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Economic and Financial Regional Integration:

Lessons from the East Asian and European experiences

Financial Integration and Common Payment Systems

Lessons from the European and Asian countries Experience

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Fragmented payment systems are a major obstacle to financial integration at the regional and international levels. The European Union has launched ambitious policies for the ceation of common payment systems among its country members. Significant results have been achieved in some aspects, but one can say that the European Union is still largely caracterised by fragmented payment systems. This means that one of the basic conditions for financial integration is not fullfilled in the European Union.

The purpose of this paper is, in the first place, to present the situation of the different payment systems in the European Union (I), and then, to draw lessons from the European experience for financial integration and payment systems in Asia (II).

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Part I: Financial Integration and Payments systems : the European experience

Financial integration is one of the major targets of the European Union. Financial integration can be defined by two criteria : (i) identical rates of interest for financial products with identical risks (law of one price), and (ii) perfect mobility of capital flows (no barriers). The benefits of financial integration are supposed to be the reduction in the cost of capital and improvement in the allocation of capital.

Two major steps towards financial integration in Europe have taken place during the last 15 years : (i) the creation of a single market for financial services in the European Union in the early 1990's, followed by (ii) the creation of a monetary union with a single currency in 1999.

The building of common infrastructures and payment systems certainly is one of the conditions for efficient allocation of financial flows among European countries. Indeed, one of the major functions of banking and financial systems is to provide efficient and safe payment mechanisms for households, firms, banks, central banks and other policy makers.

There are three categories of payment systems : (1) Wholesale payment systems ; (2) Retail payment systems ; and (3) Securities settlement systems. The problems raised by these three payment systems are quite different. Important and rapid progress in the integration of large-value payment systems has been achieved by countries in the European Union. By contast, retail payments systems and securities settlement systems are still largely fragmented today.

1/ TARGET – The large-value payment system of the Eurosystem

The existence of efficient and robust large-value-payment systems is of key importance for the functioning of the economy. The role of a large-value payment system is to ensure uniform distribution of liquidity and a homogenous level of short-term intersest rates across a monetary area. This is a prerequisite for the efficient conduct of monetary policy operations. A large-value payment system should also be robust in order to cushion systemic risk and to contribue to financial stability.

In accordance with the Maastricht Treaty, which defined the rules of the European monetary union, the Eurosystem has been assigned the task of prmoting the smooth functioning of payment systems in the Euro area. The Eurosystem carries out this task through the operation of of payment facilites, as well as by overseeing the euro payment and settlement systems. These two functions are both geared towards securing efficient transfer of payments.

The Eurosystem manages the Trans-European Automated Real-time Gross Settlement Express Transfer (TATGET) system which contributed to the rapide integration of the euro money market.

The history and features of Target[1]

Prior to the introduction of the euro and the launch of a single monetary policy in 1999, payments between EU countries mainly relied on correspondent banking. Correspondent banking is an arrangement under which one bank (correspondent) holds deposits awned by other banks (respondents) and provides payment and other services to those respondent banks. In view of the needs othe new monetary area, such arrangements were no longer considered appropriate and the establishment of a common payment system for the whole euro area was required. TARGET was created against this background. The main objectives of TARGET are to contribute to the singleness of the euro money market in order to serve the needs of the single monetary policy implemented by the Eurosystem, and to the soundness and efficiency of payment transfers in the euro area.

TARGET was developed under considerable time pressure. In its first stage, it was designed on the basis of the current infrastructure in place at the national level. Thus TARGET became a decentralised system, consisting of 15 national payment systems and the ECB payment mechanism (EPM), which are interlinked. Harmonisation was only introduced for those features whose conformity was necessary to ensure the singleness of monetary policy, and a level playing-field amongst credit institutions.

TARGET is a real time gross settlement (RGTS) system that provides immediate intraday finality and settlement in central bank money. TARGET can be used for all credit transfers in euro, both interbank and customer payments, and furthermore there is no upper or lower value limit for payment transfers. TARGET has daily operating hours starting at 7 am and ending at 6 pm. Liquidity is widely accessible in TARGET.

TARGET plays a key role in the financial system since it is the compulsory channel for monetary policy operations, and also due to the fact that all large-value net settlement systems in the euro area settle in central bank money via TARGET. Furthermonre, TARGET is used for achieving delivery versus payment in securities settlement systems and for realising payment versus payment in the field of foreign exchange settlement.

The achievements of TARGET

The TARGET system has contributed to the high degree of liquidity in the euro money market. With the launch of the euro in 1999, the national money markets were integrated in a single euro money market practically overnight. TARGET has been the market’s preferred system for large-value payments in euro from the outset.

[1] « Futrue developments in the Target system », European Central Bank Monthly Bulletin, april 2004.

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TARGET traffic – Volume and value

Daily average	1999	2003	2003 / 1999
Number of payments	163 000	261 000	+ 60 %
Value – billion €	925	1 650	+ 78 %

Source: ECB

The preferred use of TARGET is also attributed to the network externalities it offers. In 2004, more than 43 000 banks - including branches and subsidiaries - are accessible through TARGET worldwide, while more than 3 300 credit institutions participate in the system. The broad market coverage has also facilitated the harmonisation of market business paractices in the European Union.

TARGET is widely used for liquidity shifts across credi nistitutions. In particular, multicountry banks and banking groups use TARGET for their centralised treasury management.
The use and acceptance of a payment system largely depends on its safety and reliability. In this respect, TARGET has proven to be robust and resilient. In spite of the decentralised structure of TARGET, the level of availability stood at 99.79 % in 2003.

Towards TARGET 2

The need to develop a new generation of TARGET derives from the ongoing process towards integration and consolidation in the European financial system. The existing TARGET system - with its decebtralised and heterogeneous infrastructure - is no longer in keeping with today's needs. The next generation of TARGET will have to be geared towards technical consolidation and service harmonisation in line with the principle of cost-efficiency.

In 2002, the Governing Council of the ECB decided to move towards TARGET 2. Three countries - France, Germany and Italy - proposed to start operating in 2007 the consolidated Single Shared Platform (SSP) which will be used by all Central banks in the Eurosystem.

2/ Retail payment systems : Single Euro Payments Area

There is a sharp contrast between the rapid and complete integration achieved with respect to the large-value payment system, and the small progress realised so far with respect to retail payment systems.

Today, even after the introduction of the euro as a single currency in 1999, and the introduction of the euro as a scriptural instrument of payment in 2002, the market structure in Europe for processing retail payments is marked by distinct division between domestic and foreign payments. Almost every country in Europe has efficient and well-established systems for processing payments within national

borders allowing a more or les slow-cost, rapid and secure processing of domestic payments. There are however serious discrepancies between charges in Europe : Great Britain is at the top with charges, France's fees in the middle, and Germany at the bottom.

The retail payment system in the EU is fragmented

But the retail payment system in the European Union is still very fragmented and lacks common standards. National systems are not interlinked, meaning that they cannot be used for processing cross-border or EU retail payments. Cross-border credit transfers in euro are not efficient. There is a clear difference between national and cross-border credit transfers. A recent study from the Commission shows that the average price in 2001 for a transfer of EUR 100 within Europe was EUR 24.09, and the average duration was 2.97 days.

The main reasons for the difference in service for cross-border retail payments and national payments are a failure to use agreed pan-European standards and the low level of automation.

Measures taken by European political authorities

European political authorities, i. e. primarily the European Commission, have been intensively dealing with the basic conditions for cross-border retail payments within the Internal Market for more than ten years now. Most studies conducted or ordered by th Ecommission showed no significant progress towwards the improvement of cross-border credit transfers and other cross-border transactions within the Eurozone. This disapointing result led to the Commission's resolution to take legally binding measures towards the improvement of cross-border payments. Two Directives (95/5/EC and 97/5/EC) were adopted for this purpose. More recently, the Commission passed the Regulation on cross-border payments in euro 2001/2560/EC (Price Regulation) the main objective of which is to promote the standardisation of the payment systems.

In 1999, the European Central Bank (ECB) also turned its attention to the divergent situations in cross-border retail payments compared to domestic payments. According to its Statute, the Eurosystem is in charge of the promotion of smooth processing of payments. It considers itself to have full responsability for the entire payment system in the euro area. According to the Eurosystem Statute, there should be no discrimination between individual and retail payments, nor between national and cross-border payments.

The Action Plan of the European banking industry for creating the Single Euro Payments Area (SEPA)

European authorities and banks decided to implement an ambitious program towards the establishment of the Single Euro Payments Area (SEPA) in 2010. The ultimate objective is to transform the euro area in a fully integrated payments area. The

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achievement of the SEPA means that citizens in the euro area will be able to make payments throuhout the whole area from a single bank account, using a single set of payment instruments, as easily and safely as in the national context today.

European banks decided to create the European Payments Council (EPC) in June 2002 to implement their political commitment to make the SEPA a reality by 2010. In November 2002, the EPC adopted the Crediteuro, which is a standard for a « basic » pan-European bank-to-bank credit transfer that guarantees a bank customer charges at the level of a domestic transfer and a maximum execution time of three days.

In a first phase, banks should be able to offer to customers pan-European instruments, services and standards in parallel to national services, standards and instruments. The pan-European services would allow customers to make all their payments - national and cross-border - in the format from one account. In a second phase, national instruments, services and standards should be gradually phased out and replaced by pan-European ones. National infrastructures would be either abolished or transformed into pan-European ones.

The programme

The interbank clearing and settlement infrastructures for retail payments in euro are currently fragmented and lack efficient automated clearing houses with a pan-European reach. In an industry where fixed costs are high, this situation is not efficient. In that context, the EPC decided to launch a programme dealing with automated clearing, integrated infrastructures, and the definition of common standards and of a coherent legal framework.

The EPC decided to create the pan-European automated clearing house (PEACH). The PEACH was adopted with two major milestones for its implementation. The first one is to have the first PEACH service provider operational in 2003. The second innovation is the processing of the first transactions of the new pan-European direct debit instrument.

Integrated infrastructures have to be created for fully automated processing of cross-border euro credit transfers and direct debits within the Eurozone. The future infrastructure must be formed in such a way that both established (credit transfers and direct debits) and future (electronic and mobile payments) products can be processed in the same way as cross-border and national payments. By integrating the volume of national payments, the necessary scale effects will be achieved.

To increase the automation rate in cross-border euro payments, the already defined and developed STP standards (BIC, IBAN, MT103+) have to be implemented across the whole area through a binding agreement for euro payment systems. The uniform application of STP criteria is of central importance. It is one of the first measures on the path towards SEPA.

The Single Euro Payments Area is also in need of a coherent legal framework. This is a necessary condition to abolish barriers in the field of payments, to lay the foundations for a level playing field and to bring different national legal provisions in

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line with each other. Divergent procedures and legal rules for some products have to be abolished. The key SEPA payment instruments for retail payments are the credit transfer and the direct debit. An appropriate pan-European legal framework at the EU level needs to be defined for these instruments.

The path towards a Single Euro Payments Area is a gradual one. The objective of both the public authorities and the banking industry is to implement the SEPA program within a decade at the 2010 horizon.

3/ Securities clearing and settlement arrangements

Integration of securities market is one of the major dimensions of financial integration in the European Union. Integration of securities markets depends critically upon arrangements for cross-border clearing and settlement, providing for efficient and safe transfer of ownership from the seller to the buyer. This process involves four main steps, which are confirmation of the terms of the securities trade, clearance of the trade by which the respective obligations of the buyer and the seller established, delivery of the securities from the seller to the buyer, and the reciprocal payment of funds.

Cross-border clearing and settlement requires access to systems in different countries and/or the interaction of different settlement systems. Investors rarely access a foreign system directly and typically need to use intermediaries to this end. The use of local and foreign intermediaries interacting with different systems increases the risk and cost for the cross-border investor and this cost rises with the number of different clearing and settlement systems that must be accessed.

Investor demand for foreign securities has increased sharply within the European Union since the introduction of the euro. However, the EU infrastructure for clearing and settling cross-border transactions remains highly fragmented. Although the infrastructure is consolidating, there remain across the EU a large number of intermediaries and entities whose primary business is to play a role in clearing and settlement. In consequence, the pan-European investor is required to access many national systems that provide very different types of services, have different technical requirements/market pratices, and operate within different tax and legal frameworks. Using the per-transaction income of intermediaries as a proxy for cost, it appears that cross-border transactions costs on the securities market are about 11 times higher than domestic transactions.

The additional cost represents a major limitation on the scope for cross-border securities trading in the EU. It reflects the existence of barriers to efficient cross-border clearing and settlement within a fragmented EU infrastructure.

The Giovanini Reports

The European Commission appointed a group composed of financial-sector experts, chaired by A. Giovanini, to investigate on clearing and settlement arrangements on the securities market in the European Union. This group published two reports (2001,

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2003). The first report (2001) identified and listed 15 barriers to efficient cross-border clearing and settlement. These barriers have been categorised under of national differences in technical/market practice (10), national differences in tax procedures (2), and issues relating to legal certainty (3). According to this report the firt group of barriers could be significantly reduced by marked-led convergence in in technical requirements/market practice across national systems. Public authorities are responsible for improving the tax and legal framework.

The second report (2003) attempts to provide solutions to the problems identified in the 2001 report. The priority barriers are those that restrict the location of settlement activities. If these are removed, investors can choose to locate their post-trading activities and set in train a market-led integration of clearing and settlement arrangements across the EU. A sequencing of measures to be taken is proposed by the report. As far as the private sector is concerned, barriers relating to information technology and operating hours should be removed first. The removal of these barriers would facilitate the removal of four other technical barriers relating to differences in settlement periods, in rules on corporate actions, in issuance practices and intra-day settlement finality. Barriers related to taxation and legal certainty should be lifted by national governments at the same time as these remaining technical barriers.

Actions taken by the European authorities

The European Central Bank (ECB) and the Committee of European Securities Regulators (CESR), which is an independent body, appointed a joint working group which issued a report entitled « Standards for securities clearing and settlement in the European Union ». The report contains 19 standards that aim at increasing the safety, soundness and efficiency of securities clearing and settlement systems in the EU. The standards are based on the Recommendations for securities settlement systems issued jointly by the Technical Committee of the International Organization of Securities Commissions (IOSCO) and the Committee on Payment and Settlement Systems (CPSS) in November 2001, adaptating them to the European context.

This set of standards will come into force when an « assessment methodology » has been developed and after an analysis of the impact of the standards has been undertaken.

Part II: Financial Integration and Payment Systems in Asia : What Lessons can we Draw from the European Experience?

1/ Different approaches to financial integration

An integrated Asian payment system cannot be created from scratch. It has to be pushed by economic needs and pulled by political will.

In the European case both elements were presents. Intra-regional trade was important and growing and financial and monetary interdependence was strong and

deepening. The political will was also decisive in the creation of the single market, the European monetary system and then in the successful launch euro. As we have seen in the first part, the creation of an integrated payment system for large value transactions, TARGET, not only for the euro zone, but also for the whole E.U plus countries belonging to the European Economic Area (EEA) has to be credited to E.U. institutions and European states action. But despite these favourable structural elements, the full integration of European financial national markets and even the completion of payment systems integration are far from a reality and are still to be achieved. The “Single Euro Payment Area” (SEPA) project shows that there is still no cross-border retail payment system. The two Giovanini reports demonstrate how difficult it is to integrate national financial markets and to create an integrated clearing and payment system for bonds and equities.

However, private and public initiatives are taken to overcome these hurdles thrusting European financial integration forward.

On the private side, mergers and acquisitions between stock exchanges, banks, clearing and settlement institutions are integrating de facto securities and bonds trading and their settlement. Technical progress in clearing and settlement systems has been so intense these last years that market participants have heavily invested in new facilities. Economies of scale and scope have become an incentive to mergers and acquisitions since most market participants are profit-driven companies. The ultimate consolidation movement would be the creation of European monopolies for each market segments. But banks, Central Securities Depositories, and clearing institutions have also organised to promote standardisation, interoperability and interlinking between national financial markets. Cross-border financial transactions inside the E.U. are still small in comparison with domestic transactions and markets participants are reluctant to replace existing efficient facilities for domestic trades in favour of new single European facilities that would not improve the domestic arrangements.

On the public side, the European Commission has published several directives on cross-border credit transfers, on financial services, on investment services, on clearing and settlement, on electronic trading and payment system discussed and approved by the European Parliament. At the start, the objective was to create a single trading space. Now the objective is not only to remove barriers to trade integration but also to remove competitive distortions or unequal treatment of entities performing similar clearing and settlement activities. In the future, national clearing and settlement costs should not be any longer determinants to investment decisions. But the E.U. institutions have not decided which model of integration should prevail. On the one hand, consolidation would be the easiest way to achieve a single market for each category of financial transactions. On the other hand, anti-trust regulation in line with the “competitive and un-biased single market” philosophy favours the preservation of competition among market participants which bears the risk the maintenance of substantial heterogeneity between European financial markets.

One can summarise these two approaches to financial integration with chart 1 (S. Werner, 2003).

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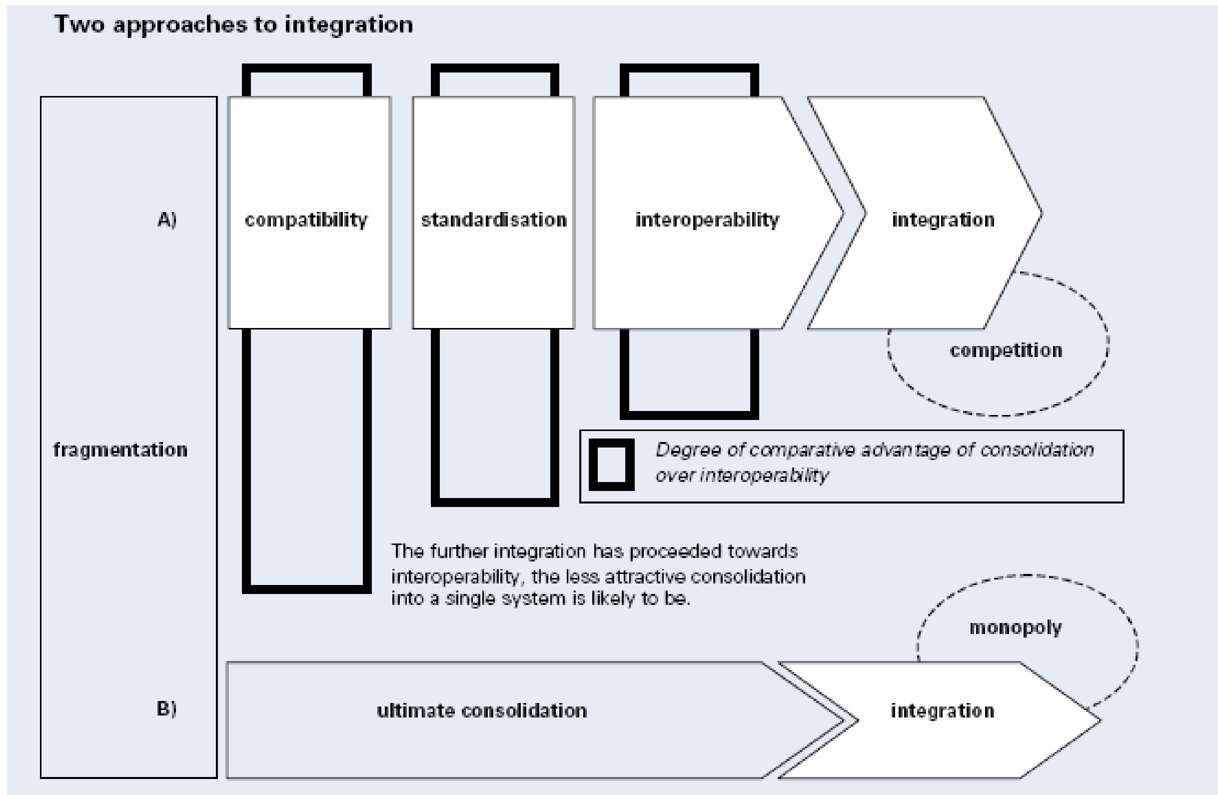

There will be probably a compromise between the two approaches. In line with the market-friendly philosophy of European institutions, private and public initiatives will design a model of market-driven integration supported by public institutions.

What lessons can we draw for the Asian case?

In the East-Asian case, one can say that there are objective economical and financial factors in favour of a regional integration but that the political will is not strong enough.

➢ Trade integration in Asia has long been lagging behind other regional experiences. New industrialised countries of the first generation (South Korea, Taiwan, Singapore and Hong Kong) or of the second generation (Thailand, Malaysia, Philippines and Indonesia) have never managed or desired creating a sufficiently dynamic trading zone.

ASEAN exists since 1967, but has not managed until recently to stimulate trade significantly between it members. Intra-ASEAN trade amounted to 22.4% of total exports in 2001, as much as in 1970, to compare with 61.2% in the E.U.

Japan, as an investor, provider and client is of course important but not to the point of challenging the decisive role of the US in the region.

Intra-Asian trade has really taken off when China decided to fully engage into international trade. China has turned Japan's second client, Taiwan's and South Korea's first one, Singapore's fifth and Vietnam's third. On its side, China directs 58% of its trade to Asia.

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The members of the region thus have a substantial interest in stability of trade and investment relations among them, which financial arrangements can foster.

- But precisely, financial integration is still weak and incipient, however necessary.

The lack of Asian financial integration is deemed as one factor at the origin of the 1997-98 financial crises in the region. For instance, S. Ghon Rhee (2000) claims that in the absence of well-developed regional bond markets, a large portion of foreign exchange reserves of East Asian countries was held in terms of the U.S. dollar or European currency denominated assets. These securities investment were then recycled back to East Asia in the form of short-term bank loans denominated in U.S. dollars in the absence of efficient bond markets. This pattern of capital flows-importation of safe capital and exportation of short-term risky capital made the region vulnerable to speculative attacks. After the crisis, East Asian countries turned to net capital exporters but this pattern did not change. Most of the reserves accumulated have been invested in safe and liquid assets such as U.S. Treasury bonds. Had there been domestic or even a regional bond markets, investors would have been able to shift into Asian bond with the build up of the crisis. The flight to quality would not have turned into massive capital flight to U.S. and European bond markets. “Contagion thus strongly reinforces the shared interest in crisis prevention and stabilization among countries in the region that is distinctive in nature and intensity from interests shared with countries outside the region” (C.R. Henning, 2002).

In retrospect, the amount of the capital reversal in 1997-98, slightly over US$ 100 billion, was not too big for the region’s economies as a group to handle. It amounts to less than 5 % of pre-crisis combined domestic savings of five crisis affected economies (Indonesia, Korea, Malaysia, Philippines and Thailand). It is also less than 5% of domestic savings of the five leading economies in the region (China, Hong Kong, Japan, Singapore and Chinese Taipei), and only about 15% of the total foreign exchange reserves accumulated by these 10 economies by the time. Now that foreign exchange reserves in the region are approaching 1.5 US$ trillion, more than one half of the world total, the amount of the reversal seems even more trivial (S. Ghon Rhee, 2003).

In short, the recent evolution establishes the basement for a progressive monetary regional integration or at least a monetary cooperation between Asian countries as experienced previously by European countries. There is a case for developing well-functioning domestic bond markets and integrates them at the regional level to mobilise domestic savings and to help stabilising Asian currencies. But the political context creates difficulties.

There is no dominant country that could organise de facto the regional integration as in North America. On a PPP basis China’s GNP is perhaps bigger than Japan’s. But Japan’s financial markets are by far the biggest of the region. Japan is a vocal supporter of enhanced regional financial cooperation and integration but since the 1997 crisis, there are questioning about Japan’s leadership. It was lacking when it was needed unlike the US intervention in the Mexican crisis in 1995. Japan withdrew its “Asian Monetary Fund” proposal as soon as the US criticised it in 1997, which feared that it could undermine their leverage in the region through the IMF intermediation. Japan was unable to stop the depreciation of the yen until the summer of 1998 and to revamp its economy plagued by its own financial crisis.

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There is neither a political leadership that could play the role of the French-German couple in the European construction. Quite to the contrary there are at least two important countries, Japan and China, opposed by rivalry and animosity. Because problems inherited from the Second World War have never been settled as they have been in Europe, Japan has never been accepted as a natural political leader. The recent Chinese protests against Japanese interpretation of history prove once again how remote is the perspective of a Japanese-Chinese couple driving Asian integration.

Apart from political problems, Japan and China are poorly equipped in efficient clearing and settlement infrastructures. In Japan, there are three different bond markets (physical bonds, registered bonds and book-entry bonds) with different tax regimes. There are different clearing and settlement systems for government bonds (JGBs) and corporate bonds, Certificates of Deposit, Commercial Paper and equities. The Bank of Japan introduced a RTGS for government bonds settlement only in January 2001, and JGBs are only partially settled through DVP. JGBs are also not eligible for ICSD such as Euroclear and Clearstream for tax reasons. Furthermore, the clearing systems in Tokyo are not linked to other regional clearing systems like Hong Kong, Singapore and Sydney (Tadahiro Asami, Junichi Mori, 2001).

In addition, Japan's legal framework differs to many other key financially developed economies in Asia, in particular Hong Kong, Singapore, Australia and Malaysia (Gordon de Brouwer, Jenny Corbett, 2003). All of them share a common law legal tradition inherited from the British Empire. Japan's legal system is based on US systems, similar to South Korea and increasingly China. There is in perspective a regional legal divide between North and South East Asia that will create a problem for legal harmonisation and for mutual recognition.

Gordon de Brouwer and Jenny Corbett give an illustrative example. Cooperation to link regional stock markets is progressing. Australian and Singaporean stock exchanges have set up a mechanism in December 2001, by which investors use their local exchanges to access and buy stocks in the other exchange, with their local exchange acting as intermediary and trustee. Japan and Singapore have signed an agreement, the "New Age Economic Agreement" to do the same thing. The Australian and Tokyo exchanges are also negotiating a bilateral agreement that would close the triangle. Participation by Hong Kong and other countries could follow. The problem is that Japan, like US securities laws, prohibits foreign securities being offered locally unless they are registered, and registration is equivalent as asking listing on the local exchange. Singaporeans can buy Japanese stocks, but Japanese cannot buy Singaporean stocks. There is no such impediment between Australia and Singapore.

There is no legal obstacle that cannot be resolved as the European experience show. But this requires a political will and a common project. The E.U. has prioritised the principle of free competition in a single market. Several Asian countries have maintained some forms of capital control and restrictions on currency convertibility together with withholding tax on financial transactions for residents and non residents. The fact that those countries like China, Taiwan or India, were not hit by the 1997-98 financial crisis proves that they were right to be prudent.

Another obstacle to regional financial integration is the existing global financial markets with their very cost-efficient infrastructure and standards already in place. To what extent can they be the most viable route to Asian financial integration? In this case, Asian financial integration would not be borne by regional institutions and

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infrastructures, as in the European case, but would rely on global institutions that are not always fitted to national specificities of Asian countries. In particular, clearing and settlement institutions need scale and scope economies that small Asian countries cannot usually meet. In consequence these countries bear the risk to be excluded from these institutions. This is another point in favour of regional financial integration in Asia. But the question is how?

Drawing upon the European experience, we can use the scheme presented above to conceive three scenari.

The first scenario is the “market-led evolutionary process” (Park Yung-Chul, Park Daekun, 2003). In the absence of any significant political change, competition among East-Asian financial markets will promote the creation of regional financial centres such as Tokyo, Hong Kong and Singapore. These regional financial centres would be closely integrated with global clearing and settlement institutions. In short, they would be the spearheads of global institutions in Asia. Borrowers and investors would migrate to these centres because of their efficient payment and settlement system. Investments in financial infrastructures will hence turn a crucial factor of competition among East-Asian countries aspiring to be the future regional financial structures. The Achilles’ heel of this scenario is the increasing fragmentation between heterogeneous national financial markets developing their own legal and technical specificities creating futures obstacles for regional integration. Up to now, the existing infrastructures for clearing and settlement for cross-border securities transactions is rudimentary and are already highly fragmentised in most countries. As we will see, technical progress cannot overcome all difficulties created by national heterogeneity. The political dimension cannot be totally absent and this leads to the second hypothesis.

The second scenario would be the integration of the national financial markets of Asian countries through legal harmonisation and promotion of compatibility, standardisation and interoperability of different local clearing and settlement systems. This requires a high and prolonged commitment of local governments and a minimum of regional coordination.

The third scenario would be the creation of new regional clearing and settlement institutions as the final product of domestic market integration or through the creation of new regional institutions. In the E.U., Target is a good example of what we have in mind. “Target one” was built as a network integration of previously existing national RTGS. But “Target two” will be a new system on its own going beyond the mere integration of existing RTGS. In Asia, new regional institutions can also be created through the deepening of compatibility of domestic infrastructures. But there is also the leap-frog way to create brand new institutions if the compatibility process appears to slow and arduous.

There is no single scenario for each financial market. In the following, we will focus on the bond market (section 2)

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2/ The Asian Bond markets as a conduit for regional clearing and settlement integration ?

2.1. The development of the Asian bond market.

An Asian bond is a bond issued by governments, corporations and financial institutions of East Asia and offered for sale in a number of countries and denominated in a currency foreign to a majority of investors. Issuers are mostly Asian entities. Buyers are global investors. Because of this global investor base, Asian bond markets are linked up with global bond markets.

According to Yung-Chul Park and Daekun Park (2003) until recently few East Asian countries were ready to issue bonds denominated in their own currency in global or even regional bond market since they did not want non-resident to hold large amount of the local currency for fear that such an internationalisation of the local currency could erode their control over monetary policy and expose them to currency speculation. This used to be the case in the early stage of the Eurobond market, when countries like Germany and Japan banned the issuance of bonds denominated in mark and yen. They have since then lifted this restriction but Switzerland still does not allow issuance of Swiss franc denominated Eurobonds.

In Asia, bond issues are therefore principally denominated in major international currencies such as the US dollar, Yen and euro and some of the currencies of the East Asian countries open to foreign investors such as Hong Kong, Singapore and Tokyo.

They are mainly issued on offshore markets of these three cities following the footsteps of the Eurobond market because these one are subject to less regulation than onshore markets, are less costly and tax free.

Since the 1997 crisis, things have begun to change. More Asian countries have allowed the issuance of bonds denominated in their currencies in order to avoid the currency mismatch when they raise funds abroad (see Daekun Park and alii, 2003). For instance, Thailand plans to issue Baht-denominated bonds in the Japanese offshore market.

And the domestic East Asian bond markets have grown rapidly since 1997, from US$ 486.2 billion to US$ 1.3 trillion at the end of 2003, more than half the total for emerging markets (Eloy Garcia and Ismail Dalila, 2005). The market can be divided into three groups. Australia, Hong Kong and Singapore have well-developed bond markets, with Japan lagging behind in terms of efficiency. Korea, Malaysia, Taiwan (Chinese Tapei) and Thailand have robust bond market and are carrying reforms to deepen and internationalise their bond markets. The bond markets of China, Indonesia and the Philippines have the weakest market infrastructure and institutions of the region and the less developed bond markets.

In relative terms, bonds markets have increased in several Asian markets (Korea, Malaysia, Singapore, Taiwan and Thailand) although Asian economies remained mostly financed by bank loans (Korea, Philippines, Taiwan) and stock markets (in particular Hong Kong, Indonesia). On average, the relative share of banks loans is much higher (36.8%) than in the USA (19.5%) but inferior to the UK (44.7%) (see table 1).

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Table 3. Financing Structure of Asian Economies and Selected Countries in 1995 and 2003

Country/ Economy	1995 Bank Loans	1995 Stock Market	1995 Bond Market	2003 Bank Loans	2003 Stock Market	2003 Bond Market
			As % of total financing			
Hong Kong	39.6	55.6	4.8	23.3	69.7	7.0
Indonesia	60.2	38.0	1.7	42.9	51.3	5.8
Korea	44.6	29.4	26.1	45.7	23.9	30.4
Malaysia	22.4	65.3	12.4	29.7	47.9	22.4
Philippines	30.1	64.9	4.9	47.9	47.3	4.7
Singapore	31.5	60.0	8.4	32.5	47.5	20.0
Taiwan	62.9	31.2	5.9	42.5	43.1	14.4
Thailand	50.8	43.9	5.3	38.3	40.2	21.5
Total	45.0	44.5	10.6	36.8	44.6	18.5
United States	21.1	30.4	48.5	19.5	33.2	47.2
United Kingdom	42.5	44.5	13.1	44.7	38.8	16.5
Japan	43.4	27.8	28.8	33.7	21.9	44.4
Total	30.2	30.7	39.1	25.1	31.4	43.5

Sources: International Financial Statistics, International Federation of Stock Exchanges, Japan Securities Dealers Association, IFC Bond Database, Thai Bond Dealing Center, Thomson Financial, CEIC, and various central banks.

Notes:

1. Total financing is defined as total outstanding amount of bank loans, stocks and bonds.
2. Bank loans are domestic credit extended to the private sector. All bank loan data, except Taiwan, are reported in line 32d in the International Financial Statistics.
3. For 2003, all outstanding bond data are as of end-2003, except for Japan and Singapore (end-2002), Indonesia (end-2000) and the Philippines (end-1999). For 1995, all outstanding bond data are as of end-1995, except for the United Kingdom (end-March 1995). Figures are local-currency denominated debt.
4. Bond figures for Hong Kong, Korea, Malaysia, Taiwan, the United States, the United Kingdom and Japan are from central banks. Figures for Indonesia and the Philippines are from IFC Emerging Markets Information Center Bond Database. Figures for Thailand are from Thai Bond Dealing Center. Figures for Singapore are estimates based on data from MAS and Thomson Financial.
5. Percentage shares may not add up to 100% due to rounding.

Source: Yung Chul Park (2004).

The momentum for accelerating the development of domestic bond markets was brought about by the launching of the "Asian Bond Market Initiatives" (ABMI) by the ASEAN+3 group [(2)] in December 2002 as a result of actions taken by Asian governments after the 1997 crisis. The bond market initiative together with swaps agreements between East Asian central banks is one of the few achievements of East Asian cooperation.

In June 2003 of the Asian Bond Fund (ABF) was launched with an initial size of US$ 1 billion. The ABF will invest using the funds pooled by the region's central banks in a basket of US dollar-denominated bonds issued by Asian Sovereign and quasi-sovereign issuers in EMEAP countries [(3)] except Japan, Australia and New Zealand. The fund will be managed by the Bank for International Settlement (BIS). The EMEAP group launched in December 2004 the second stage of ABF to invest in bonds denominated in Asian currencies. The framework of ABF2 comprises two elements: a Pan-Asian Bond Index Fund (PAIF) and a Fund of Bond Fund FoBF).

The PAIF is a single fund investing in sovereign and quasi sovereign domestic currency-denominated bonds issued in the eight EMEAP countries. The FoBF is a two layered structure with a parent fund investing in eight Sub-funds, each of which will invest in sovereign and quasi sovereign domestic currency-denominated bonds issued in the respective markets of the eight EMEAP economies. The PAIF and eight Sub-funds will be passively managed by private sector fund managers against a Pan-Asian bond index and relevant domestic bond indices for the eight EMEAP markets (see chart 1).

[2)] The ASEAN countries plus China, Japan and South Korea.

[3)] EMEAP, the Executives' Meeting of East Asia-Pacific Central Banks, is a cooperative organization of central banks and monetary authorities (hereinafter simply referred to as central banks) in the East Asia and Pacific region. Its primary objective is to strengthen the cooperative relationship among its members. It comprises the central banks of eleven economies: Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, The Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore and Bank of Thailand. It was established in 1991.

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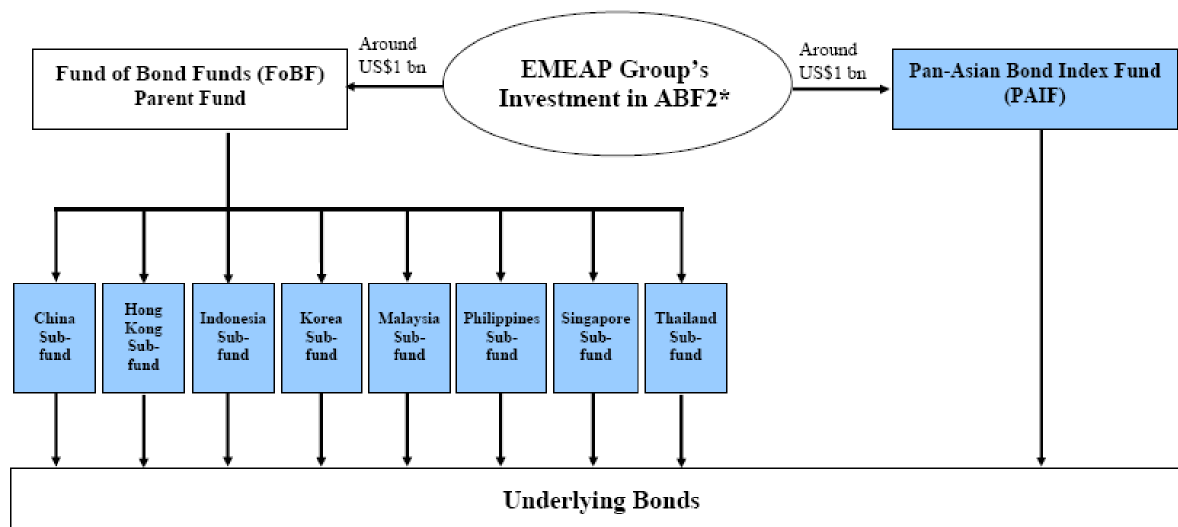

Source: EMEAP.

The PAIF and eight Sub-funds will be confined to investment of EMEAP central banks in a first stage and then open to other investors in a second stage. The PAIF will be domiciled in Singapore and initially listed in Hong Kong. Additional listing of the PAIF on other EMEAP stock exchanges will be considered in the future. The eight Sub-funds will be domiciled in their respective jurisdictions and, where appropriate, listed on their respective stock exchanges.

There are concerns about the consequences of these initiatives on the development of domestic bonds markets.

There already exists a strong private demand for high-grade Asian bonds in local or international currencies. If more demand does not increase the supply of new high grade bonds, there will be a crowding out effect (Yung Chul Park 2004). One solution would be the supply of collateral by public local states to help new issuance of corporate bonds. But this is not envisaged at the present moment.

The second problem deals with the clearing and settlement system. ABF1 and 2 are supposed to improve market infrastructure. But no initiatives are planed in this respect and it seems as if market participants should spontaneously take the relevant initiatives to modernise the existing infrastructure. In fact, the present state of Asian national clearing and settlement systems very heterogeneous and in some countries, rudimentary, and poorly interconnected.

In the EU, a recent report on integration of the clearing and settlement systems in the EU (issued by the so-called “Giovaninni group, 2001 and 2003) shows that the most serious barriers to integration are the restrictions on the settlement activities. Among them, information technology, operating hours, settlement periods, intra-day settlement finality and issuance practices must be harmonised. These reports have triggered a lot of research and efforts undertaken by private participants and institutions and by the EU institutions. Joint committees have been set.

All this shows that in Asia, progress will be made if there is the stimulus of market needs, but public initiatives will be necessary to build a regional integrated system.

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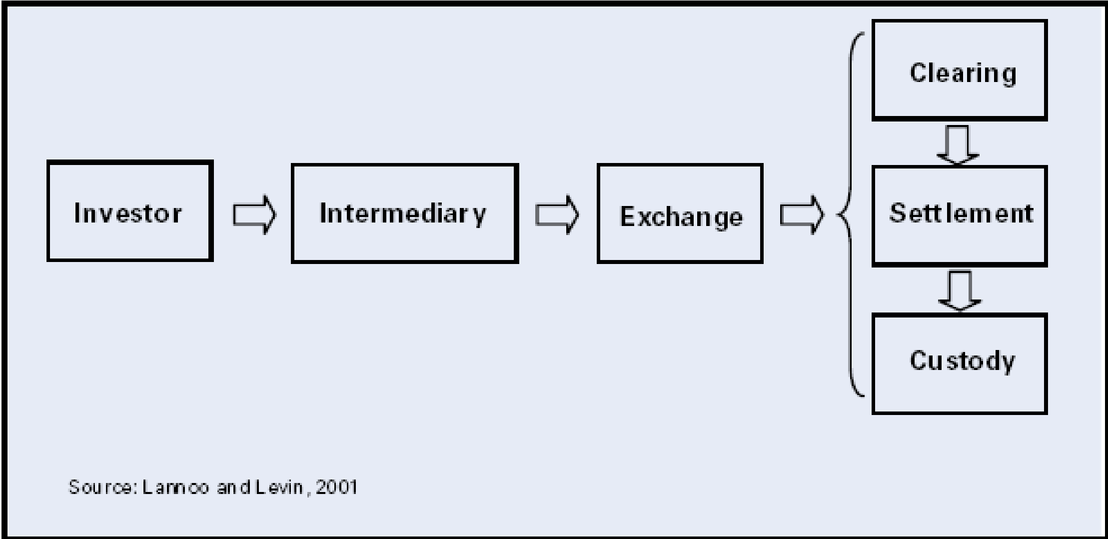
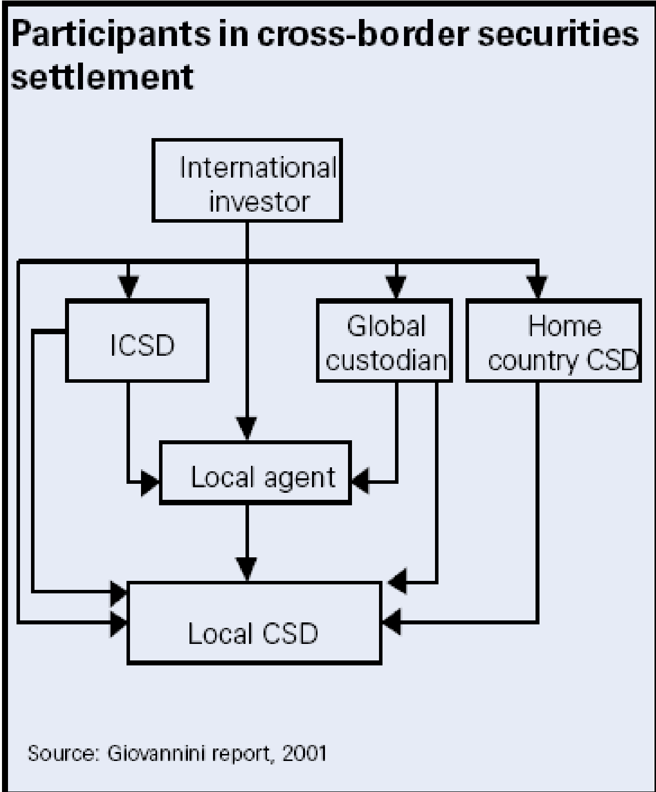
2.2. The present state of securities clearing and settlement system in Asia.

A securities settlement system (SSS) settles the transaction between the buyer and seller of a security. The buyer receives the security and the seller receives payment. This process can be divided between into three core functions: clearing, settlement and custody (see chart 3, and box 1).



Cross-border transactions are more complex. Chart 4 illustrates the different channels that cross-border settlement can take. An international investor can use the local CSD, an ICSD, a global custodian, or a local agent, when settling across the border. The global custodians and the ICSD may in turn be using local agents (see box 2).



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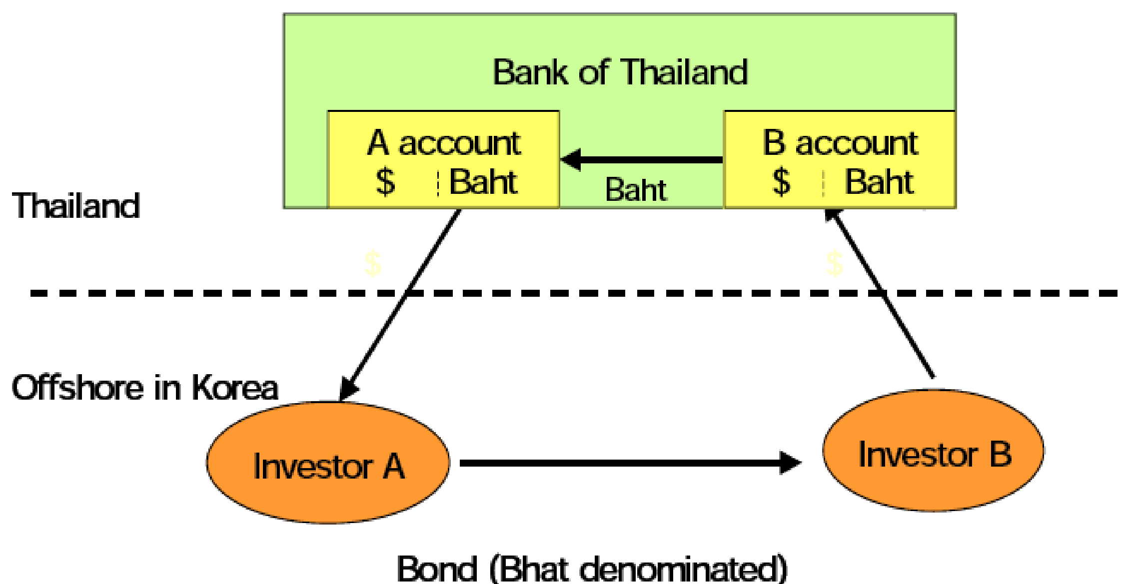
In Asia, Asian bonds that are denominated in local currency can also be settled through ICSD or other cross-border settlement methods.

The simplest and cheapest way is to settle directly in the books of the ICSD. The problem is that ICSDs offer a limited choice of currencies of settlement, especially in Asia. At Euroclear for instance, only 32 currencies of 42 countries are available, and of these, only nine are Asian currencies [(4)]. The reason is that there are some limitation on their convertibility and substantial legal uncertainties regarding the applicable regulations on foreign currency transactions. In some countries, like Korea, non-resident investors are required to report their individual identities when they open Korean won-denominated accounts. This regulation prohibits ICSDs from opening "omnibus accounts" [(5)]. The Korean government fear that it will not be able to monitor individual transactions. They are right for omnibus accounts have been criticised as a key element of money laundering (). Time will tell if Asian governments will renounce to their right to monitor individual transactions on their territory to satisfy market participants or if global investors will moderate their demands. But for the present moment, the currency coverage of ICSD is too limited. To resolve this problem, other cross-border settlement procedures are used that involve ICSD indirectly.

Correspondent banking is the first alternative. Daekun Park and alii give an example of the settlement of a Eurobond denominated in Thai Baht traded on the Korean offshore markets that use correspondent banking (see Chart 5).



source: Daekun Park and alii (2003).

[4)] Hong Kong Dollar (HKD), Indonesian Rupee (IDR), Japanese Yen (JPY), Malaysia Ringgit (MYR), Philippines Peso (PHP), Singaporean Dollar (SGP), Thai Baht (THB). Plus the Australian Dollar (ARS) and the New-Zealand Dollar (NZD). The same currencies are available at Clearstream.

[5)] An "omnibus account" is an account for large group of investors, open in the name of the ICSD, but hiding the names of the investors. ICSDs manage all the internal transactions among its members. They claim that "omnibus accounts" enables investors to protect their "necessary" anonymity and save them the onerous costs of procedural requirements.

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Investor A sells the Thai government bond denominated in Baht to investor B in the offshore market in Korea. The payment must be settled in Baht, but because the Baht is not internationalised, it cannot be done directly in Korea. Moreover, settlement in Baht should pass through the central bank of Thailand to guarantee the finality of the settlement. The solution will be the use of correspondent banks. Buyer B in Korea remits the corresponding dollar amounts to his bank in Thailand. B's bank converts the dollar remittance into Baht and transfer the proceeds to seller A's account through the settlement system of the central bank of Thailand. In turn, investor A's bank in Thailand converts the baht deposit into dollars and sends the funds to seller's A's account in Korea.

Therefore what is crucial for cross-border settlement is the convertibility of the baht, not the fact that it is not an internationalised currency. But this first possibility involves at least 3 intermediaries (the two correspondent banks and the Thai central bank), which is more costly and entail operational risks than when the cross-border transaction is settled directly in the books of the ICSD.

Relationships between NCSD and ICSD are the second alternative.

When the ICSD has links with NCSD of individual countries or with local custodian banks, Asian bonds deposited in a NCSD can be settled through the ICSD. The problem is that the number of countries linked with ICSD is too limited. In 2002, Euroclear had formal links with only 32 NCSD, of which only seven were Asian [(6)], against 16 European, and 4 North and South American. Important countries such as Korea, China, India, Taiwan and Pakistan are excluded. In 2004, Clearstream serves 40 countries, of which 10 in Asia [(7)]. New important countries such as South Korea and China are included but the coverage is still limited. This insufficient coverage of Asia by Euroclear and Cleastream shows that there is a potential for a regional ICSD.

Time zone difference is another important and probably more decisive incentive.

As most Asian currencies are not internationalised, the payment settlement of Asian bonds denominated in local currencies must be finalised in a local market, even though securities settlement can be done through ICSD located in Europe. Due to time difference between Europe and Asia, real-time settlement of Asian bonds is impossible. Money and securities must be deposited in Asia one day in advance before they are settled the next day in Europe. This increased considerably settlement risks at a time when the whole payment industry is trying to generalise Delivery Versus Payment (DVP) to all markets. This also increased a lot liquidity needs and credit risks which entail higher transactions costs.

Settlement through the use of a local or a global custodian is the third alternative and the most frequent in Asia. Local custodians have been long used when there were no relations between NCSD or between NCSDs and ICSDs and because of their expertise in the local market specificities. Local custodians act as the interface between local NCSD and foreign investors. The problem is that local custodians are not competitive in terms of costs and that foreign investors must have

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[6)] Hong Kong, Indonesia, Japan, Malaysia, the Philippines, Singapore, Thailand. Plus Australia and New Zealand.

[7)] Hong Kong, Indonesia Japan, Malaysia, South Korea, China, Singapore, Thailand,. Plus Australia and New Zealand.

a local custodian in each country which multiplies even more transactions costs. One solution is to resort to global custodians who the act as the interface in all markets where the investors want to invest, either by having its own branches in place or by using local custodians. In Europe, with the progress in regional integration global custodians are finding more interesting to create branches instead using local custodians which number is decreasing. The market for global custody is highly concentrated due to huge investments in infrastructure and technology and the significant economies of scale that it requires. In Asia the problem is that the regional market is still very fragmented and very unequal in terms of technological development and legal requirement, so global custodians are still dependant of the services of the local custodian they hire.

In the long run, an Asian regional ICSD would again resolve the problem when trading, clearing and settlement will achieve a certain threshold of modernisation and harmonisation.

How could it be built?

2.3. An Asian ICSD?

As S. Ghon Rhee (2001) points out, one of the key issues related to the development of a regional bond market in East Asia may be the creation of a single ICSD in East Asia for safekeeping, clearance, and settlement for all securities traded in the region.

Daekun Park and alii (2003) have a proposal of a public regional ICSD with direct links with Asian NCSD, which they call “AsiaSettle”. As we have seen, Asian governments, regional institutions such as the Asian Development Bank and political arena such as ASEAN + 3 agree to promote an Asian bond market. But local governments would not agree to change their legislation to favour a private entity. A public ICSD with direct relations with NCSD would reduce costs. Direct linkage means that AsiaSettle would have its own omnibus account in each local NCSD, which suppose full convertibility of currencies. Payments would be settled in the accounts of each central bank as it is the case in France for instance, and not in the account of a custodian, be it local or global. It means that local NCSD would become a member of the national payment system. Settling in central bank money has many advantages. Payment is guaranteed and the period of settlement is reduced as many central banks in Asia now use DVP systems. And in most Asian countries, the central bank is already the payment agent of NCSD that provides services for the clearing and settlement of government bonds.

This requires that each Asian central bank opens an account at each other of the central banks. This can be done quite easily by turning member of CLS bank. In this case, CLS would the international payment agent to transfer the cash leg of the securities transaction. However, as we have seen in section 1, this is not as simple, since CLS membership is costly and the market turnover must sufficiently high to provide enough liquidity and make investments profitable.

For the moment, there is no such project planned by the EMEAP countries that have launched the Asian Bond Fund 1 and 2. Although few details have been turned public, the press statement announcing the implementation phase of ABF2,

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says that HSBC, located in Hong Kong, “has been selected as the master custodian for the PAIF and the eight Single-market Funds” (EMEAP, 2005). This seems to indicate that the present global custodian scheme already dominant in Asian securities markets will prevail and that no initial steps have been made toward a regional ICSD. This means that the creation of an efficient regional bond market, able to issue bonds with lower transactions costs is doubtful.

CONCLUSION

Regional financial integration is at its early beginnings in Asia. But, although many progresses have been registered since the 1997 crisis, the future of new progress is questionable.

The EU has developed its integration before financial globalisation took off. Now that global networks of multinational banks, electronic trading companies, brokers, custodians, clearing and settlement companies and stock exchanges have reorganised financial transactions and blurred traditional borderlines between financial businesses, rules of the game have changed. The EU possess on its territory some of the most important actors of financial markets: banks, the three most important ICSD, the two most important information and trading companies, Reuters and EBS, among others. So, in a way, the EU has managed to rely on these private market participants to shape the integration of its financial markets in its own time zone. These private agents are submitted to European directives issued by the European Commission and the European Council and discussed by the European Parliament. In short there is no important gap between global finance and European finance.

This is not the case for Asia. Financial integration in Asia is starting after financial markets have globalised. Asia does not have major player in all the segments of financial markets. For instance, there is no single Asian ICSD. In the absence of a strong political and institutional integration, for instance the commitment to create an Asian monetary fund or a regional exchange rate regime base on some form of a basket currency, there are few reasons why private market participant s would spontaneously evolve toward the creation of regional markets and regional institutions including all Asian countries. There will be instead a few financial markets centres acting as ports of entry to global finance. But then financial markets will not be fitted to Asian needs.

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