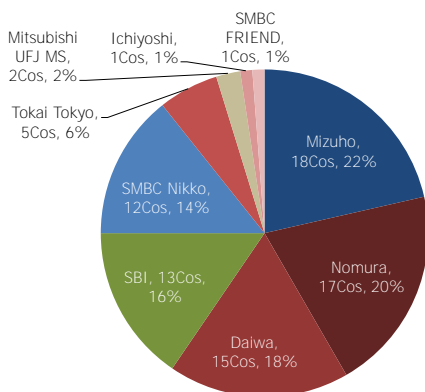


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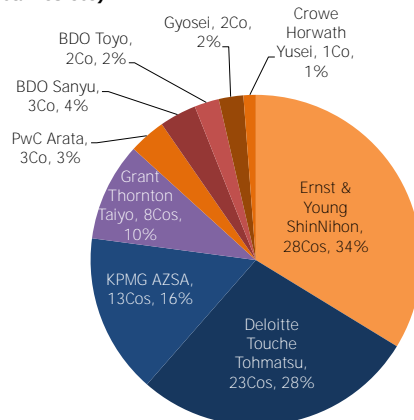
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IPOs in Japan in 2016 - Underwriters & Accounting Firms

**Number of IPOs by Underwriter in Japan in 2016
(Total: 83 Cos)^{1, 2}**



**Number of IPOs by Accounting Firm in Japan in 2016
(Total: 83 Cos)¹**



Note: 1 The data excludes Tokyo Pro Market, REITs and Infrastructure Funds.
2 Daiwa and Mitsubishi UFJ Morgan Stanley count **Menicon's** IPO.

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Overview of JSCC

Japan Securities Clearing Corporation

May 2017

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1. About JSCC
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 - Governance Structure
 - Regulation and Supervision
 - JSCC's functions
 - Eligible Transaction for Clearing
 - Business Statistics
 - Clearing and Settlement Process
 2. CCP's Functions
 - Novation
 - Netting
 - Netting Efficiency in Clearing Process
 3. Risk Management
 - Overview of Credit Risk and Liquidity Risk Management
 - Clearing Participant Monitoring
 - Default Management
 - Liquidity Management
- (Reference)
- JSCC's Business Plan

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1. About JSCC

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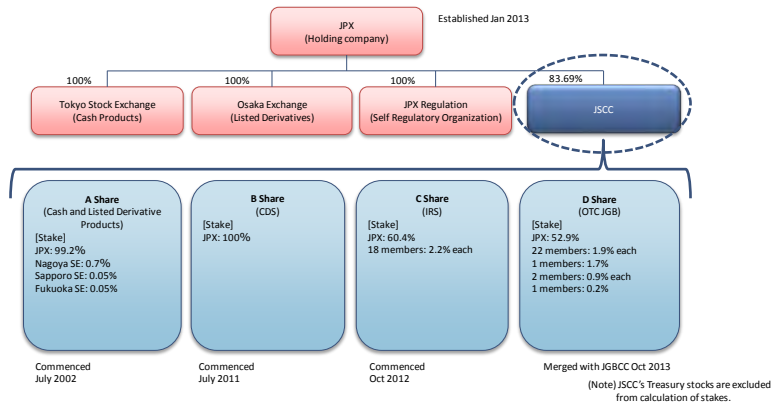
Historical Background of JSCC

- Established in July 2002 as a cross-market CCP for the Japanese securities markets by the market operators: Tokyo Stock Exchange (TSE), Osaka Securities Exchange (OSE), Nagoya Stock Exchange, Sapporo Securities Exchange, Fukuoka Stock Exchange, and Japan Securities Dealers Association
- In response to the G20 agreements for central clearing of OTC derivatives, JSCC developed clearing services for Credit Default Swaps (“CDS”) in July 2011, and Interest Rate Swaps (“IRS”) in October 2012. Following the development of these services, the Financial Services Agency of Japan implemented the first clearing mandate for OTC derivatives in November 2012
- On 1st January 2013, TSE and OSE merged to create the Japan Exchange Group (JPX), and JSCC started clearing OSE Listed Derivatives in July 2013.
- On 1st October 2013, a merger between JSCC and JGBCC (JGB Clearing Corporation, the CCP for OTC JGB trades) took effect. As a result, JSCC operates four segregated clearing businesses - Listed Products, CDS, IRS, and OTC JGB.

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Governance Structure – Ownership of JSCC

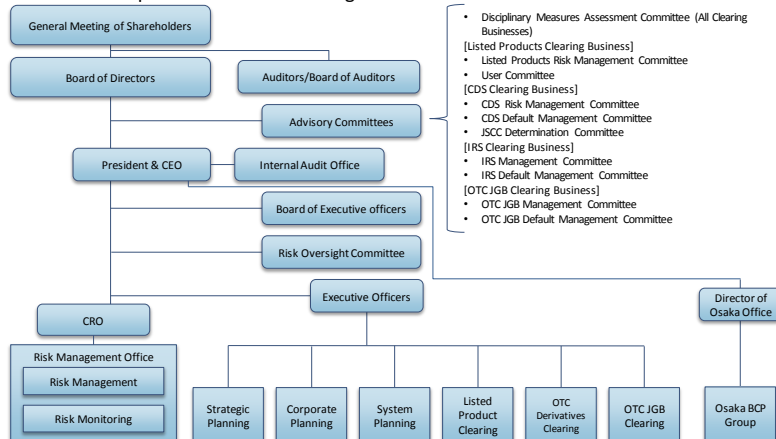
- Capital and Profit/Loss are segregated, by share class, for each of the Clearing Businesses
- Each of JSCC’s clearing businesses has its own separate share structure, business rules, financial resources for default management, and JSCC’s own capital contributions for default resources (skin in the game) and to manage ongoing business operations.



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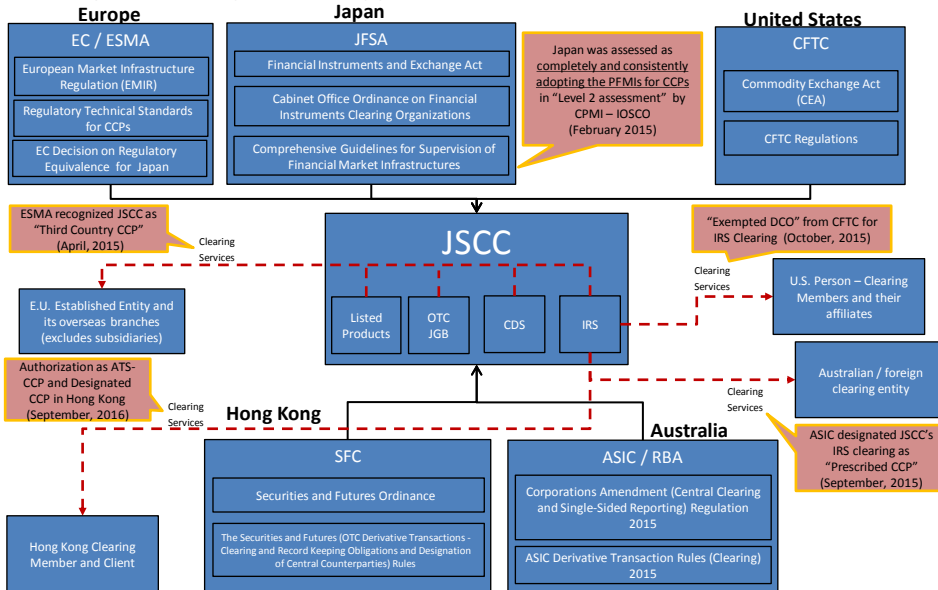
Governance Structure – Reporting Line & Advisory Committees

- Each business line and its human resources are clearly defined.
- Chief Risk Officer and Risk Management Office are independent of business lines, and evaluate JSCC’s operations in relation to the Risk Management Policy. CRO reports to the Risk Oversight Committee monthly, and the Board of Directors every quarter
- The consultative committee for each clearing business provides a forum for stakeholders to give feedback on JSCC’s operations and risk management.



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Regulations/Supervisions applicable to JSCC



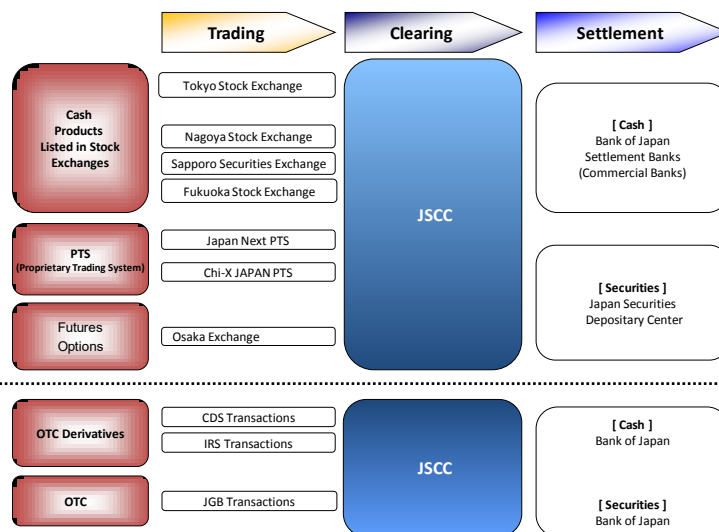
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Regulation and Supervision of JSCC in Japan

- As a CCP, JSCC is subject to the regulation and supervision of the Financial Services Agency (“JFSA”).
- The JFSA adopted the “Comprehensive Guidelines for Supervision of Financial Market Infrastructures”, in December 2013, which incorporates the PFMI into its supervisory framework.
- A CCP’s operations are prevented from being affected by the unreasonable influence of individual shareholders, with the requirement for regulatory notification of shareholdings greater than 5% and prior authorization if 20% or greater.
- CCPs are not authorized to operate any business other than clearing services, as their stability is extremely important.
- Transparency and fairness is required in a CCP’s operations.
- Changes to a CCP’s Articles of Incorporation and Business Rules shall be examined and approved by JFSA prior to implementation.
- JSCC is also subject to oversight by the Bank of Japan (“BOJ”) of financial market infrastructures, as provided in the Bank of Japan Act.

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Overview of JSCC's functions



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Eligible Transaction for Clearing

Category	Details
Listed Products	Cash Products All trades executed on domestic stock exchanges and two proprietary trading systems
	Index Futures Nikkei 225 Futures Nikkei 225 mini TOPIX Futures mini-TOPIX Futures JPX-Nikkei Index400 Futures TSE Mothers Index Futures TOPIX Core30 Futures RN Prime Index Futures TOPIX Banks Index Futures DIIA Futures India Nifty50 Futures TAEIX Futures FTSE China 50 Index Futures Nikkei 225 Dividend Index Futures TOPIX Dividend Index Futures TOPIX Core30 Dividend Index Futures Nikkei 225 VI Futures TSE REIT Index Futures
	Index Options Nikkei 225 Options TOPIX Options JPX-Nikkei Index 400 Option
	Individual Securities Options Individual Securities Options
	Bond Futures and Options 5-year JGB Futures 10-year JGB Futures Options on 10-year JGB Futures mini 10-year JGB Futures 20-year JGB Futures
Credit Default Swaps Series of Markit iTraxx Japan index Single Name CDS (35 issues)	
Interest Rate Swaps JPY LIBOR (1M, 3M and 6M) JPY TIBOR (1M, 3M and 6M) Overnight Index Swap USD LIBOR (1M, 3M and 6M) EUR EURIBOR (3M and 6M) AUD BBR (3M and 6M)	
OTC JGB Transaction Outright JGB Cash-secured Bond Lending Transaction Repo Transaction	

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Business Statistics

- Number of Clearing Participants by Qualification (As of March 2017)

	Listed Transactions			OTC Transactions		
	Cash Products	JGB Futures & Options on JGB Futures	Stock Index Futures & Stock Index Options	JGB	Credit Default Swaps	Interest Rate Swaps
Principal Clearing Participant	76	96	75	37	10	23
Agency Clearing Participant	6	3	4	1	-	-

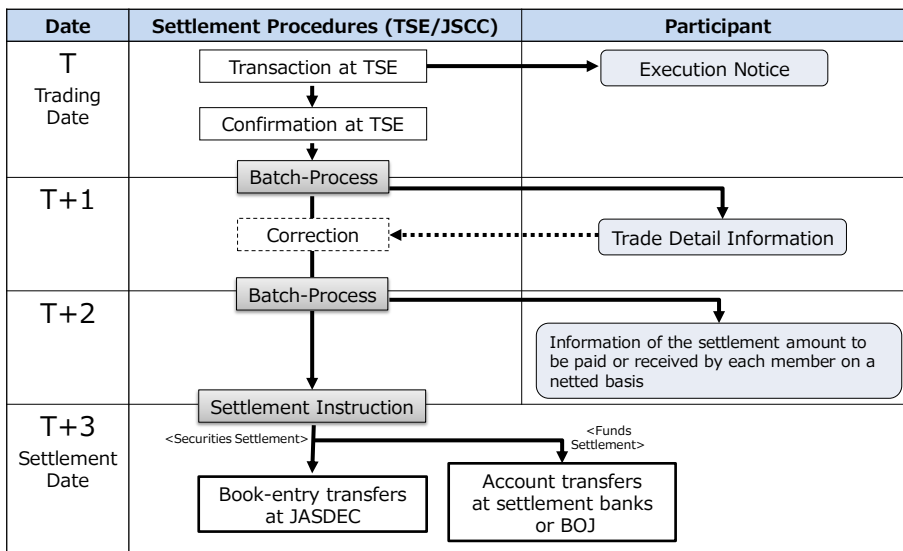
- Clearing Values (Daily average of 2016)

Listed Transactions			OTC Transactions		
Cash Products	JGB Futures & Options on JGB Futures	Stock Index Futures & Stock Index Options	JGB	Credit Default Swaps	Interest Rate Swaps
JPY 3.4 trillion (USD 31.2 billion)*	JPY 3.0 trillion (USD 27.4 billion)*	JPY 4.8 trillion (USD 43.6 billion)*	JPY 123.4 trillion (USD 1.1 trillion)*	JPY 2.0 billion (USD 18.3 million)*	JPY 3.8 trillion (USD 34.6 billion)*

*(USD 1.00 = JPY 110)

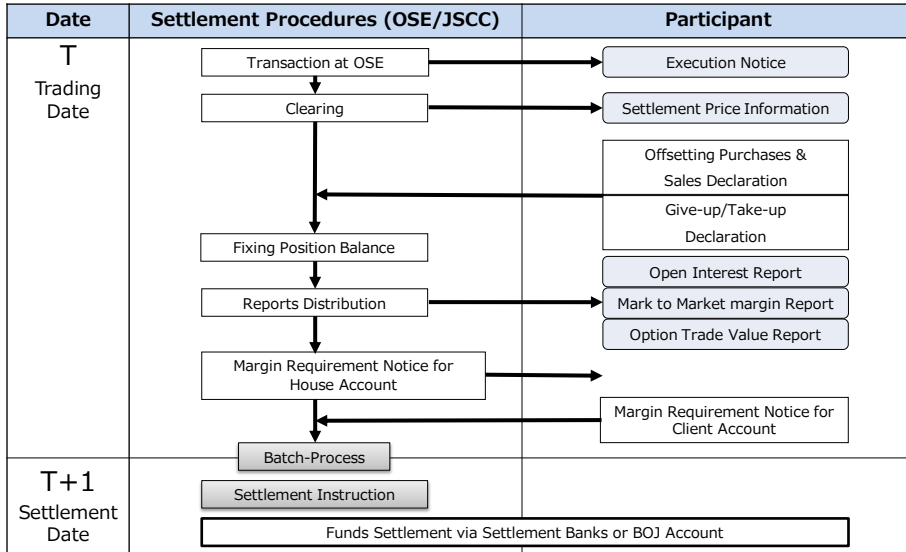
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Clearing and Settlement Process (Cash Products)



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Clearing and Settlement Process (Listed Derivatives)



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2. CCP's Functions

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CCP's Functions

- CCPs step in between original counterparties to a trade and assume the legal rights/obligations to the trade.

Basic Functions of CCP

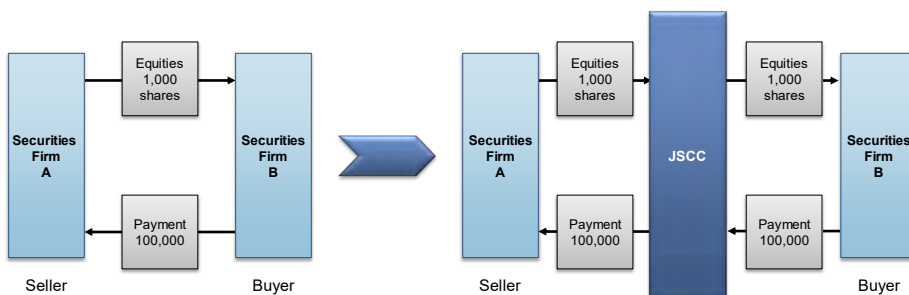
1. Risk Management
 - CCPs guarantee settlement by becoming the counterparty to all trades (credit risk is transferred to CCPs).
 - CCPs receive collateral, such as margin and clearing funds, from participants.
⇒ **Elimination of counterparty risk**
2. Improvement of Efficiency
 - Netting processes reduce the number and amount of settlement among participants.

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Novation

Novation / Settlement Guarantee

A CCP serves as an intermediary between buying and selling securities firms, becoming the counterparty to each side of a transaction. This allows the CCP to guarantee settlement. A CCP allows both firms to trade without considering individual counterparty risk.

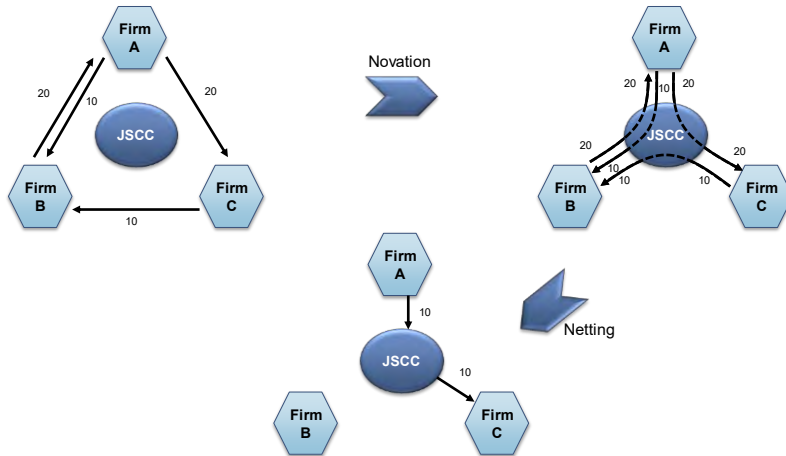


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Netting

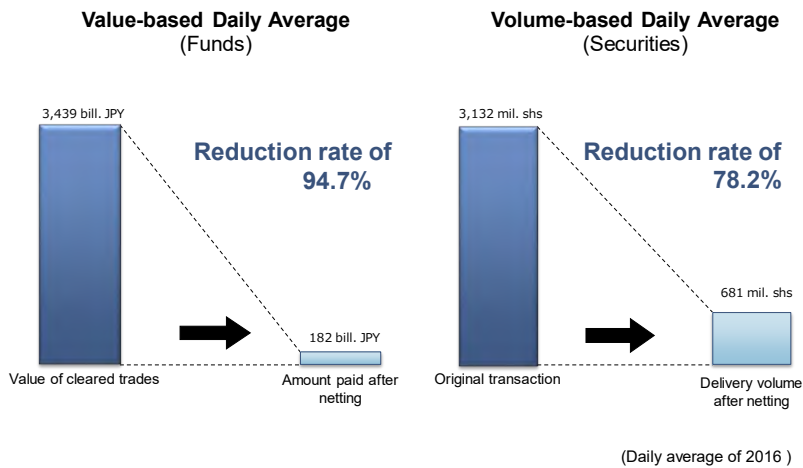
Netting

As the counterparty to all trades, a CCP is capable of increasing efficiency via netting.



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Netting Efficiency in Clearing Process

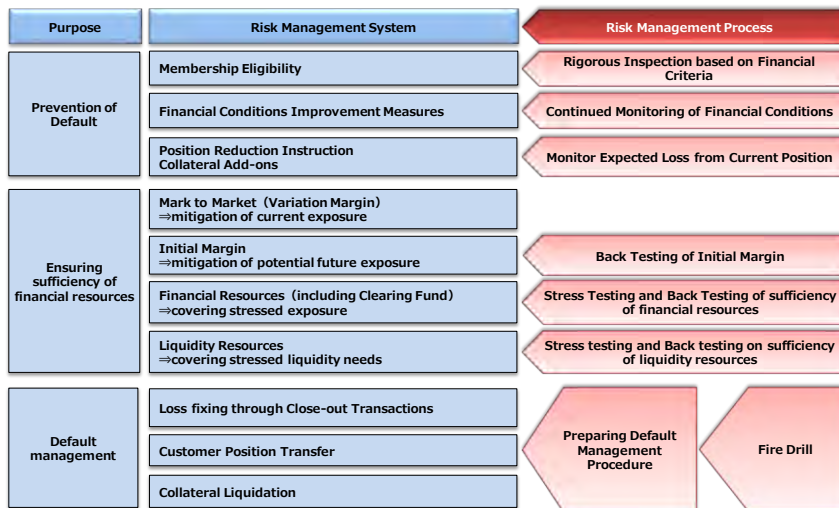


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3. Risk Management

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Overview of Credit Risk and Liquidity Risk Management



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Clearing Participant Qualification (Listed Products)

■ Criteria

1. Securities Company, Registered Financial Institution, Securities Finance Company
2. Financial Conditions (entrance and maintenance requirements)
3. Solid Management Structure and Business Operation Ability

[Details of Financial Conditions for Securities Company]

() : maintenance requirement

	Principal	Agency
Paid-in Capital	JPY 300 million (JPY 300 million)	JPY 300 million (JPY 300 million)
Net Assets	JPY 2 billion (JPY 300 million)	JPY 20 billion (JPY 20 billion)
Capital-to-Risk Ratio	200% (120%)	200% (200%)
Consolidated capital to risk ratio	200% (120%)	200% (200%)

[Details of Financial Conditions for Registered Financial Institution]

	Principal	Agency
Paid-in Capital	JPY 300 million (JPY 300 million)	JPY 300 million (JPY 300 million)
Shareholders' Equity	JPY 2 billion (JPY 300 million)	JPY 20 billion (JPY 20 billion)
Capital Adequacy Ratio * applied to registered financial institutions other than insurance companies	International standard : 8% (4%) * with overseas branch offices Domestic standard : 4% (2%) * without overseas branch office	International standard: 8% (8%) * with overseas branch offices Domestic standard: 4% (4%) * without overseas branch office
Solvency Margin Ratio * applied to insurance companies	400% (100%)	400% (400%)

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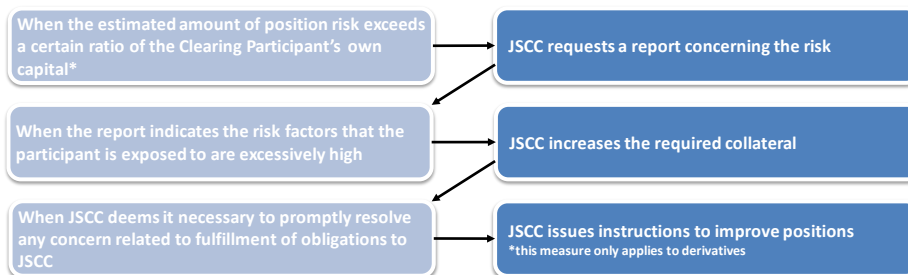
Clearing Participant Monitoring

■ Financial Monitoring

- Monthly Financial Report from Clearing Participants
- More frequent report from the participant who are identified the concerns or fluctuations

■ Position Monitoring

- Monitoring positions and exposure levels on a daily basis
- If the risk is determined to be excessive, collect information on whether customer positions are distributed unevenly and about Participants' recent fund-raising activities



*For cash products, the additional Initial Margin will be charged when an expected loss upon a default of the relevant Clearing Participant under stressed conditions cannot be covered by pre-funded financial resources.

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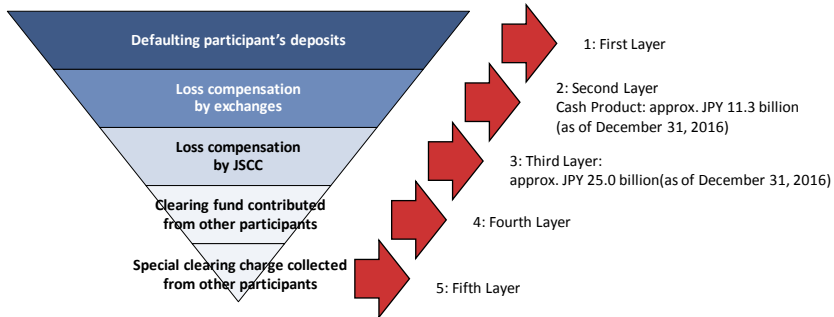
Default Management

■ Default Management Process

- In the event of a Clearing Participant's default, JSCC suspends the scheduled delivery of securities and payment of funds to the defaulting participant.
- At the same time, in order to fix the amount of losses arising from the default, JSCC executes the trades to offset the Unsettled Contracts of that participant, as well as selling the securities which was supposed to be delivered.

■ Loss Compensation Scheme

- The losses resulting from Clearing Participant's default shall be compensated in the following order:

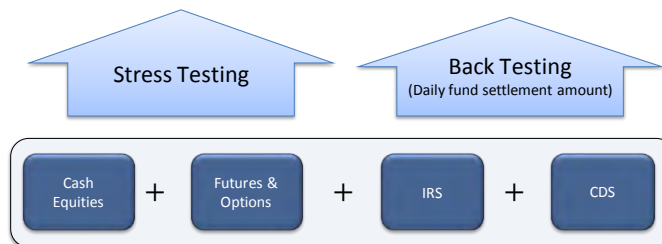


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Liquidity Management

- Liquidity Lines arranged with six Fund Settlement Banks
- Stress testing including forward-looking scenarios and back testing

Liquidity Line for JPY provided by 6 Fund Settlement Banks and JPX
Top 2 firms with the largest historical liquidity requirements across the products (Cover 2)



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Business Plan (FY2016-2018, Updated March 2017)



- ◆ Under current environment surrounding JSCC, it is still important that JSCC actively strengthen our role as core infrastructure and further strengthen our viewpoint of reinforcement of “services.”
- ◆ JSCC will continue our active efforts towards implementation of each measure after updating specific business plans based on the above management policy.

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Business Plan 1/2

Management Policy ① Reinforcement of Clearing Functions, Risk Management and IT Systems towards Service Quality Improvement

Listed Products Clearing Service	<ul style="list-style-type: none"> ➢ Replace current listed derivatives clearing system for improvement of risk management functions as well as capability for new product and revision of related rules (Derivatives Clearing Renewal Project) ➢ Take steps to shorten the settlement cycle for equities (T+2)
OTC Derivatives Clearing Service	<ul style="list-style-type: none"> ➢ Take measures for further enhancement of functionality/convenience <ul style="list-style-type: none"> ◆ Improve compression scheme for IRS Clearing Service, ◆ Implement position transfer at Client Clearing for CDS Clearing Service, etc.,
JGB OTC Transaction Clearing Service	<ul style="list-style-type: none"> ➢ Take steps to shorten the settlement cycle for JGB transactions (T+1) <ul style="list-style-type: none"> ◆ Revisions of Rules related to shortening settlement cycle
Company-Wide	<ul style="list-style-type: none"> ➢ Discuss towards optimizing overall Clearing System by streamlining/relocating etc. system functions ➢ Discuss towards reinforced risk management pursuant to PFMI additional guidance, etc.

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Business Plan 2/2

Management Policy ② Reinforcement of the Company's Role as Core Infrastructure through Expansion of the Scope of Services

Listed Products Clearing Service	<ul style="list-style-type: none"> ➢ Take steps to expand listed products eligible for clearing in response to the expansion of listed derivatives products
OTC Derivatives Clearing Service	<ul style="list-style-type: none"> ➢ Expand OTC derivatives products eligible for clearing <ul style="list-style-type: none"> ◆ Discuss towards clearing Cross Currency Swaps ◆ Expand Tenor (time to maturity) of Single Name CDS transactions eligible for clearing, etc.,
JGB OTC Transaction Clearing Service	<ul style="list-style-type: none"> ➢ Take steps for starting clearing service for Inflation-Linked Bonds
Company-Wide	<ul style="list-style-type: none"> ➢ Take measures to deal with expansion of users, including those required by overseas regulations ➢ In addition to discussing towards expansion of eligible products for clearing, discuss wider range of post trade service possibilities

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- Official website
 - <https://www.jpx.co.jp/jsc/en/index.html>
(Rules)
 - <https://www.jpx.co.jp/jsc/en/rule.html>
(Rule Change)
 - <https://www.jpx.co.jp/jsc/en/public.html>
- Inquiry
 - info@jsc.co.jp

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Self Regulatory Rules of JSDA

May 22, 2017

Satoru Yamamoto

Senior General Manager for
Self Regulatory Planning Division

Japan Securities Dealers Association

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Self Regulatory Rules of JSDA

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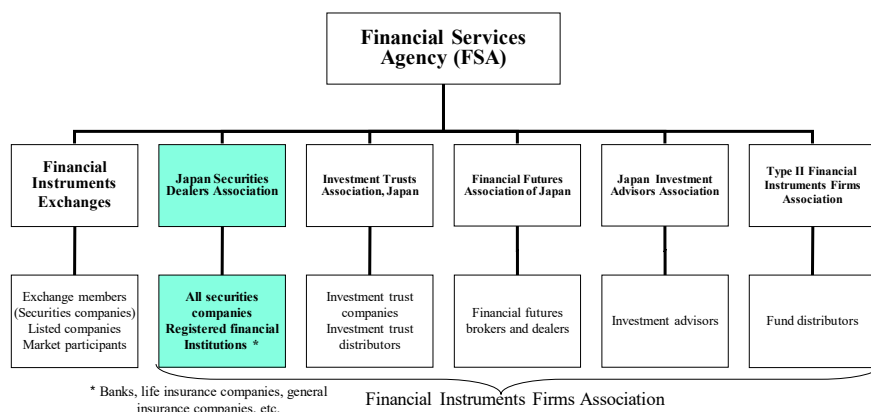
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I. Self Regulatory Organization under the Financial Instruments and Exchange Act (FIEA)



- The Financial Instruments and Exchange Act (FIEA) was promulgated in June 2006.
- Prior to the introduction of FIEA, individual industry laws* had regulated each field and thus the self-regulatory organization for respective industries exists as shown below.
 - *e.g. Commodity Exchange Act, Act on Investment Trusts and Investment Corporations, Financial Futures Trading Act



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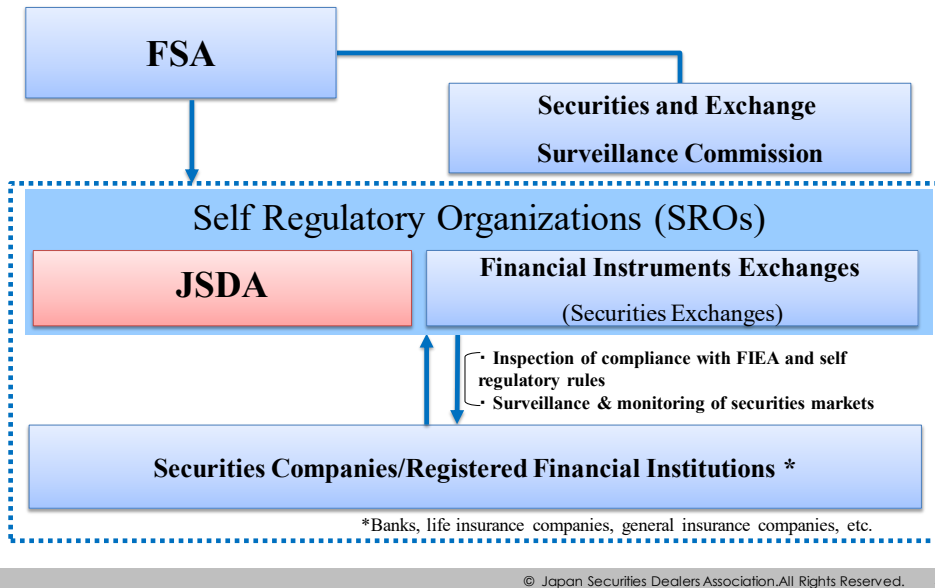
[Scope of Self Regulations for Each Financial Instruments Firm Association] (Outline)

- **Japan Securities Dealers Association (JSDA)**
 - ◆ Securities-related Business
 - ◆ OTC Derivatives Transactions (excluding Financial Futures Transactions)
- **Investment Trust Association, Japan (JITA)**
 - ◆ Investment Management Business (Investment Trust Business, etc.)
- **Financial Futures Association of Japan (FFAJ)**
 - ◆ Financial Futures Transactions
- **Japan Investment Advisers Association (JIAA)**
 - ◆ Investment Advisory Business
 - ◆ Discretionary Investment Business
- **Type II Financial Instruments Firms Association**
 - ◆ Fund Distribution Business

※The 5 associations listed on the left hold periodic meetings to exchange views (“Meeting for Communication and Deliberation among Financial Instruments Business Associations”)

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[Structure for Application of Self Regulations for Securities Companies and Registered Financial Institutions]



II. Financial Instruments and Exchange Act (FIEA) and JSDA



➤ Authorization of Establishment (Article 67-2)

A Financial Instruments Business Operator that intends to establish an Authorized Association shall obtain authorization from the Prime Minister (FSA). JSDA has obtained such authorization.

➤ JSDA's Purpose under FIEA (Article 67)

Aims to ensure fair and smooth sales and purchases or other transactions of Securities and Derivative Transactions, etc. and to contribute to the sound development of the Financial Instruments Businesses and the protection of investors.

➤ JSDA’s Member Firms (Article 68, Paragraph1)

Member Firms of an Authorized Association (JSDA) shall be limited to Financial Instruments Business Operators and Registered Financial Institutions (the latter within the scope of conducting the business of registered financial institutions).

→ Prescribed by Article 5 of JSDA’s Articles of Association.

(1) Regular Members)	Securities Companies (Among the Financial Instruments Business Operators, those who conduct Type I Financial Instruments Business (excluding, however, those who exclusively deal with OTC derivative transactions other than securities related OTC Derivative transactions))
(2) Specified Business Members	Companies dedicated to Specified OTC Derivative Transactions or crowd funding (Among the Financial Instruments Business Operators, those who conduct only business related to the Specified Over-The-Counter Transactions of Derivatives, etc., or Type I Small Amount Electronic Offering Handling Business prescribed in Article 29-4-2, Paragraph 10 in the Type I Financial Instrument Business)
(3) Special Members	Registered Financial Institutions (Banks, life insurance companies, general insurance companies, etc.) Registered Financial Institutions (those who conduct the Registered Financial Institutions Business (among the businesses prescribed in Article 33-2 thereof, those set forth in Item 1 of the same Article (excluding those related to the rights set forth in each Item of Article 2, Paragraph 2 thereof and deemed as Securities pursuant to the same Paragraph), Item 2 (excluding those related to the rights set forth in each Item of Article 2, Paragraph 2 thereof and deemed as Securities pursuant to the same Paragraph), or Item 3 (limited to those related to the Specified Over-The-Counter Transactions of Derivatives, etc.), or Securities, etc. Management Business; the same applies hereinafter).

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➤ Eligibility for JSDA’s Members (Article 68, Paragraphs 2 & 5)

An Authorized Association (JSDA) shall stipulate in its Articles of Association that any Financial Instruments Business Operator is eligible for membership as a Member Firm, provided, however, an Authorized Association may stipulate in its Articles of Association that the Authorized Association may refuse admission as a Member Firm if an applicant has been expelled from membership or has had qualification for trading rescinded by an Authorized Association (JSDA) or a Financial Instruments Exchange on account of having violated the laws and regulations. → Prescribed by Article 11 and 23 of JSDA’s Articles of Association.

※ A Financial Instruments Business Operator or Registered Financial Institution that does not become a member of the JSDA, so as not to be deficient in investor protection, must prepare its internal rules to have contents that are consistent with JSDA’s Articles of Association and its regulatory rules, thereby establishing a system that aims at observing such internal rules (FIEA, Article 29-4, Paragraph 1, Item 4(d)).

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[Self-Regulatory Operations Required of JSDA under FIEA]

Self-Regulatory Operations	Overview
[1] Rule-making (Article 67-8, Paragraph 1, Item 10)	• Establish and build awareness of self-regulatory rules that apply to Association Members.
[2] Inspection and monitoring of compliance with laws and regulations by Association Members (Article 67-8, Paragraph 1, Item 14)	• Inspect and monitor business activities and internal control systems of Association Members.
[3] Disciplinary actions given to Association Members (Article 68-2)	• Take actions to punish Association Members that have violated the laws and self-regulatory rules, such as reprimanding members, issuing fines, suspending or placing limitations on membership, and expelling members.
[4] Improvement in the qualifications of officers and employees of Association Members (Article 67-8, Paragraph 1, Item 9)	• Hold qualification examinations for securities sales representatives and for employees responsible for internal administration, and conduct training, etc. for officers and employees of Association Members.
[5] Resolution of complaints from investors and mediation (Article 67-8, Paragraph 1, Item 11)	• Resolve complaints from investors concerning the operations of Association Members. Conduct mediation to resolve disputes between Association Members and investors.

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[Other Functions Required under FIEA]

➤ **An Association shall stipulate the following items in its Articles of Association** (Article 68):

- ◆ It shall endeavor to prevent fraudulent acts, market manipulation or collection of unreasonable fees and expenses by Member Firms, as well as to promote the fair and equitable principles of transactions (Paragraph 3).
- ◆ It shall endeavor to ensure the confidence of investors by having Member Firms establish their internal rules and administration systems for the purpose of preventing the violation of laws and regulations and the Rules of Association (Paragraph 4).

→ In response to such mission, JSDA prescribes these Items in its Articles of Association, and prepares, if necessary, the model internal rules, etc. and requests Association Members to be equipped with such rules.

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III. Types of JSDA's Self Regulatory Rules



- **Articles of Association**
- **Self Regulatory Rules**
- **Unified Business Practice Rules**
 - Rules prescribing the unified process in the securities industry regarding the rights and obligations in connection with securities transactions among Association Members.
- **Dispute Settlement Rules**
 - Rules prescribing the actions and procedures for JSDA to resolve disputes between an Association Member and customer or among Association Members.
- **Association Management Rules**
 - Rules prescribing management procedures of various deliberating groups within JSDA
- **Resolutions of the Board of Governors**

IV. Overview of Self Regulatory Rules



In order to ensure that financial instrument markets run smoothly, JSDA formulates various kinds of self regulatory rules to be applicable to Association Members, thereby striving to make the financial instrument business fair and efficient (approximately 50 rules).

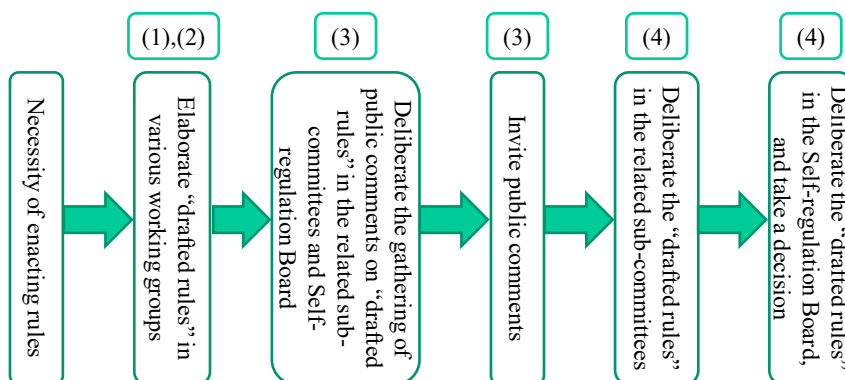
Self regulatory rules are roughly classified as follows;

- Investment Solicitation, Customer Management and Internal Administration, etc.
- Employees and Sales Representatives
- Advertising
- Personal Information Protection

- Stocks
- Bonds
- Foreign Securities and Transactions
- Securitization
- Derivatives
- Others

[Rule-Making Process]

- (1) Grasp the necessity of rules and establish working groups etc. under related sub-committees.
- (2) Elaborate drafted rules in the working group, etc.
- (3) After deliberating in the related sub-committees and Self-regulation Board, invite public comments (in principle, during 30 days or more).
- (4) Deliberate the drafted rules based on the public comments in the related sub-committees and Self-regulation Board, and take a decision.

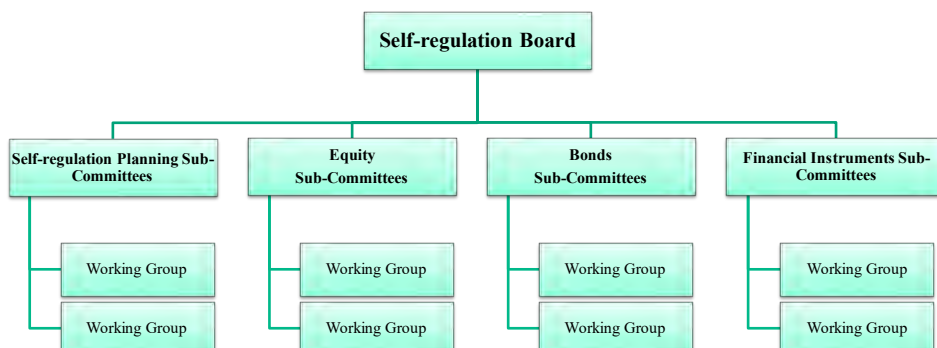


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[Working Group (1)]

- The Working Groups, etc. were made up of around a dozen officers and/or employees from the Association Members, experts, etc.
- Not limited to the officers and/or employees of the Association Members, participation of the FSA and/or Exchange, etc. was requested as appropriate depending on the subject to ask their opinions during deliberations.

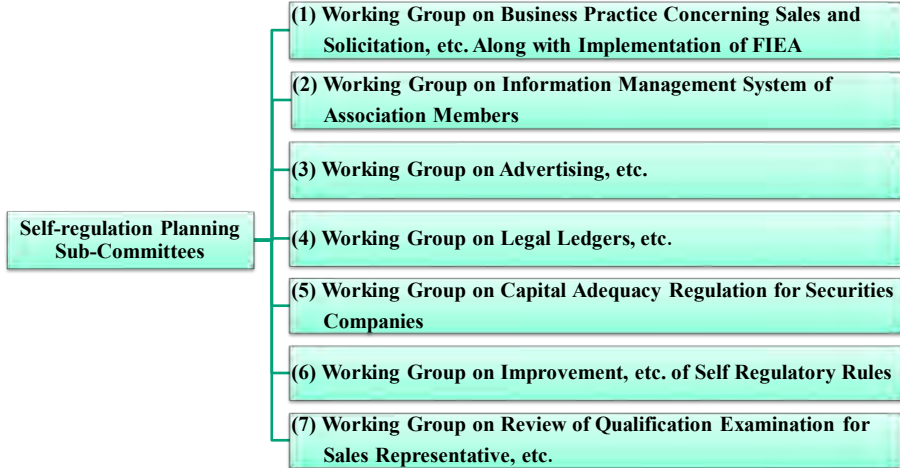
➤ Organigram of Consultative Sub-Committees under "Self-regulation Board"



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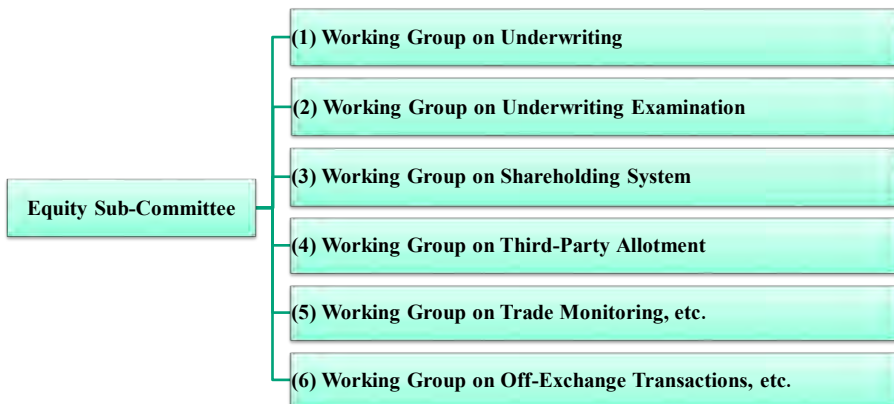
[Working Group (2)]

- Organigram of Major Working Groups, etc. under “Self-regulation Planning Sub-Committees”



[Working Group (3)]

- Organigram of Major Working Groups, etc. under “Equity Sub-Committees”



[Working Group (4)]

➤ Organigram of Major Working Groups, etc. under “Bonds Sub-Committees”



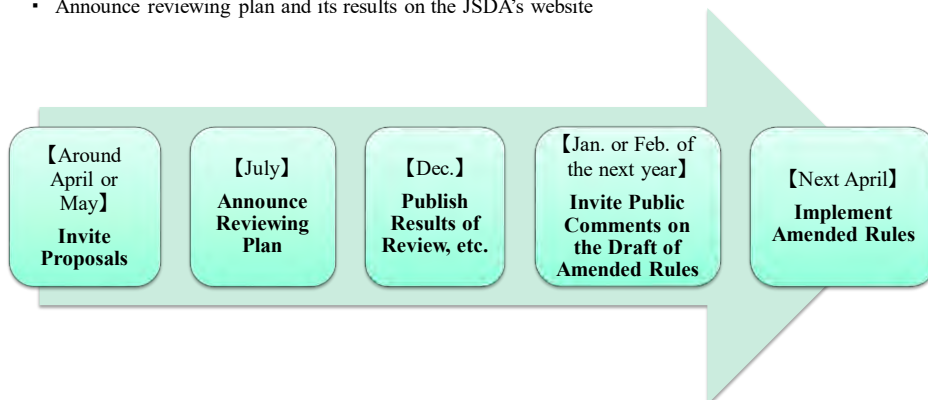
➤ Organigram of Major Working Groups, etc. under “Financial Instruments Sub-Committees”



[Periodical Review]

➤ Periodical Review of Self Regulatory Rules

- Since FY 2011, we have periodically (once a year) invited Association Members, etc. for opinions and requests concerning review of rules, etc.
- After reviewing and examining the content of opinions and requests that have been brought up, deliberate as necessary in the committee, etc. responsible for the rules in question.
- Announce reviewing plan and its results on the JSDA's website



[List of Self Regulatory Rules (1)]

➤ Relating to Investment Solicitation, Customer Management and Internal Administration, etc. by Association Members

- Rules Concerning Solicitation for Investments and Management of Customers, etc., by Association Members
- Rules Concerning Establishment of Confidential Corporate Information Management System by Association Members
- Rules Concerning Change, etc. of Assessment Rates for Substitute Securities Related to Margin Transactions
- Rules Concerning Establishment of Trade Compliance Screening System for the Prevention of Unfair Trading
- Rules Concerning Proper Handling of Pre-Hearing by Association Members
- Rules Concerning Establishment of Order Management System by Association Members
- Rules Concerning Handling of Block Trade for Intermediation Purpose
- Rules Concerning Acceptance of Deposit, etc. of Securities
- Rules Concerning Appropriate Implementation of Separate Management of Customer Assets by Regular Members
- Rules Concerning Internal Administrators, etc. of Association Members
- Rules Concerning Application for Confirmation, Examination, Confirmation, etc. of Incidents
- Rules Concerning Unification of Accounting for Securities Related Business
- Rules Concerning Handling of Documents Delivery, etc. through Electromagnetic Methods
- Rules Concerning Financial Instruments Intermediary Service Providers
- Rules Concerning Protection, etc. of Customers from Fraudulent Withdrawal Using Counterfeit or Stolen Cards
- Rules Concerning Planning, etc. of Business Continuity Management in Case of Emergency by Regular Members
- Rules Concerning Elimination of Relationship with Antisocial Forces

[List of Self Regulatory Rules (2)]

➤ Relating to Employees and Sales Representatives

- Rules Concerning Employees of Association Members
- Rules Concerning Sales and Purchase, etc. of Specified Securities, etc. of Listed Companies, etc. by Employees of Association Members
- Rules Concerning Qualification and Registration, etc. of Sales Representatives of Association Members
- Rules Concerning Qualification Examination for Sales Representatives, etc.

➤ Relating to Advertising

- Rules Concerning Representation of Advertising, etc. and Offer of Premiums
 - Rules Concerning Handling of Analyst Reports
- [Ref.] Guideline Concerning Information Gathering, etc. and Information Transmission Acts by Analysts of Association Members

➤ Relating to Protection of Personal Information

- Guideline for Protection of Personal Information
- Rules Concerning Security of Proper Handling of Personal Information by Association Members
- Rules Concerning Complaint Processing Operations Related to Handling of Personal Information

[List of Self Regulatory Rules (3)]

➤ Relating to Stocks

- Rules Concerning Over-The-Counter Securities
- Rules Concerning Equity-Based Crowdfunding
- Rules Concerning Shareholder Community
- Rules Concerning Green Sheet Issues and Phoenix Issues
- Rules Concerning Sale and Purchase, etc. of Listed Share Certificates, etc. Conducted Outside of Financial Instruments Exchange Market
- Rules Concerning Transactions Subject to Closing Price and Associated Proprietary Transactions
- Rules Concerning Handling of Cumulative Stock Investments and Mini Investments in Stocks
- Rules Concerning Handling of Borrowing and Lending Transactions for Share Certificates, etc.
- Rules Concerning Underwriting, etc. of Securities
- Rules Concerning Distribution to Customers Related to Underwriting, etc. of Public Offering, etc. of Share Certificates, etc.
- Rules Concerning Handling of Allotment of New Shares to Third Parties, etc.

[List of Self Regulatory Rules (4)]

➤ Relating to Bonds

- Rules Concerning Publication of Over-The-Counter Trading Reference Prices, etc. and Trading Prices of Bonds
- Rules Concerning Publication, etc. of Over-The-Counter Quotation of Corporate Bonds for Retail Customers
- Rules Concerning Solicitation, etc. of Sale and Purchase, etc. of Domestic CPs, etc., and Private Placement Corporate Bonds
- Rules Concerning Handling of Sale and Purchase of Bonds with Options
- Rules Concerning Handling of Conditional Sale and Purchase of Bonds, etc.
- Rules Concerning Handling of Sale and Purchase of Bonds, etc. with Delayed Settlement
- Rules Concerning Handling of Short Selling, and Borrowing and Lending Transactions of Bonds

➤ Relating to Foreign Products and Transactions

- Rules Concerning Foreign Securities Transactions
- Rules Concerning Special Provisions of the Rules Concerning Sale and Purchase of Foreign Securities regarding Overseas Issued Securities Solicited to Small Number of Investors
- Rules Concerning Foreign Securities Futures Transactions, etc.

➤ Relating to Securitized Products

- Rules Concerning Distributions, etc. of Securitized Products

➤ Relating to Derivatives Transactions

- Rules Concerning CFD Transactions
- Rules Concerning Binary Option Transactions

➤ Others

- Rules Concerning Maintenance of and Compliance with Ethical Code by Association Members

[Rules Relating to Investment Solicitation, Customer Management, Internal Administration, etc. (1)]

➤ Rules Concerning Solicitation for Investments and Management of Customers, etc. by Association Members

◆ Principle of Suitability (Article 3, Paragraph 2)

An Association Member must endeavor to solicit investments that meet customers' intentions and actual situations by fully understanding the customers' investment experience, purpose of investment, financial conditions, etc.

◆ Suitability of Rational Ground (Article 3, Paragraph 3)

When conducting sale of Securities, etc. that are new for an Association Member, the Association Member shall fully understand the characteristics and risks of such Securities, etc. and shall not sell them if the Association Member cannot identify customers who are suitable for such Securities.

◆ Adequate Explanations to Customers (Article 3, Paragraph 4)

An Association Member must endeavor to adequately explain and have the customer understand the essential matters of sale and purchase or other transactions of securities, etc.

[Rules Relating to Investment Solicitation, Customer Management, Internal Administration, etc. (1)] (Continued)

➤ Rules Concerning Solicitation for Investments and Management of Customers, etc. by Association Members (Continued)

◆ Customer's Card (Article 5)

An Association Member shall maintain a customer card containing the matters prescribed in each item below for those customers who conduct sale and purchase or other transactions of securities, etc. (excluding professional investors):

✓ name, address, date of birth, occupation, purpose of investment, asset condition, investment experience, etc.

◆ Solicitation Commencement Standards (Article 5-2)

When soliciting the sale of products set forth below to a customer, the Association Member must establish the solicitation commencement standards for each sale set forth in each of the following items, and must not solicit customers who do not meet such standards: sales of complex structured bonds and investment trusts similar to OTC derivative transactions and sale of leveraged investment trusts.

◆ Sale by Solicitation to Elderly Customers (Article 5-3)

An Association Member must establish internal rules concerning solicitation and sale to elderly customers and endeavor to conduct solicitation and sales in accordance with those rules.

➤ **Rules Concerning Solicitation for Investments and Management of Customers, etc. by Association Members (continued 2)**

◆ **Transaction Commencement Standards (Article 6)**

If an Association Member conducts transactions, etc. as set forth below, it must establish the transaction commencement standards for each transaction and conclude a contract of such transactions, etc. with the customers who meet such standards:

- ✓ Margin transaction, share option certificates, investment equity subscription right certificates, etc.

◆ **Collection of Confirmation Document (Article 8)**

When an Association Member enters into a contract with a customer for Sales and Purchases or other transactions in share option certificates, etc. for the first time, it shall collect a confirmation document regarding such transactions, etc. from the customer in order for the customer to understand the risks involved in the financial instruments transaction, fees, and other details as well as to confirm that the transaction is made according to the customer's own judgment and responsibility.

◆ **Prevention of Confusion with Deposits, etc. in Registered Financial Institution (Article 10)**

A Special Member must provide the customers with an explanation to prevent the customer from mistaking the securities for deposits, etc.

◆ **Maintenance, etc. of Insider Registration Cards (Article 15)**

An Association Member must ask any customer to submit a form declaring whether the customer is classified as an officer, etc. of a listed company, etc. Based on the declaration from the customer, an insider registration card must be prepared.

[Rules Relating to Investment Solicitation, Customer Management, Internal Administration, etc. (2)]

➤ **Rules Concerning Internal Administrators, etc. of Association Members**

◆ **Purpose (Article 1)**

Prescribe the qualifications, allocations, duties, etc. of officers and employees who engage in management of Association Members in compliance with the Financial Instruments and Exchange Act, etc.

◆ **Internal Administration Supervisor (Article 3, 4) (responsible for the compliance of the company as a whole)**

A representative director or a registered representative executive officer who takes charge of internal administration

◆ **Internal Administration Assistant Supervisor (Article 6)**

An officer or a responsible person such as general manager or section chief, etc. of the internal administration department

◆ **Sales Manager (Article 10, 11, 12) (leader in charge of compliance at sales office)**

A chief of the sales unit (e.g., head office, other sales office and administrative office, etc.)

◆ **Internal Administrator (Article 13, 14, 15) (employee in charge of compliance at sales office)**

A manager of internal administration for each sales unit (e.g., head office, other sales office and administrative office, etc.)

[Rules Relating to Investment Solicitation, Customer Management, Internal Administration, etc. (3)]

➤ Rules Concerning the Establishment of Trade Compliance Screening System for the Prevention of Unfair Trading

◆ Purpose (Article 1)

Regular Members to establish a trade compliance screening system for the prevention of unfair trading of listed share certificates, etc.

◆ Establish Internal Rules (Article 2)

◆ Precise Grasp of Trends and Customer Motives Regarding Trade (Article 3)

◆ Trade Examination (Article 4)

◆ Preparation and Retention of Internal Records (Article 5)

Prepare internal records regarding the results of the trade examination, etc. and retain them for five years.

[Rules Relating to Employees]

➤ Rules Concerning Employees of Association Members

◆ Reference to the Association (Article 5)

Inquiry of past disciplinary action taken by Association at the time of recruitment of employees.

◆ Prohibited Acts (Article 7) (such acts as stated below)

- ✓ Margin transactions or derivative transactions that are conducted by an employee as his/hers own account (Article 7, Paragraph 3, Item 6)
- ✓ Securities transactions conducted jointly with a customer (Article 7, Paragraph 3, Item 8)
- ✓ Transactions under a false name (Article 7, Paragraph 3, Item 11)
- ✓ Borrowing and lending of money (Article 7, Paragraph 3, Item 16)
- ✓ Breach of confidentiality obtained through occupation (Article 7, Paragraph 3, Item 17)
- ✓ Advertisement not being checked by examiner of advertisement (Article 7, Paragraph 3, Item 19)

◆ Notification of Breach of Laws and Rules (Article 9)

Submit to the Association a Report on Incidents when any act in violation of the laws and regulations and improper acts are found.

◆ Treatment of Perpetrators of Inappropriate Acts (Article 12)

Treat a person who has received a disciplinary action equivalent to discharge as a perpetrator of an inappropriate act. Cancel the qualification of sales representative, etc.

[Rules Relating to Advertising (1)]

➤ Rules Concerning Representation of Advertising, etc. and Offer of Premiums

◆ Purpose (Article 1)

With respect to representation of advertising and offer of premiums made by an Association Member, ensure appropriate representation of advertising and offer of premiums by prescribing representations, methods, matters to be observed, etc., thereby contributing to investor protection.

◆ Prohibited Acts (Article 4, Paragraph 1)

An Association Member must not represent advertising, etc. which falls, or is likely to fall, under any of the following Items:

- ✓ Representation which runs opposite to fair and equitable principles of transactions;
- ✓ Representation which impairs the dignity of the Association Member;
- ✓ Representation which contains elements that violate FIEA or other laws and regulations;
- ✓ Representation which contains elements that may mislead investment decisions of an investor;
- ✓ Representation which contains excessively subjective elements.

◆ Prohibited Acts (Article 4, Paragraph 2)

An Association Member must not offer premiums which violate or are likely to violate the Act Against Unjustifiable Premiums and Misleading Representations or other laws.

◆ Internal Examination, etc. of Association Members (Article 5)

An Association Member must have the advertising examined by an internal administrator qualification officer to ensure that there is no violation of the prohibited acts.

[Rules Relating to Advertising (2)]

➤ Rules Concerning Handling of Analyst Reports

◆ Purpose (Article 1)

Ensure that business pertaining to the preparation and distribution or publication of analyst reports is implemented in an appropriate and fair manner by prescribing matters that an Association Member must comply with in respect to the handling, etc. of analyst reports, thereby contributing to the provision of appropriate and valid information to investors and to the improvement of the quality of analysts.

◆ Internal Examination (Article 4)

An Association Member must strive to confirm that the representations and assessments described in analyst reports are appropriate and reasonable.

When an Association Member intends to publish, etc. analyst reports, it must have the examining officer examine such analyst reports.

◆ Presentation, etc. of Conflicts of Interest (Article 6)

If an Association Member or Analyst who prepares such analyst reports has a material conflict of interest with the company regarding which such Analyst Reports are to be prepared, it must explicitly present details regarding such conflicts of interest in the relevant analyst reports.

➤ **Rules Concerning Handling of Analyst Reports (continued)**

◆ **Strict Management of Information (Article 8)**

An Association Member must appropriately manage the material information.

◆ **Ensuring Independence of Opinions of Analysts, etc. (Article 10)**

An Association Member must establish an appropriate organizational system and an appropriate compensation system.

An Association Member must guide and supervise other departments (e.g., underwriting division, investment banking division, corporation division, sales division, etc.) in order not to unreasonably interfere with or intervene so that the independence of the opinions of analysts is impaired.

An Association Member must guide and supervise analysts not to present any content that is different from its independent opinions in consideration of the interests of specific customers.

➤ **Rules Concerning Handling of Analyst Reports (continued 2)**

◆ **Prohibition of Involvement in Business of the Underwriting Division and the Investment Banking Division (Article 11)**

An Association Member shall pay careful attention to ensure the independence of Analysts from its respective underwriting division and investment banking division, and such Association Member must prevent its relevant officers and employees from conducting the activities set forth in each of the following Items and any activities similar thereto:

- ✓ The activity of analysts being involved in making proposals to companies, etc. concerning the business of the underwriting division or the investment banking division;
- ✓ The activity of officers and employees engaged in the business of the underwriting division or the investment banking division involving or making an effort to involve analysts or outside analysts in making proposals to companies, etc. concerning the business of the relevant divisions;
- ✓ The activity of analysts being involved in briefings, etc. with investors conducted by companies, etc. or the relevant Association Member (limited to (i) briefings, etc. conducted by companies, etc. concerning the business or transactions of the underwriting division or the investment banking division and (ii) briefings, etc. in which the underwriting division or the investment banking division is involved); and
- ✓ The activity of officers and employees engaged in the business of the underwriting division or the investment banking division involving or making an effort to involve analysts or outside analysts in briefings, etc. to investors conducted by companies, etc. or the relevant Association Member.

[Rules Relating to Equities (1)]

➤ Rules Concerning Over-The-Counter Securities

- ◆ Solicitation of investments and sale and purchase of unlisted shares
- ◆ An Association Member must not solicit customers for sales of unlisted shares unless they satisfy a certain criteria.

<Certain criteria >

- ✓ Green Sheet issues, Phoenix issues
- ✓ Equity-based crowdfunding
- ✓ Shareholders community
- ✓ Unlisted shares, etc. issued by listed companies
- ✓ Private placement for professional investors

[Rules Relating to Equities (2)]

➤ Rules Concerning Underwriting, etc. of Securities

- ◆ Regulations concerning underwriting of securities that Regular Members conduct in Japan
- ◆ Ensure independence of underwriting examination
- ◆ Underwriting examination items
- ◆ Verify use of funds and request issuers to disclose this information and also request that issuers disclose the dividend payout and dividend policy

[Rules Concerning Bonds, Foreign Securities and Transactions]

- **Rules Concerning Publication of Over-The-Counter Trading Reference Prices, etc. and Trading Price of Bonds**
 - ◆ Over-The-Counter Transactions
 - ◆ Disseminate “Reference Prices for Transactions” (every business day)
 - ◆ Publicize “Monthly Trading Volumes,” etc.
 - ◆ Ensure fair trading (trading by proper price, display of price information to retail investors)

- **Rules Concerning Foreign Securities Transactions**
 - ◆ Self Regulatory Rules for sale and purchase and public offerings and secondary offering of foreign securities
 - ◆ Requirements for foreign securities for which investment solicitation of retail customers is possible
 - ◆ Delivery of explicative notes and notice for Foreign Securities

V. Implementation of Inspections and Monitoring Surveys



- **Inspections and Monitoring of Association Members**
 - ◆ JSDA conducts inspections regarding compliance with laws and self regulatory rules in the sales activities of Association Members and the status of the establishment of their internal administration systems.
 - ◆ In addition, JSDA conducts monitoring surveys regarding the business management of securities companies and their separate administration of customers' assets.

VI. Imposing Self Regulatory Disciplinary Action



➤ **Disciplinary Action Against Association Members**

- ◆ JSDA takes strict disciplinary action against Association Members and their officers and employees for violations of laws, self regulatory rules, etc. to prevent their recurrence and as a deterrent.

VII. Carrying Out the Sales Representative Registration Process and Qualification Exam



➤ **Sales Representative Registration Process, Qualification Examinations, etc.**

- ◆ JSDA carries out the registration process for Sales Representatives a under mandate by the prime minister (FSA).
- ◆ Moreover, pursuant to the self regulatory rules, JSDA implements the sales representative qualification examination and the training seminar for renewal of sales representative qualifications.

VIII. Complaints/Consultation and Mediation of Securities Transactions, etc. (1)



➤ Complaints/Consultation and Mediation of Securities Transactions, etc.

- ◆ The FIEA requires JSDA to handle customer's complaints and requests for consultation regarding Association Members, as well as to provide a "mediation" service to resolve disputes over securities transactions between customers and Association Members.
- ◆ These tasks of handling complaints/consultation and mediation are assigned to, and conducted by the Financial Instruments Mediation Assistance Center (FINMAC), which is an NPO.

* FINMAC (Financial Instruments Mediation Assistance Center) is an organization that accepts consultations and complaints regarding trouble related to transactions of financial instruments, including stocks, investment trusts, and foreign exchange margin trading (FX), and resolves disputes in a fair and neutral manner. It also operates a mediation system for dispute resolution by lawyers as the system used when the users are not satisfied with the process of consultations and complaints.

FINMAC is an organization operated collaboratively by five statutory self-regulatory organizations such as Japan Securities Dealers Association with certification granted by the Ministry of Justice and the Financial Services Agency.

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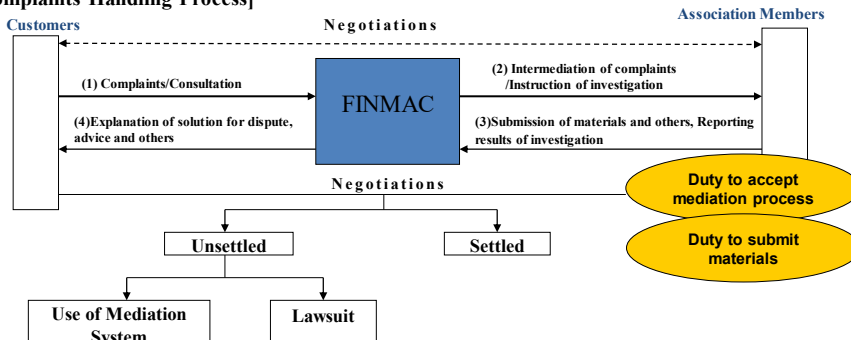
VIII. Complaints/Consultation and Mediation of Securities Transactions, etc. (2)



(1) Complaints and Consultation

- ✓ Consulting staff of FINMAC responds to requests for consultation and to inquiries from customers in connection with financial instruments or trading methods.
- ✓ After receiving the complaints concerning a specific securities transaction or the related solicitation or procedures, FINMAC acts as an intermediary between the counterparty Association Member and assists in the resolution of the dispute.

[Complaints Handling Process]



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VIII. Complaints/Consultation and Mediation of Securities Transactions, etc. (3)



(2) Mediation

- ✓ If FINMAC does not succeed in resolving a dispute through discussions and the customer is not satisfied with the result, it will introduce lawsuits, arbitration or mediation as necessary.
- ✓ In the Mediation system, a neutral and independent “Mediator (lawyer)” is appointed by FINMAC to act as an intermediary. The Customer reapplies for this service to FINMAC, which appoints a Mediator and takes the necessary procedures to resolve the dispute with the counterparty Association Member.

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IX. Significance and Advantage of Self-Regulation (1)



➤ **Autonomy**

The self-regulation governs themselves according to rules formulated by themselves, and for this reason, it leads to the healthy compliance based on the autonomous spirit. In addition, Association Members can gain a deep understanding of the intention and purpose of the rules through participating in the formulation process.

➤ **Expertise**

In order to properly regulate professional and technical financial transactions, there is a limit to what we can do with laws and regulations only, and it will be effective for those who are familiar with the current state of the market and business practice to utilize their expertise and formulate discipline on their own.

➤ **Mobility and Flexibility**

The self-regulation, as it has more mobility and flexibility, is suitable for coping with changes of rules and their interpretation in a timely manner in response to the ever-changing market circumstances.

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IX. Significance and Advantage of Self-Regulation (2)



➤ **Best Practice**

The public regulation is the minimum necessary standard for protecting users, etc. On the other hand, self regulatory organizations may set flexible and multilayered best practices leading to maintenance and improvement of high-level ethics as specialized business operators by establishing principles together with specific rules.

➤ **Formulation of Norms Fully Reflecting the Purpose of Laws and Regulations (Bridging Laws and Business Practices)**

If self regulatory organizations can provide guidance on the specific application of rules and principles embodying the purpose and spirit of laws and ordinances, the regulations under laws and ordinances will be able to focus on the aspect of presenting basic principles, and the formation of norms reflecting the purpose of laws and ordinances becomes more substantial.

➤ **Reduction of Social Costs**

Since under self-regulation the Association Members themselves are responsible for regulatory costs, they can make effective rules in light of regulatory objectives while becoming sensitive to costs. This leads to the reduction of the social cost for users and the market as a whole compared with the case under laws and ordinances

—From the interim discussion points of the deliberation on how self-regulation rules should be (2010.6.29)—

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Thank you for your attention!

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Japan Securities Dealers Association Rules for IPOs

May 22, 2017

Tetsuya Iwase
Assistant Manager
Equity Market Div., Self-regulation HQ
Japan Securities Dealers Association

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Attachments



Reference 1: Japan Securities Dealers Association, "Rules Concerning Underwriting, Etc. of Securities" (Underwriting Rules)

Reference 2: Japan Securities Dealers Association, "Detailed Rules Relating to the Rules Concerning Underwriting, Etc. of Securities" (Detailed Underwriting Rules)

Reference 3: Japan Securities Dealers Association, "Rules Concerning Distribution to Customers Related to Underwriting, Etc. of Public Offering, Etc. of Share Certificates, Etc." (Distribution Rules)

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1. Underwriting rules

Introduction

- The rules for initial public offerings of shares (IPOs) are mainly established by a stock exchanges.
 - Listing requirements
 - Listing review

- The JSDA has established rules concerning the underwriting of shares by brokerages and the associated distribution of such shares.
 - Initial public offerings (IPOs) are governed by these rules.
 - In its rules, JSDA prescribes the basic principles that should be observed. The specifics of how each company ensures that underwriting and distribution are handled appropriately in actual practice are established in each company's own internal rules and manuals, which they enforce themselves.

- Appropriate underwriting decisions (Underwriting Rules Article 3)
 - Ensure necessary and sufficient period of time for the underwriting review
 - Based on the substance of the underwriting review
 - Underwriting decision must be made based on the overall judgment and responsibility
- Rigorous underwriting review (Underwriting Rules Article 12)
 - The underwriting review department carries out a rigorous underwriting review of the underwriting review categories listed in Article 16 of the Underwriting Rules (for an IPO)
 - The materials necessary for the underwriting review are received from the issuer
 - Exchange of questions and answers with the issuer, both in person and in writing
 - Sound out the auditor
 - Receive comfort letter from the auditor
 - Utilize securities analyst research findings

cf. "Cabinet Office Ordinance on the Financial Instruments Business", Article 123-1-4

- Develop underwriting review framework (1)
 - Ensuring the independence of the underwriting review (Underwriting Rules Article 5)
 - ✓ Establish an underwriting review department
 - ✓ Officers and personnel responsible for the underwriting review may not be involved in underwriting (with certain exceptions)
 - Establish internal rules for underwriting reviews (Underwriting Rules Article 6-1)
 - ✓ Underwriting review categories
 - ✓ Information necessary for an appropriate review
 - ✓ Information necessary to form an opinion while ensuring the independence of the underwriting review
 - Establish internal manual for underwriting review (Underwriting Rules Article 6-2)
 - ✓ Underwriting review procedures

Underwriting review (2)



- Develop underwriting review framework (2)
 - Create underwriting review records and retain for 5 years (Underwriting Rules Article 7)
 - ✓ Materials and information collected in the underwriting review
 - ✓ Records of the analysis and evaluation of these materials and information
 - ✓ Materials and information that served as the basis of the underwriting decision
 - ✓ Records of the process of forming the underwriting decision
 - Regular internal inspections/audits of underwriting (Underwriting Rules Article 8)
 - ✓ Are the internal rules being observed?
 - ✓ Is the internal manual being properly followed?

Underwriting review (3)



- Items for underwriting review (for equity IPOs) (Underwriting Rules Article 16-1(1) and Detailed Underwriting Rules Article 9-1))
 - Eligibility for public offering
 - Soundness and independence of corporate management
 - Business continuity regime
 - Corporate governance and internal control regime
 - Financial condition and business performance
 - Business performance outlook
 - Intended use of proceeds
 - Proper disclosure of company information
- ★ The above represent the minimum as far as the items for underwriting review specified by the rules. It may be necessary to review other items as needed.

Underwriting review (4)



- After launch, and up to the payment date (Underwriting Rules Article 4)
 - Strive to get accurate information about how the issuer is doing.
 - Sound out the issuer as necessary
- Immediately following IPO (Underwriting Rules Article 15)
 - When the issuer discloses material facts immediately after the IPO
 - ✓ Check whether the circumstances arose before the IPO
 - ✓ Check whether the issuer was misleading in the information provided during the underwriting review
 - ✓ Verify whether the disclosures at the time of the IPO were appropriate
 - ✓ If it is determined that there is a substantial disparity between what was disclosed at the time of the IPO and the issuer's business situation at the time of the underwriting review, offer the issuer the opportunity to fully explain the reasons for this to the investors

Request for disclosure of the use of funds



- Ask the issuer to disclose the following information in press releases at the time of the launch and/or in the securities registration statement (Underwriting Rules Article 20-1, Article 23)
 - Intended use of proceeds
 - Impact on the issuer's future earnings attributable to the funds raised

* Because the issuer is not a member of the JSDA, the rules of the JSDA do not apply to the issuer.
Therefore, these rules take a form in which the brokerages, which are members of the JSDA, are obligated to request disclosure by the issuer.

Choosing pricing method at time of the initial listing



➤ Tokyo Stock Exchange, "Enforcement Rules for Securities Listing Regulations"

(Procedure for public offering before listing)

Rule 233. In cases where an initial listing applicant conducts a public offering before listing, the initial listing applicant and the lead underwriter shall follow either of the procedures listed below.

- (1) Book-building
- (2) Public offering through competitive bidding

(Determination of offering price)

Rule 234. After comprehensively considering factors including the possible danger arising from a fluctuation in share prices in the time up to the listing day and the expected demand for the securities, the initial listing applicant and the lead underwriter shall determine the offering price based on the circumstances that apply in accordance with the method used for the offering, as shown below.

(1) When book-building is used:

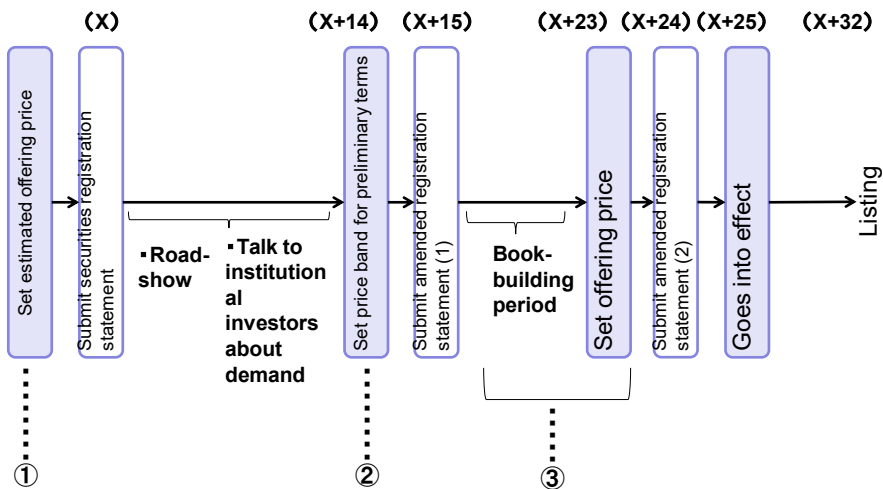
The state of investor demand, as gauged through the book-building

(2) When there is a public offering through competitive bidding:

The weighted average winning bid price in the public offering through competitive bidding (referring to a price obtained by calculating the weighted average by the method in which the aggregate of the amounts obtained by multiplying the winning prices by the winning numbers of shares is divided by the total number of shares associated with the winning bids), and other results of the competitive bidding process.

2 (Omitted)

Process for the book-building method



Gauge investor demand based on the preliminary terms indicated by institutional investors who excel in price discovery
 ⇒ Set price more in line with the market trend

- Set proper offering terms by respecting prevailing market conditions. Must not underwrite on terms that are seriously inappropriate with respect to quantity, price, or some other element (Underwriting Rules Article 24).
cf. "Cabinet Office Ordinance on the Financial Instruments Business", Article 123-1-3
- When setting the offering price through book-building, it is done in consultation with the issuer, based on the investor demand gauged through book-building and taking into general consideration the risk of market fluctuations in the time period leading up to the payment date (Underwriting Rules Article 25).

- When setting the offering price at the time of the IPO, after the suitability of the price is verified by a department or committee that has no close business relationship with the issuer or investors, the records of this verification must be retained for five years (Underwriting Rules Article 26).
- A brokerage that underwrites IPOs must establish internal rules specifying what is necessary in order to set preliminary terms and prices and to properly conduct book-building. It must also prepare an internal manual that specifies the procedures for this (Underwriting Rules Article 27).
- An underwriter must conduct regular inspections/audits to assess the state of compliance with its internal rules and to see if the internal manual is being properly followed (Underwriting Rules Article 28).

- When setting the preliminary terms of an IPO through book-building, it is done in consultation with the issuer, taking into general consideration the following matters (Detailed Underwriting Rules Article 14-1(1)).
 - The nature of the issuer's business, its financial condition, and its business results
 - The opinions of persons who have professional expertise and experience in investing
 - Other materials and opinions that can serve as a reference when determining the preliminary terms
- Formulate a basic policy for gauging demand. Book-building is carried out based on this basic policy (Detailed Underwriting Rules Article 14-1(2)).
- Book-building may not include submissions that are clearly expected to correspond with those listed below (Detailed Underwriting Rules Article 14-1(2)).
 - Submissions that are not based on actual investor demand
 - Overly large submissions aimed at securing an allotment
 - Multiple submissions based on the demand from a single investor
- Book-building records are retained for six months (Detailed Underwriting Rules Article 14-1(3)).

2. Distribution rules

- Basic principles for the distribution of shares by a brokerage (Distribution Rules Article 2-1)
 - Fairness
 - Must not be tilted towards certain investors without good reason

- *Oyabike* (the practice of selling shares to parties designated by the issuer) is prohibited, in principle (Distribution Rules Article 2-2).
- At the time of the IPO, the recipients of at least 10% of the volume of shares that is to be distributed to individual customers is determined by lottery (Distribution Rules Article 3).
- At the time of the IPO, if the distribution to individual customers is decided by a means other than by lottery, the following points must be considered (Distribution Rules Article 4).
 - There must not be an excessive distribution for a certain investor and the distribution must not be unfair
 - The difference between the distribution using this means and the average per customer quantity using the lottery method must not be significant
 - Distributions must not be made repeatedly to the same customer

- Providing information about the distribution recipients to the issuer (Distribution Rules Articles 5 to 8).
 - Names and distribution quantities for certain institutional investors that became recipients
 - Does not include information about individual investors.
 - Information provided after distribution is completed
 - Attach a commitment in writing that the issuer will not leak the information that it receives.
- Information about the status of the distribution is reported to JSDA, and JSDA releases it (Distribution Rules Article 13).
 - On a quarterly basis, distribution situation in terms of recipient characteristics and distribution quantities
→<http://www.jsda.or.jp/shiryotoukei/kabu-haibun/index.html>
 - On a monthly basis, distributions to individual customers by IPO issue (including quantities for distributions by lottery and distributions by other means)
→<http://www.jsda.or.jp/shiryotoukei/shinkikoukai/index.html>

- Formulate basic policy and make it known to investors (Distribution Rules Article 9).
 - How lotteries are conducted
 - Measures to prevent excessive distributions to certain investors and unfair distributions
 - Relationship between book-building and distribution
 - Other policy matters
- Draw up internal rules (Distribution Rules Article 10).
 - The aforementioned basic policy
 - Customers who are prohibited from receiving distributions
 - Legal and regulatory compliance
 - Distribution of "hot issues"
 - Distributions when the environment deteriorates
 - Other matters

- The chief internal control officer (person in charge of compliance) is responsible for carrying out regular internal inspections to see if distributions are properly conducted in accordance with the internal rules (Distribution Rules Article 11).
- The following records are retained for 5 years (Distribution Rules Article 12).
 - Distribution records
 - Lottery records
 - Records of the findings of aforementioned inspections
 - Purpose is to ensure that audits/inspections by outside parties are carried out properly
 - The brokerage must respond to requests for these records and submit to audits as requested by the JSDA



Project for Capacity Building of Capital Market in Mongolia

Outline of the Regulations on Securities Companies in Japan

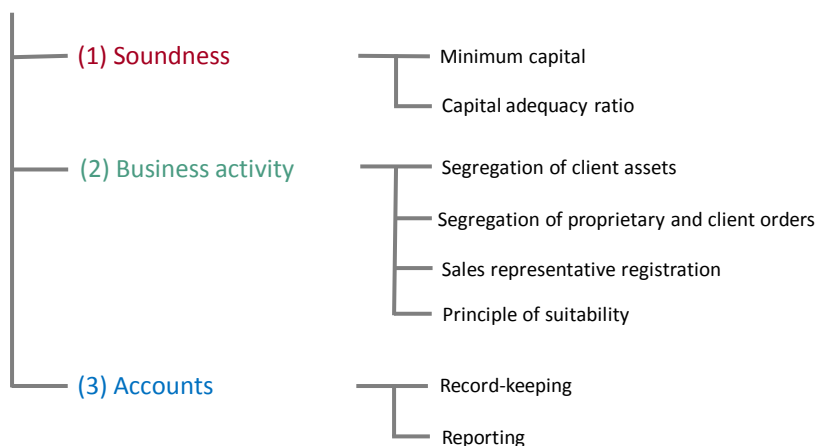


Kaoru MURAKAMI
Deputy Director, Coordination Division
Securities and Exchange Surveillance Commission



2. Current securities company regulations

Securities company regulatory structure





(1) Soundness (i) Minimum capital

To ensure that a company has a sound asset base from which to do business, it is required to maintain a fixed capital base sufficient to underpin the maintenance of a stable ongoing financial instruments business (Financial Instruments and Exchange Act: Article 29-4)

- The Securities and Exchange Act of April 1948 introduced a system of registration for the securities industry but its eligibility requirements were lax and, in the absence of a minimum capital provision of any sort, most securities companies remained small and in many cases behind the times in terms both of their organization and their content.
- In August 1950, the Securities and Exchange Act was revised in an effort to limit the proliferation of excessively small securities companies, to stabilize their management, and to protect investors by introducing a minimum capital requirement.

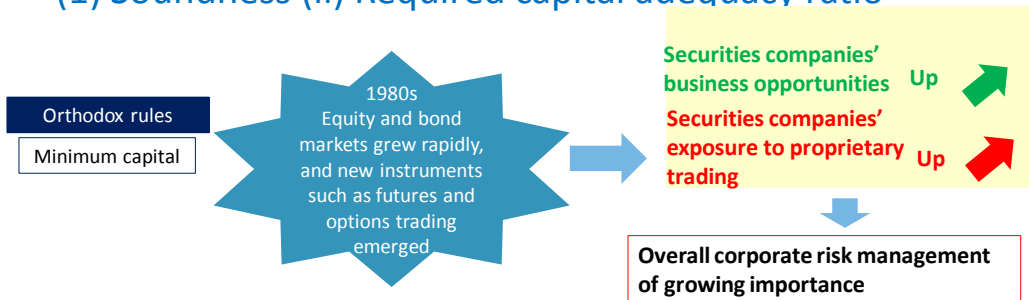
Minimum capital requirement by business type

Business type	Capital amount
Securities company	JPY50m (MNT1,100m)
Lead manager in underwriting	JPY3,000m (MNT 66,000m)
Underwriting not as a lead manager	JPY500m (MNT 11,000m)

2



(1) Soundness (ii) Required capital adequacy ratio



1990 Required capital adequacy ratio introduced

Equity capital regulation, based on the measures outlined below, is designed to ensure that even if, as a securities company's market, trading, and basic risks begin to surface, its earnings dip and asset values start to fall, its finances will nevertheless remain secure and its clients' interests will be protected.

- ✓ Capture a securities company's risks in relative terms and manage them accordingly.
- ✓ Capture a company's risks by assigning each of its positions a risk weighting.
- ✓ Also regulate a company's off-balance sheet risk (underwriting contracts, guarantees, etc).
- ✓ Consider securities company's hedging activities to minimize risk.

3



(1) Soundness (ii) Capital adequacy ratio

$$\text{Capital adequacy ratio (\%)} = \frac{\text{Amount of non-fixed equity capital}}{\text{Risk equivalent amount}} \times 100$$

$$= \frac{\text{Basic items (a) + Supplementary items (b) - Deductible Assets (c)}}{\text{Value of market risk equivalent (d) + Value of counterparty risk equivalent (e) + Value of basic risk equivalent (f)}} \times 100$$

(a) Capital, capital surplus, retained earnings, valuation difference (if negative), treasury stock

(b) Allowances, subordinated debt, valuation difference (if positive)

(c) Fixed assets (differs from fixed assets in accounts)

(d) Estimated risk value of changes in the prices of owned marketable securities, etc

(e) Estimated risk value of counterparties' non-performance of contracts, etc

(f) Estimated risk value of day-to-day business performance errors

Balance sheet

Non-fixed assets	Liabilities
	Subordinated debt, allowances etc (b)
Fixed assets (c)	Equity capital (a)

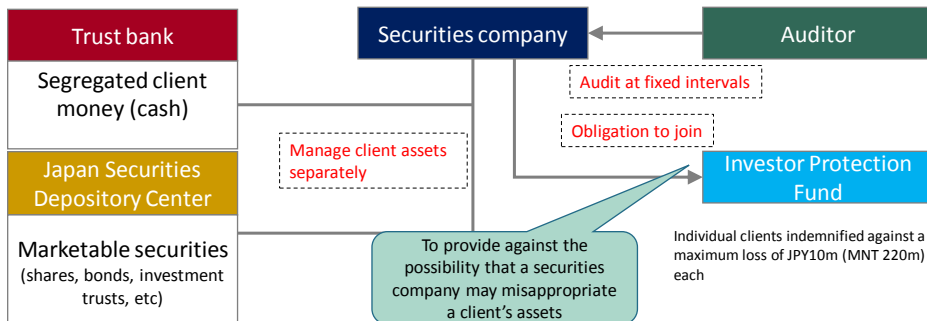
Below 140%	Below 120%	Below 100%
Securities company to report situation to the Financial Services Agency	Financial Services Agency may, for example, issue improvement orders to secure such improvements as it deems necessary	Financial Services Agency may order a company to terminate its business operations



(2) Business activity (i) Segregation of client assets

A securities company must manage assets from its clients separately from its own property. (Financial Instruments and Exchange Act: Article 43-2)

➡ This serves to protect client assets in the hands of a securities company in the unlikely event that a problem such as bankruptcy precludes a continuation of its business operations.

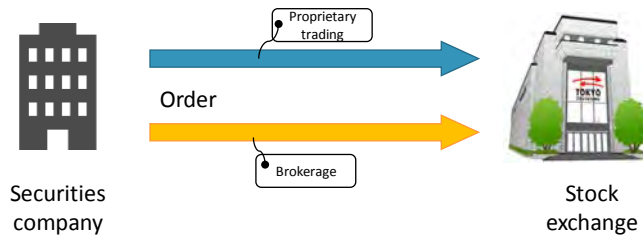




(2) Business activity (ii) Segregation of proprietary and client orders

On placing an order, a securities company must make it clear to the stock exchange whether it is acting on the instructions of a client or on the basis of its own calculations. (Cabinet Office Ordinance 158 concerning financial instruments business, etc)

➔ This is designed to prevent the ex post facto transference by a securities company of a profit or loss resulting from its own calculations to a client.



6



(2) Business activity (iii) Sales representative registration

- ◆ To protect investors, securities company staff (sales representatives) that canvass clients to consider trading financial instruments must not only observe the relevant legal provisions but must also have a specialist understanding of such instruments.
- ◆ To evaluate the suitability of potential sales representatives, the Japan Securities Dealers Association (JSDA; a self-regulatory body) has established a qualifying examination system on the basis of which successful candidates are registered as sales representatives.
- ◆ The JSDA, which provides said registration service, was initially called on to do so by the Financial Services Agency.
- ◆ The sales representative registration system specifies disqualification criteria such that representatives found, for example, to have committed a crime may have their registration annulled. (Financial Instruments and Exchange Act: Article 64)



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(2) Business activity (iv) Principle of Suitability

A securities company shall not conduct solicitation with regard to an Act of Financial Instruments Transaction in a manner that is found to be inappropriate in light of the customer's knowledge, experience, the status of property or the purpose of concluding a Contract for Financial Instruments Transaction. (Financial Instruments and Exchange Act: Article 40)



It is essential for the protection of investors that business transactions should always take full account both of a client's intentions and of their circumstances.

High risk-high return
financial instruments



I'm looking to invest
safely with minimal
risk

75 years of age

To ensure that securities companies are fully acquainted with their clients, JSDA's self-regulatory regime requires companies to prepare and keep an individual "client card" for each client.

8

(3) Accounts (i) Record-keeping

A securities company shall prepare and preserve the books and documents on its business.
(Financial Instruments and Exchange Act: Article 46-2)



Securities companies help to protect their clients by preparing accurate records of their business operations and assets and in so doing attesting to the suitability of said operations and the soundness of their assets.

Examples of the sorts of records that must be prepared and stored

General ledger	Client accounts ledger
Daily trial balance	Trading instrument accounts ledger
Cash book	Order slips
Individual administrative inspection result records	Documents returned to clients

9



(3) Accounts (ii) Reporting

A securities company shall prepare a business report for each business year and submit it to the prime minister. It shall also report the status of its business or property to the prime minister. (Financial Instruments and Exchange Act: Article 46-3)

➔ This is designed to enable the supervisory authorities to monitor a securities company's business and to gain periodic access to materials enabling them to attend to matters such as instructing a company to improve the management of its business.

Business report content	
Business status	Accounts status
Executives and employees	Balance sheet
Shareholders	Profit and loss account
Required capital adequacy ratio	Statement of changes in shareholders' equity, etc
Segregated management and division management	Supplementary itemized statements
Complaint procedures and conflict resolution etc...	



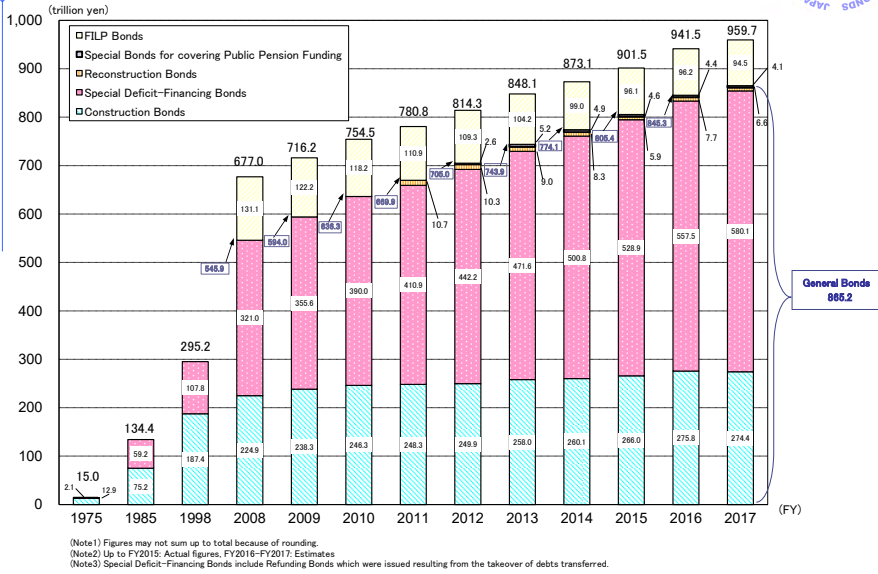
A Summary of JGB Debt Management

May 2017
Financial Bureau
Ministry of Finance, Japan



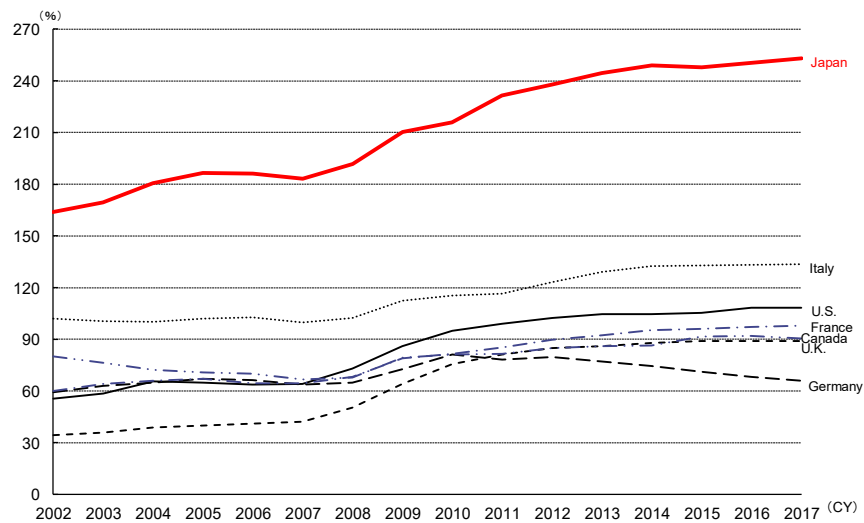
1. History of JGBs

Outstanding amount of JGBs



2

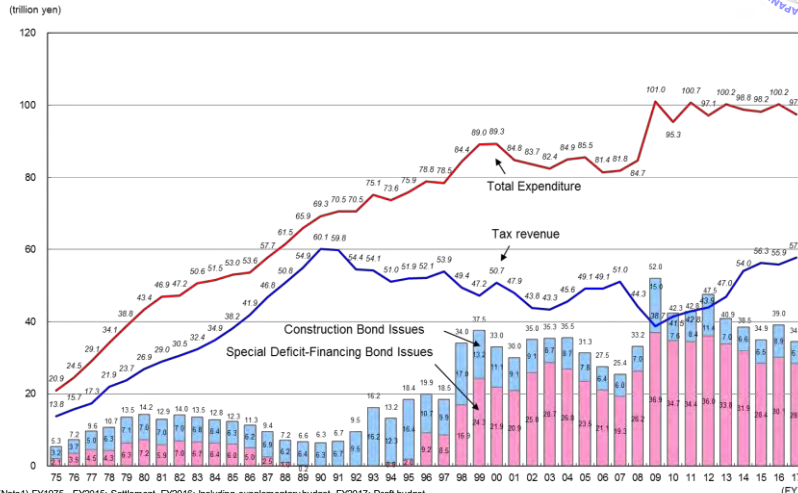
General Government Gross Debt to GDP (International Comparison)



(Source) IMF "World Economic Outlook Database" (October 2016)
 (Note) FY2017 draft budget data is not reflected.

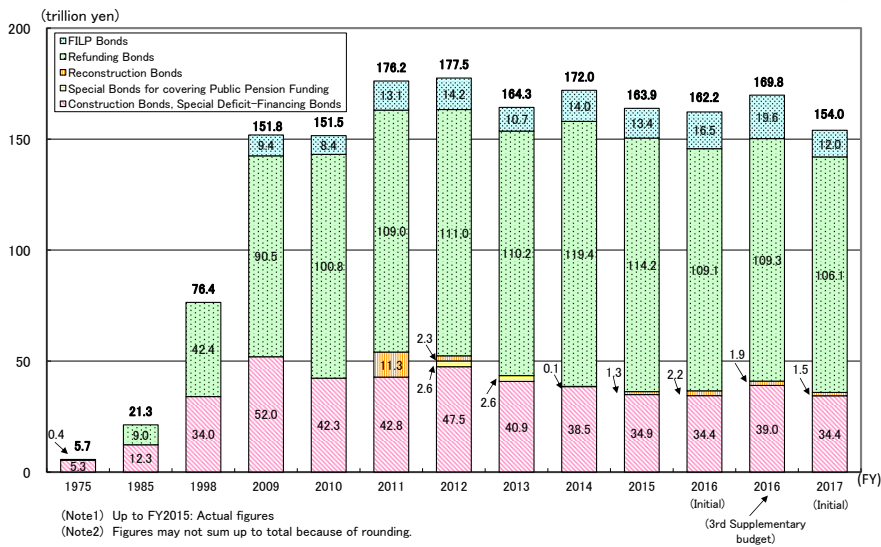
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Trends in Tax Revenue, Total Expenditure, and Government Bond Issues



(Note1) FY1975 - FY2015: Settlement, FY2016: including supplementary budget, FY2017: Draft budget.
 (Note2) Following various bonds are excluded: Ad-hoc Special Deficit-Financing Bonds issued in FY1990 as a source of funds to support peace and reconstruction activities in the Persian Gulf Region, Tax reduction-related Special Deficit-Financing Bonds issued in FY1994 - FY1996 to make up for decline in tax revenue due to a series of income tax cuts preceding consumption tax hike from 3% to 5%, Reconstruction Bonds issued in FY2011 as a source of funds to implement measures for the Reconstruction from the Great East Japan Earthquake, Pension-related Special Deficit-Financing Bonds issued in FY2012 and FY2013 as a source of funds to achieve the targeted national contribution to one-half of basic pension.
 (Note3) General Account Primary Balance is calculated by subtracting Primary Expenditure from the sum of Tax Revenue and Other Revenue. It is different from the Central Government Primary Balance on SNA basis.

Historical Changes in JGB Issuance



(Note1) Up to FY2015: Actual figures
 (Note2) Figures may not sum up to total because of rounding.



Development of JGB market 1966-1983

Mass issuing of JGBs amid slower growth

CY	Methods of Issuance	Strengthening of the Secondary Market	Diversification of Investor Base
1966	<ul style="list-style-type: none"> Start of issuance of bonds Launch of Underwriting Syndicate Launch of underwriting by Trust Funds Bureau 		
1975	Start of the issuance of Special Deficit-Financing Bonds		
1977		Launch of sales of JGBs by financial institutions	
1978	Launch of Public offering auction		
1980		Introduction of book-entry transfer system (shift to paperless system)	Launch of sales of Medium-Term JGB Funds
1983			Launch of handling of offering of JGBs by financial institutions

6



Development of JGB market 1984-1996

Mass redemption and financial liberalization

CY	Methods of Issuance	Strengthening of the secondary market	Diversification of Investor Base
1984	(Gradual increase in the ratio of issuance by public auctions)	Launch of dealing of JGBs by financial institutions	
1985		<ul style="list-style-type: none"> Start of issuance of T-Bills Start of front-loaded issuance of Refunding Bonds Launch of transactions of JGB futures (10-year) 	
1988		Launch of transactions of Super Long-Term JGB futures (20-year)	
1989		<ul style="list-style-type: none"> Launch of bond option transactions Launch of Bond-lending Transaction 	
1992			Tax exemption of profit from redemption of TB and FB owned by foreign corporations
1995		Full liberalisation of dealing of JGBs by financial institutions	
1996		<ul style="list-style-type: none"> Cash-secured Bond-Lending Transactions (Japanese Repos) Launch of transactions of 5-year JGB futures 	

7



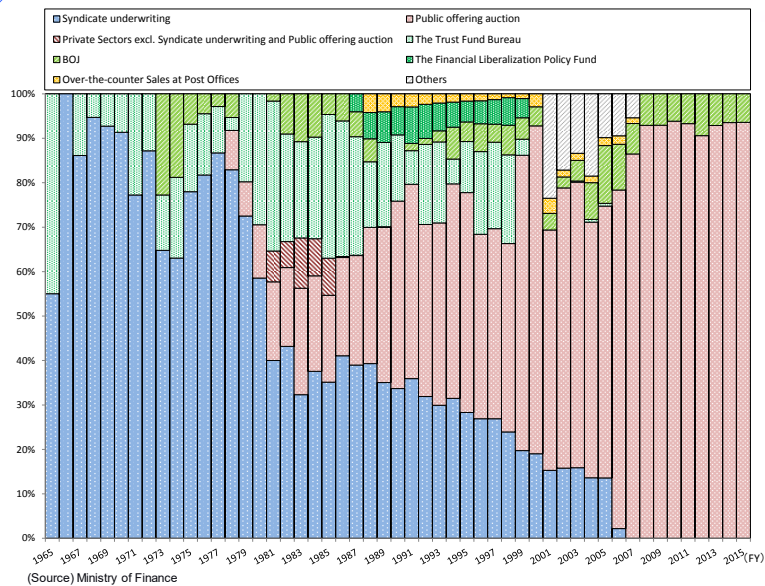
Development of JGB market after 1996

Enhanced dialogue with the market to manage large debt outstanding

CY	Methods of Issuance	Strengthening of the secondary market	Diversification of Investor Base
1999	Start of prior announcement of auction schedule and amount of issuance		Tax exemption of interest income from JGBs owned by non-residents
2000	Establishment of JGB Market Meeting		
2001		<ul style="list-style-type: none"> • Introduction of the immediate reopening rule • Introduction of the new Gensaki (repo) transaction 	
2003		<ul style="list-style-type: none"> • Start of the Buy-Back auctions • Introduction new book-entry transfer system(shift to full paperless system) 	Introduction of JGBs for Retail Investors
2004	<ul style="list-style-type: none"> • Introduction of JGB Market Special Participants(Primary Dealer) Scheme • Establishment of Advisory Council on Government Debt Management 	Start of issuance of 10-Year Inflation-Index Bonds	
2005			Start of overseas IRs
2006	Termination of issuance of JGBs by Underwriting Syndicate	Start of Auction for Enhanced-Liquidity (tap auctions)	
2007			Launch of "New Over-The-Counter sales system"
2008		Shorting of settlement interval (to T+3)	
2012		Shorting of settlement interval (to T+2)	

8

Changes in Underwriting by Syndicate at Fixed Share

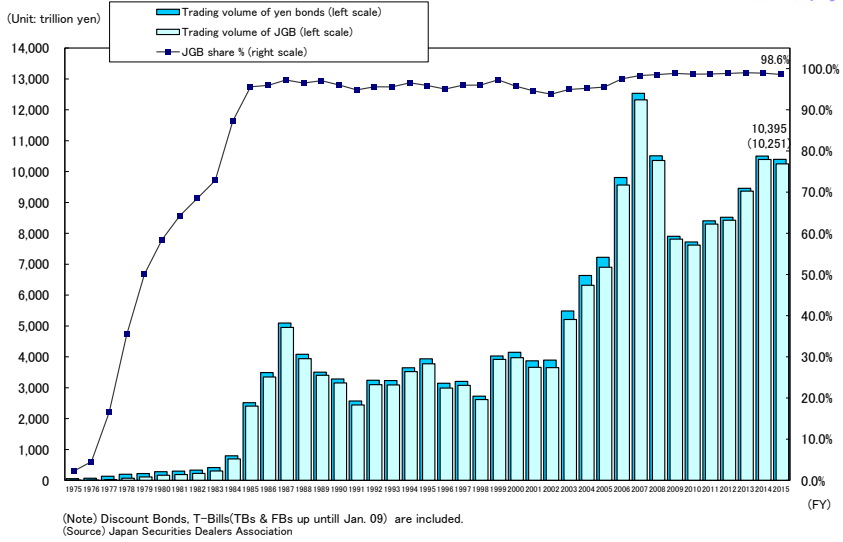


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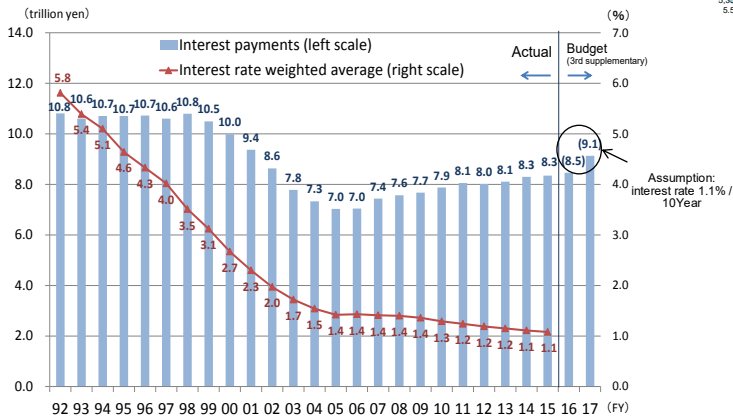


JGB in total trading volume

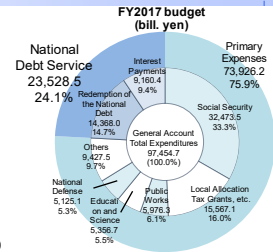


10

Interest Payments and Interest Rate

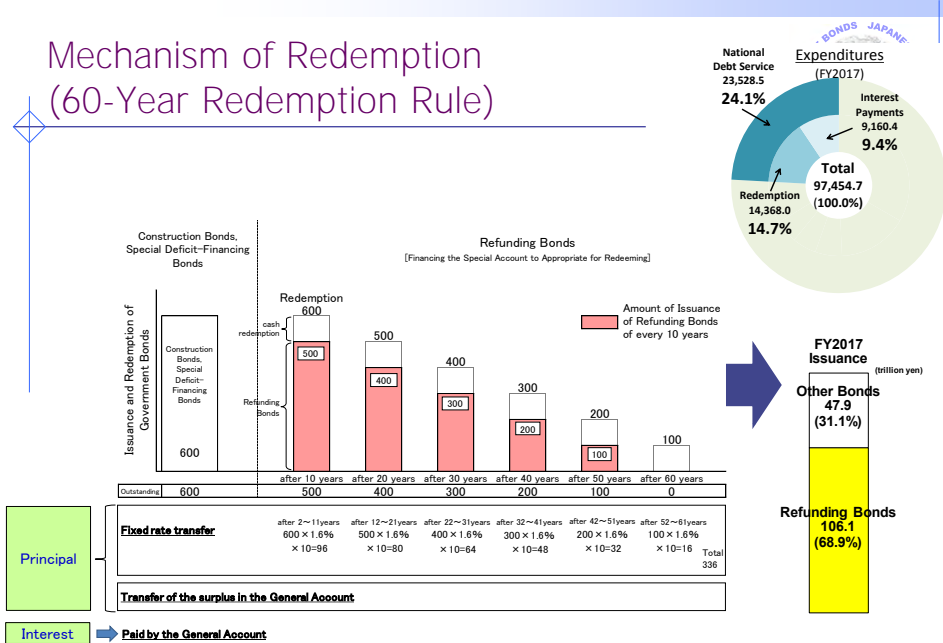


(Note1) Assumption of the interest rate (10Y bonds) of Interest payments' calculation; FY2016 and FY2017: 1.1%
 (Note2) Figures of Interest payments are rounded.
 (Source) Ministry of Finance



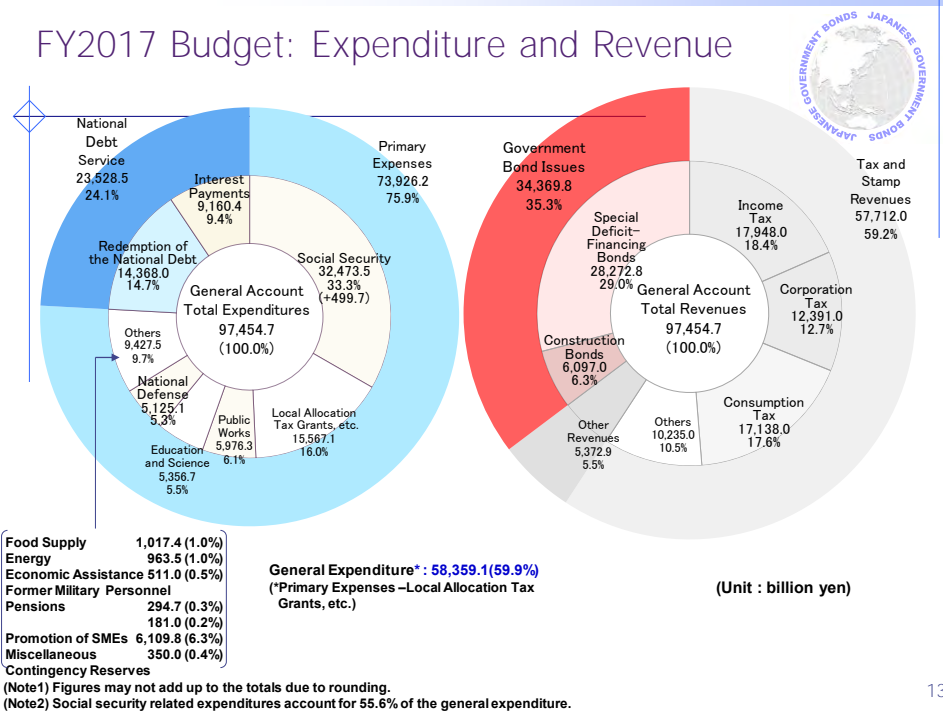
11

Mechanism of Redemption (60-Year Redemption Rule)



12

FY2017 Budget: Expenditure and Revenue



13



2. Government Bond Issuance - Current Status

Government bonds



○ JGBs by Legal Grounds of Issuance

Japanese Government Bonds (JGB)	General bonds	Construction bonds
		Special Deficit-financing bonds
		Refunding bonds
	Fiscal Investment and Loan Program bonds (FILP bonds)	

(Note) Straight government bonds include **reconstruction bonds** (issued FY2011 through FY2015) and special bonds for covering public pension funding (issued FY2012 through FY2013) in addition to the above.

○ Types of JGBs

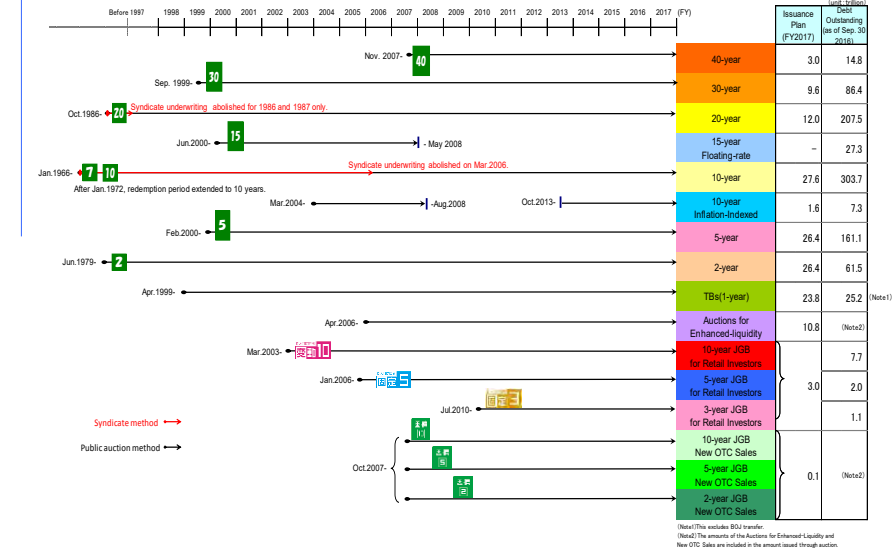
Maturity	Short-term		Medium-term	Long-term		
	Type of issue	Discount bonds		Two years, or five years	Ten years	
Coupon-bearing bonds						
Maturity	Super long-term			JGBs for Retail Investors	Inflation-Indexed Bonds	Floating-rate bonds
	20 years	30 years	40 years	3-year fix, 5-year fix, floating 10-year	10 years	15 years*
Type of issue	Coupon-bearing bonds					

(Note 1) A discount government bond is a kind of government bond that is issued at an amount below face value, no interest shall be paid, and redeemed at face value when matured.

And interest-bearing government bond is a kind of government bond whose interest shall be paid every six-months until maturity, and the principal is refunded when matured.

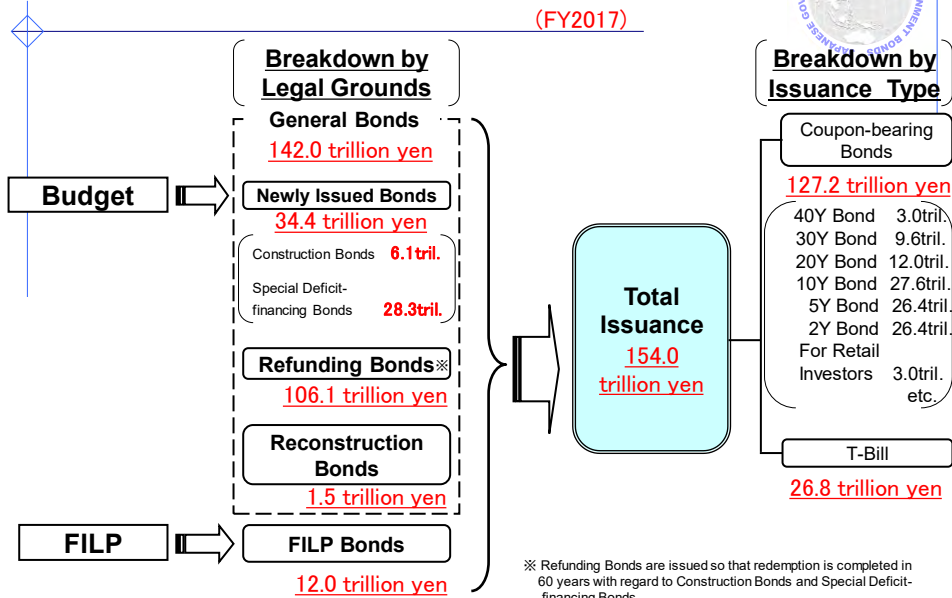
(Note 2) Issuance of Floating-Rate Bonds has been suspended since May 2008.

Supplying a variety of products according to market demand



16

Overview of Primary JGB Market

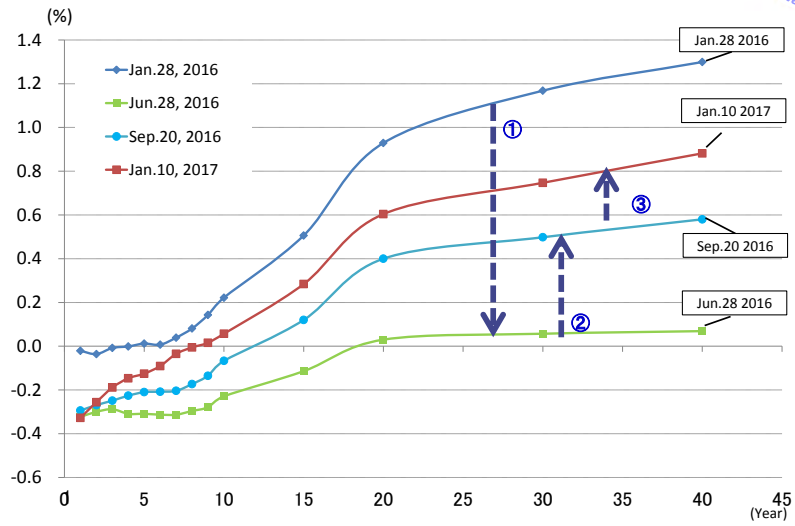


(Source) Ministry of Finance

17



JGB Yield Curve



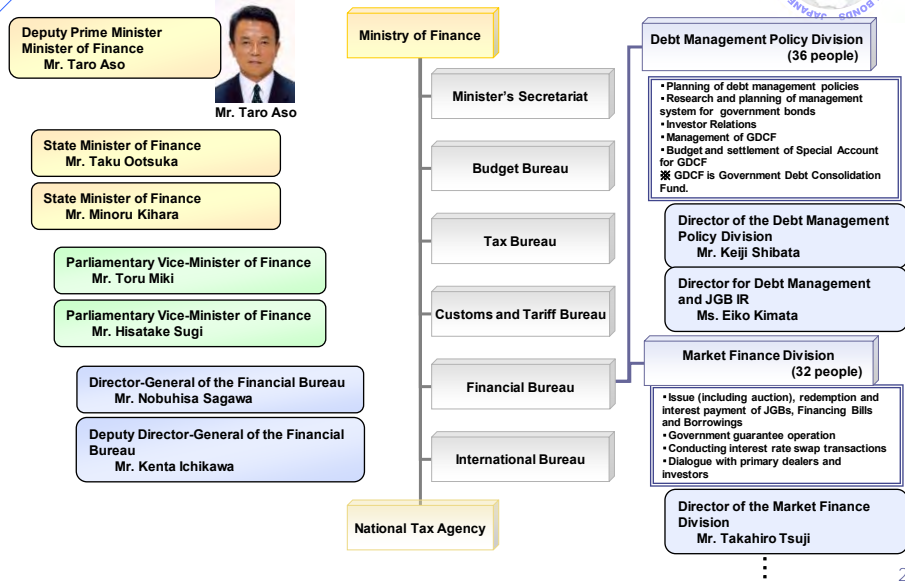
(Source) Bloomberg

18



3. Debt Management Policy

MOF organization



20

Basic Objectives and Guiding Principles

[Basic Objectives]

Ensure Stable and Smooth Issuance of Japanese Government Bonds

Minimize Medium- to Long- Term Financing Costs

[Guiding Principles]

Predictability

Develop and announce the JGB Issuance Plan every year taking opinions and views by market participants into account

Transparency

Release the data through News Letter and the MOF Website
Release records of market related councils

Flexibility

Review and revise the plan flexibly in response to changes in the market circumstances

(Source) Ministry of Finance

21

JGB Issuance Plan 2017



<Breakdown by Legal Grounds>

(Unit: billion yen)

	FY2016 (Initial)	FY2016 (3rd Supplementary Budget)		FY2017 (Initial)		
	(a)	(b)	(b) - (a)	(c)	(c) - (a)	(c) - (b)
Newly-issued bonds	34,432.0	39,034.6	4,602.6	34,369.8	-62.2	-4,664.3
Construction Bonds	6,050.0	8,901.4	2,851.4	6,097.0	47.0	-2,804.4
Special Deficit-Financing Bonds	28,382.0	30,133.2	1,751.2	28,272.8	-109.2	-1,860.4
Reconstruction Bonds	2,156.4	1,903.7	-252.7	1,514.5	-641.9	-389.2
FILP Bonds	16,500.0	19,600.0	3,100.0	12,000.0	-4,500.0	-7,600.0
Refunding Bonds	109,114.4	109,261.6	147.1	106,079.0	-3,035.4	-3,182.5
For matured Reconstruction Bonds	83.2	—	-83.2	1,911.8	1,828.6	1,911.8
Total	162,202.8	169,799.9	7,597.0	153,963.3	-8,239.5	-15,836.5

<Breakdown by Financing Methods>

(Unit: billion yen)

	FY2016 (Initial)	FY2016 (3rd Supplementary Budget)		FY2017 (Initial)		
	(a)	(b)	(b) - (a)	(c)	(c) - (a)	(c) - (b)
JGB Market Issuance (Calendar Base)	147,000.0	147,000.0	—	141,200.0	-5,800.0	-5,800.0
Non-Price Competitive Auction II	5,620.0	8,699.4	3,079.4	7,462.0	1,842.0	-1,237.4
Adjustment between fiscal years	-417.2	2,900.5	3,317.7	-698.7	-281.5	-3,599.1
Subtotal Financed in the Market	152,202.8	158,599.9	6,397.0	147,963.3	-4,239.5	-10,636.5
Nonmarketable JGBs for Retail Investors	1,900.0	3,150.0	1,250.0	2,950.0	1,050.0	-200.0
OTC Sales for Households	100.0	50.0	-50.0	50.0	-50.0	—
Subtotal for Households	2,000.0	3,200.0	1,200.0	3,000.0	1,000.0	-200.0
BOJ Rollover	8,000.0	8,000.0	—	3,000.0	-5,000.0	-5,000.0
Total	162,202.8	169,799.9	7,597.0	153,963.3	-8,239.5	-15,836.5

· The capacity for the buy-back operations is up to approximately 1 trillion yen in FY2017. Details of the buy-back operations will be determined by taking market conditions into consideration, based on a discussion with market participants.

· The maximum amount of front-loading issuance of Refunding Bonds in FY2017 is 56 trillion yen.

(Note1) Figures may not sum up to total because of rounding.

(Note2) "JGB Market Issuance (Calendar Base)" refers to JGBs issued by scheduled auctions from April to next March.

(Note3) Non-price competitive auction II is an auction carried out after the price-competitive auction, etc. The price offered is equal to the weighted average accepted price in the price-competitive auction, etc. Only the JGB Market Special Participants are eligible to bid in this auction (The amount assignable to each Market Special Participant does not exceed 15% of the amount awarded to it in the price-competitive auction, etc.).

The figure in the non-price competitive auction II in the FY 2017 is calculated by multiplying the figure of the JGB Market Issuance (40-Year, 30-Year, 20-Year, 10-Year, 5-Year, 2-Year Bonds and Inflation-Indexed Bonds) by 7%.

(Note4) "Adjustment between fiscal years" refers to leveling-off of issuance amount between fiscal years through front-loading issuance and deferred issuance in the accounting adjustment term.

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Market Issuance Plan by JGB Types



<Market Issuance Plan by JGB Types>

(unit: trillion yen)

	FY2016 (Initial)		FY2016 (Revised in September)			FY2017 (Initial)			
	(per time)	(total : a)	(per time)	(total : b)	(b) - (a)	(per time)	(total : c)	(c) - (a)	(c) - (b)
40-Year	0.4 × 6 times	2.4	0.4 × 2 times 0.5 × 4 times	2.8	0.4	0.5 × 6 times	3.0	0.6	0.2
30-Year	0.8 × 12 times	9.6	0.8 × 12 times	9.6	—	0.8 × 12 times	9.6	—	—
20-Year	1.1 × 12 times	13.2	1.1 × 12 times	13.2	—	1.0 × 12 times	12.0	-1.2	-1.2
10-Year	2.4 × 12 times	28.8	2.4 × 12 times	28.8	—	2.3 × 12 times	27.6	-1.2	-1.2
5-Year	2.4 × 12 times	28.8	2.4 × 12 times	28.8	—	2.2 × 12 times	26.4	-2.4	-2.4
2-Year	2.3 × 12 times	27.6	2.3 × 12 times	27.6	—	2.2 × 12 times	26.4	-1.2	-1.2
TBs (1-Year)	2.0 × 2 times 2.1 × 10 times	25.0	2.0 × 2 times 2.1 × 10 times	25.0	—	1.9 × 2 times 2.0 × 10 times	23.8	-1.2	-1.2
10-Year Inflation-Indexed	0.5 × 4 times	2.0	0.4 × 4 times	1.6	-0.4	0.4 × 4 times	1.6	-0.4	—
Auctions for Enhanced-Liquidity		9.6		9.6	—		10.8	1.2	1.2
Total		147.0		147.0	—		141.2	-5.8	-5.8

(Note1) 40-Year Bonds will be issued in May, July, September, November, January and March.

(Note2) The total issuance of T-Bills (Treasury Bills + Financing Bills) is to be 2.3 trillion yen per issue.

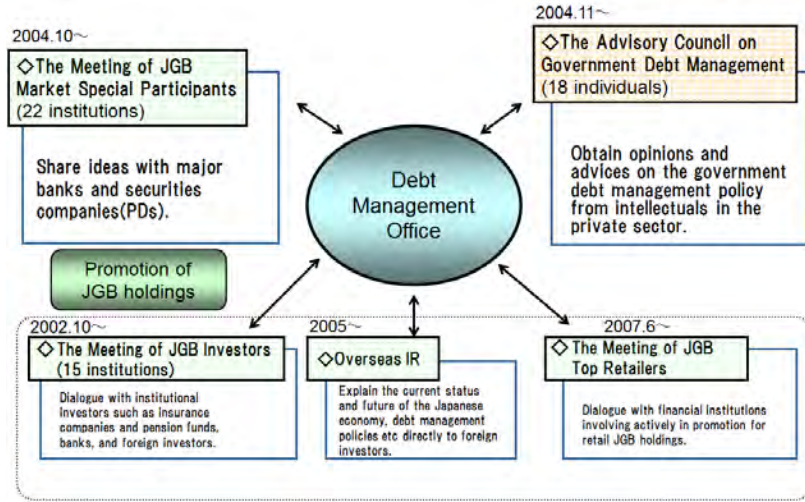
(Note3) 10-Year Inflation-Indexed Bonds (JGBis) will be issued in April, August, October and February. The issuance amount of 10-Year Inflation-Indexed Bonds may be adjusted in a flexible manner in response to market environment and investor demands, based on discussion with market participants.

(Note4) Details of Auctions for Enhanced-Liquidity such as the allocation of issuance amount for each zone may be adjusted in a flexible manner in response to market environment and investor demands, based on discussion with market participants.

	FY2016 (Estimate)	FY2017 (Initial)	Compared to FY2016
15.5-30 Year	2.4	3.0	0.6
5-15.5 Year	6.0	6.6	0.6
1-5 Year	1.2	1.2	—

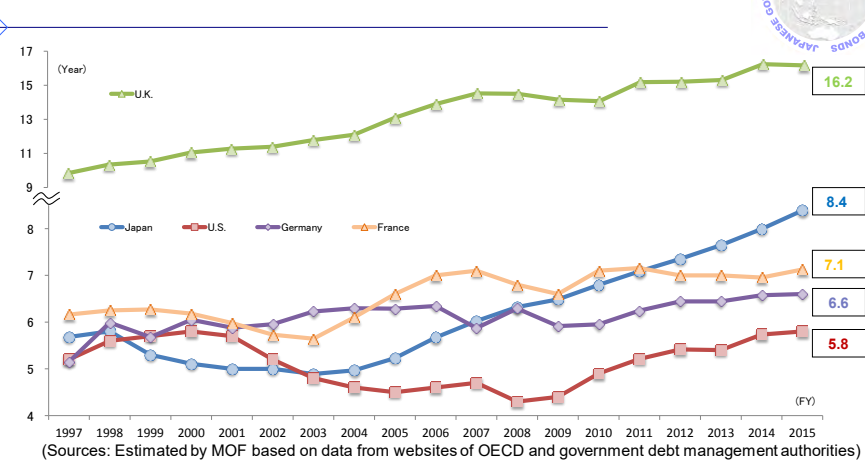
23

Dialogue with the market



24

Average Maturity (Stock Basis) of Each country



(Sources: Estimated by MOF based on data from websites of OECD and government debt management authorities)

FY	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Japan	5.7	5.8	5.3	5.1	5.0	5.0	4.9	5.0	5.2	5.7	6.0	6.3	6.5	6.8	7.1	7.4	7.6	8.0	8.4
U.S.	5.2	5.6	5.7	5.8	5.7	5.2	4.8	4.6	4.5	4.6	4.7	4.3	4.4	4.9	5.2	5.4	5.4	5.7	5.8
U.K.	9.8	10.3	10.5	11.1	11.3	11.4	11.8	12.1	13.1	13.9	14.5	14.5	14.2	14.1	15.2	15.2	15.3	16.2	16.2
Germany	5.2	6.0	5.7	6.1	5.9	6.0	6.2	6.3	6.3	6.3	5.9	6.3	5.9	6.0	6.2	6.4	6.4	6.6	6.6
France	6.2	6.3	6.3	6.2	6.0	5.7	5.6	6.1	6.6	7.0	7.1	6.8	6.6	7.1	7.2	7.0	7.0	7.0	7.1

25

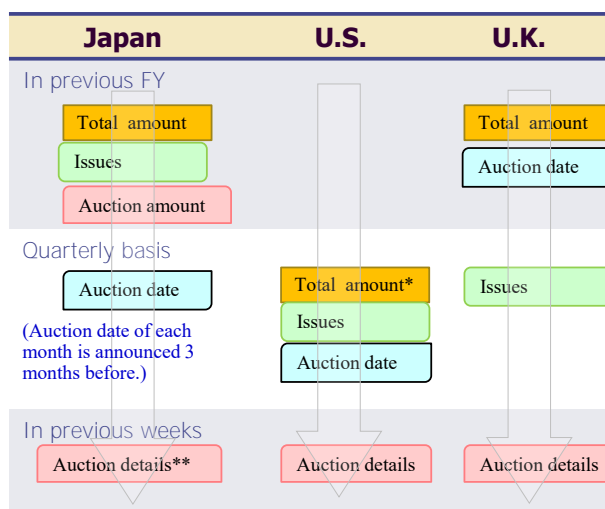
Primary Dealer System in Japan and Foreign Countries

	Japan	U.S.	U.K.	Germany ⁽¹⁾	France	
Name	JGB Market Special Participants	Primary Dealers	Gilt-edged Market Makers (GEMM)	Bund Issuance Auction Group	Spécialistes en Valeurs du Trésor (SVT)	
Introduction time	2004	1960	1986	1990	1987	
Number of members (as of March 2015)	21 companies	22 companies	21 companies	37 companies	19 companies	
Responsibilities	Bidding	4% of planned issuance amount	Total planned issuance amount / the number of PD	Participation in all auctions	—	Participation in all auctions
	Purchasing	Short-term: 0.5% or more of total planned issuance amount Mid-to-long term: 1% or more of the said amount	—	2% or more of total issuance amount	0.05% or more of total issuance amount	2% or more of total issuance amount
	Market making	Provide sufficient liquidity to the JGB secondary market	—	Have a 2% or more share in the secondary market (spot)	—	Have a 2% or more share in the secondary market (spot and repo)
	Information provision	Report to the MOF	Report to the Federal Reserve Bank of New York	Report to the DMO	—	Report to the AFT
Qualifications	Exclusive participation in auction	Non-Price Competitive Auction I and II (Up to 15% of amounts of bids accepted in the competitive auction) Auctions for Enhanced-Liquidity Buy-back Auctions	—	Competitive Auctions Non-Competitive Auctions (Up to 10% of amounts of bids accepted in the competitive auction) Buy-back Auctions, etc.	Competitive Auctions Non-Competitive Auctions Buy-back Auctions, etc.	Competitive Auctions Non-Competitive Auctions (Up to 20% of amounts of bids accepted in the competitive auction) Buy-back Auctions, etc.
	Regular meeting, etc.	Meeting with the MOF (approximately quarterly)	Meeting with Federal Reserve Bank of New York (annually) Meeting with Department of Treasury (quarterly)	Meeting with HM Treasury (annually) Meeting with DMO (quarterly)	—	Meeting with AFT (semiannually)

Note: Germany's "Bund Issuance Auction Group" is similar to UK's and French primary dealer group in that only the group members are allowed to participate in government debt auctions. But the only required qualification for a Bund Issuance Auction Group member is a financial institution based in the European Union and group members have no obligation to participate in government debt auctions and no opportunity for exchanging views with debt issuance authorities. Therefore, the German group is viewed as different from the PD group in other countries. (Source: Relevant countries' debt management authorities)

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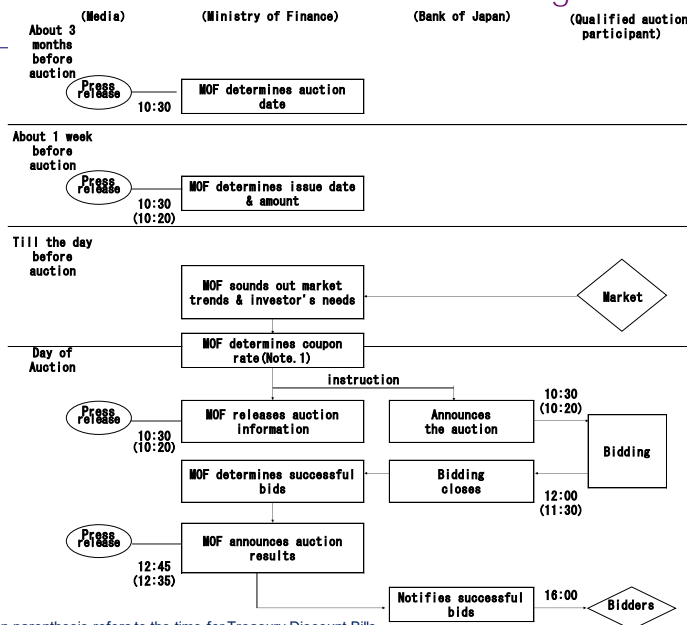
Timing for announcements



(Note1) amount to be financed from the market
(Note2) Details includes auction dates and exact amounts already announced.

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Auction Procedures for Public Offering Auction



Note.1: Time in parenthesis refers to the time for Treasury Discount Bills.

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Auction Procedures for Public Offering Auction

The MOF entrusts the BOJ with most of the government bond-related administrative tasks, such as issuance and redemption.

- **Issuance:** The BOJ accepts bids from bidders in auctions, notifies accepted bids, collects payments, issues the securities, and receives and handles revenues.
- **Redemption/interest payment:** The BOJ pays principal and interests on JGBs, and receives and handles funds to be used for redemption, and makes their disbursement.

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Act on National Government Bonds

The Act on National Government Bonds defines basic matters concerning the issuance of JGBs and clerical procedures after JGB issuance. The Act on National Government Bonds stipulates, the following matters.

- Matters related to bond issuance such as the conditions of JGB issuance, debt service, and necessary matters concerning redemption, payment of interest, securities certificates and registration are determined by the Minister of Finance
- Clerical tasks concerning JGBs must be performed by the Bank of Japan
- Remedies in cases of the destruction or loss of JGB certificates
- Matters concerning the extinctive prescription of JGBs

Specific procedures for the issuance and redemption of JGBs are stipulated in the Rules Concerning National Government Bonds; the Ordinance of the Ministry of Finance on Issuance, etc. of National Government Bonds and the Rules for the Handling of National Government Bonds in the Bank of Japan, among others.

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Redemption Resources for Construction Bonds and Special Deficit-Financing Bonds



Transfer from the General Account

Fixed-rate transfer (1.6% of total government bond outstanding as of the beginning of the previous fiscal year)

- Pursuant to the Act on Special Accounts, the amount equal to 1.6% of total government bond outstanding in face value –excluding Reconstruction Bonds, FILP Bonds, Financing Bills, etc.– as of the beginning of the previous fiscal year is transferred from the General Account to the GDCF on the basis of the 60-year redemption rule discussed above

Transfer of a budgetary surplus (A minimum of half of the surplus in the General Account as a result of the settlement of the fiscal year)

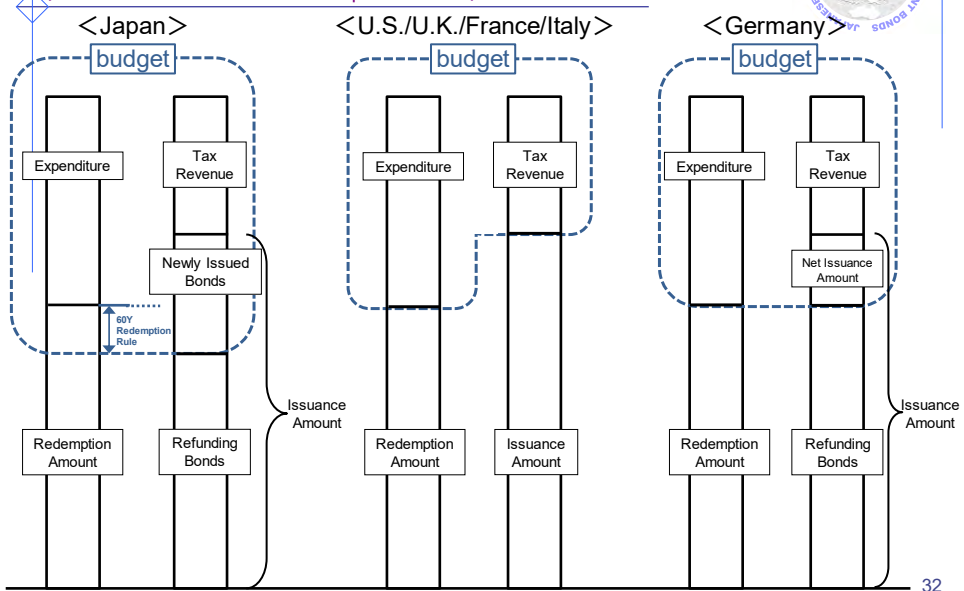
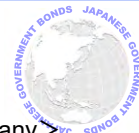
- Pursuant to the Public Finance Act, when surplus is generated in the General Account as a result of the settlement, at least half the surplus must be transferred to the GDCF within two years from the said fiscal year in which the surplus was generated.

Proceeds from allocation

- The GDCF can manipulate funds by either Repo transaction with BOJ or by depositing them to the Fiscal Loan Fund. We pursue efficient allocation of these government bonds, while taking into account the need to secure adequate level of liquidity in order to ensure smooth implementation of large-scale redemption and refunding. Proceeds from the allocation are credited to the GDCF Special Account to be included in its revenues.

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Government Budget (International Comparison)



4. Other Bonds





Government-Guaranteed Debt①

Legal Ground of Government Guarantee

In principle, government guarantees for corporate debt are prohibited according to law. Exceptions are only made by specific acts under cases where the following conditions are satisfied;

- i) Conducting businesses for highly public purposes as agencies for the government.
- ii) Their financial accounting and administration are under governmental supervision, and thus the use of guaranteed-debt borrowing and repayment schedules are thoroughly monitored.

When guarantees are given, appropriate supervisions including checking financial condition are exercised at the ministries and agencies that hold jurisdiction over the relevant agencies.

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Government-Guaranteed Debt②

Breakdown of the Planned Issuance Amount for FY2017 of Government-Guaranteed Domestic Bonds Offered to the Market and Foreign Bonds by Issuers and Maturities

Issuer											(billion yen)	
	40-year	30-year	20-year	10-year	6-year	5-year	4-year	3-year	2-year	Subtotal	Foreign Bonds	Total
Japan Finance Corporation				60.0	125.0					185.0		185.0
Japan Bank for International Cooperation										-	1,760.0	1,760.0
Japan International Cooperation Agency										-	66.0	66.0
Japan Expressway Holding and Debt Repayment Agency	70.0	240.0	400.0	675.0						1,385.0		1,385.0
New Kansai International Airport Co.,Ltd.				32.0						32.0		32.0
Development Bank of Japan Inc.				60.0	90.0					150.0	200.0	350.0
Deposit Insurance Corporation of Japan							300.0		200.0	500.0		500.0
Banks' Shareholdings Purchase Corporation									550.0	550.0		550.0
Nuclear Damage Compensation and Decommissioning Facilitation Corporation							150.0	100.0	250.0	500.0		500.0
Private Finance Initiative Promotion Corporation of Japan				13.0						13.0		13.0
Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development						48.8				48.8		48.8
Fund Corporation for the Overseas Development of Japan's ICT and Postal Services Inc.						22.6				22.6		22.6
Organization for Promoting Urban Development				27.2						27.2		27.2
Central Japan International Airport Co.,Ltd.				8.2						8.2		8.2
Japan Finance Organization for Municipalities				605.0			160.0			765.0		765.0
Total	70.0	240.0	400.0	1,480.4	215.0	71.4	610.0	100.0	1,000.0	4,186.8	2,026.0	6,212.8

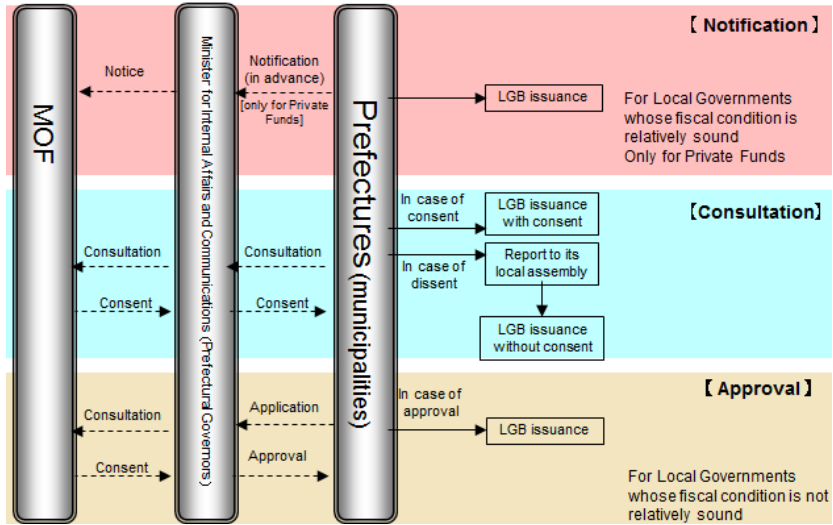
(Note1) Apart from the plan shown above, Japan Finance Corporation (JFC) and Development Bank of Japan Inc. (DBJ) are planning further issuances (maturity less than 5 years) depending on the progress of operations.

Maximum amounts of these further issuances are 270 billion yen for JFC and 100 billion yen for DBJ.

(Note2) The plan may be modified during FY2017.

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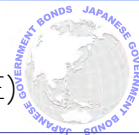
Consultation System for the Local Government Bonds Issuance



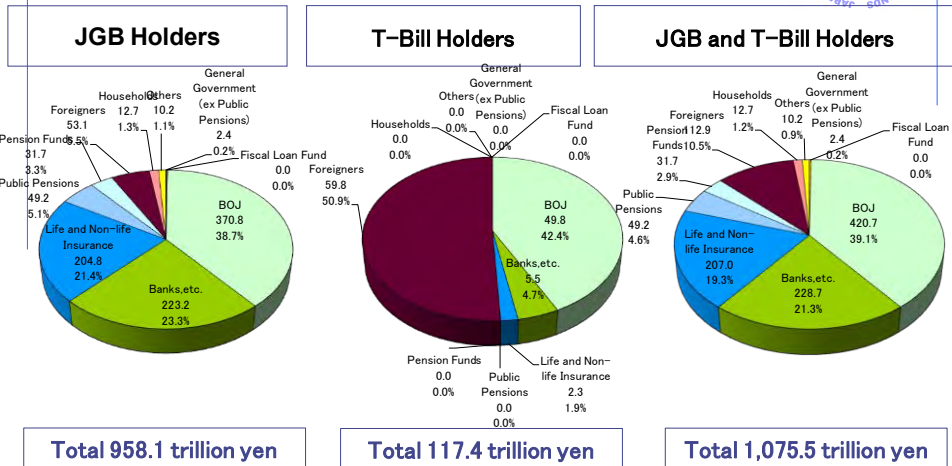
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5. Foreign Investors





Breakdown by JGB and T-Bill Holders (Dec. 2016, QE)



Total 958.1 trillion yen **Total 117.4 trillion yen** **Total 1,075.5 trillion yen**

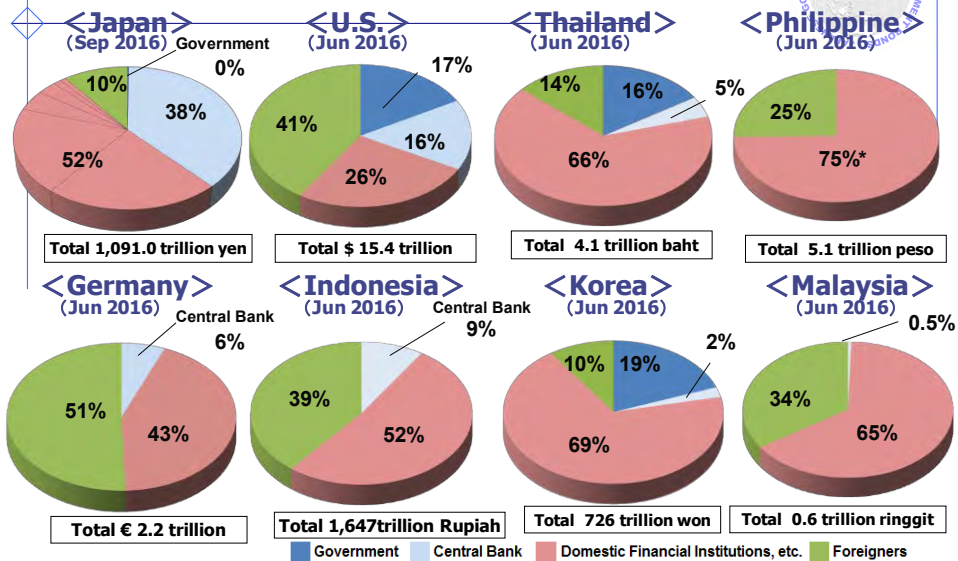
Note 1: "JGB" includes FILP Bonds. "T-Bills" is the sum of "Treasury Bills (TBs)" and "Financial Bills (FBs)" with a maturity of 1 year or less and TBs and FBs have been jointly issued since February 2009.

Note 2: "Banks, etc." includes Japan Post Bank, "Securities investment trust" and "Securities companies."

Note 3: "Life and Nonlife Insurance" includes Japan Post Insurance.

Source: Bank of Japan "Flow of Funds Accounts (Preliminary Figures)"

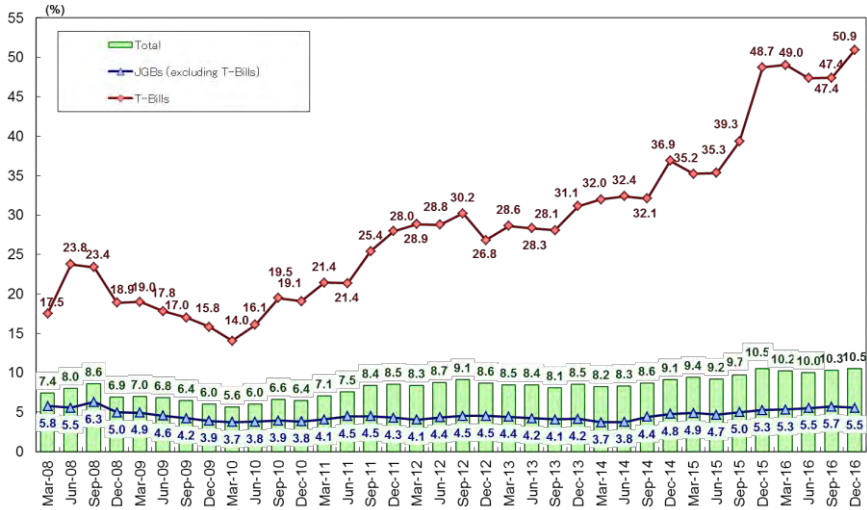
Government Bond Holders of Each Country



(Source) BOJ, FRB, Bundesbank, Bank of Thailand, ADB Asia Bonds Online, Bureau of the Treasury, Central Bank of Malaysia, Directorate General of Budget Financing and Risk Management, Ministry of Finance

(Note) *Domestic Financial Institutions* of Philippine includes all of domestic holders.

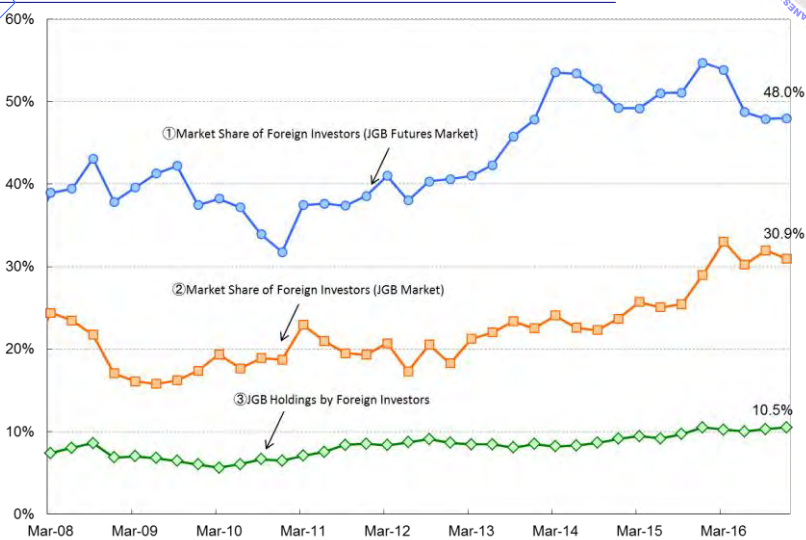
Proportion of Foreign Investors' JGB Holding



(Note) *JGB* includes T-Bills.
 (Source) Bank of Japan

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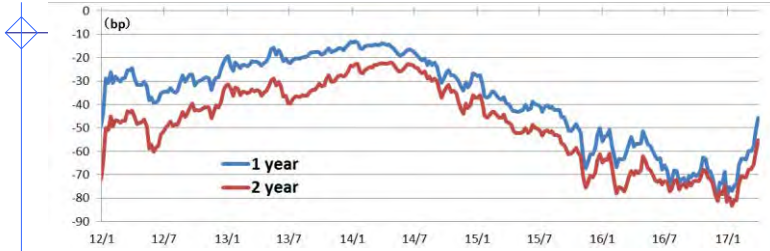
JGB Holdings and Trading by Foreign Investors



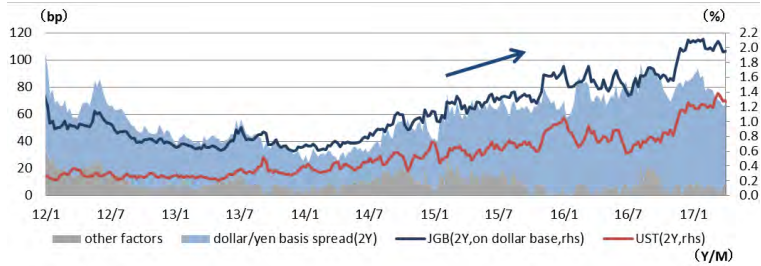
(Note1) Figures are on a quarterly basis
 (Note2) *JGB* includes T-Bills. Figures on ② excludes dealers' transaction.
 (Source) Bank of Japan, JSDA, JPX

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Dollar/Yen Basis Spread



JGB Yield (utilizing dollar/yen basis) and US Bond Yield



(Note) Other factors are swap spreads (Yen and USD) and 3-6m basis(Yen)
 (Source) Bloomberg

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6. Central Bank



BOJ's Monetary Policy



22 Jan 2013 Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth

- The introduction of "the price stability target at 2 percent"

4 Apr 2013 Quantitative and Qualitative Monetary Easing (QQE)

- "The price stability target of 2 percent" with a time horizon of about two years
- The adoption of the "monetary base control"
- An increase in JGB purchases and their maturity extension
- Increase at an annual pace of about 50 trillion yen

31 Oct 2014 Quantitative and Qualitative Monetary Easing (QQE2)

- Accelerating the pace of increase in the monetary base
- Increase at an annual pace of about 80 trillion yen

29 Jan 2016 QQE with a Negative Interest Rate (QQEN)

- The introduction of a negative interest rate
- The Bank will apply a negative interest rate of minus 0.1 percent to current accounts that financial institutions hold at the Bank

21 Sep 2016 QQE with Yield Curve Control (QQE+YCC)

- Introduction of "Yield curve control"
- Inflation-overshooting commitment

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New Framework for strengthening Monetary Easing: QQE with Yield Curve Control (2016.9.21)



1. Yield Curve Control

- a) Guideline for market operations
 - The short-term policy interest rate: Minus 0.1 % to the Policy-Rate Balance
 - The long-term interest rate: Maintain 10-year JGB yields current level (around zero percent)
- b) Purchases of JGBs for facilitating yield curve control [an annual pace of increase at about 80 trillion yen]
 - In addition, BOJ will utilize the following new measures if necessary
 - Outright purchases of JGBs (fixed-rate purchase operations)
 - Fixed-rate funds-supplying operations for a period of up to 10 years

Seek for decline in real interest rate

2. Inflation-overshooting commitment

BOJ will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds the price stability target of 2 percent and stays above the target in a stable manner.

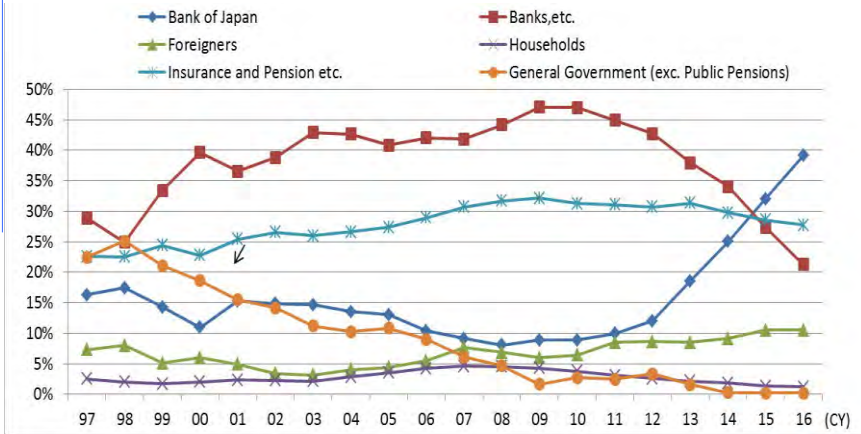
Strengthen "Forward looking mechanism"

Possible options for additional easing

- a) Cut the short-term policy interest rate
- b) Cut the target level of long-term interest rate
- c) Expand the asset purchases
- d) An acceleration of expansion of the monetary base

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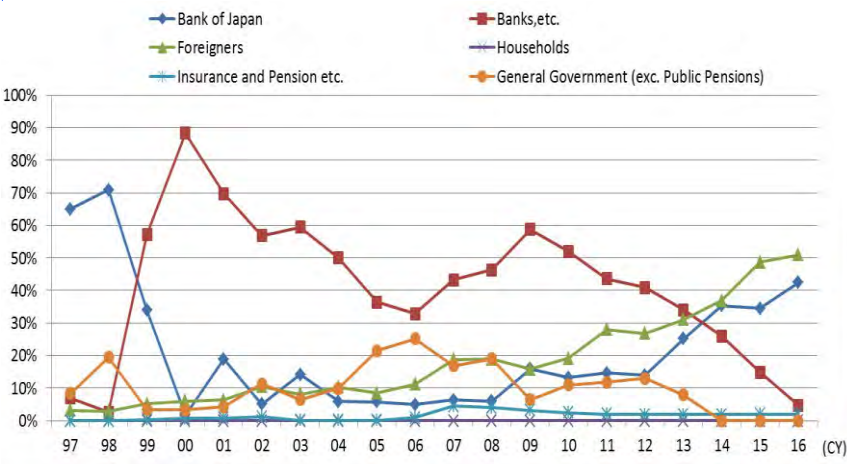
Historical Changes of JGB Holders① (including T-Bill)



(Note1) "Banks, etc." includes "Securities Investment Trusts" and "Securities Companies".
(Source) Bank of Japan: Flow of Funds

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Historical Changes of JGB Holders ② (only T-Bill)



(Note1) "Banks, etc." includes "Securities Investment Trusts" and "Securities Companies".
(Source) Bank of Japan: Flow of Funds

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