
The Advent of a New Age of Inter-market Competition and the Necessity for a More Advanced Market Infrastructure

- The Urgent Need to Establish an STP Environment and a Unified Settlement Organization -

Yasuyuki Fuchita

1. The Start of a New Form of Inter-Market Competition

1) Inter-Market Competition Affecting Japan Becomes a Reality

(1) The Significance of the Plan to Establish NASDAQ Japan

In line with the announcement of the intention to establish NASDAQ Japan, the idea of competition among the securities markets in Japan suddenly became a reality.¹ There are two kinds of market competition, that among domestic markets and that between domestic and overseas markets. Domestic inter-market competition has come about in Japan as a result of Japan's Big Bang which has resulted in the abolition of the obligation to trade at stock exchanges and the enabling of the establishment of PTSs. In reality, off floor trading by securities companies amounts to about 20 to 30% of the amount of trading at stock exchanges as this fulfills needs not met by stock exchange trading.

However, looking at the competition with overseas markets, Japan's markets operate during a different time belt to that of the other major markets. Therefore, it is difficult for competition to emerge in the form of orders being snatched from the Japanese market by other markets, and in reality this does not happen.

The plan to establish NASDAQ Japan has made us aware of another form of competition with overseas markets, quite different to this. That means that if NASDAQ Japan were to be established, it would become a Japanese market within the framework of Japanese law. However, at the same time, seen from the viewpoint of the U.S. NASDAQ, this would be an important base in its global strategies.

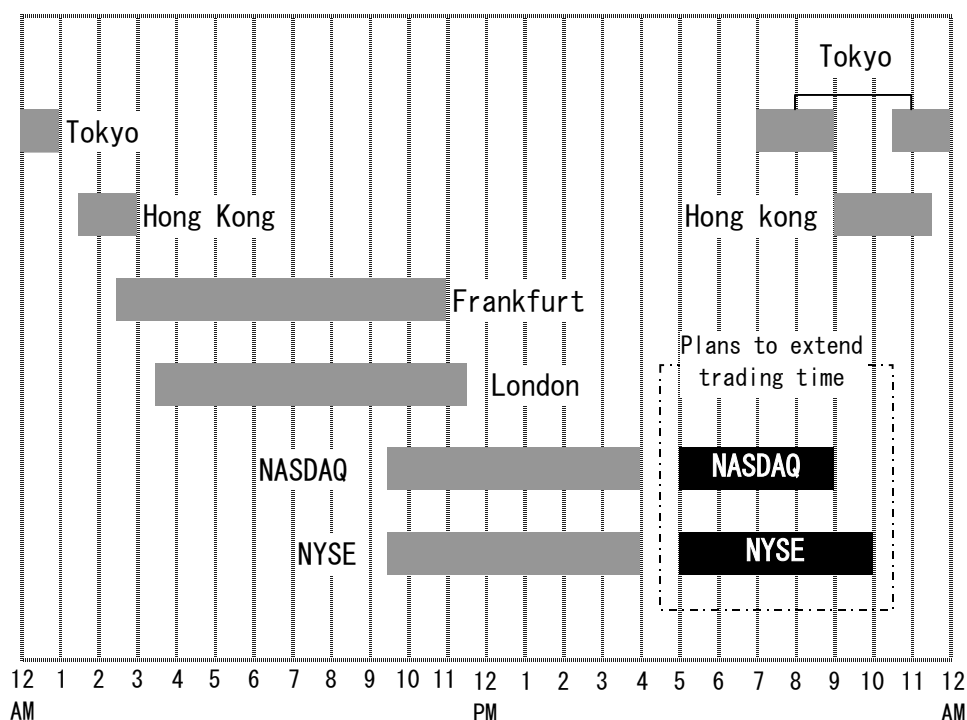
Thus, an interesting structure would be created. That is to say, it would also be a factor leading to an invigoration of inter-market competition among the domestic markets in Japan and also lead to competition between the existing domestic markets and the newly emerging markets formed through tactical alliances between Japan and overseas markets.

1 For details, see " The NASDAQ Japan Plan - The NASDAQ Market Engages in Global Strategies" by Sadakazu Osaki and Hiromi Hayashi, *Capital Research Journal*, Autumn 1999

(2) The Seven-Eleven Age of Stock Exchanges

Another topic relating to the stock markets in the first half of 1999 was the emergence of plans to extend stock trading times of the NYSE and NASDAQ markets. As Figure 1 shows, the nighttime trading on these two US markets would overlap with the morning session of TSE (Tokyo Stock Exchange).

Figure 1 Trading Times on Major Stock Exchanges



Source: Nomura Research Institute

The plan to implement night trading on the NYSE and NASDAQ exchanges has been postponed due to the decision that measures to deal with the Y2K problem should be expedited. However, these plans indicate the possibility of upsetting the concept that the Japanese markets operate within a different time framework to that of the other major markets of the world, and so have been able to avoid direct competition with the main overseas markets. In particular, interest is intensifying in the listing of the stock of Japanese companies on the NYSE, as can be seen in Toyota's decision to do this. At the same time, the NYSE set up an office in Tokyo in March this year in a full-scale move to attract Japanese firms to list on NYSE. If nighttime trading on NYSE is implemented, and there is an increase of Japanese firms listed on NYSE, during the morning session on TSE, the stock of many of Japan's prime companies would also be traded simultaneously in New York. However, depending on the costs involved, there is a possibility of competition emerging to obtain order flows between the Japanese and US markets.

2) Inter-market Competition Enters the Second Stage

The NASDAQ Japan plan and the plans to bring in nighttime trading on NYSE, etc, indicate that inter-market competition has entered the second stage.

(1) An Age When Individuals Can Move the Market

The difference between the first and second stages is the fact that the focus of competition has shifted from the needs of the institutional investors alone to those of both the institutional investors and individual investors. Against the backdrop of the increased need for lower execution costs on the part of the institutional investors, since May Day of 1975, the inter-market competition taking place in the U.S. has gradually pushed up the share of the electronic securities trading systems such as Instinet and POSIT. This is due to the fact that this trading has been vaunted as having the effect of reducing market impact.

However, during the second stage of inter-market competition, markets have to be aware of the needs of not only users such as the institutional investors but also those of the individual investors. The background to this includes the increase in Internet trading. Over the past few years, there has been a rapid increase in the use of Internet securities trading by individuals in the U.S. Now, there are many individuals who engage in on-line trading when they come home from work. In view of the increasing need of individuals for trading facilities outside stock exchange hours, it is surely a natural trend for the market to make efforts to provide some kind of price discovery venue.

The emergence of individual investors has a connection with the enthusiasm of NASDAQ to engage in global tactics. In the U.S., there is an increase in ECNs (electronic communication networks) which are a mechanism for matching orders between the spread of bid offers of the NASDAQ market makers. In the face of the competition generated by the ECNs, NASDAQ has set out to find a way of surviving by attaining the status of a global market. In the background to the expansion of the ECNs we find the orders placed by individuals through the Internet, etc. The securities firm DATEK has as clients called Day Traders, semi-professional individual investors, and DATEK has the firm Ireland, an ECN, within its group. DATEK sends the orders it receives from the Internet to this ECN and executes them. As a result, the trading volume of Ireland has now overtaken that of Instinet, the largest ECN up to now. E*Trade, a major Internet securities trading firm has recently invested capital in Archipelago, an ECN. This also shows the securities trading of individual investors over the Internet is underpinning the existence of the ECNs which are a force supporting the new inter-market competition.

(2) Exchanges as Global Multinationals

Another feature of the second stage in inter-market competition is the globalization of competition. The first stage in inter-market competition in the U.S. was mainly domestic competition. That is to say, this was competition between NYSE and the regional stock exchanges in terms of the order routing system. This also involved the competition among domestic players between PTS or third markets and existing markets such as NYSE and NASDAQ. However, in the second stage, the inter-market competition transcends national boundaries. Inter-market competition transcending national boundaries is already underway in Europe between London and various stock exchanges on the continent. Now, we have entered an era where the U.S. has made a full-scale entry into this arena of competition. This has become evident in the form of the global strategies of NASDAQ and the setting up of a Tokyo office by NYSE. The competition in Europe has passed from the stage of flagship markets such as the London Stock Exchange, the Paris Bourse and the German stock

market competing for the honor of their country to the stage of stock exchanges engaging in international activities transcending national borders.

Various schemes have been announced such as a tactical alliance between the U.K. and German stock exchanges, a pan-European stock exchange plan and the integration of the markets serving venture companies in Europe. These can be positioned as measures to improve and strengthen competitiveness of the stock exchanges transcending the concept of individual nations.

In addition, the fact that TRADEPOINT, a UK market provider, is trying to increase its flow of orders from various overseas countries is attracting attention. In March 1999, this firm was granted permission to operate in the U.S. market following on from authorization to operate in Hong Kong and Switzerland. That is to say, it has become possible for TRADEPOINT to handle orders from U.S. investors while being based in London as a U.S. registration exempt stock exchange.

In the case of Europe, as there is also the factor of market integration, this is even more so. As can be clearly seen in the global strategies of U.S. NASDAQ, it has become evident that the stock exchanges and trading markets are engaged in competition transcending the limitations of national borders like global multinational companies.

This is very similar to the competition among the global multinationals in the automotive and communications industries, and the outlook is that through an ongoing process of alliance building they will be integrated to a handful of companies. In the same way, in the arena of global business, which should perhaps be referred to as "the business of providing trading markets", it appears that an age will arrive in which there will be less than ten trading markets competing to offer services in the world major securities markets.

2. Global Trends in Reforms in the Securities Settlement Systems

1) Inter-market Competition and Securities Settlement Systems

Will Japan's trading markets be able to survive in the new age of Inter-market competition? In view of the introduction of inter-market competition, stock exchanges such as the TSE and Osaka Stock Exchange and the OTC markets are in the process of devising full-scale competition measures to strengthen their competitiveness. However, here we should note that the foundations of the market's competitiveness is also highly dependent on factors other than the reforms occurring in the stock exchanges and OTC markets.

One such fundamental element is the securities settlement system. One factor that has pushed inter-market competition to a new stage is the newly evolved desire of individuals to engage in securities trading through the Internet. However, a major prerequisite to invigorating such trading is being able to use the settlement infrastructure cheaply.

The same thing can be said of the extension of trading time.

Thus, the longer trading time becomes, the greater will be pressure to complete settlement procedures by the settlement term limits. To put this in reverse order, the existence of an effective securities settlement system is a prerequisite to being able to implement this kind of

strategy. Naturally, the strengths and weakness of a securities settlement system have a direct influence on the attractiveness of an international financial center.

In September 1998, the U.K. released the Securities Settlement Priorities Review which summarized the future nature of the U.K.'s securities settlement system. This included the following statement. "Settlement is both an important source of revenue and one determinant of location of financial activities, and technological advance and legal development have given issuers and investors increasing freedom to determine the location of settlement, as the range of non-domestic securities which can safely be held and transferred in settlement systems has widened."²

2) Global Trends in Reforms in the Securities Settlement Systems

Against this backdrop, a rapid advance is being made in reforms in the securities settlement systems in the markets of the world's leading nations. There are two visible trends in these reforms, a shortening in the time required for effecting settlement procedures and the unification of the settlement organizations.

(1) Shortening the Time Required For Settlement Procedures

In the U.S., full-scale efforts are being made by both the public and private sectors to realize T+1 (settlement completed on the day following the trade) with a target date set in June 2002. The background reasons for emphasis being placed on T+1 include an improvement in transaction efficiency and an improvement of risk management as well as the fact that the market turnover is increasing rapidly. If a high level of trading continues, the damage caused by a system failure could involve a lot of money. Thus, to avoid this, discussions have focussed on shortening the time required for effecting settlement procedures.

For people involved in the securities system in the U.S., T+1 is the next greatest objective after putting Y2K countermeasures in place, and in terms of the size of the problem, it is said to exceed the Y2K problem in importance. The ultimate target is to achieve T+0, and it is considered that T+1 is a process on the way to this final goal.

In Europe, too, advances are being made in shortening the time required to effect settlement. On the London Stock Exchange, the target is to shorten the time to settlement from T+5 to T+2, one factor being the alliance with the German stock exchange. However, we asked market players for their opinion about the proposals to improve the market put forward by London Stock Exchange. Regarding idea of shortening the settlement time required, two thirds said that the ultimate objective should be to attain T+1.³ Regarding U.K. government bonds, the settlement period has already been reduced to T+1. In Denmark and other countries a declaration of intent to shorten the settlement term has been made. In other places, although there have been no clear announcements, the concept of achieving T+1 or T+0 has become a daily subject of conversation among people involved in settlement work.

2 Bank of England "Securities Settlement Priorities Review", September 1998.

3 London Stock Exchange, European Alliance, results of London Stock Exchange market harmonization and order book development consultation, June 1999.

(2) Unification of Settlement Organizations

Another trend seen in the world's securities settlement systems is the unification of settlement-related organizations. There are two streams taking place, one is the integration of clearing organizations and securities depository organizations, and the other is the integration of settlement organizations which have been dealing in different types of products. In both cases, this is a movement clearly aimed at an improvement in competitiveness.

① The Integration of Clearing Organizations and Securities Depository

On March 22, 1999, the DTC (Depository Trust Company), the central securities depository and NSCC (National Securities Clearing Corporation), a clearing organization engaged in netting, announced a merger. The newly formed organization after the merger is scheduled to be formed under a new name after obtaining SEC authorization. The press release issued at the time of the merger stated that the objective of this decision was "A centralized infrastructure will competitively position the U.S. in overseas markets" indicating that the purpose was to improve competitiveness. A clearing organization engaged in netting all the individual transaction is traditionally an ancillary to stock exchange operations in most countries. However, in view of the paper crisis in the 1960s, in the U.S. a settlement system reform was implemented in the 1970s. At that time, the NSCC was established with capital participation by NASD. This organization also engages in clearing of transactions outside the stock exchange. GSCC (engaged in government bond netting) and Fund/SERV mechanism (message transferring and netting of funds payments for mutual funds transactions) were also positioned as subsidiaries of NSCC. Looking at other countries, in France SICOVAM is engaged in integrated securities depository operations, and it also conducts netting work including stock exchange transactions. In the Netherlands, the clearing organization and the central securities depository have been merged.

② Integration of Settlement Organizations Dealing in Different Types of Products

On March 20, 1998, in the U.K., the Bank of England implemented a review survey on securities settlement priorities. This review sought the opinions of participants involved in the development of the securities settlement system. Based on the results of this survey, studies were implemented by a steering committee headed by Mr. Alastair Clark as chairman, an executive director of the Bank of England. The committee was made up of representatives from CGO (Central Government Office - engaged in settlement of Government bonds), CRESTCo. (the central securities depository agency of the U.K.), HM Treasury (finance ministry), the Debt Management Office and the Financial Service Authority.

In September 1998, based on the opinions of the participants and the committee members, the Securities Settlement Priorities Review was released as the opinion of the Bank of England and CRESTCo. The most important suggestion included in this review was the merging of CGO (engaged in settlement of Government bonds) and CREST (engaged in the settlement of corporate bonds). At the same time, it was proposed to merge CREST and CMO (Central Money Market Office) which is engaged in the settlement of money market products.

On September 18, 1998, the Bank of England and CRESTCo announced the official decision to implement these proposals. Initially, it was planned to transfer the responsibility for operation to CREST by the middle of 1999 while continuing to employ the existing system. Subsequently, it was decided to center the system on CREST by 2000. The merger

announcement statement included the following. "These developments---will enable London to continue to offer the most efficient and effective securities settlement infrastructure and help to ensure that London retains its position as one of the world's key financial centers." This clearly indicated that the improvement of London's competitiveness was the objective.

Thus, it appears that the U.K. will move forward to a full-scale merge of its settlement organizations. However, in Sweden, integration was accomplished in 1993. In France, the French central bank invested capital in SICOVAM in 1995. Through this move, in addition to stock and corporate bonds (already integrated), the settlement operations for Government bonds and the money market product were also integrated.

Seen from the viewpoint of the historical development of the market, up to now it has been the general practice keep the settlement organizations for stock and corporate bonds separated from Government bonds and money market products in most countries. However, for those using the market, an increasingly urgent need has emerged to achieve efficient, speedy and integrated processing of securities transactions through one unified organization. In view of this, it is necessary for the settlement organizations to respond to this. For the users, this integration will have the advantage of making it possible to effect unified and effective control of funds, securities and collateral, and risk control will also be able to be integrated. By implementing settlement through one single organization, it is expected that economy of scale will operate. In addition, the decision making process in terms of the settlement system in the markets of one country will become integrated into a single process and become more flexible and provide a faster response.

(3) The Balance between Unification and Competitiveness

Many securities markets operating in addition to existing stock exchanges have emerged and they are engaged in global competition with each other. This, taken together with the unification of settlement organizations, would at first appear to be a case of flows running in conflict with each other. However, as the individual players seek to compete in terms of deploying their competitive strength to the maximum, the meaning of achieving a competitive edge tends to become meaningless.

In fact, it would be easier to compete in an arena where a common infrastructure has been created, and so advances are expected in areas such as compatibility and unification.

Naturally, this will not allow existing organizations to maintain a monopoly. Looking at the example of France, this country is making progress in unification while effecting reforms in the existing mechanisms. If unification advances to the point where there is just one settlement organization per country, competition will not disappear because the settlement organizations of other countries will be able to provide settlement services for the players in such a country. This means that unification is advancing amidst competitive pressures. We should also note that not all settlement related services are moving towards unification.

Looking at the U.S., in line with the regulations of NYSE and NASD, the users have been obliged to use trade confirmation and affirmation services (ID system) provided by DTC. However, in May 1999, the SEC allowed changes in these rules. This resulted in the use of trade confirmation and affirmation services provided by authorized vendors becoming possible. In the U.S., transactions are processed step by step from trade confirmation to trade affirmation, and DTC provides a service in which enables more rapid processing by

effecting matching of transaction data from the securities firms and account allocation instructions of the institutional investors at a central location. However, at the same time as the May 1999 change in rules, measures were also taken to promote competition in this area. In the U.S., the law of 1934 states that clearance agencies must be registered with the SEC. However, the authorities have allowed Thompson Financial Technology Services to be exempted from this law to promote competition in the centralized trade matching service sector. That is to say, this enables Thompson to provide services in competition with DTC's central matching services. This exception to the rules indicates that the aim of the authorities is to bring about widespread use (and improvement) of these central matching services as they are necessary and essential to achieve T+1.

Thus, competitive forces have been introduced where this is considered more advantageous. In this way, an appropriate balance is being sought between competition and the advantages of unification.

(4) The Response to Cross-border Securities Transactions

When considering the response of the new settlement system to cross-border transactions, we have to take into account the reform movements in cross-border securities transactions which are making advances on the international scene. In September, 1998, GSTPA (Global Straight-Through Processing Association) was established by leading European and U.S. securities companies, institutional investors and global custodians as a response to this. GSTPA seeks to promote STP (Straight-Through Processing) in securities trading transcending national boundaries. The background to this can be seen in the fact that many countries are seeking to shorten the time required for trade settlements, and there is an increasing awareness of the need to shorten the time required in cross-border trading, too. The realization of STP is absolutely essential for a shortening of the time required for processing trade settlements.

GSTPA mainly seeks to efficiently implement the processes from execution notification to trade matching through the TFM (Transaction Flow Manager). If Japan were to lag behind in the reforms of its settlement systems or to design such systems without taking GSTPA into account, Japan would not be able to effectively utilize GSTPA to the full. Moreover, even though GSTPA maintains that it is not seeking to bring about changes in the domestic settlement systems of each country, if Japan's settlement related services continued to remain at the present low level, we cannot rule out the possibility that GSTPA might account for a part of Japan's domestic securities trading processing.

3. The Current Situation in Japan

The issues in Japan's settlement systems include problems such as the establishment of DVP. However, here we focus on the gap between Japan's current status and two global trends - a shortening of the time required to process trade settlements and unified settlement organizations.

1) Radical Reforms Are Needed to Shorten Settlement Cycle

In Japan, the times required to process trade settlements are as follows: stock requires T+3, corporate bonds T+5 and government bonds T+3. However, the T+1 settlement time the U.S. aims to achieve by 2002 requires that the trade data for a certain day must all be confirmed on that day, and the information on the securities and fund transfers that must be effected on the next day must be confirmed. In Japan, as far as government bonds are concerned, BOJ is making progress in systemization, and a shortening of settlement time of them will be not that difficult. However, in the case of stock and corporate bonds, radical reforms will be necessary, and these are outlined below.

(1) Stock

In Japan, the trading in stock mostly involves manual work, the fax and the telephone, and we are a long way from STP. For example, transaction instructions from an institutional investor to a trust bank are carried out using fax messages, and a transaction report form from a securities firm to a trust bank is a paper event. First, the document is stamped with the seal of the securities firm, and the person responsible from the securities firm physically takes the report to the trust bank on the day after the transaction. Thus, achieving T+1 is completely out of the question.

Using this paper document based information, the trust bank implements the matching of the transaction. This means that we cannot expect rapid processing. Thus, systemization of the matching process is necessary. Recently, a movement has emerged in which the handling of some transaction information is carried out over computer networks. However, as there is no unification compatibility of the various systems used, interconnection has not been achieved. In this respect, from December last year, a movement finally started to get underway to introduce international protocol standards such as FIX and ISITC. When it comes to T+1, the transaction data of the stock exchange must be sent to the people concerned promptly on the actual day of the trade. Thus, a reform of the stock exchange infrastructure must be carried out.

(2) Corporate Bonds

Corporate bond settlement procedures are effected through one of over 150 corporate bond registration organizations (nationwide banks). In November 1996, the Japan Bond Settlement Network System was set up to link these 150 using JBNNet. In November 1997, the system went into operation, and the situation has been greatly improved. Even so, when it comes to shortening the settlement time, it is expected that it will finally be shortened from T+5 to T+3 by October this year.

Corporate bonds are controlled in the same way as real estate under the Corporate Bond Registration Act. That is to say, each corporate bond is numbered, and the control extends to monitoring which bond has been transferred from whom to whom. In order to improve the efficiency of securities settlements, normally the method of doing this is securing fungibility. That means that the actual distinguishing marks of each share certificate are not required for a transaction. In the case of corporate bonds, they are handed as if each individual bond were unique, like real estate property. Thus, when a specific corporate bond is traded many times

during the course of a day, it is necessary to run a check on the sequence of the buyers and sellers like a click-trail, and this takes time.

In addition to this, in most cases the investors, securities firms and the various registration organizations are all mostly involved in manual processing work, and input takes time. Moreover, the registration of the corporate bonds must be done in one of the more than 150 registration banks. Thus, this work goes on in 150 or more different locations, and it makes administrative work very complex.

2) The Current Situation Is a Long Way from Integration of Settlement Organizations

In Japan, settlement of domestic stock is carried out by the Japan Securities Depository Center, the settlement of corporate bonds, government-backed bonds, bank debentures and local government bonds by various registration organizations, and the settlement of government bonds is performed by the BOJNet. In addition, among stock exchange members, settlements of convertible corporate bonds and exchange listed foreign stock is done by the Japan Securities Settlement Co. In addition, regarding CPs and CDs, there is debate underway on the subject of introducing a new settlement framework.

Thus, Japan has a vast array of settlement systems divided vertically by products. So Japan is very far distant from the global trend to integrate settlement organizations. In other countries, the need to improve their competitive edge is put forward as a reason for the integration of settlement organizations. Naturally, in view of this situation, there is no way to realize an improvement in competitiveness in Japan's securities market and the settlement organizations, and also no way to improve the convenience of the users.

The clearing organizations are still at the stage prior to integration with the Japan Securities Depository Center. That is to say, Japan is in the same position as the U.S. before going through the paper crisis and implementing reforms of settlement systems. In Japan, the clearing are done by stock exchanges. In the U.S., the stock exchanges and NASD all have a stake in NSCC. Netting including off-floor trade has been carried out at NSCC since the 1970s.

3) Lack of a Consolidated Initiative to Implement Reform in the Settlement System

The current state of Japan, as outlined above, presents various problems. However, an even greater problem exists in as much as the upper echelons of Japan show absolutely no signs of achieving an integrated policy stance toward the future state of Japan's settlement system at a high level. In the U.S., whenever an occasion presents itself, the SEC Chairman Arthur Levitt, stresses the advantages of achieving T+1 to the financial sector, and so acts as a flag waver for reform. In the U.K., the Bank of England and CRESTCo. are the main bodies providing thrust for this drive. In Japan, the various settlement organizations are not totally lacking in reform plans at various levels that take into account the need for STP and T+1. However, the Government of Japan lacks both vision and goals regarding the state of settlement systems. Thus, although the numerous settlement organizations are debating reform plans, since various STP networks were divided vertically into many different product categories, they would not offer the users a high level of convenience.

At the moment, if Japan continues its present course, it appears that the country is not likely to be able to create a representative settlement organization such as DTC and CREST able to compete internationally and effect coordination.

This is not a problem that can be solved at the level of players such as securities firms, banks and investors, nor at the stock exchange level, nor even at the level of the various settlement organizations. In the case of Japan, the root of the problem lies in the fact that there is no entity able to command an overview the entire market infrastructure enabling it to take the initiative in implementing reforms.

4. The Outlook for a New Securities Settlement System in Japan

1) An Intensification in the Debate over Reforms

Fortunately, recently a wave of interest in a reform of the settlement system has finally emerged in Japan. In February 1999, the report of the Financial Strategy Council stated “a unified settlement system for various securities such as corporate bonds, stock and CPs is necessary. The system should conform to international standards and its formation should be positioned as being an indispensable requisite for creating the infrastructure needed for the 21st century. The Government should study the idea of allocating a budget for the support of creating such as system.”

In May 1999, the Association for the Regular Members of the Tokyo Stock Exchange issued a report recommending the creation of an infrastructure related to securities settlement. The report pointed out the necessity for an increase in the deposits in the Japan Securities Depository Center, a reduction in the risks surrounding settlement and efforts to create a unified settlement organization.

Heightened interest on the securities settlement issue among the members of the bond market reform sub-committee of the LDP Financial Study Group shows signs of an initiative at the national level.

Here we will outline the desirable reforms assuming that it were possible to achieve a radical reform of Japan's securities settlement system.

2) The Vision Required

First, it is necessary for the government to be aware of the necessity for the following two items. The first is the establishment of a unified settlement organization, and the second is the achievement of a STP system.

(1) Establishment of a Unified Settlement Organization

We have already mentioned the need for a unified settlement organization. The backdrop to the fact that, up to now, a clear direction has not been shown in terms of a reform of the settlement system is the lack of initiative on the part of the government. However, up to now, a uniform settlement organization format has not existed in Japan. At a practical level, there

has been no entity in Japan able to study an improvement in the overall settlement system of Japan. In this sense, it is thought desirable to establish a unified settlement organization which should become the main entity to make daily studies at the site level on the way in which Japan's settlement systems overall should be reformed, and then plan improvement measures.

If this is to be a unified settlement organization, it must be a single organization formed under a new law, and it should handle all settlement operations including corporate stock as well as government bonds, local government bonds, government-backed bonds and money market products. There is the option of having separate settlement organizations, as is the case in U.S, for the processing of government bonds (Federal Reserve Bank) and corporate securities (DTC). However, the ideal form is a unified body. If Japan were to take the course of first introducing a two body system, it should indicate its intention to unify these two in the future. If this unified body is achieved, it would be possible for government bond market players to utilize this unified settlement organization, and it would develop to become a mechanism accommodating all the players including the major securities firms, the financial institutions and the institutional investors as well as the government bond players. This state of affairs would make an operational basis for a strong unified settlement organization. Naturally, this unified settlement organization would also come to provide clearing functions as is expected in the U.S.

As one of its missions, this unified settlement organization should also take on the rapid improvement of the investment trust-related operations infrastructure. The current situation of Japan's investment trust operations is that notes are issued as beneficiary certificates and this certificates is sent to the firms selling investment trusts. When customers terminate a contract, the certificates are sent to the trust bank and disposed of on a one by one basis. This involves a massive flow of certificate notes. Under the present system, it is impossible to transfer the investment trust purchased by a certain investment trust sales firm to another. If a Japanese version of a 401K is introduced, as thing are, it will be difficult to process investment trusts. In the U.S., mutual funds are held in custody and transferred by the DTC. NSCC possesses a system known as Fund/SERV, and this enables fund settlement netting between the firm selling mutual funds and the securities firm. This is making a major contribution to the improvement of efficiency in mutual funds operations and even the development of the mutual funds market.⁴

Japan's unified settlement organization should be a body that performs the same role as DTC and NSCC in the area of investment trusts.

(2) Establishment of a Body to Facilitate the Introduction of STP

Even if the settlement systems per se are good, it would still not be possible to achieve T+1 because the processing work after execution of an order would have to be computer-empowered processing using networks employing uniform specifications and not manual work. Even if systems seeking to facilitate STP are introduced, if the systems don't use the same specifications, the participants will hesitate to introduce them. Thus, it is desirable for Japan to have a body that can achieve uniformity in terms of the system

4 For details, please refer to, "Ways to Attract More Individual Investors to the Securities Market" by the Association for the Regular Members of the Tokyo Stock Exchange, May 1999

specifications Japan will select. This body should take into consideration the trends in the standardization of specifications used overseas, and employ advanced uniform specifications. Based on these specifications, system and network design should be submitted to private sector system engineering firms.

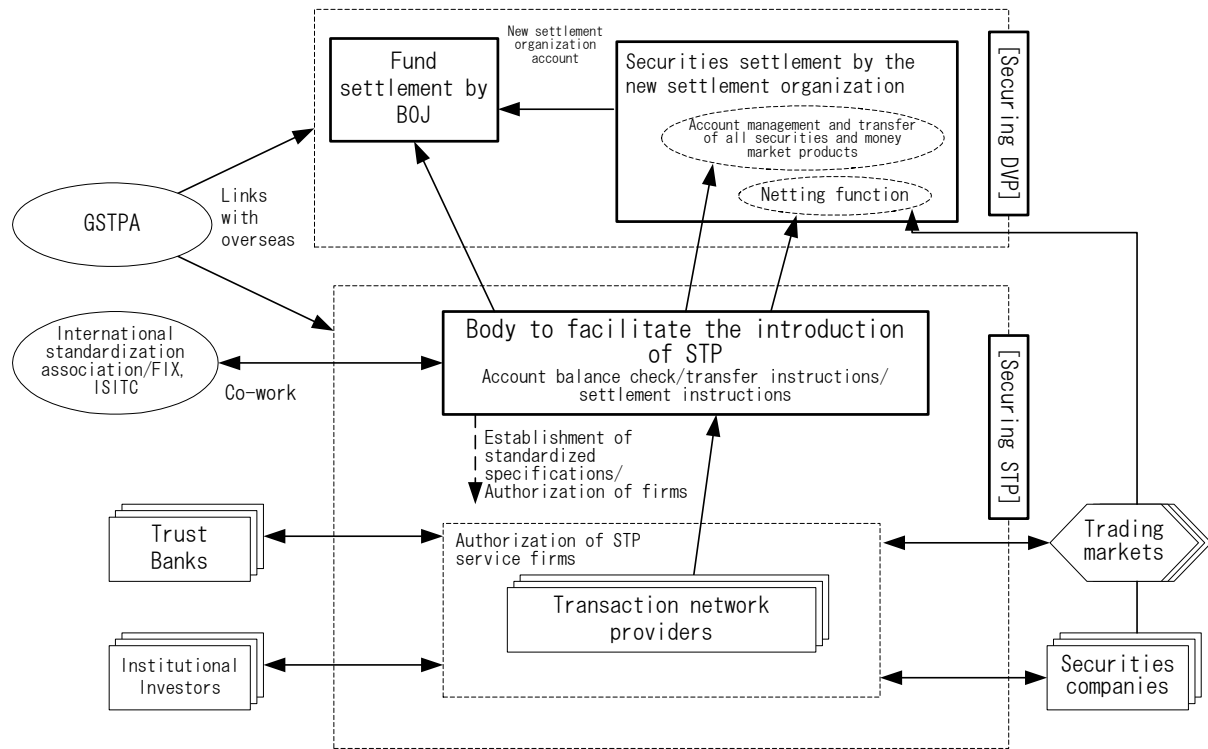
The firms which can fulfill the conditions imposed should be designated as authorized STP service providers. This body should not just ensure specifications are uniform, but it should be possible for it to undertake central matching, and it should be able to give final instructions to the unified settlement organization, mentioned previously, relating to the actual movement of funds and securities.⁵ Even if there are several authorized private sector STP service providers, information is collected by this body and it will ensure reliable information transmission to the unified settlement organization and BOJ, the fund settlement organization. This division of roles is just an example, and so it is better to decide the allocation of roles while maintaining a good balance between the various sectors. That means deciding which sectors would be better at providing services on a competitive basis in the private sector and which would best serve by being standardized and made uniform, and then functioning as an infrastructure for the industry.

3) Areas Requiring Caution in the Reform Process

Figure 2 shows a vision of Japan's new securities trading infrastructure using the establishment of a unified settlement organization and a body to facilitate the introduction of STP as its core areas. Several comments on this are shown below.

5 This is based on the JSTPC concept envisioned by Yasuyuki Fuchita in the article "Investment in an Advanced Information Infrastructure for the Securities Market - JSTPC Concept", in the Winter 1998 *Capital Research Journal*. However, subsequent to this, a private sector order routing system actually began to function. Thus, here, we have envisioned a body which has its functions limited to the areas required for the public infrastructure sector.

Figure 2 A Vision of Japan's New Securities Trading Infrastructure



New settlement organization

- * A unified settlement organization representative of Japan (Integration of Japan Securities Depository Center, Japan Securities Settlement Co., JNet, corporate bond registration organizations and BOJ's government bond settlement function)
- * Custody, transfer and registration of all securities and money market products
- * Netting functions for some securities and some trading (Some functions of stock exchanges and Japan Securities Settlement Co. will be absorbed during development)
- * Realization of RTGS by BOJ and New settlement organization for some securities and some trading
- * Will also undertake safe keeping and transaction support of investment trusts

Body to facilitate the introduction of STP

- * Body to facilitate the introduction of STP in Japan
- * Account balance check/ transfer instructions/ settlement instructions
- * Establishment of a trading environment by using internationally accepted uniform specifications
- * Authorization of STP service firms

Source: Nomura Research Institute

(1) Transition Process

As previously mentioned, it would be more practical to effect the shift to a unified settlement organization in stages. However, at this time it is important to show that unification is the ultimate goal, and to state by when this should be attained.

Naturally, a detailed work process sequence and systems actually functioning at the present time do exist. Therefore, the process should be to keep the parts that are useable and make the transition to a new unified settlement organization.

It should also be noted that, in some unified organizations, there is already a movement to implement reform to achieve certain realization of a more advanced system within reasonable

limits based on the present reality. If the reforms already underway are ignored and a fresh start is made from zero, it is probable that it will take some time to get the system functioning on a practical basis.

For example, the Japan Securities Depository Center intends to start the development of a system to effect central matching for domestic stocks from October 1999. It has already started on working out the specifications. The first version of this system is scheduled to come into operation from April 2001. The second phase is expected to include applications to cover other settlements and a framework able to encompass a shift to T+1. It will take into consideration the standardization movements overseas. It is also necessary to undertake similar studies regarding other products while taking advantage of these movements and ensuring compatibility with them.

In this sense, it will be necessary to rapidly implement the requisite legal changes to handle corporate bonds and government bonds within the new settlement organization. The new settlement organization preparation group will have to undertake integrated future oriented planning and strategy formulation and develop a new system.⁶

(2) The Relationship between the New Settlement Organization and the Organization to Facilitate the Introduction of STP

One possible option is to combine functions of the New Settlement Organization and the Organization to Facilitate the Introduction of STP in one entity. However, the integration of the existing settlement organizations is expected to happen in stages. The standardization of the specifications for the move to STP and the establishment of STP networks are urgent objectives. Consequently, I feel that it would be more practical to create the Organization to Facilitate the Introduction of STP and the New Settlement Organization preparation group as separate entities. At the stage where it appears possible to effect a shift to the New Settlement Organization, studies should be carried out on whether it would be better to integrate these two bodies. If such integration is decided on, debate should be held on what form it should take.

(3) On the Need for the Possession of Actual Certificates

If there is an extensive need to hold the actual securities certificates and effect execution without using the system, even if we create a STP and unified settlement organization, the advantages of this would diminish. It would be possible to impose higher commissions on this kind of transaction. There may be people who would insist that it would be cheaper to hold the certificates and carry out transaction processing manually. If many people use the system, the cost of using it would drop as a result. This vicious circle of ...The system is expensive because it is not used by many people, or it is expensive so people don't want to use it... should be avoided by creating a framework to induce everybody to use the system through initiative from the top.

6 Regarding the desirability of retaining the movements already actually underway, it is expected that it will be possible to utilize various projects to bring about the use of electronic systems in financial and securities trading. This has already got underway through Japan Information Processing Development Center (JIPDEC), a MITI-related enterprise as a part of the third supplementary budget in 1998.

There is also the option of doing away with actual certificates in securities business. However, if we embark on such debates, the overall schedule would be delayed.

Conclusion

It appears that some people think it would be possible to achieve STP and T+1 by leaving the existing settlement organization frameworks in place and link them up in on-line networks. However, T+1 is just one goal, and it is only an intermediate target on the road to achieving T+0. The real objective is to create a market infrastructure with a high degree of competitiveness. Of course, although one objective is to shorten the settlement time, this is not the only goal. An effective entity able to make decisions is needed. This entity should be able to react speedily to the situation and create new tactics and strategies to meet the needs created by the advent of new information technology or when changes occur in the competitive environment with overseas markets.

Therefore, it is not just a question of linking up what we have today into on-line networks. In practical terms, the only entity which could implement decision-making in this arena is a unified settlement organization. From now on it will not just be a question of competition alone, it will also be vital to achieve international coordination of the settlement organizations.

When it comes to holding discussions on this subject, the other countries of the world will send the executive of the unified settlement organizations of their countries to represent their countries in the debates. However in Japan there are no such organizations and no such executives. I feel this will be very inconvenient.

It is thought that there will be resistance to making changes in important corporate bond processing work areas of the existing banks. However, many Japanese banks have accepted injections of public funds. Therefore they must make efforts to improve their profitability by being selective in their operations and specializing in some key areas. Therefore, it is necessary to carefully consider if such corporate bond processing operations can generate adequate profitability. However, seen in reverse, if this generates an ample profit margin, it would result in additional unnecessary costs being borne by the issuers, the investors and the Japan market in general, something which could really be avoided.

The settlement of securities is an area not covered by Japan's Big Bang. A factor at play here is that just at the time Japan was considering its own Big Bang, Japan Bond Settlement Network System in the form of a joint-stock company was just about to emerge and people were busy with its creation. However, during this time, Japan has fallen far behind the trends and changes in Europe and the U.S. Now, more than ever, is the time to implement a Big Bang in securities settlement.

For some time to come, Japan will be engaged in catching up with Europe and the U.S. However, right from the start, Japan should have a clear vision and seek to attain something near to the ideal system and implement drastic reforms and decisions. For example, if Japan's system can be used to process transactions in other Asian securities, too, Japan may well contribute to expediting the development of a pan Asian securities market. By maintaining this goal in its vision, rather than just importing Western standard specifications,

the possibility would emerge for Japan to create international standards for the world. If the movement to integrate the European settlement organizations were to make progress, this might well lead to the creation of a powerful settlement organization for the Euro zone. In the dollar zone, the DTC will become more powerful. If Japan is able to create a globally oriented unified settlement organization on a par with those in European and the U.S., it would fit in with the goal of making the yen an international currency, and this is Japan's role in the Asia-Pacific region. This is not the time to be wasting energy in fighting over vested interests as Japan did prior to the implementation of its Big Bang.