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This paper provides the reader with a history, overview, and structure of the London and the Tokyo Stock Exchanges.

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THE TOKYO STOCK EXCHANGE

Background.

Currently there are eight exchanges in Japan: the Fukuoka, Hiroshima, Kyoto, Nagoya, Niigata, Sapporo, and Tokyo Stock Exchanges; the Osaka Securities Exchange; and an over the counter market. While this paper will concentrate on the Tokyo Stock Exchange, TSE, it is important to keep in mind that these other exchanges heavily contribute to Japan's security market activities and the capital flow in and throughout Japan.

Common indices include the Nikkei Stock Average, or more frequently termed the Nikkei 225 and Nikkei 500; and the TOPIX. The Nikkei averages are calculated similarly to the United States. They are averages of the stock prices adjusted for issues and non-market factors. TOPIX, a composite index of all stocks in the first section, originated in 1969; it was created by the TSE. An index for the second section stocks was also developed by the TSE.. This index measures market capitalization change relative to a base market value.

The TSE was established in 1878 and has continued to provide trading activities throughout the years, save for a brief period in 1945-1947 when the exchange was forced to close clue to increasing World War II air raids. Today the TSE serves as the primary exchange in Japan, both in volume as well as in capitalization.

Organization

Government of the Japanese Stock Exchanges falls under the arm of the Securities and Exchange Law of the Minister of Finance. The self proclaimed functions of the TSE include the following.[1]

- Providing a market place - prices are public, the market is open for set a period of time, in a set place (the trading floor)
- Supervision of trading - surveillance of executions
- Listing securities - the TSE and the Minister of Finance most approve all securities prior to listing
- Monitoring listed securities - to ensure consistency of the listed companies on the TSE

The TSE is chartered as a membership organization and as such it relies upon the members to perform administration duties, which basically means that it is highly self regulated.

Daily operations are governed by the 24 member board of directors, the president, and the six governors. The TSE directly employs about 900 employees; the floor has about 2,000 people working on it.

Operations

Trading hours on the TSE are from 9:00 to 11:00 a.m. and 12:30 to 3:00p.m. each day. Stocks are traded either on the floor or by the Computer-assisted Order Routing System (CORES). The exchange has two types of orders, the market order and the limit order.

In November of 1990 the TSE installed an intra-floor trading system. This system:

- automated order routing for orders of less then 3000 shares
- automated the trade confirmation process
- installed an electronic book with order execution capacity

Settlement

Settlement occurs by means of book clearing, versus certificate movement, in four various ways.

- **Cash transactions**

  Cash is expected on the same day of the trade, but it can be paid on the following day if both parties agree to this delay in advance.

- **Regular settlement**

  Delivery is due on the third business day after the transaction (T+3), this form is used for 99% of the transactions.

- **Special agreement transactions**

  Delivery is due on a fixed date as determined by both parties, not exceeding 14 business days after the transaction.

- **When issued**

  Delivery is due on a fixed date as determined by the exchange. This is used for new securities and subscriptions only.

TSE also serves as a clearing house for their transactions. When the market appears to be speculative or when the supply and demand balance is out of kilter the TSE maintains daily price limits, based on the previous day's closing price.

Members

All securities are traded through an authorized security dealer. All such dealers are members of the Japan Securities Dealers' Association. TSE's constitution sets forth the membership structure, which is to be compromised of 4 *saitori* and 114 regular members. All members must be security companies, meaning that there are no individual members. It is interesting to note that the Japanese exchanges do not employ the United State's specialist system that is used on the New York Stock Exchange and the American Stock Exchange.

Shares are traded utilizing two methods. A continuous trade method, the *zaraba* method, and an open outcry system, the Itayose method. Orders that have reached the floor prior to the opening of the trading session form the base for the prices of the securities on that. that business day. Throughout the day additional orders are matched by open auction.

The TSE has two types of members, the *saitori* and the regular member. The *saitori* acts as an intermediary between the regular exchange members and cannot deal on their own account or for other investors. The regular member of the TSE exchange may buy and sell either as a principle or as an agent.

Saitori employees, who are classified as intermediary clerks, position themselves at trading posts throughout the trading floor. Their main objective is to match buy and sell orders which are placed by the trading clerks. Trading clerks are the employees of the regular members of the exchange. Their main objective is to buy and sell. Orders arrive at the trading floor via computer order systems or the telephone. Floor clerks of the regular members bring the computer generated trades to the appropriate trading clerk.

Securities

The TSE lists both debt and equity securities of foreign and domestic stocks. Securities are segmented into groups on the exchange depending on the securities origin, size, and volume. Domestic stocks are split between *firs, sedan* and *second section* stocks. First section stocks have a heavier volume than second section stocks and they tend to have more shares outstanding and a larger distribution. Newly listed stocks are listed in the second section. Further groupings include:

- *Foreign Stock section*
- *Bond section* - all debt securities, including domestic, foreign
- *Over the counter market* - list emerging companies

As of the end of 1984 there were 1689 companies listed on the TSE. 454 were listed in the 2nd section. At this time there were only 93 foreign companies listed on the exchange.[2]

Real Scoop

The Japanese market is one of the least geared towards protecting the individual investor. The reporting of financial data occurs every six months and in much less depth than the reporting we see in the U.S. per the Securities and Exchange Commission. Disclosure-has been reported to be so poor that many people assume the data is manipulated[3]. Also, Japan's companies are tightly interwoven in their ownership structure. The largest companies own considerable amounts each other's companies, therefore the larger companies can significantly influence the TSE.

The first corporation headquartered in the United State's to become a member of the TSE was Citicorp in 1984. They obtained the seat vicariously by acquiring Vickers Da Costa, a British securities firm. This was a huge step forward for a U.S. commercial bank as Japan had enacted a law forbidding commercial banks from holding a seat.

[2] GT Guide to World Equities
[3] Unequal Equities, pp. 5-8.

Statistics

The price to earnings ratio and the yield of the TSE form 1990-1994 is shown below.

	1st Section		*2nd Section*	
year end	*P/E*	*Yield*	*P/E*	*Yield*
1990	39.8	.49	41./	.35
1991	37.8	.9/	43.3	.48
1992	39.7	.88	31./	.78
1993	94.9	.79	9/.1	.71
1994	90.3	.98	133.7	N/A

Source: GT Guide to World Equity Markets

Trading Volume of the TSE as of December 4, 1996

1st Section	277.00 million shares
2nd Section	10.77 million shares
Foreign Section	150.6 thousand shares

Source: Tokyo Stock Exchange

Market value of the TSE as of December 4, 1996

1st Section	349.97 trillion Yen
2nd Section	11.52 trillion Yen

Source: Tokyo Stock Exchange

London Stock Exchange

History

The stock market began in the United Kingdom with merchant venture activity back in the 17th century. Over time an informal market grew around the London coffee houses. New Jonathan's Coffee House became the first site for the stock exchange in 1773. It's official constitution was signed in 1802. Over the years a variety of regional exchanges cropped up. In 1973 the seven regional exchanges joined forces to create the Stock Exchange of Great Britain and Ireland. Their trading floors were located throughout the two countries. Late in the I980's regional trading floors closed up shop and all trading was handled in the central market.

Over the years since the exchange began, it maintained an enormous number of restrictive trade rules. The members who ran the exchange wanted to maintain their share of the profits, and they feared that progressive changes, that is the loosening of restrictions, would minimize their profits. One particular case of restrictions that caused a lot of controversy over the years was the distinct separation of duties between jobbers and brokers. There was some overlap between duties, thus leading to turf battles between the two groups.

<u>Big Bang</u>

The Exchange was relatively safe from government intervention until 1976 when they began to see the tide turn. When the Exchange registered with the Office of Fair Trading, they were shortly told they were violating a number of rules imposed by the Restrictive Trade Practices Order of 1976.

A number of major issues were discussed as a result of the filing. One of the most notable thorns in the side of the Exchange was that their jobber-broker classifications were a form of restrictive trade, now a political black mark. They also were forced to examine their practice of prohibiting brokers from acting as full service brokers to their clients. And of course the commission structure was brought up, could they impose a fixed minimum commission?

Once the snowball began formation, it kept growing as it rolled down the hill. Cecil Parkinson, Trade Secretary, told the Exchange to bring forth ideas for reformation.
And so the steps of change were born and the what was to be coined as the Big Bang in the history books came to life. The Big Bang, a set of market reforms that were to be phased into the Stock Exchange by October 27, 1986 was officially kicked off in 1983 via Parkinson's initiative. The four main changes that were proposed:

- abolish minimum scale commissions
- allow non-members of the Exchange to serve on the board
- establish a third party, Appeal Tribunal, which could over rule the Council's applicant decisions
- install members on the Appeal Committee who were not on the Council

The exchange was not looking forward to the changes, in fact they embraced no eagerness in the evolution that was to ultimately ensue.

The exchange has 19 directors on its board, all were elected from the securities business. The exchange is self regulated, operating in accordance with their articles of incorporation.

In 1990 a revised structure of the exchange was introduced. It is comprised of 6 regional offices in the UK and Ireland. Trading hours are from 8:30 a.m. to 4:30 p.m. Monday through Friday.

Operations

The Big Bang of October 1986 had a reforming effect on the exchange, it did away with the broker and jobber distinctions; jobbers lost monopoly power over market making. Now anyone who is a member of the exchange or other trading association can act as both an agent and as a market maker. Actual trades are carried out via the Stock Exchange Automated Quotations system (SEAQ). Foreign entities can become members of the exchange and mergers amongst different types of financial firms are now allowed. It also ceased to require fixed minimum commissions.

SEAQ and Structure

The logistical flow of the new system is driven by the structure of SEAQ. There are thi'ee screens that are broken up into levels. Level 1 shows the best bid and offer for each alpha and beta stock. Contrary to some of the other systems in the world, it does not show which firm made the bid or offer. Access to this information is limited to institutional investors and clients. Level 2 displays the clay's cumulative trades, the last six trades from alpha stocks, and quotes from all market makers. This level is available to all market participants. Level 3 is the system that allows market makers to actually bid and offer. This available only to market makers.

> Stocks listed on the exchange are quoted in normal market size (NMS). There are 12 bands of NMS, which range from 500 shares to 200,000 according to each individuals stock average market turnover. Securities with an NMS of 2000 shares or more have immediate trade publication on SEAQ for all bargains up to three times their NMS. Any bargains over three times NMS are published after a 90 minute delay.

In theory SEAQ was to all but eliminate the need for a trading floor. No longer would one need to walk around, looking at prices, asking for quotes.

Shares

A companies share capital may divided into several different classes. Companies may issue redeemable shares, but they can only be redeemed by the companies profits or from funds generated for the express purpose of redeeming the shares. Warrants and options are allowable. Currently the exchange includes local and foreign issues, as well as fixed interest instruments placed by private borrowers. The exchange also includes the British government's primary and secondary securities.

The most common type of share traded on the exchange is the ordinary share. This type provides the investor with the right to the dividends. Ordinary issues must be issued at par value. Typically this is the only share that provides the investor with voting privileges.

Preference shares give the investor the right to a fixed dividend, a percent of the par value, or to a repayment of capital. Loan stocks are similar to what the US terms bonds. They are company issued debt securities, with either a fixed[5] or floating rate.

One of the changes that emanated from the Big Bang was the reclassification of stocks. This was done in part to decide which stocks got reported on SEAQ. There were

[4] Euromoney Publications. The GT Guide to World Equity Markets. Euromoney Publications PLC, London, 1995.

three major groups of stocks separated on the basis of market capitalization, trading volume, the interest of market makers, and the number of outstanding shareholders.

- Alpha: Have a high trading volume, large market capitalization, many market makers. Market makers generally set the prices in this group as competition is high and the trading volume is large enough to protect the market makers bids. There are only a few dozen stocks in this class. Alpha stocks are reported on SEAQ.
- Beta: Have a lower trading volume, not as many market makers, and they are hundreds of equities in this group. This group's trade is delayed
- Gamma: Have low turnover, few market makers, and small capitalization. There is delayed reaction in reporting the trade prices in this category. Gamma stocks incorporate foreign equities, government stocks, local bonds, and fixed, interest stocks.
- Delta: These stocks are not listed on SEAQ

Crest and AM

Crest is the LSE's version of an electronic share settlement system. This paperless settlement system will increase the efficiency of the exchange. It will decrease the settlement cycle time from T plus five days to T plus two. And Crest will provide overhead savings as it is less expensive to operate than their previous, ill-fated, short lived Talisman system.

The LSE's Alternative Stock Exchange, AIM, began in June of 1995. This exchange was created to facilitate the trade of smaller (market capitalization), high growth, new issues. In the first year of operation it listed 173 companies with a market capitalization of 3652 BPm."

Going Concerns

As the world's capital markets have incorporated technology into their exchanges the transfer of information has improved efficiencies and increased the integrity of the data.

For example: Brokers' Regulatory Association or the Financial Intermediaries', Managers', and Brokers Regulatory Association

[6] AIM Slock Exchange

Some exchanges have used technology to eliminate costs, others have incorporated it into their operations as a defensive move, to maintain a player in the global stock market.

The LSE falls into the second category, they have incorporated technology as a defensive measure, as they have watched their competitors' business increase over the years. The interesting point here is to look at the history of the LSE. They have always resisted change, they would prefer to keep the exchange running like it is out of fear. Fear for a loss of power and control that a member or market making participant may have.

Yet the LSE is moving forward, albeit slowly and against their will. Thanks to a lost court battle, real-time stock quotes are now being generated for the LSE. And now the LSE is planning on installing an order driving trade system, to replace the current market making system.

Another bone of contention with the LSE is their regulatory system. It is still primarily self regulated by the self regulatory organizations, SRO, with a new addition of the Securities and Investment Board, SIB. The SIB is charged with monitoring the SROs and the markets, however they have no authority to punish. In 1987 the Serious Fraud Office was created to reduce financial fraud. Despite the installation of these groups, people still believe that the SROs operate in their own best interests, thus leaving the customers out in the cold. Furthermore, insider trading prosecution has seen little conviction activity. The LSEs main *gatekeepers* appear to be rather impervious to penal action.

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Faculty Evaluation

This paper presents a thorough and interesting review of the current microstructure and other regulatory features of the London and Tokyo stock exchnages. Regulation, clearing, history and regularities are all well explained. The use of data is also impressive