Intermarket Competition and the Future of Stock Exchanges

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Market Competition Is Increasing

On 8 August, 2000, OM Gruppen, the company that runs the Stockholm Stock Exchange, announced a takeover bid for the London Stock Exchange. This followed an announcement by the London Stock Exchange that it was going to merge with the Frankfurt Stock Exchange (Deutsche Börse) to form a new stock exchange called iX ("International Exchange"). It was also expected that the NASDAQ would take a share in the venture capital market that was supposed to be established under the aegis of iX. However, on 9 September, 2000, the London Stock Exchange announced that it was abandoning its plan to merge with Deutsche Börse and appealed to its shareholders to oppose the takeover bid from OM Gruppen. During the same month, the Paris, Brussels and Amsterdam stock exchanges merged to form a new stock exchange, Euronext.

In the United States, virtual stock exchanges operating on electronic communications networks (ECNs) are increasing their turnover, which is now 30%-40% that of the NASDAQ. One of these ECNs, Archipelago, has tied up with the Pacific Stock Exchange (a regional stock exchange based in San Francisco) to form a new stock exchange to challenge both the New York Stock Exchange (NYSE) and the NASDAQ. In response to this, the NYSE and the NASDAQ are trying to become more competitive by raising capital for investment in new systems and by forming a global trading network.

There have been similar developments in Japan. Rather like the "black ships" that opened up Japan to the West in the middle of the 19th century, the NASDAQ has tied up with the Osaka Securities Exchange (OSE) to form the Nasdaq Japan market. Although this is part of the NASDAQ's plan to form a global network, it has also had a major impact on Japan's securities markets, leading, for example, to the formation of a venture capital market ("Mothers") by Japan's biggest stock exchange, the Tokyo Stock Exchange (TSE), in an effort to maintain its lead. Similarly, the over-the-counter (OTC) market, which was originally intended to be the Japanese equivalent of the NASDAQ in the United States and has helped venture capital businesses to go public, is restructuring its operations and targeting companies in an effort to maintain its position.

Stock exchanges operating stock, bond and futures markets have been engaging in M&A activity, forming alliances and entering new areas of business to survive—just like normal companies. Stock exchanges all over the world now find themselves caught up in developments that would have been unimaginable only a few years ago. Competition among these markets has increased to the point where it would be no exaggeration to talk about an "intermarket war."[1]

The Emergence of Proprietary Trading Systems and the Demutualization of Stock Exchanges

Two of the most significant of these developments are, first, the emergence of proprietary trading systems (PTSs) in place of the traditional type of mutually owned stock exchanges and, second, the conversion of mutually owned exchanges to listed companies ("demutualization").

In the United States, PTSs have the legal status of "alternative trading systems" (ATSs), and ECNs are one example. Instinet, established in 1969 and the world's first electronic trading system, has a longer history than the NASDAQ. However, it was not until the 1990s that the turnover on electronic trading systems increased to the point where a broad debate began on their future. In recent years electronic trading systems have spread to other countries, and in Europe many new systems have been developed, especially for bond trading.

In Japan, PTSs were regarded for many years as "trading systems similar to exchanges," which are prohibited under the Securities and Exchange Law. However, the December 1998 Financial System Reform Law ("Big Bang") permitted securities companies to operate PTSs. The first two licenses were granted in June 2000—to Super Trade (operated by the Japan Bond Trading Company) and E*Bond (operated by E*Bond Securities, a joint venture between Softbank Finance and Lehman Brothers Japan). Since then, there have been moves to set up more PTSs (e.g., for overnight share trading and institutional bond trading).

These PTSs are operated by securities firms as for-profit organizations. The emergence of PTSs is a striking example of how a market function that used to be monopolized by non-profit semi-public organizations such as the stock exchanges and the Japan Securities Dealers Association has become a business.

At the same time, some traditional stock exchanges—especially in Europe, where the creation of a single currency and a single market has reduced the importance of national boundaries—have also embraced the profit motive and decided to become listed companies with shareholders other than their trader-members. Similarly, in the United States, new rules governing electronic trading systems ("Regulation ATS") came into force in April 1999. The official recognition that stock exchanges could pursue profit was also one of the reasons why existing stock exchanges such as the NYSE began to consider the possibility of going public (see Table).

In Japan, too, the May 2000 revision of the Securities and Exchange Law, which comes into force in December, for the first time permits listed companies—and not just non-profit mutual companies—to become stock exchanges, as well as allowing existing mutually owned stock exchanges to demutualize.

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1 For an overview see S. Osaki, Kabushiki Shijokan Senso [Stockmarkets at War], Daiyamondosha: Tokyo, 2000.

Possible Negative Effects of a Demutualization of the Tokyo Stock Exchange

Generally speaking, the main reasons a mutually owned stock exchange might want to demutualize are as follows: (1) to sell shares to finance investment in new systems; (2) to change employee attitudes, increase efficiency and speed up the decision-making process by embracing the profit motive and subjecting management to the scrutiny of shareholders; (3) to improve disclosure and increase transparency by going public; and (4) to give management greater flexibility and choice by making it easier to engage in mergers and acquisitions. In many countries, however, stock exchanges are expected to act as self-regulating guardians of fairness and have found it difficult to reconcile this with the commitment to the profit motive that demutualization entails.

Table Stock Exchange Demutualization

Ownership structure		Stock exchange	Details
Mutually owned company		New York Stock Exchange	Non-profit company owned by individual members. In September 1999, its board decided to move towards demutualization.
		Tokyo Stock Exchange	A February 1999 report mentioned the possibility of demutualization. In July 2000, a committee was set up to examine the issue of ownership.
Shareholder-owned company	Public company	London Stock Exchange	Demutualized in 1986. In March 2000, decided to allow non-members to become shareholders.
		Stockholm Stock Exchange	Demutualized in 1992. Since 1994, shareholders have been free to dispose of shares. In January 1998, acquired by OM Gruppen, whose shares are now listed on the exchange.
		Frankfurt Stock Exchange	Management company (Deutsche Börse) demutualized in 1993.
		Helsinki Stock Exchange	Demutualized in 1995.
		Copenhagen Stock Exchange	Demutualized in 1996.
		Amsterdam Stock Exchange	Demutualized and listed in 1997. In September 2000, merged with Paris and Brussels exchanges to form Euronext.
		Australian Stock Exchange	Demutualized and listed in October 1998.
		Hong Kong Stock Exchange	In March 2000 became part of new holding company, Hong Kong Exchange and Clearing (HKEx), together with Hong Kong Futures Exchange. HKEx listed its own shares in June 2000.
		NASDAQ market	Used to be wholly owned by the NASD. However, in April 2000 shareholders decided to allow non-members to take a stake. Following a capital increase in June (Phase 1), about 40% of the NASDAQ's shares became owned by non-members. Phase 2 was due to take place in the autumn.
	Other	Paris Stock Exchange	Demutualized in 1988. In September 2000, the Paris, Amsterdam and Brussels stock exchanges merged to form Euronext. New exchange is due to list its own shares.
		American Stock Exchange	In November 1998, merged with the NASDAQ and became wholly owned by the NASD.
		Singapore Stock Exchange	In December 1999, became part of a new holding company, the Singapore Exchange (SGX), along with SIMEX. Most of SGX's shareholders are still former members of SES and SIMEX, but in future more than half of the shares are due to be allocated to business partners.

Ownership structure		Stock exchange	Details
		Toronto Stock Exchange	Demutualized in April 2000. The shares were allocated to members, who are not allowed to dispose of them during the first two years without the board's permission.

Source: NRI.

In Japan, too, some people take the view that existing mutually owned stock exchanges such as the TSE should demutualize in order to achieve the above aims. In July 2000 the TSE set up a committee (chaired by the president of Nomura Securities, Mr. Jun'ichi Ujiie) to consider this issue.

It is not clear what progress the committee has made. However, given the important role the TSE plays in Japan's securities (and, especially, equity) markets, we need to consider first the whole issue of whether it should demutualize.

In the author's view, the possible disadvantages of demutualization are likely to outweigh the advantages and could have a negative impact on Japan's securities markets.

The following are some of the possible disadvantages.

First, the quickest way for a demutualized TSE to boost its income would be to raise its dealing charges and the fees market participants and information vendors have to pay for the information it provides. Although competition would restrict the TSE's freedom to do this, its virtual monopoly of trading in Japanese equities means that its members would probably prefer to pay slightly higher dealing charges than risk switching their share dealings to less liquid (or completely illiquid) markets.

In fact, the TSE's current dealing charges are lower than they used to be and are even quite low by international standards. This suggests that the exchange might be tempted to raise its dealing charges in order to boost its income. Such an increase would probably be absorbed by member securities companies (who have to compete fiercely with one another in order to survive) rather than passed on to their customers; but, in the longer term, it would probably lead to a poorer service and higher transaction costs.

Needless to say, the present president of the TSE and his staff are almost certainly not considering adopting such expedients. However, if the TSE were to become a listed company with shareholders other than its present trader-members, it could not ignore calls from such shareholders to boost its earnings. For such shareholders, who would not be directly engaged in share dealing, maximizing their profits would naturally take precedence over developing the exchange as a securities market.[2]

The second possible disadvantage if the TSE demutualized is the risk that it might take its self-regulatory responsibilities for enforcing listing requirements and monitoring market activity less seriously and that its reputation as Japan's fairest and best-supervised securities

2 Stock exchanges in Japan were previously allowed to charge fixed rates of commission because they were covered by an exemption of the Antimonopoly Act. Now, however, they are subject to the Act in the same way as other companies. Nevertheless, while the Act does not permit activities such as cutting prices or forming cartels in order to defeat rivals, it may allow stock exchanges to increase their dealing charges.

market might suffer. Although the revised Securities and Exchange Law requires demutualized stock exchanges to ensure that traders observe its regulations just as much as a traditional mutually owned stock exchange, enforcing such regulations is an expensive undertaking, requiring both human and IT resources. Therefore, insofar as this aspect of the exchange's business does not itself generate any earnings, it is quite conceivable that embracing the profit motive could lead the exchange to take its regulatory responsibilities less seriously than at present.

Even now, there is a risk that competition for new business among Japan's three venture business stock markets (the Mothers in Tokyo, the Nasdaq Japan in Osaka, and the OTC market) could lead them to relax their listing requirements in an effort to bring more companies to market. The risk would be even greater if the way listing requirements were enforced became linked directly to ensuring a profit.

The third possible disadvantage if the TSE demutualized is that it might be less willing to assume the responsibility for liaising with stock exchanges in other countries and transferring know-how to developing countries that its predecessor has assumed in its semi-official capacity as representative of Japan's securities markets. Although this aspect of the exchange's work has played an important part in enhancing Japan's international status and cultivating relations with other countries, it does not in itself help to boost the number of listings or the exchange's turnover. It is an expensive yet unprofitable activity.

An exchange committed to the pursuit of profit would have no need to liaise with other markets (except to form alliances aimed at boosting its revenue), while it would probably take a dim view of the idea of transferring know-how to potential rivals.

Few Advantages in Demutualizing and Few Disadvantages in Not Demutualizing

Even if the risks we have described are real, the TSE would still be well advised to demutualize as soon as possible if the potential advantages outweighed the disadvantages or if there were significant risks in not doing so. For the following reasons, however, neither would appear to be the case.

First, most of the advantages that a stock exchange is supposed to derive from demutualization can be achieved by other means. If, for example, we take access to capital—one of the main arguments made for demutualization—there is no reason why the TSE could not finance its operations equally well by other means (e.g., borrowing or securitization). The same is true of speeding up the decision-making process and changing employee attitudes: if there were serious shortcomings in these aspects of the exchange's operations, they could be dealt with by taking specific action.

Second, there is the issue of whether a mutually owned stock exchange does not put the interests of member securities companies before everything else. Normally, one would expect the interests of securities companies, which can only boost their revenues if the securities markets also expand, to match those of the markets. However, where there are vested interests (e.g., if competition is restricted by entry barriers or only a limited number of securities companies can become members), there is a risk that the exchange may conduct its business in the interest of its members at the expense of non-members. In fact, it has been said that one of the reasons for proposing that the NYSE demutualize was to try to reduce the influence of the specialists (i.e., the market makers) who dominate it.

In the case of the TSE, however, there are no longer any restrictions on the number of members, and any securities company that meets the necessary standards (on creditworthiness, etc.) can deal on the exchange and have a say in how it is run. The introduction of a registration system as a result of "Big Bang" has led to intense competition among securities companies, and any that fail to heed their clients' wishes will sooner or later go out of business. In such a situation, therefore, it would be incorrect to say, for example, that the TSE will be unable to address investors' needs if it does not have shareholders that are not trader-members. Moreover, the TSE already has directors whose job it is to represent the public interest and who take part in committee meetings. Therefore, involving non-members in the way the exchange is run is not necessarily synonymous with demutualization.

Third, under the revised Securities and Exchange Law, the TSE is unlikely to be able to diversify its operations and become as flexible as it would like even if it does demutualize. It would therefore be misleading to draw conclusions from the experience of US and, especially, European stock exchanges, for which this was one of the main reasons for demutualization.

In Europe, Deutsche Börse and OM Gruppen have been able to offer a wide range of products covered by different legal structures and take over stock exchanges in other countries by becoming holding companies. It was the holding company structure that enabled the Paris, Brussels and Amsterdam exchanges to merge to form Euronext—a stock exchange covering three different countries. Under Japan's revised Securities and Exchange Law, however, no single shareholder of a stock exchange would be permitted to own more than 5% of its shares, thus preventing the formation of a holding company with a majority shareholding.

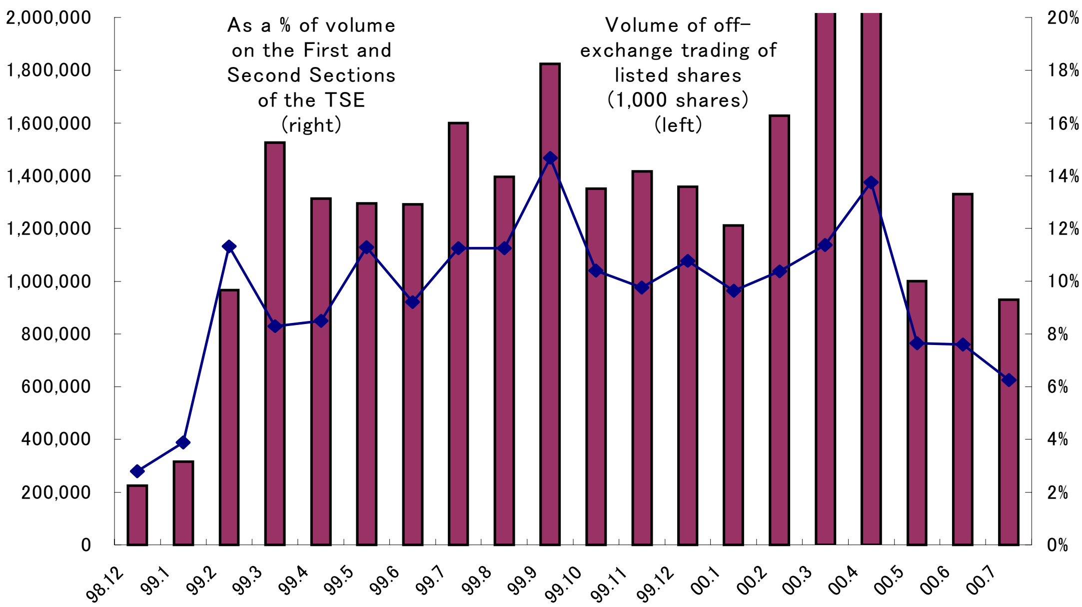
This restriction also means that, even if it did demutualize, the TSE would never face the threat of a takeover bid—such as that made by OM Gruppen for the London Stock Exchange. Thus, the argument that, by demutualizing and subjecting itself to the discipline of the market, a stock exchange will become more efficient does not even apply in Japan.

Fourth, fortunately or unfortunately, the threat of competition for its main products—one of the main arguments advanced by European exchanges for demutualization and one of the major factors behind the proposal that the NYSE demutualize—does not exist, either, for the TSE.

In Europe, where economic integration is well under way, it is no longer taken for granted that shares in the major companies of a particular country should be traded on a stock exchange in that country. In fact, this development was anticipated back in the late 1980s, when SEAQ International (the foreign section of the London Stock Exchange) began trading the shares of major European companies in earnest. The reaction of the Continental European exchanges was to reform. In the United States, it was moves by the ECNs to trade in shares listed on the NYSE that led, more than any other factor, to proposals to demutualize the NYSE. However, it appears that the ECNs have not been able to increase their share of trading in listed stocks significantly and have not posed a threat to the NYSE on the scale that was originally feared. With its attention taken up with many other issues (e.g., the decimalization of share prices and the adoption of T+1 settlement), the NYSE appears to be in less of a hurry to demutualize.

In contrast, the TSE dominates Japan's securities markets and has a virtual monopoly of trading in Japanese equities. Even though shares no longer have to be traded on the exchange (as was the case before "Big Bang") and can be bought and sold either through securities companies (in the case of listed companies) or using the Japan Bond Trading Company's PTS, these alternatives cater for the particular needs of a limited number of investors and dealers (e.g., institutions wishing to avoid the market impact of dealing in large numbers of shares at one time). In fact, off-exchange trading has not grown rapidly since it was permitted just over 18 months ago and has remained at roughly the same level in response to a fairly constant demand.

Figure Off-Exchange Trading of Listed Shares



Source: NRI, from Japan Association of Securities Dealers and Tokyo Stock Exchange data.

Over the years, the TSE has actually increased its share of trading in Japanese equities at the expense of other domestic stock exchanges. Its order-driven auctions and automated trading systems currently enjoy the support of the majority of market participants, who feel that it provides a fair and efficient method of trading. The situation facing the TSE is therefore very different from the loss of business that faced European stock exchanges and forced them to take action such as merging with other markets.

I am not saying, however, that the fact that the TSE does not at the moment face any direct threat to its domination of the market for its main product (Japanese equities) means that there is no need for it to demutualize. Rather, I am saying that I doubt whether this is absolutely necessary—even in an age of global competition.

The competitiveness of a stock exchange should not be judged solely by its profitability. There is no reason why mutually owned non-profit stock exchanges cannot be fair and efficient, and cope with large trading volumes. They are also perfectly capable of reforming themselves if that is what the market requires. It would be an oversimplification to assume that mutually owned stock exchanges are bound to succumb to international competition.

Significance of Intermarket Competition

Although not directly related to the issue of whether stock exchanges should demutualize, I should just like to say that I do not consider the fact that the TSE does not face any immediate threat to its position as the main market for Japanese equities to be a problem.

It is an incontrovertible fact that global competition has forced securities markets to reform and to think about their businesses more carefully (rather than simply in terms of maximizing revenues). As a result, they now offer a better and more efficient service.

In a paper I co-authored a number of years ago, at a time when many were claiming that Japan's securities markets were being "hollowed out" and that the only way to deal with the problem was to radically reform the financial system, I put the view that, in fact, Japan's securities markets were not being hollowed out and did not face any immediate threat (largely because of time differences). However, I was concerned that the absence of such a threat should not be used as an excuse to delay necessary reforms.[3]

My view of the "threat" facing Japan's securities markets (and the stock market, in particular) is much the same as it was then. If anything, any threat from other securities markets in the region has probably receded following the Asian currency crisis. As I mentioned, it is highly unlikely that either off-exchange trading or PTSs will pose a serious threat to the TSE's main business in the near future.

More important, however, than whether or not the TSE is under any threat from other markets is the fact that there are no longer any institutional constraints on intermarket competition in Japan. As the speed with which the exchange launched the Mothers market and the vigor with which it has since pursued market reform show, it is now highly responsive to the needs of business. There is therefore every chance that its efforts to deal with any threat will only serve to make it even more responsive.

Furthermore, even if they do not pose any threat to the TSE, PTSs can fully justify their existence as a limited response to particular needs. There is no reason why, as the bastion of Japanese equities, the TSE should feel obliged to cater for all possible needs. The main point about intermarket competition in Japan is that entrepreneurs can now set up their own PTSs to create niche markets that cater for particular needs.

What about Other Stock Exchanges?

As I have said, I would not at the moment be wholeheartedly in favor of any move by the TSE to change its status from that of a mutually owned company to that of a listed company.

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3 Y. Fuchita and S. Osaki, "Japan's Securities Markets: The Real 'Hollowing Out' Problem," NRI Quarterly, Winter 1994, Vol.3, No.4.

However, that is not to say that I would consider such a change of status for other stock exchanges (or the creation of new stock exchanges with the status of listed companies) ill-advised in all cases.

For stock exchanges that do not enjoy the kind of monopoly enjoyed by the TSE and have not played a leading role as either regulators or international communicators, the decision to demutualize may not involve some of the above-mentioned risks. If such an exchange is able to attract new shareholders, demutualization is one means by which it can try to achieve some of the goals commonly mentioned in this connection. Even if the Osaka Securities Exchange, the leading market for Japanese equity derivatives, became a for-profit organization, the fact that its main product (Nikkei 225 futures) faces direct competition from the SGX (Singapore Exchange) means that there is little likelihood that it would increase its dealing charges.

There is also no reason why an entrepreneur using a business model similar to a PTS should not impose a self-regulatory regime on his own system and restrict admission to securities companies in order to increase confidence in his system.

However, when considering whether stock exchanges other than the TSE should demutualize or whether new stock exchanges with the status of listed companies should be set up, what was said above about the revised Securities and Exchange Law should not be forgotten. For example, Japan's smaller stock exchanges do not have the option of shifting up a gear by being taken over by a major overseas exchange as part of a holding company. Nor do overseas holding companies have the option of setting up new exchange subsidiaries in Japan.

Prospects for Stock Exchanges in an Age of Competition

Elsewhere I have pointed out some of the problems currently facing the Nasdaq Japan market in Osaka.[4] I have similarly expressed some doubts about the need for some of the intermarket links that have been proposed—especially the Global Equity Market (GEM) project involving the NYSE and the TSE.[5] I have also expressed my reservations (in view of US experience of out-of-hours trading) about the proposals for overnight trading currently being considered by the TSE.[6]

As I have now also voiced some doubts about the advisability of the TSE's becoming a listed company, some readers may mistakenly assume that I am opposed to all new developments involving stock exchanges. However, this is far from my intention.

This is not the place to go into detail, but, as far as intermarket links, for example, are concerned, I do not object to such links in principle. If it is simply a matter of redirecting

4 S. Osaki, "Mada Nokoru Kore Dake no Kadai" [Some Unresolved Issues], Kin'yu Bijinesu [Financial Business], September 2000.

5 S. Osaki, "Mittsu no Kyokumen de Tenkai Sareru Shijokan Kyoso no Sugata" [Three Aspects of Intermarket Competition], Shukan Kin'yu Zaisei Jijo, 23 October, 2000.

6 S. Osaki and N. Hiramatsu, "Beikoku ni Okeru Kabushiki Yakan no Jittai to Mondaiten" [Overnight Stock Trading in the United States: Current Situation and Issues], Shihon Shijo Kuwotari [Capital Market Quarterly], Autumn 2000.

orders from one market to another, this could be left to those securities companies that already have a global network. In this regard, the kind of link suggested by Richard A. Grasso, chairman and chief executive officer of the NYSE, (where orders that were still outstanding at the end of trading on one exchange could be rematched and executed on an exchange in a different time zone) is well worth considering.[7]

Nor do I wish to suggest that there is no demand for overnight trading. Such needs do exist. I simply wanted to voice my doubts as to why a stock exchange that was the main market for Japanese equities (and not just a PTS) should have to make a special effort to develop overnight trading. Similarly, I expect the Nasdaq Japan to overcome the difficulties it currently faces and to play a leading role in increasing Japanese investment in the NASDAQ and helping venture businesses to diversify their sources of finance.

What I fear most is that the much increased awareness of intermarket competition in recent years could lead to an overreaction in the form of ill-conceived "reforms" and "policies" that threaten fundamental principles such as the formation of a fair and efficient market and the protection of investor rights.

What Japan's stock exchanges should be doing now is gradually implementing long-term development policies without being distracted by what are sometimes superficial understanding of changes in the United States and Europe. It is quite clear (e.g., from the fact that turnover on Japan's stock markets has not increased significantly in spite of the fact that commission rates have been deregulated and transaction costs have fallen considerably) that Japan's securities markets still face many problems. They (and the TSE, in particular) should now be acting in the public interest to address these problems—something that would not be possible for PTSs and other organizations concerned simply with the pursuit of short-term gain.

7 See Nihon Keizai Shimbun, 14 October, 2000.