The Future Of the Debate Over Japan's Settlement Infrastructure Reform

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It is now over 6 months since the debate over reform of Japan's settlement infrastructure began in earnest. Building on the discussion so far, in this report I will outline those areas that in my view deserve most attention in terms of concrete steps to reform.[1]

1. Basic Policy Outline

A pertinent example of an attempt at wholesale settlement infrastructure reform is the UK stock exchange's attempt to introduce the "Taurus" system, a project started in 1987 and eventually abandoned in 1993.

The Taurus project was an attempt at a complete overhaul of the existing settlement infrastructure, obliging companies to use a CSD (Central Securities Depository) and entirely abolishing the use of paper-based share certificates. Numerous revisions to the basic plan resulted in the project being delayed far longer than the planners had originally envisioned, and as costs ballooned through expensive software re-writes, the overall structure became enormously complicated. The various related regulations were formulated into a massive 250-page document. When the system was finally tested, numerous faults were discovered leading to the project being abandoned once it became clear that it would take a further 2 or 3 years before the Taurus system could go live.

As a result the Bank of England decided to form a task force charged with investigating a reform of the settlements system. It came up with the following policy guidelines as a result of the Taurus debacle:

- Not to build an entire settlement system from scratch
- Minimize complexity
- Build an optional rather than an obligatory system
- Greatly reduce the amount of paper transfer involved
- Enhance the international competitiveness of the stock market
- Build a system with in-built flexibility able to incorporate future technological developments

1 This report is a revised and updated version of a presentation made by the author to Japan's Ministry of Finance Securities Settlement Infrastructure Reform working group meeting held on 17 April 2000.

Based on the task force's report published in July 1993 that incorporated the above guidelines, the UK then embarked on building a new system. Within 3 years "CREST," at the time the most advanced CSD in the world, was up and running.

Observing the CREST example leads me to the conclusion that it is first very important to draw up basic policy guidelines concerning the reform of Japan's settlement infrastructure.

In addition, while many of the guidelines that came out of the failure of the Taurus project are applicable to Japan, the most important of these is that the system should not be built entirely from scratch.

Japan's debate over settlement infrastructure reform has begun under the shadow of further shortening of settlement times and various moves to integrate and merge settlement organizations in the rest of the world. While Japan is already behind other countries in its adoption of both STP (Straight Through Processing) and DVP (Delivery Versus Payment), if other countries were to make further enhancements to their settlement infrastructures, Japan would be left with a serious international competitive deficit on its hands.

Therefore speed is of the essence in Japan's case. Precisely because of this, it is even more important that Japan does not try to implement radical reforms at once, and as a result incur the high costs in both money and time that bedeviled the Taurus project.

We should therefore clearly differentiate between near-term objectives and medium-to long-term objectives, and draw up as soon as possible, as part of our basic policy guidelines, the minimum amount that has to be done in order to achieve the near-term objectives.

Concentrating on achieving the short-term plan does not of course imply that we should neglect the medium- to long-term considerations. The debate so far has given rise to various idealistic visions of a future settlement system infrastructure. We need plenty of time however to examine such proposals carefully, and precisely because this process should not be rushed we need to file these under "medium- to long-term." I do not mean to say we should "shelve" those issues decided as suitable for longer term discussion, as we would, by tackling the issues according to these priorities, have set in train the process by which we can deepen the scope of the discussion at a later date.

Japan's immediate objectives need to be centred around the achievement by 2002 of T+1 (settlement on the next business day) and DVP. We therefore need to implement STP as far as is necessary in order to achieve these objectives.

Those issues that are not indispensable to the achievement of the immediate objectives and require further discussion should be put aside for the time being. Then we should as far as possible clarify the time-scale involved and the steps to be taken.

I believe that the best way forward in terms of a grand design for settlement infrastructure reform is through the above method of clearly separating short-term from medium- to long-term issues.

2. Competition In The Provision Of Securities Settlement Services

The issue of whether there should be competing securities settlement services in Japan has often been raised during debate over basic policy guidelines.

In considering this question we should first look to see if there are any other actual examples of major countries having several actively competing systems providing securities settlement services. In the US there have been examples of CSDs existing alongside the DTC (Depository Trust Company), but ever since being established by a consortium including the NYSE, American SE, NASD, securities companies and banks the DTC has retained an overwhelming share of settlements business in the US.

The task force set up by the Bank of England to examine the question of settlement infrastructure reform in the wake of the failure of the Taurus project also considered the option of having several competing settlement systems providers instead of a single central institution, but this idea was shelved at an early stage on the grounds that there were no similar examples in other countries and that the settlement infrastructure itself was too important a part of the financial infrastructure, and essential for maintaining internationally competitive securities markets, for it to be left without a central organization.

Examples do of course exist of competing settlement organizations. In particular there are numerous examples of countries with separate systems for settling sovereign debt and for settling equity trades existing in parallel. These systems however are not in competition with one another, but serving different markets according to the type of financial instrument they deal with. This framework however is also beginning to disappear: important developments are occurring towards integration of such separate settlement organizations due to their similarity of function, advancements in technology, and for users' convenience (due to the greater number of trades that straddle both markets).

In 1999 the UK decided to centralize settlement of government bonds, money market instruments and investment trusts through its CSD "CREST," in addition to regular equities and corporate bonds. Italy has also taken the policy decision to merge its own securities organizations previously separated along financial instrument lines.

I believe that we also must recognize the importance of a single centralized settlement organization, as is the current global trend, for achieving both the near- and mid- to long-term objectives.

However, we should not exclude the possibility of competition from the system altogether. Since the voices calling for a competitive environment are so strong, we should identify those elements of any new structure where competition would be a positive benefit and construct the system so as to allow that to occur. Reform of the current system in particular is necessary, where there are various settlement organizations each with a monopoly on the financial instruments they handle. Each settlement organization should be allowed to handle the entire range of financial products.

Since the avowed aim of this enterprise is to reduce settlement risk, we need to introduce special restrictions above those taken with regular companies when allowing companies to set themselves up and operate as competing settlement organizations: it would be counter-

productive if problems were to occur with the health or credit risk of the settlement organizations which then resulted.

3. Importance Of Distinguishing Questions Of "Systems Architecture" and "Organizational Structure"

In the previous report on this subject I stressed the importance of clearly separating questions of "institutional framework" that are the main concern of the working group discussions, and those of "system architecture" (such as whether merger and integration of settlement organizations or maintenance of a number of separate systems is the most efficient arrangement).[2]

There seem to be many voices in Japan in favour of supporting a number of competing settlement organizations in terms of the institutional framework (i.e. competing in the provision of services for the same financial products rather than product-based monopolies). Therefore the question of whether competing organizations will in fact appear comes down to whether a number of different settlement organizations can develop systems that are able to satisfy user requirements.

Regarding the question of what sort of system users will want, the fact that in Japan as yet the decision-making parameters have not yet been drawn as to whether to opt for a multi-provider competitive environment, or to have one effectively single and centralized organization while leaving the door open to the emergence of competitors, is cause for concern.

For example, there are many cases where the systems technology and the organizational aspects are being confused when comparing the merits of a single central organization against that of the co-existence of several organizations.

There could be many systems technologies used under a single organizational structure, or alternatively there could be a standardized technology used across a number of organizations.

In the case of the previously mentioned UK CREST's integration of corporate securities, sovereign debt and money market instrument settlement, the organizational and technological aspects were handled separately. First of all the organizational level centralization was achieved by transferring government bond and money market instruments to CREST, while CREST continued to use its existing IT systems and operate out of the same offices.

In the US the merger of the DTC and NSCC drew attention by bringing together a settlement and a clearing organization under one roof. However while a new holding company "DTCC" was set up and the two companies reorganized under its umbrella, systems were not standardized. Further, this organizational merger only brought together the legal, personnel, accounting, financial and management strategy areas by combining their functions at the level of the holding company, while the organizations themselves maintained a fair degree of independence from each other.

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2 Y. Fuchita "The Debate Over Settlement Infrastructure Reform in Japan" (Capital Research Journal, Spring 2000)

In the case of Japan, a complex choice of settlement system, organizational structure and user IT systems should not be reduced to choosing between two inflexible sets of alternatives:

- Unified settlement organization = unified organizational structure = absence of competition = standardized IT systems = the wholesale replacement of existing IT systems, or
- Several settlement organizations = several organizational types = allowance of competition = a network of different IT systems = use of existing systems

We must bear in mind that there are various system, organizational structure and technology options, and that we should look for the optimum arrangement of these various elements.

This decision must also conform to the basic guidelines, essentially:

- Achieve both T+1 and DVP by 2002, in the process promoting STP, pushing through the minimum necessary amount of reform as soon as possible.
- To clarify time-scale and final objectives for issues requiring longer discussion, and where reform is not absolutely necessary for the achievement of short-term objectives.
- To avoid developing a structure that rules out competition in the provision of settlement services.

4. Short-term Issues vs. Mid- to Long-term Issues

I imagine there would be a number of different views as to how to prioritize short-term vs. mid- to long-term issues. Bearing in mind previous discussions on this matter, in this section I will propose my own view of how this could best be achieved.

Firstly, since it is necessary to speed up reform as much as possible, progress in two issues is particularly desirable: a shift to RTGS (real-time gross settlement) of government bonds and the construction of a central matching system for share certificates. Both movements tie in with the objectives of settlement system reform and regarding which the debate pre-dates that of the current debate over system-wide reform. We need to make sure that current moves for settlement system reform do not obstruct these efforts that are already underway.

The following is my view on how the various issues divide into those for which urgent short-term reform is necessary and those for which a more careful mid- to long-term consideration is required.

1) Short-term Reform Objectives

Primary short-term objectives include the achievement of T+1 and DVP-based settlement by 2002, for both of which it is necessary to promote STP. The following areas in particular require reform:

(1) Immobilization of securities

Though the stated purpose of the current Central Securities Depository Law is "to rationalize the custody and delivery of stock certificates and other securities" and is applicable to both listed and "comparably traded" securities, the framing of the legislation had mainly share certificates in mind. In fact, the depository organization set up to handle securities based on this law, JASDEC, currently only deals with share certificates.[3]

For Japan to make much progress in immobilizing security certificates, the range of securities to which this law is explicitly applicable needs to be expanded. This should also allow greater competition in the offering of securities settlement services, which observers and industry insiders consider to be important.

Another problem is the situation that no more than a third of a company's issued shares may be deposited with JASDEC. A number of suggestions have already been made, such as allowing the depositing of newly issued shares without the actual issue of share certificates or allowing the deposit of odd-lot shares. We now have a good opportunity to institute such legislative reforms.

(2) Electronification of trade confirmations and investment instructions

With employees at securities houses still mailing signed paper-based trading reports to trust banks and life-insurers, and it still being typical practice for investment advisory firms to fax their investment instructions to trust banks, the current situation in Japan is still very far from the STP ideal.

The electronification of such messages is desirable in order that data authenticity, integrity and anonymity can be maintained, so that arrival of messages at their destination can be confirmed, so that data cannot be falsified ex post facto when and if disputes arise, and in order that messages can be made available to clients at a later date within a reasonable amount of time.

(3) Provision of book-entry DVP settlement by JASDEC

In order that trades between JASDEC account-holders can be settled by DVP, JASDEC should manage funds information and carry out funds netting.

3 From 2001 JASDEC plans to also handle convertible bonds.

2) Mid- to Long-term Reform Objectives

The areas most often pointed to as suitable for mid- to long-term treatment are questions of the legal framework to enable the complete "paper-less" handling of equity and bond trades.[4]

Japan's corporate bonds are not issued in physical certificate form, instead investors register themselves as the owners of purchased bonds at the various registering institutions (around 160 banks across Japan fulfil this function). A registry entry notes the number of bonds at a particular face value for each investor, and keeps track of the bond number for each (electronically represented) bond certificate. In the case of equities however, delivery can be effected by simply transferring the right amount of shares of the same issue out of those held for example centrally by JASDEC (it does not have to be exactly those shares held by the investor making the sale). In the case of corporate bonds, the seller must transfer exactly those bonds that are registered as belonging to the seller to the buyer. The banks must confirm between them each and every movement of bonds for each transaction and the corresponding certificate numbers in order as they occur, through the course of an entire day's trading. This lack of fungibility is a serious impediment to smooth and efficient settlements processing.

A computer network operational since December 1997 (JB Net) now links all the bond registering banks to facilitate speedier processing of title transfer, and consequently a settlement period of T+3 has been in operation since October 1999. To further shorten this to T+1 with the current system would however be extremely problematic.

T+1 might be possible if a number of minor revisions were made to the Bond Registration Law. If bonds were no longer managed at the individual number and certificate level, and for registration purposes, investors were grouped according to the broker through which they deal with transfer of title taking place between brokers ("street-name" system), then such partial revisions might bring this issue within the scope of short-term considerations.

However, some point out that it would be impossible to change to a street-name system without major revisions to the current Bond Registration Law. Further, there is also strong opposition to a different legal framework for equities and bonds in terms of origination, transfer and removal of holder rights, and that the ideal solution would be for an entirely new legal framework.[5]

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4 As an example of a "collateral law" problem, where DVP settlement is gross for securities while cash is netted, there is a possibility that the cash part of a transaction might not be fulfilled despite physical delivery having been made. However, if it were possible to re-do the securities settlement, this would represent a "legal" problem in that the trade would not have "finality." In order for the securities trade to have finality, cash settlement must be unimpeded. Legislative revisions therefore need to be considered to enable collateral to be taken in proportion to the counterparty's unsettled cash amount. A question of proper law on the other hand is the nature of the law governing cross-border trades. If such legal problems are not resolved, then the achievement of T+1 and DVP by 2002 will be jeopardised. Hopefully some minor adjustments to the law or some workaround that would allow Japan to meet the 2002 deadline without any serious problem occurring will be considered. A more "idealistic" scenario can be considered as part of the mid- to long-term objectives.

5 It would of course be possible to envisage corporate bonds not issued under the Bond Registration Law being dealt with by JASDEC as another workaround solution.

In which case, in order to achieve genuine electronification of the trading process, a new legal framework (for "electronic securities registration") would have bond securities not represented by any physical certificate and truly fungible, thus streamlining the settlement process. It could also be extended to cover equities in addition to bonds.

One related development that has attracted considerable attention is the March 2000 report by a group set up to research the electronification of commercial paper settlement. Set up in April 1999 and staffed from both the academic and finance fields, the group has also worked jointly with the Justice and Finance Ministries. This report proposed the enactment of a new law that would enable the issuance and trading of CPs to be entirely paperless. According to this law, issuers and investors would hold an account with "electronic bond registration institutions" as designated by the relevant authorities, and settlement of trades could then be carried out by changes to the electronic register. If these proposals were to become law, then this could serve as a particularly useful example for the electronification of trades processing of other instrument types, including equities.

3) Consistency between short-term and mid- to long-term objectives

If the objectives for settlement system reform are to be split into short-term and mid- to long-term objectives, then it is important to maintain consistency between these two areas. If the settlement system envisaged for the short-term differs widely from that to be implemented later on, then this will result in a double investment burden on behalf of market participants.

For example, if the mid- to long-term plan envisages the enactment of new legislation to cover the electronic settlement of both equities and bonds, then in order that this transition should proceed as smoothly as possible the short-term plan should as far as possible unify the handling of bonds and equities.

4) Other

In addition, some have pointed out the incongruity of encouraging the competitive offering of settlement services while other settlement institutions remain part of the public infrastructure. This would entail a fundamental revision of the Bank of Japan's government bond settlement service, and debate over the future legal status of JASDEC. This should not be seen as a necessary obstacle to the early implementation of T+1, DVP and STP, but rather as a mid- to long-term issue that deserves further consideration.

Conclusion

The implementation of settlement system reform should be separated into short-term and mid- to long-term issues. Of course, if it were possible to build an ideal system from scratch then that should be done, but the costly failure in terms of time and money of the UK's Taurus project is something Japan must avoid if at all possible. Aware that Japan is already lagging behind other countries, we need to press on with a steady and well thought-out program of reform.