Medium-Term Management Plan 2024

Exchange & beyond

To contribute to improving the attractiveness of the Japanese financial and capital markets as a whole and enhance their global competitiveness, we will prioritize initiatives in three specific "Focus" areas.

Focus 2

Focus (

Financial targets, capital expenditures, and capital policy

Financial targets for the final fiscal year

Operating revenue

JPY 147.0 bil.

Net income
(Attributable to owners of the parent company

JPY **53.0** bil.

ROE

At least 15%

Capital expenditures

Total amount over three years

Approx. JPY $50_{ ilde{ ilde{o}}}0_{ ilde{ ilde{bil}}}$

While working on enhancing market convenience and resilience, we will invest in building the foundations of a global, comprehensive finance and information platform.

Capital policy

Return to shareholders

Dividend payout ratio of approx. 60%

Flexibly implement further shareholder returns in consideration of future investments, etc.

Support the sustainable development and evolution of the market by making constant investment while keeping a balance between shareholder returns and financial resilience for stable market operations

Irrespective of market conditions, maintain ROE of 10% exceeding capital cost over the medium to long term

Facilitating Cycle of Corporate Innovation/ Growth and Asset Formation



In our role as a core infrastructure supporting fundraising by companies and asset formation by the public, as well as supporting innovation and growth at companies, we will develop the primary and secondary markets so that the profits stemming from companies' efforts generate asset formation among the general public, leading back to further innovation and growth at companies

Develop an environment that supports sustainable growth at companies

- Enhancement of financing functionality for growth companies
- Promotion of corporate value improvement at listed companies
- Establishment of IPO ecosystem that contributes to revitalizing regional economies
- Provision of trading opportunities for after delisting

Review of the First Year of the Plan

- Summarized discussions of the Council of Experts Concerning the Follow-up of Market Restructuring and set out TSE's future actions
- Released outline of new index focusing on value creation
- Released outline of specifications for a smoother initial listing process and other things
- Concluded capital and business alliance agreement with Minsetsu, Inc. and made SCRIPTS Asia, K.K. a wholly owned subsidiary with the aim of promoting constructive dialogue between listed companies and investors

Develop products and rules to contribute to asset formation

- Expansion of the ETF market
 Target 30% increase* in average daily trading value and net assets held in ETFs, etc. in FY2024
- Revisions to trading rules to allow smooth execution
- Development of an environment enabling secure and easy investment while considering investor protection
- Promotion of listings of cross-border companies, mainly from Asia
 Target 20 listings of cross-border companies in the three years of the plan
- Provision of comprehensive financial education including life planning, and strengthening of collaborative activities with industry players

Review of the First Year of the Plan

- Released outline of specifications for active FTFs
- Released outline of specifications for optimization of tick sizes for medium liquidity stocks
- Requested issuers to lower investment units
- Launched "JPX Manebu Lab," a comprehensive financial and economic education portal site that provides information from a fair and neutral standpoint
- Published list of TOPIX phased weighting reduction constituents

Further improve convenience and resilience as a market infrastructure

- Ongoing improvement of systems and their operation, and system upgrades
 - Target Upgrade of cash equity trading system in the second half of FY2024 and extension of trading hours at the time of upgrade
- Strengthening of BCP function to ensure stable market operations

Review of the First Year of the Plan

- Started development for upgrading the cash equity trading system
- Completed construction of the secondary data center in the Kansai area in preparation for the predicted large earthquake under Tokyo

*In comparison with FY2021. Average daily trading value excluding leveraged/inverse products. Net assets excluding BOJ purchases

etc.

Achieving Market Transformation (MX)



In order to serve as a hub for circulating capital in the Asia-Pacific region while keeping focused on changes in the interest rate environment, we aim to enable optimal allocation of risk/return across society by ensuring systems for raising and managing funds function smoothly and sufficiently, not only for stocks but for other products as well. In addition, to reduce the costs of raising and managing funds, we will advance digitization in all corners and enhance information usage.

etc.

etc.

Strengthen functionality of interest rate-related markets

- Revitalization of JGB-linked derivatives
- Introduction of short-term interest rate derivatives **UPDATED**
- Promotion of professional-oriented bond market

Review of the First Year of the Plan

 Released outline of specifications for short term interest rate futures linked to the Bank of Japan's TONA

Invigorate the derivatives market

- Listing of small lot products linked to index futures and options
- Improvement of convenience for retail investors
- Expansion of flow from global investors

Review of the First Year of the Plan

- Launched holiday trading to enhance investor convenience by providing hedging opportunities
- Released outline of specifications for Nikkei
 225 micro Futures and Nikkei 225 mini Options
- Released outline of specifications for the introduction of a new margin calculation method (VaR Method) for listed derivatives

Advance digitization and enhance information usage

- Creation of a digital securities market
 - Target Creation of a market and start of trading of new products by the end of FY2024
- Development of new services utilizing digital technologies for internal and external use
 - Target Three services in the three years of the plan
- Strengthening of index businesses and enhancement of investment-related information

Target 280 new clients for information services and 12 cases of creating new information services or updating existing information services and rules in the three years of the plan UPDATED

Review of the First Year of the Plan

- With the aim of creating a digital securities market, issued a Digitally Tracked Green Bond, established a study group, joined consortia on digital issues, began joint discussions on establishing Progmat, and invested in BOOSTRY
- Implemented DLT technology for settlement by physical delivery and payment of rubber futures contracts

Promoting Sustainability that Connects Society and Economy



We will assist the creation of a sustainable society by utilizing market mechanisms to provide solutions for a wide range of societal issues, through the provision of an environment where sustainability-related information, products, and services are easily accessible to all.

Strengthen dissemination of sustainability-related information

- Creation and enhancement of information platform
 - Target Launch of information platform for publicly offered ESG bonds in FY2022 Achieved
- Support for sustainability information disclosure from issuers
- Participation in international debate and standard-setting on sustainable finance etc.

Review of the First Year of the Plan

- Launched ESG Bond Information Platform to improve convenience for market users and visibility of the products
- Launched "JPX Listed Company ESG Information WEB (beta version)," which provides a list of links to reports containing ESG information

Calculate ESG indices and list related ETFs/futures

• Calculation of ESG-related indices, listing of related futures etc.

Target Launch of new ESG indices in FY2022 ▶ Achieved
Listing of futures linked to ESG indices

Review of the First Year of the Plan

- With FTSE, launched FTSE JPX Net Zero Japan Index Series, an index series using environmental metrics
- Released outline of specifications for futures contracts based on ESG indices
- Released outline of specifications for the revision to the contract unit of Silver Futures and Palladium Futures to improve trading convenience

Vitalize the energy market, advance the creation of an emissions trading market

- Increase in trading of electricity/LNG futures
 - Target Expand trading volume on electricity futures fivefold by FY2024*

 Permanent listing of LNG futures by FY2024
- Study and work towards the creation of a Japanese carbon credit market UPDATED

Review of the First Year of the Plan

- Launched Electricity Futures as a permanent listing and LNG Futures as a trial listing
- Signed MoU with Japan Electric Power Exchange
- Conducted trial trading of carbon credits as part of the "Technical Demonstration Project for Carbon Credit Market" commissioned by the Ministry of Economy, Trade and Industry

*In comparison with FY2021.

Global Strategy We will aim to continue as a central market for the Asia-Pacific region, and a key market globally, by attracting global investment into Japan while creating an environment that enables one-stop investment in stocks and other products from across the globe

Attracting Global Investment into Japan

Market/infrastructure functionality

Strengthening of market resilience and convenience through extension of cash equity market trading hours, upgrade of cash equity trading system, launch of derivatives holiday trading, enhancement of functionality in interest rate-related markets and clearing, expansion of English disclosure, etc. **UPDATED**

Promotion

Development of extensive relationships with investors and information vendors and advancement of marketing and sales in trading and information services areas

Enabling One-stop Investment in Global Products

Cross-border companies

Expansion of campaign to attract cross-border company listings, mainly in Asia

ETFs/ETNs

Proactive work to attract issues linked to indices covering foreign stocks, etc.

Bonds

Promotion of TOKYO PRO-BOND Market, the market for professional investors

Strengthening the Foundations of Our Global Business

Human resource investment

Creation of an environment and investment to enable obtainment and nurture of diverse human resources, as well as development and demonstration of employee capabilities

Overseas cooperation

Cultivation of business opportunities through collaboration with overseas companies mainly in Asia

Market/regulation trends

Research and analysis of global trends in markets and regulation, etc. through mainly the overseas offices

International standards, etc.

Participation in discussion about and creation of international standards relating to sustainable finance

• Overseas technical assistance

Work to contribute to sustainable development and create business opportunities in the countries we assist

TOPIC

Strengthening the Foundations of Our Global Business

JPX promotes collaboration with overseas exchanges, governmental organizations, and other entities in order to strengthen its business foundation. It concluded a memorandum of understanding in September 2022 with the New York Stock Exchange regarding support for cross-border investments between Japan and the U.S., a memorandum of understanding in November 2022 with JETRO regarding collaboration on activities such as information dissemination and the promotion of international collaboration and investment in Japan, and a memorandum of understanding in May 2023 with the Asian Development Bank regarding cooperation on activities such as the promotion of sustainable finance in the Asia-Pacific region.

In addition, JPX has joined international organizations such as the World Federation of Exchanges and the SSE Initiative and participates in discussions on international standards and in their development, aiming to promote sustainable investment.

Moreover, through its activities as the Secretariat for the Asian and Oceanian Stock Exchanges Federation, JPX has strengthened its collaboration with exchanges in Asia. It also cooperates with JICA to provide technical assistance abroad by offering training programs on the Japanese securities market for the employees of securities exchanges and other organizations in developing countries.



Long-term ESG target

Contribute to sustainable societal and economic development by providing solutions for a wide range of societal issues



Environmental Vision

Japan Exchange Group will maintain and further develop the capital market into one that can coexist with the environment, by creating a clear action plan on environmental issues and making ongoing efforts to reduce our environmental footprint

Aim for carbon neutrality in securities market operations (our value chain) by 2030

Utilizing Market Mechanisms to Promote Sustainability

- Promotion of action on sustainability issues and information disclosure at listed companies, through Japan's Corporate Governance Code
- Strengthening of sustainability-related information functions (further development of information platform for publicly offered ESG bonds, including functionality enhancement)
- Calculation of ESG indices and listing of related ETFs/futures
- Vitalization of the energy market, advancement of an emissions trading market (study and work towards the creation of a Japanese carbon credit market)

 UPDATED
- Promotion of use of Digitally Tracked Green Bonds that utilize digital securities

 UPDATED
- Enhancement of the "JPX ESG Knowledge Hub" to support listed companies' ESG information disclosure

Aiming for Carbon Neutrality across Group by FY2024

- Direct contribution to environmental conservation through owning our own renewable energy generation facilities - not just purchasing carbon credits
- Endorsement of METI's "GX League Basic Concept"

Aiming for Carbon Neutrality in Securities Market Operations (Our Value Chain) by 2030

 Working towards securities market operations that underpin a sustainable society by utilizing and implementing JPX's own initiatives in cooperation with market participants

TOPIC

Promotion of Use of Digitally Tracked Green Bonds

As part of its Green Strategy, JPX Group generates sustainable energy after using the proceeds from the Digitally Tracked Green Bond, which was issued in June 2022, to acquire solar power generation facilities on land that is also used for farming and biomass power generation facilities that use discarded cooking oil for fuel. In order to realize carbon neutrality, JPX Group not only purchases carbon credits but also implements initiatives that create environmental value themselves.

In addition, by issuing the Digitally Tracked Green Bond

as security tokens that utilize digital technologies such as blockchain, JPX Group has made the falsification of greenness indicator data more difficult. It is also enhancing the transparency of data on green investments and increasing the efficiency of its collection by providing a website that displays this data in a timely manner.

JPX Group will contribute to carbon neutrality in society as a whole by improving the convenience of this scheme to encourage broader usage by issuers and investors in the future.

CIO Message

Our Persistent Efforts at Stability and Reliability Will Supply Tailwinds for Business Creation and Innovation

Takura Satoshi

Executive Officer & CIO, Japan Exchange Group, Inc.

The Future Role of IT

JPX Group's systems play a role in the financial markets, and it is our duty to ensure the systems' stable operation. However, as the world continues to rapidly evolve due to new technologies, the growth of JPX Group will slow down if we make this our sole duty. Our solution to this issue is working in an integrated manner on the following two areas: "Areas needing steady progress" and "Areas needing swift responses."

For "Areas needing steady progress," we will intensify and advance efforts to develop and operate extremely reliable systems under rigorous quality control and prioritize the sound implementation of projects such as system upgrades. For "Areas needing swift responses," we will prioritize creating new value with a sense of urgency by actively building new system services and introducing advanced technologies to respond flexibly to business needs.

Preparing for Diverse Risks

In order to provide stable market functions, JPX Group has implemented various measures to reduce business continuity risks that could affect its systems. In promoting these measures,



the Group's IT departments make full use of their knowledge and intellectual capital gained through steady efforts over many years.

1 Preparing for system failures

With arrowhead 4.0, the next-generation cash equity trading system that we began developing in 2022, JPX Group aims to strengthen its response to system failure risks and provide even more reliable services by expanding its existing commitment to "Never Stop" to include "Resilience" in order to further ensure that recovery measures are prompt and appropriate.

2 Preparing for large-scale natural disasters

In order to minimize the risk of damage to multiple system bases in the event of a large-scale natural disaster, we have been building a backup data center in the Kansai region. Construction of the backup systems that are housed in the Kansai backup data center was completed in December 2022, and they serve as backup systems for the trading and clearing systems of the cash equity and derivatives markets. This will allow uninterrupted market and clearing operations for cash equities and derivatives even if a large-scale disaster, such as an earthquake occurring directly under the Tokyo metropolitan area, makes it impossible to continue operations there.

Opening Properties of the P

In response to the increasing risk of cyberattacks, we are constantly striving to make improvements, such as by establishing an in-house security countermeasure team, detecting incidents in real time, and having experts from external organizations conduct security assessments.

We will continue striving to improve the stability of market operations not only in preparation for system failures but also in preparation for natural disasters and cyberattack risks.

Using IT Knowledge to Create New Value

An exchange's IT serves as the foundation for the exchange not only to provide basic market functions such as placing and executing orders but also to create new value.

I believe that we can supply tailwinds for business creation and innovation by utilizing our IT departments' many years of knowledge and promoting the introduction of new technologies and the development of a data use environment that creates links both within and outside the Group.

"Target 2030"—JPX Group's long-term vision for 2030—sets forth the Group's goal of evolving into a global, comprehensive finance and information platform. I believe that using digital technology to create an environment that makes it easier for many stakeholders to use data will create new value.

In order to realize such an environment, JPX Group has created the foundational structures for digital transformation by consolidating its data and digital-related services into JPX Market Innovation & Research (JPXI), which was established in 2021. In addition, JPXI will work on an ongoing basis to strengthen and develop human resources to support the IT of JPX Group. It will strengthen and develop these resources through measures to utilize and develop highly skilled personnel, such as by establishing a recruitment framework to acquire specialists in the field of digital technology.

IT as a Source and Driver of Competitiveness

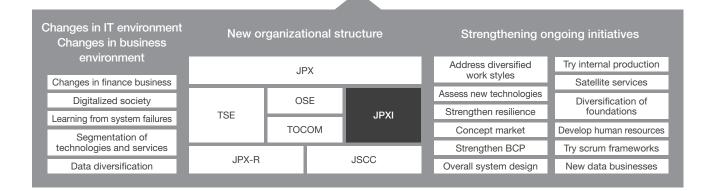
Areas needing swift responses

- Adapting to drastic changes in the external environment
- Providing a variety of services and improving their sophistication
- Optimally utilizing rapidly evolving technology Searching for technologies to support the
- diversification of businesses
- Assessing technologies and giving feedback under clear objectives

Unified promotion

Areas needing steady progress

- Steadily pushing forward with existing projects
- Increasing convenience, reliability and resilience as a market infrastructure
- Carrying out market operations through integrated business and IT teams
- Forming a clear view of aspects requiring a change



CFO Message

Supporting the Sustainable Development and Evolution of the Market by Making Constant Investments While Keeping a Balance between Shareholder Returns and Financial Stability for Stable Market Operations

Tabata Atsushi Senior Executive Officer & CFO, Japan Exchange Group, Inc.

Looking Back at FY2022

During FY2022, the tense global situation and other factors affected such things as commodity prices, interest rates, and currency fluctuations, which contributed to brisk trading throughout the year and resulted in the average daily trading value of cash equities hitting JPY 3.84 trillion, a record high for the second year in a row. Meanwhile, as part of a global trend, listing services revenue declined, mainly due to a drop in the amount of funds raised by listed companies. As a result, overall operating revenue decreased 1.1% year on year to JPY 133.9 billion.

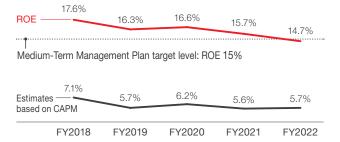
At the same time, operating expenses, particularly in the areas of (1) systems-related costs and (2) expenses related to various measures in the Medium-Term Management Plan 2024 (FY2022-FY2024), increased by 6.8% year on year to JPY 67.5 billion.

As a result, operating income decreased 7.1% year on year to JPY 68.2 billion. Net income (attributable to owners of the parent company) decreased 7.2% year on year to JPY 46.3 billion.

JPX Group's Capital Policy

It is extremely important that JPX Group maintains a stable financial base in order to ensure that we can always operate our markets stably and with a high level of user satisfaction, without being overly affected by Japanese and global economic conditions and financial policies, geopolitical risks, and other trends. In order to achieve this, we currently anticipate the minimum

Cost of shareholders' equity and return on equity (ROE)



required equity capital level to be around JPY 250.0 billion. In addition, in our Medium-Term Management Plan 2024 currently underway, we aim to achieve financial targets (operating revenue of JPY 147.0 billion, net income of JPY 53.0 billion, and ROE of at least 15%) by implementing a wide range of measures.

JPX Group recognizes the level of the cost of shareholders' equity at around 6% based on estimates of the CAPM, which is one of the indicators of the cost of shareholders' equity, which is the return expected by a company's shareholders. While we currently achieve an ROE that exceeds the cost of shareholders' equity, we will promote capital-efficient management even more in order to further improve our future ROE.



JPX will improve its overall earning power in various business fields through the revitalization of the Japanese stock market.

In addition, JPX will work to strengthen the functionality of its interest rate-related markets to prepare for future changes in the economic environment, as well as seek M&A opportunities as investments for inorganic growth.

Operating expenses, which continue to increase, will be suitably controlled by prioritizing projects with an attention to investment efficiency and by conducting business cost-effectively.

Balance sheet management/ Shareholder returns

While JPX's basic policy is to maintain a dividend payout ratio of approximately 60%, we will consider the additional return of surplus capital and cash/cash equivalents when appropriate, while taking the feasibility of M&As and other growth investments into account.

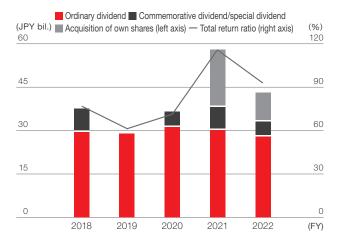
Shareholder Return Policy

As part of its fundamental shareholder return policy, JPX has announced a dividend payout ratio target of approximately 60% and continues to aim for this as a general rule. On top of that, JPX is considering the implementation of the additional return of profits in the form of surplus capital and cash to shareholders while taking capital efficiency and the feasibility of M&As and other growth investments into account.

In FY2022, JPX acquired approximately JPY 10.0 billion of its



Past total return ratios & total amount of shareholder returns



own shares and paid a commemorative dividend of JPY 10 per share that totaled JPY 5.2 billion. The total return ratio exceeded 90%. In line with JPX Group's capital policy, we will continue to flexibly and actively return profits to shareholders while taking the feasibility of growth investments into account.

Proactive Engagement with Shareholders and Investors to Enhance Corporate Value

I believe that one of the CFO's most important duties is to hold constructive dialogues with many stakeholders including shareholders, institutional and retail investors, and analysts. At JPX, actual meetings take place with either a director, an executive officer, or the department in charge of IR, depending on the purpose of the meeting or what is requested.

In FY2022, we held earnings and business briefings, as well as company briefings for retail investors, including a briefing on the Medium-Term Management Plan that was presented by the CEO. In addition, we exchanged views on JPX Group's growth and financial strategies individually with 136 Japanese and foreign investors and analysts. As FY2022 marks the first year of the Medium-Term Management Plan 2024, we have been engaged in a series of dialogues to carefully communicate our major initiatives for growth over the next three years in an easy-to-understand manner.

In order to increase JPX Group's corporate value, the understanding of its shareholders, investors, and other stakeholders is indispensable. We will listen to their feedback, understand what they need and lack, and use what we learn in our management.

To this end, the feedback that is obtained through dialogues is reported twice a year to the Board of Directors and quarterly to the whole company, including management. We aim to improve the quality of management by utilizing the feedback in JPX Group's growth and financial strategies. In addition, in order to stimulate dialogue with our stakeholders, we will strive to further enhance our disclosure of financial and non-financial information, with the aim of enhancing our corporate value.

Going forward, we look forward to your continued understanding and support as we continue to invigorate market activity to comprehensively boost our various earnings capabilities, while also responding to future changes in the economic environment by strengthening the functions of interest rate-related markets while investing in growth by actively seeking out M&A opportunities.

Approach to Creating New Value

JPX Group's Value Creation Strategies

The entire JPX Group, including subsidiaries and affiliates, engages in business related to the establishment and operation of financial instruments exchange markets and commodity markets so that market users can trade securities with confidence at all times. The markets established by the Group provide listed companies with financing opportunities, investors with asset management opportunities, and society as a whole with price discovery functions.

By further enhancing these functions and responding to changes in the global environment, the Group is working to realize its long-term vision "Target 2030: Contribute to sustainable societal and economic development by evolving into a global, comprehensive finance and information platform which provides solutions for a wide range of societal issues, centered on the ability to raise and circulate capital."

Tokyo Stock Exchange

Cash Equity Market | P.32 |

Osaka Exchange

Derivatives Market | P.35 |

Tokyo Commodity Exchange

Derivatives Market | P.36 |

JPX Market Innovation & Research
Market-Related Services | P.37 |

Japan Exchange Regulation
Self-Regulation | P.39 |

Japan Securities Clearing Corporation

Clearing | P.41 |



Tokyo Stock Exchange, Inc.

In our role as a core infrastructure supporting fundraising by companies and asset formation by the public, as well as supporting innovation and growth at companies, we will develop the primary and secondary markets so that the profits stemming from companies' efforts generate asset formation among the general public, leading back to further innovation and growth at companies



Iwanaga Moriyuki

Director & Representative Executive Officer, Group COO Japan Exchange Group, Inc. President & CEO Tokyo Stock Exchange, Inc.

Our Mission

- Realize an affluent society by building a sustainable and strong economic and social infrastructure, as well as by contributing to future asset formation by individuals, as a result of promotion of corporate value improvement at listed companies
- Realize fair and smooth price formation in the markets and contribute to the protection of investors and the sound development of the national economy through effective trading supervision
- In addition to stable market operations, improve market convenience and reliability through various measures that contribute to improving market functions

Major Stakeholders

• Listed companies*, investors, trading participants and clearing participants

*Includes companies that aim to be listed.

Perceived Strengths

- Listing of many companies representing the Japanese economy and providing funding opportunities to leading start-ups
- One of the world's largest markets, with a diverse investor base that includes retail investors as well as Japanese and overseas institutional investors
- Trust from and cooperation with market participants built over time
- Safe and reliable cash equity trading system

Perceived Risks

- Diminishing trading volume, decreasing supply of investment funds, and stagnating economic activity among listed companies and start-ups associated with a deteriorating market environment due to factors such as economic downturns in Japan and abroad
- Risk of no progress in enhancing quality of capital markets
- Reduced liquidity on the exchange due to a higher share of off-exchange trading

Growth Strategy

Creating Value

Tokyo Stock Exchange (TSE) operates Japan's leading stock market and serves as a core infrastructure that supports Japan's capital market. In order to increase the value of JPX Group, it is essential to increase the value of TSE, which is the core of the Group. To this end, we will demonstrate our presence as a place to be listed and a place to trade stocks of listed companies.

As a place to be listed, TSE has launched new market segments and is working to create a framework to promote autonomous initiatives by listed companies, including the promotion of management that is conscious of cost of capital and stock price, with the aim of realizing sustainable growth and medium- to long-term corporate value enhancement. We will continue to work closely with listed companies while implementing measures that enhance their corporate value. We will also strengthen growth support initiatives for start-ups so the fruits of these efforts lead to further innovation and growth.

The ability to provide liquidity so investors can buy and sell according to the requirements of their various needs at all times is an essential mission of TSE as a place to trade stocks. We have taken measures to improve the usability of our market including optimization of tick sizes and will continue to work on this.

In addition, the "Doubling Asset-Based Income Plan" formulated by the government included the drastic expansion and permanence of the NISA scheme and the enhancement of financial and economic education. As financial and economic education is positioned as a national strategy, TSE is increasing the significance of our position in this field by leveraging our unique position as a market operator and collaborating with related organizations to expand the NISA scheme.

In addition, the cash equity trading system is to undergo replacement in the latter half of FY2024. We will also continue to work diligently toward enhancing the system's resiliency as a market infrastructure, given TSE's significant responsibility for ensuring consistent access to stable markets.



Changes and Reviews Following the Market Restructuring

In April 2022, the three new market segments of TSE began operations. With the transition to new market segments, positive changes are occurring at many listed companies to improve corporate value, including initiatives based on new growth strategies, action on sustainability issues, and work to enhance corporate governance. To provide backing to these trends, TSE is discussing how to create better markets through the "Council of Experts Concerning the Follow-up of Market Restructuring." In January of this year, TSE published a summary of issues discussed at the Council's meetings along with its future actions in response to these.

The issues summarized and TSE's future actions consist of two main points.

The first point is the need to clarify the end date of transitional measures for the Continued Listing Criteria established for the transition to the new market segments, from the perspective of promoting a healthy industrial metabolism and increasing foresight for companies. Specifically, based on market assessments and the lengths of plans to meet the Continued Listing Criteria disclosed by listed companies, TSE has decided that, as a general rule, the transitional measures will end in March 2025, three years after the transition to the new market segments.

The second point is, from the perspective of revitalizing the Japanese stock market and by extension the Japanese economy, the need to provide motivation for companies, even those not at risk of falling under the transitional measures, to take

Special Feature

Enhancing the appeal of the Japanese market by boosting the corporate value of listed companies

Iwanaga Moriyuki

Director & Representative Executive Officer, Group COO Japan Exchange Group, Inc. President & CEO Tokyo Stock Exchange, Inc.

JPX GROUP

proactive measures to improve corporate value. With this in mind, TSE has decided to develop frameworks to promote autonomous initiatives at listed companies including the promotion of management conscious of cost of capital and stock price.

Increasing Corporate Value of Listed Companies

In order to promote efforts to increase the corporate value of listed companies, in March 2023, TSE issued a request for all listed companies on the Prime Market and Standard Market to take action aimed at implementing management that is conscious of cost of capital and stock price.

Although Japan's Corporate Governance Code has long indicated that management should be conducted with an awareness of the cost of capital from a medium- to long-term perspective, there are still many companies in the Japanese stock market with low return on equity (ROE) and price-to-book ratio (PBR). Against this background, the Council concluded that TSE should make a request to listed companies in hopes of raising awareness among and changing the behavior of listed company management.

Specifically, TSE has requested that listed companies conduct a series of actions on an ongoing basis. This starts with gaining a proper understanding of their cost of capital and profitability based on the balance sheet, and continues with analyzing and assessing the current situation around these and the market valuation at board of directors meetings, preparing and disclosing plans for improvement, and then using dialogue with investors to update these initiatives. Through conducting these actions, it is expected that, based on the basic management policy established by the board of directors, the management team will take the lead in appropriately allocating resources with sufficient consideration of cost of capital and profitability. This could be by pushing forward initiatives such as investment in



R&D and human capital that leads to the creation of intellectual property and intangible assets that contribute to sustainable growth, investment in equipment and facilities, and business portfolio restructuring.

At the same time, we strongly request institutional investors, who are responsible for dialogue with listed companies, to play a role in supporting corporate efforts, including constructive dialogue based on disclosures associated with the request.

Investors support listed companies that make decisive efforts to increase corporate value, which leads listed companies to accelerate these efforts. Through the creation of such a virtuous cycle, TSE will continue to make every effort to enhance the attractiveness of the market, thereby contributing to the sustainable growth of the Japanese economy and the realization of an affluent society.



Osaka Exchange, Inc.

By pursuing a convenience that takes the needs of Japanese and foreign market participants into account, we can provide efficient and effective hedging and asset management opportunities as a hub for circulating capital in the Asia-Pacific region, develop Japan's markets, and contribute to improving their global presence.

Our Mission

 Through the proper operation of a convenient and transparent listed derivatives market, we will provide Japanese and foreign market participants with efficient and effective hedging and asset management opportunities, provide solutions in response to societal issues and economic conditions in Japan and abroad, and sustainably develop the listed derivatives market.

Major Stakeholders Investors*, society and the environment, trading participants and clearing participants

*Includes business corporations and other commercial traders.

Perceived Strengths

- Our reliability as a market operator that we have built over time as both a traditional securities exchange and a pioneering derivatives exchange
- Our position as a Comprehensive Exchange that handles a wide range of listed derivative products whose underliers are stock price indices, securities, government bonds, interest rates, and commodities under the Financial Instruments and Exchange Act
- Our diverse base of market participants as typified by Nikkei 225 Futures and its resulting high market liquidity

Perceived Risks

- Risk of reduced liquidity due to a decrease in trading volume caused by factors such as a diminished demand for the use of hedging against price fluctuation risks, which is prompted by an economic slowdown and/or changes in industrial structures in Japan or abroad
- Risk of reduced liquidity due to competition with Japanese and foreign exchanges and/or alternative markets that handle similar products

Yokoyama Ryusuke

Director and Executive Officer, Japan Exchange Group, Inc. President and CEO, Osaka Exchange, Inc. Representative Director and Chair, Tokyo Commodity Exchange, Inc.



Growth Strategy

Creating Value

Osaka Exchange (OSE) and Tokyo Commodity Exchange (TOCOM) operate the integrated JPX Group derivatives markets as a "Comprehensive Exchange," which is a single platform that handles a wide range of listed derivative products whose underliers are stock price indices, securities, government bonds, interest rates, and commodities.

In May 2023, OSE began listing smaller-sized products (Nikkei 225 micro Futures and mini Options) in response to those with more detailed risk management needs and in order to increase convenience for retail investors. In addition, amidst a growing focus on the yen interest rate market both in Japan and abroad, OSE has listed 3-Month TONA Futures in order to provide trading opportunities for both long- and short-term interest rates. Both initiatives are aimed at increasing the number of market participants by responding to new needs.

With the launch of LNG futures in April 2022, TOCOM has put together a lineup of major energy-related products, which

also includes crude oil futures, petroleum-related futures, and electricity futures. TOCOM will continue to pursue its goal of being a fair and extremely convenient comprehensive energy market by providing hedging opportunities in response to the energy situation both in Japan and abroad so that it can contribute to the sustainable development of the Japanese economy.

In September 2022, both exchanges began allowing the holiday trading of derivatives to further improve convenience by providing hedging opportunities on holidays. Its use has exceeded our expectations, and we will continue to promote its widespread adoption.

By expanding our product lineup, increasing our investor base, and providing new trading opportunities, we strive to "invigorate the derivatives market" as set forth in JPX Group's Medium-Term Management Plan 2024.

Tokyo Commodity Exchange, Inc.

As a "comprehensive energy market" that handles major energy products ranging from fuel to electricity and that is closely tied to industrial policies that are promoted by the Japanese government, we provide an extremely convenient market for Japanese and foreign commercial traders and contribute to the stability and development of industries in Japan and Asia.

Our Mission

 Through the proper and sound management of the energy market, we will facilitate the production and distribution of energy-related products by ensuring that they are fairly priced and by providing hedging opportunities.

Major Stakeholders

- Investors*, society and the environment, trading participants and clearing participants
- *Includes business corporations and other commercial traders.

Perceived Strengths

- Our position as an energy market that is closely tied to industrial policies that are promoted by the Japanese government
- Our knowledge of and experience at managing the market for energy products
- The trust and cooperation that we have built over time with market participants

Perceived Risks

- Risk of being unable to provide the liquidity that is expected by commercial hedgers due to a decrease in the number of trading participants who engage in the brokering of customer orders and the delivery of commodities
- Risk of reduced liquidity due to competition with foreign exchanges and/ or alternative markets handling similar products

CLOSE-UP

Revitalization of the comprehensive energy market

TOCOM's energy market, which provides hedging opportunities, plays an important role as an industrial infrastructure as the focus is on securing stable supplies of affordable energy—essential both for industry and for daily life—amidst the recent supply-demand crunch and soaring energy prices.

The trading of electricity futures, which were permanently listed in 2022, has been steadily increasing, with the number of market participants having grown substantially to more than 160 companies, as opposed to 13 companies at the beginning of the trial listing. In January 2023, we concluded an MOU with the Japan Electric Power Exchange to promote the development of the electricity spot and futures markets and their efficient management and to further mutual cooperation for the creation of valuable services. As Japan is the world's fourth largest consumer of electricity, we expect the electricity market here to continue to grow.

With our experience in managing the market in line with industrial policies, TOCOM will continue to promote a sustainability that utilizes market mechanisms by striving to stimulate the market and improve its convenience through close communication with the authorities and market participants and by increasing our value as an industrial infrastructure.

Ishizaki Takashi

Executive Officer Japan Exchange Group, Inc. Representative Director, President Tokyo Commodity Exchange, Inc.



JPX Market Innovation & Research, Inc.

As an organization that serves a central role in JPX Group's strategic business development by consolidating JPX Group's index, data and digital-related services, we will contribute to bolstering the competitive strengths and status of Japan's financial and capital markets while actively creating diverse market services that address new demand.

Miyahara Koichiro

Director and Executive Officer Japan Exchange Group, Inc. President & CEO JPX Market Innovation & Research, Inc.



Creating Value

Centered on index, data, and digital services, JPX Market Innovation & Research, Inc. (JPXI) engages in initiatives that contribute to enhancing the competitive strengths of Japan's financial and capital markets, while also playing a key role in creating the global, comprehensive finance and information platform "G-HUB" as set out under Target 2030.

JPXI's current operations, specifically calculating and disseminating indices, furnishing various forms of data, and providing infrastructure such as network and information systems, can be considered as the foundation of the reliability of JPX Group's overall market operations. As such, we will continue solidly operating these services given that they serve as key businesses that account for a substantial portion of our revenues. In addition, we will also resolutely continue to take on the challenge of creating new value through projects such as creating a digital securities market, which is a new field for us, and expanding indices and data services that address various societal issues including ESG.

More specifically, in addition to new development of the "JPX Prime 150 Index" for the purpose of further improving the appeal of the Japanese stock market through the promotion of value creation by listed companies, we will also actively explore initiatives including providing financial products and services that utilize new technologies such as security tokens, and enhancement of frameworks and services that support corporate value improvement and enhanced information dissemination, including ESG information, at listed companies. We aim to achieve our objectives in these fields by utilizing cooperative relationships with external partners, including M&A and capital alliances.



CLOSE-UP

Advancing into new areas with JPX Market Innovation & Research

Utilizing cooperative relationships with external partners, JPXI is boldly taking on the challenge of creating diverse market services, including in new areas that JPX Group has never explored, to build foundations for the global, comprehensive finance and information platform (G-HUB) looking ahead to 2030 while also strengthening the competitiveness of Japan's financial and capital markets.

In the index field, we announced the outline of the "JPX Prime 150 Index" in March 2023 which selects stocks from among the top-ranked companies listed on the Tokyo Stock Exchange Prime Market by market capitalization based on two measures of value creation, namely "return on capital" based on financial results and "market valuation" which also incorporates future information and non-financial information. Through the JPX Prime 150 Index, we aim to visualize the penetration of value-creating management and the leading Japanese companies that are expected to create value.

With the goal of solving various societal issues including those around ESG, provide a varied index lineup and enhance functions related to dissemination of ESG information

- Create an environment that attracts domestic and overseas investors to Japan's financial and capital markets by supporting listed companies in disseminating information and improving their corporate value
- Contribute to the efficiency of the market and the sophistication of information usage through the creation of a digital securities market, the development of new services that utilize digital technology, and the enhancement of investment-related information

Major Stakeholders

Our Mission

- Listed companies, investors, society and environment, trading participants and clearing participants, business partners*
- *In addition to collaborating with information vendors for activities such as joint calculation of indices, we are collaborating with start-up companies for new initiatives.

Perceived Strengths

- A strong client base centered on TOPIX and a highly fair, transparent, and neutral index management system
- Ability to develop market services built on foundations and know-how cultivated as a market infrastructure
- Extensive track record of using AI, blockchain, cloud and other digital technologies and cooperating with external partners

Perceived Risks

- Intensifying international competition in the data business field
- Decline in the number of service users due to diminishing appeal of Japan's financial and capital markets

JPX GROUP

As for the digital field, to promote the creation and expansion of a digital securities market for Japan, JPX Group invested in BOOSTRY, Co., Ltd. in March 2023, which provides a security token issuance and management platform. As well as this, since December 2022, joint research on establishing a joint venture company for the digital asset business has commenced with six partner companies, including Mitsubishi UFJ Trust and Banking Corporation.

Furthermore, as part of our work to support listed companies in disseminating information and improving their corporate value, in July 2022 we invested and entered into a capital and business alliance with Minsetsu, Inc., which operates the IR communication platform "Minsetsu." In February 2023, we also made SCRIPTS Asia, K.K. a wholly owned subsidiary. This entity prepares the minutes of events held by listed companies for investors, translates them into English, and distributes them to domestic and overseas institutional investors and securities companies. We aim to contribute to the expansion and revitalization of the Japanese stock market by enabling more constructive dialogue through enhancement of the operational efficiency of dialogue between listed companies and investors/ shareholders and the amount of information that is shared.



- Operates "Minsetsu," which provides information on earnings briefings and coordinates meeting schedules for listed companies and investors
- July 2022: Capital and business alliance



- Prepares and distributes minutes of events (in Japanese and English) held by listed companies for investors
- February 2023: Became a wholly owned subsidiary

Our Mission

 Contributing to facilitating the cycle of sustainable corporate growth and asset formation among the public by supporting sustainable development of markets through self-regulatory functions, including maintaining listed company eligibility, preventing unfair trading, and ensuring soundness of securities companies and other trading participants

Major Stakeholders Investors, listed companies, trading participants and clearing participants

Perceived Strengths

- Organizational structure that enables management and operations from a neutral position
- Substantial expertise based on familiarity with market functions and characteristics

Perceived Risks

- Emergence of new types of unfair trading accompanying shift to more sophisticated and rapid trading methods
- Impairment of market credibility due to incidents of fraudulent accounting among listed companies and companies applying for listing

Japan Exchange Regulation

In order to ensure and enhance credibility with respect to markets, as well as market fairness and transparency, we aim to better engage in self-regulatory operations that instill trust in market users by closely cooperating with government authorities and relevant organizations in Japan and abroad, and also by appropriately addressing environmental changes.

Hosomizo Kiyoshi

President Japan Exchange Regulation

JPX GROUP

Growth Strategy

Creating Value

Japan Exchange Regulation (JPX-R) is a corporate body that is established under Japan Exchange Group (JPX) to specialize in self-regulatory operations of financial instruments exchanges under the Financial Instruments and Exchange Act of Japan. It is entrusted by the market operators Tokyo Stock Exchange (TSE) and Osaka Exchange (OSE) to take on self-regulatory operations that consist of: "listing examinations" to examine the eligibility of prospective listed companies; "listed company compliance," which involves monitoring information disclosure and corporate conduct; "trading participants examination and inspection" to ensure the reliability of operations of securities companies and other trading participants; and "market surveillance" to monitor the market for unfair trading.

Our mission is to ensure the fairness and transparency of financial instrument exchanges through self-regulatory operations, thereby increasing society's trust in the market. In order to continue fulfilling this mission, we must respond appropriately to various changes surrounding the market. In FY2022, under the new TSE market segments, we clarified the methods for listing examinations of deep tech companies while steadily implementing effective self-regulatory operations based on the characteristics of each segment. Two years have passed since JPX Group evolved into a Comprehensive Exchange. In addition to initiatives to improve internal control systems such as monitoring, examinations, and seminars for commodity futures trading participants, we also provided a collection of case studies and held Compliance Learning Center (COMLEC) courses for trading management departments of trading participants. Going forward, JPX-R aims to better engage in self-regulatory operations that gain the confidence of market users by working closely with market operators as well as government authorities and related organizations in Japan and abroad.

CLOSE-UP

Listing examination and listed company compliance in line with changes in the market and societal environment

Given that fostering start-ups is the key to promoting the dynamism and growth of the Japanese economy and solving societal issues, various measures are being implemented by the government, including the items listed in the Grand Design and Action Plan for a New Form of Capitalism. Amidst these circumstances, TSE has revised the listing system for IPOs to diversify initial listing methods for start-ups, including facilitating a smoother process for initial listings and enabling Direct Listings. The Listing Examination Department, which examines the eligibility of companies that wish to be listed, conducts necessary reviews of practices as needed in order to conduct appropriate listing examinations in line with such changes in the market and societal environment.

In FY2022, we clarified listing examination methods for R&D-type companies (deep tech) aiming to discover new markets utilizing new technologies in innovative industries such as space exploration. These methods included the utilization of investment valuations from institutional investors, based on the recognition that companies in these industries are in the process of developing their technologies and business models, making the evaluation of corporate value relatively challenging.

In addition, given that FY2022 was the first year after the transition to the new market segments, the Listed Company Compliance Department, which checks information disclosure and corporate behavior of listed companies, considered and implemented necessary measures while paying close attention to the discussions regarding the timing to end transitional measures for the Continued Listing Criteria and other related topics. More specifically, in addition to conducting examinations based on the characteristics of each market segment in accordance with revisions to Japan's Corporate Governance Code, in light of the increased risk of fraud associated with the termination of transitional measures, if concerns regarding the internal control systems of listed companies arise, we are also implementing measures to prevent violations of listing rules and encourage early improvement of internal control systems through visits to listed companies, online interviews, or other means.

Going forward, we will continue to implement appropriate listing examinations and listing management in line with changes in the market and social environment while fostering close collaboration between related departments of JPX Group and market stakeholders.





Japan Securities Clearing Corporation

By utilizing our track record and competitiveness as the leading clearing house in Japan to offer more efficient and trustworthy clearing services to a diversifying market, we provide an environment where clearing participants, and therefore investors, can trade securely and smoothly.

JPX GROUP

Konuma Yasuyuki

Director and Executive Officer
Japan Exchange Group, Inc.
President & CEO
Japan Securities Clearing Corporation



Growth Strategy

Creating Value

By providing clearing services to the market, Japan Securities Clearing Corporation (JSCC) plays an important role behind the scenes, supporting the market through improving settlement efficiency and ensuring transaction security. In order for JSCC to contribute to the creation of value for JPX Group through the development of markets, we believe it is important to strive to continuously improve risk management based on global best practices, in addition to providing clearing services to as many markets as possible. Some examples of these efforts are providing clearing services for new products introduced by the exchanges such as 3-Month TONA Futures, and the introduction of the VaR method for margin which enables more precise risk calculations and is being adopted for futures and options trading globally.

As a social infrastructure that provides services to various markets, the strengthening of JSCC's business continuity framework for emergencies holds even greater significance for JPX Group's value creation in view of future expansion of services.

We are also working to implement new technologies such as distributed ledger technology (DLT) in fields where JSCC provides services. By utilizing these new technologies, we believe that we can contribute to improving convenience for clearing participants and other market stakeholders, as well as to revitalizing the market.

Leveraging our track record and competitiveness as Japan's leading clearing house, JSCC will continue to strive to meet the expectations of clearing participants, as well as a broad spectrum of investors, by augmenting and improving secure and convenient clearing services.

Our Mission

 Contributing to sustainable development of the market economy by providing the foundations for abundant liquidity and smooth price formation for diverse markets, whether on exchange or over the counter, through improving settlement efficiency and ensuring trade security

Major Stakeholders

 Trading participants and clearing participants, investors

Perceived Strengths

- 20 years of experience in providing clearing functions to various markets in Japan
- High-level risk management with an awareness of global standards
- Providing centralized clearing services for various trades
- Highly convenient clearing services through close communications with domestic and international clearing participants

Perceived Risks

- Risk of inability to complete an appropriate default settlement of a clearing participant, which has a significant impact on other clearing participants and in turn the entire market, due to inadequate or inappropriate operation of risk management systems
- Risk of difficulty to continue operations as the social infrastructure that supports the market economy due to events such as system failures and natural disasters

CLOSE-UP

Introduction of VaR Margin for futures and options trading

JSCC guarantees the settlement of trades by clearing participants on exchange and over the counter. However, to prepare for a situation where a clearing participant goes bankrupt, JSCC requires clearing participants to deposit margin as collateral to cover losses pertaining to the bankruptcy.

Although the required amount of margin to be

deposited with JSCC for futures and options trading is currently calculated using SPAN, which was developed by CME, we are preparing to introduce the VaR method for calculating margin in November 2023 with the aim of both suppressing rapid fluctuations in margin levels and improving the original function of margin, which is to protect customers and clearing participants through more sophisticated risk management.

Utilization of DLT technology for settlement by delivery of rubber futures transactions

JSCC is also working to utilize new technology in the clearing and settlement fields. From January 2023, we have implemented DLT technology for settlement by delivery of rubber futures transactions as the first step in utilizing this technology. In the past, settlement by delivery of rubber futures transactions was carried out through the exchange of documents called delivery orders. Due to the efforts of JSCC, we are shifting to a method of online exchange of tokens that record information on the delivery instructions. As a result, the creation and transportation of delivery orders, which had taken place between seller and buyer for each delivery by settlement of rubber, are no longer necessary and the process can all be completed online.

Going forward, we will strive to expand these methods for improving convenience to futures trading of precious metals such as gold, silver, and platinum, which have higher liquidity than rubber, while also keeping an eye on relevant changes in laws.

Rubber futures delivery

