CHAPTER IV

The Secondary Stock Market

1. Structure of the secondary stock market (1) - Exchange trading

The secondary stock market is a market where listed shares are traded by investors. The main market is provided by stock exchanges, and there are four stock exchanges in Japan: the Tokyo Stock Exchange, and the Nagoya, Fukuoka and Sapporo exchanges. Stock exchanges used to be membership organizations consisting of securities companies. However, under the 2000 amendment to the Securities and Exchange Act, they were authorized to change their status to stock corporations. Today, the Japan Exchange Group, which owns the Tokyo Stock Exchange, and the Nagoya Stock Exchange are corporations.

Shares of listed stocks (1) that meet certain listing requirements are traded on the stock exchange (2) during fixed trading hours (3) by auction, and (4) the stock exchanges manage and supervise the trading process and the business conduct of securities companies as self-regulatory organizations with a view to ensuring that trading is fair.

In January 2013, the Tokyo Stock Exchange and the Osaka Securities Exchange merged to form the Japan Exchange Group. In July 2013 the cash equity market was consolidated into the Tokyo Stock Exchange, and four market segments were opened on the TSE: First Section, Second Section, Mothers, and JASDAQ ("Standard" and "Growth"). However, various issues have been highlighted with this structure. For example (1) the concept of each market segment is ambiguous and is thought to be impractical by many investors, and (2) listed companies do not feel sufficiently motivated to continuously improve their corporate value under this structure. TSE began a review of market segments in autumn 2018. In April 2022, it introduced three new market segments, "Prime," "Standard," and "Growth."

The stock exchanges are upgrading their trading systems to meet the needs of market participants and changes in methods of buying and selling securities. The Tokyo Stock Exchange introduced "arrowhead", a world-class, high speed cash trading platform in January 2010, in response to the emerging trend of algorithmic trading. Subsequently, the system was upgraded in Sep-

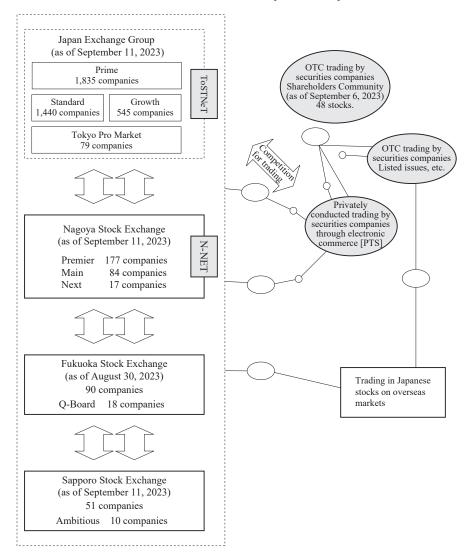


Chart IV-1. Inter-market Competition in Japan

tember 2015 and November 2019 to improve processing performance in response to changes in the stock market environment, such as increased number of orders, increased concentration of orders in short periods of time, and new needs of investors. The fourth system update is scheduled for November 2024.

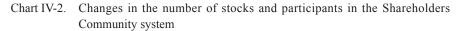
2. Structure of the secondary stock market (2) -Off-exchange trading

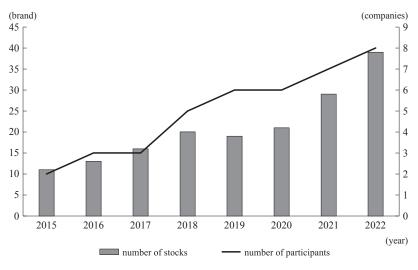
In addition to stock exchange trading, the secondary market includes off-exchange trading, which involves buying and selling outside the stock exchange (also called "off-floor trading" or "over-the-counter trading"). A typical example of this is a trading system operated by a private company (Proprietary Trading System or PTS), as authorized by the amendment of the Securities and Exchange Act in 1998. A computer system operated by a securities company is used to conduct trades without going through an exchange. In Japan, certain securities companies have opened their own proprietary trading system (PTS) mainly for the purpose of matching orders received outside business hours.

Off-exchange trading also includes off-floor trading of TSE-listed issues (ToSTNeT). This was also made possible by the abolition of the "market concentration rule", which required that stocks be traded through stock exchanges, in 1998. The ToSTNeT system has a three part structure to accommodate the diverse needs of investors: ToSTNeT-1 which processes large-lot and basket trades of listed stocks through negotiated or cross transactions; ToSTNeT-2 which concludes trades at specific prices such as the closing price several times a day; and ToSTNet-3 which handles purchases of treasury stocks. (For trends in off-exchange trading in Japan, please refer to the data on the following page, "Diversification of the Securities Trading System").

Unlisted stocks are also traded outside stock exchange. Japan had Green Sheet market that was established in 1997, but this was abolished at the end of March 2018 because of sluggish transaction volumes due to the imposition of timely disclosure requirements.

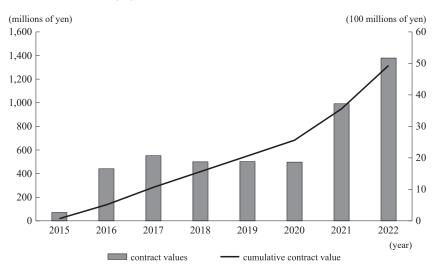
The Shareholders Community system was established in May 2015 as a system for secondary trading of unlisted stocks in place of the Green Sheet market. Under this system, securities companies form shareholder communities for individual OTC securities and can only solicit investment from investors who have registered to participate. The system was originally set up in May 2015 to facilitate trading and cash-raising for unlisted shares as a way of supporting the financing needs of local businesses. Since then, efforts have been made to promote the use of the system tackling issues such as the fact that securities companies' ability to solicit investment is limited to the shareholders community. In 2022, reforms were implemented to make the system more user-friendly, such as lifting the ban on soliciting specified investors (professional investors with expertise in investment as defined in the Financial Instruments and Exchange Act) for participation in shareholders communities. Since the system was established, the number of shareholders com-





Source: Japan Securities Dealers Association.

Chart IV-3. Changes in contract values and cumulative contract value in the Shareholders Community system



Source: Japan Securities Dealers Association.

munity transactions has increased every year, with the cumulative trading value exceeding ¥5 billion yen in February 2023.

3. Transaction Size of the Secondary Stock Market

As of the end of 2022, the number of companies listed on the national exchanges (including multiple listings) stood at 3,962, with 332.3 billion shares listed. The trading volume for 2022 was 425.4 billion shares, and the trading value totaled \$872.6 trillion. Of these, the number of listed companies on the Tokyo Stock Exchange was 3,863 with the number of listed shares of 331 billion, the trading volume and value there was 425.1 billion shares and \$872.3 trillion, respectively. Thus, Japan's exchange trading of shares is extremely concentrated on the Tokyo Stock Exchange.

The heavy concentration of stock trading on the TSE may be explained by the fact that the stock markets have taken on a hierarchical structure, with the Prime Market of the TSE at the top, and many companies aim for a listing on the Prime Market. And as shares are actively traded in large volumes and on a highly liquid market, the externality of the order flow—trading flows to where shares are actively traded—works to accelerate the concentration of orders.

The Prime Market is a market for companies with a focus on constructive dialogue with global investors. As of the end of 2022, it consisted of 1,837 listed stocks with a market capitalization of ± 676 trillion. The trading volume was 251.8 billion shares and the trading value was ± 606 trillion. By contrast, the Standard Market functions as a market for companies with sufficient liquidity and governance standards to make them eligible as investments in the public market. The Standard Market had 1,449 listed stocks and a market capitalization of ± 22 trillion as of the end of 2022. The trading volume was 41.9 billion shares and the trading value was ± 15.5 trillion. TSE also has the Growth Market for companies with high growth potential. It consisted of 513 listed stocks with a market capitalization of ± 7 trillion as of the end of 2022; the trading volume was 24.5 billion shares and the trading value was ± 25.3 trillion.

The Nagoya Stock Exchange has three markets: Premier, Main, and Next, with a total of 278 companies listed (as of the end of September 2023). In 2022, the trading volume was 160 million shares, and the trading value was \$85.7 billion.

The Fukuoka Stock Exchange has the regular market and the Q-Board market for emerging companies, with a total of 108 companies listed (as of the end of August 2023). In 2022, the trading volume was 12 million shares and the trading value was \$11.3 billion.

| | | April 2022 | July 2022 | October 2022 | January 2023 | April 2023 | July 2023 |
|-------------------------|----------|------------|------------|--------------|--------------|------------|------------|
| Trading | Prime | 24,354,567 | 24,988,075 | 29,433,788 | 24,178,785 | 24,266,922 | 32,034,184 |
| volume (in thousands | Standard | 3,962,616 | 4,074,580 | 4,753,693 | 4,015,809 | 4,830,580 | 5,969,726 |
| | Growth | 2,335,720 | 2,636,496 | 2,179,310 | 3,190,986 | 2,843,346 | 2,800,841 |

Table IV-1. Trends in TSE Trading Volumes by Each Market Segment

Source: Japan Securities Dealers Association, Japan Exchange Group.

| Table IV-2. | Trends in TSE | Trading Va | alue by Each | Market Segment |
|-------------|---------------|------------|--------------|----------------|
| | | | | |

| | | April 2022 | July 2022 | October 2022 | January 2023 | April 2023 | July 2023 |
|------------------------|----------|------------|------------|--------------|--------------|------------|------------|
| Trading | Prime | 57,651,017 | 59,972,739 | 71,085,575 | 57,255,026 | 59,496,350 | 78,046,611 |
| amount (millions of | Standard | 1,366,865 | 1,676,745 | 1,703,020 | 1,416,845 | 2,791,520 | 2,516,403 |
| yen) | Growth | 2,878,334 | 2,213,516 | 2,632,552 | 3,258,339 | 3,549,073 | 3,307,708 |

Source: Japan Securities Dealers Association, Japan Exchange Group.

Table IV-3. Trading Volume and Value by Stock Exchanges and Respective Market Share (2022)

| Stock Exchanges | Trading Volume (millions of shares) | Market Share % | Trading Value (millions of yen) | Market Share % |
|-----------------|--|----------------|------------------------------------|----------------|
| Tokyo | 425,149 | 99.945 | 872,531,257 | 99.987 |
| Nagoya | 159 | 0.037 | 85,651 | 0.010 |
| Fukuoka | 12 | 0.003 | 11,268 | 0.001 |
| Sapporo | 60 | 0.014 | 12,317 | 0.001 |
| Total | 425,382 | 100 | 872,640,494 | 100 |

Source: Japan Exchange Group.

The Sapporo Securities Exchange has the regular market and the Ambitious market for emerging companies, with a total of 61 companies listed (as of the end of September 2023). In 2022, the trading volume was 60 million shares and the trading value was \$12.3 billion.

4. The Structure of Share Ownership

Following the liquidation of the financial combine zaibatsu (great industrial

or financial conglomerates or holding companies) after the war, shares held by them were released to the stock market for distribution among individual investors. And the ratio of shares held by individual shareholders rose to 69.1% in 1949. However, as obviously not many of these individual investors could afford to hold these shares for the long haul, they liquidated their holdings soon after they had acquired them. As a result, the ratio of individual investors' shareholdings declined rapidly thereafter. Partly due to the fact that some investors had cornered these shares, groups of companies that had belonged to the former financial combine (*zaibatsu*) started cross-holding shares of one another to strengthen their group solidarity.

In the 1960s, capital transactions were liberalized following the post-war restoration efforts. However, in fear of a hostile takeover by foreign firms taking advantage of liberalized capital transactions, Japanese firms sought to build a strong shareholder base, and the ratio of the shareholdings of business corporations and financial institutions increased. Subsequently, the system of issuing shares at par value changed to one of issuing at market price, making it necessary for business corporations to maintain their share prices at a high level if only to enable them to advantageously raise funds for a capital increase. Consequently, the ratio of the shareholdings of business corporations continued to increase in the years up to 1975. Meanwhile, encouraged by the long-lasting bull market, financial institutions also continued to build their equity portfolios and increased the ratio of their stock holdings until the speculative bubble in the end of the 1980s.

Such corporate domination of the shareholdings structure brought about a material impact on the formation of stock prices. While individuals and institutional investors bought stocks as an investment to earn yields (profit-earning securities), business corporations or financial institutions bought shares on their proprietary accounts, in many cases, for the purpose of holding shares to strengthen corporate affiliations or business tie-ups as a means of gaining control of the management. Therefore, these corporations were more determined to hold such shares for the long haul (management-stake securities) without consideration to yields on investment, and yields on such shares tended to decline. As a result, prices of such shares rose to a level that was beyond the reach of individual investors who invested in shares on the basis of the yield they produced, and the ratio of stock holdings by individual investors dropped further. In addition, as individual investors had no choice but to aim at making capital gains even under such circumstances, the rate of turnover of their investments needed to be quickened. Against this backdrop, individual investors took to highly speculative investment, bringing about a special structure of the stock market in this country.

However, as unrealized capital gains on stock investment shrank sharply due to falls in stock prices after the burst of the speculative bubble, holding

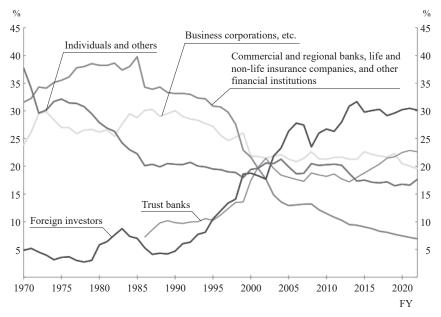
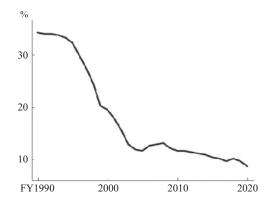


Chart IV-4. Trends in the Ratio of Shares Held by Different Categories of Investors

- Notes: 1. Results of Trust banks are included in that of Commercial and Regional banks in and before 1985 Survey.
 - Results from FY 2004 to FY 2021 include the portion of companies listed on JASDAQ, and those after FY 2022 include JASDAQ figures within Osaka Securities Exchange or Tokyo Stock Exchange.
- Source: 2022 Shareownership Survey.





Note: Based on research by Nomura Capital Markets Research Institute. Ratio of cross-shareholdings held by listed corporations (excluding financial institutions) and listed banks to market capitalization. Source: Nihon Keizai Shimbun electronic version, October 16, 2022 shares was no longer an attractive investment even for corporate investors. In recent years, there has been an acceleration in the reduction of cross-share-holdings. Among other factors, this is advocated by the Corporate Governance Code, and it is also one of the listing criteria for the Prime market that the tradable share ratio should be at least 35%. In addition, companies have also felt the need to secure their cash reserves against COVID-19.

5. Stock Prices and Indicators for Investment (1)

Theoretical prices of assets that generate regular income, such as stocks, can be expressed as dividends by a certain rate of capitalization (interest rate plus risk premium). However, actual asset prices fluctuate according to the investment actions of buyers and sellers depending on their different speculations. Investors' activity levels are reflected in the daily changes of trading volumes and trading values.

Only a small portion of listed shares are actually traded on the stock exchange. Therefore, market capitalization is calculated using the total number of outstanding shares based on the price of completed transactions. For example, on September 11, 2023, the market capitalization of the TSE Prime Market was approximately \$836 trillion, but the value of shares traded was approximately \$3.1 trillion. This indicates that the total market capitalization of the TSE is computed on the basis of share prices formed through the trading of approximately \$3.1 trillion worth of shares. (To be precise, the market capitalization of the entire market represents a sum of the market valuation of all listed stocks, but the above explanation is intended to simplify the picture.)

Trends in the secondary stock market are expressed by the movements of stock price indices. The Nikkei Stock Average (Nikkei 225), calculated and published by Nihon Keizai Shimbun (*Nikkei Daily*), is a well-known stock price index in Japan. It is calculated by adding up and averaging the share prices of 225 representative stocks in each industry out of all the stocks listed on the Tokyo Stock Exchange (Dow-type adjustment). The divisor is not 225 but is adjusted for corporate events such as stock splits or dividend payments, or whenever one issue in the index is replaced by another. The current divisor (as of September 11, 2023) is 29.509.

The first reason for using a revised divisor is to adjust for the impact of stock splits and stock dividends. For example, a stock split theoretically lowers a stock price, and the continuity of the stock price index is lost. Therefore, an adjustment is made by reducing the divisor. The second reason is to offset the impact of stock replacements. This is because continuity is lost when replacements occur between issues with significantly different stock

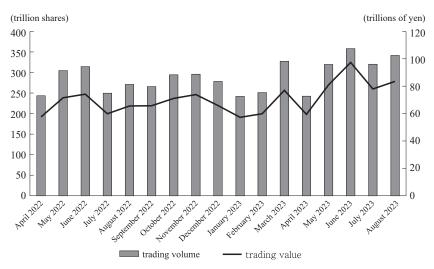
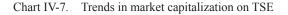
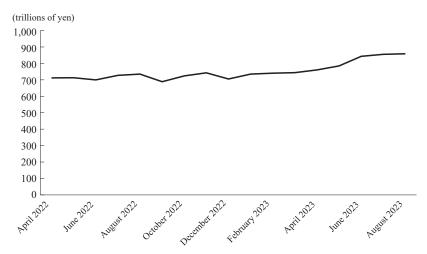


Chart IV-6. Trends in trading volume and trading value in TSE Prime Market

Note: Data on domestic shares. Excludes domestic preferred shares, equity securities and foreign shares. Source: Japan Exchange Group.





Note: The total TSE market includes data for the Standard, Growth and TOKYO PRO Market in addition to the Prime Market. *Source:* Japan Exchange Group.

prices. Thus, the problem with Dow-type indexes is that they reflect rises or falls in the simple average of stock prices at a scale several times larger than what has occurred. Because these are unweighted average indexes, they can be susceptible to fluctuations in the price of scarce or highly-priced stocks. One way to avoid these drawbacks is to base the index on market capitalization.

6. Stock Prices and Indicators for Investment (2)

TOPIX (Tokyo Stock Price Index) is another well-known stock price index in Japan. It measures the current market capitalization of the First Section of the TSE assuming that the market capitalization as of the base date (January 4, 1968) is 100. It has been calculated and published by TSE since July 1, 1969. TOPIX has the following characteristics: (1) it covers all issues listed on the First Section of the TSE and therefore reflects changes in the country's industrial structures and market trend, and is not susceptible to potential discontinuity when some issues are replaced; (2) it allows easy determination of changes in market size from the perspective of market capitalization; and (3) it is weighted by the number of shares of listed stocks and is therefore not overly impacted by a rise or fall in the prices of scarce stocks or highlypriced stocks.

Although TOPIX has long played an important role as a benchmark for many institutional investors, it is not seen as a completely practical investment benchmark because it comprises all the stock on the First Section. TSE has been reviewing TOPIX to improve its functionality as an investment benchmark while ensuring its continuity as an index. While all the TOPIX component stocks continue to be included in the index regardless of companies' selected market segment after the new market segmentation came into effect in April 2020, constituents with a tradable share market capitalization of under ¥10 billion are designated as "phased weighting reduction constituents" and their weighting is being gradually reduced every quarter in ten (10) stages starting from the end of October 2022 to the end of January 2025.

In addition, the method for calculating the free-float weight ratio was changed to better reflect actual market conditions by adding strategic shareholdings to non-free float shares. The revision is being carried out in stages, taking account of the potential market impact from adjustments by passive funds. In addition, initiatives for gathering opinions from market participants, such as Index Consultations and the Index Advisory Panel, have been introduced in order to improve governance of the index.

Another stock price index is the JPX Nikkei Index 400, which has been published jointly by TSE and Nikkei since January 2014. This index was de-

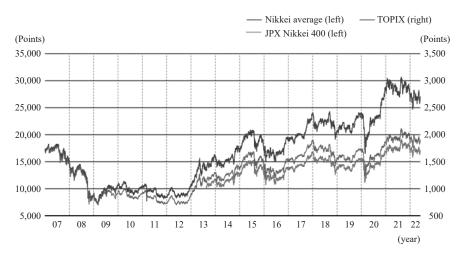
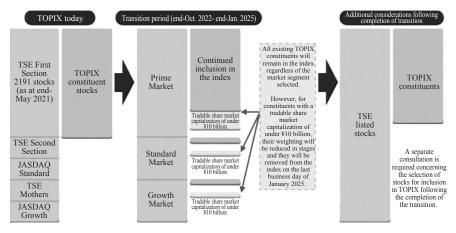


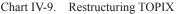
Chart IV-8. Transitions in Stock Prices

Note: The record date of JPX Nikkei 400 is August 30, 2013 (base value of 10,000 points). As of June 30, 2022.

Source data: Bloomberg.

Source: Japan Securities Dealers Association.





Source: Japan Exchange Group.

veloped with the aim of selecting stocks that meet the requirements of global investment standards, such as efficient use of capital and investor-oriented management. Furthermore, TSE and S&P have been publishing the S&P/JPX Carbon Efficient Index since September 2018. This bases the weighting of component stocks by focusing on their environmental information disclosure and level of carbon efficiency.

7. Stock Prices and Indicators for Investment (3)

Investors look at various indicators when making decisions to buy or sell. One such indicator is the dividend yield, which is calculated by dividing the annual dividend by the stock price at the time of purchase. This is compared to the market interest rate, an objective indicator, as a way of determining how high or low the dividend yield compared to the market. However, yield becomes less useful as an investment indicator if many companies adopt a financial policy of not paying dividends and instead retaining and reinvesting their profits. In this case, it is necessary to find a way of relating a company's stock price to its potential for earnings growth.

The price-to-earnings ratio (PER) is a widely used investment indicator. It is calculated by dividing earnings per share by the share price and shows the multiple of earnings at which an underlying share is bought and sold. Investors compare the PER of a stock with the industry average or with other stocks to measure whether a share is over- or undervalued. Stocks with a high PER reflect market expectations of future growth potential. However, while dividend yield can be compared with an objective indicator, such as market interest rate, the PER has a drawback in that it can only be compared on a relative basis.

Another frequently used indicator for investment is the price/book value ratio (PBR), which shows the relationship between the net asset value and its stock price. The PBR of a corporation is computed by dividing its stock price by the value of net assets per share. The net assets of a corporation represent the sum of the capital and earned surplus, etc., which is called equity capital, and they are computed by deducting liabilities (debt, etc.) from the total assets listed on the debit side of the balance sheet. In other words, it is the net assets that would remain after repaying all the debts of a corporation out of the proceeds of its assets when the corporation is dissolved at a certain point in time. Hence, the PBR is an indicator that compares the stock price of a corporation prevailing at a given time with its liquidation net asset value per share. If the PBR of any corporation falls below one (or below its liquidation net asset value per share), the stock price of such a corporation is often considered undervalued.

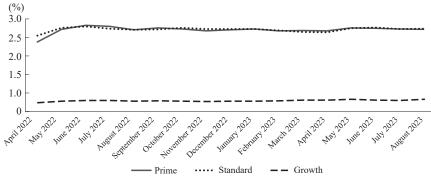
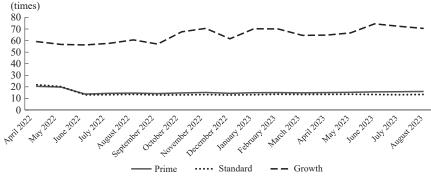


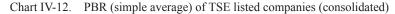
Chart IV-10. Dividend yield of TSE-listed companies (simple average)

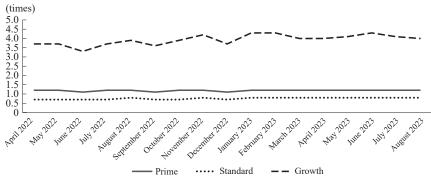
Source: Japan Exchange Group.

Chart IV-11. PER (simple average) of TSE-listed companies (consolidated)



Source: Japan Exchange Group.





Source: Japan Exchange Group.

78 Chap. IV The Secondary Stock Market

It should be noted, however, that the use of the PBR as an indicator for investment is based on an assumption that it reflects the actual book value of the company. If not, even if the PBR is below 1x, this does not mean the stock is undervalued. In March 2023, TSE issued a notice requesting listed companies who had P/B ratios below 1x for an extended period of time (on the Prime and Standard Markets) to disclose and implement measures to address this. This initiative is intended to encourage management to be more conscious of the cost of capital and their company stock prices, and thereby increase the attractiveness of the Tokyo market to investors.

8. The Margin Trading System (1)

Shinyo torihiki (margin trading) is a system crafted on the model of the margin trading conducted in the United States and was introduced into Japan in June 1951 with a view to stimulating speculative demand for securities trading. Margin trading is a transaction in which an investor receives credit from a Financial Instruments Business Operator (securities company) and can buy a certain number of shares of a stock or sell shares without owning the funds to buy or the shares to sell, provided that they deposit a certain amount of margin money. On the other hand, the Financial Instruments Business Operator that receives such an order must settle the transaction on the settlement day. As the money markets and the securities markets in Japan were not fully integrated originally, a securities finance company was created to help Financial Instruments Business Operators reduce their burden of having to provide cash or stock certificates for the settlement of such margin trading. These were called loans for margin transactions.

A loan for margin transaction is where a securities finance company lends a Financial Instruments Business Operator, who is a participant of a financial instruments exchange, funds or stock certificates that are needed to settle margin transactions through the settlement mechanism of the financial instruments market. The amount of funds and shares required for the transaction is reduced by first internally offsetting applications for a loan of shares of a certain stock against those for lending shares of the same stock — more specifically, by lending the money it collects from a margin selling investor (or stock certificates it collects as collateral from a margin buying investor). Next, for any requirement of funds after offsetting, the securities finance company meets the shortage by borrowing the amount of such shortage from a bank or by raising funds from the call market, or the Bank of Japan. For any stock lending requirements, the securities finance company may borrow by inviting bids from Financial Instruments Business Operators and institutional investors (see the chart on the next page). Stocks that can be traded or

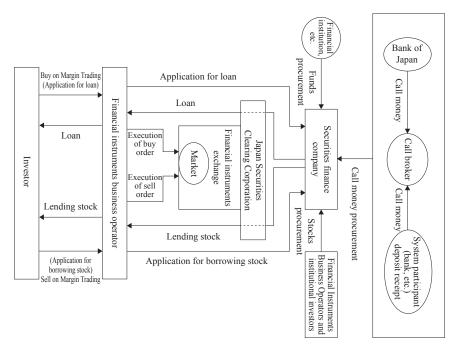


Chart IV-13. Outline of Margin Trading and Loans for Margin Transactions

- Standardized margin trading (between a customer and a Financial Instruments Business Operator) Collateral: Shares bought (or the proceeds from the sale of shares sold)
 - Margin: 30% or more of the market price of the shares bought (or sold) on margin. (When a substitute security is deposited, such security will have a collateral value of up to 80% or less of its market price.) However, the minimum amount of the margin in all cases is ¥300,000.
- Loans for margin transactions (between a Financial Instruments Business Operator and a securities finance company)

Collateral: Shares bought (or the proceeds from the sale of shares sold)

- Guarantee deposit: 30% or more of loan balance (or the lending stock balance) (When a substitute security is deposited, such security will have a collateral value of up to 80% of its market price.)
- •Call money share collateral deposit receipt system (participating in the system are securities finance companies, call money dealers, companies affiliated with the deposit receipt system, financial instruments exchanges, and the Bank of Japan).

Under this system, stock certificates pledged as collateral for a loan for margin transaction received by a securities finance company (only such issues recognized as appropriate by the Bank of Japan) are transferred to the account of a financial instruments exchange opened with the Japan Securities Depository Center and the securities finance company takes in call money by pledging as collateral the deposit receipt issued by the financial instruments exchange based on the aforesaid stock certificates.

In other words, the system enables collateral to be used to procure the funds necessary for the loan transaction, effectively using the stock as collateral. The deposit receipt also serves as collateral when borrowing money from the Bank of Japan through a call money dealer.

Note: The margin rate and the ratio of collateral value above may change based on margin trading regulations.

lent for margin trading purposes are selected by the financial instruments exchange and can be categorized into trading issues, which can be used for both trading and loans, and loanable issues, which are used only for loans. Loanable issues are selected from the perspective of ensuring liquidity to handle speculative demand based on the number of tradable shares or the number of shareholders. Moreover, there are added restrictions on the amounts of stocks that can be borrowed.

The securities finance companies are special financial institutions on the securities market established in 1950. They began operating loan transactions in line with the introduction of the margin trading system in June 1951. Since the role of securities finance companies on the securities market increased thereon as margin trading expanded, to strengthen their function, the government introduced a licensing system from April 1956, requiring securities finance companies to be authorized by the Minister of Finance (currently, the Prime Minister). Since then, there has been significant consolidation among securities finance companies that had been established on regional stock exchanges. As of September 2023, Japan Securities Finance (JSF) alone handles loans for margin transactions.

9. The Margin Trading System (2)

Based on the amendments to the Securities and Exchange Act in 1998, the restrictions on borrowing stock without going through securities finance companies and on borrowing and lending stock between themselves (the so-called stock lending market) were lifted. At the same time, the regulator approved negotiable margin trading, allowing Financial Instruments Business Operators to freely determine prices, interest rates, and contract terms between themselves and their customers. At this juncture, conventional margin transactions backed by loans for margin transactions for which the financial instruments exchanges determine prices, interest rates, and contract terms on their markets came to be called standardized margin transactions (see Table IV-4). Negotiable margin trading became increasingly popular after they started to be used in Internet trading in Japan in 2003, and such transactions have come to account for about 30% of all margin purchase balances in recent years.

Looking at the proportion of loan balances in standardized margin stock buying balances, the dependency of Financial Instruments Business Operators on loans for margin transactions almost uniformly declined up to 1988 because of their growing ability to finance themselves primarily out of their internal reserves. However, the market's dependency on loans for margin transactions began to rise again in the 1990s, due to factors including the de-

| | Standardized margin trading | Negotiable margin trading | |
|-------------------------------|---|--|--|
| Margin deposit | 30% or more of trade contract value | 30% or more of trade contract value | |
| Loan rate (negative interest) | Rate set xby the financial instru- ments exchange | Determined by Financial Instru- ments Business Operator | |
| Repayment due date | Up to six months | Determined by Financial Instru- ments Business Operator | |
| Eligible issues | Selected by financial instruments exchanges, etc. | Selected by Financial Instruments Business Operator | |
| Rights processing | Method set by the financial instru- ments exchange | Method specified by Financial In- struments Business Operator | |
| Financing (loan transaction) | Available | Not available | |

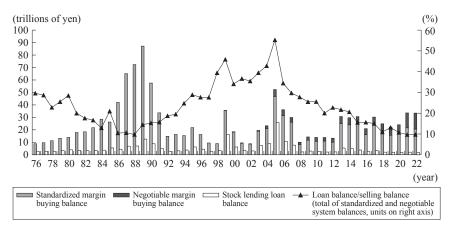
Table IV-4. Comparison of Standardized and Negotiable Margin Trading

Source: Based on Japan Exchange Group materials.

terioration in the financial positions of Financial Instruments Business Operators following the burst of the economic bubble, the emergence of Internet trading, and a recovery in stock market prices starting in 1999. In 2005, the dependency of Financial Instruments Business Operators on loans for margin transactions neared the 50% mark. Since then, the dependency on loans for margin transactions has again taken a downward path because of the greater diversification of financing sources for Financial Instruments Business Operators. On the other hand, looking at the balance of shares used in lending transactions, the traditionally small amount of margin sales began to rise in the latter half of the 1990s as institutionalization of stock markets became active and cases of Financial Instruments Business Operators borrowing shares from securities finance companies on their own proprietary accounts to settle buy orders increased. By 2000, the dependency of Financial Instruments Business Operators on loans for margin transactions had risen to 80%. Recently, this dependency has generally remained above 50%.

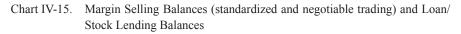
The margin trading system and margin deposit operations of securities finance companies have changed and diversified along with the development of the securities market in Japan. The margin trading system has been revised frequently to invigorate the market, with JASDAQ issues added in October 1997 and PTS added in August 2019. A loan financing system for issues other than loanable issues was introduced in October 1995, and loans for margin transactions became available for the JASDAQ market in April 2004 and PTS in August 2019. Furthermore, a commercial financing system became available for Financial Instruments Business Operators that needed cash to settle their margin buying trades in negotiable margin transactions.

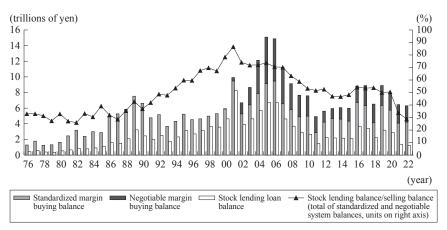
Chart IV-14. Margin Buying Balances (standardized and negotiable trading) and Loan/ Selling Balances



Note: Previous to 2012, figures included the margin balances of companies listed on the Osaka Securities Exchange.

Source: Based on Japan Exchange Group materials.





Note: Previous to 2012, figures included the margin balances of companies listed on the Osaka Securities Exchange.

Source: Based on Japan Exchange Group materials.

In addition to their licensed-based loans for margin transactions business, securities finance companies also (1) offer general loans to Financial Instruments Business Operators or their clients, (2) run a commercial stock lending business other than loans for margin transactions for financial instruments companies, and (3) act as intermediates in bond lending transactions.

10. Diversification of the Securities Trading System

The basic function of the stock market is to efficiently allocate funds by finding a price at which all demands are matched with the supply available. At a stage when information technology (IT) was not fully developed, there was a need to concentrate securities trading in one place in order to achieve that purpose. In fact, a number of stock exchanges had been established in different regions to the extent that transactions in each region could be concentrated at the respective exchange, and listed securities were required to be traded on these stock exchanges. In an environment where dissemination of information, communication of orders, and processing of transactions incur costs and cannot be conducted in a timely manner, no arbitrage transaction-a practice that plays the role of eliminating a price difference-could sufficiently take place even if an opportunity arose to make a profit by taking advantage of a difference in the price of one and the same stock between stock exchanges. Under such circumstances, it became necessary to concentrate securities trading on the stock exchange to avert the occurrence of what is known as the "fragmentation of the market."

However, the securities markets have shifted to computerized trading systems thanks to the development of information technology, and stock exchanges where orders are processed manually on the trading floor have become a rarity in the world. That is, elements of securities trading, i.e. integration of trading information, transmission and execution of orders, delivery of securities, settlement, and custody, are integrated by the computer networks and processed in real time, realizing an environment in which balanced prices can be found even through a dispersed computer network installed at markets in multiple locations. The idea of market operation based on such an infrastructure of securities trading is called inter-market competition. Meanwhile, given the growing number of institutional investors in the securities market, the need for a guarantee of anonymity and for a trading system designed to minimize the market impact cost has increased, and special forms of trading, such as large-lot transactions and basket transactions, have also increased. As complex trading rules can be instituted without difficulty in a computerized trading system, a trading system capable of meeting such needs can be provided at a low cost.

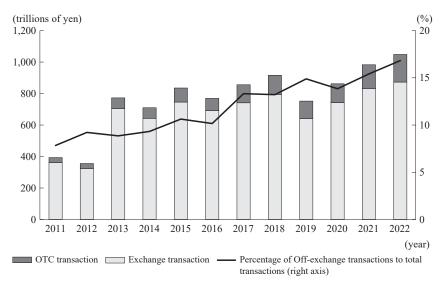


Chart IV-16. Trading Amounts of Exchange Transactions and OTC Transactions

Source: Japan Securities Dealers Association.

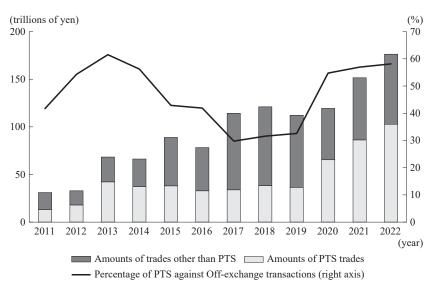


Chart IV-17. Breakdowns of OTC transactions

Source: Japan Securities Dealers Association.

These technological innovations make it difficult to distinguish the trading systems provided by private companies from those provided by the traditional securities exchanges. In the United States, the Securities and Exchange Commission (SEC) has acknowledged the similarity of functions performed by the two types of trading systems and has adopted the Alternative Trading System (ATS) and has authorized the Electronic Communication Network (ECN), a type of ATS, as a securities exchange. Also in Japan, the regulators have authorized negotiated trading in listed securities following the lifting of the ban against off-exchange securities trading and have added a Proprietary Trading System (PTS) to the types of securities business that can be handled by securities companies.