

Newsletter



Institute for International Monetary Affairs
(財) 国際通貨研究所

Towards a Regional Settlement Intermediary Discussion on the Infrastructure of the Settlement System in East Asia¹

Naoyoshi Kinukawa
Director, Economic Research Department
Institute for International Monetary Affairs

Today I would like to talk about what should be considered concerning the development of settlement systems in East Asia, including discussion on a regional settlement system.

Strengthening of the settlement system infrastructure is important

Bond markets in East Asia have been improving their infrastructures for the past several years, supported by the cooperation among monetary authorities and central bankers that took shape as part of the Asian Bond Market Initiative (ABMI) and the Asian Bond Fund. Many features of most of East Asia's bond markets, such as the formation of yield curves and activation of securitized transactions, have been improved, and the markets have expanded.

An improved bond market infrastructure is important, and this also applies to the settlement system.

The well-developed settlement infrastructures of financial centers could serve as a model for developing financial markets. Hong Kong, Singapore, and South Korea became advanced in this area relatively earlier, and Japan's settlement system has recently seen much improvement.

Elimination of impediments to cross-border securities investment is important

It is important that such limitations—such as foreign exchange regulations—on

¹ This article is a text of the speech made at the conference titled "Developing Bond Markets in APEC, Towards Greater Public Private Sector Regional Partnership", held June 21-22, 2005 at the Asian Development Bank Institute in Tokyo.

cross-border securities investment in East Asia be removed. Otherwise, the possibility of activating cross-border investment will be quite limited. In this regard, I would like to express my appreciation for the ongoing research initiated by the Bank of Japan on the impediments on cross-border securities investments², that started in late 2003.

Cross-border securities investment has two sides: incoming investment from overseas, and outgoing investment to overseas. It is important that infrastructures be developed on both sides, and that relevant risk in securities investments be reduced.

First, the deregulation of securities investments from overseas sources that have large savings is necessary, followed by consideration of the deregulation of outgoing investment, especially for countries where the opportunities for securities investment are limited even as the investment needs of institutional investors grow.

It is important to note that some problems may arise for some countries if they pursue the rapid liberalization of foreign exchange controls before they are fully prepared to do so. In the Asian currency crisis of 1997, the growth of offshore liquidity in a given currency provided funds to speculators when they attacked that currency. The memory of this is still fresh, and so especially since 1999 it has become popular for East Asia countries to take steps so that their currencies do not flow without controls into the offshore market. This is called a policy of non-internationalization of their currencies. Increased cross-border investment in securities means that the international use of a currency becomes enhanced. Since more activity in the cross-border investment of securities is needed, further study will be necessary on how to liberalize related regulations in a way that will prevent future currency crises. In making a proposal of prescriptions, such research should also include the recent strengthening of the framework for regional financial cooperation.

Discussions on East Asia's regional settlement system

The idea of Asiaticclear as a cross-border settlement system for East Asia was initially brought up by the Asian Development Bank in the early 1990s. This was generally understood to be an idea that East Asia needed its own settlement system for securities, which should be an important infrastructure for developing the bond market. The particulars of this idea have not yet been defined, I understand.

In the early 1990s bonds were issued in NIES, namely Hong Kong, Singapore, Taiwan, and South Korea, and were called "dragon bonds," but those denominated in US dollars could not be easily launched in East Asia because competition with London and New York was so tough. For local and domestic currencies, however, the appetite of domestic investors grew steadily, although the amounts of each amount were small. Bonds denominated in Hong Kong dollars were the most successful.

The financial officials of Hong Kong had just established the Hong Kong Monetary Authority (HKMA), and were quite supportive of the strengthening of the infrastructure for the securities settlement system. In Hong Kong, the strengthening of the settlement system infrastructure advanced more quickly than in other East Asian

² Study on Impediments to Cross-border Bond Investment and Issuance by Bank of Japan. See p. 3 of ABMI WG Progress Report (April 2005) of WG 3 [Foreign Exchange Transactions and Settlement Issues], http://asianbondsonline.adb.org/documents/ABMI_WG_FETS_2005_Apr.pdf.

economies, although Singapore also strengthened its settlement infrastructure.

Existing settlement channels

When considering the future securities settlement system for the region, we have to study what kind of channels are in use for cross-border securities investment, which channels will be popular in the future, where the needs of relevant parties are, and other matters.

The integration of the settlement system had advanced in Europe, and two groups—Euroclear and Clearstream—linked several settlement systems and central securities depositories (CSD). In the US, the Depository Trust Company Corporation (DTCC) and major US financial institutions, as custodians, are the main parties. In East Asia, although the two European groups have already established entities, the presence of global custodians is tremendous, and they are mainly major US banks. I would like to discuss their major types.

The first is the way by which investors appoint financial institutions that are called “global custodians” and enter into agreements by which investors instruct such financial institutions to settle the securities that they buy in multiple overseas markets. J.P. Morgan Chase, Bank of New York, and State Street are the most popular of such financial institutions. Institutional investors enter into contracts so that they can always buy, hold, and sell securities through a custodian in multiple markets where they have an interest. This method should become the most popular in East Asia.

The second method is to have local agents intermediate in settlements. Investors buy securities through local securities companies or local financial institutions working as brokers. The securities purchased are then deposited with financial institutions that are local custodians. Citibank, Hong Kong and Shanghai Banking Corporation, Standard Chartered Bank, and others belong to this group. This should also be quite popular in East Asia.

The third method is direct access. In East Asia there are several countries that limit the access of non-residents to funds transfers of local currencies. In fact there are very few that allow direct access.

The fourth is a channel that international central securities depositories (ICSD) provide. Investors go through one of the ICSDs for settlement. Euroclear and Clearstream belong to this group, and have offices in East Asia. ICSDs are used when investors in East Asia purchase securities in Europe, but appear to be infrequently used when purchasing securities in East Asia.

The fifth one is to go through the linkage that CSDs in the region have established for securities settlement. CMU (a Hong Kong CSD) has established a linkage with other CSDs in East Asia and Pacific, and with ICSDs by which they can settle securities in individual economies. The number of these linkages is limited, however, and the traffic that goes through them seems quite small.

Market participants select their counterparties quite strictly, to avoid risks in markets where DvP is not established.

For final investors, it is important that they act based on their own investment decisions, using a risk-free, low-cost mechanism. This is a serious issue for overseas investors, who face larger risks in settlements of funds and securities if DvP is not established. For effective cross-border investment in securities, it is quite necessary for the settlement infrastructure to be strong. Nevertheless, intermediaries and investors will take the risks and pay the additional costs if they really want to make a specific investment, even if such risks and costs are not negligible.

Specific needs

Together with some of my colleagues, I recently learned the followings with a number of market participants.

First, market participants have already recognized, somewhat ambiguously, that there are several needs that are not fully satisfied by the settlement services currently provided by the public sector or by financial institutions in the private sector. When asked if there is a need to establish a settlement system in East Asia, they respond by asking what its contents would be.

We may know that it is important to recognize what needs have not been met, but it is still an open question what kinds of functions should be given to a regional institution providing settlement services in East Asia, and what kind of needs would be satisfied. There should be an explanation for these points, and so the opinions of market participants about them is quite important.

Second, most of the problems that market participants pointed out are almost the same as those that we at IIMA found in our past research on the settlement infrastructures of domestic bond markets. For example, in Thailand there is only one registrar for stock, Thailand Securities Depository, but there are several for corporate bonds and state enterprise bonds. Since the registrars for issue of corporate bonds are different, there seem to be several cases where settlements are not conducted smoothly. In Indonesia, there is a case where the purchase contract of Indonesian rupiah securities was cancelled because the central bank blamed the intermediary for being negligent about giving prior notice to the Bank of Indonesia. The intermediary had to bear the cost of cancellation.

I learned in discussions with market participants that the settlement institution to be established in this region should have the several functions. Some requested that payment information be available on settlement systems managed by central banks, in addition to information on the settlement of securities. It is considered quite valuable to get relevant information on individual countries' real-time gross settlement systems at the same time that they get information on the settlement of securities.

RTGS has become possible in most East Asian countries, but this does not mean that information on its settlement has been well dispersed to anyone other than interbank market participants. This is especially the case with non-residents. Custodian banks should have a need to provide the necessary settlement information to the institutional investors who are their non-resident customers. In East Asia it often it takes time for them to confirm if the payment and delivery of securities is finished. Market participants' need for efficient cash management and cash investment in domestic

currencies is quite strong. This will not be a serious problem in the immediate future, because the interest rates of East Asian currencies have been low recently, and liquidity is somewhat reliable, but for better and efficient management of cash, it is important to take note of the needs of market participants.

Such local agents as brokers and custodians can also handle cross-border investments from abroad in East Asia, but some say that they would prefer to use an East Asia settlement system if there was one, on a parallel basis in addition to the existing channel they use.

Hong Kong provides CSD linkage with Australia, New Zealand, and South Korea, but the traffic on it seems to be low, indicating that business-viability consideration should be given in the feasibility studies of such intermediaries. As mentioned earlier, market participants showed interest in using such an intermediary in parallel with existing channels.

Minimizing foreign exchange settlement risk is important

A handicap that East Asia faces is the time difference between it and other major markets. This appears in the form of foreign exchange settlement risk, known as the “Herstatt Risk.” There is a time difference of at least half a day between the delivery of funds between US dollars and Asian currencies. When selling US dollars and buy Thai baht, payment of the US dollars in New York precedes but it takes at least a day to confirm the receipt of the Thai baht. A simple Herstatt Risk materializes when the counterparty defaults after one makes payment in US dollars and does not receive Thai baht later. This is an example of US dollar against Thai baht. Even though there is going to be an active baht/yen foreign exchange market, the parties of baht/yen foreign exchange transactions are exposed to Herstatt Risk under currently available settlement service.

In the most popular channel for investment, if an investor goes through a global custodian or a local agent, that global custodian or local agent takes the Herstatt Risk. Under a contract between an investor and a financial institution, this risk is borne by the investor. Costs and risks will be paid by the investor in the form of a fee, and margin in the relevant foreign exchange transaction.

Measures to minimize the Herstatt Risk have been taken since the middle of the 1980s. FX Net was widely used as a bilateral netting mechanism among major financial institutions that were active in foreign exchange dealings. CLS Bank was established in 2002, and currently executes multilateral netting of 15 currencies,³ to make PVP between currency pairs. These 15 currencies constitute around 95 percent of the turnover of world foreign exchange transactions, according to BIS’s triennial survey of 2004. The current members of CLS Bank consist of 485 institutions (including 71 shareholders), and are believed to account for around 50 percent of total worldwide foreign exchange turnover, if all the foreign exchange transactions that they handle go through CLS. Since CLS provides quite an efficient service in addition to simply

³ Australian dollar, Canadian dollar, Danish krone, EU euro, GB pound, Hong Kong dollar, Japanese yen, South Korean won, New Zealand dollar, Norwegian krone, Singapore dollar, South African rand, Swedish krona, Swiss franc, and US dollar.

reducing foreign exchange settlement risks, there is an expectation in the market that they will eventually expand the number of currencies that they handle.

CLS does not seem to have any immediate plan to include more East Asian currencies, however, and instead requests members to shift the settlement of currency pairs that are settled differently. They will try to attract more market participants as shareholders and users, and try to include additional entities among the member institutions where more CLS business is created. Nonetheless, there are difficulties for Asian financial institutions wishing to become shareholders in CLS Bank.

First, attracting more customers—such as institutional investors—as CLS Bank shareholders in order to increase turnovers of foreign exchange transactions seems to be a more viable decision for CLS bank than adding new Asian currencies, since they have quite marginal foreign exchange turnovers.

Second, CLS Bank reportedly has a variety of eligibility requirements for new currencies, including the following: the finality of payment in a currency must be ensured; the payment system managed by the central bank of a country must work properly; contingency plans should be established; and there are periodic tests of the reliability of the operations of each CLS Bank member. To become shareholders in CLS Bank, local financial institutions must also pay in capital amounts that are calculated for new participating shareholders. At least two banks that provide liquidity of a currency are required: for a new currency to be included in PvP services on CLS Bank's books against US dollar, approvals by the Board of Governors of the Federal Reserve System (FRB) and by the Federal Reserve Bank of New York are required. For PvP against the other eligible CLS currencies, approvals are needed not only from the central bank of an eligible CLS currency, but also from the FRB and the Federal Reserve Bank of New York.

Considering those points, we must conclude that the possibility of another Asian currency being included in CLS Bank settlement is quite low.

For the time at which the finality of a settlement is ensured, time differences will be much longer. There is one PvP method already available to market participants: by going through the HKMA's settlement services for the US dollar and euro against the Hong Kong dollar, but this service includes the commercial banks that take part in the payment channel, and so the finality of payment will not be provided.

If linking directly the real-time gross settlement services of central banks within East Asia, the finality of payment on PvP will be given as long as relevant legal infrastructures are present in the relevant countries. EMEAP seems to have early on considered the issue of payment and settlement among participating central banks. The report, "Payment Systems in EMEAP Economies" (known as the "Redbook"), published in 1997 and 2002, is a quite reliable, useful source of information on the settlement systems of EMEAP member economies. A working group under EMEAP has studied the issue of linking payment systems directly managed by central banks in member economies, but does not seem to have reached a point at which they can begin a more specific study. The report, "Foreign Exchange Settlement Risk in the East Asia-Pacific Region" (2001) states: "If cross-currency trades between EMEAP currencies develop significantly in future, then PvP systems in the form of bilateral linkages between national RTGS systems in the EMEAP region might help reduce

foreign exchange settlement risk. With this in mind, payment experts from some EMEAP economies joined the EMEAP Experts Program, hosted by the Bank of Japan, and conducted basic and theoretical research on the feasibility of this kind of PVP system.”⁴

For this, a possibility that could be considered is a linkage between a regional settlement intermediary and CLS Bank. A regional settlement intermediary could become a shareholder in CLS Bank, with the function of a settlement bank for specific currencies within the region, and provide necessary liquidity for those currencies. Such a regional settlement intermediary would provide a link between domestic RTGS payment systems and CLS Bank, to eliminate the Herstatt Risk in the region.

As I have already said, there are certain functions that would be quite useful for users. In comparing the situation in Europe, where CSD linkages are well developed, it might appear possible that a similar idea could be applied in East Asia. Considering that most East Asian economies still require much infrastructure development, however, as well as the deregulation of foreign exchange controls, this would not currently be feasible.

Euroclear and Clearstream have already established offices in East Asia, and there is a two-way CSD linkage between them and Hong Kong, although usage seems to be mostly from East Asia to Europe. Moreover, such an ICDS provides settlement services on a batch basis, with their systems working 24 hours a day, but there seems to be a problem in the difference of working hours between Europe and Asia.

The traffic going through the CSD linkage service provided by Hong Kong is limited, and investment in domestic capital markets (both equity and debt) is mostly made through global custodians or custodian banks.

If this business is left to global custodians and similar parties, there is a risk that transactions will be concentrated on a few financial institutions. Since global custodians pay a variety of costs and take a variety of risks, the resulting commissions and charges that investors pay to global custodians could become high. Large institutional investors can do business with global custodians, but small and medium-sized investors, and individuals, might not be able to do so directly, and the fees and charges would be expensive for them as well even if they are allowed to.

These points should be taken into consideration when discussing a future settlement system for East Asia.

Some say that the regional settlement system should be a public infrastructure

My opinion is that the cost of establishing a regional settlement system, the possible competitive relationship with existing settlement services (especially in the private sector) and complementarities should be considered.

East Asia has some handicaps compared with Europe and the US, and ways to resolve them should also be kept in mind. In this regard, there should be some kind of allocation of roles between public and private sectors when serious consideration is

⁴ See footnote 22, on page 23, of the report. <http://www.emeap.org/fxreport/fxreport.pdf>.

given to the issuance of bonds denominated in basket currencies.

It is important to strengthen the infrastructures of all East Asian countries

Whatever ideas one may have about a settlement system for East Asia, it is extremely important for the region's economy to improve the infrastructures of its existing individual settlement systems. If bankruptcy laws are not effective or even present, or if the rewinding of payments or deliveries of securities is possible, no reliable cross-border settlements will be conducted. These are areas where the region's national economies should compete with each other in developing their settlement infrastructures.

There are several recommendations about the points which should be developed further, such as by the Group of Thirty and the International Securities Services Association, in the private sector. The guidelines of IOSCO/CPSS are provided by the public sector. It would make sense to study how far each country has fulfilled the requirements of each point.

Some say that there might be a need to establish a more appropriate standard for East Asia, especially considering the region's unique situation. It might not make sense to establish a special edition for East Asia, but it could be worth considering study of the situations of each economy, focusing especially on practical matters, and to request that they reach levels which are somewhat lower than required for Europe, the US, and some of the advanced markets in East Asia.

Bilateral and multilateral technical assistance on settlement infrastructures for some East Asian economies should also be enhanced.

The role of the private sector should be quite important

A settlement system makes sense if it is used by the private sector, since the public sector is sometimes not aware of the practical difficulties that the private sector encounters. It is understandable that the public sector does not reveal its own problems, which can be pointed out by market participants from the private sector when they consider such problems serious and ongoing, and who can make recommendations about improvements to the public sector.

I would like to stress the importance of establishing an institutional framework, where the opinions of the private sector can be reflected. Consideration should be given to the fact that participants in the private sector are not expected to devote their time to the development of East Asia's bond market infrastructure. Public sector participants are expected to enhance the settlement system infrastructure, and to make relevant information available on websites and by other means. Self-assessments could also be considered, and checks by the private sector should be made occasionally.

Finally, I would like to reiterate that the development of a regional settlement system for East Asia is a medium-to-long-term task, on which the public and private sectors should work in close cooperation with each other, with considering both the various possibilities and flexible approaches.

Thank you for your attention.⁵

References

IIMA *Settlement Systems of East Asian Economies* (2004)

http://asianbondsonline.adb.org/documents/abmi_wg_fets_settlement_systems.pdf

Hajime Shinohara, *Asian Currency Settlement System* (1999), IIMA Newsletter

<http://www.iima.or.jp/pdf/nl99-01e.pdf>

N. Kinukawa, *A Call to Develop a Regional Bond Market in East Asia* (2002), IIMA Newsletter

http://www.iima.or.jp/pdf/nl_07_2002e.pdf

Copyright 2005 Institute for International Monetary Affairs (財団法人 国際通貨研究所)

All rights reserved. Except for brief quotations embodied in articles and reviews, no part of this publication may be reproduced in any form or by any means, including photocopy, without permission from the Institute for International Monetary Affairs.

Address: 3-2, Nihonbashi Hongokucho 1-chome, Chuo-ku, Tokyo 103-0021, Japan

Telephone: 81-3-3245-6934, Facsimile: 81-3-3231-5422

〒103-0021 東京都中央区日本橋本石町 1-3-2

電話 : 03-3235-6934 (代) ファックス : 03-3231-5422

e-mail: admin@iima.or.jp

URL: <http://www.iima.or.jp>

⁵ The author would like to thank the commentators, especially to Mr. John Farrell, Former Chief Executive, New Zealand Securities Commission, Professor Yoshiharu Oritani, Professor, Meiji University and former Chairman, EMEAP Working Group on Payment and Settlement Systems, and Mr. Esmond Lee, Head, Market Systems Development Division, Hong Kong Monetary Authority at the conference.

APPENDIX

Power Point Slides

Towards a Regional Settlement Intermediary in East Asia

Prepared for the conference titled "Developing Bond Markets in APEC, Towards Greater Public-Private Sector Regional Partnership" on June 21-22, 2005, at Asian Development Bank Institute, Tokyo, Japan

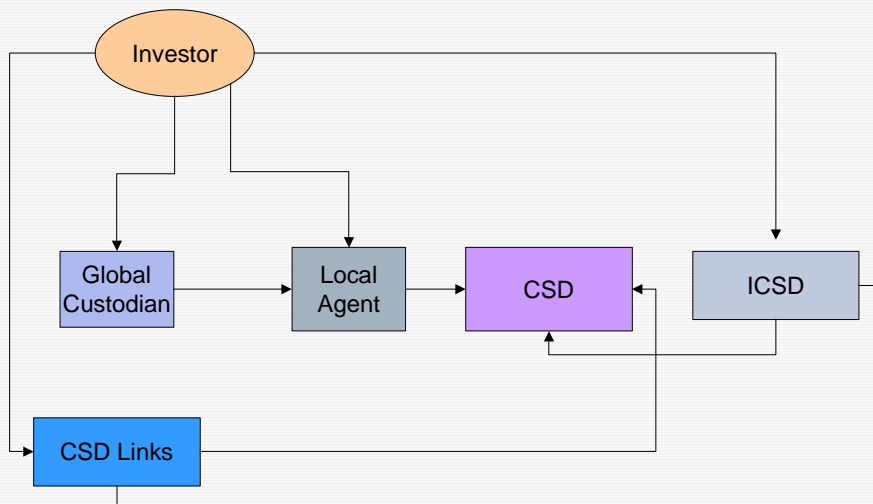
Naoyoshi Kinukawa
Institute for International Monetary Affairs
(IIMA)

- Strengthening of the infrastructure of the settlement system is important.
 - Elimination of the impediments to the cross-border securities investment is important.
 - Out-in
 - In-out
 - How to eliminate the regulations without inducing currency crisis
 - Discussion on East Asia's regional settlement system
 - The idea of Asiaclear
 - Dragon bonds
-

Existing settlement channels

1. global custodians
 2. local agent – securities companies and financial institutions in the local market
 3. direct access
 4. International Central Securities Depositories (ICSDs)
 5. linkage of CSD
-

Methods of cross border settlement



Specific needs

- Market participants recognized that there are several needs that are not satisfied.
 - Most of the problems are of practical nature.
-

Future settlement institution in the region should have:

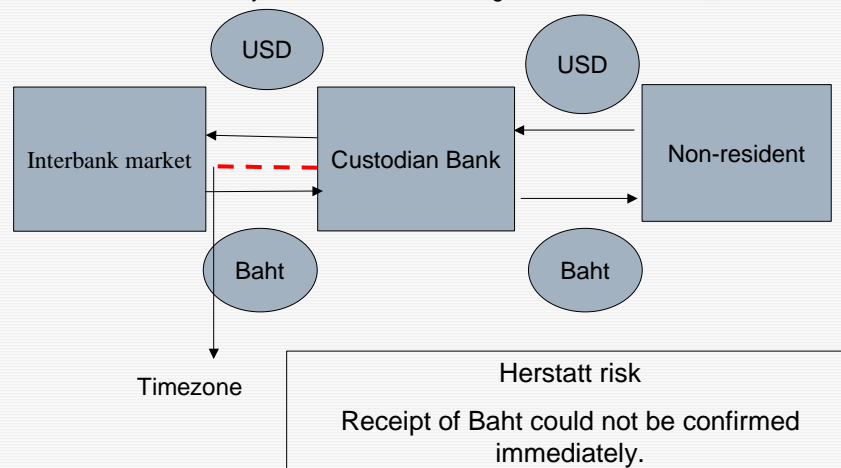
- Information on the payment by central bank payment system in addition to the information on securities settlement will be appreciated.
 - Information on RTGS settlement
 - Better cash management
 - Existing settlement channels do not satisfy all parties.
-

Minimizing foreign exchange settlement risk is important

- ❑ Time difference
 - ❑ Herstatt risk (foreign exchange settlement risk)
 - ❑ FX Net
 - ❑ CLS Bank
-

Herstatt risk

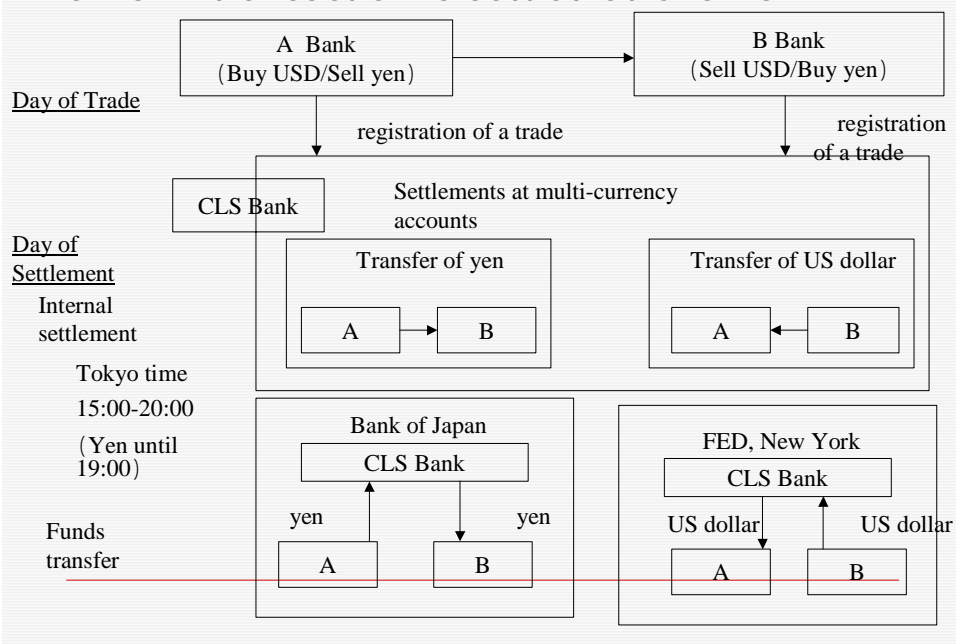
In case of new investment by an investor who exchanges USD cash for Baht,---



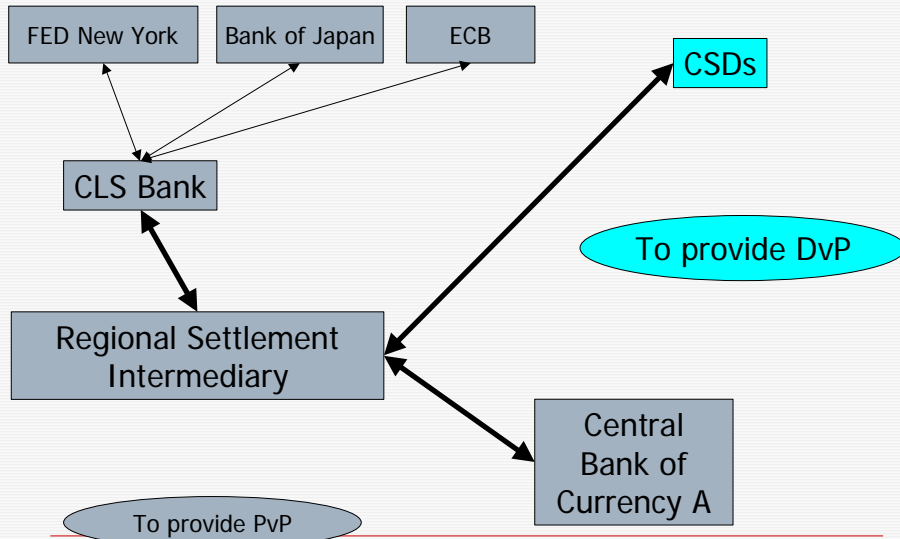
CLS might not include other Asian currencies in the near future

- ❑ Business consideration – to attract more business of 15 currencies are attractive
- ❑ Eligibility of a new CLS currency
- ❑ Service by HKMA
- ❑ Study by EMEAP
- ❑ Idea of a link between a regional settlement intermediary and CLS Bank

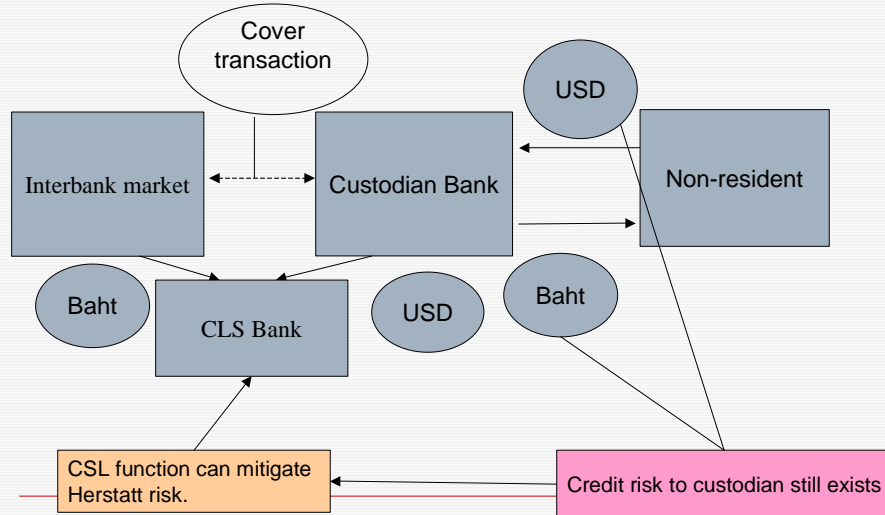
How a fx transaction is settled at CLS Bank



Idea of a link



Use of CLS Bank avoids Herstatt risk



Regional Settlement Intermediary

- Some say that the regional settlement system should be a public infrastructure.
 - It is important to strengthen the infrastructure of all East Asian economies.
 - The role of the private sector should be quite important.
-

Thank you for your attention.

Comments would be highly appreciated now or later.
