

BILATERAL LINKAGES OF CENTRAL SECURITIES DEPOSITORIES

This paper sets out the case for developing a network connecting domestic central securities depositories (CSDs) in the Asian region through bilateral linkages and illustrates how this will work in practice.

Background

The World Bank study of July 1995 on the Emerging Asia Bond Market points to very favourable economic fundamentals for the development of the debt market in the region. These include:

- (i) rapid economic growth - forecast to be 7.7% per annum between 1994 and 2004;
- (ii) huge amount of investment (US\$8 trillion between 1994 and 2004) needed to sustain this growth;
- (iii) an increasing reliance of the regional economies on debt financing (from 9% of the gross domestic fixed investment in 1994 to 26% in 2000-2004) to satisfy the huge investment needs as compared to equity and bank finance; and
- (iv) savings ratios of the major economies in the region are high (over 30%).

Notwithstanding the above depicting the macro trends which are favourable to the supply of, and the demand for, bonds, it does not necessarily follow that the East Asian bond market will take-off by itself. One important element is market infrastructure which is a necessary, though not sufficient, condition for debt market development. Many of the economies in the region have already developed CSDs of their own. Most economies in the region are at various stages of developing some form of centralised, computerised book-entry clearing and settlement system for debt securities. While these CSDs may each be providing an efficient service to their domestic investors, there is no linkage between these CSDs which would enable cross border transactions to be conducted in a safe and efficient manner.

Currently there is no international/regional CSDs like Euroclear and Cedel in Asia. As a result, practically all US\$ Dragon Bonds issued in Asia,

bought in Asia have to be cleared through Euroclear and Cedel in European time. It is obviously more convenient to have a network linking domestic CSDs in the region for clearing cross border trades in securities in Asian time. It can provide the following services for cross border trades in Asian and Euro bonds:

- (i) to facilitate trading and holding of Asian Bonds and Euro Bonds by domestic participants;
- (ii) to enable participants in other Asian countries to hold securities cleared in domestic CSD; and
- (iii) to enable cross border Delivery versus Payment (DvP) transactions.

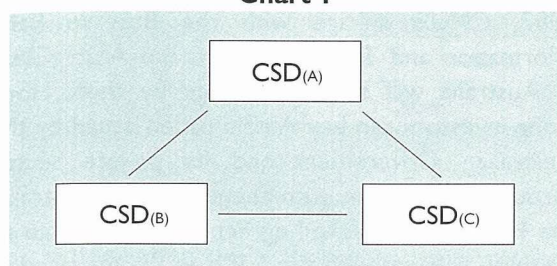
(i) and (ii) above will facilitate trading and holding of Asian bonds by domestic participants, hence enlarging the investor base and broadening the market to create the critical mass for the Asian debt markets and enhance the liquidity of Asian debt securities. (iii) is also possible as the payment systems of the economies in the region move onto real time gross settlement (RTGS) platform, cross border trades in debt securities, at least at the wholesale level, could also be settled on a DvP basis, reducing settlement risks and creating an important component of the right conditions for large international investors to invest in debt markets in the region.

Types of Cross Border Linkages

Cross border linkage of domestic CSDs in the region can take different forms. There are 3 basic models:

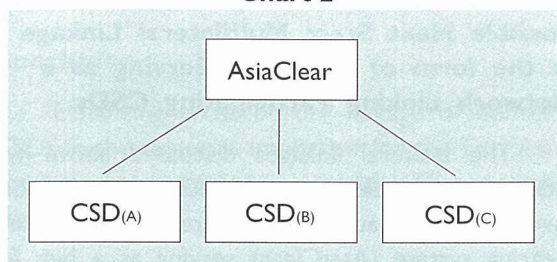
- (i) a group of CSDs connected by bilateral linkages to form a network (this does not involve setting up a central depository and clearing system as a separate legal entity) (Chart 1);

Chart 1



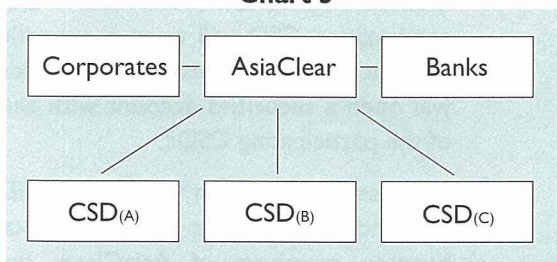
- (ii) the creation of a multi-access central depository and clearing system, owned/operated by central banks in the region, to serve as a hub for linking domestic CSDs in the region for cross border trade in securities (Chart 2);

Chart 2



- (iii) a modification of (ii) that allows investors, in addition to CSDs, to open securities account with, and become direct members of, the multi-access central depository and clearing system (Chart 3).

Chart 3



A further variation to the above models would involve participants maintaining cash accounts to facilitate cross border DvP. However, it should be noted that the opening of cash accounts is not a pre-requisite for cross border DvP for securities trades. This can be achieved through establishing linkage between the securities accounts and their respective payment systems as well as by making use of the correspondent banking relationship.

Case for an Evolutionary Approach

Embarking on model (ii) or model (iii) would be a great leap in the development of cross border linkages. This would probably be difficult to achieve in the short-term bearing in mind:

- (i) the different stages of development of the domestic CSDs in the region;
- (ii) that it would be difficult and time-consuming to organise a multilateral network from scratch as it involves a large number of central banks and CSDs and there is no practical experience in cross border linkages in the region; and
- (iii) premature consideration of more complicated structure, in particular the opening of cash accounts, may cause unnecessary concern to potential participants. The central banks may be worried about disturbances to their payment systems. The commercial banks may also be worried about competition from the CSDs.

In view of the above, there is a strong case for adopting an evolutionary approach starting with a network of bilateral linkages among CSDs in the region which does not involve the operation of cash accounts. This approach has the following advantages:

- (i) it is easy and quick to set up as it mainly involves each participating CSD becoming a member and opening an account with each participant in the network. The number of CSDs in the network is flexible. It can start with a few CSDs of financial centres which are at similar stages of development in their debt markets. Other CSDs may join later at a pace comfortable to them;
- (ii) the framework and procedures developed for the initial cross system linkages can be replicated for new participants thereby expediting the process of subsequent expansion of the network; and
- (iii) it is easier to gain support from all interested parties because such bilateral linkages, which do not involve the opening of cash accounts, pose no threat to participating CSDs and the banks in their jurisdiction.

Business Case for Establishing Bilateral Linkages

A bilateral linkage between two CSDs will provide the following benefits to the market participants:

- (i) it will broaden the market substantially by making cross system holding and trading of securities much easier, for example, an investor in Country A wishing to purchase foreign bonds can go through his local bank via the CSD in Country A to the CSD in that foreign country, rather than opening a special account with the branch of a foreign bank in Country A;
- (ii) settlement efficiency will be enhanced and by synchronising the processing and settlement cycle, settlement risk can be reduced or even eliminated; and
- (iii) funding efficiency will be enhanced, for example, an investor can make use of securities issued overseas to secure local currency credit facilities if these are held through the cross system linkage by a Member of the CSD in his own country (for example, a local bank) (with no cross system linkage, investors will have to put those foreign issued securities in the overseas member's account in the other system (Annex I), thus they cannot be used to secure credit facilities denominated in the local currency).

How a Bilateral Linkage will Work in Practice

The key design features and the mode of operation of the proposed linkage are set out in Annexes II and III. Insofar as Hong Kong is concerned, efforts have been devoted to external securities linkages ever since the service of the Central Moneymarkets Unit (CMU) was extended to private sector debt securities in January 1994. As early as December 1994, the CMU was linked up with Euroclear and Cedel. In the past one year, the Hong Kong Monetary Authority's (HKMA's) discussion with other central banks in the region on cross border linkages of domestic CSDs has

made good progress. Starting from 1 December 1997, CMU's linkage with the Reserve Bank Information and Transfer System and AustraClear in Australia will start operation. By then, Hong Kong investors can buy Aussie paper issued by the Australian Government and its private sector through CMU's link with them. Besides Australia, the HKMA has reached agreement in principle to establish linkages with the CSDs in the mainland of China and New Zealand. Our objective is to set up more of such linkages with other systems in the region and also to develop payment linkages with the other monetary systems. In so doing, real time DvP and Payment versus Payment (PvP) in Asian time will become a reality for cross border securities trade and other cross currency large value financial transactions.

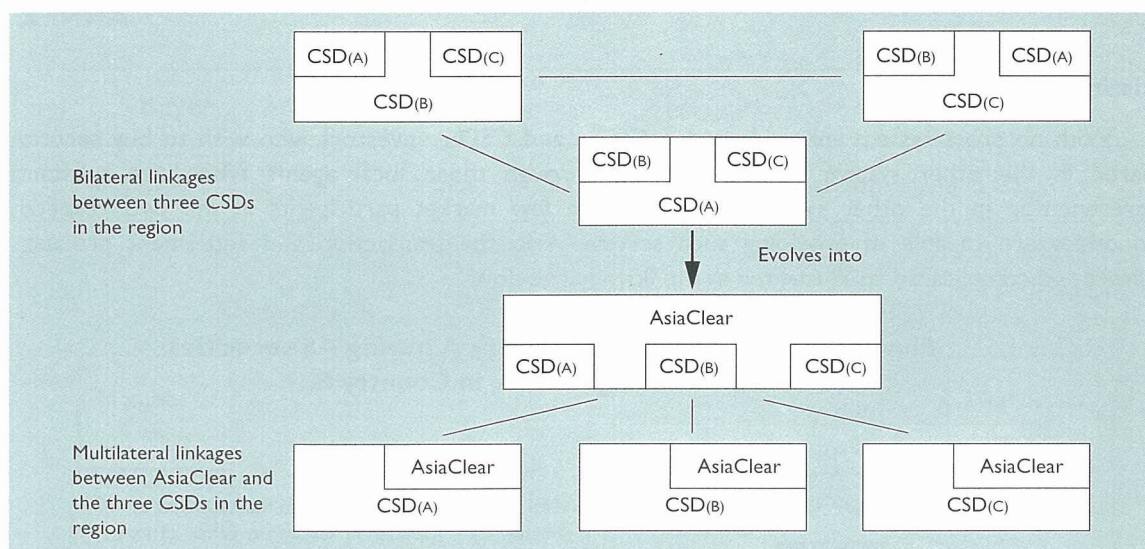
Possible Next Step: Multilateral Linkage in the form of AsiaClear Serving as a Network Linking Participating CSDs

The bilateral linkages discussed above will facilitate the development of a multilateral network involving the creation of a central depository and clearing system (AsiaClear) serving as a hub for linking domestic CSDs in the region (Chart 4).

The key features of this multilateral framework are as follows:

- (i) business structure and account relationship: all CSDs are treated equally and will have direct access to, and membership with, AsiaClear. Each participating CSD will open a securities account with AsiaClear and AsiaClear will open a securities account with each of the participating CSDs;
- (ii) business relations with CSDs: only CSDs (not individual market participants) can become members of AsiaClear, thus AsiaClear is complementary to, not competing with, domestic CSDs; and
- (iii) no opening of cash account between the CSDs is required: arrangement on the settlement of cash leg relies on correspondent banks but DvP can still be achieved by developing appropriate linkage with the local payment system (Annexes II to III).

Chart 4



Conclusion

Enhancing cross border linkage of domestic CSDs in the region is important for the East Asian bond market to realise its potential. This paper has illustrated that:

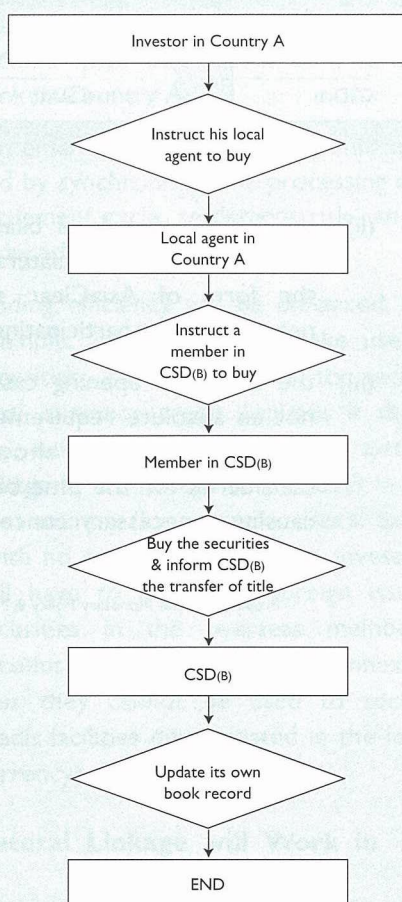
- (i) an evolutionary approach, starting with the development of a network of bilateral linkages, is a practical way forward. CSDs in the region can decide to participate in these bilateral linkages at a pace comfortable to them;
- (ii) the initial network of bilateral linkages can evolve into multilateral linkages in the form of AsiaClear serving as a network linking participating CSDs; and
- (iii) the need for opening cash account is not an absolute requirement for cross system DvP and should not be considered for the time being to avoid causing unnecessary concerns to CSDs and banks. ❖

– Prepared by the Monetary Policy & Markets Department

Existing situation

With no cross system linkage between CSD_(A) and CSD_(B), investors who wish to buy securities cleared in the other system will have to go through those local agents who have substantial representation in the other system. Hence only a few market participants in the two respective economies are capable of providing such service. Also the transaction and settlement process is indirect and complicated, as illustrated in the flowchart below.

Flowchart of an investor in Country A buying A\$ securities cleared through CSD_(B) in Country B

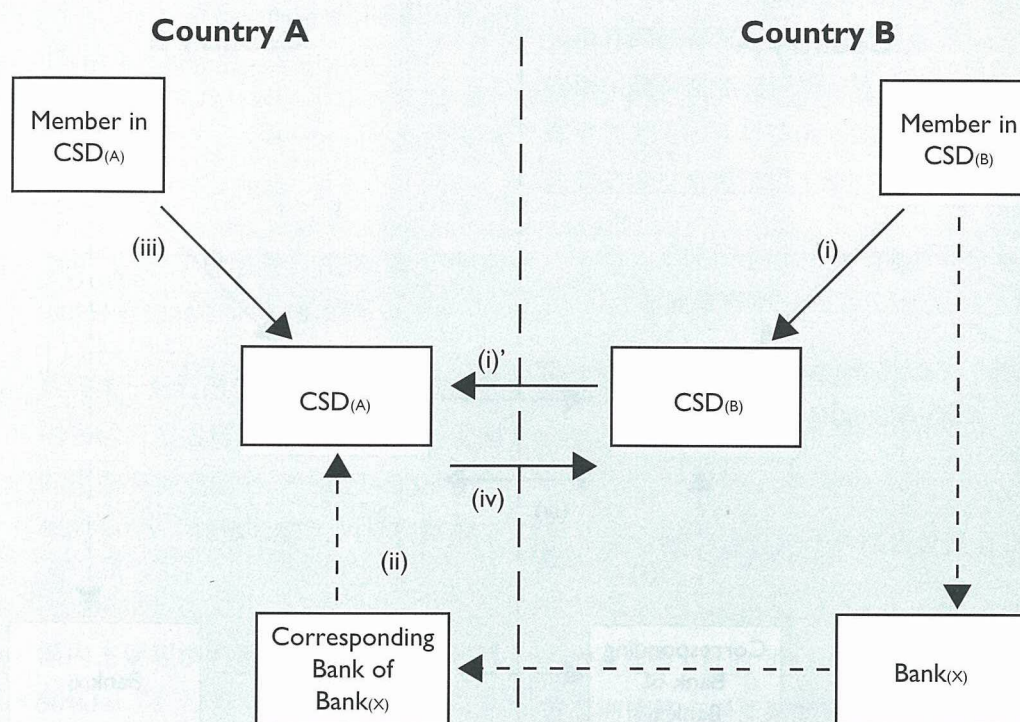


The books of CSD_(B) will record the securities as holding by a member in CSD_(B) on behalf of its client, i.e. the local agent in Country A. The disadvantages of this arrangement are:

- (a) only a handful of local agents who have good connection and representation in Country B can, and have interest to, handle such cross border trades;
- (b) the investor in Country A will only be identified in the local agent's book; and
- (c) there are no established rules and procedures regarding the processing cycle and settlement of these deals, the investor in Country A obtains information only from its local agent.

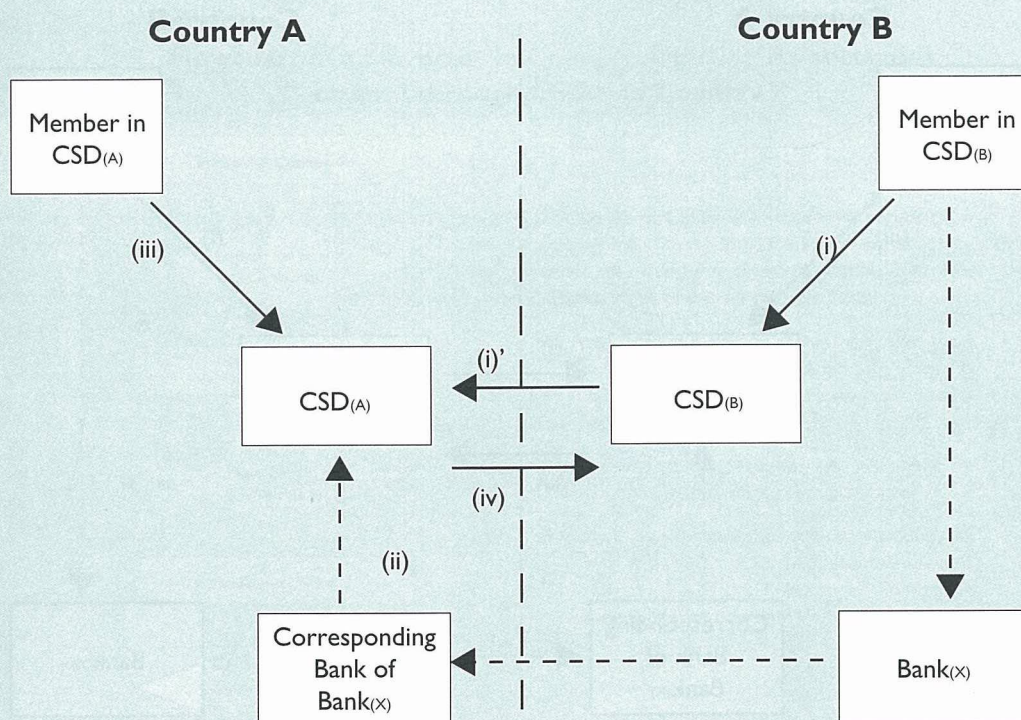
ANNEX II

Buyer	Seller	Securities
Member in CSD _(B)	Member in CSD _(A)	A\$ securities held in CSD _(A)



- The investor in Country B sends a “buy” securities instruction (i) to CSD_(B) and instructs his banker, Bank_(X), to pay.
- CSD_(B) in turn sends the “transfer in” securities instruction (i)’ to CSD_(A) for matching.
- The corresponding bank of Bank_(X) in Country A sends a payment instruction (ii) to CSD_(A) before authorising CSD_(A) to direct debit the settlement amount from its settlement account with the central bank in Country A.
- Within CSD_(A), the Member sends a “sell” securities instruction (iii) to CSD_(A) indicating the details of the transaction.
- Within CSD_(A), CSD_(A) matches the instructions (i)’ and (ii) with (iii). After matching, CSD_(A) will execute the transfer of securities and payment during the End-of-Day Batch Processing. All the securities titles will be updated after the processing.
- CSD_(A) faxes a reconciliation report (iv) to CSD_(B) detailing the results of the transfer.
- CSD_(B) may use the reconciliation report to update its own books by crediting the A\$ securities cleared in CSD_(A) into its member’s securities account in CSD_(B).

Buyer	Seller	Securities
Member in CSD _(A)	Member in CSD _(B)	A\$ securities held in CSD _(A)



- The investor in Country B sends a “sell” securities instruction (i) to CSD_(B) and instructs his banker, Bank_(X), to receive the payment.
- CSD_(B) in turn sends the “transfer out” securities instruction (i)’ to CSD_(A) for matching.
- The corresponding bank of Bank_(X) in Country A will send a pre-advise (ii) to CSD_(A) stating the amount that it expects to receive.
- Within CSD_(A), the Member sends a “buy” securities instruction (iii) to CSD_(A) indicating the details of the transaction.
- Within CSD_(A), CSD_(A) matches the instructions (i)’ and (ii) with (iii). After matching, CSD_(A) will execute the transfer of securities and payment during the End-of-Day Batch Processing. All the securities titles will be updated at this moment.
- CSD_(A) faxes a reconciliation report (iv) to CSD_(B) detailing the results of the transfer.
- CSD_(B) will base on the reconciliation report (iv) to update its own book by debiting the A\$ securities cleared in CSD_(A) from its member’s securities account in CSD_(B).