
A New Era for Securities Exchanges

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1. Exchanges Being Transformed into Private Enterprises

1) Japan Faces an Era of Inter-market Competition

Japan is going to introduce the principle of competition among markets at long last as part of its financial big bang. This step will foster competition among securities exchanges and between exchanges and other markets such as the advanced electronic trading systems to secure more listed companies and order flows. In some cases, securities companies will compete with existing stock exchanges for better execution of orders outside the exchange. Such competition among different markets will drastically change Japan's entire securities market into a more efficient and innovative format. This historical change, which is embodied in the Financial System Reform Law enacted in June 1998, will be enforced in December 1998.

The Japanese version of big bang, which aims at a shift from the financial and capital markets protected by the "convoy system" to a competition-based market. As financiers will be exposed to active mutual competition, so will be market suppliers such as securities exchanges in what is known as "inter-market competition".¹

It is a global reality that the distinction between "financiers" and "market suppliers" has become blurred due to the changes occurring. The United States was quick to respond to this trend by introducing the principle of inter-market competition in 1975 in what is known as "May Day".

Britain also responded with its own big bang in 1986, and this has prompted competition among securities exchanges in continental European countries. From the latter half of the 1980s through the 1990s, Asian and Oceanic countries reinforced the competitiveness of their exchanges as part of the policy to foster their capital markets. Japan has been much behind other countries in introducing the principle of inter-market competition, and thus must make its reforms all the more effective in line with the purpose of its big bang.

The financial and capital market is beset with massive problems, but it has little time to shelve their solutions, because foreign exchanges are accelerating their changes. With the increasingly blurred distinction between financiers and market suppliers, securities exchanges of foreign countries are behaving more and more like private business corporations.

This report will confirm the movement that symbolizes the changes in the character of foreign exchanges, which are taking place in such forms as mergers, affiliation, corporatization and transformation into publicly-held companies, and then explore background factors for these changes.

2) Mergers and Affiliation among Securities Exchanges

In the United States, the American Stock Exchange (AMEX) is becoming a subsidiary of NASD (National Association of Securities Dealers), which also has NASDAQ under its umbrella. Thus the so called OTC market and the exchange handling listed stocks will become sister organizations under NASD. This was agreed by voting by AMEX members on June 25, 1998. It has also been basically agreed that this combination will be joined by the Philadelphia Stock Exchange. In fact the Philadelphia Exchange had been approached by the Chicago Board Options Exchange (CBOE) for possible merger, but it chose AMEX which made a better offer. The outcome is the possibility of the emergence of a great force that may be called the NASD alliance against the NYSE.

The CBOE, which failed in merging with the Philadelphia Exchange, is negotiating with the Pacific Stock Exchange for a possible affiliation. Some observers predict the birth of a “super-regional exchange” embracing other American regional exchanges in Boston and Chicago.

In Europe, the German exchange and the London Stock Exchange, which had competed vigorously with each other, surprised many people by announcing a joint listing arrangement and a system integration in July 1998. Subsequently, the Dutch exchange also announced that it will participate in the group, which is expected to be joined by the exchange in Luxembourg.

Prior to this movement, the exchange in Germany announced a plan in September 1997 to form a common market with the French and Swiss exchanges. The plan calls for a merger of the Swiss futures options exchange and the German futures exchange by the autumn of 1998. A common trading system EUREX is being prepared for this purpose. These exchanges are discussing how to coordinate rules and integrate the clearing and settling organizations.

Other reported European plans include a merger of exchanges in Stockholm, Copenhagen, Oslo and Helsinki, as well as a tie-up of exchanges in Amsterdam, Luxembourg and Belgium in terms of cross membership, cross access and sharing of data and information.

As an example of tie-up among European exchanges, a system called Euro NM designed for the venture business market in France, Belgium, Germany and the Netherlands has been in operation since March 1996. The recent trend is toward a tie-up designed not merely for the venture market but for a comprehensive market.

The future development of these affiliations and integrations remains to be seen. According to some observers, the announcement by the German exchange of its tie-up with the London stock exchange is indicative of the rough going of the previously announced talks with the Paris exchange. Other observers predict the emergence of a “greater European stock exchange” to be participated in by many European exchanges.²

There is also a move toward a tie-up between the American and European markets. In March 1998 the CBOT announced an affiliation with the EUREX, which was followed by a report on a tie-up between the NASDAQ and the German stock exchange in June 1998.

1 For the concept of inter-market competition and its position in the Japan's big bang, see, *Securities Market and the Big Bang*, by Yasuyuki Fuchita, Nihon Keizai Shinbunsha, 1997.

2 For these views, see *Business Week*, July 20, 1998.

3) Corporatization of Stock Exchanges

The general perception of stock exchanges was that their members were securities firms and they were of highly public nature as typified by those in Japan and the United States. Recently, however, some exchanges have been corporatized and they list their stocks as shown in Table 1.

Table 1. Organizational Forms of Stock Exchanges

Form		Name	Notes
Membership		NYSE, AMEX, Tokyo, Toronto	AMEX has been corporatized and affiliated with NASD.
Corporation	Shareholders are limited to members.	LSE Paris Bourse Hong Kong	Corporatized in 1986 Corporatized in 1988 based on the banking law and issued preferred stocks to banks and insurance companies to increase its capital.
	Shareholders include non-members.	Frankfurt Stockholm Helsinki Copenhagen Amsterdam Australia	It is operated by Deutsche Borse AG. Corporatized in 1993 with shares traded freely after 1994. Corporatized in 1995. Corporatized in 1996. Corporatized in Jan. 1997 and sold to external investors. in March 1997. Listing planned for 2002 Corporatized in 1997 and listed in 1998.

Source: Prepared by NRI on the basis of Tokyo Stock Exchange, "Trends of major market reforms in foreign stock exchanges".

The London Stock Exchange and the Paris Bourse were corporatized through the "big bang" and the "petit bang" respectively in the 1980s. In both cases shareholders were limited to their members. However, shareholders included non-members in the cases of corporatization that took place in the 1990s in Stockholm, Helsinki, Copenhagen, Amsterdam and Australia.

Listing of stocks was implemented by the Australian Stock Exchange in 1998, and the Amsterdam plans to follow suit in 2002. In March 1997 the Finance Committee of the British House of Commons proposed a public offering of the LSE stocks. It is reported that the Paris Bourse will also go public in 1999 at the earliest.

In discussing a plan to have stock exchanges go public the following advantages have been pointed out.

(1) As investment in technologies by stock exchanges is becoming important, the corporatization plan will facilitate fund raising for investment in systems on the capital market.

(2) Recently it is increasingly difficult to continue to operate stock exchanges through agreement of members because of the expanding differences in the type of business, earnings and scale of operation among their members. Corporatization will ensure quick decision making.

(3) Adoption of the stock option scheme is expected to provide exchange executives and employees with greater incentives.

(4) Organizational transparency is expected to improve through disclosure. Greater respect for listed companies and investors as their real customers instead of emphasizing the interests of members, improving accountability for them and shareholders.

(5) Organizational efficiency will be prompted through means such as cost reduction.

Formerly stock exchanges were encouraging business companies to list their stocks by convincing them of the advantages of going public. Now they are going public themselves to enjoy the resulting advantages.

The AMEX will shift from a membership organization to a stock company by becoming a subsidiary of NASD (but will not be publicly owned). Further mergers and affiliation among stock exchanges should accelerate such organizational transformation in the future

4) From Monopoly to Competition, from Public to Private Organizations

Behind the changes that were inconceivable in the past, such as mergers and public offering by stock exchanges, is the fact that exchanges are now in an era when their social and economic position as an institution is going through dramatic change. In other words, they are changing from bodies with exclusive and public nature into those that behave more like ordinary business corporations which are constantly exposed to competition.

In the United States, traditional stock exchanges are competing with NASDAQ in addition to competition with each other. Competition over the electronic trading system is also intensifying. In the case of Europe, competition among exchanges of many countries has intensified after the British big bang, and is expected to become keener with the currency unification approaching. Britain is already seeing additional competition with an electronic trading system called Tradedpoint. In the midst of intensifying competition, exchanges are transforming themselves in order to survive.

We have seen many examples of monopolistic and quasi-public enterprises transforming themselves into quasi-private enterprises operating under the principle of competition in various industries, including ports and harbors, railroads, airlines, marine and land transportation, telephone, telecommunications and broadcasting. Now stock exchanges are joining this list.

What is common to these industries is the fact that with the progress in technologies, the backdrop which once sustained their monopolistic position (network externality and the need for huge sums of fixed investment) has been changing. On the other hand, the adverse effects of bureaucratic systems and vested interests fostered by the existing monopolistic and quasi-public operation have been criticized more severally than before under the current of the times.

In the network industry for instance, the effect of services tends to improve with the increase in subscribers, as typically seen in telephone. This fact has led to an economic motive for encouraging a company to exclusively expand its operation rather than allowing many individual companies to separately expand their networks. The need for huge sums of investment for expanding the networks has also made the approach by fully private enterprises difficult

Against the backdrop of the advances in technology, keener competition and the growing criticism of the traditional organizational structure, telephone companies have been privatized worldwide.

In the past, securities exchanges developed as monopolistic organizations because they could identify more efficient trading and price by physically gathering orders in one place. However, it has now become possible to match up orders by computer operations and this does not require much physical space. When computers were expensive, it was unavoidable to establish and operate exchanges in certain physical space as a sort of public facility through joint investment by the state or regional organizations. However, with the drop in computer price, an era has arrived when various entities can create better-performing facilities with relative ease.

Since technological development is expected to continue, we should realize that the flow of corporatization of exchanges will gain momentum in the future. Today a handful of global companies are engaged in a cut-throat competition through international integration and mergers in the telephone, or telecommunications industry. Likewise, exchanges, or rather the market-supplying business, will enter an era of the emergence of companies qualified for global operation.

5) The Government's Role in an Era of Corporatized Exchanges

Transformation of a monopolistic organization serving public interest into something like a private enterprise operating under the principle of competition will inevitably cause drastic changes in the role of the government. Regulation in the case of the monopolistic industries and public sector industries aims to minimize the adverse effects caused by monopolization. In order to prevent monopolistic price-setting, a system for official approval of rates is introduced and the range of operation is restricted.

Since the enterprise allows competition of the type seen in the private sector, official intervention will have to change, if not diminish. However, it is important to note that official intervention will not disappear but merely change. As a result, the government will have a new role in the following points.

First, since competition will not be on a full scale, the government will have to cope with some problems that may arise from imperfect competition.

Western securities exchanges are endeavoring to secure transparency. In the U.S., transparency in executing orders by market makers and specialists and their best execution have been promoted by introducing the principle of compulsory order-execution rule. In the London Stock Exchange, the order-driven system has been realized by adopting the new trading system, SETS (Stock Exchange Electronic Trading Service). This was prompted by the request by investors and the Fair Trade Commission for greater transparency.³

According to some views, if markets have strong competitive mutual relations, economic incentives for the disclosure of necessary information will automatically appear even if securing transparency is not specified by the rule, because exchanges will begin to strive to garner more orders. In actuality, however, the spread between market makers' quotes remained wide and almost fixed, a problem which has troubled NASDAQ.

Second, there is a problem of asymmetric information, which is related to imperfect competition. For instance, it is difficult for ordinary individuals to gain full information on quotations and prices at various points of execution. Therefore, some observers argue that to facilitate individuals' access, disclosure of information should be obligated under a unified rule.

Third, official intervention may be justified in some cases to afford protection against various systemic risks. Systemic risks for stock exchanges include the collapse of computer systems. As technologies become more important on the market, the impact of such problems with the system

³ The SETS is intended for the component stocks of FTSE100, which adopts standard settlement (T+5) in the number of over 500 shares (over 5 pounds) and under 1000 shares (under 5 pounds) and for the trading in the amount under 10 times NMS (2.5% of daily average trading volume).

on the entire market will be far greater than in the past. As a precautionary measure, the way of monitoring the capacity and security of market systems is systematized in the U.S., Again there is a view that there is no need to introduce regulations from the standpoint of respecting the principle of competition, because markets will have economic incentives in minimizing the problems of systems. However, if damages due to the confusion of a market spread to the entire market, it would be insufficient to leave the solution to the efforts of individual markets.

Fourth, when competition is imperfect, official intervention may be justified to promote competition and correct the imperfection. Thus, competition policies take on a greater importance as seen in other industries. Nippon Telegraph and Telephone Corporation was privatized into NTT, which was then required to split. Full-scale reexamination of various monopolistic arrangements and procedures is now under way.

As will be explained, the SEC of the U.S. has considered the electronic trading system to be registered as a securities firm. The reason is that it does not mechanically apply the regulations for traditional exchanges to this electronic system in consideration of its small scale, and that it regards it desirable for such innovative markets to grow and generate competition with the existing exchanges.

Quasi-public industries such as exchanges as well as telephones and railroads have changed into private enterprises due to the emergence of their alternative systems. However, they still remain network industries where the economy of network functions. As a general rule, an increase in the number of participants will facilitate the use and improve competitiveness. This means that even if alternative systems are better, they may be less competitive than the existing systems. In this sense, systems and measures to sustain new systems are justified.

2. How to Meet the New Era for Exchanges - An American Approach

1) American Measures to Promote Competition among Markets

As the foregoing discussion indicates, today's exchanges have reached a stage of rapid shift from monopolistic and quasi-public organizations to those closer to private-sector corporations. As a result, competition among exchanges is intensifying and exchanges are being forced to take measures to survive. Regulatory organizations on their part are forced to deal with the problems arising from the fact that exchanges have not become genuine private companies and that "the market for markets" remains imperfect.

Obviously, the measures taken by the latter (regulatory bodies) greatly influences the former (in terms of the degree of inter-market competition, what individual exchanges should do and the extent of benefits generated by competition to users). Furthermore, it determines the quality and competitiveness of the entire securities market.

Now let us confirm how competition is related to regulations in the U.S. which has realized the best exchange markets in the world.

An important fact is that some courts decided in the 1960s that the anti-monopoly act can be applied to stock exchanges. As collecting the fixed commissions from customers was decided to be a matter under the anti-monopoly act, demand increased for liberalization of commissions. The demand by the New York Stock Exchange for ban on off-floor dealing was also opposed by a

committee of Congress. These discussions led to the Securities Act Amendments of 1975. Generally known for May Day, that is the act which liberalized commissions, and the amended act denied the monopolization of exchanges and initiated legalized competition among markets.

Then as a framework to ensure transparency by a unified standard for all markets, rules for reporting on trading and quotes were introduced. The rules are universally applied to exchanges, securities companies as market makers and the NASDAQ which organized those market makers.

In this way, the stance to promote competition was adopted without limiting the role of providing market functions to exchanges. As a result, it was made possible to steadily develop Instinet, which had been functioning as a system for off-floor trading since 1969, and help the emergence of both market makers making full use of computers and the electronic trading system, in the process of the subsequent development of technologies.

In 1989 the Chicago Mercantile Exchange filed a suit as to whether or not the system for trading treasury bond options called the Delta system should be registered with exchanges. The SEC, which was entrusted by the court to make professional judgment, in a limited interpretation of the definition of exchanges, established the environment that facilitated the introduction of electronic trading system.⁴ In 1994 the SEC Division of Market Regulation issued a report "Market 2000", which reaffirmed the stance to place emphasis on inter-market competition by positively treating the emerging electronic trading system.

2) Proposals for Regulating a New Electronic Trading System

Recently this stance has gone through major adjustment. With the growing demand for market transparency, proposals were made to impose stricter regulations on the rapidly increasing electronic trading systems.⁵

The proposal for new rules for the electronic trading system deserves special attention because it does not merely represent strengthened regulations but also indicates the SEC's new approaches to such problems as what exchanges should be and how various emerging markets including the electronic trading system should be regulated.

The proposal shows the interpretation of the definition of exchanges. In its Section 3(a)(1), the Securities and Exchange Act stipulates the definition. However, the stipulation is ambiguous because it can mean the place which provides functions "commonly performed by a stock exchange as that term is generally understood". Under Rule 3b-12 which has been proposed as an interpretation of this provision, the exchange is defined as follows (Rule 3b-12[a]):

Any organization, association, or group of persons that: (1) consolidates orders of multiple parties; and (2) sets non-discretionary material conditions (whether by providing a trading facility or by setting rules) under which parties entering such orders agree to the terms of a trade.⁶

This definition is far extensive than the SEC's definition⁷ that was presented on the occasion of

4 See note 8.

5 Securities and Exchange Commission, Proposed Rule, "Regulation of Exchanges and Alternative Trading Systems", Release No.34-39884. This was proposed in April 1998 on the basis of comments from many quarters on the concept release issued in May 1997.

the Delta system issue. It was also expressly noted that this definition does not cover a system for merely transfer orders, a system for a single securities company to present bid offers, collect and execute orders, and a system for securities companies to internally match orders or cross orders⁸, and that these systems are not exchanges (Rule 3b-12[b]).

However, by this extensive definition, many electronic trading systems would be treated as stock exchanges. Interestingly enough, the SEC has proposed that such electronic trading systems⁹ can choose between the option to become exchanges and the option to continue to operate as securities firms with the duty to register as exchanges exempted, in return for observing a new rule called the ATS (Rule 3a1-1(a)(2) and Rule 3a1-(b)(2)).¹⁰

In the past, it was considered to be difficult for an electronic trading system to take a legal form of exchange. Especially, the Section 6(b)(3) of the SEC Act stipulates that an exchange should have a board of directors that can be controlled by its members and that directors should be selected so as to fairly represent its members. However, an electronic trading system does not adopt the membership system, and the form of its governance is just like that of a private company. As a recent step, the SEC notes that this rule does not always imply that the exchange should be owned by its members. The SEC also notes that in order to ensure fair representation, the exchange can use many methods (asking all participants to designate candidate directors, establishing a director selection committee composed of those selected from participants, and selecting directors directly by distributing voting rights to participants in proportion to their utilization). This means that an electronic trading system can be an exchange without adopting the form of traditional membership system.¹¹

6 Because of the stipulation “more than one participant”, the case of single market maker, in which the partner of trading is always a company, is not included. The term “orders” represents firm expression of the intention of buying or selling, and consent to the execution of orders at that price. It is not a mere expression of interest. The term “concentration” contains participants’ interest in trading shown collectively on the screen. Therefore, it includes the NASDAQ system and inter-dealer brokers. It may also include the AuTeX that is diffusing as the electronic board for block trading, which does not meet the condition of (2) above. Systems that merely supply information are not included.

7 So-called “Delta Release” of 1990, which interprets a stock exchange in the Securities Exchange Act as organizations that are “designed, whether through trading rules, operational procedures or business incentives, to centralize trading and provide buy and sell quotations on a regular or continuous basis so that purchasers and sellers have a reasonable expectation that they can regularly execute their orders at those price quotations.”, Securities Exchange Act Release No.27611 (Jan. 12, 1990).

8 It is required, however, that no orders from customers should be disclosed to anyone outside and that no orders should be executed by the prescribed rule which has been notified to customers. In other words, a scheme (in which a securities company collects orders, shows them outside and then collects corresponding orders and executes them) may be regarded as an exchange when it is operated by participants by the established rule.

9 The Alternative Trading System, which is an exchange stipulated by Rule 3b-12 and is defined as any system that would not regulate its members or surveil its own market (Rule 300(a)(2)). In other words, it is stipulated that the system which functions as a self-regulatory organ is not an ATS and should be registered as an exchange.

10 The markets operated by the Securities Dealers Association are exempt from registration with the exchanges (Rule 3a1-1(a)(1)). The system which handles only government securities, Brady bonds, and their repo arrangements is not covered by Rule ATS. Trading of government securities is specially regulated by the SEC, Treasury Department and the FRB regulatory authorities.

11 Besides, Section 6(c)(1) of the Securities Exchange Act stipulates that an exchange should prohibit direct access by companies other than the registered securities companies. In its 1997 Concept Release, the SEC solicited comments on direct access to an exchange attempted by institutional investors who became the exchange’s members. Many commentators expressed opposition. The reason is that as securities companies are subject to various regulations as direct participants in the exchange, institutional investors will be subject to necessary regulations when they directly participate in the exchange. In that event, the exchange and the SEC are required to make intricate judgment regarding what regulations should be adequate compared with securities companies. Institutional investors, on their part, can make virtually direct access to the exchange even at present by formally going through securities companies if they use an order routing system. For these reasons, the SEC has judged that there is no need to make institutional investors direct members.

When the electronic trading system chooses securities companies rather than exchanges based on this new definition, Regulation ATS applies. As a result, some conditions become more rigid than before. When the ATS accounts for more than 10% of the trading of an issue¹² on the entire market, it is required to disclose the best quote for that issue and arrange for even non-participants to have access to the disclosed best quote. When the percentage exceeds 20%, the ATS is required to be fair with regard to the access to the system. It is also required to have adequate capacity and to be perfect and safe.

Other conditions include membership of a self-regulatory organization,¹³ notification of the establishment and changes in the system to the SEC and reporting on quarterly trading to the SEC. However, these conditions have been basically required of the electronic trading system.

Because of the application of Regulation ATS in the foregoing series of cases, the system has been strongly required to ensure transparency, fairness and adequacy (which are required of exchanges) even when the electronic trading system chooses securities companies.

Proposals for exchanges include less strict interpretation of the board of directors as explained above and the exemption of the obligatory registration of a pilot trading system with the SEC. An exchange is now required to file the introduction of rules with the SEC and go through the process of soliciting comments from the public. This latter proposal is designed to cope with criticism that the process disfavors the electronic trading system, which is under no such obligation.

3) Differences between Exchanges and Securities Companies

Table 2 compares the differences between requirements for a securities exchange in operating the market and those for a securities company in operating the market. Requirements for exchanges have been relaxed, while those for securities firm have been strengthened. The table shows considerations to reduce the difference in regulatory burden between the two.

Table 2. Market Operation by Registered Stock Exchanges and That by Securities Companies

Requirements	Operation of Markets by Exchanges	Operation of Markets by Securities Companies
Self-regulatory organization	○	×
Participants are securities companies (direct participation by institutional investors is not permitted)	○	×
Trading is limited to listed companies	○	×
Fair selection of the board members	○ → △ ¹⁾	×
SEC filing concerning the introduction of rules, etc.	○ → △ ²⁾	×
Obligatory disclosure of the best quotes	○	× → ○ ³⁾
Obligations regarding fair access and prohibition against anti-competitive behavior	○	× → ○ ³⁾
Obligations to achieve an adequate system standard	○	× → ○ ³⁾

Note 1: This regulation is flexibly interpreted when the market is operated not under the membership system but by profit-making organizations.

Note 2: This is exempted when the new trading system is operated as a pilot program.

Note 3: This is exempted for small-scale markets (registration is exempted for small-scale exchanges).

Source: Nomura Research Institute

¹² Covered securities are defined by Rule 11Ac1-1(a)(6). Specifically they are listed stocks and NASDAQ-registered stocks (including Small Cap).

Apparently market operation by an exchange still has to be subject to stricter regulation than that by a securities company. However, the SEC stresses the advantages from the viewpoint of being an exchange because the exchange can determine its own rules as a self-regulatory organization and because the use of the term “exchange” ensures users’ confidence.

The electronic trading system has expanded its share, but the trading centers on NASDAQ issues, with the issues handled by the NYSE accounting for only 4%. The market which has secured high liquidity tends to attract more orders, while the market with low liquidity suffers from limited popularity and thus its liquidity may decline further. This is why the existing markets are in a better position to secure competitive advantages simply because they have existed for some time. However, this reason makes it difficult for even a technologically superior system adequately dealing with investors’ needs to take root in the market.

The fact that regulations for the exchange are more rigid reflects the measures taken in consideration of the difference in competitiveness. The same consideration seems to be reflected in the fact that some of the requirements for the above-mentioned Regulation ATS apply only in big-scale trading. When trading volume is small, the exchange is exempted from registration.

These facts point to an attitude seen in the U.S. to achieve balance in real condition for competition not merely by affirming competition among markets but also by considering the difference in actual competitiveness. As long as the electronic trading system is based on such an idea, there will be no problem that may hamper the growth of the system despite the newly strengthened regulation. The clarification of the definition of exchanges and the requirements for the operation of the electronic trading system as securities companies as well as the decreased uncertainty for new entry should help encourage competition. In making decisions about whether the market should be operated by the exchange or by the securities company, the difference between regulations should be narrowed and a neutral administrative stance taken. This fact deserves favorable assessment because it keeps the market operator from spending valuable management resources in choosing the less regulated system and because it enables him to engage in system development and business planning by focusing his efforts on customers’ real needs and the type of business he wants to engage.

The SEC’s approach is to acknowledge the market supplier under the definition of a securities company and ensure fair competitive conditions regardless of whether it is an exchange or a securities company, against the background of the expanding place for trading outside the traditional exchanges as a result of technological development.

There may be a countervailing approach to regulate the traditional exchange and the electronic trading system with a common framework, by reexamining the past definition of an exchange or securities company, and by newly defining a new business in the form of supplying the market.

The SEC did not take the latter approach because it had no right to make proposals for a change in the Securities and Exchange Law itself, and this shows an attitude of flexibly coping with

13 Placing the ATS under the supervision of other self-regulatory organizations such as the NASD has been criticized on the ground that the step would make the NASD, which is operating the market itself, compete with the ATS and that it is problematical to place the NASD as the supervisor of its competitor. On this point, the SEC points out that as a self-regulatory organization, the SEC will supervise other self-regulatory organization’s behavior that is intended to operate the market in favor of ATS by taking advantage of its supervisory position. At the same time, it is indicated that it would be possible to establish a new Securities Dealers Association which supervises the ATS only.

a new situation through new interpretation even without easily changing the fundamental framework in the form of law.

Whichever approach is taken, there will remain a problem of how to distinguish exchanges from securities companies, or market supplier from mere information vendors. With technologies expected to develop further, there may emerge various borderline systems. If regulatory burdens differ extremely between stock exchanges, securities companies, market service providers and similar facilities outside the foregoing three categories, then incentives for looking for loopholes in the law will increase. However, this is far from productive. In the U.S., it is relatively easy to become a securities company. If an information vendor wants to engage in a business close to the business of market supply, it may well register itself as a securities company just in case. Measures to exempt registration or regulation for small-lot transactions are available as stated before, and rigid regulations are not applied from the outset.

It is possible to distinguish between securities companies and information vendors in the U.S. through masses of past judicial precedents and in terms of specific examples. In this respect, it seems adequate to have dealt with problems within the existing regulatory framework for exchanges and securities firms, rather than creating a new comprehensive definition for “market supplier“ and discussing its interpretation right from the beginning.

3. Toward the Second Stage of Big Bang for the Securities Sector

1) Reforms of Exchanges Underway

In Japan not merely exchanges but the entire financial industry were under the monopolistic and quasi-public system, as symbolized by the term “convoy”. The ongoing big bang is nothing but a process of transforming the present industry into an industry which is operated by private-sector companies under the principle of competition.

Securities exchanges will be changing as part of this process and becoming entities closer to private companies. The process will witness two definite trends as seen in Western countries - keener competition and changes in the regulatory background.

In foreign countries, the existing exchanges were exposed to competition caused by factors including technological changes or to competition from abroad. Regulations were accordingly altered. In Japan, the introduction of the principle of competition was expressly noted as part of the idea of the financial big bang, and whether competition intensifies or not remains to be seen.

Under the financial system reform law, compulsory limiting of trading to the exchange facility will be eliminated, and off-floor transaction will be permitted as from December 1998. The OTC market will also be positioned not on a complementary but equal footing with exchanges, and both will be in a mutually competitive relationship.¹⁴

In response to the introduced principle of competition, exchanges are endeavoring to reinforce their competitiveness. The Tokyo Stock Exchange adopted the off-floor dealing system in Novem-

¹⁴ For details, see “A Reexamination of Japan’s Securities Exchange Regulations” by Sadakazu Osaki, *Capital Research Journal*, Autumn 1998.

ber 1997, allowing securities companies to trade off the floor. The results of this type of transaction are reported to the exchange and treated as part of its transaction.

In order to effect this transaction more efficiently, ToSTNet-1 was introduced in June 1998 and ToSTNet-2 in August 1998. The former allows securities companies to use a system instead of facsimile in reporting their off-floor transactions to the TSE and is also equipped with the function of negotiating trading terms. The latter is a system for trading based on closing prices, and accepts trading even 1,000 shares or over, compared with the former off-floor trading which was limited to large-lots.

In the past, securities companies were not allowed to handle an order for more than 3 units of floor issues using systems and had to manually handle them on the floor. Such trading constraints were eased in August 1997 and it was made possible to handle all orders through a system in March 1998. As a result, the justification for the continuing existence of the floor is being discussed

Another developments include the establishment of the Securities Policy Council in April 1998, which is expected to discuss the long- and medium-term course of securities exchanges.

On the other hand, the Osaka Stock Exchange discontinued floor trading in January 1998. In order to improve securities trading efficiency using networks, it plans to launch a new system called "J-Net" within 1998. Nagoya and other local stock exchanges are also considering various measures for reform.

2) Measures Necessary to Promote Inter-Market Competition

(1) Will Competition among Markets Intensify?

It is a welcome gesture to achieve reforms that individual exchanges are making efforts in line with the policy to introduce the principle of competition. If more exchanges make drastic reforms as seen in the Osaka Stock Exchange, it should have an unexpectedly large impact on other exchanges which have been hesitating to reform themselves. As there are many cases of duplication of listed stocks and similarity of trading methods among the existing exchanges, there may be a major shift in trading among them if substantial differences occur in their commissions, dues and other fees.

Such competition among the existing exchanges will intensify in the future, but with the emergence of off-floor dealing and electronic trading systems, the possibility of more diverse forms of competition will not be great.

With the expected elimination of compulsory trading limited to the exchange floor in December 1998, substantial portion of off-floor dealing which currently takes the form of exchange trading will shift to off-floor dealing by securities companies. Currently, most of the off-floor dealing is established by securities companies which take orders from institutional investors. The reason is that after the lifting of the ban on off-floor dealing, securities companies will save fees currently paid to exchanges by making the current form of dealing (effecting dealings by taking orders from institutional investors) their own off-floor dealing. In consequence, there will arise a certain competition among markets - among exchanges' off-floor dealing and a new system for this purpose on one hand and securities companies' off-floor dealing on the other. However, such competitive rela-

tions will be seen in a limited area, and the room for the off-floor dealing and the electronic trading system to emerge will be limited. The reasons are the overwhelmingly high liquidity of the existing exchanges as well as the following constraints.

First, because the TSE reduced the tick size in April 1998, the development of the system to match orders within broad bid offer spreads as seen in the U.S. is limited.

Second, off-floor dealings can be executed only when investors expressly want it, and the trading price in that case should be within the price range of exchange prices.

Third, the business that supplies the place for electronic trading has been stipulated as securities business, and the methods to decide the price approved under this system are limited to the following four.

(1) To decide the price using the price made at the exchange.

(2) To decide the price using the price at the OTC dealing in securities market.

(3) To decide the price based on negotiations among customers.

(4) To decide the price using other methods as prescribed by the Prime Minister's Office Ordinance and the Finance Ministerial Ordinance.

There will be no problem if method (4) is widely used, but the definition may be limited. Securities companies which operate using electronic trading systems have to settle accounts for each case of trading because there is no settlement organization that collectively handles all the transactions on the market regardless of exchange trading or off market trading as seen in the NSCC in the US.

(2) Problems with Japan's Regulations for Electronic Trading Systems

Of the aforementioned problems, the price decision method for the electronic trading system poses special problem, and may result in unnecessary constraints on competition. According to the report by the Market Working Group of the Securities and Exchange Council, "if a new trading system has price-forming function as strong as that of exchanges, the system will have to be subject to regulations as an exchange. However, for the time being, this system is expected to utilize the exchange's price-forming function and does not have the price-forming function as strong as that of the exchange. Therefore, it should be treated not as an exchange but as a securities company."

It would be inadequate to change the definition of the system as an exchange or as a securities company depending on whether or not there is the high level of price-forming function. Indeed it is illogical that many local exchanges, which are engaged in trading by "using the price-forming function of the exchange (TSE)" and do not have their own price-forming function, are still regulated as "exchanges".

Even if electronic trading system dealings become active and the price-forming function becomes more advanced, it is unreasonable to urge a system that is virtually working as a securities company to convert itself into an exchange. The reason is that under the amended Securities and Exchange Law, exchanges in Japan are still defined as organizations that do not pursue profits. Therefore, as the electronic trading systems functioning as securities companies attract customers

as trading becomes active, they have to change into non-profit organizations.

An exchange may be seen as having the price finding function. However, why a system with price-forming function should not pursue profits remains unexplained fully. As we saw in Chapter 1, exchanges are entering an area where they increasingly behave like private companies.

(3) Measures Necessary to Promote Competition

Technological development has blurred the distinction between securities exchanges and securities companies and other information system companies. Legal distinction between exchanges, securities companies and business corporations may have to be maintained, and it is only natural for them to meet the purpose of regulations. Yet it is desirable for those engaged in the business of supplying markets to be able to freely choose the price-decision methods, organizational forms, profit or non-profit operation and the form of participants (securities companies and/or investors) according to their management resources and the characteristics of their customers and services. Such discretionary choice will promote entry of new participants and innovation of market.

As stated before, the recent proposal by the SEC of the U.S. aims to ensure that market suppliers' choice of exchange and securities companies will have just a neutral impact on this process of decision making. To put it in an extreme way, it is theoretically possible in the U.S. for all market suppliers, including the existing stock exchanges, to choose to become securities companies and operate the markets. This implies the extinction of the traditional exchanges. The existing exchanges then may make that choice if it can better meet users' needs and ensure further development. The resulting loss to exchanges would be nothing more than the use of the term "exchanges". The U.S. market would continue to function without hindrance.

The U.S. also adopts a consistent stance to exempt newly emerging small forces from regulatory burden as much as possible in order to promote competition.

Considering that emphasis in official intervention and regulations should be placed on the promotion of competition, it is hoped that regulations regarding exchanges and electronic trading systems in Japan will be modified by referring to the examples in the U.S.

In the U.S. and Britain, May Day and big bang were triggered by the application of the anti-monopoly law to exchanges. In Japan, however, exchanges remain exempted from the application of the anti-monopoly law. This point should be reexamined quickly, and the attitude toward the promotion of competition should be expressed as a policy for the securities market in order to achieve a better market rather than as a policy for preventing monopolization. This is the reason why the Japanese version of the big bang should proceed to the second stage.

(4) Expanding Spread between Japanese and Overseas Markets

The reason that it is important to prepare an environment receptive of innovative electronic trading systems is that without significant progress in market infrastructure, the spread between the Japanese market and the aforementioned Western markets which are undergoing dramatic changes will expand further.

If the spread is allowed to expand, the shift of securities trading overseas may emerge someday to the degree that cannot be ignored, considering the ongoing technological changes and globalization of corporate and investor activities.

Indeed, there have been signs of the hollowing out of Japan's securities markets. For instance, the NYSE is going to open an office in Japan and will actively invite Japanese companies to list their stocks in New York. Japanese companies are now more and more being required to manage their operations by global standards. In consequence, Japanese companies, especially better-performing ones, will place greater strategic emphasis on the listing in New York. The NYSE on its part aims at multi-currency trading of foreign stocks. If the listing of Japanese companies in New York increases, Japanese stocks will be traded in yen there, and this will facilitate the participation by Japanese investors.

On the other hand, the German stock exchange has set up access points and terminals in many countries, making it possible for foreign members in remote areas to have direct access to the system of its exchange. In late 1998, it will set up an access point in Singapore, the first in Asia, and is considering another access point in Japan. If set up in Japan, the access point would enable Japanese investors and securities companies, to trade German stocks and probably those on British exchanges which are to merge with the German exchange, directly without going through the Foreign Section of the Tokyo Stock Exchange.

There is a problem, however, as to whether such access points of foreign exchanges can be set up in Japan. Since securities companies participate in high-level formation of securities prices through terminals, such facilities can be regarded as exchanges in Japan. If so, the exchanges have to get a Japanese exchange license. In that case, they face a strange question of whether only securities companies participating from Japan should apply for license, or whether access points themselves become self-regulatory organizations. If the establishment of such facilities is not permitted, Japanese securities companies and investors will be much behind their foreign counterparts in this era of international network formation.

Incidentally, the U.S. gave the British Tradepoint the status of exempted stock exchange in July 1998. Tradepoint allow institutional investors to directly input orders on the order board through terminals, and are operated by private sector companies. As the Tradepoint was authorized as exchanges in the U.S., American institutional investors can now directly participate, through terminals, in trading on the order board operated by computers in London. Tradepoint, which currently handle only British stocks, plan to handle stocks of other countries in the future.

Until the 19th century, securities exchanges existed in almost all major cities of various countries. However, thanks to technological development and nationwide expansion of corporate and economic activities, those exchanges have converged on a few major exchanges in the 20th century. It is now conceivable that in the 21st century exchanges of different countries will move toward convergence on a handful of exchanges operating across borders. Exchanges in countries that fail to participate in such global competition will probably lose their relative competitiveness.

The fear of the hollowing out of Japan's financial and capital markets was a factor that prompted the big bang. As far as the purpose of preventing the hollowing out of financial institutions is concerned, the big bang has been successful, and many foreign financial institutions have started operating in Japan. However, the prevention of the hollowing out of the securities market essentially depends on the degree of reforms of the Japanese market.

Under the current foreign securities company law, overseas securities firms can directly trade with institutional investors even without business bases in Japan. If customers are limited to these

major investors, overseas electronic trading systems operated by securities companies may be able to freely operate in Japan, and handle Japanese stocks. There may arise a situation in which overseas exchanges supervised under various regulations, such as the German stock exchange, cannot establish access points in Japan, while the markets operated by overseas securities firms can do. Evidently this points to the necessity for a new framework.

3) Direction of Exchange Reforms

In order to prevent the actual hollowing out of securities markets, Japan's existing exchanges should improve themselves and various innovative electronic trading systems should be allowed to operate in Japan. In the case of the latter, it is desirable to introduce a new framework for the electronic trading systems to function as a securities company or a new exchange, regardless of the form of price discovery function. If its scale is smaller than the existing market, some consideration to promote competition should be given to alleviate its regulatory burden.

In order for the existing exchanges to improve, the ongoing efforts of reform and discussions about further reforms must bear fruit. Quick and bold reforms are desired considering that the U.S. and Britain went through May Day ten to twenty years ago and realized their versions of big bang and are now in the process of further reform.

The following are comments on some specific plans for reforms now being talked about.¹⁵

(1) Direct Participation in Exchanges by Institutional Investors

Currently, exchanges admit only securities companies to their membership and do not allow others to directly trade through them. As a result, there have been discussions about the means to ensure users' convenience by allowing investors to directly participate.

However, the era has past when securities companies' commissions were inefficiently set and competition among securities companies for better services was inadequate. Today, securities firms are fiercely competing with each other over how to transfer and execute orders, and extra profits from services are disappearing. No wonder there is little cost difference between institutional investors' direct trading and their trading through securities companies.

When investors directly participate in trading, they will naturally be required to ensure financial health and comply with trading and settlement rules. If such conditions required of member securities companies are rational, the conditions for investors attempting direct participation will essentially be the same as those for becoming member securities companies. In other words, they would be qualified as member securities firms rather than as investors. If information of limit order book becomes available, trading through networks between securities companies becomes possible and if the pricing for securities firm services can be efficiently effected, fewer investors would be willing to directly participate by bearing such costs of regulation. If competition among securities companies is inadequate and if participation through the existing securities firms does not ensure satisfactory services, investors would possibly establish securities firms with their own efficient pricing and participate in exchanges through such securities firms now that regulations for subsid-

¹⁵ The following discussions are based on useful suggestions from people in the industry and Dr. Ruben Lee of Oxford Consulting.

aries and holding companies have been relaxed.

There may be some views that even if the number of investors wishing direct participation is small, direct participation should not be prohibited. As mentioned earlier¹⁶, many people in the U.S. expressed their opposition to the admission of institutional investors to exchanges' membership in the Concept Release of 1997. Therefore, this idea was not included in SEC's latest proposal. This fact leads us to believe that what should be done in Japan with priority is not to ensure investors' direct participation in the exchange but to stimulate competition among securities firms and relax the membership qualification.

(2) Integration of TSE Sections 1 and 2

Integration of Sections 1 and 2 of the TSE has been proposed by some users. Indeed, the NYSE has no such separation. On the other hand, it is also proposed that the OTC securities market be divided into more than one market by the nature of registered companies. In the U.S., the NASDAQ has two sections, one for nationwide issues and the other for Small Cap.

The issue of which is better, one market or more than one market, depends on the situation. It is not a matter of either option being better than the other. The decisive point should be which is easier for users to utilize. Such division of the market will be meaningful only when the stocks traded can be grouped by some notable characteristics and when higher liquidity can be expected and user convenience can be enhanced by treating those stocks separately and changing trading methods. Otherwise the division will have little meaning.

Behind the proposal for integration of Sections 1 and 2 is the fact that because Section 2 companies are generally believed to rank lower than Section 1 companies, some Section 2 companies resort to unnecessary equity finance to meet Section 1 requirements by increasing their issued stocks and shareholders, only to lower their own ROE. However, this is a matter of management and not of the market. If a company in Section 1 disregards its ROE and behaves in a way which is not to the advantage of its shareholders, it would spoil its own image as seen by shareholders, while even a Section 2 company, if it is a really good company, would be adequately evaluated through appropriate IR (investor relations) activity.

After all these are minor items for reform compared with drastic changes in Western exchanges.

(3) Clearing and Settlement Function

The TSE clears all accounts for exchange transactions at its 100% subsidiary Nihon Shoken Kessai. For the policy purpose of promoting competition among markets, it is desirable for off-floor trading and the electronic trading system to join this clearing scheme.

In the U.S., the NYSE, AMEX and NASDAQ had their own settlement bodies, which have been incorporated into the NSCC through financing by the three organizations. As a result, exchange trading, OTC trading and electronic system trading are now cleared all together. In other words, despite mutual competition in trading, these exchanges and system use a common settlement arrangement. In Japan, the position of the TSE's 100% subsidiary should be reexamined if the organization to be formed is to handle off-floor trading as well. In addition to the first view-

16 See Note 11.

point of the policy for promoting competition, the second viewpoint of how to strengthen the competitiveness of exchanges is important in discussing the clearing and settlement function. The Amsterdam Stock Exchange has acquired the portion invested by the central bank, and made the settlement organizations its 100% subsidiary in order to cope with competition from foreign markets. Generally, however, it is advisable for the clearing and settlement organizations to rationalize their operation and cut costs to the fullest extent. They can thus be regarded quasi-public facilities intended as an efficient infrastructure for the entire market.

On the other hand, future exchanges should aim to compete in areas, where high value added services are required, by improving trading methods and services. As they function not as public facilities but rather as private sector corporations, differentiation should be most important. The clearing organizations, by contrast, will be required to provide more people with services of uniform quality and low cost. When exchanges were quasi-public organizations, it may have been meaningful for them to have their own clearing organizations that provided quasi-public services. However, when exchanges are changing, this point should be reexamined.

The third viewpoint for the clearing and settlement issue concerns how to reduce settlement risks. A noteworthy trend overseas in this regard is the growing discussions about the possible shortening of the settlement period for securities trading to T+1 in a few years. With the recent trend in funds transactions toward RTGS, it is being felt that T+3 would be too slow for securities (including securities collateral for funds and repo transactions). For this reason, it is important to promote global STP (straight through processing, or integrated electronic processing of transactions from order handling to settlement). A global STP should be realized to improve the present situation of settlement-related organizations. There is a move in foreign countries to incorporate settlement-related organizations, which have been separated for each category of products, in order to improve the settlement efficiency and reduce settlement risks. An ideal system for the future would be settlement risk control for the entire financial and capital markets including the banking system, derivatives market, bond and short-term money markets. Such a comprehensive settlement organization would ensure integrated control of the positions of all participants and adequate grasp of risks in consequence, and enable all participants to efficiently control collateral and margin requirements. It is hoped that the future form of settlement organization will be considered on the basis of discussions from the afore-mentioned long-term perspective as well.

(4) Corporatization and Other Organization Problems

In Japan there is a view calling for corporatization of securities exchanges. In a business environment where competitive markets can emerge, any forms of organization should be operated through user-oriented management. Therefore, the question is in essence whether or not an organization is user-oriented. However, this target cannot automatically be achieved merely through corporatization.

If the emergence of adequately competitive markets is difficult, there is no guarantee that corporatization will change an exchange into a really user-oriented organization. If an exchange transforms itself from a quasi-public body into a profit-making organization while retaining monopolistic power, its monopolistic behavior may appear in such forms as monopolistic price setting. Of course it is important to restrain such behavior through an anti-monopoly law. As a prerequisite, however, priority in reforms should be placed on how to develop an environment which encourages the emergence of competitive markets and in which any exchanges, in whatever form

of organization, should be excluded through competition unless they are managed by the user-oriented approach.

(5) Exchanges' Functions as Self-Regulatory Bodies

Securities exchanges play the role of self-regulatory bodies, but this role may place them at a competitive disadvantage against the electronic trading systems which are free from self-restraint. However, they are not always at competitive disadvantage because by behaving as self-regulatory bodies, they can secure higher confidence from the market and enhance their competitiveness in supplying trading services. They contribute to fairness and orderliness of the entire securities market more than they contribute to their own inter-market competitiveness.

It would be advisable therefore for an exchange to leave the portion with strong public nature (of its self-regulatory functions) to public organizations, and transform itself into a fully private sector enterprise specialized in supplying trading services. For instance, when the Amsterdam Stock Exchange corporatized itself, it retained the role of market regulation, but left that of membership regulation to the securities supervisory authorities. The London Stock Exchange also plays the role of market supervision, but the function of the members' customer services is entrusted to the self-regulatory organizations to which they belong. In Britain, the financial supervisory agency has started recently plans to absorb the role played by the self-regulatory organizations into its own function. In other words, instead of the industry's self-control, players are distinguished from the regulatory and supervisory administration. This approach should be of reference in Japan where there are many ambiguous points in the positioning of self-regulatory organizations.

If exchanges continue to play the role of self-regulatory bodies in some form or other, the regulatory methods should be reformed. By the big bang, the financial administration's method is expected to change from prior prohibition to ex post fact exposure. Exchanges will also be required more than before to exactly specify various rules, strictly monitor their observance, and thoroughly expose or control violations. Upgrading of the market surveillance system will also be required as a matter of course.

The administrative side is expected to make highly transparent rules instead of a discretionary or closed-door approach. Exchanges may well go through a process of disclosing proposals for the establishment of rules and the introduction of new systems and solicit comments from many quarters. This approach will ensure more user-driven decision making.

Conclusion

In order to ensure a business environment in which investors can trade securities efficiently, various kinds of services and functions should be provided. They include investment decision making, order routing, execution and matching of orders, price discovery, clearing and settlement, account control and circulation of market information. Other services and functions include development and management of these systems, invitation and screening for listing, examination of trading, other self-imposed rules and investor education.

In the past a certain portion of these functions was performed by securities companies and the remainder largely by exchanges. The latest amendment of the Securities and Exchange Law has

enabled securities companies to take over some services and functions of exchanges. Changes will not stop here. Some securities companies will further specialize their operations, while some institutional investors may perform many functions themselves. Some information vendors and system vendors may perform part of those functions.

As a major future trend, specific functions and services of securities trading will be undertaken by the parties with the best cost performance in respective functions and services. Even though exchanges' functions and services have been fixed under the law, rules and tradition, they will certainly be taken over by other better players who may emerge.

Therefore the existing exchanges should not consider reforms on the basis of the traditional functions, but endeavor to expand or specialize their functions considering in what areas they can provide fully competitive services compared with other organizations that may replace them.

In considering such expansion and specialization of functions, recent changes in Western exchanges are of reference. It should be stressed again that Western exchanges took great pains much earlier to reinforce their competitiveness by liberalizing commissions and introducing the principle of competition among markets. For instance, the London Stock Exchange abolished trading floors, carried out thorough restructuring and rented many floors to business corporations soon after the big bang. In the process of this restructuring, the organization was revamped and personnel slashed. Apart from the move toward merger, integration, affiliation and corporatization mentioned at the outset, there were many reports from Western exchanges on their noticeable reforms, including the reinforcement of publicity and marketing functions and the introduction of advanced systems. It should be recalled that prior to these reforms, these exchanges had followed a steady, painstaking process of reforms ahead of the arrival of the era of inter-market competition.

The administrative side is expected to flexibly reexamine various regulations to ensure the optimal distribution of social resources for above-mentioned securities services. The very effective means to realize the optimal allocation of resources is of course by introducing the principle of competition. The importance of policies that promote competition among markets can never be overly emphasized.