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## Prospects for a Multicurrency Clearing System in Asia

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Junichi Shukuwa[1] and Masaya Sakuragawa[2]

Keio University Global Research Institute



[1] E-mail: shukuwa@main.teikyo-u.ac.jp
[2] E-mail: masaya@econ.keio.ac.jp

Prospects for a Multicurrency Clearing System in Asia

Junichi Shukuwa and Masaya Sakuragawa[1]

**Abstract**

In the aftermath of the Asian financial crisis, ministers of finance of major Asian countries launched the Asian Bond Markets Initiative (ABMI) to avoid the risk of currency crisis. But the ABMI does not facilitate currency clearing, especially multicurrency clearing. This chapter proposes a new multi-currency clearing system in Asia. That scheme will clear each currency on a simultaneous base, supported by the Asian central banks. The architecture for liquidity provision in multi currencies is the first step for Asian financial integration.

## 1. Introduction

The world economic center of gravity is shifting from the West to the East. As of 2010, the share of the world GDP in Asia amounts to over 30 percent, and is predicted to be over 50 percent in 2050. Looking at the international positions, Asian countries, including China and Japan, have run current account surpluses toward the US, and accumulated huge net foreign assets, but any Asian currency is not still globally used. The share of the global foreign reserves in China and Japan is over 50 percent, but they hold almost of foreign reserves by the US Treasury bills.

[1] Junichi SHUKUWA, PhD, Professor, Faculty of Economics, Teikyo University
Masaya Sakuragawa, Professor, Faculty of Economics, Keio University

The autonomy in financial integration in Asia is not still established. When China and Japan trade goods, the Chinese Yuan is first converted into the US dollar, and then the US dollar is converted into the Japanese Yen. The US dollar intermediates the settlement between the Chinese Yuan and the Japanese Yen because of its superior liquidity provision, and at the same time leads to the misallocation of Asian savings into the regional investment.

The central concern is how the Asian financial markets are independent of the dominance of the US dollar. A developed financial market realizes risk sharing, liquidity provision, and an efficient capital allocation. The precondition for the developed financial infrastructure is to establish a settlement system that is useful for Asian currencies. Our answer is to establish the multicurrency clearing system in Asia. The clearing arrangement across multiple currencies facilities financial transactions among Asian countries, which is expected to develop the Asian financial markets, such as the Asian bond markets and the currency arrangement.

Asia is defined as “ASEAN +3”, that include 10 ASEAN countries, Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar (Burma), and Vietnam, and “+3 ”, China, South Korea, and Japan. To reach an agreement on a successful financial integration, the cooperation between these 13 countries is necessary. In particular, the China and Japan, the two largest economies in Asia, are expected to take the joint leadership in facilitating the regional financial integration. Unfortunately, China and Japan face political conflicts and territorial disputes. But the situation is expected to change. The new presidency in the US attacks China and Japan for the large trade deficits of the US. China and Japan have a common interest in opposing the request by the US, and are in good positions to use this opportunity to improve their bilateral ties and cooperation.

**2. Experiences for Asian Financial Integration**

In the aftermath of the Asian financial crisis in 1997, Asian countries understood the necessity to eliminate the risk of currency and maturity mismatches, the so-called, double mismatches. The currency mismatch arises when the foreign-currency denominated funds are converted into the home-currency denominated investment. The maturity mismatch arises when the long-term investment is made by rolling over short-term loans.

In May 2000, ministers of finance of several Asian countries agreed with the Chiang Mai Initiative (CMI) that was decided to expand the network of bilateral swap arrangement of foreign reserves. This arrangement was intended to eliminate the risk of the shortage of foreign reserves when the member countries face the financial crisis and the currency attack. This initial agreement was bilateral between the two countries. In 2010, it was advanced to include the multilateral arrangement among the members.

In August 2003, ministers of finance of major Asian countries launched the Asian Bond Markets Initiative (ABMI). It was aimed to develop efficient and liquid bond markets in Asia that facilitate the better utilization of Asian savings for the regional investments. ABMI was expected to contribute to the mitigation of currency and maturity mismatch in financing.

The Asian bond fund (ABF) was established as part of the architecture of Asian bond markets. The ABF is the joint investment fund that allows its members to pool part of the foreign reserves and invest in Asian sovereign and sub-sovereign bonds. The first phase of the initiative, so-called ABF1, was released in 2003 and the ABF invested in Asian sovereign and sub-sovereign bonds, but those denominated in US dollar. Asian currency authorities wondered “why the US dollar?” It was natural to change the currency denomination. The so-called ABF2 was released in 2005 and the ABF invested in bonds denominated in each local currency.

The main goal of ABF is to further develop the bond markets of member countries, combined with enhancing the efficiency and stability of Asian financial markets. The establishment of this class of bond funds is to give some Asian countries, who have built up massive foreign reserves, the opportunity to invest in financial assets that would return back to the region. The ABF2 called a new problem on how to deal with the settlement risk of the local currencies. The concept of “without the US dollar” means the necessity of the efficient clearing system among the local currencies.

The development of Asian bond markets is necessary to eliminate the risk and inefficiency arising from the currency mismatch. A good reference is the resilience shown by the European currency integration. The European countries established the common currency Euro without any link to the US dollar.

Asian countries have the experience of ACU (Asian Currency Unit). The ACU, a proposed basket of Asian currencies, is the Asian model of the European Currency Unit (ECU) that existed for 1979-1998. The ECU is artificial and preparing currency for the Euro. The ADB and Asian currency authorities initiated the plan of the ACU and started to calculate the trial version of the ACU. The US stalled that project in 2007. The independence of the US dollar is necessary to realize the autonomy in the Asian financial markets.

## 3. Settlement

The settlement is a basic and crucial process for security and currency transactions. There is a settlement risk specific to foreign exchange transaction. That risk is called the "Herstatt Risk". Herstatt Bank, a private bank located in Cologne in the West German, went bankrupt in June 1974, and had to stop operations on payments between different time zones. Counterparty banks had released payments in Deutsche Marks to Herstatt in exchange for US dollars that were to be delivered in New York. Due to the time zone difference, however, those banks paid Deutsche Marks but did not receive their US dollar payments, which in turn caused defaults amounting to losses of millions of dollars. The realization of settlement risk often gives rise to financial crisis. The global financial crisis in 2008 was triggered by the fact that settlements of the derivatives transactions had failed.

The settlement risk is the risk that one party fails to deliver the terms of a contract with another party at the timing of settlement. The source of the settlement risk is the "time difference" in the settlement between the two parties. The time difference arises because the transfer of sell currency and buy currency is made separately by the settlement system of each of the two countries. The settlement of the Japanese yen is made using the Japanese settlement system during the opening time of the Japanese calendar, while that of the US dollars is made using the US system during the opening time of the US calendar. The risk associated with time difference arises because the opening time zones are not equal between Japan and the US.

The payment-versus-payment (PVP) settlement eliminates the time difference risk perfectly. It ensures that a final transfer of one currency occurs only if the final transfer of the other currency also takes places. The counterpart mechanism in securities is the delivery-versus-payment (DVP).

The ideal arrangement is to realize the PVP settlement. Continuous Linked Settlement (CLS) is a global multicurrency settlement system that eliminates any foreign exchange settlement risk due to the time-zone difference. In CLS, there is the CLS bank that has special accounts on the 18 central banks. The CLS service, provided by the CLS bank, allows both legs of a foreign exchange trade submitted by members to be settled simultaneously across the books of CLS Bank and therefore guarantees finality and irrevocability of the settlement. The CLS has two head offices, one in New York and the other in London.

The CLS covers 14 major currencies. It covers only 4 Asian currencies, the Hong Kong dollar, the Singapore dollar, the Korean won, and the Japanese yen. It does not cover other Asian currencies, such as the Thailand baht, the Indonesian rupiah, and the Chinese Yuan.

Our subject is to establish a system like CLS to cover Asian countries. The experience of Hong Kong is a good reference to this subject. Hong Kong independently established the financial infrastructure on the PVP basis among the Hong Kong dollar(HKD), the US dollar(USD), the Euro(EUR), the Chinese yuan(RMB).[2] This system realized the PVP settlement among the four currencies in the opening time of Asian, and built a linkage with the Chinese yuan, which is not covered by the CLS.

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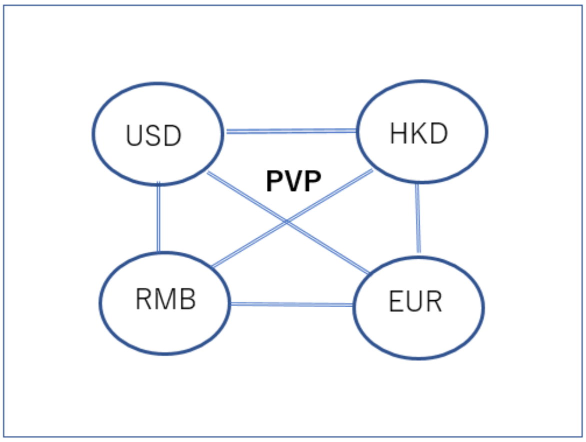
[2] Hong Kong Monetary Authority: Financial Infrastructure in Hong Kong http://www.hkma.gov.hk/eng/key-functions/international-financial-centre/infrastructure/financial-infrastructure-hong-kong.shtml.

(Figure 1) Hong Kong's multi-currency payments and settlement infrastructure




**4. Proposal of Multicurrency Clearing System in Asia**

The subject is to establish a system like CLS to cover as many Asian currencies as possible. Our proposal is to construct a multicurrency clearing system in Asia (hereafter MCSA). MCSA eliminates settlement risks for securities and currencies, and clears each currency on a PVP basis supported by the central bank.

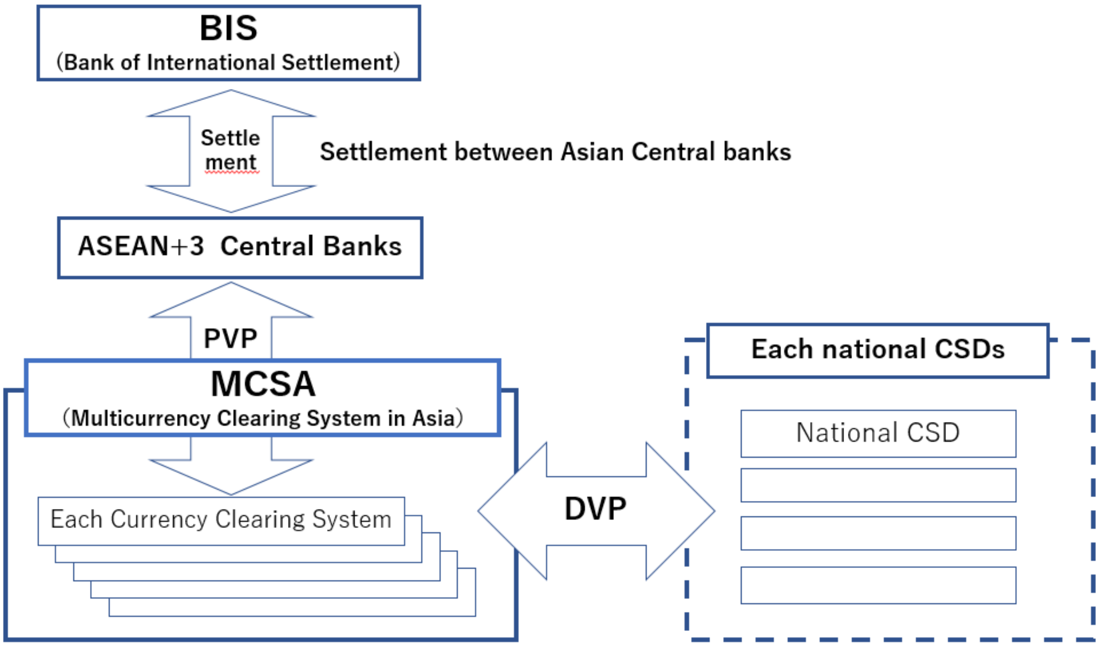
We propose to build MCSA in three steps. The first step is to link security settlement systems of individual countries bilaterally. The security settlement system is called CSD (central securities depository), which is a specialized entity that provides a central point for depositing financial instruments, such as bonds and shares. Clients of CSDs are typically financial institutions, such as custodian banks and brokers. Any CSD is linked with the central bank settlement system of home country. It will take 3-5 years to build this system. This is the most realistic model for the short term.

Security settlements are typically settled through the international central securities depository(ICSD). Even for settlement for Asian trading, two European ICSDs are the dominant international securities settlement infrastructure. This attempt is aimed to shift the place of international settlement for securities from Europe to Asia. Our idea is to develop the Hong Kong financial Infrastructure. The equality in position among Asian members is important for integration, likely the European experience.

The second step is to build a simple linkage system to the Bank for International Settlements (BIS). Now central banks have their accounts on the BIS. This allows final settlements to be made on the internal transfer between the BIS accounts of the Asian central banks. It will take 10 years to build this system. The BIS is located at Switzerland that is politically neutral, which will be advantageous to keeping the relation that is free from political conflict.

The final step is to integrate these linkages, and construct multicurrency clearing system in Asia. This is not just linkage system but settlement system. MCSA is the multicurrency clearing system such as CLS Bank and connect the domestic CSD among Asian countries. MCSA uses the PVP system to eliminate the settlement risk. It will take twenty years to complete it. Figure 2 illustrates the rough image.

(Figure 2) Multicurrency Clearing System in Asia (MCSA)




## 5. Conclusion

We have proposed the architecture of a multicurrency clearing system in Asia. We discuss on several related issues. Huge foreign reserves in Asian countries, particularly Japan and China, are effectively used for securing the stability of MCSA. These two countries are in good positions to take initiatives in its architecture. The multicurrency clearing system serves the role of providing liquidity. MCSA is complementary to the CMI because the CMI provides only USD. Finally, MCSA collects the financial data necessary for calculating the accurate ratio of the currency basket of Asia. Among the all the international settlement, financial transactions amount to nearly 97%, while those of trade is just 3%.