3. The Foundations of Value Creation

The foundations of JPX’s corporate value creation lie in two places: establishing appropriate corporate governance, and, through dialogue, meeting the expectations of a wide range of stakeholders such as listed companies, trading participants such as securities companies, investors and other related organizations. While continuously striving to improve corporate governance so that it functions more effectively, we proactively seek dialogues with each stakeholder, and engage in various activities in our role as a member of society, beginning with the operation of our market.
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.
Corporate Governance

JPX is committed to developing its corporate governance system in the most suitable way for fulfilling its social mission as the core infrastructure of the Japanese market.

Fundamental 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 fundamental views on corporate governance from the following four perspectives.

- **Corporate Philosophy and Social Mission**
  JPX Group operates markets that are a public asset and fulfills its social mission by pursuing the sustainable development of its markets.

- **Enhanced Corporate Value**
  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.

- **Effective Corporate Governance**
  JPX strives to constantly improve its corporate governance system to further facilitate effective and useful systems, so as to support the sustainable development of its markets.

Corporate Governance System

JPX clearly segregates the management oversight and business execution functions and adopts the structure of a company with three committees (nomination, audit and compensation) to strengthen oversight and raise the transparency of management.

Corporate Governance System Diagram

1. **General Shareholders Meeting**
   - Comprised of 5 directors, including 4 outside directors
   - Decides on proposals regarding the appointment and removal of directors to be submitted at general shareholders meetings, etc.

2. **Board of Directors**
   - Comprised of 5 directors, including 3 outside directors
   - Determines the compensation, etc. of each director and executive officer

3. **Audit Committee**
   - Comprised of 5 directors, including 4 outside directors
   - Conducts audit on the execution of director and executive officers’ duties, prepares audit reports, and decides on proposals regarding the election and dismissal of the accounting auditor, as well as the disengagement of the accounting auditor

4. **Risk Policy Committee**
   - Comprised of 5 members, including 3 outside directors and 1 executive officer
   - Examines/discusses important risks, compiles the results of such deliberations, and submits recommendations to the Board of Directors in the form of a statement on comprehensive risk management

5. **Board of Executive Officers**
   - Discusses important matters regarding aspects including business strategy, management, and finances concerning the corporate group

6. **CEO**

7. **Internal Auditing Office**
   - Reports directly to CEO and COO and conducts internal audit

8. **Audit Committee Office**
   - Comprised of dedicated staff to support members of the Audit Committee and performs work related to the committee
Composition of the Board of Directors

The JPX Board of Directors is comprised of 14 members, including two women. To strengthen the board’s functions, namely increasing the transparency and accountability of management and supervising the appropriateness of business execution, the composition of the board includes nine independent outside directors, constituting a board majority, and an independent outside director as non-executive Chairperson.

The breakdown of the nine independent outside directors is as follows: three corporate managers, one legal professional, one certified public accountant, and four 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.

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.

### Board of Directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Responsibilities</th>
<th>Areas of Expertise of Independent Outside Directors</th>
<th>Committee Memberships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiroki Tsuda</td>
<td>Independent Outside Director of the Board of Directors</td>
<td>- - - - - -</td>
<td>Nomination, Compensation, Audit, Independent outside directors</td>
</tr>
<tr>
<td>Akira Kiyota</td>
<td>Director and Representative Executive Officer, Group CEO</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Koichiro Miyahara</td>
<td>Director and Executive Officer President &amp; CEO, Tokyo Stock Exchange, Inc.</td>
<td>- - - - - -</td>
<td>-</td>
</tr>
<tr>
<td>Hiromi Yamaji</td>
<td>Director and Executive Officer President &amp; CEO, Osaka Exchange, Inc.</td>
<td>- - - - - -</td>
<td>-</td>
</tr>
<tr>
<td>Hironaga Miyama</td>
<td>Director and Executive Officer President &amp; CEO, Japan Securities Clearing Corporation</td>
<td>- - - - - -</td>
<td>-</td>
</tr>
<tr>
<td>Christina Ahmadian</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>Nomination, Compensation, Audit, Independent outside directors</td>
</tr>
<tr>
<td>Nobuhiro Endo</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Hitoshi Ogita</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Hideaki Kubori</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Main Kohda</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Eizo Kobayashi</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Makoto Minoguchi</td>
<td>Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Kimitaka Mori</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Tsuyoshi Yoneda</td>
<td>Independent Outside Director</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
</tbody>
</table>

Note: "O" indicates the director is the chairperson of the committee.

---

JPX Report 2019 29
Independent Outside Directors Committee

JPX has 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.

### Independent Outside Directors Committee

<table>
<thead>
<tr>
<th>Objectives</th>
<th>For independent outside directors to exchange information and form consensus. <em>The chairperson of the board, the CEO, and other members of management may participate upon the request of the committee.</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of meetings</td>
<td>In principle, at least twice a year <em>The committee chairperson convenes meetings as needed.</em></td>
</tr>
<tr>
<td>Committee Chairperson</td>
<td>The committee chairperson convenes meetings and presides over them. When the committee deems it necessary for ensuring smooth communication, the committee chairperson may report the content of the discussions of the committee to the chairperson of the board, the CEO, and other members of management.</td>
</tr>
</tbody>
</table>

Risk Policy Committee

JPX has 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 32.

Evaluating the Effectiveness of the Board of Directors

At JPX, the Board of Directors analyzes and assesses its own effectiveness based on interviews with and surveys completed by all board members. The Independent Outside Directors Committee is tasked to conduct the evaluation to increase the objectivity and transparency of the evaluation process.

For information on the evaluation process, an overview of evaluation results and other related matters, please refer to the Company’s Corporate Governance Report.

WEB Corporate Governance Report
https://www.jpx.co.jp/english/corporate/governance/policy/

### Board Effectiveness Evaluation Cycle

- **All Directors**: Self-assessment by interview and/or survey
- **Other members of management**: Consideration of improvements, etc.
- **Independent Outside Directors Committee**: Evaluation of improvements, etc.
- **Board of Directors**: Confirmation of evaluation, improvements, etc.
- **Independent Outside Directors Committee**: Review
2. Strategies for Creating Value

Director and Executive Officer Remuneration and Factors for Determining Remuneration

Remuneration is comprised of (1) basic salary, (2) bonuses, and (3) JPX stock. The policies, etc. regarding decisions on each type of compensation are as follows. (1) Basic salary: Basic salary is determined in accordance with each executive’s position and duties as consideration for their everyday execution of duties and participation in management, and with reference to the level of executive remuneration at other companies, based on research by external expert organizations and other sources. (2) Annual incentive (bonus): An annual incentive (bonus) is paid to Executive Officers using net income (refers to net income attributable to owners of the parent company on the consolidated statement of income, hereinafter the same) as the indicator. Net income is used as the indicator for two major reasons: first, because it is a source of funds for dividends to shareholders and for investment aimed at corporate value creation, and second, because the bonus corresponds to each fiscal year, and it is therefore appropriate to base it on net income earned in the corresponding fiscal year. Specifically, the annual incentive primarily consists of an amount proportional to net income and an amount based on net income’s rate of change from the preceding fiscal year. (3) Medium-to-long-term incentive (stock remuneration): The medium-to-long-term incentive (stock remuneration) is paid to Executive Officers with the aim of aligning the interests of executives closer to those of shareholders, providing motivation for corporate value creation over the medium to long term, and strengthening the link between performance and compensation. JPX stock remuneration utilizes a share delivery trust framework and is comprised of a fixed amount and a performance-linked amount. For the fixed amount, executives are issued points every fiscal year in accordance with their position, etc., and are awarded stocks corresponding to these points three years later. For the performance-linked amount, all executives are given performance-linked base points each fiscal year. Three years later, stocks are awarded corresponding to the final tally of performance-linked base points, which is calculated by multiplying the performance-linked base points with a coefficient based on the degree of achievement of certain performance conditions. The above-mentioned co-efficient is set within a 0–150% range, based on the following conditions: (i) the Company’s consolidated ROE exactly three years from the issuance date of the performance-linked base points and (ii) a comparative assessment of Total Shareholder Return (TSR) and the performance of the JPX-Nikkei Index 400 (total return index) for the three-year period from the end of the fiscal year before the performance-linked base points were issued. Consolidated ROE is used as an indicator from the perspective of improving capital efficiency, while TSR is used from the perspective of improving value for shareholders. With a view to the success of JPX Group’s 3rd Medium-term Management Plan, launched in FY2019, the Compensation Committee, which was convened on March 26 and April 19, 2019, has implemented a review of performance-linked remuneration for Executive Officers. Specifically, the committee’s measures include integrating the annual incentive (bonus) linked to net income’s rate of change from the preceding fiscal year into the amount that is proportional to net income. The new rules will apply from FY2019.

Compensation Paid to Directors and Executive Officers

<table>
<thead>
<tr>
<th>Classification</th>
<th>No. of Recipients</th>
<th>Total Amount Paid (JPY million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director (Outside)</td>
<td>10</td>
<td>164</td>
</tr>
<tr>
<td>(9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Officers</td>
<td>6</td>
<td>410</td>
</tr>
</tbody>
</table>

Notes: 1. Four Directors serving concurrently as Executive Officers do not receive compensation as Directors and are therefore not included in the number of recipients. Furthermore, one Executive Officer serving concurrently as Director of Tokyo Stock Exchange, Inc., one Executive Officer serving concurrently as Director of Osaka Exchange, Inc., and one Executive Officer serving concurrently as Director of Japan Securities Clearing Corporation do not receive compensation as Executive Officers and are therefore not included in the number of recipients. 2. The payment amounts above include the following: (1) The amount of basic salary awarded in accordance with position and duties of each executive, in consideration of their everyday execution of duties and management participation. (2) An amount of JPY 128 million in annual incentive (bonus) for Executive Officers determined at the Compensation Committee meeting held on April 19, 2019. (3) An amount of JPY 95 million in medium-to-long-term incentive (stock remuneration) for Executive Officers recorded as expenses in the fiscal year under review.

The Remuneration System

![Image of the Remuneration System]

3. The Foundations of Value Creation
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, chaired by the CEO, and Risk Management Committee, chaired by an outside director, 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. As a rule, 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 chairperson), the Executive Officer overseeing the General Administration Department, and the director of the department make up the core members, while the chairperson 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
1. **Overview of JPX**

2. **Strategies for Creating Value**

3. **The Foundations of Value Creation**

<table>
<thead>
<tr>
<th>Risk Phenomena</th>
<th>Risk Scenarios</th>
</tr>
</thead>
</table>
| Risks that could impact JPX business continuity and business operations | • 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 | • 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 |
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-

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 (back-up) 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 a bid to help further enhance the reliability of the Japanese market, the decision was made to construct a new secondary (back-up) center in a remote area of the Kansai region, where in the case of a disaster such as a major large-scale earthquake in the Tokyo Metropolitan area, there would be little or no fear of damage to societal infrastructure causing a shortage of essential services such as electricity. The new secondary (back-up) center is scheduled to come online progressively from FY2021.

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 Business Continuity Plan
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 has a 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/governance/internal-control/index.html

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.

WEB  Compliance Program  
https://www.jpx.co.jp/english/corporate/governance/compliance/index.html

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.

Organizational System

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. JPX has a Compliance Hotline in place to provide a channel for reporting information and making inquiries regarding clear or suspected violations of laws and internal rules, including against the Charter of Corporate Behavior. When certain behavior involving JPX officers or employees is suspected to be in violation of compliance, the hotline makes it possible to detect such acts promptly from an incoming call and introduce measures and frameworks to address them.

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.
Directors

Hiroki Tsuda
Independent Director,
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: 1,400 shares

Akira Kiyota
Director and Representative Executive Officer, Group CEO

Apr. 1969 Joined Dawa Securities Co., Ltd. (currently Dawa 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, Dawa Securities SB Capital Markets Co., Ltd. (currently Dawa Securities Co., Ltd.)
Jun. 2004 Deputy Chairman of the Board and Corporate Executive Officer, Dawa Securities Group Inc.
Chairman of the Institute, Dawa Institute of Research Ltd.
Jun. 2008 Chairman of the Board and Corporate Executive Officer, Dawa 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: 50,193 shares

Koichiro Miyahara
Director and Executive Officer

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: 28,837 shares
3. The Foundations of Value Creation >> Corporate Governance Initiatives

Directors

Interview with Hiroki Tsuda, Chairperson of the Board of Directors

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)
Pres. & 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: 18,989 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: 15,473 shares

Christina Ahmadjian
Independent Director, Outside Director

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)
Mar. 2019 Outside Director, Asahi Group Holdings, 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.
Outside Director, Asahi Group Holdings, Ltd.
No. of Company shares held: 1,400 shares

Member of the Compensation Committee
Member of the Audit Committee

JPX Report 2019
1. Overview of JPX

2. Strategies for Creating Value

3. The Foundations of Value Creation

4. Financial and Corporate Data

Nobuhiro Endo
Independent Director, Outside Director

Hitoshi Ogita
Independent Director, Outside Director

Hideaki Kubori
Independent Director, Outside Director

Main Kohda
Independent Director, Outside Director

Jun. 2019  Outside Director, Sumitomo Dainippon Pharma Co., Ltd. (current position)  
Chairman of the Board, NEC Corporation (non-executive) (current position)
Outside Director, Tokio Marine Holdings, Inc. (current position)
Significant Concurrent Positions:
Chairman of the Board, NEC Corporation (non-executive)
Outside Director, Sumitomo Dainippon Pharma Co., Ltd.
Outside Director, Tokio Marine Holdings, Inc.
No. of Company shares held: 1,200 shares

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

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: 4,400 shares

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
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: 1,100 shares

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. 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, MITSUBISHI MOTORS CORPORATION
No. of Company shares held: 1,900 shares

Member of the Nomination Committee
Member of the Independent Outside Directors Committee (Chairperson)
Member of the Risk Policy Committee (Chairperson)
Member of the Risk Policy Committee
Member of the Audit Committee
Member of the Nomination Committee
3. The Foundations of Value Creation >> Corporate Governance Initiatives

Corporate Governance Risk Management Internal Control Systems and Compliance Directors

Interview with Hiroki Tsuda, Chairperson of the Board of Directors

Kimitaka Mori
Independent Director, Outside Director

Apr. 1984 Joined Tokyo Stock Exchange
Jun. 2007 Director, General Administration Department, Tokyo Stock Exchange Group, Inc.
Aug. 2007 Director, Tokyo Stock Exchange Regulation (currently Japan Exchange Regulation)
Jun. 2011 Director, Chairman
Jun. 2013 Director, Chairman
Jun. 2015 External Director, Japan Airlines Co., Ltd. (current position)
Jun. 2016 Outside Director of the Company (current position)
Chairman, ITOCHU Corporation (current position)

Makoto Minoguchi
Director

Apr. 1980 Joined Shinwa Accountants (currently KPMG AZSA LLC)
Jun. 2000 Representative Partner, Asahi & Co. (currently KPMG AZSA LLC)
Jun. 2004 Director of financial services, KPMG AZSA & Co. (currently KPMG AZSA LLC)
Jun. 2006 Board Member, KPMG AZSA & Co.
Jul. 2011 Chairman, KPMG FS Japan
Jun. 2013 Retired from KPMG AZSA LLC
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)

Tsuyoshi Yoneda
Independent Director, Outside Director

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)

Eizo Kobayashi
Independent Director, Outside Director

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 External Director, Japan Airlines Co., Ltd. (current position)
Jun. 2016 Outside Director of the Company (current position)
Chairman, ITOCHU Corporation (current position)

Significant Concurrent Positions:
Senior Representative for Business Community Relations, ITOCHU Corporation (current position)
Statutory Auditor, Tokyo Stock Exchange, Inc.
No. of Company shares held: 3,300 shares

Makoto Minoguchi
Director

Apr. 2017 Managing Director and Executive Officer
Jun. 2017 Director of the Company (current position)
Statutory Auditor, Tokyo Stock Exchange, Inc.
No. of Company shares held: 7,900 shares

Kimitaka Mori
Independent Director, Outside Director

Apr. 1984 Joined Tokyo Stock Exchange
Jun. 2007 Director, General Administration Department, Tokyo Stock Exchange, Inc.
Aug. 2007 Director, 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

Significant Concurrent Positions:
Certified Public Accountant
Outside Corporate Auditor, SUMITOMO LIFE INSURANCE COMPANY (current position)
No. of Company shares held: 2,800 shares

Tsuyoshi Yoneda
Independent Director, Outside Director

Significant Concurrent Position:
Outside Corporate Auditor, Marubeni Corporation
No. of Company shares held: 2,500 shares

Eizo Kobayashi
Independent Director, Outside Director

Significant Concurrent Positions:
Senior Representative for Business Community Relations, ITOCHU Corporation (current position)
Statutory Auditor, Tokyo Stock Exchange, Inc.
No. of Company shares held: 3,300 shares

Makoto Minoguchi
Director

Significant Concurrent Positions:
Certified Public Accountant
Outside Corporate Auditor, SUMITOMO LIFE INSURANCE COMPANY (current position)
No. of Company shares held: 7,900 shares

Kimitaka Mori
Independent Director, Outside Director

Significant Concurrent Positions:
Certified Public Accountant
Outside Corporate Auditor, East Japan Railway Company
Outside Director, SUMITOMO LIFE INSURANCE COMPANY
Chairman, ITOCHU Corporation (current position)

Significant Concurrent Positions:
Certified Public Accountant
Advisor, The Japanese Institute of Certified Public Accountants
Outside Corporate Auditor, MITSUI & CO., LTD.
Outside Auditor, East Japan Railway Company
Outside Director, SUMITOMO LIFE INSURANCE COMPANY
Chairman and President, The Japanese Institute of Certified Public Accountants
Chairperson, Japan Overseas Educational Services

Significant Concurrent Positions:
Certified Public Accountant
Advisor, The Japanese Institute of Certified Public Accountants
Outside Corporate Auditor, MITSUI & CO., LTD.
Outside Auditor, East Japan Railway Company
Outside Director, SUMITOMO LIFE INSURANCE COMPANY
Chairman, ITOCHU Corporation (current position)

Significant Concurrent Positions:
Certified Public Accountant
Advisor, The Japanese Institute of Certified Public Accountants
Outside Corporate Auditor, MITSUI & CO., LTD.
Outside Auditor, East Japan Railway Company
Outside Director, SUMITOMO LIFE INSURANCE COMPANY
Chairman, ITOCHU Corporation (current position)

Significant Concurrent Positions:
Certified Public Accountant
Advisor, The Japanese Institute of Certified Public Accountants
Outside Corporate Auditor, MITSUI & CO., LTD.
Outside Auditor, East Japan Railway Company
Outside Director, SUMITOMO LIFE INSURANCE COMPANY
Chairman, ITOCHU Corporation (current position)
### Japan Exchange Group, Inc.

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director &amp; Representative Executive Officer, Group CEO</td>
<td>Akira Kiyota</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Senior Executive Officer &amp; CIO (IT Planning)</td>
<td>Ryusuke Yokoyama</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Senior Executive Officer (Global Strategy)</td>
<td>Isao Hasegawa</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Senior Executive Officer (General Administration and Human Resources)</td>
<td>Koichiro Miyahara</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director &amp; Executive Officer (Management of Tokyo Stock Exchange, Inc.)</td>
<td>Hironaga Miyama</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director &amp; Executive Officer (Management of Osaka Exchange, Inc.)</td>
<td>Satoshi Futagi</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Executive Officer (Corporate Strategy)</td>
<td>Atsushi Tabata</td>
<td>President &amp; CEO</td>
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</table>

### Tokyo Stock Exchange, Inc.

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>President &amp; CEO</td>
<td>Koichiro Miyahara</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director &amp; Senior Executive Officer (Listing, New Listings, Equities (Client Relationship), Management, Equities Business Development and Financial Literacy Support)</td>
<td>Yasuyuki Konuma</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director &amp; Senior Executive Officer (IT Administration, IT Development (Equities Trading, Information and Clearing) and IT Services)</td>
<td>Ryusuke Yokoyama</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Akira Kiyota</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Standing Statutory Auditor</td>
<td>Hiroyuki Matsuzaki</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Statutory Auditor</td>
<td>Kazuaki Kama</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Statutory Auditor</td>
<td>Katsushi Kuroda</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Senior Executive Officer (Information Services)</td>
<td>Yoshihiro Isaka</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Tatsuya Kamiki</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Syunsuke Matsui</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director &amp; Executive Officer (IT Services and Tokyo Site Contingency)</td>
<td>Isao Hasegawa</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Standing Statutory Auditor</td>
<td>Akira Tagaya</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Standing Auditor</td>
<td>Satoshi Takura</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Executive Officer (IT Development (Information))</td>
<td>Mikio Hinoide</td>
<td>President &amp; CEO</td>
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### Osaka Exchange, Inc.

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>President &amp; CEO</td>
<td>Hiromi Yamaji</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director &amp; Senior Executive Officer (Market Planning, Derivatives Business Development, Financial Literacy Support, Comprehensive Exchange Development and Osaka Site Contingency)</td>
<td>Hiroyasu Ichimoto</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Senior Executive Officer (IT Services)</td>
<td>Masahiko Maruyama</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Managing Governor (Listing Examination, General Administration)</td>
<td>Tatsuya Kamiki</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Standing Statutory Auditor</td>
<td>Syunsuke Matsui</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Yoshihiro Isaka</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Ryusuke Yokoyama</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Isao Hasegawa</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Akira Tagaya</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Executive Officer (Market Operations)</td>
<td>Satoshi Takura</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Mikio Hinoide</td>
<td>President &amp; CEO</td>
</tr>
</tbody>
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### Japan Exchange Regulation

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>President &amp; CEO</td>
<td>Kiyoshi Hosomizo</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Managing Governor (Listing Examination, General Administration)</td>
<td>Yasushi Suzuki</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Managing Governor</td>
<td>Kazuo Fukuda</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>(Trading Participants Examination and Inspection, Market Surveillance and Compliance)</td>
<td>Takeshi Hirano</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Standing Governor (Listed Company Compliance)</td>
<td>Hidetaka Kawakita</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Governor</td>
<td>Hideki Kanda</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Governor</td>
<td>Toru Ishiguro</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Governor</td>
<td>Shosaku Shimomura</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Governor</td>
<td>Hiroiyuki Matsuzaki</td>
<td>President &amp; CEO</td>
</tr>
</tbody>
</table>

### Japan Securities Clearing Corporation

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>President &amp; CEO</td>
<td>Hironaga Miyama</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Nobuhiko Izawa</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Kazuhiro Ohashi</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Satoshi Futagi</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Kunihiko Morishita</td>
<td>President &amp; CEO</td>
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<td>Director (part-time)</td>
<td>Masatoshi Yosihara</td>
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<tr>
<td>Director (part-time)</td>
<td>Hiroshi Kagiwada</td>
<td>President &amp; CEO</td>
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<tr>
<td>Director (part-time)</td>
<td>Takehiro Hosomura</td>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Director (part-time)</td>
<td>Mikio Hinoide</td>
<td>President &amp; CEO</td>
</tr>
</tbody>
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Note: 1. Statutory Auditor (Outside)  
2. Governor (Outside)  
3. Director (Outside)
Interview with Hiroki Tsuda, Chairperson of the Board of Directors

Hiroki Tsuda
Japan Exchange Group, Inc., Outside Director, Chairperson of the Board of Directors

Over the course of his career, Mr. Tsuda was appointed to several key positions within Japan’s Ministry of Finance, which he joined in 1972. These positions included Director-General, Tokyo Customs, Deputy Vice Minister for Policy Planning and Coordination, Deputy Vice Minister, Director-General of the Budget Bureau, and Administrative Vice Minister of Finance. After leaving the Ministry of Finance, Mr. Tsuda served as Professor at the Graduate School of Public Management, Waseda University from 2008. He was appointed to his current position in 2015.

I was conscious that deliberations should be centered around the future and in particular the three-year period beyond the current Medium-Term Management Plan.

The Board of Directors

Q. What are your thoughts about the current Board of Directors?

Nine of the 14 members of JPX’s Board of Directors are independent outside directors. Among those members, there are corporate managers, legal experts, public accountants, researchers, ex-government officials and others. Moreover, this includes two female members, one of whom is a foreign national. This makes for a diverse Board of Directors, and I believe it is a structure which allows varied expert opinions to be easily reflected in management.

In addition, every year we conduct interviews and surveys of all directors to evaluate the effectiveness of the Board, and we make improvements based on the results of those evaluations. We think that the effectiveness of the Board of Directors is improving every year due to this method.

Q. What are your main areas of focus when conducting Board of Directors’ operations?

When only company insiders are involved, opinions tend to converge, so having outside directors add their differing perspectives and arguments to discussions generates a good sense of tension within the Board. Personally I feel that the Board of Directors should be a venue for constructive dialogue by a membership that is rich in diversity, so I focus on leading discussions in a way that enables each person to actively participate. At times I also encourage other members to speak. I believe that proactively incorporating diverse opinions and proposals will help governance at JPX to evolve.

Moreover, if a discussion has not reached a mature stage, we will carry it over to the next meeting, rather than cutting it off prematurely. This way, even if opinions differ during a discussion, we can make sure that everyone can consent to the final conclusions.
Q. How do you view the formulation process for the 3rd Medium-Term Management Plan that was announced in March of this year?

Developing a management plan is one of the Board of Directors’ most important roles.

Deliberations on the general direction of the 3rd Medium-Term Management Plan began last summer, and building on those, robust discussions were held over eight months including eight meetings of the Board of Directors, leading up to the Plan’s unveiling in March. The deliberations focused not just on the three year period that the plan covers, but also further into the future, with consideration of course to the pursuit of profit, but in the context that profit is an end result rather than an objective, as stated in our Articles of Incorporation. Discussions started with an analysis of the current environment surrounding JPX, and then moved on to concrete conclusions about what JPX can contribute towards the creation of an affluent society. We believe that the fact that these conclusions are reflected throughout the Medium-Term Management Plan is proof that the Board of Directors’ functions worked in the way they should have.

Q. What kind of points did you struggle with in moving discussions forward?

At JPX’s Board of Directors, both internal and external members routinely have free-spirited and vigorous discussions. As a result, it took blood, sweat and tears to work out how to bring everyone to a consensus. I do think that this is evidence that the Board of Directors is functioning as it should, but from the management execution side, it must have been difficult to respond to such a variety of opinions.

Q. What impressions were you left with from discussions on the Medium-Term Management Plan at the Board of Directors?

My first impression was how much the directors are deeply mindful of stakeholders. At the early stages of Medium-Term Management Plan discussions, one director actually expressed a wish to check what kind of opinions had been received from stakeholders. Moreover, there were differing opinions even on the specific wording which had been selected to be written on the materials, and earnest discussions were held on the best way to phrase things to make sure the Plan could be easily understood.

Secondly, I was struck by the keen awareness that all the directors have on how JPX must be a role model for corporate governance, in its position as parent company of the Tokyo Stock Exchange, which formulates the Corporate Governance Code.

Q. What are your expectations for JPX going forward?

The social and economic environment surrounding JPX is facing significant structural changes. Outside Japan, uncertainties are rising with the increasing shift toward protectionism and partisan politics, while inside Japan, the declining birthrate and aging population means that stable asset building for retirement is becoming an urgent issue. In addition, striking developments are being carried out in new technologies, led by fintech. I am expecting JPX to create value in this environment through the solid implementation of “Sail to the future, Keep the market secure”, our 3rd Medium-Term Management Plan strategy. To that end, I would like the Board of Directors to continue to sufficiently deliberate on the progress of the Medium-Term Management Plan in order to fulfil its functions of directing and overseeing management.

Our view of ideal governance is something that changes in line with the times and demands of society. As the parent company of the Tokyo Stock Exchange, which formulates the Corporate Governance Code, I would like the Company to adapt to the environment and endeavor to make it so that we can go forward with a governance framework to be proud of.
3. The Foundations of Value Creation  
> Initiatives for Realizing an Affluent Society  
> Financial Education  
- The Spread of ESG Investment  
- Promoting International Cooperation  
- Facilitating Studies and Research  
- Engagement with Shareholders and Investors  
- Engagement with Market Users  
- Human Resources  
- The Environment and Regional Communities  
- Corporate Data: Environment and Employees

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 54% of the total, while stocks and other investments account for only 13%.

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 from elementary school to adults 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**

- Shareholders provide funds for businesses
- Businesses pay out dividends and stock prices rise
- Businesses provide goods and services for society
- Businesses expand as they generate earnings

**Initiatives to Encourage Participation in the Market**

- Opportunities to think about investment
- Knowledge of investment

Promoting the shift from savings to investment

Highlighting the significance of investment and offering information to increase knowledge of investment

Increase in financial and economic literacy
Outreach to Schools
(Secondary 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 FY2018, JPX held over 110 lectures, reaching out to approximately 3,800 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 FY2018, TSE welcomed a cumulative total of 9,700 students for 470 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 FY2018, a total of approximately 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 and attend lectures. In FY2018, more than 190 lectures were held as part of this program, attracting a cumulative total of approximately 7,500 attendees.

To help nurture the next generation of leaders, JPX holds sponsored courses at Keio University and joint courses at Sophia University and Yokohama National University. Lectures cover the latest developments in law, economics, management and accounting related to the securities market, along with the roles expected of listed companies.

In addition, JPX has also sent staff to Kansai University to give lectures on the basic mechanisms and roles of derivative products. JPX is also prioritizing lectures at major universities with a focus on life planning and asset building.

Financial Lectures for All Generations

<table>
<thead>
<tr>
<th>School students*</th>
<th>Approx. 17,000 participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Approx. 1,400 participants</td>
</tr>
<tr>
<td>University students</td>
<td>Approx. 8,300 participants</td>
</tr>
<tr>
<td>Adults</td>
<td>Approx. 20,000 participants</td>
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</table>

* Includes parents and guardians of students participating in the programs for elementary and junior high school students.
3. The Foundations of Value Creation >> Initiatives for Realizing an Affluent Society

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 FY2018, the program reached 13 locations across Japan and drew about 1,300 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 FY2018, JPX held the Summer Vacation Economics Course for Teachers and the Winter Vacation Economics Seminar for Teachers, which were attended by a cumulative total of around 970 teachers over nine days. JPX also sends staff to speak at training and study sessions for teachers.

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 FY2018, a cumulative total of over 10,500 persons participated in JPX Academy programs.

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 810 schools have participated in these programs in FY2018.
TSE has been involved in the “+YOU Japanese Economy Support Project” since FY2012 under the slogan of “impacting 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 FY2018, JPX held 28 seminars, in which a cumulative total of approximately 3,000 individuals participated.

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 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 and include topics such as “How to employ your money to achieve your life plan” and “Pointers for using DC/DeCo and NISA defined contribution pension plans.”

This service was used mainly as part of in-house training and new employee training. The lectures were held for approximately 100 companies and organizations and were attended by more than 4,700 individuals in FY2018.
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 FY2018, over 63,000 persons in total visited TSE Arrows in Tokyo and OSE Gallery in Osaka.

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, the site includes explanatory videos, infographics which explain things in an easy-to-understand visual form, and articles especially for the elderly focusing on a future where people will live to 100 years old.

Online Courses

To provide opportunities to learn about finance and economics for those who are unable to attend seminars, from April 2018 TSE has collaborated with the NTT DOCOMO subsidiary DOCOMO gacco to offer online courses on asset building. The course in 2019 was titled “2019’s the time for asset building: More ease, more benefits!” More than 15,000 people (40% of whom had had no previous investment experience) have taken the course, and 80% of those who had completed the course stated that they would like to take more advanced courses on investment and asset management.

WEB “Shift from Savings to Asset Building” online course (in Japanese only)
http://gacco.org/jpx/shisankeisei/
The Spread of ESG Investment

In recent years, ESG investments have been spreading rapidly. These take into consideration ESG (environment, society, and governance) elements from the perspective of evaluating corporate sustainability and corporate value over the medium- to long-term.

JPX has been making efforts to promote ESG investment, including the formulation of the Corporate Governance Code and the listing of ESG-related products. In the years to come, JPX will work together with its stakeholders to advance their efforts and, as a listed company, will promote ESG-related efforts to improve the corporate value of our own company.

Providing Information to and Promoting Dialogue with Listed Companies and Investors

To encourage mutual understanding and dialogue about ESG issues between listed companies and investors, JPX held a symposium on ESG, and in June 2019, translated into Japanese the “Model Guidance for Companies on Reporting on ESG Information” prepared by the Sustainable Stock Exchanges (SSE) Initiative. We anticipate that this will be a help to listed companies when considering ESG-related disclosure.

Listing of ESG-Related Products and Highlighting Company Activities

To promote ESG investment, JPX calculates ESG-related indices, lists ESG-related ETFs, and has set up an infrastructure fund market and an information disclosure platform for green and social bonds. Also, to provide retail investors with opportunities and materials to consider when making investment decisions, we select and publish lists of companies on certain themes: those that encourage female participation, and those that manage employee health and productivity from a strategic perspective.

Promoting the Spread of TCFD Recommendations

The Task Force on Climate-related Financial Disclosures (TCFD) is a privately-led task force established in 2015 at the request of the G20 Finance Ministers and Central Bank Governors’ Meeting. A final report was issued in June 2017 aimed at encouraging individual financial institutions and corporates to ascertain and disclose the financial impact of “risks” and “opportunities” brought about by climate change.

JPX announced its support for the final TCFD recommendations in October 2018. Subsequently, Mr. Mark Carney, Governor of the Bank of England and then Chair of the Financial Stability Board (FSB), and Ms. Mary Shapiro, a TCFD special advisor who was formerly Chair of the U.S. Securities and Exchange Commission (SEC), were invited to exchange views on climate change and finance. We are also promoting the spread of TCFD recommendations, through activities such as holding a symposium entitled “Company-investor Dialogue on TCFD: Future Prospects” jointly with the Financial Services Agency, and participating in the TCFD Consortium.
Contributing to International Organizations

World Federation of Exchanges (WFE)
An industry association composed of members from exchanges and clearing organizations around the world, WFE is engaged in making policy recommendations and conducting surveys and research about capital markets as well as in the collection and provision of statistical data. WFE also supports the development of market infrastructure by facilitating information sharing among members and by providing technical support for emerging exchanges. Recent important themes for WFE activities include regulatory dissonance and market fragmentation in international financial markets, technology-related policies including initial coin offerings (ICOs) and crypto-assets, and ESG issues in market structure.

JPX supports the work of WFE by actively participating in the activities of the WFE Board of Directors and Working Committees, in particular by serving as vice-chair of the Sustainability Working Group.

Asian and Oceanian Stock Exchange Federation (AOSEF)
AOSEF is a regional federation of 19 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.

For recent activities, we set up discussion groups on the themes of corporate governance, investor education, and information disclosure, while exchanging information and research among members. We are also planning to launch a group on the theme of sustainability, focusing on topics in which member interest is high.

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 the 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.

The training is primarily geared to core business operations, such as listing examination and management, trading, trading participant systems, clearing and settlement. Also included are discussions on the latest topics, such as fintech and sustainability, and lectures are given by the person in charge of each department. 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.
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.

In addition, we actively use JPX Working Papers to widely share, throughout the industry, knowledge obtained from fintech-related initiatives at JPX. So far, in addition to various studies on the applicability of blockchain/distributed ledger technology to financial market infrastructure, we have announced the introduction of robotics process automation (RPA) throughout the JPX Group and the use of machine translation for timely disclosure materials.

JPX Working Papers Published in FY2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
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<tbody>
<tr>
<td>February 2019</td>
<td>Liquidity and Arbitrage Cost between ETF and Stocks using Agent-Based Model</td>
</tr>
<tr>
<td></td>
<td>Study on Applicability of DLT in Trade Matching Processes, Phase 2</td>
</tr>
<tr>
<td></td>
<td>Initiatives toward Using Blockchain and Encouraging Open Innovation in the Securities Industry</td>
</tr>
<tr>
<td></td>
<td>Simulation of Chain Bankruptcy: the Effects of Asset Price Volatility and the Network Structure</td>
</tr>
<tr>
<td>December 2018</td>
<td>Impact on Utility of Traders by Improvement of Liquidity in Stock Secondary Markets</td>
</tr>
<tr>
<td>July 2018</td>
<td>Proof of Concept on Utilization of Blockchain Technology in KYC Processes</td>
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</table>

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.
Engagement with Shareholders and Investors

JPX is focusing its efforts on promoting two-way communication with its shareholders and investors, and building relationships of trust based on mutual understanding. JPX actively provides investors with the corporate information necessary for their decisions and shares views obtained from shareholders and investors with senior management, thereby further enhancing corporate value.

Engagement with Shareholders

Shareholders Meeting

JPX sees the annual general shareholders meeting (AGM) as a valuable opportunity to engage in constructive dialogue with its shareholders, so they can deepen their understanding of the company. Therefore, every year, to allow more shareholders to attend, we hold the meeting early, avoiding the days on which many other companies hold their AGMs. JPX held its shareholder AGM for FY2018 (April 1, 2018 to March 31, 2019) on June 19, 2019, with 2,375 shareholders in attendance.

The notice of the shareholder AGM is sent out three weeks ahead of the meeting to ensure that shareholders are given sufficient time to decide how to exercise their voting rights. With regard to electronic information, the Japanese and English versions of the notice are made available on the JPX website four weeks prior to the meeting and are also simultaneously available to overseas shareholders via the Electronic Voting Platform for Institutional Investors provided by Investor Communications Japan, Inc. (ICJ). In addition, JPX is promoting the use of more color and graphics in the AGM notice as part of its efforts to present the information in a more easily understandable form.

The AGM is attended in person not only by the directors and executive officers of JPX, but also directors from subsidiaries and affiliates. This is so that the broad range of shareholder questions, which cover activities of the whole group, can be appropriately answered by the correct people, including those from subsidiaries. We also upload videos of the AGM to the JPX website for those who were unable to attend on the day.

Shareholders may send in their votes via the Internet or the Electronic Voting Platform, as well as by post. At the AGM held on June 19, 2019, approximately 90% of voting rights were exercised.

WEB  Shareholders Meeting
https://www.jpx.co.jp/english/corporate/investor-relations/shareholders/meeting/
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 FY2018, JPX held five separate investor roadshows across Europe, the U.S., and Asia. We are also striving to increase opportunities for dialogue with institutional investors and analysts, for example by participating in IR conferences both in Japan and abroad. Opinions received from institutional investors and analysts through such meetings are provided periodically to management and related departments, and then reflected in JPX management practices.

Earnings and Medium-Term Management Plan Presentations, JPX IR Day
In FY2018, in addition to holding two earnings presentations, JPX gave a presentation for its newly announced 3rd Medium-Term Management Plan in March 2019. The company also provided opportunities for investors to exchange views with the Group CEO and top management of the JPX subsidiaries at the JPX IR Day 2018, our second stand-alone IR event. Video and audio recordings of each meeting 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.

Engagement with Retail Investors
We held a total of 14 JPX outreach events, reaching approximately 2,500 retail investors by participating in major domestic IR events, including TSE IR Festa, face-to-face seminars held at securities company branches nationwide and live online seminars.

JPX also actively provides information to retail investors on its IR website. In addition to providing content that offers an overview of JPX in an easily understood format, we deliver documents, videos and other content from IR events in a timely manner.

WEB
For Retail Investors (in Japanese only)
https://www.jpx.co.jp/corporate/investor-relations/individual/

IR E-mail Distribution Service for Retail Investors (in Japanese only)
https://www.jpx.co.jp/corporate/investor-relations/ir-mail/
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.

Engagement with Market Users

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.

- **Exchanges of Views with Securities Company Representatives and Others**
  JPX believes that communication with securities companies is very important to improve exchange operations. We hold discussion meetings and roundtables, as appropriate, with representatives of trading participants and others, as we consider them effective venues to promote mutual understanding among top management and deepen relationships of trust. We also have closer dialogue with securities companies and institutional investors on a technical level, and do our best to change the trading system in line with changes in actual trading conditions. In fact, the below changes were implemented recently based on such exchanges of views.

**Revision of ETF Market Making Scheme in April 2019**

Originally, the market making scheme for ETFs was a liquidity improvement measure with a focus on retail investors. However, as a result of calls from larger institutional investors for increased order volumes, we have revised the scheme for a limited number of products to ensure a volume of orders large enough for large institutional investors to trade.

**Review of Trading System to Improve Market Function Scheduled for November 2019**

We received requests, primarily from overseas institutional investors, to improve execution rates for Itayose* trades at the end of the afternoon session (“Obike”). As a result of exchanges of views with trading participants, we are updating our price stabilization measures (continuously contracted quotes), as well as changing the trading system in order to conduct closing Itayose with wider price ranges.

* An auction method which looks for matching buy and sell orders, then uses that price to execute all orders.
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. Supported by many exhibiting companies and retail investors, the TSE IR Festa has grown to become one of the largest IR events in Japan. As well as IR briefings and booth exhibitions by listed companies, the event sees briefings on products such as ETFs and REITs, and seminars aimed at improving financial literacy; this way, the event can be useful not just for those with a wealth of investment experience, but also those who are just considering making a start in investment.

- **JPX Concerts**
  As part of our cultural contribution activities, we have been holding JPX concerts focusing on classical music since 2016. In FY2018, we held a concert in Tokyo featuring a string quartet with members of the New Japan Philharmonic Orchestra. We also co-sponsored the Special Concert of Four Orchestras in Osaka Featuring Yutaka Sado at the 57th Osaka International Festival, and we were uplifted by the exquisite tones of classical music. While working to realize a richer, more affluent society, we hope that the JPX concerts will serve as a catalyst for people to feel more familiar with JPX.

- **First and Last Trading Days of the Year**
  JPX holds ceremonies at the Tokyo and Osaka exchanges to celebrate the first trading day of each year and the end of the year’s trading. At the end of year ceremony in Tokyo, celebrities and various people in the news grace the event as special guests and convey their messages to investors. The general public can gain attendance to the ceremonies, via a lottery or on a first-come-first-served basis, or watch recordings from the ceremonies on JPX social media.
3. The Foundations of Value Creation >> Initiatives for Realizing an Affluent Society

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 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. Based on those beliefs, JPX is promoting the development of a work environment that accepts and supports ways of working which fit with diverse values and lifestyles. From the viewpoint of supporting employees’ desire to remain in the workplace, we are advancing initiatives to give impetus to the active participation of a variety of employees. These initiatives include introducing support systems for employees living with illness as well as for maternity/childcare and adult caregiving, promoting women’s careers, and enhancing the post-retirement reemployment system to meet diverse workers’ needs. By continuously implementing a raft of measures to reform working culture throughout the company, we are also aiming to create more comfortable workplaces and build a more robust organizational foundation for the future.

Supporting the Balance between Various Lifestyles and Work

Improving Maternity/Childcare and Adult Caregiving Support Systems

At JPX, we are working to create comfortable working environments so that employees with limited time—for example, due to childcare, adult caregiving or treatment for illness—can make the most of their abilities. In particular, to make it possible for male employees to participate in childcare and housework, we introduced parental leave as a type of paid leave, and built an environment where employees feel comfortable using it. As a result, in FY2018 the number of male employees who took parental leave more than tripled compared with FY2015. We also introduced leave and days off exceeding the legal requirement for adult caregivers, and a system for flexible shortened working hours. Leave for adult caregivers can be taken in daily, half-daily or hourly units, and we also hold “caregiver seminars” every year in support of balancing work and caregiving. The caregiver seminars provide information and promote understanding of adult care, so that employees shouldering this burden, the number of which is expected to increase in the future, can continue to balance caregiving with work.
Career Advancement for Female Employees

From the viewpoint of boosting female employees’ careers by encouraging them to participate and contribute to a higher level, we have advanced a variety of initiatives, including career training programs for female employees and supporting networking with career-minded female employees from other companies. From FY2019 onward, we plan to implement measures to give added impetus to the development of female employees. JPX has set a numerical target of at least 8% female employees in managerial positions (6.1% as of April 2019) to be achieved through the above measures by FY2022. In the years to come, we will continue to increase the ratio of women in managerial positions, with a view to cultivating and securing human resources with the skills needed for director and executive positions.

The Re-employment System

JPX has a contingency re-employment system that enables employees to select part-time work after reaching the statutory retirement age. Through this system, JPX is working to keep valuable human resources, while making it possible for re-employed employees to continue working.

Employment of People with Disabilities

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. JPX also provides monetary assistance for examinations to facilitate the early detection of a range of cancer types.

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. In addition to enabling interviews with psychiatrists as needed, we also provide information on the prevention of mental illness. In recent years, we have carefully conducted mental care not only for mental disorders but also for employees returning from medical treatment.

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.
3. The Foundations of Value Creation >> Initiatives for Realizing an Affluent Society

Implementation of Work Style Reform Program

As a response to internal and external environmental changes, as well as human issues, JPX is implementing working style reforms through flexible business operations and working to improve productivity, so that the entire JPX organization can achieve sustainable growth.

For JPX, the work style reform program is a collaboration between the company and its employees. With this approach, 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 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

<table>
<thead>
<tr>
<th>Prevention of Overworking</th>
<th>Every month, we conduct checks into working hours, including those at the managerial level. To prevent long working hours from harming an employee’s health, we try to ascertain their health situation at an early stage based on our own standards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversifying leave systems</td>
<td>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.</td>
</tr>
<tr>
<td>Reemploying former employees</td>
<td>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.</td>
</tr>
<tr>
<td>Increasing opportunities for employees to engage in off-hour activities</td>
<td>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.</td>
</tr>
<tr>
<td>Reforming corporate culture</td>
<td>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.</td>
</tr>
<tr>
<td>Joining Iku-boss Enterprise Alliance</td>
<td>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 Iku-boss Enterprise Alliance1 to help promote our work style reforms, and is working on nurturing executives and managers as Iku-boss,2 ideal bosses of the new generation.</td>
</tr>
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</table>

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.

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 discrimination or harassment in all its forms.
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 and hot-water supply 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 FY2018 by 10% compared with the emissions targets. (See page 60 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 Yashima 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. In the city of Yurihonjo, Akita Prefecture, an NPO established to run the JPX Entrepreneur Experience Program under its own direction has initiated projects—for example at Akita Prefectural University, Akita Prefectural Nishime High School and Akita Prefectural Yashima High School—with the cooperation of commercial enterprises, academia, government, and financial institutions. The NPO has developed a finance and economy education program integrated throughout the local community, to the extent that in February 2019 it won an award from the Government’s Small and Medium Enterprise Agency.

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)

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<tr>
<td>Total usage</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Electricity (kWh)</td>
<td>8,132,632</td>
<td>7,921,216</td>
<td>7,435,466</td>
<td>6,079,696</td>
<td>6,272,280</td>
<td>6,413,800</td>
<td>6,135,360</td>
<td>5,899,040</td>
<td>5,935,384</td>
<td>6,035,488</td>
<td>5,936,520</td>
</tr>
<tr>
<td>City gas (m³)</td>
<td>349,994</td>
<td>343,707</td>
<td>362,622</td>
<td>319,200</td>
<td>341,276</td>
<td>304,248</td>
<td>300,295</td>
<td>306,467</td>
<td>322,579</td>
<td>326,926</td>
<td>311,238</td>
</tr>
<tr>
<td>Per capita</td>
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</tr>
<tr>
<td>Electricity (kWh)</td>
<td>10,078</td>
<td>9,660</td>
<td>9,214</td>
<td>7,686</td>
<td>7,715</td>
<td>7,297</td>
<td>7,044</td>
<td>6,989</td>
<td>7,419</td>
<td>7,442</td>
<td>7,302</td>
</tr>
<tr>
<td>City gas (m³)</td>
<td>434</td>
<td>419</td>
<td>449</td>
<td>404</td>
<td>420</td>
<td>346</td>
<td>344</td>
<td>363</td>
<td>403</td>
<td>403</td>
<td>363</td>
</tr>
<tr>
<td>Total emissions</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Per capita</td>
<td></td>
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<tr>
<td>Per capita</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂ emission result (based on Tokyo Metropolitan Environmental Security Ordinance)</td>
<td>—</td>
<td>—</td>
<td>+1%</td>
<td>−16%</td>
<td>−12%</td>
<td>−13%</td>
<td>−16%</td>
<td>−10%</td>
<td>−9%</td>
<td>−8%</td>
<td>−10%</td>
</tr>
<tr>
<td>Per capita</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂</td>
<td>4.89</td>
<td>4.69</td>
<td>4.5</td>
<td>3.82</td>
<td>3.87</td>
<td>3.54</td>
<td>3.44</td>
<td>4.19</td>
<td>4.49</td>
<td>4.51</td>
<td>4.39</td>
</tr>
</tbody>
</table>

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 FY2018 were for the second compliance period.

### Employees

<table>
<thead>
<tr>
<th></th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>FY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of employees by gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>1,001</td>
<td>975</td>
<td>1,085</td>
<td>1,093</td>
<td>1,110</td>
</tr>
<tr>
<td>Male</td>
<td>728 (72.7%)</td>
<td>716 (73.4%)</td>
<td>792 (73.4%)</td>
<td>803 (73.4%)</td>
<td>805 (72.5%)</td>
</tr>
<tr>
<td>Female</td>
<td>273 (27.3%)</td>
<td>259 (26.5%)</td>
<td>293 (26.5%)</td>
<td>290 (26.5%)</td>
<td>305 (27.4%)</td>
</tr>
<tr>
<td>Average years of service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>17.3</td>
<td>16.7</td>
<td>17.0</td>
<td>17.1</td>
<td>17.3</td>
</tr>
<tr>
<td>Male</td>
<td>15.9</td>
<td>15.5</td>
<td>15.9</td>
<td>15.9</td>
<td>16.1</td>
</tr>
<tr>
<td>Female</td>
<td>21.0</td>
<td>20.2</td>
<td>20.5</td>
<td>20.5</td>
<td>19.9</td>
</tr>
<tr>
<td>No. of employees in managerial positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>350</td>
<td>336</td>
<td>339</td>
<td>345</td>
<td>388</td>
</tr>
<tr>
<td>Female</td>
<td>13 (3.7%)</td>
<td>15 (4.5%)</td>
<td>17 (5.0%)</td>
<td>19 (5.5%)</td>
<td>24 (6.1%)</td>
</tr>
<tr>
<td>No. of new hires</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>20</td>
<td>25</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Females/Foreign nationals</td>
<td>3</td>
<td>10</td>
<td>7</td>
<td>12</td>
<td>12</td>
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<tr>
<td>Ratio of annual paid leave taken</td>
<td>49.9%</td>
<td>53.7%</td>
<td>67.0%</td>
<td>67.0%</td>
<td>71.8%</td>
</tr>
<tr>
<td>No. of male employees taking time off for childcare (including childcare leave)</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>No. of female employees returning to work after maternity leave</td>
<td>94.1%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

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, 2019.