

Your Exchange of **Choice**



Who we are...

Japan Exchange Group, Inc. (JPX) was formed through the merger between Tokyo Stock Exchange Group and Osaka Securities Exchange in January 2013.

In 1878, soon after the Meiji Restoration, Eiichi Shibusawa, who is known as the father of capitalism in Japan, established Tokyo Stock Exchange. That same year, Tomoatsu Godai, a businessman who was instrumental in the economic development of Osaka, established Osaka Stock Exchange. This year marks the 140th anniversary of their founding.

JPX has inherited the will of both Eiichi Shibusawa and Tomoatsu Godai as the pioneers of capitalism in modern Japan and is determined to contribute to drive sustainable growth of the Japanese economy.



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Editorial Policy

Contributing to realizing an affluent society by promoting sustainable development of the market lies at the heart of JPX's corporate philosophy. We believe that our efforts to realize this corporate philosophy will enable us to both create sustainable value and fulfill our corporate social responsibility. Our goal in publishing this JPX Report 2018 is to provide readers with a deeper understanding of this idea and our initiatives in business activities.

This report consists of five chapters. "Overview of JPX" illustrates JPX's corporate philosophy, creed, role in society, and business model. "Strategies for Creating Value" explains the progress made under our management plan. After providing details of JPX's "Corporate Governance" systems that serve as the foundation for creating value, we show our "Initiatives for a Sustainable Society" based on dialogue with stakeholders. Lastly, we provide an outline of JPX's "Financial/Corporate Data".

August 2018

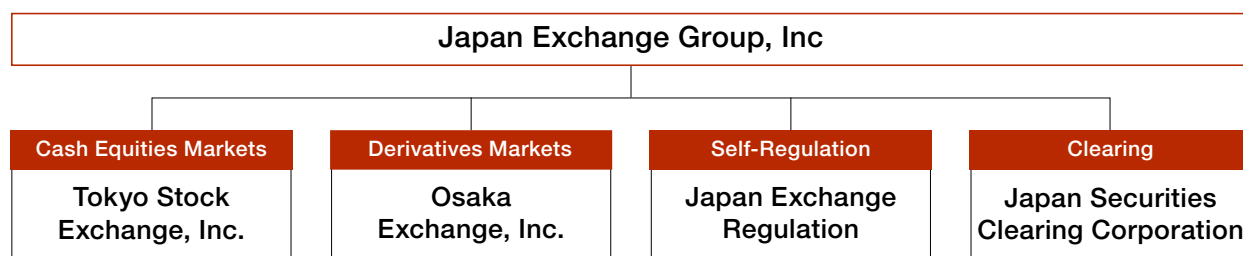
Reference guidelines

- International Integrated Reporting Council (IIRC) framework
- Guidance for Collaborative Value Creation (METI)



価値協創ガイダンス
Guidance for
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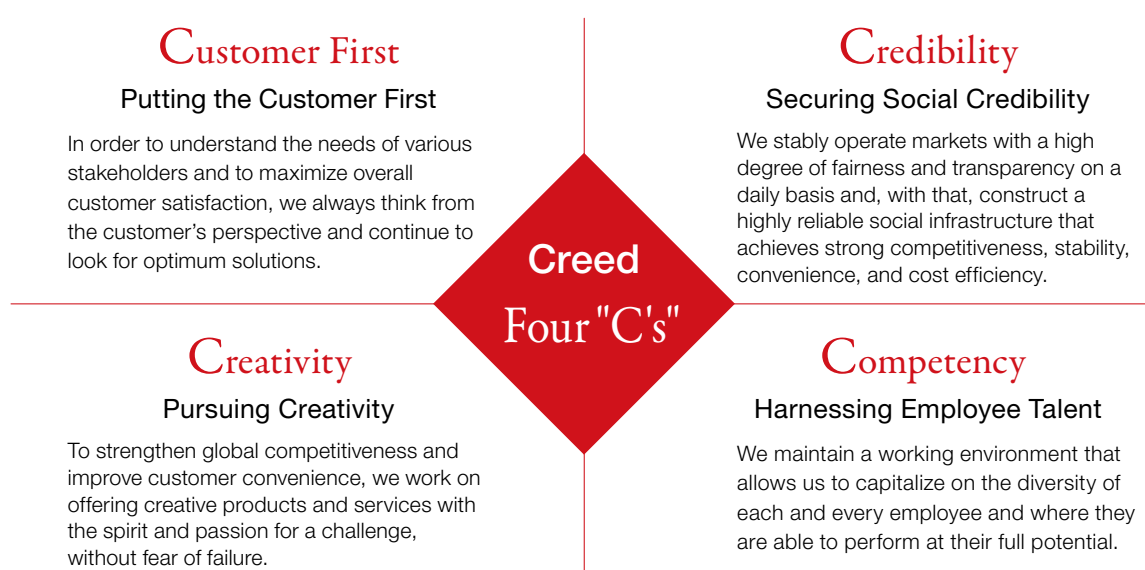
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Corporate Philosophy and Creed

Contributing to realizing an affluent society through sustainable market development

Our mission is to contribute to the realization of an affluent society by promoting sustainable development of the market. Committed to our public nature and credibility, we build highly convenient, efficient, and transparent markets, and provide creative and attractive services. Our efforts help us attract the support and confidence of investors and market users and reap the rewards in the form of profits.

Under this corporate philosophy, we raise the four principles of Customer First, Credibility, Creativity, and Competency as the JPX employee creed.



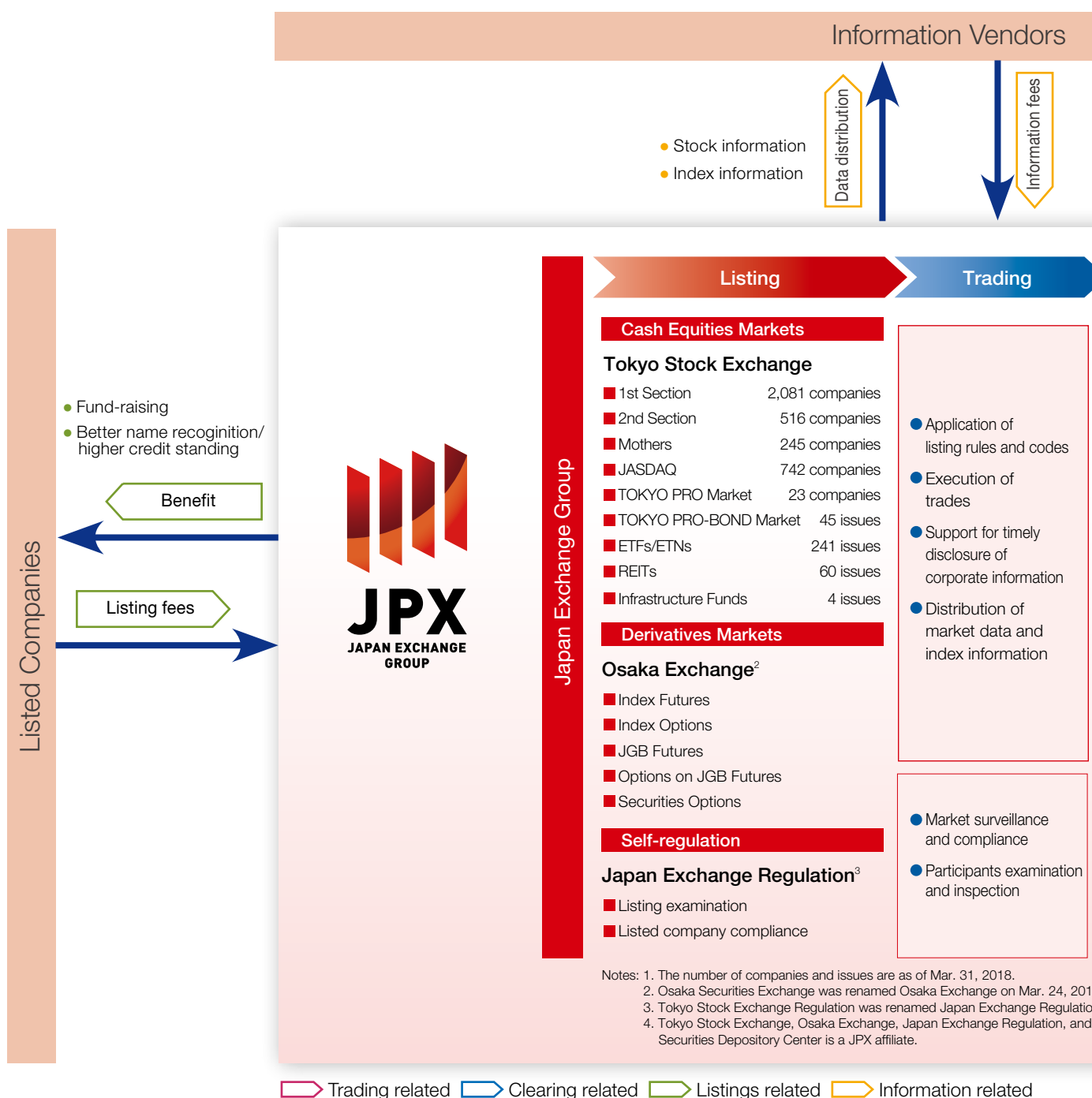
The Role of Exchange Markets

The markets established by JPX provide companies with business financing methods, investors with asset management opportunities, and society as a whole with price discovery functions. By fulfilling these social roles, we contribute to realizing an affluent society through sustainable market development.

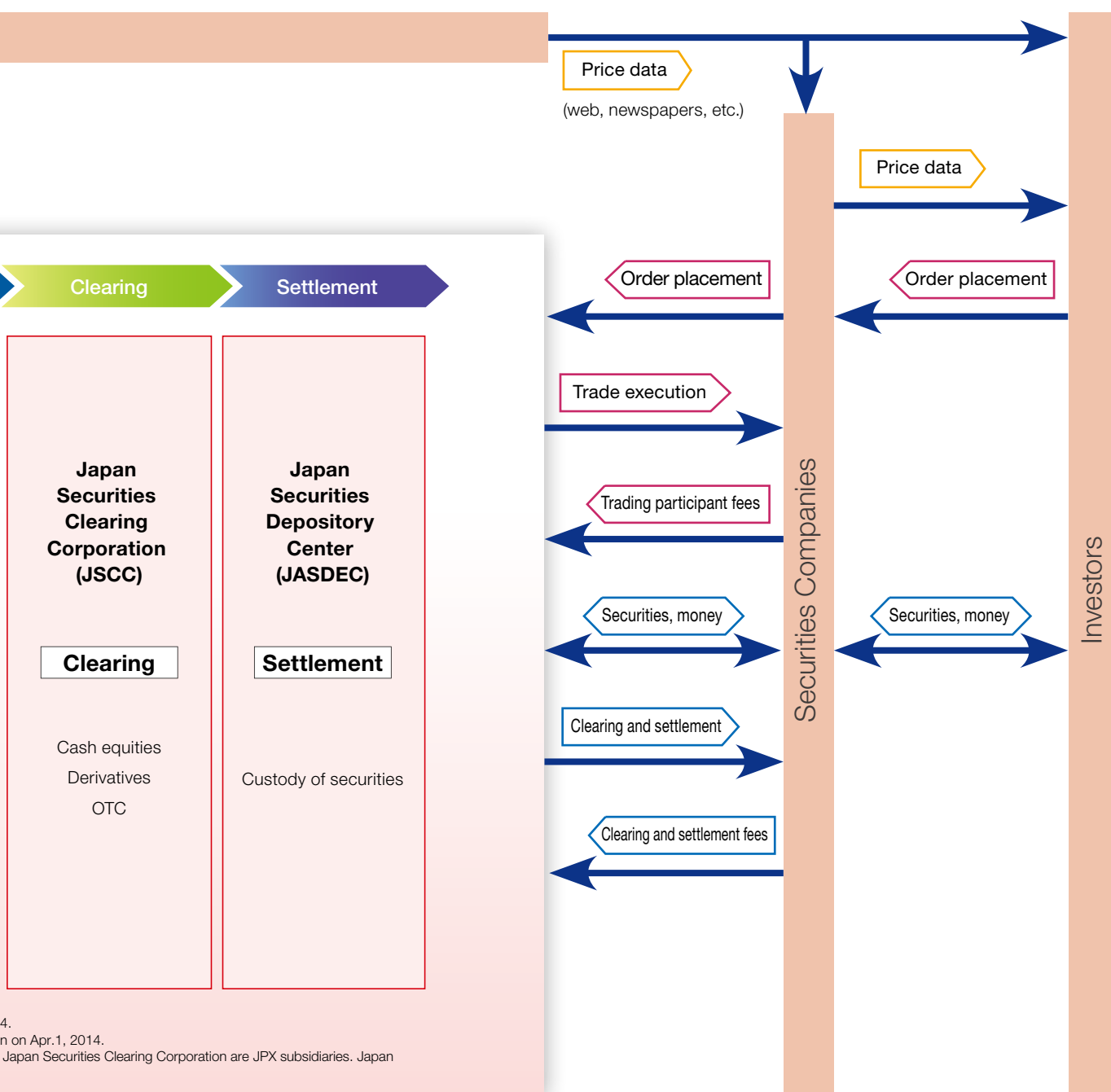


Business Model

In addition to TSE, which handles cash equities markets, and OSE, which handles derivatives markets, the corporate group also includes a self-regulatory subsidiary, which carries out the examination and supervision processes needed to maintain market quality. Our comprehensive services also encompass clearing and settlement functions.



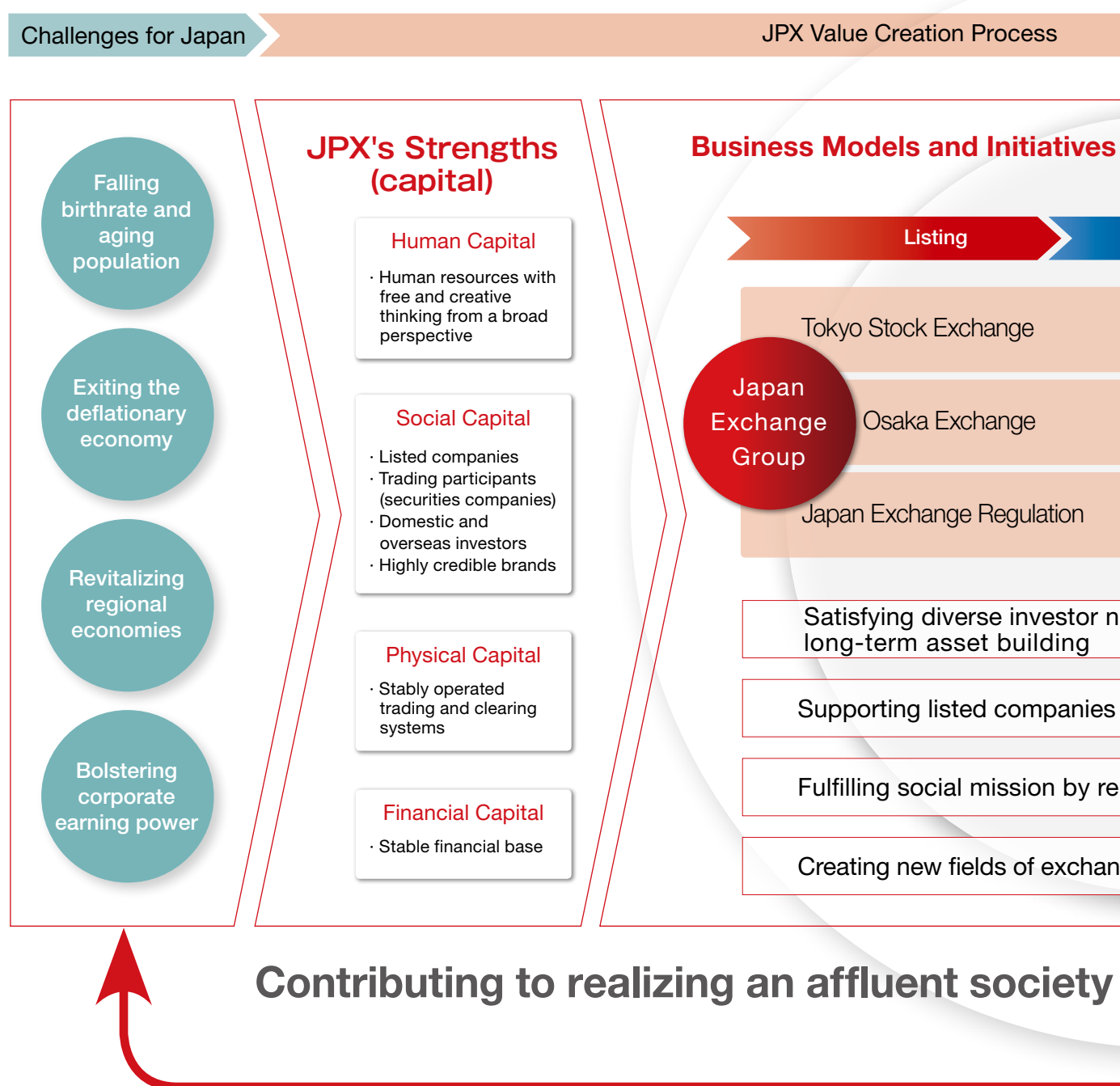
As consideration for JPX services, we receive various fees from market participants such as trading participants (i.e., securities companies), listed companies, and information vendors. Specifically, our sources of revenues are (1) revenues from trading services, (2) revenues from clearing services, (3) revenues from listing services, and (4) revenues from information services.



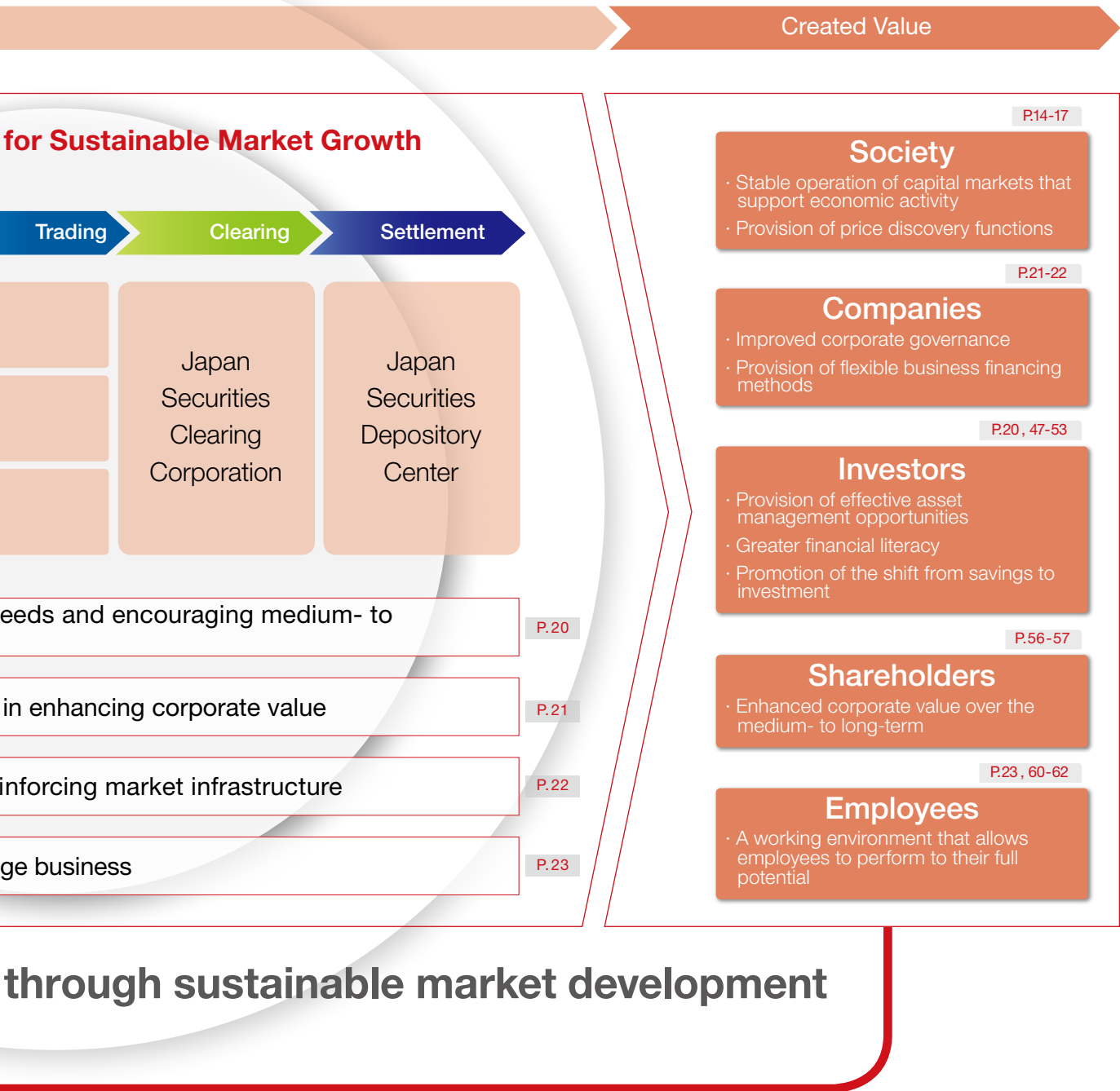
4. Japan Securities Clearing Corporation and Japan Securities Depository Center are JPX subsidiaries. Japan Securities Clearing Corporation was established on Apr.1, 2014.

Creating Value at JPX

Vibrant securities markets are essential to economic development and general prosperity. Expanding the base of market participants is a key factor for sustainable growth and requires a robust financial market infrastructure, together with continuous provision of diverse products and services.



JPX's aim is to realize the sustainable development of securities markets and contribute to the creation of a more affluent society. To this end, JPX ensures the reliability of securities markets and operates them in the public interest, works continuously to create a market base that is convenient, efficient, and transparent, and offers higher value added through creative and attractive services.

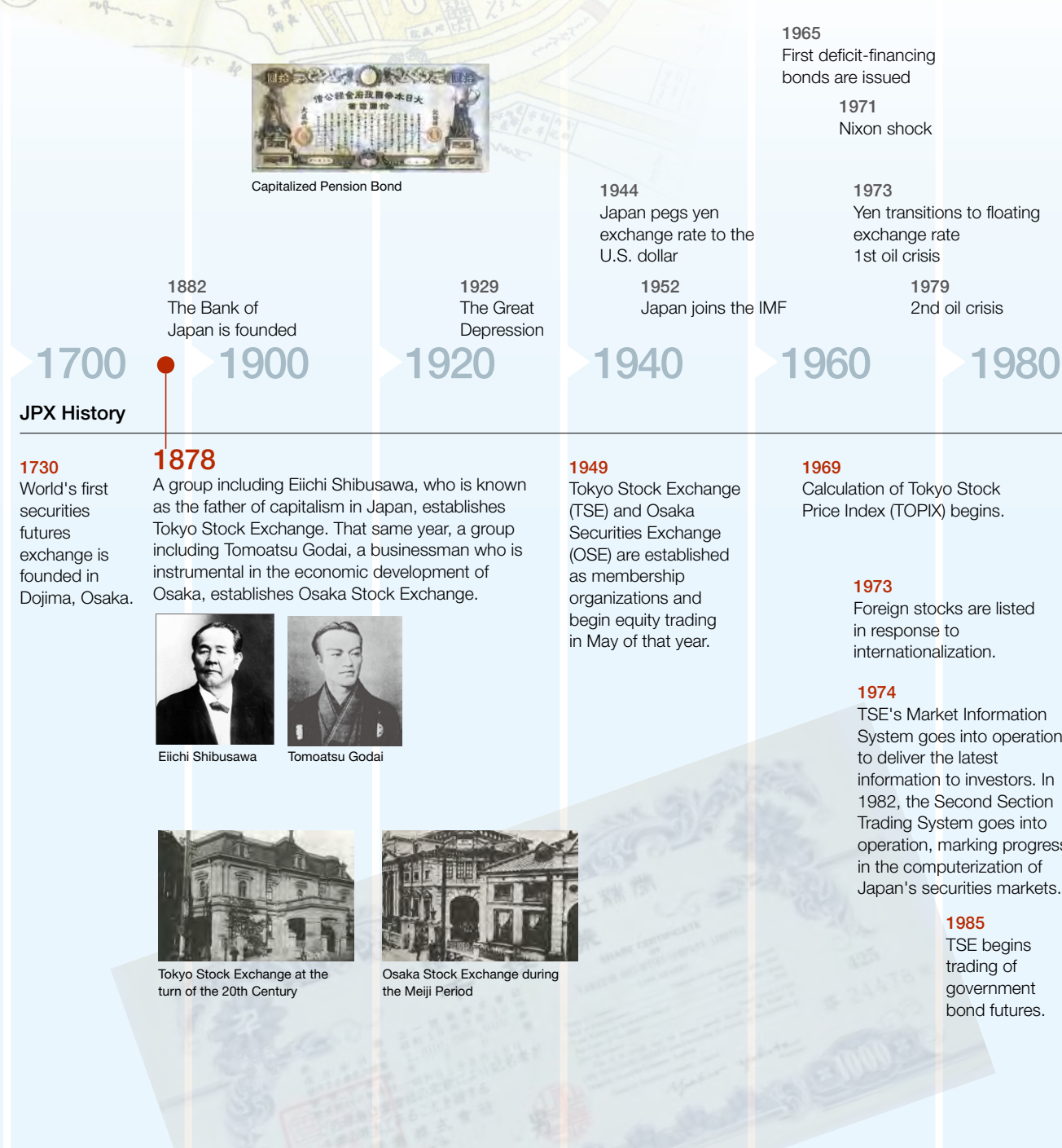


JPX History

The Tokyo and Osaka exchanges were established in 1878, soon after the Meiji Restoration and the start of Japan's modern era. JPX marked the 140th anniversary of the founding of its predecessor exchanges in 2018.

Constantly changing with the times and serving as the engine of the Japanese economy, JPX will continue to drive sustainable economic growth in Japan and contribute to the global economy.

History of the Japanese Economy and Key Global Developments





1988
Trading value and market capitalization of TSE both become world's No. 1

1989
Nikkei Stock Average reaches record high of JPY 38,915.87

1991
Nikkei 225 Futures becomes the world's most traded contract on a trading value basis

1997
Asian currency crisis

1999
Bank of Japan's zero interest rate policy

2002
Euro goes into circulation

2007
Global financial crisis

2000

1988
TSE begins trading of TOPIX Futures and OSE begins trading of Nikkei Stock Average (Nikkei 225) Futures.



Nikkei 225 Futures launch at OSE.

2001
TSE and OSE are demutualized.

ETF and J-REIT markets are established.

2003
Japan Securities Clearing Corporation (JSCC) goes into operation.

2004
OSE lists on OSE Hercules to become Japan's first public exchange.

1999
TSE launches Mothers, a market for new emerging companies, with OSE following suit in 2000 in the form of Nasdaq Japan (now integrated into JASDAQ).

The trading floors at both TSE and OSE are closed. After this, trading of stocks and other listed issues becomes computerized.



Nasdaq Japan Market is established.

2013

Japan Exchange Group is formed through the merger between TSE Group and OSE.

Open the flap to see more

Five Years since the Birth of JPX - Milestone Developments

- January:

JPX is formed through a merger between TSE Group and OSE.
- July:

OSE cash equity market is integrated into TSE.
Self-regulatory operations of OSE are integrated into Tokyo Stock Exchange Regulation.
Derivatives clearing operations of OSE are integrated into JSCC.
- October:

JSCC and Japan Government Bond Clearing Corporation are merged.

- April:

The infrastructure funds market is established.
- May:

Joint TSE/OSE Singapore branch office opens.
Contract months for Nikkei 225 Options are expanded with introduction of Weekly Options.
- June:

Japan's Corporate Governance Code is introduced.
- September:

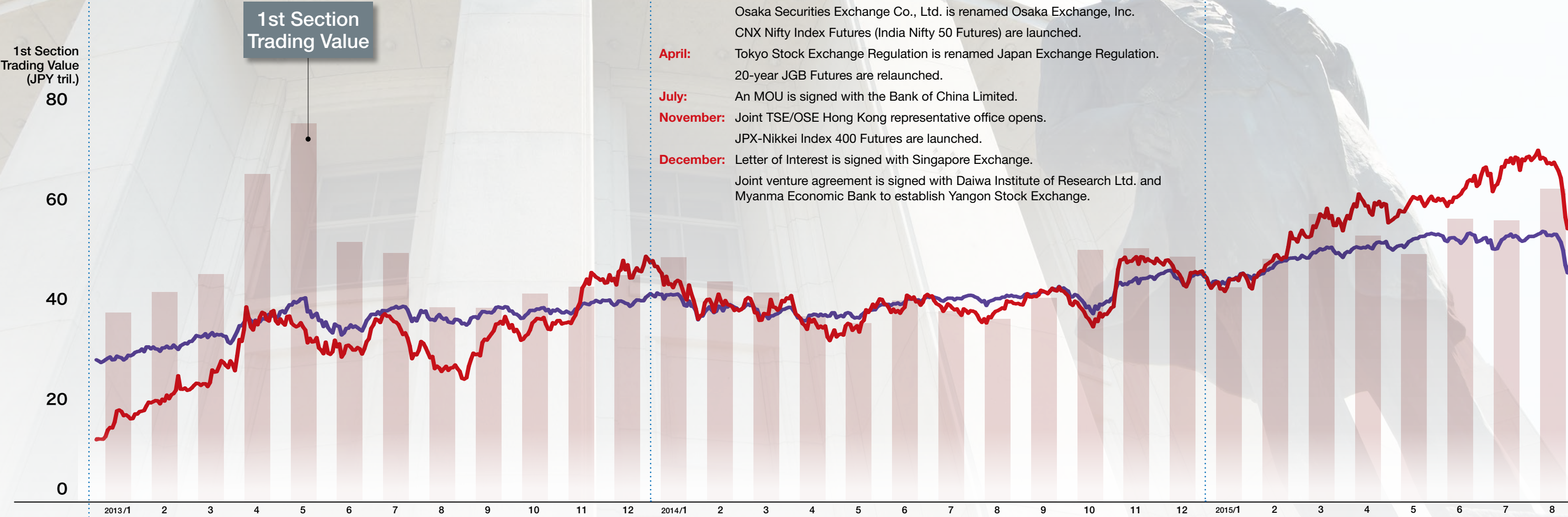
The cash equity trading system (arrowhead) is renewed.
- December:

Calculation of the S&P/JPX Smart Beta Index Series (GIVI, Risk Control Index, Dividend Aristocrats Index) begins.
Taiwan Dollar-denominated TOPIX Futures are launched on Taiwan Futures Exchange.

2013

2014

2015



1st Medium-Term Management Plan (FY2013–FY2015)

2016

- February:** Proof of concept (PoC) testing of blockchain technology begins.
- March:** Trading on Yangon Stock Exchange begins.
- April:** Calculation and publication of JPX/S&P CAPEX & Human Capital Index begin.
- July:** The derivatives trading system (J-GATE) is renewed.
The trading hours (day and night sessions) for the derivatives market are extended.
OSE launches TSE Mothers Index Futures, TWSE Capitalization Weighted Stock Index (TAIEX) Futures, FTSE China 50 Index Futures, and JPX-Nikkei Index 400 Options.
- September:** Provision of the J-GATE derivatives trading system to Tokyo Commodity Exchange, Inc. (TOCOM) begins.

- January:** Calculation and publication of S&P/TOPIX 150 Environment Indices begin.
- March:** Calculation and publication of JPX-Nikkei Mid and Small Cap Index begin.
An MOU is signed with Saudi Stock Exchange (Tadawul).
The ToSTNeT trading system for the ToSTNeT market (off-auction exchange market) is renewed.
- May:** Money Market and Capital Market Development Strategy for Mongolia project begins.
- July:** Basic agreements on collaboration are concluded with regional financial institutions for regional economic development. (The Hokkaido Bank, Ltd. and the Hokuriku Bank, Ltd. in July; regional banks participating in the Shikoku Alliance and the Bank of Kyoto, Ltd. in October; the 77 Bank, Ltd. and Tohoku University in November; and the Nishi-Nippon City Bank, Ltd. in December)

- January:** Yen-denominated TOPIX Futures are launched on CME Globex.
- February:** New clearing system for listed derivatives goes live.
- March:** Market Surveillance starts using AI.
JPX, Korea Exchange, and Taiwan Stock Exchange Corporation sign a trilateral MoU.

2017

- August:** Calculation and publication of TOPIX High Dividend Yield 40 Index begin.
- September:** OSE wins Exchange of the Year - Derivatives, the Asia Capital Markets Awards 2017.
- October:** A license agreement is entered into with CME Group for yen-denominated TOPIX Futures on CME Globex.
Provision of a new arrownet-Global service, "JPX-Chicago Co-Location Direct", begins.
- November:** A decision is made to build a new remote secondary center.
- December:** JPX joins the UN's Sustainable Stock Exchanges initiative.

2018

JPX Stock Price

TOPIX

JPX Stock Price (JPY)
TOPIX (Points)
2,500

2,000

1,500

1,000

500

0

2nd Medium-Term Management Plan (FY2016–FY2018)

FY2017 Highlights

Operating Revenue

JPY **120.7** billion

Operating Expenses

JPY **50.9** billion

Net Income

JPY **50.4** billion



Note: Net income attributable to owners of the parent company

ROE

19.0 %

Note: Return on equity attributable to owners of the parent company

EPS

JPY **94.17**

Note: Earnings per share (basic)

Annual Dividend per Share

JPY **67**



Average Daily Trading Value for Cash Equities

JPY **3.4** trillion

Number of IPOs on Tokyo Stock Exchange

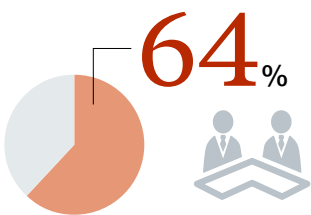
83



Average Daily Trading Volume for Derivatives

1.44 million contracts

Proportion of Outside Directors



Employees' Average Years of Service

Male **15.9**
Female **20.5**

Financial and Economic Lectures

Provided to **52,000** people

Strategies for Creating Value

JPX's mission is to contribute to the realization of an affluent society through the sustainable development of the market. To fulfill this mission, JPX creates value by providing products and services that meet diverse needs, supporting listed companies in enhancing corporate value, reinforcing the market infrastructure, and creating new fields of business.



Message from the CEO



■ Corporate Philosophy and Creed

At JPX, we have a mission – "to contribute to the realization of an affluent society by promoting the continuous development of the market by ensuring our public nature and credibility, constructing the foundation of the market, which is highly convenient, efficient, and transparent, and providing creative and attractive services". Our contributions are guided by our corporate philosophy, to garner greater support and confidence from investors and other market users, from which we reap rewards in the form of profits.

Based on this corporate philosophy, all officers and employees are bound by the four C's of our creed —

Customer First
Putting the Customer First

Credibility
Securing Social Credibility

Creativity
Pursuing Creativity

Competency
Harnessing Employee Talent

Our corporate philosophy and creed express the goals and values that guide our business activities and underpin our management policies and decisions. JPX officers and employees constantly bear this philosophy in mind in the performance of their day-to-day tasks.

Challenges

As an exchange group, JPX's services for financial instruments markets in Japan span the entire spectrum, from markets for listing and trading of equities and derivatives to clearing and settlement services, covering also index and market data services.

Conditions in financial instruments markets change constantly with developments in the external environment, such as the domestic and global economic climates, monetary policies, and geopolitical risks. With our core business rooted in such fluid financial instruments markets, the top priority at JPX lies in providing reliable market infrastructure that is sufficiently impervious to external influences as we maintain high user satisfaction levels.

Under the 2nd Medium-Term Management Plan (FY2016–FY2018), JPX is advancing core initiatives, such as improving the quality of market infrastructure and services through cross-division cooperation and complementary relationships within the corporate group, while closely monitoring developments being brought about by new financial and information technologies (fintech) and continuing to focus on maintaining and improving market reliability and efficiency. Over the medium- to long-term, we aim to achieve a business portfolio balanced across the cash equities, derivatives, and other business segments.

Meanwhile, JPX's basic capital policy aims to secure a robust financial base by improving financial stability and achieving corporate growth through increasing investment while balancing financial resilience and shareholder returns. In line with this policy, we will focus on capital efficiency in our management to achieve the ROE target of 10%, above capital costs, over the medium- to long-term regardless of market conditions.

Overview of 2nd Medium-Term Management Plan (FY2016–FY2018)

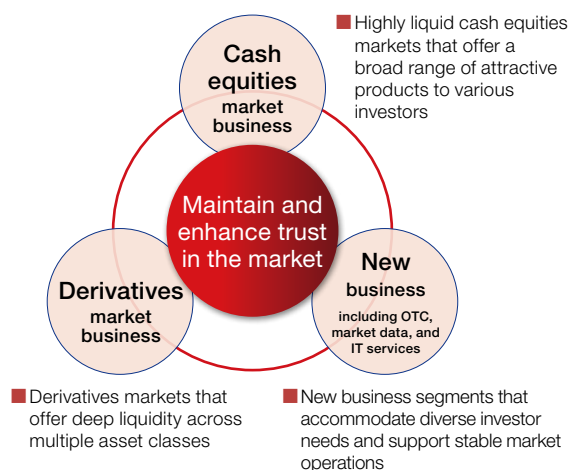
Set realization of well-balanced business portfolio as medium- to long-term vision
Enhance revenue diversification and investment to improve stability
Aim to accumulate operational revenue/net income via enhanced strategic investments

Concept

STEP UP TO THE NEXT

Medium- to Long-Term Vision

Well-balanced business portfolio



Core Initiatives

I

Satisfying diverse investor needs and encouraging medium- to long-term asset building

II

Supporting listed companies in enhancing corporate value

III

Fulfilling social mission by reinforcing market infrastructure

IV

Creating new fields of exchange business

>> Message from the CEO

2nd Medium-Term Management Plan

On April 27, 2018, we updated our Medium-Term Management Plan for FY2018, the final fiscal year for achieving the targets set in our second three-year plan. The update incorporates the progress made and outcomes to date, and reflects developments in the external environment and anticipated challenges. JPX is making steady progress on the four core initiatives outlined in the plan.

The first initiative is encouraging medium- to long-term asset building. As we work to accommodate diverse investment needs, we are also taking steps to improve financial literacy and vitalize the ETF market to foster medium- to long-term asset building in Japan.

The second initiative is enhancing the corporate value of listed companies. To help companies listed in Japan improve their corporate value, TSE pursues efforts toward better corporate governance and deeper engagement between listed companies and their investors. We also offer support for IPOs to ensure a steady supply of risk money to businesses seeking growth capital.

The third initiative is reinforcing the market infrastructure. As the core infrastructure of financial instruments markets in Japan, JPX aims to consistently deliver reliable services and high levels of user satisfaction. To this end, we are reinforcing our Business Continuity Plan (BCP) and enhancing cybersecurity, while steadily working to shorten the settlement cycles for JGB and cash equity trading.

The fourth initiative is creating new fields of exchange business. To contribute to the creation of a sustainable society, JPX is working on a framework for ESG and other non-financial disclosure, while developing ESG-themed indices and nurturing markets for green bonds and infrastructure funds. We also facilitate the development of new financial and information technologies such as blockchain, and bolster our human capital by hiring diverse people.

Progress in the First Two Years (FY2016 & FY2017)

I	Satisfying diverse investor needs and encouraging medium- to long-term asset building	Promote asset building by retail investors	▶ No. of ETF holders up by 170K (vs. the end of Jul. '15)
		Diversify derivatives lineup	▶ Launched four new products, including TSE Mothers Index Futures
		List attractive products	▶ Total NAV of ETFs exceeded JPY 30 tril.
		Attract diverse institutional participants	▶ Listed four infrastructure funds
		Develop index and information business	▶ Attracted investment in Japanese market centered on overseas investors
II	Supporting listed companies in enhancing corporate value	Enhance effectiveness of corporate governance	▶ 88% of companies appointing two or more independent outside directors (TSE 1st Sec./as of Jul. '17)
		Ensure stable supply of risk money	▶ 83 IPOs
III	Fulfilling social mission by reinforcing market infrastructure	Strengthen BCP and cybersecurity	▶ Formulated long-term backup scheme and strengthened BCP
		Enhance risk management on market operation	▶ Built comprehensive risk management framework
		Support for the registration regime of HFTs	▶ Improved client support for smooth registration of HFTs
		Design next-generation trading systems	▶ Clarified concepts in trading scheme through working group deliberations
		Expand clearing and settlement services	▶ Replaced the clearing system and prepared for shortening settlement cycles
IV	Creating new fields of exchange business	Enhance self-regulatory functions	▶ Adopted market surveillance leveraging AI
		Enter into new business fields	▶ Provided trading system to TOCOM
		Discuss utilization of fintech	▶ Took further steps to improve the ETF creation/redemption process
		Reinforce a foundation for business	▶ Launched consortium for PoC testing of DLT across the financial industry
			▶ Engaged in fostering more creativity and innovation within the organization
			▶ Advanced work style reforms

Social Responsibilities

Since JPX operates markets that are a public asset, we are responsible to society at large for ensuring the sustainable development of our markets. As core infrastructure for financial and capital markets in Japan, we recognize our responsibility to serve the public good and maintain credibility as we consistently provide reliable market infrastructure to deliver high levels of user satisfaction.

In addition to discharging our primary duties of developing market infrastructure and operating markets, JPX contributes to the realization of an affluent society by aiming for sustainable market development. Leveraging expertise acquired in the course of our work to provide finance and economics education, collaborating with foreign stock exchanges, and promoting academic work and research count among the range of initiatives at JPX toward fulfilling our social responsibilities.

Alongside Our Stakeholders

As we serve as core infrastructure for financial and capital markets at the heart of the Japanese economy, JPX will strive to engage and gain the understanding of our diverse stakeholders, including domestic and global investors, listed companies, trading participants such as securities firms, as well as regulators and the general public.

We deeply appreciate your continued support and ask that you walk alongside us in our journey forward.

Highlights

Basic Policy for Updates

Our most important mission is to stably provide market infrastructures that satisfy users without being affected by uncertainties that remain present in global politics and economy.

Review our implementation plan to accomplish the 2nd Medium-Term Management Plan based on external changes, anticipated challenges, and progress and effects to date

Modify the implementation plan with an eye on the potential changes brought about by fintech while valuing maintenance and reinforcement of market reliability and efficiency

Conduct research and reinforce investments for new missions such as promoting ESG investments, strengthening of human resources foundation, and utilizing fintech for the next medium-term management plan

Updates to Core Initiatives

I	Satisfying diverse investor needs and encouraging medium- to long-term asset building	<ul style="list-style-type: none"> ▶ Enhance efforts to encourage asset formation by retail investors ▶ Maintain and strengthen competitiveness of derivatives market ▶ Strengthen functions of our cash market, especially of ETF market ▶ Develop new information services such as providing API
II	Supporting listed companies in enhancing corporate value	<ul style="list-style-type: none"> ▶ Promote actions to improve corporate governance of Japanese listed companies ▶ Examine and improve the system for stable supply of risk money ▶ Promote IPOs and enhance actions to diversify listed products
III	Fulfilling social mission by reinforcing market infrastructure	<ul style="list-style-type: none"> ▶ Strengthen BCP, risk management, and cybersecurity ▶ Enhance HFT monitoring function and HFT support ▶ Work on shortening the settlement cycle of JGBs and stocks ▶ Supervise listed companies to prevent corporate scandals and their recurrence
IV	Creating new fields of exchange business	<ul style="list-style-type: none"> ▶ Promote awareness of ESG investment in Japan as a participant in the SSE initiative ▶ Enhance utilization of fintech and monitor technological trends ▶ Strengthen foundations for business and human resources

Financial Policies

Financial Objectives under the 2nd Medium-Term Management Plan

Under the 1st Medium-Term Management Plan, which was formulated at the time of the merger in 2013, JPX achieved the targeted cost reduction of at least JPY 8.5 billion between FY2012 and FY2015 by maximizing cost synergies through organizational and infrastructural integration and streamlining. JPX also built flexible and resilient financial foundations.

While the 1st Medium-Term Management Plan aimed to clamp down on expenses, the 2nd Medium-Term Management Plan aims for expansion, setting the goal of operating revenue of JPY 123 billion (JPY 15.0 billion increase) and net income of JPY 48.0 billion (JPY 8.0 billion increase) in FY2018, the final fiscal year of the plan.

Capital Policy for Sustainable Development of the Market

Our basic capital policy is to invest aggressively to expand revenue inflows and profits and achieve better income stability while balancing sound financial health and shareholder returns, and thereby achieve sustainable development of the market. As part of this policy, we aim to create a business model that allows us to secure an ROE of approximately 10% even under unfavorable market conditions over the medium- to long-term.

The dividend payout ratio is set at approximately 60%, and we will consider further returns to shareholders along with the need for growth investments.

The dividend per share for FY2017 was JPY 67. This dividend is the total of the ordinary dividend of JPY 57 based on the above payout ratio and an additional commemorative dividend of JPY 10 that marked the fifth anniversary of JPX's founding and shared the rewards from the record consolidated earnings results in our corporate history.

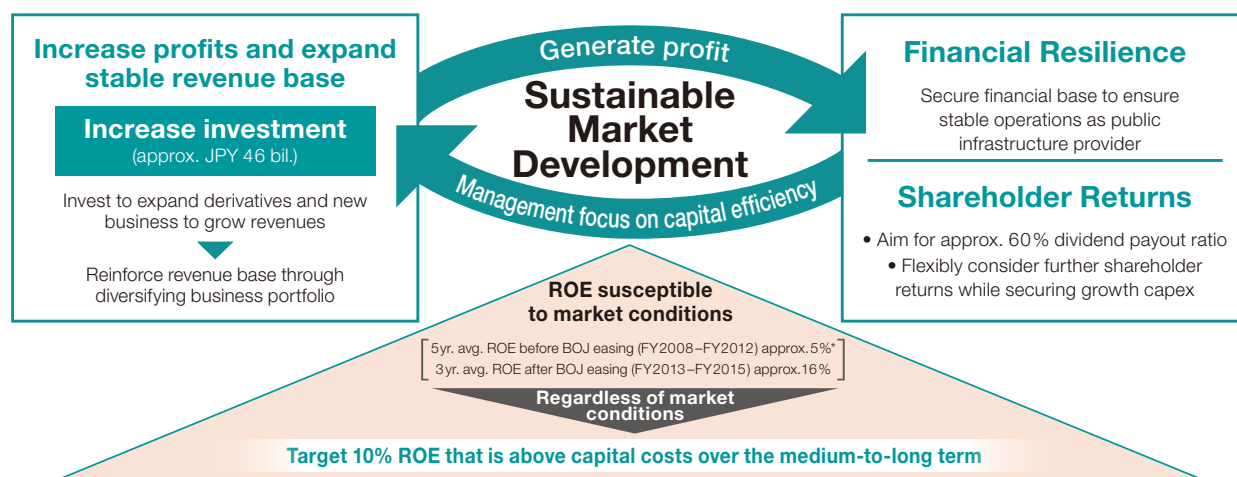
Financial Targets

	Fiscal Years of 2nd Medium-Term Management Plan			Reference
	FY2016	FY2017	FY2018 earnings forecast ¹	Targets in the last fiscal year of 2nd MTMP (Compared with 1st MTMP) ²
Operating Revenue (JPY)	107.8 bil.	120.7 bil.	123.0 bil.	123.0 bil. (+15.0 bil.)
Net Income (JPY)	42.1 bil.	50.4 bil.	48.0 bil.	48.0 bil. (+8.0 bil.)
ROE	16.4%	19.0%	Approx. 17%	Approx. 17% <small>Target 10% or more as a level maintained in the medium-to-long term</small>

Notes: 1. The consolidated earnings forecast for the fiscal year ending March 31, 2019 is based on the assumption that cash equities average daily trading value is JPY 3.45 tril. and derivatives annual trading volume is 360 mil. contracts. The consolidated earnings forecast may deviate from these levels depending on the external environment such as market conditions and other factors.

2. Estimates based on actual market conditions in the three years during 1st MTMP from FY2013 to FY2015 (cash equities average daily trading value of JPY 3.1 tril., derivatives annual trading volume of 350 mil. contracts)

Capital Policy toward Sustainable Development of the Market



*5-year average ROE for FY2008–FY2012 is based on combined net income and equity capital of TSE Group and OSE before business integration.

IT Master Plan

IT Strategy as the Source of Our Competitiveness

Exchanges provide venues to gather large numbers of sellers and buyers. Today, those venues exist on systems, and the quality of these systems and their information-processing capabilities have a direct bearing on exchange competitiveness. Thanks to rapid advances in information technology, investors can scour the world to choose the market that offers the best investment environment. The needs of market users are also becoming increasingly complex and sophisticated. To meet these needs and become their market of choice, we must constantly improve our systems infrastructure to enhance convenience for our users. At the same time, as core financial infrastructure, exchanges' most-important mission is to provide sound venues by stably operating systems that are highly reliable and scalable. As such, JPX views IT both as a source of competitiveness and as a means to sharpen its competitive edge. We will employ the latest technology as far as possible to construct and continue providing highly reliable and convenient market infrastructure and services.

Continuous Systems Upgrades and Pushing the Limits for Better Corporate Value

The arrowhead cash equity trading system currently handles trading of over 3,600 listed stocks, while our J-GATE derivatives trading system provides access to Japan's best-known futures and options products for the Nikkei 225, TOPIX, and 10-year JGBs. Through these systems, we operate one of the world's leading markets. In FY2017, we enhanced the risk management functions of our clearing systems, upgraded the functions for derivatives clearing, and diversified our services with a view to expanding our clearing and settlement services and strengthening the system infrastructure. We are also strengthening and enhancing our cybersecurity in response to the recent heightened awareness of security threats as a priority issue. The strength and resilience of its systems infrastructure are the source of competitiveness for an exchange. Our experience from system upgrades and other initiatives have given our IT divisions the ability to assess and take measured risks to create a highly skilled, positively charged organization.

We will continue to boldly push the limits as we work to enhance the corporate value of JPX through our IT strategy.

IT Initiatives (FY2016–FY2018)

2nd Medium-Term Management Plan

Increase investment for sustainable market development to build on successful TSE-OSE integration

Leverage competencies across JPX

Further develop JPX markets through stronger cross-division cooperation and complementary relationships in the corporate group

Aggressively pursue new business

Diversify business portfolio toward ensuring stable market operations

IT Initiatives

Expand clearing / settlement services and enhance system infrastructure	Design next-generation trading systems	Launch next J-GATE and next ToSTNeT systems	Strengthen BCP and cybersecurity
<ul style="list-style-type: none"> Strengthen system foundations for product diversification and more sophisticated risk management Develop and strengthen systems infrastructure for shorter settlement cycle and post-trade business expansion 	<ul style="list-style-type: none"> Start developing next-generation trading systems with a focus on enhancing user-friendliness and reliability of JPX markets, as well as improving cost effectiveness 	<ul style="list-style-type: none"> Promote development of systems with high processing capacity, reliability, and fault tolerance with the aim of expanding product lineup, boosting existing products, and increasing market liquidity 	<ul style="list-style-type: none"> Strengthen cybersecurity to counter increasing threats Start reviewing contingency plans based on revisions to the government's basic disaster management plan and enhancing contingency operations

Core Initiatives

I

Satisfying Diverse Investor Needs and Encouraging Medium- to Long-Term Asset Building

Owing to JPX's continued efforts to expand the investor base, the number of ETF holders has increased by approximately 170,000 between July 2015 and July 2017. JPX has also focused efforts on diversifying the derivatives lineup, such as by marketing and encouraging the use of TSE Mothers Index Futures (launched in 2016).

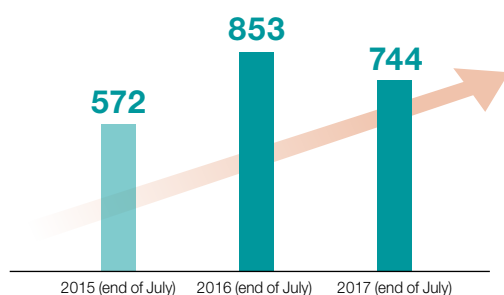
Along with providing finance and economics education programs and other efforts to raise financial literacy, JPX is keen to vitalize the ETF market by enhancing cash equities markets and increasing liquidity. JPX will also maintain and enhance the competitiveness of the derivatives market as a growth segment and move to further develop the indexing and information business.

Core Initiatives

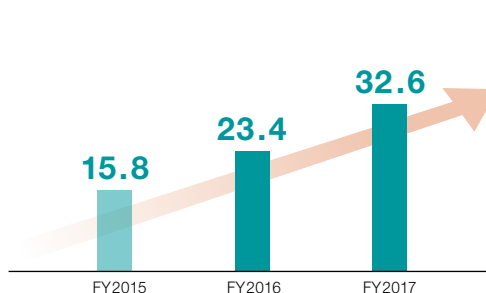
1	Promote asset building by retail investors <ul style="list-style-type: none"> • Develop approaches and enhance efforts to expand investor base • Promote education on finance and economy to improve financial literacy • Improve retail investors' awareness of derivatives
2	Enhance competitiveness of OSE derivatives market <ul style="list-style-type: none"> • Enhance competitiveness in light of international trends • Increase awareness and trading of new products • Improve liquidity by attracting new investors • Advance research and discussion of comprehensive exchange initiative
3	Generate momentum in ETF market and reinforce TSE cash market <ul style="list-style-type: none"> • Revise schemes to enhance functions of cash equities market and promote system development • Adopt ETF market making scheme and improve liquidity • Improve the ETF creation/redemption process • Attract new investors for further market liquidity
4	Develop index and information businesses <ul style="list-style-type: none"> • Promote JPX's indices to increase AUM linked to the indices and reinforce a sales/support team • Develop new indices to accommodate diverse user needs • Examine how to promote and expand information provision services

Expansion of the ETF Market

Number of ETF holders (thousands)



ETF Net Assets value (JPY tril.)



II

Supporting Listed Companies in Enhancing Corporate Value

In FY2017, TSE revised Japan's Corporate Governance Code with an eye on enhancing the corporate value of companies listed in Japan, and encouraged constructive dialogue between investors and listed companies by such means as promoting the disclosure of corporate information in English. In FY2018, JPX will continue working on encouraging listed companies to enhance corporate governance and incorporate investor perspectives into their management.

There was a total of 83 IPOs in FY2017, largely unchanged from FY2016. In FY2018, from the standpoint of securing a stable supply of risk money, JPX will collaborate with capital market stakeholders and regional financial institutions to offer support for IPOs and list attractive investment products that contribute to asset building.

Core Initiatives

1

Enhance effectiveness of corporate governance

- Review Japan's Corporate Governance Code and encourage efforts to enhance corporate governance
- Promote constructive dialogue between listed companies and investors by developing environments conducive to the disclosure of non-financial information and encourage listed companies to adopt management policies that incorporate investor perspectives

2

Ensure stable supply of risk money

- Offer support for IPOs by collaborating with regional financial institutions and relevant entities in the market
- Promote cross-border listings
- Review current sections for listed companies

3

List attractive products

- Expand ETF lineup to encompass various asset classes
- Aid in developing and bringing new listings to the REIT/Infrastructure fund markets

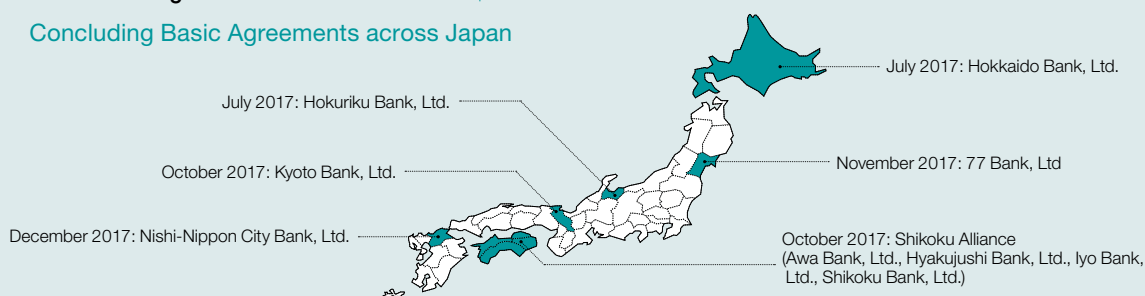
Cooperation with Regional Financial Institutions

Supporting Revitalization of Regional Economies through IPOs

Activities to spread knowledge and understanding of finance and economics

- Assistance for growth of regional companies through IPO, courses to enhance the capabilities of regional bank employees
- Encouraging use of TOKYO PRO Market
- Introductory programs on finance and economics to nurture investors (+YOU, JPX Academy, ETF/REIT Investment Seminar, entrepreneurship experience programs)

Concluding Basic Agreements across Japan



>> Core Initiatives

III

Fulfilling Social Mission by Reinforcing Market Infrastructure

In FY2017, JPX set up a backup arrangement for a long-term situation in the event of a wide-area natural disaster as a part of efforts to strengthen its Business Continuity Plan (BCP). For self-regulatory operations, JPX upgraded core self-regulatory functions by such means as applying artificial intelligence (AI) for market surveillance to ensure market fairness and credibility. In FY2018, JPX will further improve its BCP by rolling out a remote backup center and continue to adopt more advanced cybersecurity.

To improve the convenience of financial and capital markets in Japan and strengthen their international competitiveness, with the cooperation of market participants and relevant institutions, in May 2018, JPX shortened the JGB settlement cycle to T+1 and, in July 2019, will trim the cycle for equities to T+2.

Core Initiatives

1	Strengthen BCP, cybersecurity, and risk management <ul style="list-style-type: none"> Enhance backup capabilities at Tokyo and Osaka bases as a precaution against wide-area disaster Establish and maintain backup center in the Kansai region Employ better and more advanced cybersecurity
2	Engage with and support HFTs in the adoption of the new registration regime <ul style="list-style-type: none"> Strengthen market surveillance in connection to newly adopted HFT registration regime Attract new participants Offer support to HFTs in connection to the registration regime Expand IT network connectivity services
3	Expand clearing and settlement services and enhance system infrastructure <ul style="list-style-type: none"> Ensure smooth transition to shortened (T+1) settlement cycle for JGBs Advance efforts to replace cash products clearing system Make sound progress to shorten settlement cycle (to T+2) for stocks Improve service level of OTC clearing services
4	Reinforce and enhance self-regulatory operations <ul style="list-style-type: none"> Apply AI technology to market surveillance Promote listed company compliance with a focus on preventing new incidents and recurrence

Principles for Preventing Corporate Scandals

The corporate scandals in recent years have not only severely damaged the reputation of listed companies. Their business performance and stock prices have suffered, eroding their corporate value. Going beyond the consequences for individual companies, a capital market where corporate scandals are common creates the perception of insufficient corporate governance, which undermines market credibility.

Recognizing there is an urgent need for listed companies to take effective measures to prevent corporate scandals, JPX-R published the Principles for Preventing Corporate Scandals on March 30, 2018 as a means of supporting listed companies' initiatives aimed at preventing corporate scandals.

The following six action principles were published.

- ▶ Principle 1: Gain a thorough understanding of the actual situation
- ▶ Principle 2: Fulfill responsibilities with a sense of mission
- ▶ Principle 3: Encourage two-way communication
- ▶ Principle 4: Detect non-compliance early and respond swiftly
- ▶ Principle 5: Execute consistent business management throughout the entire corporate group
- ▶ Principle 6: Be accountable in view of the relevant supply chain

IV

Creating New Fields of Exchange Business

JPX joined the Sustainable Stock Exchanges (SSE) initiative in December 2017 with the aim of fostering a sustainable society. In FY2018, JPX established a Sustainability Committee directly reporting to the Group CEO and will continue pursuing initiatives for the creation of a sustainable society, such as developing a disclosure framework for ESG and other non-financial information and offering related indices. Moreover, in order to adapt to changes in the business environment so as to develop the market sustainably, JPX facilitates the development of new financial and information technologies such as blockchain, and will utilize new technologies to improve operational efficiency. JPX will also strengthen its human capital through facilitating engagement among diverse people.

Core Initiatives

1	Promote ESG investment <ul style="list-style-type: none"> Promote green and social bonds on a new disclosure platform Develop a disclosure environment for non-financial information such as ESG Promote infrastructure funds to encompass such areas as renewable energy Develop and propagate indices related to ESG
2	Enhance utilization of fintech in business <ul style="list-style-type: none"> Further promote industry-wide PoC testing on utilization of blockchain as a platform for R&D in the financial industry Research and monitor trends on digital/virtual currencies and ICOs Enhance operational efficiency with artificial intelligence (AI) and Robotics Process Automation (RPA)
3	Strengthen foundations for HR <ul style="list-style-type: none"> Train and retain diverse personnel on a consistent basis by focusing on hiring talent of all experience levels Advance work style reforms by streamlining operations and harnessing the capabilities of diverse personnel
4	Strengthen foundations for business <ul style="list-style-type: none"> Strengthen foundations for global business in the form of joint projects with international exchanges and technical assistance with systems and infrastructure development Improve functions of research and PR Enhance management from ESG viewpoint such as establishment of a special organization reporting to CEO

Participation in the Sustainable Stock Exchanges (SSE) Initiative

This initiative is a platform for stock exchanges to proactively explore and deliberate ways and means toward building sustainable societies through collaborating with investors, listed companies, and other stakeholders.

The SSE initiative is led by the UN Conference on Trade and Development (UNCTAD), the UN Environment Programme Finance Initiative (UNEP FI), and other related organizations.



ESG-Related Index Calculation and Publication

JPX promotes the calculation and publication of stock indices from ESG and other perspectives, as well as the creation of index-linked products.

Industry-Wide Proof of Concept Testing on Utilization of Blockchain

With the cooperation of a broad range of participants, including financial institutions and IT vendors, JPX is conducting proof of concept testing as well as research and study on the possibility of applying blockchain or distributed ledger technology to financial infrastructure.

>> Core Initiatives >> Creating new fields of exchange business

Initiatives Related to the Spread of ESG Investment

Domestic and International Movements in ESG Investment

Since the establishment of the Principles for Responsible Investment (PRI) in 2006, ESG investment has exhibited a greater presence throughout the world, particularly in the United States and Europe. Likewise, the operational balance, which reached approximately JPY 23 trillion globally in 2016, is also expected to see continued growth going forward. In Japan, as well, the Government Pension Investment Fund signing the PRI in 2015 triggered the rapid expansion of this balance. ESG investment has also attracted the strong interest and anticipation of international institutions and governments in Japan and abroad as a means of connecting to solutions for SDGs, climate change, and other global scale challenges.

Growth of ESG Investment Assets



Source: GSIA (Global Sustainable Investment Review 2016)

Our Response

Through measures such as the initiatives included in the Update of the 2nd Medium-Term Management Plan (page 23), JPX has been proactively engaged in spreading ESG investment in Japan. On July 1, 2018, we established the Sustainability Committee, which reports directly to Akira Kiyota, Group CEO, in order to promote these initiatives on a group-wide basis. With a focus on our initiatives as a market operator and combined with our initiatives as a listed company, we will drive forward and contribute to the establishment of a sustainable society, in collaboration with all of our stakeholders.

Initiatives as a Market Operator

Support for the ESG initiatives of listed companies

We provide support for a mutual understanding and greater dialogue regarding ESG among listed companies and investors.

Listing and provision of ESG-related products

We explore new ESG-related products, expand the product lineup, and promote our listed products and services to investors.

Initiatives as a Listed Company

- Through ESG information disclosure and dialogue with investors, we will deepen the understanding of our own corporate value among a broad range of stakeholders.
- We will continue to pour our energies into initiatives related to social responsibility as a corporation.



Corporate Governance

Appropriate corporate governance is the foundation of JPX's value creation. In order to operate sound, sustainable markets and fulfill our social role as a public infrastructure provider supporting the Japanese economy, JPX continuously strives to improve corporate governance so that it functions with a greater degree of effectiveness.

Corporate Governance

JPX seeks to fulfill its social mission by serving as vital public infrastructure in the form of Japan's central financial instruments market and is committed to appropriately developing its corporate governance system.

Basic Views

In order to conduct management in line with its corporate philosophy (page 2), JPX is aware of the importance of having its stakeholders understand its corporate philosophy and corporate activities. Therefore, JPX has established the basic views on corporate

governance from the following four perspectives.

Based on these basic views, JPX is committed to properly developing its corporate governance system in light of the intent of the individual principles of Japan's Corporate Governance Code.

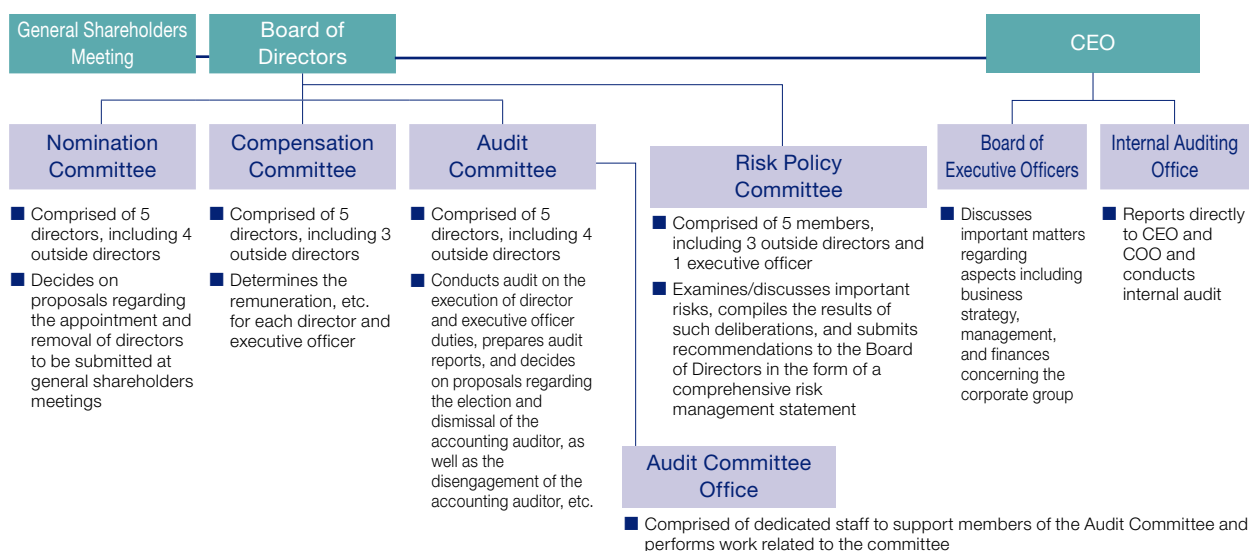
Corporate Philosophy and Social Mission <p>JPX operates markets that are a public asset and fulfills its social mission by pursuing the sustainable development of its markets.</p>	Market Operations <p>JPX operates markets with the view that garnering support for and fostering confidence in the markets it establishes are in the common interest of all investors and market users, and maintaining and enhancing such support and confidence will build the foundations for sustainable development of its markets.</p>
Enhanced Corporate Value <p>In pursuing the sustainable development of its markets, JPX must continue to accommodate the diverse needs of shareholders and other stakeholders, and through this JPX will enhance its corporate value over the medium- to long-term.</p>	Effective Corporate Governance <p>JPX strives to constantly improve its corporate governance system to further facilitate effective and proper systems, so as to support the sustainable development of its markets.</p>

Corporate Governance System

JPX clearly segregates the management oversight and business execution functions and adopts the structure of "a company with a nomination committee and other

committees" to strengthen oversight and raise the transparency of management.

Corporate Governance System Diagram



Composition of the Board of Directors

The JPX Board of Directors is comprised of 14 members. The functions of the board include increasing the transparency and accountability of the management and enhancing supervision of the appropriateness of business execution. To accomplish this, the composition of the board includes a non-executive Chairman, who is among nine outside directors that constitute a board majority. Of these nine outside directors, eight are persons that satisfy the independent director criteria.

The breakdown of the eight independent outside directors is as follows: three corporate managers, one certified public accountant, one legal professional, and three academics or former government officials. Each of them has considerable experience and insight in his/her respective field and contributes to a structure that allows for multi-faceted external perspectives to be readily incorporated into the management of JPX.

Board of Directors

Name	Position and Responsibilities	Areas of Expertise of Independent Outside Directors					Committee Memberships				
		Corporate management	Financial audit	Legal affairs	Research/ Government	Technology	Nomination	Compensation	Audit	Independent outside director	Risk policy
Hiroki Tsuda	Outside Director Chairperson of the Board of Directors	—	—	—	—	—					
Akira Kiyota	Director and Representative Executive Officer, Group CEO	—	—	—	—	—	●	●			●
Koichiro Miyahara	Director and Executive Officer President & CEO, Tokyo Stock Exchange, Inc.	—	—	—	—	—		●			
Hiromi Yamaji	Director and Executive Officer President & CEO, Osaka Exchange, Inc.	—	—	—	—	—					
Hironaga Miyama	Director and Executive Officer President & CEO, Japan Securities Clearing Corporation	—	—	—	—	—					
Christina Ahmadjian	Independent Outside Director				●			●	●	●	
Nobuhiro Endo	Independent Outside Director	●				●	●			●	
Hitoshi Ogita	Independent Outside Director	●					◎			◎	
Hideaki Kubori	Independent Outside Director			●			●			●	◎
Main Kohda	Independent Outside Director				●				●	●	●
Eizo Kobayashi	Independent Outside Director	●					●	◎		●	
Makoto Minoguchi	Director Statutory Auditor, Tokyo Stock Exchange, Inc.	—	—	—	—	—			●		
Kimitaka Mori	Independent Outside Director		●					●	●	●	
Tsuyoshi Yoneda	Independent Outside Director				●				◎	●	●

Note: "◎" indicates the director is the chair of the committee.

Nomination, Compensation, and Audit Committees

As required by law, JPX has a Nomination Committee and a Compensation Committee for the purpose of ensuring transparency and objectivity in the appointment/removal and compensation of directors and executive officers. Outside directors are in the majority in both these committees. The appointment and removal of directors and executive officers are thoroughly deliberated and determined by the Nomination Committee and put forth for approval at general shareholders meetings, and the compensation of directors and executive officers is determined by the Compensation Committee.

JPX also has an Audit Committee, as required by law, to perform the audit function. This committee is made up of five directors (including one full-time Audit Committee member), of which four, including a certified public accountant, are independent outside directors. JPX also has an Audit Committee Office to assist the committee members in the performance of their duties.

Each of these committees is chaired by an independent outside director.

>> Corporate Governance

■ Risk Policy Committee

JPX establishes a Risk Policy Committee with the aim of further improving its corporate governance. The role of the committee, which consists mainly of outside directors, is to bring an outside perspective to risk management.

For further information on JPX's risk management systems, including information on the content of activities of the Risk Policy Committee, please refer to page 30.

■ Independent Outside Directors Committee

JPX establishes an Independent Outside Directors Committee as a corporate organ composed exclusively of independent outside directors to allow them to exchange information and form consensus among

themselves. The committee helps independent outside directors to better perform management oversight and facilitates active discussion at Board of Directors meetings.

Objectives	For independent outside directors to exchange information and form consensus * The chairman of the board, the CEO, and other members of management may participate upon the request of the committee.
Frequency of meetings	In principle, at least twice a year * The committee chairman convenes meetings as needed.
Committee Chairman	The committee chairman convenes meetings and presides over them. When the committee deems it necessary for ensuring smooth communication, the committee chairman may report the content of the discussions of the committee to the chairman of the board, the CEO, and other members of management.

■ Evaluating the Effectiveness of the Board of Directors

At JPX, the Board of Directors analyzes and evaluates its own effectiveness based on questionnaire surveys and interviews with all board members. The

Independent Outside Directors Committee is tasked to conduct the evaluation to increase the objectivity and transparency of the evaluation process.

Board Effectiveness Evaluation Cycle



Summary of the Assessment of the Effectiveness of the Board of Directors, Etc. in FY2017

As a result of interviews and responses to questionnaires, we were able to confirm that, in comparison with FY2016, the effectiveness of the board has improved. Particularly noteworthy were the comments of all outside directors indicating that the atmosphere of Board of Directors meetings made it easy to state opinions and have discussions. On the other hand, it was pointed out that improvement is needed in the following areas.

(1) Discussions of management strategy

- During the preparation of JPX's 3rd Medium-Term Management Plan (covering FY2019–FY2021), it will be necessary to not be bound by existing ways of thinking

with regard to the medium- to long-term management strategy and growth strategy.

(2) Functions of legally-mandated committees

- Upon reviewing the matters to be covered by the Nomination Committee, an outside director should be appointed to chair the committee.
- Regarding the Audit Committee, further consideration should be given to selection of agenda items, frequency of meetings, dates of convening meetings, and other matters.

These comments will be taken into consideration, and the management will consider measures for improvement. In the Board of Directors meetings, it was confirmed that some appropriate improvement measures should be implemented.

■ Directors and Executive Officers Remuneration and Factors for Determining Remuneration

The remuneration for directors, executive officers, and statutory auditors is determined by the Compensation Committee, which is composed of a majority of independent outside directors.

Remuneration is comprised of (1) basic remuneration, (2) bonuses, and (3) JPX stock.

For executive officers,

- Basic remuneration is consideration for daily business execution and participation in management commensurate with each position and its duties.
- Bonuses consist of short-term incentives, which are calculated using consolidated net income as the indicator, and medium-term incentives, which are linked to progress toward the achievement of business plan objectives and management and financial targets.

- Compensation in the form of stock acts as an incentive for increasing corporate value in the medium to long term, and JPX previously introduced a directors' shareholder association. Moreover, a newly introduced stock compensation system based on a trust (starting in August 2018) aims to further encourage the alignment of interests between directors and other shareholders and further incentivize directors to contribute to increasing corporate value.

Directors (excluding directors who also serve as executive officers), in view of the roles they perform and their independence, receive only basic remuneration. They do not receive a bonus or remuneration in the form of JPX stock.

Risk Management

In its approach to risk management, JPX recognizes the importance of maintaining sound and stable business operations to fulfill its public role and continue raising corporate value.

Risk Management Systems

JPX faces numerous risks in the course of its operations, including risks associated with system glitches, legal matters, compensation in the event of clearing participant defaults, and administrative errors. JPX has established a Risk Policy Committee and Risk Management Committee to address risk. In line with JPX's Risk Management Policy, these committees are responsible for identifying risks as well as developing and implementing measures to prevent such risks. JPX also has a system in place to ensure a swift and appropriate response when risks do or are likely to materialize.

The Risk Policy Committee consists of at least five members, the majority of whom are outside directors. In principle, the committee is chaired by an outside director.

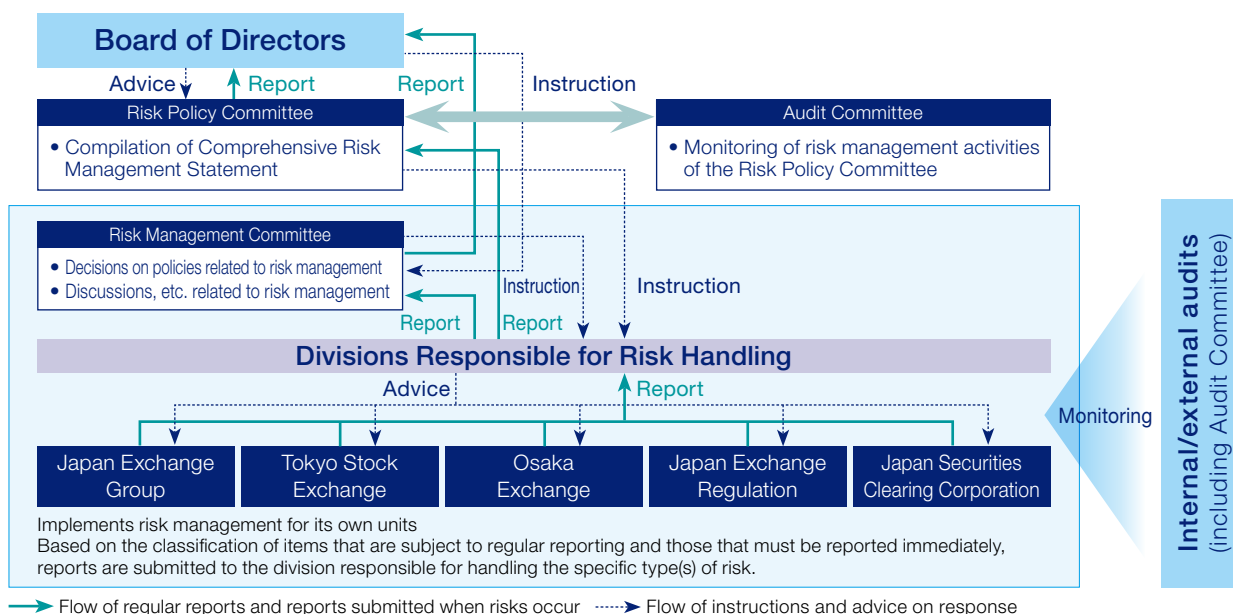
The Risk Management Committee is composed of core members and project members who oversee the risks of specific projects. The CEO (who serves as chairman), the Executive Officer overseeing the General Administration Department, and the director of the department make up the core members, while the chairman of the committee assigns project members to specific cases as they arise.

The Risk Management Policy serves to prevent risks by indicating and classifying the risks JPX faces. Departments or sections are assigned to handle the classified risks, and information on the assessments of operations and issues to be addressed are periodically brought before the Risk Policy Committee and Risk Management Committee.

Each fiscal year, the Risk Policy Committee identifies the significant risks requiring priority action in JPX.

The results of this process are submitted to the Board of Directors as recommendations in the form of a Comprehensive Risk Management Statement. JPX works to reduce the possibility of realization of the risks based on the Comprehensive Risk Management Statement and responds flexibly to risks that materialize. When a major issue occurs, the Risk Management Committee gains an overall grasp of the situation and orchestrates a concerted response by giving directions for dealing with the issues as quickly as possible. The system calls for all necessary information to be reported to management promptly and without fail.

Risk Management Systems



Risk Classification

Types of Risks	Examples
Business environment and business strategy risk	Economic fluctuations, legal and regulatory matters, demographic changes, technological innovation, investor trends, public opinion, and errors in judgment on business choices
Accidents and disaster risk	Major earthquakes, typhoons, tsunamis, epidemics, terrorism, failure/stoppage of social infrastructure, fires, and accidents
System risk	Inadequate hardware capacity and application errors
Legal risk	Violations of laws and regulations in the course of business, business partner's failure to perform on contracts, and the possibilities of having a relationship with anti-social forces
Financial risk	Jeopardized reliability of financial reporting, lack of funds, and loss or damage to assets, including deposits
Human risk	Personnel shortage, industrial accidents, and occupational hazards
Information security risk	Information leakage, unauthorized access, and computer viruses
Operational risk	Mistakes in operational procedures and misjudgments
Risk of associated companies	Emergence of risk in group companies
Reputational risk	Decline in public reputation due to acts and statements by employees and/or third parties
Credit risk and liquidity risk arising from obligation assumption business	Emergence of losses due to default, etc. by clearing participants
Other risks	Risks other than those mentioned above

Significant Risks

Each fiscal year, we identify the significant risks that could affect JPX. We control the possibility of the materialization of these risks by implementing the necessary preventive measures. We also implement measures to ensure that we are able to respond flexibly in the event that risks materialize.

JPX approaches risk management on two levels.

First, all group companies work to identify risks in the internal environment.

Second, there is wide-ranging discussion involving the management team about potential risk factors in the

external environment, including geopolitical risk. Based on the results of these discussions, we then examine significant risks.

Many risks are detected at the discussion stage. We examine these in detail to identify the risks that require the greatest attention in each fiscal year, on the basis of the potential impact on JPX if the risk materializes and the frequency with which such risks are likely to arise.

We then take preventive measures targeting specific significant risks.

Significant Risks

Risk Phenomena	Risk Scenarios
Risks that could impact JPX business continuity and business operations	<ul style="list-style-type: none"> • Risk to business continuity resulting from damage to social infrastructure, including power grid failure, such as in the event of a wide-area disaster • Risk that could affect market operations, etc. due to cyberattacks on JPX's systems • Risk to trading continuity due to pressure on system capacity caused by abnormal market fluctuations in response to sudden short-term exchange rate movements caused by economic or political events in Japan or overseas
Risks that could affect JPX business performance and financial position	<ul style="list-style-type: none"> • Risk of a decline in trading due to medium- to long-term market stagnation resulting from changes in political and economic conditions in the U.S., the EU, or other major economies • Risk that the financial position of JPX will be impacted by a clearing participant default

>> Risk Management

■ Systems Capacity Management

In recent years, with faster systems and the growing prevalence of co-location services, there has been an increase in the number of orders processed by JPX trading systems. In view of these changes, JPX is monitoring market trends and system usage and working to manage the system capacity of JPX as a whole by utilizing projections to prepare for and prevent any system capacity issues that may arise.

Capacity management is not conducted by IT divisions alone, but also by the Capacity Management Committee with the CIO as chairperson. The cross-divisional committee is made up of executive officers

and departments involved in market operations. Geared toward realizing even better systems, the committee monitors, analyzes, and assesses system operation conditions, works on improvements for current systems, and provides feedback on the design and development of next-generation systems. The committee employs the PDCA management cycle in its activities, while reporting to management periodically and on an as-needed basis to make swift and appropriate decisions on priority or emergency issues related to system capacity.

■ Business Continuity in Emergencies

JPX's core responsibility as a market operator within the social infrastructure is to provide reliable markets for market users to trade with confidence. Therefore, even when major risks do materialize, such as in the form of natural disasters or terrorist acts, JPX must be prepared to answer the call of society and continue operations. To be ready for such situations, JPX established its Business Continuity Plan (BCP) to define its response to materialized risks.

The basic concept of the BCP is to continue operations as far as possible even in times of emergency. If suspension is unavoidable, then the affected operations should be resumed as soon as possible. For instance, even if a serious incident, such as a major earthquake, occurs and operations are suspended, in principle, JPX aims to resume clearing operations in about two hours and trading operations within 24 hours to prevent the loss of a trading day to the greatest extent possible.

To achieve said targets, in addition to its primary data center where operations normally take place, JPX also maintains a secondary (backup) center, which is located in a different area to avoid having both centers be simultaneously affected. If the primary center is affected by a disaster and cannot continue operations, operations are switched over to trading and other core systems in the backup center to allow trading to resume as quickly as possible.

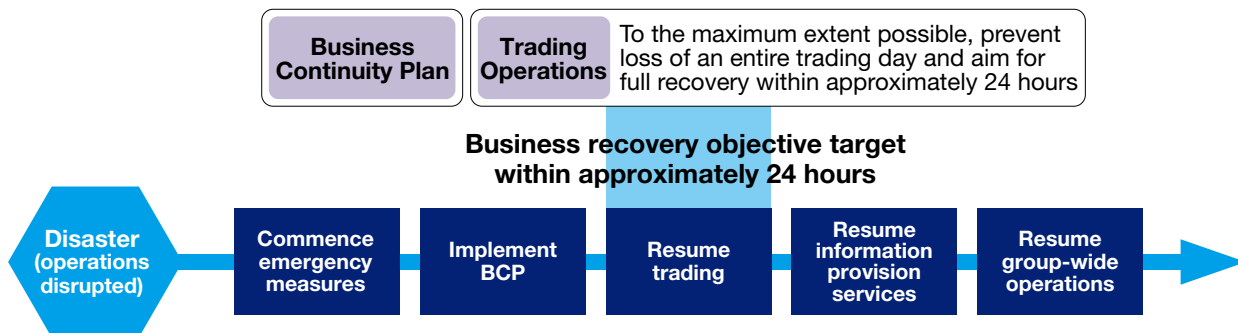
Furthermore, in preparation for a large-scale earthquake and other wide-area disasters, the core telecommunications network, arrownet, is designed as an optical ring network that surrounds the Tokyo metropolitan area. Even if a part of the network is severed by a disaster, transmissions will be re-routed immediately, ensuring that connections are maintained. The BCP also defines the response policy for each type of identified risk, as well as detailed plans for establishing the BCP emergency headquarters and securing personnel and communication methods. JPX reviews its BCP at least once a year and revises it accordingly in light of changes in the environment.

WEB

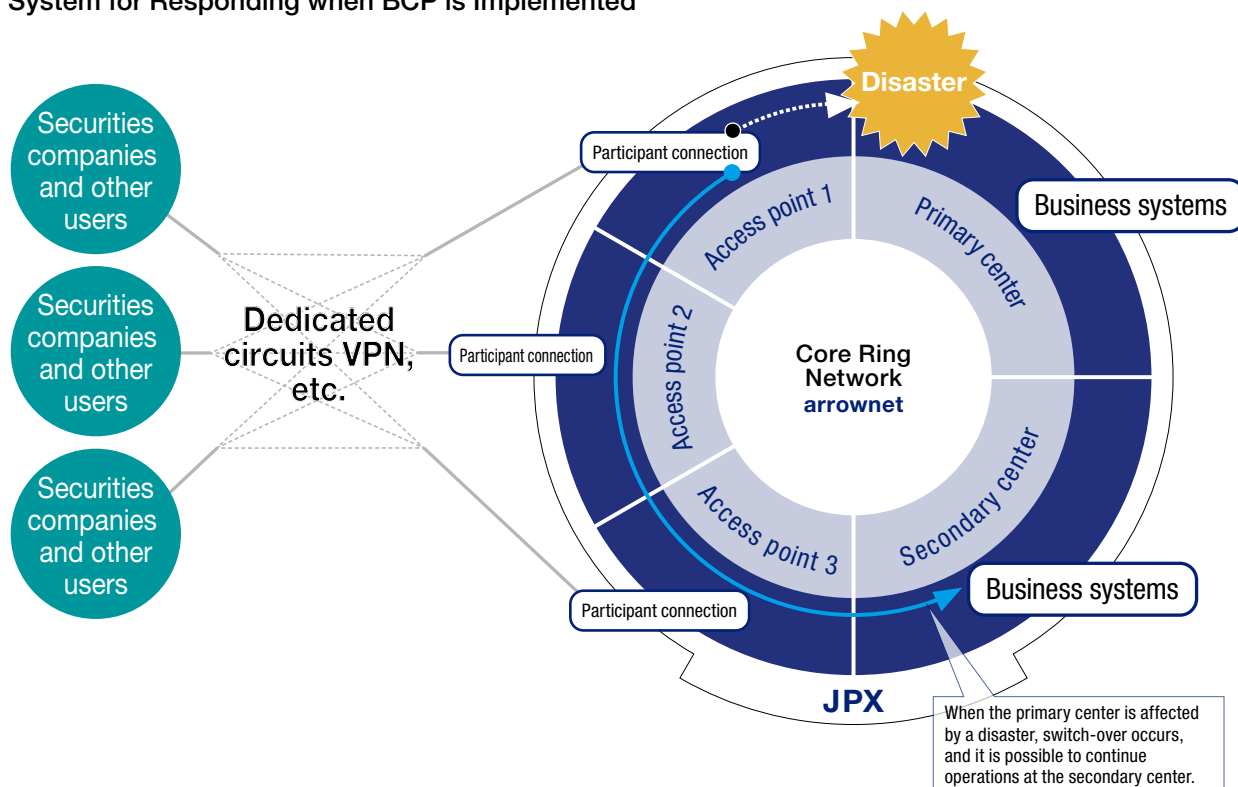
Crisis Management

<https://www.jpx.co.jp/english/corporate/about-jpx/crisis-management/>

Procedures for Restoring Trading Operations based on BCP after Disaster Occurs



System for Responding when BCP is Implemented



Contingency Plan

Alongside the need for exchanges to provide opportunities for trading, in order to maintain fair price formation in the market, it is also necessary for securities companies and other market participants who place orders to the exchange market to maintain a certain level of preparedness. JPX formulates contingency plans for disseminating and publishing its basic response policies when it becomes difficult to continue trading, such as when there is a glitch in a JPX

or external system, a natural disaster or terrorist act, or when parts of the social infrastructure cease to function. For example, when trading participants that account for approximately 50% or more of securities trading can no longer participate in the market, the policy is to decide whether to suspend trading after comprehensively considering the impact on liquidity and fair and reliable price formation.

Internal Control Systems and Compliance

Besides maintaining well-designed business operating systems for stable and appropriate execution of business, all officers and employees observe laws and regulations and demonstrate a strong sense of ethics in the performance of their daily tasks.

Internal Control Systems

JPX establishes the Basic Policy on Establishment of Internal Control System and develops internal control systems based on this policy. To ensure the proper operation of business processes throughout the corporation, JPX creates systems for ensuring compliance with laws and regulations, safeguarding and managing information, managing risk of loss, ensuring efficient operations, and for internal controls. To ensure

that these systems are functioning properly, the Internal Auditing Office, an independent unit that reports directly to the CEO, periodically confirms and assesses the status of internal controls.

WEB Basic Policy on Establishment of Internal Control System

<https://www.jpx.co.jp/english/corporate/about-jpx/internal-control/>

Compliance Program

JPX has a Charter of Corporate Behavior in place as a set of standards for ethics and morals, which clearly states the expected corporate behavior. In order to ensure the effectiveness of internal controls, JPX

continues to increase awareness of compliance among management and employees by continually renewing internal systems, as well as through education and training.

Charter of Corporate Behavior

The Charter of Corporate Behavior serves to make clear JPX's social responsibilities as an open and transparent corporation positioned in harmony with society.

The Charter states the basic policies for corporate behavior in terms of ethics and morals. It also clearly indicates JPX's investor-centric stance and reflects our commitment to being an open company.

Compliance Program

The CEO assumes responsibility for compliance and oversees all compliance-related matters. The CEO is assisted by the officer responsible for compliance and

the Compliance Secretariat, which takes charge of operating the Compliance Hotline and the execution of other administrative matters.

Compliance Hotline

JPX has a Compliance Hotline to provide a channel for reporting information and making inquiries regarding clear or suspected violations of laws and internal rules, including the Charter of Corporate Behavior. Where the

activity of any JPX officer or employee is suspected to be a compliance violation, the hotline allows such acts to be detected promptly and addressed by suitable measures and frameworks.

Activities for Continued Awareness

JPX engages in a number of activities to maintain awareness of compliance issues. These include cross-divisional meetings among all staff in charge of compliance matters, distributing compliance handbooks, communicating knowledge on compliance through the intranet, and holding e-learning courses.

WEB Compliance Program

<https://www.jpx.co.jp/english/corporate/about-jpx/compliance/>

Dialogue between New Outside Director and CIO

"What's Next for JPX from the Systems Perspective?"

Given the nonstop advancement of IT, JPX has positioned IT as the source of its competitiveness and has been enhancing its corporate value through the uninterrupted reinforcement of IT functions and by taking bold challenges.

In June 2018, JPX welcomed Mr. Nobuhiro Endo, who has ample experience and deep insight into computer systems and networks, as one of its outside directors. Mr. Endo and Mr. Ryusuke Yokoyama, CIO and Senior Executive Officer in charge of JPX's IT divisions, talked about the future of JPX from the systems perspective.



Nobuhiro Endo

Outside Director, Japan Exchange Group, Inc.
Chairman of the Board (Representative Director),
NEC Corporation

“ JPX provides a platform for dealing with cash equities and derivatives products. As JPX works to improve the transparency and reliability of its platform, the question is: how can you create and deliver new value from the large amounts of data that JPX has accumulated? I hope to share my opinions from this perspective. ”

Ryusuke Yokoyama

Senior Executive Officer and CIO, Japan Exchange Group, Inc.

“ As a listed company, we must create value. At the same time, from the perspective of maintaining the order of markets as an exchange, we must deal with various phenomena. Regardless of which facet we are looking at, I feel that leveraging data will set the course for how we think. ”

>> Dialogue between New Outside Director and CIO

Yokoyama: Ever since TSE closed its trading floor and ceased all manual processing in 1999, all trading and post-trade clearing and settlement processes, as well as dissemination of stock price information and such, have been handled by computer systems.

In response to a subsequent system failure that severely rattled public confidence, in 2010 we launched the arrowhead cash equity trading system, which prioritizes stability and processing capacity. We have progressed from an era of manual processing to one of phased computerization, and today we continue to upgrade our systems with an awareness of the level required of us as social infrastructure.

Endo: When I entered NEC as a satellite communications engineer in 1981, the frontline of global communications was satellite communications. In 1986, just five years after I joined NEC, however, a submarine fiber optic cable had been laid between Japan and the United States. Along with this, the frontline of international communications shifted to fiber optics. Later on, we established mobile phone services that utilized the wide coverage provided by satellites and eventually brought these into commercial use, but, even then, after land-based mobile phones went digital and started to come into full-scale use around 1995, satellite-based mobile communications began to wane. In 2000, only five years after their emergence, mobile phone use outstripped landline phones. In the short span of 20 years since I entered NEC, we passed through an era that saw the replacement of major platforms.

Amid the change in the platforms, a great amount of value was created from the enabling of mass data



transmission and the reduction in the delay in global communications, which together created significant potential for the services that followed. More specifically, the explosion in the volume of data going through mobile and other networks and people's interactions with communications networks dramatically changed our

Nobuhiro Endo

**Chairman of the Board
(Representative Director),
NEC Corporation**

After joining NEC Corporation (NEC) in 1981, Mr. Endo served as Senior Vice President and Executive General Manager of the Mobile Network Operations Unit, Executive Vice President, Executive Vice President and Member of the Board, and President (Representative Director) of NEC. He was appointed to his current position in 2016. Mr. Endo was appointed as an outside director of Japan Exchange Group, Inc. in June 2018.



Ryusuke Yokoyama

**Senior Executive Officer and CIO,
Japan Exchange Group, Inc.**

Mr. Yokoyama serves as Senior Executive Officer and CIO in charge of IT Planning at Japan Exchange Group, Inc. He also serves as Senior Executive Officer at both Tokyo Stock Exchange, Inc. and Osaka Exchange, Inc., where he oversees IT Administration, IT Development, and IT Services. After joining TSE in 1986, he served as Director of the IT Business Department, and Executive Officer. He was appointed to his current position in 2017.





daily lives. Another aspect that I think we cannot overlook in the field of information and communications technologies (ICT) is the enhanced capability of computers. The processing power of the world's fastest computers has increased more than two million times over the past 25 years. If a process took one year to complete 25 years ago, today it would be completed in 15 seconds. So, we have acquired an incredible amount of processing power, and this is beginning to bring a real-time dimension to all kinds of services.

These changes mean that we obtained the three core functions I see as part of ICT, namely, real-time, dynamic, and remote, which provide means to creating value in the real world. The dynamic function gives us the ability to immediately transform collected data into services of value, and the remote function gives us the ability to

provide services to both specific and dispersed locations simultaneously. By combining these three functions, we can deliver significant value to society. We are now in an era in which we can both acquire and maximize the use of these kinds of platforms. I said before that 2017 is the first year of AI. By this, I mean that we can now experience the value of AI, in other words, platforms have been established in which AI functions in real time. Although developing platforms requires time and money, once a platform is in place, it spurs on the development of applications on the platform. Platforms will continue to evolve going forward, but I think it is likely that we will enter a phase in which AI evolves rapidly at a pace that drives platform development hundreds or even thousands of times faster than in the past.

Yokoyama: When we consider how changes in ICT have affected the exchange business, the concept of remote has had the biggest impact. In the past, trading was not possible without gathering at the exchange, but the emergence of online securities companies and the development of international communication lines have enabled orders to be placed from anywhere. Today, some 60% of equity trading orders are placed by foreign investors. The submarine cables that link us with these investors now provide extremely broad bandwidths and high speeds.

These various changes were also brought about in part by computing power, networks, and software, and have had a major impact on business systems.

At the same time, platforms for exchange business have been impacted in various ways, which have led to the creation of value.

Endo: Along with the spread of networks, I think that, as customers gain access on a global level, we will also see obvious changes in the quality of services. One day, it will be normal for the world to leverage IoT devices on networks, deftly process the data that is generated, and convert that into value. This is exactly the epitome of service providers of the future, and there is space for creativity.

>> Dialogue between New Outside Director and CIO

Yokoyama: Changes are also beginning to occur in the financial world, and I feel that we are truly at a turning point in the times. For example, just look at which fields AI can be leveraged.

At JPX, we have introduced AI in some of our market surveillance operations. By applying AI to areas that were done manually, we are not simply realizing labor savings, but might also be able to create new value. I also think that there might be some parts of our existing services that we can deliver even more quickly.

Endo: Although big data has been a buzzword for the past five years or so, the stated value of big data is actually the real-time value. How do we collect huge volumes of data and process them in real time to create added value? I think this is the point of AI.

Yokoyama: Certainly, for example, during trading, any advice received 30 seconds or one minute after the price has moved is not very useful. If advice is available in real

time, it might create value for the entire securities market.

Although JPX now simply provides services that disseminate stock prices in real time, if we can apply computing power or AI to deftly process this massive amount of data on hand and deliver the results to our customers in real time, this would become a service with added value.

Endo: Essentially, AI derives an answer from large amounts of data. Although the data alone does not hold any meaning, collecting, categorizing, and organizing the data under some criteria or other will transform the data into information of value. By processing data with AI, we can extract those pieces of information with strong relationships as knowledge. Because this knowledge serves as something like a rule or principle, if we make the assumption that such knowledge holds true generally under certain conditions, then based on it, we can predict the phenomena that will occur under some conditions. This is the greatest value of AI. If we can predict the phenomena, then we can devise ways to approach them, which means we can offer these approaches as solutions of value.

Holding large volumes of data, like in the case of JPX, means that knowledge can be created based on patterns and relationships regarding the trends in human society or the actions of individuals. This knowledge will surely be very valuable.

Yokoyama: As a listed company, we must create value. At the same time, from the perspective of maintaining the order of markets as an exchange, we must properly deal with various phenomena. Regardless of which facet we are looking at, I feel that leveraging data will set the course for how we think. In terms of reaping profits, the course for the future will lie in creatively linking data to added value, and making it into a product that we can then sell. In terms of the other



facet of maintaining orderly markets, for example, I think that we can use various data to cope with times of extreme market volatility, such as the 2008 global financial crisis, and also combine the use of data and AI in our risk management.

Endo: In a sense, JPX provides a platform, so it is very important to increase its transparency. Doing so will increase the level of confidence that users have in the platform, and increase its utility value. In this sense, too, I think using ICT to improve its real-time aspect will be an important factor in improving transparency.

Yokoyama: Making whatever is happening in the markets visible to all participants and displaying this in a near real-time format will certainly lead to a greater sense of security.

Finally, I would like to ask you about cybersecurity, one of our most urgent challenges.

Endo: Cybersecurity has advanced to the next level. Until today, the issue of cybersecurity has been addressed solely from the perspective of IT systems, but if we consider the utilization of AI, the importance will be on shortening the time lag, in other words, how close to real-time things will be processed. Computers will access the depths of communications networks, so I feel that we have entered an era where we must consider approaches to protecting services as a whole, including the communications networks. In addition to ensuring the security of individual IoT devices, I think that it will become very important to protect the data itself, in ways including encryption.

Yokoyama: Even if we have established some degree of security for the networks that we operate, in an era where trading is becoming increasingly mobile, we will also need to consider how we approach different types of networks including those of households.



Endo: In a world of electronic transactions made through mobile networks, identity verification or authentication methods will also likely become a major point of consideration. I think for the technology, for example, blockchain holds significant potential. Deploying technology to ensure the security of the overall service is important. This ties in with transparency, as we talked about earlier, which I feel will foster a greater sense of security among investors.

JPX provides a platform that reliably handles equities, derivatives, and other financial products. The question is: how can you create and deliver new value, for example, with AI, from the large amounts of data that JPX has accumulated thus far, while working to improve the transparency and reliability of its platform? I hope to share my opinions from this perspective from time to time.

Directors



Hiroki Tsuda

Outside Director
Chairperson of the Board of Directors

Apr. 1972 Joined Ministry of Finance
Aug. 2002 Director-General, Tokyo Customs
Jan. 2003 Deputy Vice Minister for Policy Planning and Co-ordination
Jul. 2004 Deputy Vice Minister
Jul. 2006 Director-General of the Budget Bureau
Jul. 2007 Administrative Vice Minister of Finance
Jul. 2008 Retired
Sep. 2008 Professor, Graduate School of Public Management, Waseda University
Jun. 2015 Outside Director of the Company (current position)
Chairperson of the Board of Directors of the Company (current position)

No. of Company shares held:
800 shares



Akira Kiyota

Director and Representative
Executive Officer, Group CEO

Member of the
Nomination Committee

Member of the
Compensation Committee

Member of the
Risk Policy Committee

Apr. 1969 Joined Daiwa Securities Co. Ltd. (currently Daiwa Securities Group Inc.)
Jun. 1994 Director, Head of Tobu Area Sales Division
May 1996 Director, Head of Bond & Finance Division
Jun. 1997 Managing Director, Head of Bond & Finance Division
Oct. 1997 Deputy President
Apr. 1999 President, Daiwa Securities SB Capital Markets Co. Ltd. (currently Daiwa Securities Co. Ltd.)
Jun. 2004 Deputy Chairman of the Board and Corporate Executive Officer, Daiwa Securities Group Inc.
Chairman of the Institute, Daiwa Institute of Research Ltd.
Jun. 2008 Chairman of the Board and Corporate Executive Officer, Daiwa Securities Group Inc.

Apr. 2011 Director and Honorary Chairman
Jun. 2011 Honorary Chairman
Jun. 2013 Director of the Company (current position)
President & CEO, Tokyo Stock Exchange, Inc.
Jun. 2015 Representative Executive Officer, Group CEO of the Company (current position)
Director, Tokyo Stock Exchange, Inc. (current position)

Significant Concurrent Position:
Director, Tokyo Stock Exchange, Inc.

No. of Company shares held:
24,000 shares



Koichiro Miyahara

Director and
Executive Officer

Member of the
Compensation Committee

Apr. 1979 Joined Electric Power Development Co., Ltd.
Apr. 1988 Joined Tokyo Stock Exchange
Jun. 2002 Director, General Administration Department, Tokyo Stock Exchange, Inc.
Jun. 2004 Director, Information Services Department
Jun. 2005 President, Representative Director, ICJ, Inc.
Dec. 2005 Executive Officer, Tokyo Stock Exchange, Inc.
Oct. 2007 Standing Governor, Tokyo Stock Exchange Regulation (currently Japan Exchange Regulation)
Jun. 2009 Senior Executive Officer, Tokyo Stock Exchange Group, Inc.

Jan. 2013 Senior Executive Officer of the Company
Senior Executive Officer, Tokyo Stock Exchange, Inc.
Jun. 2014 Executive Vice President of the Company
Jun. 2015 Director of the Company (current position)
President & CEO, Tokyo Stock Exchange, Inc. (current position)
Nov. 2015 Executive Officer of the Company (current position)

Significant Concurrent Position:
President & CEO, Tokyo Stock Exchange, Inc.

No. of Company shares held:
24,600 shares



Hiromi Yamaji

Director and
Executive Officer

Apr. 1977 Joined The Nomura Securities Co., Ltd.
(currently Nomura Holdings, Inc.)
Jun. 1997 General Manager, Personnel Department
Jun. 1998 Member of the Board in charge of
Investment Banking Products Division
Jun. 2000 Managing Director, Head of Global
Investment Banking Division
Apr. 2002 President & CEO, Nomura Europe
Holdings plc (London) and Chairman,
Nomura Holding America Inc. (New York)
Apr. 2007 Executive Vice President, Global
Investment Banking, in charge of
Corporate Finance Division, Nomura
Securities Co., Ltd.

Jun. 2013 Director of the Company
(current position)
President & CEO, Osaka Securities
Exchange Co., Ltd. (currently Osaka
Exchange, Inc.) (current position)
Nov. 2015 Executive Officer of the Company
(current position)

Significant Concurrent Position:
President & CEO, Osaka Exchange, Inc.

No. of Company shares held:
15,600 shares



Hironaga Miyama

Director and
Executive Officer

Apr. 1978 Joined Tokyo Stock Exchange
Nov. 2001 Director, Derivatives Department,
Tokyo Stock Exchange, Inc.
Jun. 2003 Director, Treasury Department
Jun. 2004 Director, Corporate Strategy Department
Jun. 2005 Executive Officer
Jun. 2007 Senior Executive Officer
Jun. 2011 Managing Director
Jun. 2013 President & CEO, Japan Securities
Clearing Corporation (current position)
Apr. 2016 Executive Officer of the Company
(current position)
Jun. 2017 Director of the Company
(current position)

Significant Concurrent Position:
President & CEO,
Japan Securities Clearing Corporation

No. of Company shares held:
12,300 shares



Christina Ahmadian

Independent Director,
Outside Director

Member of the
Compensation Committee

Member of the
Audit Committee

Jan. 1995 Assistant Professor, Columbia
Business School (Graduate School of
Business, Columbia University)
Oct. 2001 Associate Professor, Graduate School
of International Corporate Strategy,
Hitotsubashi University
Jan. 2004 Professor, Graduate School of
International Corporate Strategy
Apr. 2010 Dean, Graduate School of International
Corporate Strategy
Apr. 2012 Professor, Graduate School of
Commerce and Management
Jun. 2012 Outside Director, Mitsubishi Heavy
Industries, Ltd. (current position)
Jun. 2014 Outside Director of the Company
(current position)

Apr. 2018 Professor, Graduate School of
Business Administration, Hitotsubashi
University (current position)
Jun. 2018 Outside Director, Sumitomo Electric
Industries, Ltd. (current position)

Significant Concurrent Positions:
Professor, Graduate School of Business
Administration, Hitotsubashi University
Outside Director, Mitsubishi Heavy Industries, Ltd.
Outside Director, Sumitomo Electric Industries, Ltd.

No. of Company shares held:
800 shares

>> Directors



Nobuhiro Endo

Independent Director,
Outside Director

Member of the
Nomination Committee

Apr. 1981 Joined NEC Corporation
Apr. 2006 Associate Senior Vice President,
Executive General Manager of Mobile
Network Operations Unit
Apr. 2009 Executive Vice President
Jun. 2009 Executive Vice President and Member
of the Board
Apr. 2010 President (Representative Director)
Apr. 2016 Chairman of the Board (Representative
Director) (current position)
Jun. 2017 Outside Director, Seiko Holdings
Corporation (current position)
Jun. 2018 Outside Director of the Company
(current position)

Significant Concurrent Positions:
Chairman of the Board (Representative Director),
NEC Corporation
Outside Director, Seiko Holdings Corporation

No. of Company shares held:
0 shares



Hitoshi Ogita

Independent Director,
Outside Director

Member of the
Nomination Committee
(Chairperson)

Member of the
Independent Outside
Directors Committee
(Chairperson)

Apr. 1965 Joined Asahi Breweries, Ltd.
(currently Asahi Group Holdings, Ltd.)
Mar. 1997 Director, General Manager of Fukuoka
Branch
Mar. 2000 Managing Corporate Officer, Senior
General Manager of Kyushu Regional
Headquarters
Mar. 2002 Senior Managing Corporate Officer,
Senior General Manager of Kanshin-etsu
Regional Headquarters
Sep. 2002 Corporate Officer, Vice President, Asahi
Soft Drinks Co., Ltd.
Mar. 2003 President and Representative Director
Mar. 2006 President and Representative Director,
Asahi Breweries, Ltd.
Mar. 2010 Chairman of the Board and
Representative Director

Jun. 2010 Outside Director, Imperial Hotel, Ltd.
(current position)
Mar. 2014 Senior Adviser, Asahi Group Holdings,
Ltd. (current position)
Jun. 2016 Outside Director of the Company
(current position)

Significant Concurrent Positions:
Senior Adviser, Asahi Group Holdings, Ltd.
Outside Director, Imperial Hotel, Ltd.

No. of Company shares held:
3,800 shares



Hideaki Kubori

Independent Director,
Outside Director

Member of the
Nomination Committee

Member of the
Risk Policy Committee
(Chairperson)

Apr. 1971 Registration as Attorney-at-Law
(current position)
Joined Mori Sogo
(currently Mori Hamada & Matsumoto)
Apr. 1998 Representative, HIBIYA PARK LAW
OFFICES (current position)
Apr. 2001 President, Daini Tokyo Bar Association,
and Vice President, Japan Federation
of Bar Associations
Jun. 2011 Outside Director,
Tokyo Stock Exchange Group, Inc.
Outside Governor,
Tokyo Stock Exchange Regulation
(currently Japan Exchange Regulation)
Jan. 2013 Outside Director of the Company
(current position)

Jun. 2014 Outside Director,
SOURCENEXT CORPORATION
(current position)
Apr. 2015 Professor, Toin Law School
(current position)
Apr. 2018 Outside Director, Coincheck, Inc.
(current position)

Significant Concurrent Positions:
Attorney-at-law
Representative, HIBIYA PARK LAW OFFICES
Outside Director, SOURCENEXT CORPORATION
Professor, Toin Law School
Member of the Supervisory Committee,
The Norinchukin Bank
Outside Director, Coincheck, Inc.

No. of Company shares held:
500 shares



Main Kohda

Independent Director,
Outside Director

Member of the
Audit Committee

Member of the
Risk Policy Committee

Sep. 1995 Started independently as Novelist,
to the present
Jan. 2003 Member of Fiscal System Council,
Ministry of Finance Japan
Apr. 2004 Visiting professor, Faculty of
Economics, Shiga University
Mar. 2005 Member of the Council for Transport
Policy, Ministry of Land, Infrastructure,
Transport and Tourism
Nov. 2006 Member of the Tax Commission,
Cabinet Office, Government of Japan
Jun. 2010 Member of the Board of Governors,
Japan Broadcasting Corporation
Jun. 2012 Outside Director, Japan Tobacco Inc.
(current position)

Jun. 2013 Outside Director, LIXIL Group
Corporation (current position)
Jun. 2016 Outside Director of the Company
(current position)
Jun. 2018 Outside Director, MITSUBISHI
MOTORS CORPORATION
(current position)

Significant Concurrent Positions:
Novelist
Outside Director, Japan Tobacco Inc.
Outside Director, LIXIL Group Corporation
Outside Director, MITSUBISHI MOTORS
CORPORATION

No. of Company shares held:
800 shares



Eizo Kobayashi

Independent Director,
Outside Director

Member of the
Nomination Committee

Member of the
Compensation Committee
(Chairperson)

Apr. 1972 Joined C. Itoh & Co. Ltd.
(currently ITOCHU Corporation)
Jun. 2000 Executive Officer
Apr. 2002 Managing Executive Officer
Jun. 2003 Representative Director, Managing
Director
Apr. 2004 Representative Director,
Senior Managing Director
Jun. 2004 President & Chief Executive Officer
Apr. 2010 Representative Director, Chairman
Jun. 2011 Director, Chairman
Jun. 2013 Outside Director, OMRON Corporation
(current position)
Jun. 2015 Counsellor, Bank of Japan
(current position)
External Director, Japan Airlines Co., Ltd.
(current position)
Jun. 2016 Outside Director of the Company
(current position)
Chairman, ITOCHU Corporation
(current position)

Apr. 2018 Senior Representative for Business
Community Relations
(current position)

Significant Concurrent Positions:

Senior Representative for Business Community
Relations, ITOCHU Corporation
Chairman, ITOCHU Foundation
Outside Director, OMRON Corporation
Counsellor, Bank of Japan
External Director, Japan Airlines Co., Ltd.
Outside Director, Nippon Venture Capital Co., Ltd.
Chairman, National Federation of Corporate
Taxpayers Associations
Administrative Director, The Public Interest
Incorporated Foundation Tohoren Mutual Benefit
Association for Specific Retirement Allowance

No. of Company shares held:
1,600 shares



Makoto Minoguchi

Director

Member of the
Audit Committee

Apr. 1984 Joined Tokyo Stock Exchange
Jun. 2007 Director, General Administration
Department, Tokyo Stock Exchange, Inc.
Aug. 2007 Director, General Administration
Department, Tokyo Stock Exchange
Group, Inc.
Jun. 2009 Director, Corporate Strategy
Department
Oct. 2010 Director, Listing Examination
Department, Tokyo Stock Exchange
Regulation (currently Japan Exchange
Regulation)
Jun. 2011 Standing Governor
Jun. 2015 Managing Director, Japan Securities
Clearing Corporation
Apr. 2017 Managing Director and Executive Officer

Jun. 2017 Director of the Company
(current position)
Statutory Auditor, Tokyo Stock
Exchange, Inc. (current position)

Significant Concurrent Position:

Statutory Auditor, Tokyo Stock Exchange, Inc.

No. of Company shares held:
7,700 shares



Kimitaka Mori

Independent Director,
Outside Director

Member of the
Compensation Committee

Member of the
Audit Committee

Apr. 1980 Joined Shinwa Accountants
(currently KPMG AZSA LLO)
Jun. 2000 Representative Partner, Asahi & Co.
(currently KPMG AZSA LLO)
Jun. 2004 Director of financial services,
KPMG AZSA & Co.
(currently KPMG AZSA LLO)
Jun. 2006 Board Member, KPMG AZSA & Co.
Jul. 2011 Chairman, KPMG FS Japan
Jun. 2013 Retired from KPMG AZSA LLO
Jul. 2013 Established Mori Certified Public
Accountant Office
Chairman and President,
The Japanese Institute of Certified
Public Accountants
Jul. 2016 Advisor, The Japanese Institute of
Certified Public Accountants
(current position)
Outside Director of the Company
(current position)

Jun. 2017 Outside Corporate Auditor,
MITSUI & CO., LTD. (current position)
Outside Corporate Auditor,
East Japan Railway Company
(current position)
Jul. 2017 Outside Director, SUMITOMO LIFE
INSURANCE COMPANY
(current position)

Significant Concurrent Positions:

Certified Public Accountant
Advisor, The Japanese Institute of Certified Public
Accountants
Outside Corporate Auditor, MITSUI & CO., LTD.
Outside Corporate Auditor, East Japan Railway
Company
Outside Director, SUMITOMO LIFE INSURANCE
COMPANY

No. of Company shares held:
1,600 shares



Tsuyoshi Yoneda

Independent Director,
Outside Director

Member of the
Audit Committee
(Chairperson)

Member of the
Risk Policy Committee

Apr. 1976 Joined National Police Agency
Sep. 2001 General Manager, Criminal Affairs
Department, Metropolitan Police
Department
Aug. 2003 General Manager, Kyoto Prefectural
Police Headquarters
Sep. 2007 Commissioner, Criminal Affairs Bureau
Jun. 2009 Commissioner-General's Secretariat
Oct. 2011 Deputy Director-General
Jan. 2013 Commissioner General
Jan. 2015 Retired
Jun. 2015 Outside Director of the Company
(current position)
Jun. 2017 Outside Corporate Auditor, Marubeni
Corporation (current position)

Significant Concurrent Position:

Outside Corporate Auditor, Marubeni Corporation

No. of Company shares held:
1,300 shares

>> Management Team

Japan Exchange Group, Inc.

Akira Kiyota
Director & Representative
Executive Officer, Group CEO

Ryusuke Yokoyama
Senior Executive Officer & CIO
(IT Planning)

Yoshihiro Isaka
Senior Executive Officer
(Global Strategy)

Koichiro Miyahara
Director & Executive Officer
(Management of Tokyo Stock
Exchange, Inc.)

Hiromi Yamaji
Director & Executive Officer
(Management of Osaka
Exchange, Inc.)

Hironaga Miyama
Director & Executive Officer
(Management of Japan
Securities Clearing
Corporation)

Isao Hasegawa
Executive Officer
(General Administration and
Human Resources)

Satoshi Futagi
Executive Officer
(Corporate Strategy)

Atsushi Tabata
Executive Officer & CFO
(Treasury, Corporate
Communications and
Investor Relations)

Tokyo Stock Exchange, Inc.

Koichiro Miyahara
President & CEO

Moriyuki Iwanaga
Director & Executive Vice
President
(Equities, Equities Business
Development and Financial
Literacy Support)

Yasuyuki Konuma
Director & Senior Executive
Officer
(Listing and New Listings)

Akira Kiyota
Director (part-time)

Takashi Moriya¹
Standing Statutory Auditor

Katsushi Kuroda¹
Statutory Auditor

Atsushi Shimizu¹
Statutory Auditor

Makoto Minoguchi
Statutory Auditor

Ryusuke Yokoyama
Senior Executive Officer
(IT Administration, IT
Development (Equities
Trading, Information and
Clearing) and IT Services)

Yoshihiro Isaka
Senior Executive Officer
(Information Services)

Tatsuya Kamiki
Executive Officer
(IT Services and Tokyo Site
Contingency)

Isao Hasegawa
Executive Officer
(General Administration)

Katsumi Ao
Executive Officer
(Listing)

Hiroki Kawai
Executive Officer
(Equities, Equities Business
Development and Financial
Literacy Support)

Satoshi Takura
Executive Officer
(IT Development (Information))

Mikio Hinoide
Executive Officer
(Tokyo Site Contingency)

Osaka Exchange, Inc.

Hiromi Yamaji
President & CEO

Kazuo Fukuda
Director & Senior Executive
Officer
(Market Planning, Derivatives
Business Development,
Financial Literacy Support
and Osaka Site Contingency)

Tatsuya Kamiki
Director & Executive Officer
(IT Services)

Masahiko Maruyama
Standing Statutory Auditor

Yasuhiko Ogawa¹
Statutory Auditor

Shunsuke Matsui¹
Statutory Auditor

Ryusuke Yokoyama
Senior Executive Officer
(IT Administration, IT
Development (Derivatives)
and IT Services)

Yoshihiro Isaka
Senior Executive Officer
(Information Services)

Isao Hasegawa
Executive Officer
(General Administration)

Akira Tagaya
Executive Officer
(Market Planning, Derivatives
Business Development and
Financial Literacy Support)

Satoshi Takura
Executive Officer
(IT Development (Derivatives))

Mikio Hinoide
Executive Officer
(Market Operations)

Japan Exchange Regulation

Takafumi Sato¹
President

Yasushi Suzuki
Managing Governor
(Listing Examination, General
Administration)

Hiroyuki Matsuzaki
Standing Governor
(Trading Participants
Examination and Inspection,
Market Surveillance and
Compliance)

Takeshi Hirano
Standing Governor
(Listed Company Compliance)

Toru Ishiguro¹
Governor

Hidetaka Kawakita¹
Governor

Koichi Masuda¹
Governor

Shosaku Shimomura
Standing Auditor

Takashi Moriya¹
Auditor

Japan Securities Clearing Corporation

Hironaga Miyama
President & CEO

Masaki Shizuka
Director & Senior Executive
Vice President
(Corporate Planning Division,
Strategic Planning Division,
and OTC Derivatives Clearing
Service)

Hiroyasu Ichimoto
Director & Executive Officer
(Listed Products Clearing
Service, System Planning
Division and OTC JGB
Clearing Service)

Masamichi Ishikawa
Director (part-time)

Yosuke Inaida
Director (part-time)

Hironao Eguchi
Director (part-time)

Kazuhiko Ohashi
Director (part-time)

Satoshi Futagi
Director (part-time)

Masatoshi Yoshihara
Director (part-time)

Hiroshi Kagiwada¹
Standing Statutory Auditor

Shigeru Nakajima¹
Statutory Auditor

Masao Yanaga¹
Statutory Auditor

Mikio Hinoide
Executive Officer
(Tokyo Site Contingency)

Note: 1. Outside



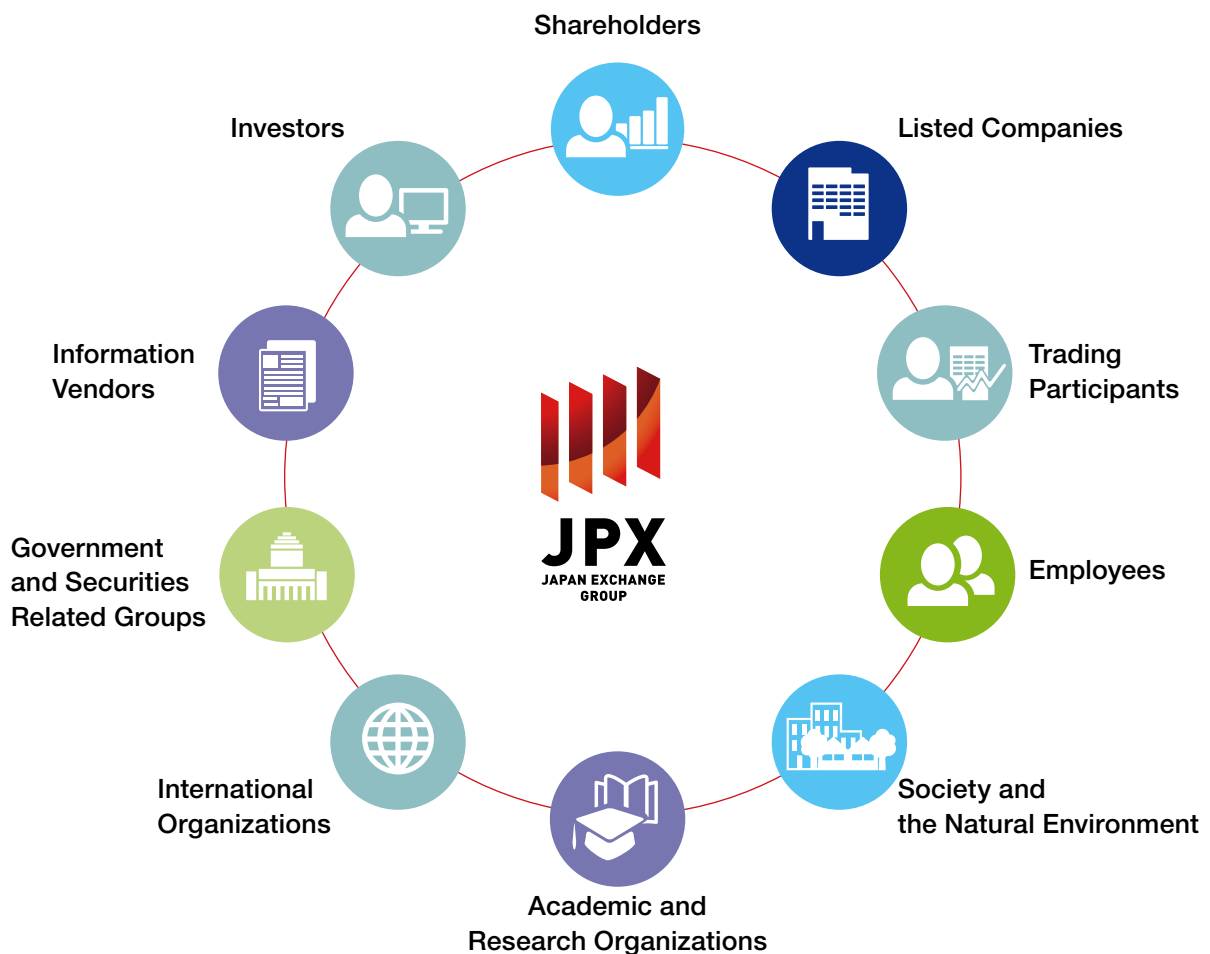
Initiatives for a Sustainable Society

In order to realize enhanced value creation at JPX, we feel it is necessary for JPX to continuously meet the expectations of a wide range of stakeholders, including listed companies, trading participants such as securities companies, investors, and other related organizations. JPX, therefore, proactively holds dialogues with each stakeholder, the results of which are utilized in operating markets and other activities as a member of society.

Aiming to Realize an Affluent Society

At the UN Sustainable Development Summit in 2015, 17 Sustainable Development Goals (SDGs)—international goals related to the economy, society, and environment—were adopted as a step towards realizing a society that is sustainable, diverse, and inclusive.

JPX's corporate philosophy is to contribute to the realization of an affluent society by promoting the sustainable growth of the market and, by extension, realizing the society envisioned in the SDGs. Under this corporate philosophy and as a member of society, JPX will continue to regularly hold dialogues with a wide range of stakeholders, including listed companies, trading participants such as securities companies, investors, and other related organizations, and aim to contribute to the realization of an affluent society.



Financial Education

Role of Financial Education

Japan is facing problems arising from a shrinking workforce and limitations on its social security system. Therefore, the major task at hand for Japan is figuring out how to use its assets as efficiently as possible to generate economic growth for the next generation. JPX believes it can help to address these issues by raising the financial literacy of each and every member of our society and by pushing for a shift from savings to investment. To this end, JPX implements various initiatives.

In Japan, households have ample monetary assets, totaling more than JPY 1.8 quadrillion; however, these assets are still not being fully utilized. The statistics of the composition of Japanese household assets show that cash and deposits account for a substantial 53% of the total, while stocks and other investments account for only 15%.

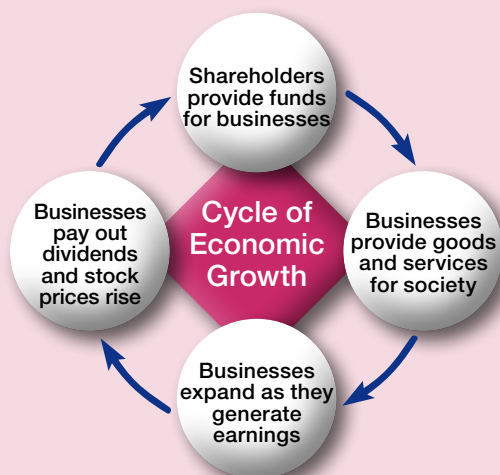
If even a portion of the household cash and deposits that account for over half of household assets were to be invested in publicly traded companies, companies could expand their businesses and provide new products and services, resulting in additional employment and

increased wages. We, thus, need to create a virtuous cycle in the Japanese economy by promoting the shift from savings to investment.

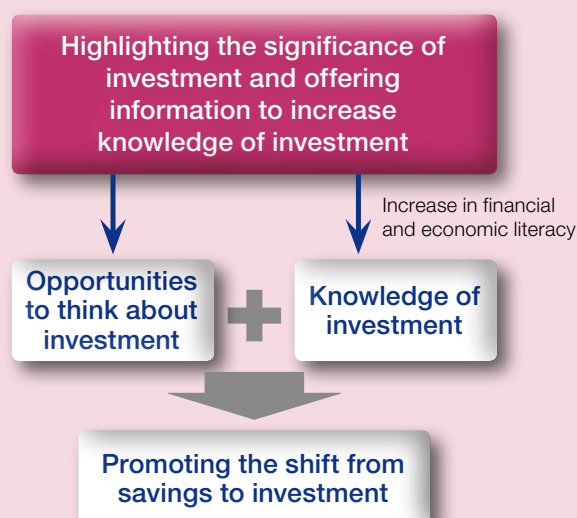
At the same time, there is no guarantee that the existing social security system will be able to continue providing sufficient financial resources for the elderly after retirement amid the major changes that arise, such as the social security system being reviewed due to low birthrates and the aging population. Each and every one of us must proactively build assets in a manner suited to our life cycles.

For this reason, JPX offers various educational programs that provide practical information on what to invest in and how to invest to people of all ages with different investment experience, including those new to investing. These programs serve as an opportunity to think about investment and motivate participants to start investing. JPX contributes to the development of the Japanese economy by providing more people with the information necessary to participate in the financial market, thereby accelerating the shift from savings to investment.

Driving the Economic Growth Cycle through Asset Utilization



Initiatives to Encourage Participation in the Market



>> Financial Education



Economics Lectures for Parents and Children

Financial Lectures for All Generations

School students*	Approx. 17,000 participants
Teachers	Approx. 900 participants
University students	Approx. 13,000 participants
Adults	Approx. 19,000 participants

* Includes parents and guardians of students participating in the programs for elementary, junior high, and high school students

Outreach to Schools (Elementary through High School)

Although our daily lives are closely related to the economy and stock companies, there are very few opportunities to learn about these topics in school. To remedy this situation, JPX sends staff to speak during politics and economics or civics classes at schools. They give lectures on how stock companies work and mix some role-play and skits to help students familiarize with finance and economics. During FY2017, JPX held over 100 lectures, reaching out to 4,700 students in total.

These lectures are also given at TSE and OSE along with tours of the facilities to let students experience the dynamism of economics on-site. In FY2017, TSE welcomed a cumulative total of 10,300 students for 480 lectures.

Economics Lectures for Parents and Children (Elementary and Junior High School Students)

JPX holds many events, mostly during summer vacation, for elementary and junior high school students and their families to familiarize with finance and economics. In FY2017, a cumulative total of 1,600 persons participated in these events.

OSE held a program called "Learning with Children - Finance and Stocks Summer School", for fourth to sixth grade students in collaboration with the Osaka prefectural government's finance and public relations committee, Japan Securities Dealers Association, and other organizations. The students heard explanations from on-site staff as they visited key facilities in the Osaka financial and economic community.

Lectures for University Students

JPX offers lectures at universities nationwide to substantially deepen the understanding of finance, economics, and securities markets among college students who will soon be deeply involved in the Japanese economy. Students also have the opportunity to visit TSE and OSE to gain firsthand experience

Staff Voices

Giving Youth the Chance to Learn about Finance and Economics for a Brighter Future

I give lectures on finance and economics to junior high and high school students. TSE is involved in educational activities, because we want future generations to have accurate knowledge. Our hope is that they can be proactive in learning, see things from various perspectives, and make decisions on their own. In my lectures, I focus on providing information about the organization of a stock company as one of the major players in the economy. Students who participated said that after coming to TSE during school excursions, they now pay attention to economic news and are encouraged to strive towards their dreams.

My goal is for students to broaden their view and understand that society, the economy, and money are closely related to their own lives.



Chiharu Okabe
Financial Literacy Support Department
Tokyo Stock Exchange, Inc.

and attend lectures. In FY2017, more than 270 lectures were held as part of this program, attracting a total of approximately 11,000 attendees.

To help nurture the next generation of leaders, JPX holds sponsored courses at Keio University and joint courses with Sophia University. The lectures mainly focus on listing and disclosure systems, presenting case studies while discussing issues (i.e., the expected role of listed companies and the latest developments in laws, economics, management, and accounting) related to the securities market. In addition, JPX has also sent staff to Kansai University to give lectures on the basic mechanisms and roles of derivative products.

JPX Entrepreneur Experience Program

The JPX Entrepreneur Experience Program aims to give students the experience of running and managing a simulated start-up stock company that operates a bazaar stall. This entrepreneur education program involves events for participants to learn and gain the ability to think on their own initiative and, thereby, contribute to the development of more well-rounded individuals. JPX collaborates with schools and regional communities as part of JPX's activities to support financial literacy; and, in FY2017, the program reached 21 locations across Japan and drew about 1,100 participants.

In FY2015 and FY2016, as a result of this initiative, JPX received an honorable mention award from the judges of a program sponsored by the Ministry of Education, Culture, Sports, Science and Technology that recognizes companies that offer superior hands-on experience activities for young people.

Economics Lectures for School Teachers

JPX provides seminars for junior high and high school teachers mainly during summer vacation, aiming at equipping teachers with knowledge and ways of thinking that will support them in holding classes for students. In FY2017, JPX held the Summer Vacation Economics Course for Teachers, which was attended by a cumulative total of 900 teachers over eight days. JPX also sends staff to speak at training and study sessions for teachers.



Lecture for University Students at Kyoto University



Joint Course at Sophia University



Seminar for Teachers in Osaka



JPX Entrepreneur Experience Program

>> Financial Education



Seminar for Young People

+YOU Japanese Economy Support Project

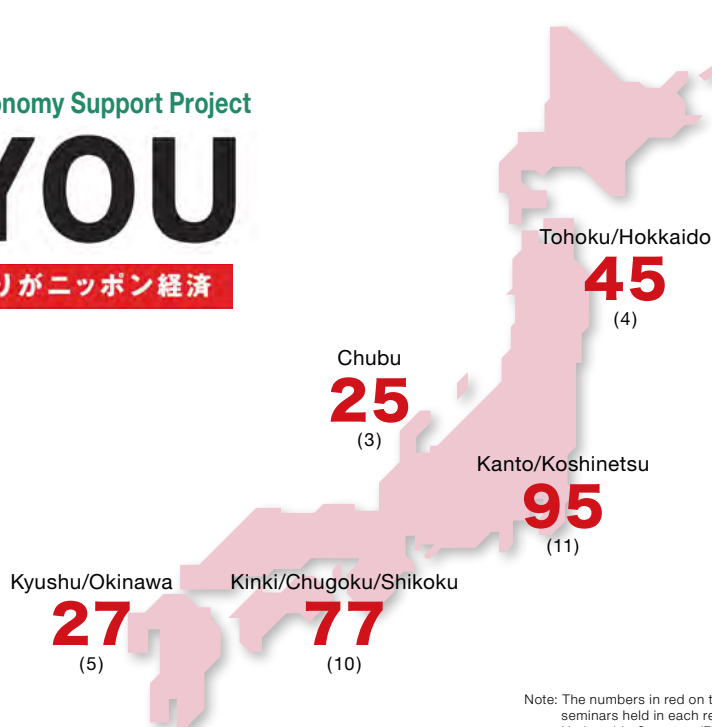
TSE has been involved in the "+YOU Japanese Economy Support Project" since FY2012 under the slogan of "imparting new energy upon Japan through the securities market". The objective of this project is to inform as many people as possible of the true meaning and dynamics of securities investment. To achieve this objective, the project introduces the appeal of investment to those who have no interest in economics or investment.

In FY2017, JPX held 33 seminars, in which a cumulative total of 2,600 individuals participated.

Japanese Economy Support Project

+YOU

一人ひとりがニッポン経済



Note: The numbers in red on the map indicate the total number of seminars held in each region since the start of Japan Support Nationwide Caravans (FY2012). Numbers in parentheses indicate the number of seminars held in FY2017.

Staff Voices

Annual Summer Event at OSE —JPX Kitahama Festa—

As the western base of JPX, OSE is working to improve financial literacy of retail investors, mainly about derivatives and the stock market. In the JPX Kitahama Festa, which we have held every summer for the past three years, we offer introductory seminars about equities and derivatives, expert seminars led by university professors, a panel exhibition under a different theme each year, and economic lectures for elementary school students and their parents.

Starting last year, as a new tradition, we decorate the event with bamboo grass ornaments during the Tanabata festival season. All generations, including local elementary school students, made their wishes for Tanabata in the event. We remain committed to raising the financial literacy of retail investors and expanding the investor base by holding seminars and events related to investing, as well as by participating in local events with the hope that people will feel more familiar with OSE.



Hiromi Hashimoto
Department Manager
Financial Literacy Support Department
Osaka Exchange, Inc.

JPX Academy

Knowledge of "finance and economics" and "asset building" is important for everyone, and there is a growing need to increase opportunities for people of all generations to learn about them.

JPX Academy offers information from a neutral point of view on financial products such as stocks, exchange traded funds (ETFs), and derivatives, as well as macroeconomic trends, the latest economic theories, and other subjects relevant to asset building and management. In FY2017, a cumulative total of 9,300 persons participated in JPX Academy programs.



JPX Academy

Lecturer Dispatch Service for Listed Companies

To provide employees of listed companies and other organizations with opportunities to learn more about securities markets and asset building as part of training and study sessions, we began a service in August 2017 that dispatches staff who are well-versed in finance and capital markets as lecturers. The lectures aim to help attendees realize their own optimal asset building by enhancing their financial literacy and increasing their interest in asset management. Therefore, the lecture contents are flexibly customized to meet individual needs.

This service was used mainly as part of in-house training and new employee training. The lectures were held for 31 companies and organizations and were attended by more than 1,000 individuals in FY2017.

Visits to JPX Facilities

To give everyone a better firsthand understanding of securities exchanges, JPX opens its facilities to various groups and individuals from elementary school children through to university students and the general public.

In FY2017, over 66,000 persons in total visited TSE Arrows in Tokyo and OSE Gallery in Osaka.

Joint Projects with Securities Industry Groups

JPX collaborates with securities industry groups and organizations to offer programs to disseminate information and forge a deeper understanding of securities. In particular, JPX offers simulated stock investment programs for students from junior high schools to universities to help them learn about the relationship between stock price fluctuations and economic phenomena. A cumulative total of nearly 42,200 students from 800 schools have participated in these programs.



Securities Investment Day Commemorative Event

>> Financial Education

TSE Money-bu-jpx.com

We launched TSE Money-bu (TSE's Money Club), a website for promoting asset building to retail investors, where we broadcast information daily (currently available only in Japanese).

The purpose of this website is to help as many people as possible to engage in asset building by providing information about the importance of asset building through long-term, diversified investment. The site presents stories about the role of money in familiar situations, using language that is accessible even for novice investors.

The site is also intended to disseminate information to a wider range of individuals. For example, to attract younger generations, the site releases articles in the form of infographics and explanatory videos.

The TSE Money-bu app was also recently launched in February 2018. Utilizing the benefits of apps, we notify users of the latest articles and make seminar announcements via push notifications.

東証マネ部!



TSE Money-bu's Landing Page



Ad for TSE Money-bu App



Infographics

Staff Voices

Bringing Asset Building to Everyone
—TSE on the Web and Open Innovation—

I work on marketing asset building and the ETF market. We launched a media site directed at local retail investors (<https://money-bu-jpx.com/>) to broadcast information on the web. It is my job to encourage people to give investment a try and build up assets. We are now in an era where simply making high-quality products does not mean they will sell. It is vital for us to deliver the right information to the right audience. We utilize apps and social media, such as LINE and Twitter, to reach out to our target audience via the tools they typically use.

We know it is challenging to spur a shift from savings to investment on our own, which is why we aim to drive open innovation by collaborating with companies and those new to investment. For instance, the Japanese slogan for TSE ETFs was solicited through an open advertising award campaign. We aim to convey the effectiveness of long-term investing to everyone.

I am determined to continue daring to take on new challenges.



Takahiro Yoshida
Manager
Financial Literacy Support Department
Tokyo Stock Exchange, Inc.

Selecting Theme Issues

Looking at Companies through Theme Issues

Together with the Ministry of Economy, Trade and Industry (METI), JPX selects and publicizes theme issues based on specific themes or indicators to generate interest in investment for individual investors.

Nadeshiko Brand Stocks

By introducing listed companies that are outstanding in terms of encouraging the empowerment of women in the workplace as attractive stocks to investors who prioritize medium- to long-term corporate value enhancement, JPX and METI aim to promote investment in and accelerate the initiatives of these companies.

During FY2017, the sixth such selection since FY2012, JPX and METI focused on the quality of initiatives aimed at promoting the empowerment of women among listed companies in terms of how these connected to management results. Specifically, JPX and METI evaluated the initiatives required for diversity management aimed at enhancing corporate value and the degree of disclosure for these initiatives. Ultimately, 48 companies from each industry were selected as Nadeshiko Brand Stocks (announced on March 22, 2018).



Nadeshiko Brand Stocks Award Ceremony

Health and Productivity Stocks

"Health and productivity management" is defined as a practice in which an enterprise focuses on and strategically carries out efforts with regard to the health of its employees from a managerial standpoint. Implementing health and productivity management brings about greater vitality among employees, improved productivity, and a revitalization of the organization, which are expected to realize enhanced medium- to long-term results and corporate value. By introducing these companies as attractive stocks to investors that prioritize corporate value from a long-term perspective, JPX and METI aim to ensure the social recognition of companies that have implemented health and productivity management, as well as to promote initiatives related to health and productivity management. Now in its fourth year, 26 companies from 26 industries were selected as Health and Productivity Stocks for 2018 (announced on February 20, 2018).



Health and Productivity Stocks Award Ceremony

Competitive IT Strategy Company Stocks

From the perspective of enhancing corporate value and reinforcing competitiveness over the medium- to long-term, JPX and METI select and introduce listed companies from each industry that actively work to leverage IT in ways that bring about management innovation, greater earnings, and higher productivity as Competitive IT Strategy Companies. Amid the unprecedented pace with which industrial structures and business models are changing today, strategic competitive IT investments are expected to help Japanese companies succeed within international competition. The 4th Competitive IT Strategy Companies for 2018 were selected from 491 entries, a record high, and 32 companies were chosen from 22 industries (announced on May 30, 2018).



Competitive IT Strategy Company Stocks Award Ceremony

Promoting International Cooperation

Contributing to International Organizations

World Federation of Exchanges (WFE)

WFE is an industry association composed of members from exchanges and clearing organizations around the world and is engaged in making policy recommendations and conducting surveys and research about capital markets. WFE also supports the development of market infrastructure by facilitating information sharing among members and by providing technical support for emerging exchanges. Recent WFE activities include sharing information on the role of exchanges in promoting ESG (environmental, social, and governance), cybersecurity and fintech initiatives, and conducting research on market integrity. JPX actively participates in the WFE Board of Directors and Working Committee and supports WFE initiatives, more recently, by serving as the vice-chair of the Sustainability Working Group.



AOSEF General Assembly

Asian and Oceanian Stock Exchanges Federation (AOSEF)

AOSEF is a regional federation of 18 stock exchanges for the Asia-Oceania region. AOSEF aims to facilitate information sharing and provide mutual technical support among member exchanges. JPX serves as the secretariat for AOSEF, promoting research initiatives while also leading the General Assembly and Working Committee.



JICA Seminar

Trainees from Overseas Exchanges (commissioned by JICA)

In recent years, the subject of the establishment and development of stock exchanges in rapidly growing countries in Asia has become an important topic. Commissioned by Japan International Cooperation Agency (JICA), JPX accepts trainees from exchanges and related organizations of various countries and tailors the content of the training programs to their needs as a way of contributing to the development of their stock markets. In addition to the multinational training program, more recently, JPX has provided training with a focus on nurturing the securities market of Myanmar, a country to which Japan has been providing support on the development of its capital market. JPX is also supporting the development of Myanmar's securities market by supporting the operation of Yangon Stock Exchange.

Staff Voices

Asian and Oceanian Stock Exchanges Federation (AOSEF)

I am in charge of the secretariat for AOSEF, a federation comprised of stock exchanges in the Asia-Oceania region. I serve as the contact point for member exchanges and support the seamless operation of AOSEF activities.

Hearing opinions from member exchanges, AOSEF works on research studies and exchange of ideas on matters of common interest. Recently, we have been discussing the possibility of sharing information and cooperation among the member exchanges in the fields of corporate governance and disclosure for listed companies, as well as investor education.

The objective of AOSEF is to facilitate mutual cooperation and assist in the growth of member exchanges through information exchange. To achieve this objective, I support the member exchanges when required and promote their further commitment to AOSEF.



Yukiko Yamaguchi
Head of Global Communications,
Global Strategy
Japan Exchange Group, Inc.

Facilitating Studies and Research

JPX Working Papers

JPX conducts studies and research on changes in the market structure and regulatory environment with a view to enhancing its competitiveness. The results of such studies are compiled and published by JPX officers and employees with contributions from external researchers. These papers are published to invite broad commentary from academia, research institutions, market users, and related parties.

The JPX Working Papers also serve as a means of publicizing the analysis results produced by JPX's Fintech Laboratory in relation to the applicability of blockchain or distributed ledger technology to capital market infrastructure.

Joint Research with The University of Tokyo

JPX collaborates with The University of Tokyo to conduct research on technologies and system design for the stable and efficient operation of financial instruments exchange markets. JPX's finance research team is working with the research team under Professor Kiyoshi Izumi at the Department of Systems Innovation, School of Engineering of The University of Tokyo, to bring together their areas of expertise as a way of driving forward research into the use of artificial market simulations to virtually recreate conditions that cannot be observed in the actual market. The results of such joint research are published in the form of JPX Working Papers.

JPX Study Group on the Financial Instruments and Exchange Act

JPX provides a platform for a study group on the Financial Instruments and Exchange Act to make research outcomes on the various legal issues related to the financial instruments and exchange market broadly available in Japan and overseas.

This study group is composed of more than 20 leading researchers, who generally meet once a month to make reports and hold discussions. Along with posting the minutes and reports of this study group on the JPX website, the reports are periodically compiled into publications that are distributed to researchers and related organizations.

JPX Working Papers Published in FY2017

	Title
January 2018	Study on Applicability of Distributed Ledger Technology in Trade Matching Processes
September 2017	Analysis of Reference Price Latencies in Japanese Dark Pools
September 2017	The Trend of Exploring the Use of Distributed Ledger Technology in the Capital Market
April 2017	Statistical Analysis of High-Frequency Limit-Order Book Data: On Cross-Market, Single-Asset Lead-Lag Relationships in the Japanese Stock Market

WEB

JPX Working Papers

<https://www.jpx.co.jp/english/corporate/research-study/working-paper/>

Staff Voices



Masashi Kondo
Manager
Fintech Laboratory, Corporate Strategy
Japan Exchange Group, Inc.

Promoting Research and Examining Uses of Cutting-Edge Technologies

The Fintech Laboratory is working on studies and research on artificial intelligence, blockchain, and other new technologies, as well as examining their use. JPX supports the social infrastructure, meaning it is essential for us to collaborate with many stakeholders, including investors and securities companies, in bringing new technologies into practical use.

To this end, we regularly publish our knowledge of cutting-edge technologies in the form of working papers to deepen understanding across the industry. Moreover, we invite various financial institutions to take part in our blockchain proof of concept testing, thereby jointly advancing the research towards practical application. I believe that we openly carry out research with such institutions in a way that no other exchange in the world does.

Going forward, I hope to keep contributing to further enhancing the range of capabilities and efficiency of not only JPX operations but also within the financial industry as a whole.

Engagement with Shareholders and Investors

JPX focuses on activities for establishing relationships based on mutual understanding by promoting two-way communication with shareholders and investors. JPX actively provides investors with the corporate information necessary for their decisions and shares views obtained through dialogue with shareholders and investors with senior management thereby contributing to enhancing corporate value.



Notice of the 17th Annual General Shareholders Meeting

Engagement with Shareholders

Shareholders Meeting

JPX held its annual general shareholders meeting for FY2017 (April 1, 2017 to March 31, 2018) on June 20, 2018, with 2,336 shareholders in attendance. JPX has made a video clip of the meeting available (only in Japanese) via its website for shareholders who were not able to attend the meeting.

The notice of the shareholders meeting is sent out three weeks ahead of the meeting to give shareholders sufficient time to decide how to exercise their voting rights. The Japanese and English versions of the notice are also made available on the JPX website four weeks prior to the meeting. It is also simultaneously available to overseas shareholders via the Electronic Voting Platform for Institutional Investors. In addition, JPX is working to present the information in the notice in a more easily understandable form.

Shareholders may send in their votes by post or via the Internet or the Electronic Voting Platform. For the annual general meeting held on June 20, 2018, approximately 90% of the voting rights were exercised.

WEB Shareholders Meeting

<https://www.jpx.co.jp/english/corporate/investor-relations/shareholders/meeting/>

Staff Voices

AGMs as Opportunities for Constructive Dialogue

We believe that the annual general shareholders meeting (AGM) is not just for obtaining approval on our proposals. For JPX, the AGM is an important opportunity to have constructive dialogue with our shareholders and to help them deepen their understanding of our organization. Therefore, aiming to raise attendance, we are committed to holding our AGM early to avoid days on which many other companies are also holding their AGMs. In addition, we publish and send our notice of our AGM, in which we include a wide array of information, early to ensure that our shareholders can view the notice at an early point.

The directors and executive officers of JPX and its subsidiaries, Tokyo Stock Exchange, Osaka Exchange, and Japan Exchange Regulation attend our AGM to answer a wide range of questions from our shareholders.



Kota Mizukoshi
Manager
General Administration
Japan Exchange Group, Inc.

Engagement with Institutional Investors and Analysts

IR Meetings

JPX senior management reaches out to domestic and overseas institutional investors and analysts in face-to-face meetings. In FY2017, JPX went on five separate trips to meet investors across Europe, the United States, and Asia, and participated in IR conferences both in Japan and abroad. Reports on the contents of these meetings are provided periodically to management and related departments, and then reflected in JPX management practices.



JPX IR Day
(Hiromi Yamaji, President & CEO,
Osaka Exchange, Inc.)

Earnings Presentations and JPX IR Day

In FY2017, JPX held two earnings presentations and JPX IR Day, its first stand-alone IR event, to provide opportunities for investors to exchange views with the Group CEO and the presidents of the core JPX subsidiaries. Video and audio recordings of such meetings are made available in Japanese and English as early as the same day. In this way, JPX is committed to providing domestic and overseas investors with timely information.



Presentation for Retail Investors at TSE IR Festa

In-House Seminar by an Analyst

We invited an analyst covering JPX to present a professional perspective on JPX to management and employees. The annual event is aimed at providing a channel for external assessments to reach the company directly.

WEB

For Retail Investors (in Japanese only)

<https://www.jpx.co.jp/corporate/investor-relations/individual/>

Engagement with Retail Investors

JPX held a total of 17 informational sessions, reaching approximately 2,000 retail investors through major IR events, including TSE IR Festa, as well as other means such as live web seminars.

In addition, JPX actively provides information to retail investors on its website, which contains descriptions about JPX, materials and videos from informational meetings, and other content.

WEB

IR E-mail Distribution Service for Retail Investors (in Japanese only)

<https://www.jpx.co.jp/corporate/investor-relations/ir-mail/>

Staff Voices



Mitsuo Miwa
Director & Chief IR Officer
Japan Exchange Group, Inc.

For Better Communication with Our Shareholders and Investors

With the goal of increasing the number of committed supporters who hold our shares over the long term, we communicate our business nature, medium- to long-term corporate strategy, and our vision.

We understand how important it is to listen to voices from diverse stakeholders in raising our corporate value. Along with working to provide more information via our one-on-one IR meetings, briefings, our website, and publications, we liaise closely with JPX's stakeholders to enhance the effectiveness of dialogue with investors.

Moreover, we make regular reports to the Board of Directors and also provide feedback to all employees on knowledge, ideas, and opinions we acquire through such dialogue.

Engagement with Market Users

Building collaborative relationships based on confidence and trust among market participants is essential for operating sustainable markets. JPX provides a range of opportunities for dialogue with market users. These dialogues allow JPX to bring more transparency to market operations and create more convenient markets.

Mutual Understanding through Dialogue



Engagement with Trading Participants

Market Operating Committee

TSE and OSE, operators of JPX markets, are each equipped with a Market Operating Committee as an advisory unit to the Board of Directors composed of outsiders from academia, securities companies, institutional investors, and other areas of expertise. With the aim of creating more convenient markets, outside expert opinions are considered in decisions on important matters, such as listing new products, establishing new markets, and revising rules or frameworks.

Working Group on Trading Rules

When looking for outside views on improvements to the trading rules, TSE organizes a working group composed of persons in charge of practical operations at trading participants and institutional investors. This working group allows TSE to incorporate the needs of a wide range of market participants as it reinforces market functions.

Exchanging Opinions with Representatives of Securities Companies

Close communication with securities companies is extremely important for enhancing exchange operations. To this end, JPX engages with representatives of trading participants in meetings to exchange opinions and extends get-togethers to representatives of other securities companies.

Staff Voices

Introduction of ETF Market Making Incentive Scheme

ETFs are a type of mutual fund, which investors can trade just like stocks. We can say ETFs are suitable for asset building, because they have a high degree of transparency in disclosure and fees are low. Over 200 ETFs are listed on TSE, but trading had been concentrated on only some of these listings. This made it difficult to invest in ETFs, because not every listing could always be purchased and sold at reasonable prices. Therefore, in July 2018, we introduced the ETF Market Making Incentive Scheme, which obligates market makers to continuously display quotes at appropriate prices; and, in return for fulfilling said obligation, registered market makers receive incentives. When we created this scheme, we engaged in multiple deliberations to ensure that both market makers and investors would want to participate.

We hope that the scheme will enhance the appeal of ETFs, making them more convenient for long-term asset building.



Kei Okazaki
Manager
Strategic Planning Group,
Equities Department
Tokyo Stock Exchange, Inc.

Engagement with Investors

JPX undertakes a range of activities and provides information to raise its corporate profile, build the JPX brand, and deepen public understanding of its role in securities markets.

TSE IR Festa

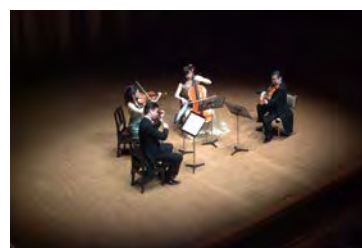
Since 2007, TSE IR Festa has been providing retail investors and listed companies with a venue to meet each other. Gathering many exhibitors and retail investors, the event has grown into one of the largest IR events in the country. At TSE IR Festa, besides the mainstay company briefing sessions and exhibition booths, we also provide content aimed to engage and make investment more familiar to the non-investing public and the younger generation, such as seminars targeted at improving financial literacy.



TSE IR Festa

JPX Concerts

As part of our contributions to cultural pursuits, JPX holds free classical music concerts open to the public. In FY2017, audiences enjoyed the melodious harmony of a string quartet in Tokyo and Osaka. We hope that JPX Concerts will nurture greater public affinity to exchanges and give people the opportunity to consider building their financial assets for the future.



JPX Concert

First and Last Trading Days of the Year

JPX holds ceremonies to mark the end of the year's trading and the first trading day of each year. On the year's final trading day, celebrities and various people in the news during the year grace the event as special guests and convey their messages to investors. People unable to attend in person can also view the live and recorded proceedings of the ceremonies in Tokyo and Osaka via JPX social media channels.



First Trading Day of 2018

Staff Voices



Beom-soo Son
Corporate Communications
Japan Exchange Group, Inc.

TSE IR Festa 2018 - First Time in Yokohama

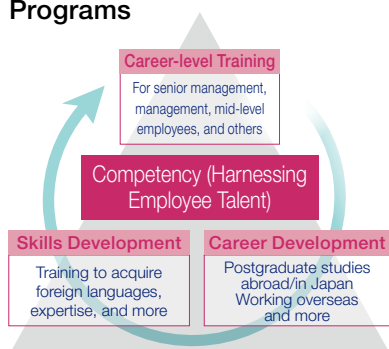
This year marked the 11th edition of TSE IR Festa and the first time it was held in Yokohama, a port city symbolic in Japan's modern history for being one of the first to open to the outside. Building on that symbolism with a desire to further extend our reach, we set out to make the event even more memorable for participants by offering special programs such as seminars from famous lecturers with ties to Yokohama; an exhibition on the history of securities markets highlighting Yokohama's role as the site where securities brokers first emerged in Japan; a food court selling local specialties; and public recordings of a popular local FM radio station program. We even set up a photo booth where people could simulate ringing TSE's listing bell. Thanks to the various attractions, TSE IR Festa 2018 in Yokohama had a record attendance of over 20,000 people.

TSE IR Festa will be returning to Tokyo in 2019, and we certainly hope you come join in the fun.

Human Resources

Human resources are one of the prime assets for enabling JPX to sustainably increase its corporate value. In order to bring the best out of each and every employee, JPX endeavors to create workplaces where employees find it easy to work.

Human Resource Development and Training Programs



CEO Kiyota Mingling with New Employees



JPX Family Day

Human Resources Development

JPX has created an environment where employees can actively master specialized knowledge, access the latest information, and pursue a broad perspective and free and creative thinking. According to employees' length of service and job responsibilities, the programs provided vary and encompass career development training to enhance knowledge and skills; skills development training to acquire foreign languages and expertise; professional development training to obtain an MBA or other advanced degrees at overseas universities; and more.

Promoting Diversity

For JPX, "promoting diversity" means for each and every employee to have mutual respect for other employees with differing values and lifestyles. In short, JPX believes that, by accepting diversity, individual employees will be able to work energetically and create new value (innovation) that leads to overall organizational growth.

Support Systems for Balancing Diverse Lifestyles and Work

By promoting a work environment that is accepting of work styles based on different values and lifestyles, JPX is working to enrich systems and programs that support a balance with maternity, parenting, and caregiving, as well as illness, from the perspective of nurturing the desire to remain in the workplace.

Staff Voices

Towards a Cheerful, Rewarding, and Harassment-Free Work Environment

JPX pays close attention to individual rights and safety in the workplace to create an environment where all employees are able to work as productively as they can without any worries. Therefore, JPX stipulates "respect for human rights and prohibition of discrimination" in its Charter of Corporate Behavior, which prohibits all forms of harassment based on gender, seniority, maternity/paternity, and any other personal attributes, as well as unfair discrimination against those who identify as LGBT. We ensure that all employees easily and safely consult with the relevant contacts in the event they are victims of or witness any type of harassment. JPX employees have access to direct consultations with HR and also a Compliance Hotline that also accept anonymous correspondence. We also provide detailed training to raise understanding of harassment and appropriate action for eliminating harassment.

We will continue these efforts to provide workplaces where employees can work with confidence and motivation and be free from unfair discrimination or harassment in all its forms.



Eiko Tanizawa
Group Manager
Human Resources
Japan Exchange Group, Inc.

Career Advancement for Female Employees

To promote the further empowerment of women in the workplace, in addition to the aforementioned initiatives, JPX encourages female employees to change their mindset by means such as providing career training programs for women and supporting them for networking with female career employees of other companies.

Through these initiatives, JPX has set a target of at least 6% female employees in managerial positions by FY2019 (5.5% as of April 2018). JPX aims to increase the ratio of women in managerial positions as we pursue our policy of cultivating and securing highly capable human resources for director and executive positions.

Employment of the Handicapped

Under the principle of "Competency (Harnessing Employee Talent)" laid out in the JPX Creed, in addition to encouraging female employees and those of advanced age to actively participate in the workplace, JPX also offers employment opportunities for persons with disabilities according to the individual's abilities and aptitudes.

Health Management

JPX believes that the health of each individual employee is essential for our employees to fully leverage their competencies. JPX is, therefore, working to maintain and promote health, while at the same time striving to grasp the health condition of all of our employees to aid early detection.

Mental Health

JPX has made both internal and external counseling available to ensure that employees can work while maintaining both their physical and mental well-being. As necessary, an employee may also consult a psychiatrist in-person.

Safety and Health Initiatives

In order to provide a safe and healthy work environment, JPX organizes a monthly health and sanitation committee, conducts workplace inspections by an occupational health physician, manages long working hours and late-night work, and conducts stress checks.



New Kurumin Mark

WEB

Support Systems for Balancing Work and Childcare

<https://www.jpx.co.jp/english/corporate/sustainability/csr-activities/employee/>



Health Promotion Seminar for Employees



JPX Philharmonic Concert for Employees

Staff Voices



Momoko Iwata

Senior Manager
Human Resources
Japan Exchange Group, Inc.

Supporting Cancer Treatment and Balancing Work and Diverse Lifestyles

Developments in medical technologies in recent years have contributed to an increased number of cases where individuals can continue working while undergoing medical treatment for critical illnesses such as cancer. Foreseeing an increase in the number of employees balancing work and medical treatment, JPX improved the flexible hourly leave system and the shortened work hours system in FY2018 in an effort to ensure that employees do not have to give up working as long as they wish while undergoing cancer or other medical treatment. In addition, JPX also implemented various measures such as providing financial aid for medical checkups for cancer screenings; establishing an internal helpline; and presenting a handbook to all employees that shows how to balance work and medical treatment for illnesses such as cancer.

JPX remains committed to improving its work environment to ensure that employees who are undergoing or have already completed treatment for critical illnesses continue working with ease and to encourage employees to achieve a work-life balance.

>> Human Resources

Special Feature Implementation of Work Reform Program

JPX is implementing work reform programs in order to help employees maximize their creativity and promote innovation within the company. JPX believes that work reforms will be achieved through cooperation between the company and its employees. JPX is undertaking initiatives to create an environment that allows greater flexibility in work styles and create more off hours. The reform is expected to change employees' mindset about work hours and productivity, as well as their work styles, and to provide more opportunities for off-hour activities that will be reflected at work.

Targets for Work Style Reforms

In order to create more off hours for employees and allow employees to spend more time on activities outside of work, JPX is advancing work style reforms on a company-wide scale with numerical targets for reducing overtime hours and using annual paid leave.

Work Style Reforms at JPX

Diversifying leave systems	JPX has instated systems for Professional Development Leave and Leave to Accompany Spouse in such cases as when an employee chooses to study abroad or his/her spouse is given an overseas assignment, allowing for flexible work styles that adapt to employees' diverse life plans.
Reemploying former employees	JPX also has a program in place for reemploying individuals who decided to resign from JPX in the past for such reasons as parenting. The program offers ambitious and talented former employees an opportunity to once again contribute to and excel at JPX.
Increasing opportunities for employees to engage in off-hour activities	JPX supports employees who would like to engage in activities for personal development during the extra time available thanks to work style reforms. JPX is raising the amount of subsidies offered and expanding the number of eligible courses for skills development training.
Reforming corporate culture	JPX is working on reforming the corporate culture and encouraging employees to reevaluate their work ethics and behavior by offering lectures on work style reforms, running e-learning courses, regularly providing information, calling out directly to employees, and so forth.
Joining <i>Iku-boss</i> Enterprise Alliance	Managers or bosses will play the greatest part in achieving work style reforms, thereby creating more flexibility in employee work styles and more off hours. With the workforce becoming diverse, JPX has joined the <i>Iku-boss</i> Enterprise Alliance ¹ to help promote our work style reforms, and is working on nurturing executives and managers as <i>Iku-boss</i> , ² ideal bosses of the new generation.

Notes: 1. A network of companies that recognize the necessity of *Iku-boss*, dedicated to improving such awareness among managers and to developing them as ideal bosses of the new generation, where the life of employees diversifies.

2. A boss (male/female manager or corporate executive) who allows staff to balance work and family commitments and to pursue career development while achieving business targets, as well as enjoying his/her own work and private life.

Staff Voices**Creating an Environment for Flexible Work Styles**

JPX has adopted flexible hours and telework systems available to all employees with the aim of reducing work-related time and location constraints, so that employees can choose the work style that best suits their own circumstances. The flexible working hours system enables each employee to flexibly determine their working hours on his/her own, and the telework system allows any employee to work from home regardless of the reason such as for childcare and family care. This initiative led to JPX being selected as one of the "Top Hundred Telework Pioneers" by the Ministry of Internal Affairs and Communications in November 2017.

Aiming to consistently grow as an organization, JPX continues to help employees maximize their potential by improving these initiatives and implementing new ones in response to changes in the surrounding environment and the need for diverse work styles.



Kentaro Yamada
Senior Manager
Human Resources
Japan Exchange Group, Inc.

The Environment and Regional Communities

JPX aims to contribute toward the realization of a sustainable society and actively implements initiatives to reduce its environmental footprint. JPX also takes steps to raise environmental awareness among its employees through activities such as tree planting and community cleanup programs.

In addition, JPX actively participates in events to give back to local communities that provide it with invaluable support on a day-to-day basis.

■ Contributing to the Environment

Reducing Our Environmental Footprint

As part of its activities to reduce its environmental footprint, JPX is cutting down its power consumption for lighting, air conditioning, and other purposes.

For example, JPX updated equipment in the TSE building, its main business site, after the securities industry established a voluntary power consumption reduction target for itself in 2008. JPX has also worked to raise the environmental awareness of its employees. In response to the greenhouse gas emission targets set for the five years from FY2015 to FY2019 under the Tokyo Metropolitan Environmental Security Ordinance (17% reduction from the average emissions released from FY2005 to FY2007), JPX has continued to strive to reduce power consumption, namely by replacing air-conditioning equipment, switching to LED lighting, and reducing lighting sources in common areas. As a result, JPX was able to reduce emissions of greenhouse gases from the TSE building in FY2017 by 8% compared with the emissions targets. (See page 64 for data.)

In addition, overall energy use at JPX, including data centers, has decreased. While the enhancement of backup systems in recent years has led to the need to expand facilities, JPX has improved the energy efficiency of its infrastructure and reduced overall energy use. Going forward, we will continue to strengthen our environmental management systems and reduce our environmental footprint in our contributions to the creation of a sustainable society.

Tree-Planting Program

The TSE Listing Forest began in June 2004 in Yurihonjo, Akita Prefecture. Each year, saplings are planted at the five-hectare plot with the hope that the exchange will grow and prosper along with newly planted trees.

Together with these conservation activities, JPX worked alongside the local Yajima region, which cooperated on these conservation activities, in providing financial education. At Yajima Junior High School, JPX held an on-site course entitled "How Stock Companies Work", and organized a study session with staff at the city's Yajima Branch Office to consider the importance of life planning and financial education. Locally, an NPO established to run the JPX Entrepreneur Experience Program under its own direction has been deepening JPX's connection with the regional community, in part by initiating projects at Akita Prefectural University and Akita Prefectural Nishime High School through the cooperation of commercial enterprises, academia, government, and financial institutions.

■ Contributing to Regional Communities

Every year, JPX participates in "Chuo City Marugoto Museum" (literally, all of Chuo City is a museum) to make the area that is home to TSE a living museum. For the event, JPX awards original merchandise bearing the JPX logo as prizes in lucky draws.

JPX's other contributions to local communities include participating in cleanup programs in Tokyo's Kabutocho district.

Corporate Data: Environment and Employees

Energy Consumption at TSE Building (electricity and gas)

	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	
Energy consumption at TSE Building	Total usage											
	Electricity (kwh)	8,338,920	8,132,632	7,921,216	7,435,466	6,079,696	6,272,280	6,413,800	6,135,360	5,899,040	5,935,384	6,035,488
	City gas (m³)	359,636	349,994	343,707	362,622	319,200	341,276	304,248	300,295	306,467	322,579	326,926
	Per capita											
	Electricity (kwh)	10,901	10,078	9,660	9,214	7,686	7,715	7,297	7,044	6,989	7,419	7,442
	City gas (m³)	470	434	419	449	404	420	346	344	363	403	403
Emissions of greenhouse gases from TSE Building	Total emissions											
	CO₂	4,048	3,943	3,848	3,631	3,020	3,143	3,114	3,001	3,542	3,595	3,656
	CO₂ emission target (based on Tokyo Metropolitan Environmental Security Ordinance)	—	—	—	3,585	3,585	3,585	3,585	3,585	3,956	3,956	3,956
	CO₂ emission result (based on Tokyo Metropolitan Environmental Security Ordinance)	—	—	—	+1%	-16%	-12%	-13%	-16%	-10%	-9%	-8%
	Per capita											
	CO₂	5.29	4.89	4.69	4.5	3.82	3.87	3.54	3.44	4.19	4.49	4.51

Note: The volume of greenhouse gas emissions is calculated according to the method specified in the Tokyo Carbon Reduction Reporting Program issued in the Tokyo Metropolitan Environmental Security Ordinance.

Figures for FY2010 through FY2014 were emission targets for the first compliance period of the ordinance. Those for FY2015 through FY2017 were for the second compliance period.

Employees

	FY2013	FY2014	FY2015	FY2016	FY2017
No. of employees by gender					
All	1,029	1,001	975	1,085	1,093
Male	742 (72.1%)	728 (72.7%)	716 (73.4%)	792 (73.4%)	803 (73.4%)
Female	287 (27.9%)	273 (27.3%)	259 (26.5%)	293 (26.5%)	290 (26.5%)
Average years of service					
All	17.1	17.3	16.7	17	17.1
Male	15.6	15.9	15.5	15.9	15.9
Female	21.1	21.0	20.2	20.5	20.5
No. of employees in managerial positions					
Total	351	350	336	339	345
Female	11 (3.1%)	13 (3.7%)	15 (4.5%)	17 (5.0%)	19 (5.5%)
No. of new hires					
Total	17	12	20	25	26
Females/foreigners	6	3	10	7	12
Ratio of annual paid leave taken					
	46.6%	49.9%	53.7%	67.0%	67.0%
No. of male employees taking time off for childcare (including childcare leave)					
	1	8	10	7	30
No. of female employees returning to work after maternity leave					
	100%	94.1%	100%	100%	100%

Notes: 1. As a general rule, "employees" refers to persons working at JPX. This excludes persons such as those temporarily assigned by JPX to outside entities and those dispatched to JPX from temporary staffing agencies. It does include, however, persons temporarily assigned by an outside entity to JPX and persons on maternity/childcare leave.

2. Figures for percentage of female employees in managerial positions are as of April 1, 2018.

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Review of Operations and Financial Condition

Financial Highlights of FY2017 (IFRS)

(JPY mil.)

	FY2013	FY2014 ³	FY2015	FY2016	FY2017
Operating Revenue	113,846	106,167	114,776	107,885	120,711
Operating Expenses	59,244	52,863	50,925	50,185	50,902
Operating Income	53,343	53,529	66,271	59,377	71,791
Net Income ¹	33,304	34,427	44,877	42,124	50,484
EBITDA	68,296	65,743	77,791	71,595	82,505
Dividends per Share ² (JPY)	21.5	25.0	50.0	47.0	67.0
ROE	17.1%	15.6%	18.2%	16.4%	19.0%

Notes: 1. Net income attributable to owners of the parent company.

2. The amounts shown reflect the stock split (5 for 1) that became effective on October 1, 2013 and the stock split (2 for 1) that became effective on October 1, 2015. The dividend per share figure for FY2017 includes a commemorative dividend of JPY10 per share.

3. JPY adopted International Financial Reporting Standards (IFRS) beginning in FY2014.

Average Daily Trading Value/Volume of Main Products

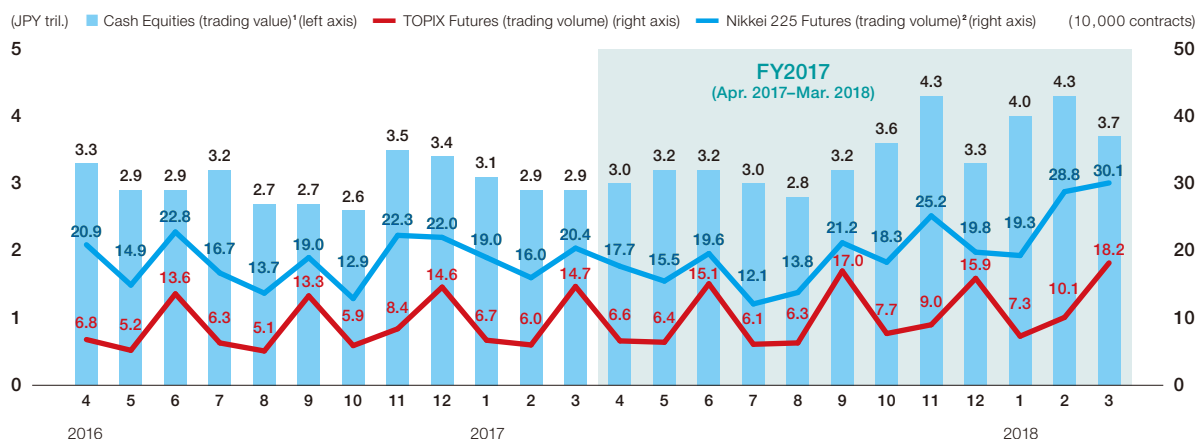
	FY2013	FY2014	FY2015	FY2016	FY2017
Cash Equities (trading value) ¹	JPY 3,098.8 billion	JPY 2,856.4 billion	JPY 3,412.6 billion	JPY 2,998.7 billion	JPY 3,446.2 billion
TOPIX Futures (trading volume)	94,297 contracts	84,785 contracts	93,824 contracts	89,966 contracts	105,287 contracts
Nikkei 225 Futures ² (trading volume)	218,619 contracts	186,565 contracts	230,435 contracts	184,250 contracts	200,646 contracts
Nikkei 225 Options ³ (trading value)	JPY 40.0 billion	JPY 27.8 billion	JPY 30.7 billion	JPY 24.8 billion	JPY 27.0 billion
10-year JGB Futures (trading volume)	34,975 contracts	36,745 contracts	34,658 contracts	28,569 contracts	35,978 contracts

Notes: 1. Average daily trading value of common stocks on TSE 1st/2nd Sections, Mothers, JASDAQ, TOKYO PRO Market, and ETFs/ETNs, REITs, etc. in auction and off-auction trading.

2. Includes trading volume of Nikkei 225 mini, which is calculated using a conversion factor of 1/10.

3. Excludes weekly options.

Monthly Average Daily Trading Value/Volume of Main Products



Notes: 1. Average daily trading value of common stocks on TSE 1st/2nd Sections, Mothers, JASDAQ, TOKYO PRO Market, and ETFs/ETNs, REITs, etc. in auction and off-auction trading.

2. Includes trading volume of Nikkei 225 mini, which is calculated using a conversion factor of 1/10.

Adoption of IFRS

JPX has adopted the International Financial Reporting Standards (IFRS) to facilitate comparisons of financial results of JPX with those of other exchanges located overseas and to increase investor convenience.

Summary of Performance

In FY2017, JPX recorded operating revenue of JPY 120,711 million (11.9% increase from the same period of the previous fiscal year (i.e. year on year)) due to factors such as increases in trading services revenue and clearing services revenue compared with the previous year, and operating expenses were JPY 50,902 million (1.4% year-on-year increase). As a result, JPX recorded operating income of JPY 71,791 million (20.9% year-on-year increase) and income before income tax of JPY 72,990 million (20.4% year-on-year increase).

In addition, net income attributable to owners of the parent company after tax was JPY 50,484 million (19.8% year-on-year increase).

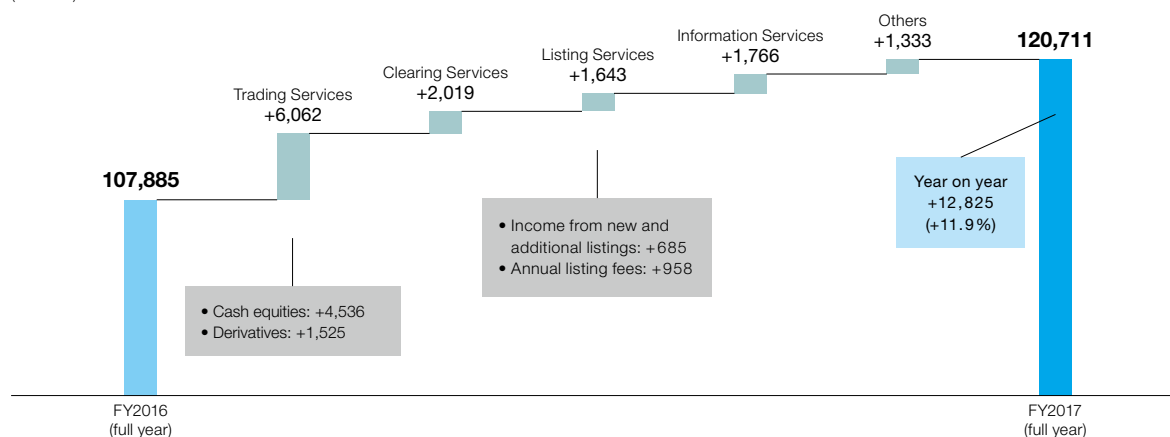
Consolidated Statement of Income

Operating Revenue

Operating revenue in FY2017 increased by 11.9% to JPY 120,711 million from FY2016.

Operating Revenue

(JPY mil.)



>> Review of Operations and Financial Condition

Operating Revenue

	FY2013	FY2014	FY2015	FY2016	FY2017	
	Amount (JPY mil.)	Amount (JPY mil.)	Amount (JPY mil.)	Amount (JPY mil.)	Amount (JPY mil.)	Ratio
Trading Services Revenue	54,155	48,698	52,471	45,703	51,766	43%
Transaction Fees	45,347	40,221	43,294	36,523	42,430	
Cash Equities	32,058	28,705	30,783	26,168	30,652	72% ¹
Derivatives	13,288	11,515	12,510	10,354	11,777	28% ¹
TOPIX Futures	1,952	1,816	1,934	1,841	2,106	
Nikkei 225 Futures (incl. Nikkei 225 mini)	4,795	4,382	5,136	4,231	4,691	
Nikkei 225 Options	4,661	3,374	3,543	2,834	3,149	
10-year JGB Futures	1,625	1,679	1,597	1,329	1,672	
Others	253	261	298	117	157	
Basic Fees	1,183	1,067	1,061	1,044	1,043	
Access Fees	4,980	4,730	5,165	4,985	4,851	
Trading System Facilities Usage Fees	2,544	2,600	2,854	3,066	3,341	
Others	101	79	95	84	98	
Clearing Services Revenue	20,334	20,092	23,140	21,454	23,473	19%
Listing Services Revenue	12,308	12,249	13,250	12,903	14,547	12%
Initial/Additional Listing Fees	5,287	4,762	5,330	4,317	5,002	
Annual Listing Fees	7,020	7,486	7,919	8,586	9,544	
Information Services Revenue	16,116	16,311	17,706	18,112	19,878	16%
Others	10,931	8,815	8,208	9,711	11,045	9%
Total	113,846	106,167	114,776	107,885	120,711	100%

Note: 1. Figures indicate percentage of Transaction Fees.

Reference: Major Stock Indexes

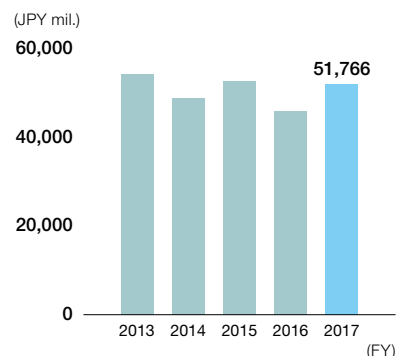
As of March 31	FY2013	FY2014	FY2015	FY2016	FY2017
TOPIX	1,202.89 point	1,543.11 point	1,347.20 point	1,512.60 point	1,716.30 point
Nikkei 225	JPY 14,827.83	JPY 19,206.99	JPY 16,758.67	JPY 18,909.26	JPY 21,454.30
JPX-Nikkei 400	10,893.94 point	14,022.96 point	12,161.79 point	13,522.45 point	15,180.09 point

1. Trading services revenue

Trading services revenue comprises "Transaction Fees" based on the value of securities traded or volume of derivatives traded, "Basic Fees" based on the types of the trading participant's trading qualification, "Access Fees" based on the number of orders, and "Trading System Facilities Usage Fees" based on the types of trading system facilities used.

During FY2017, trading services revenue increased 13.3% year on year to JPY 51,766 million due mainly to an increase in transaction fees resulting from year-on-year increases in trading of cash equities and derivatives.

Trading services revenue

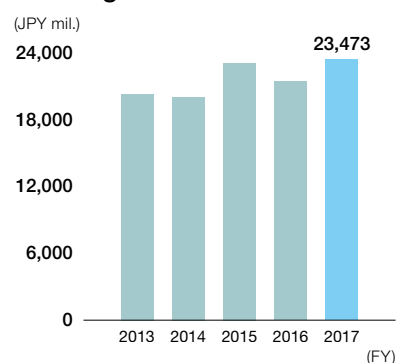


2. Clearing services revenue

Clearing services revenue comprises clearing fees related to the assumption of obligations of financial instrument transactions carried out by Japan Securities Clearing Corporation.

During FY2017, clearing services revenue increased 9.4% year on year to JPY 23,473 million.

Clearing services revenue

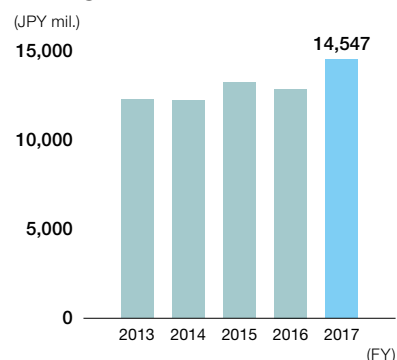


3. Listing services revenue

Listing services revenue comprises "Initial/Additional Listing Fees" that are received based on the issue amount when a company initially lists or when a listed company issues additional shares, and "Annual Listing Fees" received from listed companies based on their market capitalization.

During FY2017, listing services revenue increased 12.7% year on year to JPY 14,547 million due to increases in initial/additional listing fees and annual listing fees, mainly resulting from a year-on-year increase in the amount raised by listed companies or growth in market capitalization of listed companies and net asset value of ETFs.

Listing services revenue

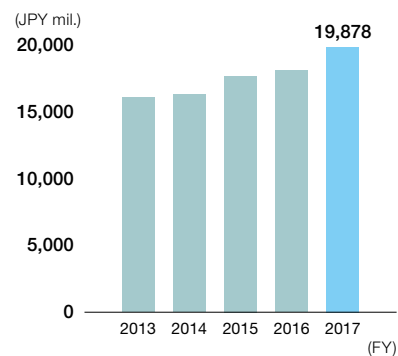


>> Review of Operations and Financial Condition

4. Information services revenue

Information services revenue comprises revenue related to the provision of market information to information vendors, etc. (market information fees), revenue related to the index business, and revenue related to the provision of corporate action information and other information.

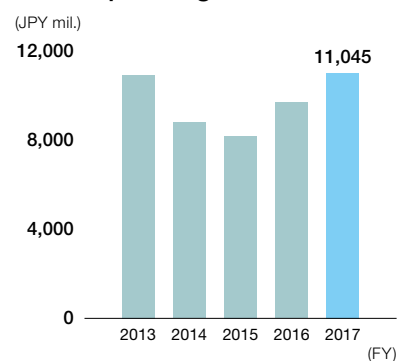
During FY2017, information services revenue increased 9.8% year on year to JPY 19,878 million due mainly to increases in market information fees and index business revenue.

Information services revenue**5. Other operating revenue**

Other operating revenue includes the following main items:

- Usage fees for arrownet, which connects trading, market information and other systems to trading participants and other users;
- Usage fees related to co-location services that allow trading participants, information vendors, and other users to install devices in the system center for the purpose of improving trade execution efficiency by shortening order transmission time, etc.; and
- Revenue from system development and operations conducted by consolidated subsidiary TOSHO SYSTEM SERVICE CO., LTD.

During FY2017, other operating revenue increased 13.7% year on year to JPY 11,045 million due mainly to increases in revenue from usage fees for arrownet and usage fees related to co-location services.

Other operating revenue

Operating expenses

During FY2017, personnel expenses increased 4.6% year on year to JPY 16,329 million.

Rent expenses on real estate also decreased by 3.9% year on year to JPY 3,904 million as space efficiency improvements in the system center were accompanied by the integration of co-location services.

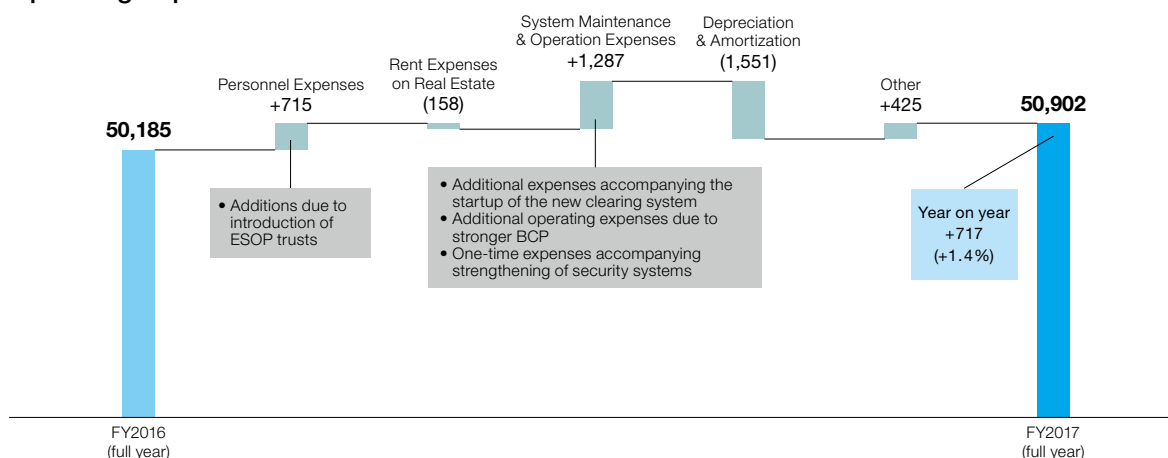
System maintenance and operation expenses include expenses related to maintenance and management/operations of various systems including the cash equities and derivatives trading systems.

During FY2017, system maintenance and operation expenses increased 11.9% year on year to JPY 12,100 million.

Depreciation and amortization decreased 14.1% year on year to JPY 9,431 million.

During FY2017, other operating expenses increased 4.9% year on year to JPY 9,136 million.

Operating Expenses



Operating Expenses

	(JPY mil.)				
	FY2013	FY2014	FY2015	FY2016	FY2017
Personnel Expenses	15,101	15,265	16,437	15,614	16,329
Rent Expenses on Real Estate	5,900	5,959	4,620	4,062	3,904
System Maintenance and Operation Expenses	11,642	9,947	11,923	10,813	12,100
Depreciation and Amortization	13,413	10,803	9,973	10,983	9,431
Other	13,185	10,888	7,970	8,711	9,136
Total	59,244	52,863	50,925	50,185	50,902

Note: A part of the operating expenses incurred in a consolidated subsidiary, TOSHO SYSTEM SERVICE CO., LTD., which had been included in "other operating expenses", has been reclassified as "system maintenance and operation expenses" effective from FY2016 to correctly reflect the nature of those expenses. The figures for FY2015 hereby presented have also been reclassified in the same manner for the convenience of the comparison with those for FY2016.

Basic Policy for Allocation of Profit

JPX adopts a dividend policy with a target payout ratio of about 60% tied to business performance while giving due consideration to the importance of internal reserves for the following purposes:

- Maintaining sound financial health as a financial instruments exchange group;
- Preparing for risks as a clearing organization; and
- Enabling the corporate group to pursue investment opportunities to raise the competitiveness of its markets as they arise.

In line with this policy, the dividends for FY2018 are planned to be JPY 54 per share (JPY 27 per share at the end of the second quarter).

(As of July 31, 2018)

Consolidated Statement of Financial Position

	(JPY mil.)			(JPY mil.)	
	As of March 31, 2017	As of March 31, 2018		As of March 31, 2017	As of March 31, 2018
Assets			Liabilities and equity		
Current assets			Liabilities		
Cash and cash equivalents	73,553	78,999	Current liabilities		
Trade and other receivables	9,774	11,841	Trade and other payables	3,190	5,591
1 Clearing business financial assets	37,555,555	37,311,964	Loans payable	22,500	32,500
2 Specified assets for deposits from clearing participants	3,374,863	3,621,319	1 Clearing business financial liabilities	37,555,555	37,311,964
3 Specified assets for legal guarantee funds	474	491	2 Deposits from clearing participants	3,374,863	3,621,319
Income tax receivables	8,507	6,191	3 Legal guarantee funds	474	491
Other financial assets	73,800	86,700	4 Trading participant security money	8,142	7,402
Other current assets	1,626	1,814	Income tax payables	9,210	14,253
Total current assets	41,098,156	41,119,322	Other current liabilities	5,339	7,599
			Total current liabilities	40,979,276	41,001,120
Non-current assets			Non-current liabilities		
Property and equipment	5,140	5,209	Loans payable	29,933	19,940
Goodwill	67,374	67,374	Retirement benefit liabilities	7,357	7,624
Intangible assets	30,596	34,208	Other non-current liabilities	3,693	3,392
Retirement benefit assets	5,202	5,956	Deferred tax liabilities	4,900	4,526
Investments accounted for using the equity method	8,809	10,407	Total non-current liabilities	45,884	35,484
5 Specified assets for default compensation reserve funds	27,948	27,948	Total liabilities	41,025,161	41,036,604
Other financial assets	36,275	36,252			
Other non-current assets	5,793	5,774	Equity		
Deferred tax assets	3,635	3,887	Share capital	11,500	11,500
Total non-current assets	190,775	197,019	Capital surplus	59,722	39,716
			Treasury shares	(13,506)	(953)
			Other components of equity	11,604	10,816
			6 Retained earnings	188,634	212,691
			Total equity attributable to owners of the parent company	257,955	273,771
			Non-controlling interests	5,815	5,965
			Total equity	263,770	279,736
Total assets	41,288,932	41,316,341	Total liabilities and equity	41,288,932	41,316,341

1 The clearing business financial assets/liabilities pertaining to derivative transactions, etc. as of the term end of Japan Securities Clearing Corporation (JSCC), the financial instruments clearing organization.

2 Collateral that JSCC requires clearing participants to deposit to cover any loss JSCC incurs in the event a clearing participant defaults.

3 Collateral that TSE and OSE require trading participants to deposit to cover any loss incurred by an entrustor of securities trading, etc. in the event a trading participant defaults.

4 Collateral that TSE and OSE require trading participants to deposit to cover any loss TSE and OSE incur in the event a trading participant defaults.

5 Reserve funds to cover losses resulting from the clearing business.

6 This figure includes the amount of reserve funds in the above 5.

Consolidated Statement of Income/ Consolidated Statement of Comprehensive Income

Consolidated Statement of Income

(JPY mil.)

	Fiscal year ended March 31, 2017	Fiscal year ended March 31, 2018
Revenue		
Operating revenue	107,885	120,711
Other revenue	161	271
Total revenue	108,047	120,983
Expenses		
Operating expenses	50,185	50,902
Other expenses	9	15
Total expenses	50,195	50,918
Share of income of investments accounted for using the equity method	1,525	1,726
Operating income	59,377	71,791
Financial income	1,235	1,282
Financial expenses	8	83
Income before income tax	60,604	72,990
Income tax expense	18,240	22,355
Net income	42,363	50,634
Net income attributable to		
Owners of the parent company	42,124	50,484
Non-controlling interests	238	149
Net income	42,363	50,634
Earnings per share		
Basic (JPY)	77.00	94.17
Diluted (JPY)	—	—

Consolidated Statement of Comprehensive Income

(JPY mil.)

	Fiscal year ended March 31, 2017	Fiscal year ended March 31, 2018
Net income	42,363	50,634
Other comprehensive income		
Items that will not be reclassified to profit or loss		
Net gain (loss) on revaluation of financial assets measured at fair value through other comprehensive income	(1,717)	(787)
Remeasurements of defined benefit plan	1,268	511
Share of other comprehensive income of investments accounted for using the equity method	(0)	0
Other comprehensive income, net of tax	(448)	(276)
Comprehensive income	41,914	50,357
Comprehensive income attributable to		
Owners of the parent company	41,676	50,208
Non-controlling interests	238	149
Comprehensive income	41,914	50,357

Consolidated Statement of Changes in Equity

(JPY mil.)

	Equity attributable to owners of the parent company				
	Share capital	Capital surplus	Treasury shares	Other components of equity	
				Net gain (loss) on revaluation of financial assets measured at fair value through other comprehensive income	Remeasurements of defined benefit plan
Balance as of April 1, 2016	11,500	59,726	(9)	13,321	—
Net income	—	—	—	—	—
Other comprehensive income, net of tax	—	—	—	(1,717)	1,268
Total comprehensive income	—	—	—	(1,717)	1,268
Acquisitions of treasury shares	—	(3)	(13,497)	—	—
Dividends paid	—	—	—	—	—
Changes of interests in subsidiaries without losing control	—	—	—	—	—
Transfer from other components of equity to retained earnings	—	—	—	—	(1,268)
Total transactions with the owners	—	(3)	(13,497)	—	(1,268)
Balance as of March 31, 2017	11,500	59,722	(13,506)	11,604	—
Net income	—	—	—	—	—
Other comprehensive income, net of tax	—	—	—	(787)	511
Total comprehensive income	—	—	—	(787)	511
Acquisitions of treasury shares	—	(2)	(7,452)	—	—
Dividends paid	—	(20,003)	20,003	—	—
Changes of interests in subsidiaries without losing control	—	—	—	—	—
Transfer from other components of equity to retained earnings	—	—	—	—	(511)
Other	—	—	1	—	—
Total transactions with the owners	—	(20,005)	12,552	—	(511)
Balance as of March 31, 2018	11,500	39,716	(953)	10,816	—

(JPY mil.)

	Equity attributable to owners of the parent company				
	Other components of equity		Total	Non-controlling interests	Total equity
	Total	Retained earnings			
Balance as of April 1, 2016	13,321	172,656	257,194	5,717	262,912
Net income	—	42,124	42,124	238	42,363
Other comprehensive income, net of tax	(448)	—	(448)	—	(448)
Total comprehensive income	(448)	42,124	41,676	238	41,914
Acquisitions of treasury shares	—	—	(13,500)	—	(13,500)
Dividends paid	—	(27,414)	(27,414)	—	(27,414)
Changes of interests in subsidiaries without losing control	—	—	—	(140)	(140)
Transfer from other components of equity to retained earnings	(1,268)	1,268	—	—	—
Total comprehensive income	(1,268)	(26,146)	(40,915)	(140)	(41,056)
Balance as of March 31, 2017	11,604	188,634	257,955	5,815	263,770
Net income	—	50,484	50,484	149	50,634
Other comprehensive income, net of tax	(276)	—	(276)	—	(276)
Total comprehensive income	(276)	50,484	50,208	149	50,357
Acquisitions of treasury shares	—	—	(7,454)	—	(7,454)
Dividends paid	—	—	—	—	—
Changes of interests in subsidiaries without losing control	—	(26,938)	(26,938)	—	(26,938)
Transfer from other components of equity to retained earnings	(511)	511	—	—	—
Other	—	—	1	—	1
Total transactions with the owners	(511)	(26,427)	(34,391)	—	(34,391)
Balance as of March 31, 2018	10,816	212,691	273,771	5,965	279,736

Consolidated Statement of Cash Flows

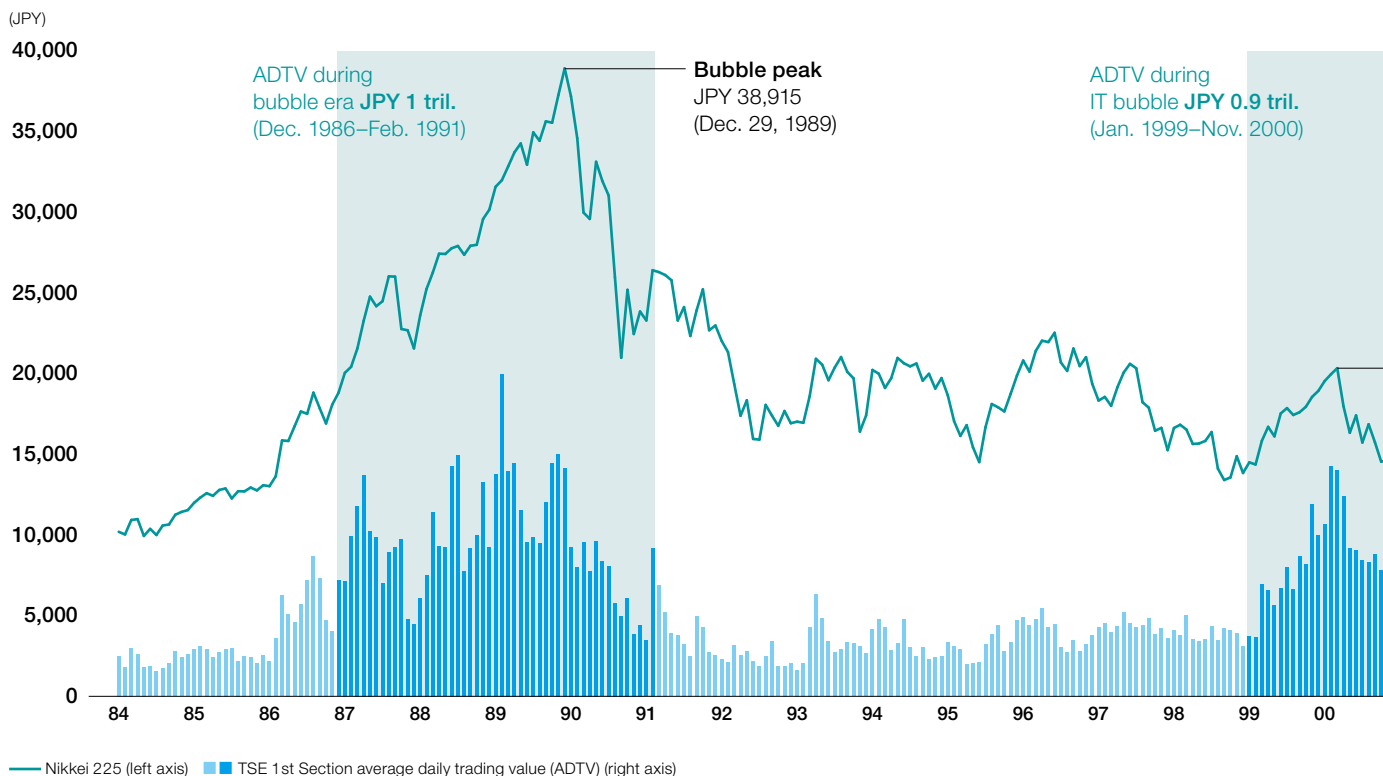
Consolidated Statement of Cash Flows

(JPY mil.)

	Fiscal year ended March 31, 2017	Fiscal year ended March 31, 2018
Cash flows from operating activities		
Income before income tax	60,604	72,990
Depreciation and amortization	11,784	10,114
Financial income	(1,235)	(1,282)
Financial expenses	8	76
Share of income of investments accounted for using the equity method	(1,525)	(1,726)
Gains on sale of property and equipment	—	(50)
(Increase) decrease in trade and other receivables	306	(2,067)
Increase (decrease) in trade and other payables	(498)	877
(Increase) decrease in retirement benefit assets	(1,575)	(753)
Increase (decrease) in retirement benefit liabilities	4	267
Other	1,492	1,990
Subtotal	69,364	80,436
Interest and dividends received	1,575	1,493
Interest paid	(5)	(76)
Income taxes paid	(23,473)	(15,835)
Cash flows generated from operating activities	47,462	66,018
Cash flows from investing activities		
Payments into time deposits	(83,100)	(105,700)
Proceeds from withdrawal of time deposits	74,900	93,800
Purchase of property and equipment	(1,111)	(1,554)
Purchase of intangible assets	(9,970)	(10,537)
Purchase of investment securities	(127)	(2,000)
Other	79	(172)
Cash flows used in investing activities	(19,330)	(26,164)
Cash flows from financing activities		
Proceeds from loans payable	10,000	20,000
Repayments of loans payable	(10,000)	(20,000)
Proceeds from issuance of bonds	19,932	—
Dividends paid	(27,414)	(26,938)
Purchase of treasury shares	(13,501)	(7,454)
Other	(136)	—
Cash flows used in financing activities	(21,119)	(34,393)
Net increase (decrease) in cash and cash equivalents	7,011	5,460
Cash and cash equivalents at the beginning of the year	66,547	73,553
Effect of changes in exchange rate on cash and cash equivalents	(6)	(14)
Cash and cash equivalents at the end of the year	73,553	78,999

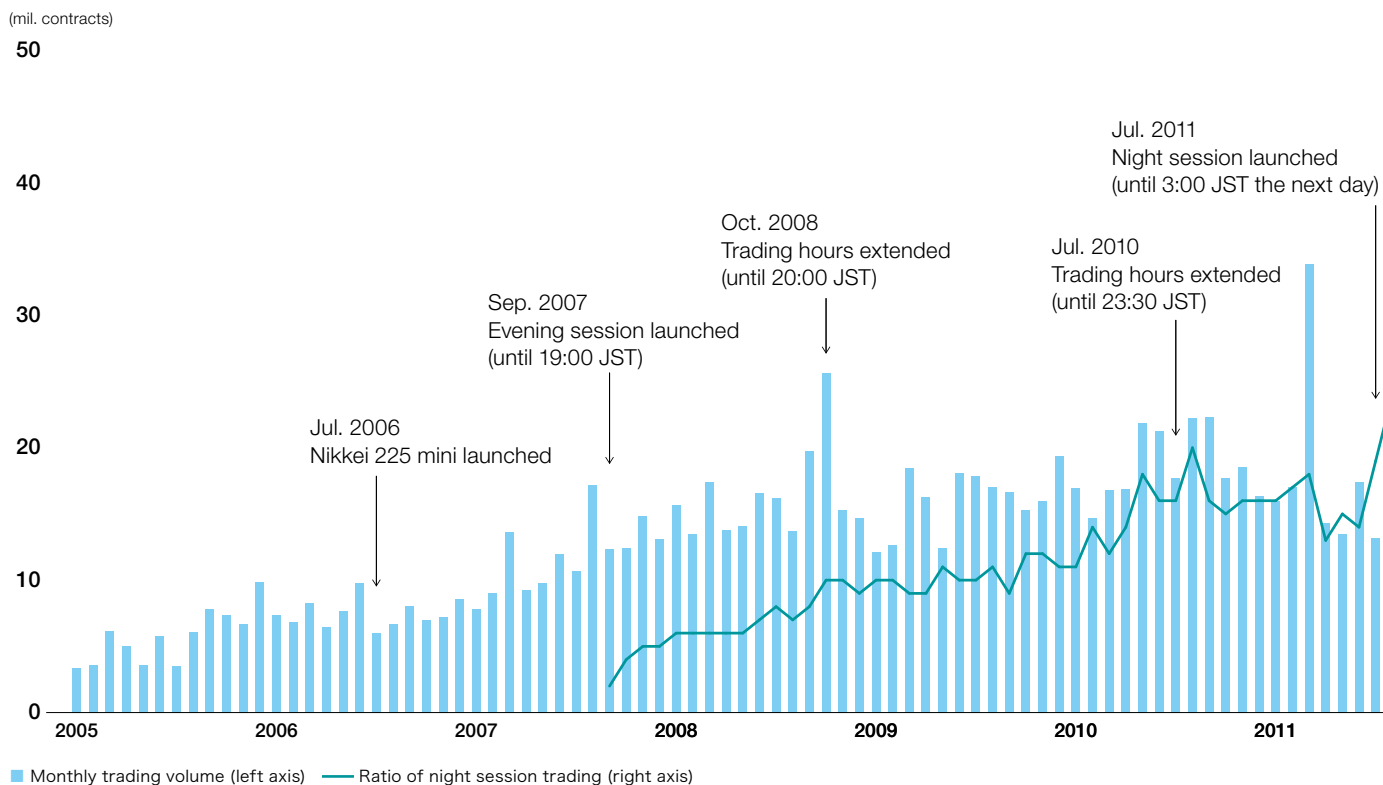
Economic Data/Market Data

Stock Market Performance

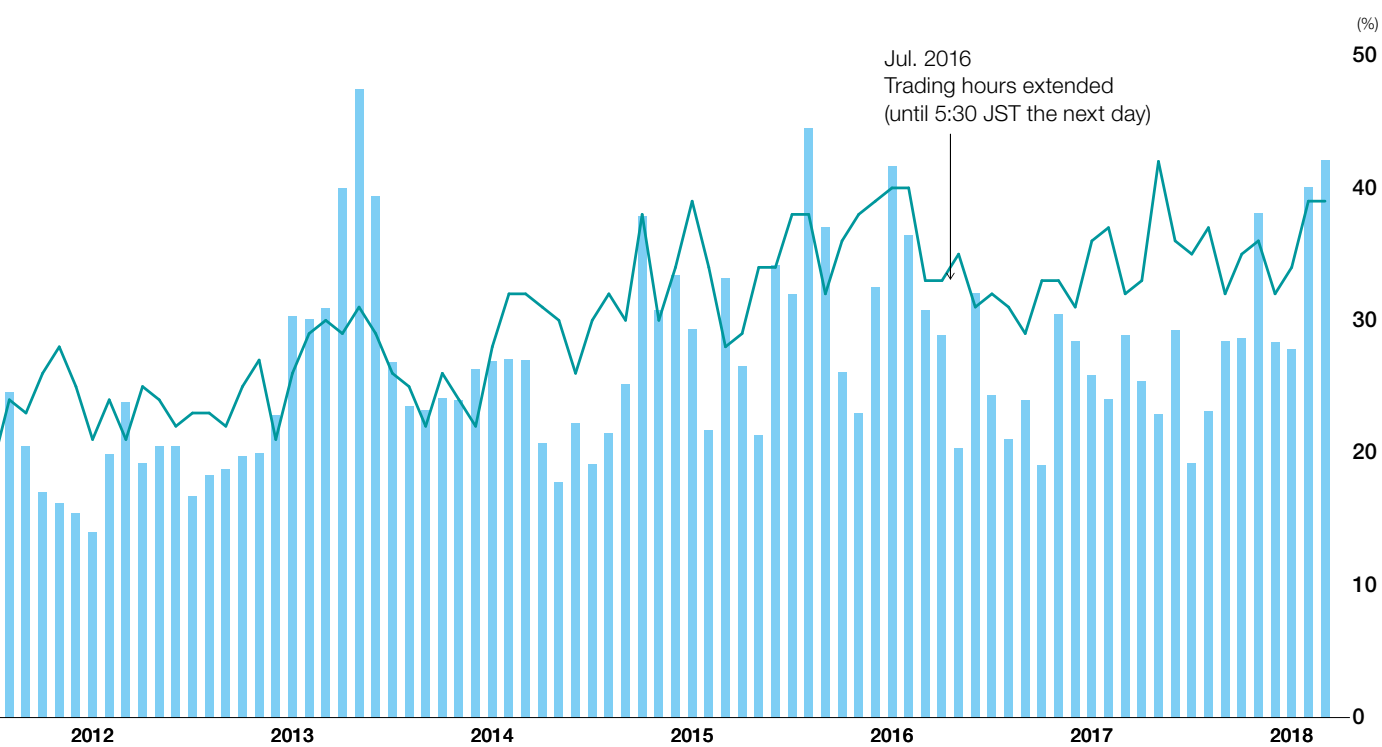
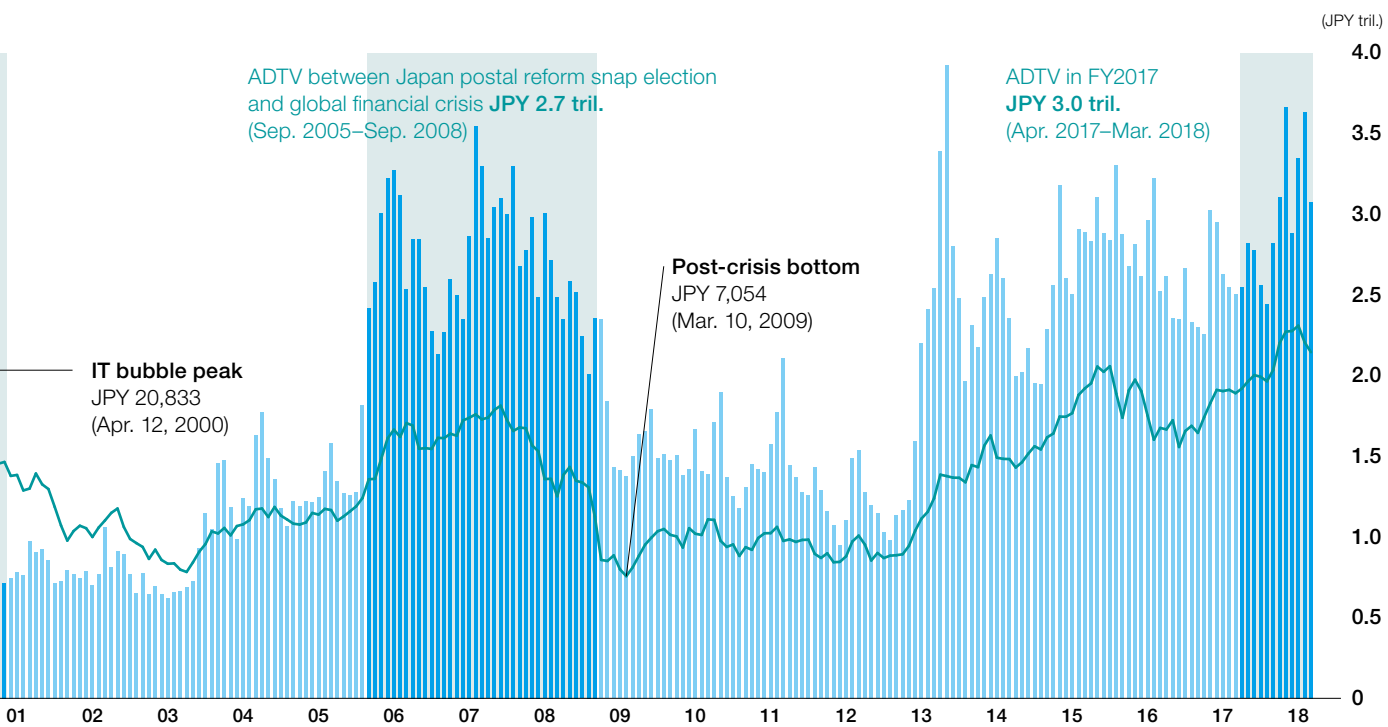


Note: The highest and lowest prices of the Nikkei 225 are based on closing prices.

Derivatives Trading Volume and Ratio of Night Session Trading



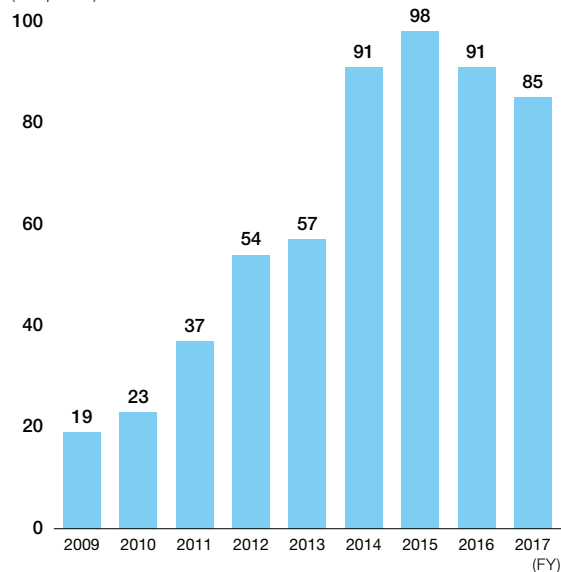
Note: Total trading volume for all derivatives



>> Economic Data/Market Data

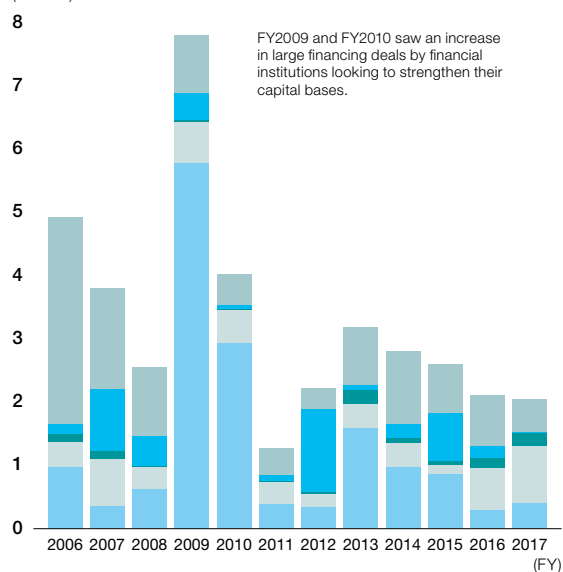
IPOs in Japan

(companies)



Financing by Listed Companies

(JPY tril.)

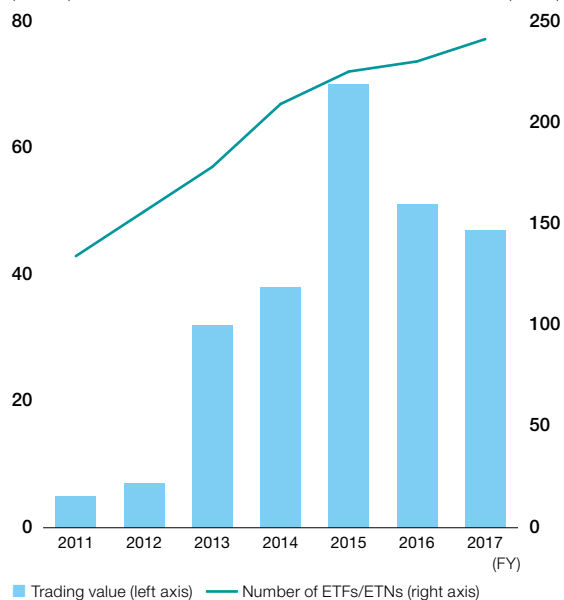


■ Offerings to shareholders
 ■ Public offerings (including IPOs)
 ■ Private placements
 ■ Warrants and stock options exercised
 ■ Preferred stocks, etc. ■ Convertible bonds

Note: Excluding straight bonds (domestic and foreign)

ETF/ETN Trading Value

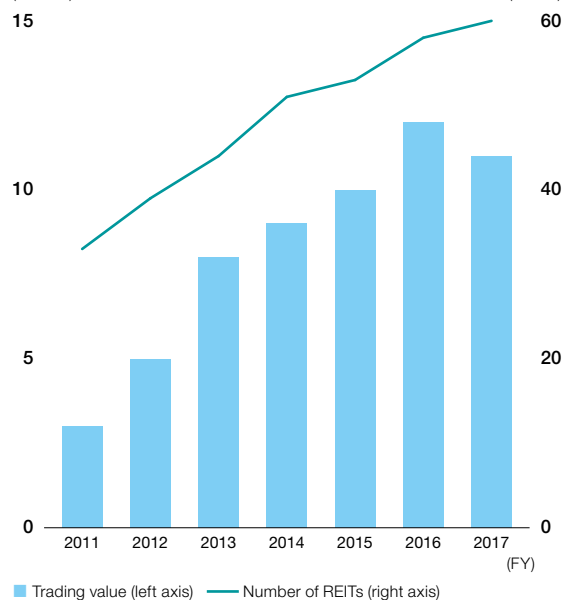
(JPY tril.)



■ Trading value (left axis) — Number of ETFs/ETNs (right axis)

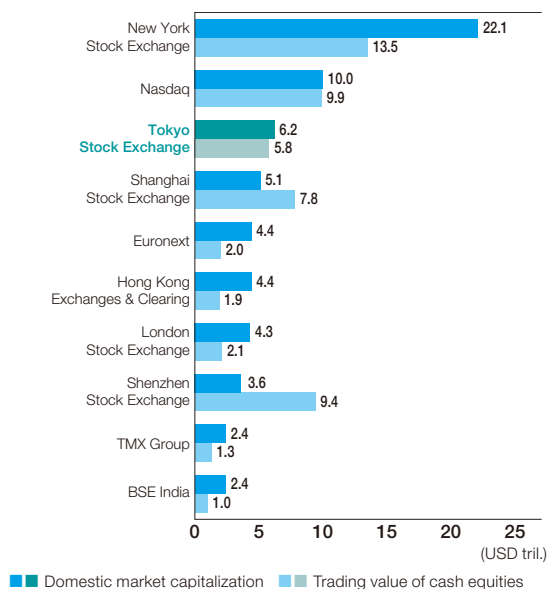
REIT Trading Value

(JPY tril.)



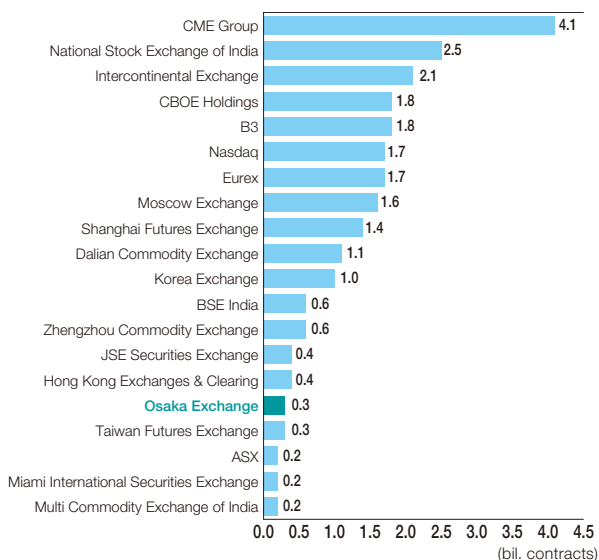
■ Trading value (left axis) — Number of REITs (right axis)

Domestic Market Capitalization, Stock Trading Value Rankings



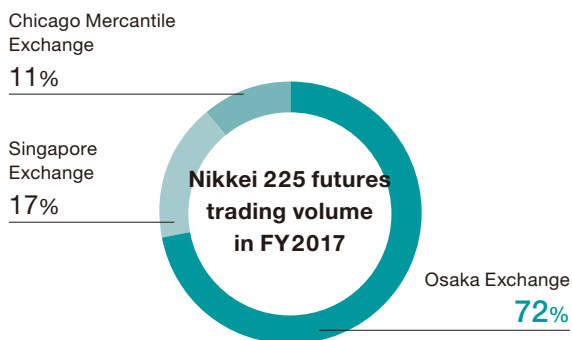
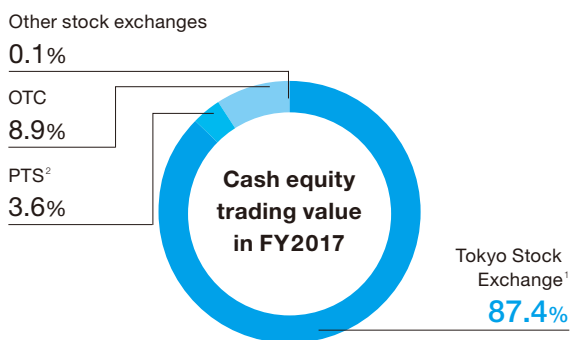
Note: Market capitalization of domestic stocks as of end of Dec. 2017
 Stock trading value includes only auction and electronic trades in 2017.
 Source: WFE statistics

Derivatives Volume Rankings



Source: Futures Industry Association, Trading Volume in 2017

Competitive Landscape of Main Products



Notes: 1. Total value of auction and off-auction trading of common stocks on TSE 1st/2nd Sections, Mothers, JASDAQ, and TOKYO PRO Market, ETFs/ETNs, REITs, etc.

2. The figure for PTS is the total of figures for SBI Japannext and Chi-X Japan.

Sources: TSE, SBI Japannext, Chi-X Japan, and JSDA statistics

Note: Conversion factors of 1/10 for OSE mini, 1/2 for SGX large (incl. USD-denominated), 1/10 for SGX mini, and 1/2 for CME USD- and JPY-denominated contracts were used in calculations.

Sources: Statistics from each exchange

JPX's Response to the Principles for Preventing

The Principles for Preventing Corporate Scandals are composed of six action principles. Requiring companies to take initiatives from the perspectives of Principles 1 through 3 serves as the basic framework, which will, in turn, embed a cycle that prevents the occurrence of corporate scandals and, thereby, meet the goals of Principle 4.

Based on this basic framework, JPX is working to prevent internal corporate scandals in the following manner.

*For more details on the Principles for Preventing Corporate Scandals, see page 22.

■ Principle 1: Gain a thorough understanding of the actual situation

- In order to accurately and exhaustively grasp the level of compliance throughout JPX, we hold regular Risk Management Committee meetings (page 30) attended by the CEO and the responsible person(s) from each division. During these meetings, members acquire a thorough understanding of the actual risks from the perspective of prevention and discuss ways to prepare and implement countermeasures.
- When an emergency response is required, we immediately hold special Risk Management Committee meetings, during which members acquire an overarching understanding of the situation and take action towards a swift solution.
- In addition to the initiatives taken to acquire a thorough understanding of the situation under normal circumstances as described above, in preparation for situations where the reporting lines that should have functioned as intended become clogged, we have established both an internal and external Compliance Hotline to provide a channel for an internal reporting (whistleblowing) system (page 34). We continuously share the information about the hotlines with officers and employees as part of our effort to establish an environment that makes it easy for internal voices to be heard.

■ Principle 2: Fulfill responsibilities with a sense of mission

- With our corporate philosophy (page 2) as a cornerstone, all officers and employees strive to fulfill their day-to-day tasks. In order to manage the company in line with the corporate philosophy, the management team takes it upon themselves to be committed to compliance and disseminate information on the level of compliance both internally and externally through annual reports and such.
- In terms of governance, in order to further strengthen management oversight and supervisory functions and to contribute to greater transparency, the majority of the members of our Nomination Committee, Compensation Committee, and Audit Committee, as well as the majority of the Board of Directors as a whole, is composed of outside directors.
- With the Risk Policy Committee, which consists mainly of outside directors, and the Independent Outside Directors Committee, which is entirely composed of independent outside directors, we work to exchange information and share awareness. By actively incorporating outside opinion through the aforementioned committees, we maintain an awareness of whether the customs and practices that have become entrenched within the company correspond with ever-changing social norms, and work towards continuously enhancing the effectiveness of governance within JPX and acquiring a thorough understanding of the actual situation.

■ Principle 3: Encourage two-way communication

- In order to share the awareness of compliance between the workforce and management, we work to share the awareness of compliance among all of our officers and employees, such as by providing all of our officers and employees with yearly e-learning courses that aim to maintain and enhance their awareness of compliance.
- For middle management, by incorporating a menu of activities designed to increase the awareness of compliance as part of the training for new managers, we instill an understanding that enables action based on a strong awareness of compliance.
- During each business year, we identify critical risks within JPX. As part of the necessary actions to prevent and respond to these specific risks (page 31), we solicit and compile opinions from each division throughout JPX in relation to identifying these risks. At this time, younger employees and management directly exchange opinions and communicate in a way that ensures opinions come from both sides as we collect and summarize the opinions.
- As a means of activating two-way communication between the workforce and management, we have established a location that allows employees, including those that are not directly related to the business of the affiliated division, to report business ideas to management. We also conduct employee awareness surveys regarding the rewarding nature of tasks and the workplace atmosphere, and hold office tours and company events to which the families of employees are invited. In this way, we work to energize communication among employees, including officers.

Corporate Scandals

■ Principle 4: Detect non-compliance early and respond swiftly

- As we organically link the cycle proceeding through Principles 1 through 3, we pay heed to keeping employees from falling into compliance fatigue and continue to take steps in order to prevent scandals in line with the actual situation.
- Specifically, when we receive a contact through the hotline, we scrutinize and analyze the pertinent facts and take disciplinary action, thereby remaining a step ahead in detecting and correcting any actions that do not comply with laws, ordinances, or the Charter of Corporate Behavior, or any actions that are deemed to pose such a risk.
- Moreover, management, including top management, sounds the alarm for near-misses reported through the Risk Management Committee, confirms similar instances through horizontal deployment, continuously sends out messages to nurture an awareness of compliance, and instills an awareness of the need to report to management faster when the news is worse. In addition to providing regular e-learning courses based on instances that have led to specific scandals, we continuously conduct surveys that scrutinize the depth of compliance awareness among the employees, identify the degree to which awareness has been nurtured and problematic points, and make revisions to our rules as necessary.

■ Principle 5: Execute consistent business management throughout the entire corporate group

- Each company within JPX has important characteristics that support the core of the financial infrastructure and every one of these companies has a degree of importance that cannot be overlooked. With such recognition, we manage and supervise JPX as a single entity, and deploy our measures for Principles 1 through 4 equally throughout JPX.

■ Principle 6: Be accountable in view of the relevant supply chain

- JPX operates market infrastructure in cooperation with a diverse range of stakeholders including listed companies; trading participants that receive and execute orders from investors; clearing participants that safely and reliably settle transactions; information providers that disseminate market information to society in a timely and accurate manner; and Japan Securities Depository Center and the Bank of Japan that provide settlement infrastructure for stocks and funds, respectively.
- Serious problems that occur among such stakeholders pose the risk of damaging the credibility of Japan's financial markets, including exchanges, and the stability of trading. As such, for listed companies, for example, we have established rules and the code of corporate conduct at TSE with which listed companies must comply. Likewise, we work to ensure the qualifications of listed companies through listing examinations and listed company compliance operations by JPX-R. We also work to ensure the appropriateness and soundness of trading participants' business operations through trading participant examinations and inspections.
- With the rapid advancement of information technology, building a highly reliable IT infrastructure has become an important mission for meeting the increasingly complex and sophisticated needs of market users and to become the market of choice. Therefore, we are driving forward with systems development by utilizing many system vendors and support personnel. When applying quality control to the services provided by system vendors and such, we have taken steps to appropriately monitor the vendors and to ensure a thorough shared awareness related to the positioning and roles of each party upon clearly demarcating the boundary of responsibility with vendors.

Corporate Data

(as of March 31, 2018)

Corporate Information

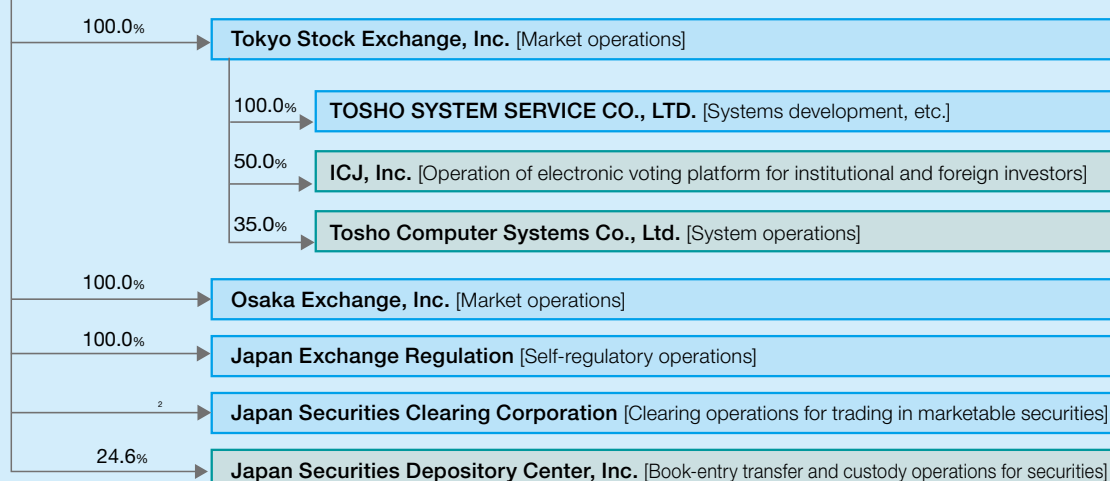
Company Name:	Japan Exchange Group, Inc.	Number of Employees:	1,093 (consolidated)
Number of Directors:	14 directors, 9 executive officers (as of June 20, 2018)		Japan Exchange Group, Inc. 193
Location of Head Office:	2-1 Nihombashi-kabuto-cho, Chuo-ku, Tokyo 103-8224, Japan		Tokyo Stock Exchange, Inc. 422
Foundation:	April 1, 1949		Osaka Exchange, Inc. 128
Amount of Capital:	JPY 11,500 mil.	Business Description:	Japan Exchange Regulation 191
			Other consolidated subsidiaries 159
			Management and administration of financial instruments exchanges and other incidental businesses

Information on the Corporate Group

JPX comprises five subsidiaries and three companies accounted for under the equity method, and its primary operations are the provision and operation of markets for exchange-traded financial instruments. Specifically, these include operations such as (i) providing market facilities for

securities trading, securities index futures trading, and securities options trading, (ii) publicizing market quotations and ensuring fairness of securities trading, and (iii) providing financial instruments obligation assumption services.

Japan Exchange Group, Inc. [Management and administration of subsidiary financial instruments exchanges and a subsidiary self-regulatory organization]



Notes: 1. Percentages indicate share of voting rights.

2. Class A shares: 99.2% / Class B shares: 100.0% / Class C shares: 60.4% / Class D shares: 52.9%

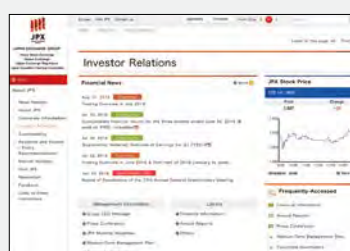
Website



About JPX

<https://www.jpx.co.jp/> (Japanese)

<https://www.jpx.co.jp/english> (English)



Investor Relations

<https://www.jpx.co.jp/corporate/investor-relations/> (Japanese)

<https://www.jpx.co.jp/english/corporate/investor-relations/> (English)

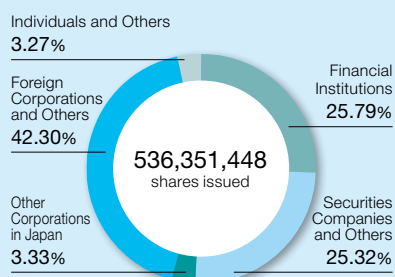
Stock Information

Stock Code: 8697
Listed Market: Tokyo Stock Exchange (1st Section)
Business Year: April 1 to March 31
Annual General Shareholders Meeting: June
Record Date: March 31 for Annual General Shareholders Meeting and for Year-end dividend and September 30 for Interim dividend

Number of Shares per Share Unit: 100 shares
Number of Shares: Total number of shares authorized to be issued: 2,180,000,000 shares
 Total number of shares issued: 536,351,448 shares
 (As a result of the cancellation of treasury shares on February 9, 2018, the number of issued shares decreased by 12,717,652 shares from the end of the previous fiscal year.)
Number of Shareholders: 47,469

JPX's Shareholders

Distribution of Shareholders



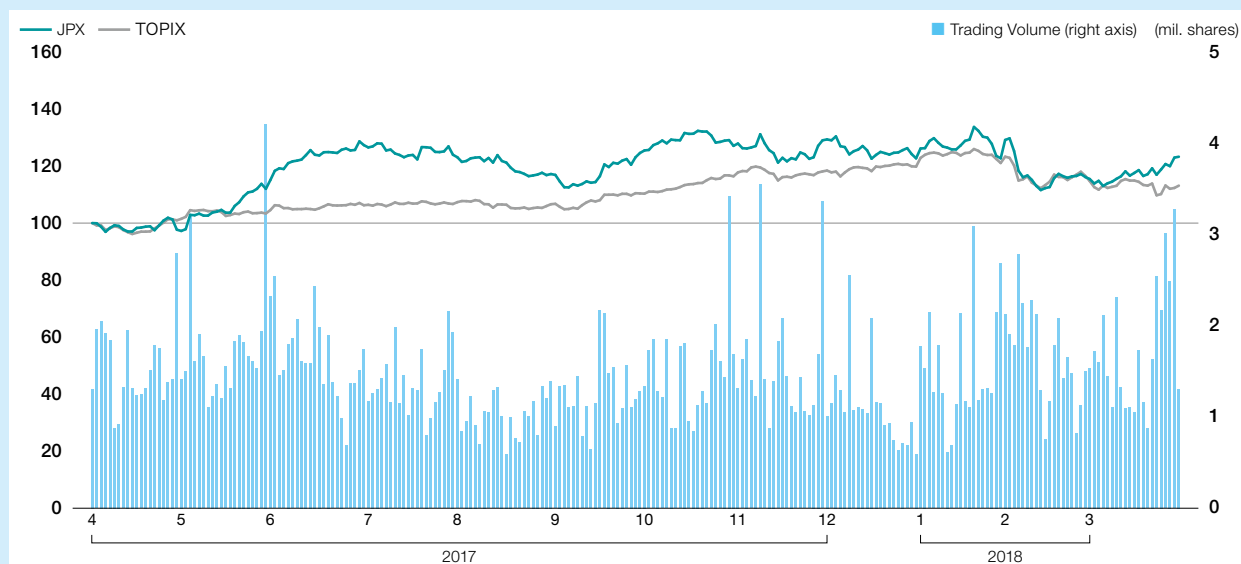
Major Shareholders

	No. of Shares Held	Shareholding Ratio (%)
1 The Master Trust Bank of Japan, Ltd. (Trust Account)	20,915,400	3.90
2 SMBC Nikko Securities Inc.	19,438,300	3.62
3 Japan Trustee Services Bank, Ltd. (Trust Account)	19,229,000	3.59
4 Japan Trustee Services Bank, Ltd. (Trust Account 5)	10,950,900	2.04
5 NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY	10,401,991	1.94
6 Japan Trustee Services Bank, Ltd. (Trust Account 7)	9,962,500	1.86
7 STATE STREET BANK WEST CLIENT-TREATY 505234	9,565,746	1.78
8 Mizuho Securities Co., Ltd.	9,269,800	1.73
9 Japan Trustee Services Bank, Ltd. (Trust Account 2)	8,177,100	1.52
10 Japan Trustee Services Bank, Ltd. (Trust Account 1)	8,140,800	1.52

Notes: 1: JPX does not hold any treasury shares.

2: Shareholding ratios are calculated based on a total that includes JPX shares held by the Stock-Granting ESOP Trust account (585,416 shares).

JPX Stock Price (rebased to 100 on April 3, 2017)



About JPX Logo

The logo expresses dynamic and global growth and development.

The four rising bars represent the Four C's of our creed—adopting a "Customer First" approach of prioritizing customer needs, building "Credibility" and public confidence, pursuing "Creativity" in innovative solutions, and achieving "Competency" by harnessing employee potential.



JAPAN EXCHANGE GROUP

TOKYO STOCK EXCHANGE
OSAKA EXCHANGE
JAPAN EXCHANGE REGULATION
JAPAN SECURITIES CLEARING CORPORATION

JAPAN EXCHANGE GROUP, INC.

2-1 Nihombashi-kabuto-cho,
Chuo-ku, Tokyo 103-8224, Japan

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