Regional Financial Cooperation

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Use of Local Currencies in ASEAN Trade

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1. Introduction

After the eruption of Asian financial crises in 1997-98, the International Monetary Fund (IMF) drew numerous comments on both sides. On one hand, some asserted that the IMF was very helpful in orchestrating rescue funds from various donors as well as itself. Moreover, the IMF package helped retrieve investor confidence and credibility of crisis countries. On the other hand, some pungently criticized that the IMF gave totally wrong policy medicines, thus exacerbating, instead of ameliorating or correcting, the problems. In other words, the economic depression was partly due to the IMF stringencies. These two camps led to confusion about who is right.

Since the IMF was severely attacked as an inefficient international lender of last resort, some countries proposed an establishment of Asian Monetary Fund (AMF) to function as a complement to the IMF so that crisis countries are given enough curative funds in time. However, the AMF was opposed by other influential countries on the grounds that its job would be repetitive with the IMF's and would motivate crisis countries to defy or diverge from the direction of IMF's policy prescriptions. This paper thus intends to give an impartial and conceptual analysis of whether we need a regional lender of last resort, by covering pertinent problems, their underlying causes, limitations, and reasonable resolutions.

Section 2 will examine the role of international lender of last resort, its objectives, constraints, and techniques of operations. Section 3 investigates how the IMF comes into play and whether it fulfils all obligations of an ideal international lender of last resort. This section also itemizes weaknesses of the IMF. Section 4 analyzes possible contributions of a regional lender of last resort if it is established. Included are various angles in which a regional lender of last resort is likely to do better or worse than the IMF, or their comparative advantages. Section 5 considers how a regional lender of last resort, if founded, can complement the IMF, how the IMF's role should be amended, what cautions a regional lender of last resort should take, and what are possible supplements to such lender in different respects. Section 6 presents conclusive remarks on whether we need a regional lender of last resort, and if so, what role it should play in conjunction with the IMF.

As implied above, this paper does not represent a literature review on international lender of last resort. Instead, the paper aims at synthesizing viewpoints of different authors as well as those of the writer. It therefore refrains from quoting each different author one by one. Nevertheless, their valuable contributions are well recognized by listing in the references.

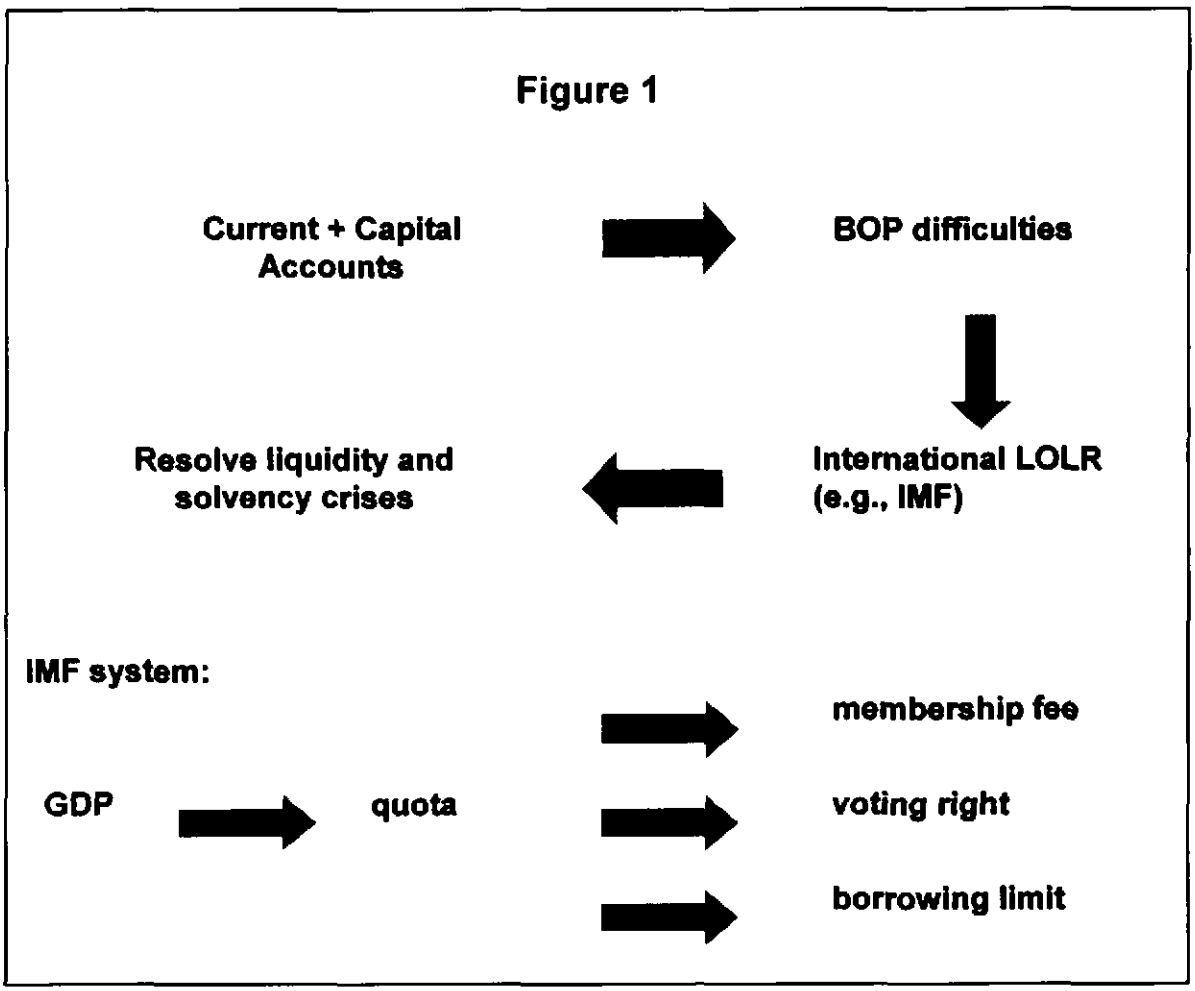
2. Why International Lender of Last Resort?

In the 1990's financial liberalization and integration around the world gave opportunities to surplus units to invest abroad in order to seek higher returns. Conversely, deficit countries exploited cheap foreign borrowings so as to close their financial gaps at lower costs. Unsurprisingly, the volume of international capital movements surged to an unprecedented level. However, imprudence emerged on the part of borrowers as well as lenders with regard to proper debt management. Consequently, credit and currency exposure rose beyond debt servicing capacity, thus weakening investor confidence to such an extent that sparked massive withdrawals of capital funds and severe plus widespread financial crises. This clearly demonstrates two important lessons. First, in the current arena of mobile capital, investor confidence is extremely vital, and it is very intricate, depending on numerous characteristics of debtor countries (e.g., whether the prevailing exchange rate reflects an equilibrium on the external account, whether existing reserves suffice for net foreign exchange liabilities or likely capital outflows in the short run, how stable or fragile the financial system is, future prospects of economic growth, external account, and politics). Second, the gigantic volume of global capital inflows and outflows has proved to be insurmountable for a small developing or emerging country, as evidenced by the Asian financial crisis in 1997-98.

In principle, there are three channels to avoid or alleviate adverse effects of international capital mobility. First, capital controls could be adopted, seeking to limit short-term capital inflows and/or limit the extent or frequency of capital outflows. Thus far, few developing countries opted for this route because controls were hardly efficient (due to various loopholes) yet costly in terms of capital market access. Second, concerted efforts may be exerted upon strengthening macroeconomic fundamentals and financial structure for the purpose of restoring

foreign investors' confidence. Third, troubled countries may resort to an international lender of last resort like the IMF (Figure 1). In handling the crisis, the IMF could act as a lender as well as a manager, i.e., cooperating with many parties in arranging financing packages. Among these three channels, the third one is the quickest to yield some resolutions of both liquidity and solvency crises.

Figure 1



At this point it is worth distinguishing liquidity from solvency crises. Liquidity tension arises as a result of disharmony on the country's financial balance sheet or time frame of inflows and outflows. However, debt servicing capacity is unquestionably sufficient. Solvency crises, on the other hand, are affiliated with economic fundamentals of debtor countries. Many factors which affect debt servicing capacity come into play, e.g., export earnings, foreign exchange reserves, incompressible imports, national income, targeted economic growth, domestic fiscal and monetary policies, interest rates, inflation rates, existing as well as expected savings-investment gaps, and projected debt service profile. Typical solvency

crisis gradually emerges as a result of lingering problems. Although the solvency crisis is easier to forecast than the liquidity crisis, the former is harder and takes longer to resolve than the latter. In addition, liquidity shortage, which could occur unexpectedly or may arise because of financial contagion, is preventable by carrying adequate emergency credit lines.

Ideally, a lender of last resort is meant for remedying only liquidity crises because its main objective is to minimize the chance of financial disruption and instability in the macro framework. Meanwhile, it ignores lending for the sake of solvency, as that concerns status of each individual party which is not under its responsibility. However, sovereign debtors are rarely allowed to go bankrupt, so an international lender of last resort typically offers aids in both liquidity and solvency cases. Essentially, an international lender of last resort assists sovereign debtors in two respects, crisis correction and crisis prevention. These two functions often aim at restoring investor confidence. To achieve its goals, the international lender of last resort must possess sufficient financial resources, be able to make proper allocation of those resources, and be able to monitor as well as supervise its member countries. Stating that in a crisis the lender of last resort should lend freely, at a penalty rate, and on good collateral, the classic and famous contribution of Bagehot (1873) can be generalized in the international context to some extent. For instance, the IMF introduced its Supplemental Reserve Facility (SRF) at the end of 1997 to serve crisis countries as short-term loans at penalty rates. Penalty also took the form of policy conditionalities when SRF's were extended to Korea, Russia, and Brazil. Since sovereign debtors seldom bear a bankruptcy status, except in some cases of the London and Paris Clubs, "good collateral" of borrowing from the international lender of last resort is equivalent to the denial of market access.

As most international lenders of last resort are confronted with scarce financial resource, their support must be offered selectively to the countries which can meet a series of preconditions. This selectivity serves as an incentive for policy commitments and implementation in the direction that is compatible with warding off a crisis, conforming to prudential standards, and reducing financial vulnerability. Otherwise, a number of difficulties would arise, e.g., moral hazard,

shortage of rescue funds, and failures to rectify fundamental problems in debtor countries. Too much stability can also instigate moral hazard as well. One clear-cut example of such incidence was excessive foreign borrowing of Southeast Asian private corporations in the first half of 1990's when capital account transactions were liberalized but exchange rates were not and kept rather rigid or tightly pegged to the U.S. dollar. Therefore, the task of international lenders of last resort is very delicate, as either too many rescues or too much stability can easily induce moral hazard. The dilemma is worsened when the problem countries are too big to fail, because their insolvency could disrupt not only the global financial order but also world economic growth. The IMF encountered such situations so many times that most of the IMF's rescue operations in the past were meant for solvency, instead of liquidity, purpose. It is thus worth examining the IMF's basic structure including primary objectives, operating mechanism, and existing facilities together with their exclusive features.

3. IMF Stories

The IMF was founded in 1945 for the following purposes: monetary cooperation, expansion of international trade, exchange rate stability, lending to correct balance-of-payments problems, and reducing the duration as well as the degree of external disequilibrium. Later on, its roles were expanded to cover soundness of banking system (March 1996), special data dissemination standard (April 1996), capital account liberalization (April 1997), good public governance (July 1997), standards and guidelines on accounting, auditing, financial disclosure, asset valuations and corporate governance (April 1998).

Each member country's quota is determined by GDP, (gross) current account position, and official reserves. The quota reflects membership fee, voting right, and borrowing limit. Ordinarily, member countries remit 75% of their membership fee in local currencies and 25% in SDR or usable currencies. In case any member is short of SDR or usable currencies, it can borrow from other countries and repay the *lenders* later on by credits from the IMF. SDR or Special Drawing Right was originated in 1969 as a result of liquidity crunch. The allocation of SDR is based on quota. Even though the SDR serves as one type of

international reserves, it cannot be utilized on a commercial basis. In other words, it is only recorded as a book entry.

The following describes different types of credit facilities offered by the IMF for different purposes or circumstances.

1. Stand-by and Extended Arrangements are given to countries which encounter balance-of-payments problems. Conditionalities and performance criteria are imposed, contingent upon some economic variables such as monetary base, short-term borrowing, government guarantee for borrowing, accounting, and auditing. Normally, the stand-by have maturities of 2-3 years, while the extended last longer or 3-5 years.

2. Emergency Financing Mechanism represents borrowing in the form of swap. That is, borrowers deposit their local currencies at the IMF while the IMF offers SDR or usable currencies in return. This credit typically matures in 3 years and entails the SDR interest rate x 1.07.

3. Supplemental Reserve Facility was introduced in 1997 for countries facing extreme short-term needs due to capital flight. Its primary purpose is to subdue or prevent the problems of contagion effect and loss of market confidence. The facility is a term loan which can be disbursed twice in 1 year but must be repaid within 2-2.5 years. Its charge is SDR interest rate increased by 0.5% semi-annually.

4. Financing for Debt and Debt Service Reduction was designed for heavily indebted countries such as those in Latin America for the purpose of refinancing. This facility was terminated in May 2000 because it was deemed unnecessary.

5. Currency Stabilization Fund was supplied to the countries that were pressured by high inflation and wanted to cope with such inflation by fixed exchange rate or currency board, which necessitated funds to defend the exchange rate at the beginning period. This fund was abolished in May 2000 as the IMF does not support fixed exchange rate or currency board any more.

6. Contingent Credit Line is, since 1999, offered to the countries that have not yet encountered problems but are exposed to adverse contagious effects.

The IMF ordinarily draws funds from not only SDR, members' currencies, and reserve positions but also borrowings from its member countries, such as the General Agreement to Borrow (similar to term loan) and New Agreement to Borrow (similar to overdraft). Unsurprisingly, the IMF's liquidity ratio (net uncommitted usable resources divided by liquid liabilities) grew from 48% in 1997 to 97% in 1999 (Table 1). Consequently, the volume of IMF assistance rose steadily and substantially in the second half of 1990's (Table 2).

Table 1: IMF's Financial Resources and Liquidity Position

(In billion SDR)

	1997	1998	1999.4.	1999.5.	1999.5. US$
Total Resources	149 2	165 1	212 5	214 2	287
Members' currencies	144 7	149 4	205.0	206 4	277
Gold holdings	3 6	3 6	3.6	3 6	5
SDR holdings	0 6	0 7	3 6	3 9	5
Other assets	0 3	0 3	0 4	0.3	0
Non-usable resources	98.5	111.5	128.8	127.0	170
Usable resources	50 7	53.6	83.7	87.2	117
Net uncommitted usable resources	22 7	19 5	56 7	60 1	81
Balances available under the GAB/NAB	18 5	18 6	34 0	34 0	46
Liquid liabilities	47 1	60 6	63 6	62.0	83
Liquidity ratio (%)	48 2	32 2	89 2	96.9	96.9
US$/SDR	1.34925	1 40803	1 35123	1 34196	

Source: IMF's Financial Resources and Liquidity Position, June 1999

Table 2: IMF's Commitment of Liquidity Support to the Crisis Countries

As of January 1999 (US Dollars)

Country	Stand-by/EFF	SRF
Mexico (1995)	17.8 billion (Stand-by)	–
Thailand (1997)	4.0 billion (Stand-by)	–
Indonesia (1997)	11.2 billion (Stand-by → EFF)	–
Korea (1997)	7 6 billion (Stand-by)	13 4 billion
Russia (1998-1999)	1.3 billion (EFF) in 1998 2 2 billion (EFF) in 1999	11 2 billion in 1998 0 4 billion in 1999
Brazil (1988)	5.4 billion (Stand-by)	12 6 billion

Source IMF

Those assistance together with attached conditionalities helped rectify fundamental problems and contribute to financial stability in some borrowing countries to a large extent. At a global level, the IMF made substantial progress in promoting disclosure of economic statistics as well as indicators, in developing voluntary codes of good practice or governance, and in raising the degree of transparency in member countries' economic policies. Such progress as well as long experience in rescuing troubled countries enhanced the expertise of the IMF together with its credibility.

However, contentious issues about the IMF were plentiful, as widely criticized by academics, government officials, people in the countries receiving aids from the IMF, along with outsiders. The following will examine those complaints item by item (Figure 2).

1. Even though the IMF was successful in replenishing its resources to such an extent that its net uncommitted usable resources grew as mentioned above, resource allocation was restricted by the quota rule. This quota limited an access to rescue funds for ailing countries despite the availability of resources and the fact that the IMF's central objective was to bail its member countries out of financial difficulties.

Figure 2

Complaints about the IMF:

1. Quota limits access to rescue funds
2. Provisions must be backed up by votes
3. National interests involved
4. Demand opening up domestic markets
5. Lack acquaintance, weak surveillance
6. Orthodox policy prescriptions
7. Timing, too abrupt
8. Bureaucratic friction
9. Poor correction and prevention
10. Not transparent

2. Some may assert that the IMF set up certain facilities so as to assist its members facing particular financial stresses. Nevertheless, all provisions of assistance had to be backed up by enough votes in the IMF Board of Directors. And the rule stipulated that countries with more quota command more votes. Since large industrial countries made substantial contributions in accordance with their GDP, they were granted larger quota and thus entitled to more votes than small developing countries which were more vulnerable to financial difficulties. In short, the "one dollar, one vote" in the IMF, instead of the "one country, one vote" in the U.N., generated adverse voting biases which shifted the basis of fund allocation from the needs of desperate member countries to the discretion of major members.

3. What is more worrisome is the involvement of national interests in several respects. For instance, influential members logically desired to assist their trading partners and direct the course and pace of world economic growth in their favor. Simultaneously, they bore in mind how much their financial institutions already lent to which debtor countries and they never wanted those debtors to go bankrupt. Nevertheless, amid most debt negotiations or policy discussions, creditor countries rarely compromised by agreeing to some requests from the IMF as a means to bail out deficit countries, because such provisions will burden their residents or tax payers. Instead, debtor countries were often pressed to be the only party which had to comply with IMF's stringencies. Overall, unequal votes in the IMF led to asymmetric policy prescriptions or biased resolutions of payment disequilibrium.

4. On some occasions, the IMF demanded that its member countries open up domestic markets to foreign investors and increasing competition. In principle, no one doubts the merit of competition. But in practice target countries questioned the viability of such opening, especially when domestic private businesses were not ready, because too much or too quick liberalization can destabilize the economies of recipient countries. At this point, one may wonder whether the IMF had any legitimacy to interfere with domestic affairs of ailing countries in the direction that benefited large member countries as stated above and in item (3). The IMF's answer is likely to be affirmative because most IMF funding came from large member countries so they claimed that they were entitled to protect their national interests. That is why critics were tempted to brand the IMF as "Rich Men's Club."

5. It is irrefutable that the IMF possessed high-caliber staff. However, those staff's strong capability was not utilized in developing country-specific research that took into account socio-political factors or special characteristics of problem countries, and incorporating them into country programs. Most IMF economists lacked extensive experience in and acquaintance with ailing economies. That gave rise to inefficient surveillance. Besides, the IMF staff's country recommendations were subject to the discretion of the IMF Board of Directors, which could be easily biased as mentioned in items (3) and (4).

6. In connection with item (5), the IMF team stuck fast to orthodox policy prescriptions such as fiscal austerity, tight monetary policy, and drastic structural reforms. The IMF only resorted to its prototype models regardless of different circumstances, surroundings, and particular features of deficit countries. In other words, such models were both out-of-date and out-of-tune with reality. In some cases, IMF prescriptions even aimed at the wrong causes of relevant problems. For example, the IMF kept on demanding reduction of fiscal spending in the countries whose crises stemmed from extravagance of private entities. Eventually, IMF's restrictive conditionalities became ineffective in rescuing the diseases, resulting in economic recession, social depression, widespread business bankruptcies, and financial defaults. These negative consequences worsened investor confidence, the opposite of IMF's intention.

7. Timing is another controversial issue. The IMF often assigned crisis countries to undertake structural reforms, such as the one in the financial sector, on the grounds that those structural defects contributed to the crisis and it was desirable to rectify such defects as soon as possible. The analysis may be right but corrective reforms were not only painful to several parties but also time-consuming and may even generate a vicious circle, e.g., the one between commercial banks' capital adequacy/NPL/ loan loss provisioning and economic downturn. Therefore, the IMF drew widespread flak for adopting too abrupt an approach. Gradual assignment should yield better adjustment on the part of debtor countries.

8. Bureaucratic friction and procedure within the IMF was partly blamed for slow credit approvals and disbursements. This inefficiency was particularly distressing for the countries encountering liquidity gaps.

9. The IMF was harshly denounced on its corrective roles as well as preventive roles. That must have been partly attributed to the weak surveillance, orthodox approach, and bureaucracy as mentioned above.

10. Contrary to its advice favoring transparency, the IMF staff excluded themselves and their documents from outsiders, criticisms, and suggestions. Confidentiality was constantly demanded, triggering widespread suspicions about what were behind the scene, e.g., whether the IMF staff truly understood the prevailing problems, whether they were compelled to adopt specific approach for the interest of certain parties or countries, whether they ran out of innovative ideas which suited the true status of ailing countries.

4. Regional Lender of Last Resort

The above complaints about the IMF may have convinced readers that the first step to improve order in the international financial system is to overhaul the IMF in several aspects such as the following. The system of votes and quota should be changed for the purpose of reducing possible biases in decision making. Research staff ought to familiarize themselves more with the countries they are in charge so that they take into account local characteristics or business modality. Besides, they should add more flexibility to their approach so as to make it more realistic. That is, instead of orienting themselves too much toward neoclassical economics (whereby orderly and sound fiscal and monetary stance would automatically engender corrective adjustments), they should give some attention to the Keynesian approach (whereby countercyclical measures are needed in order to remedy economic downturn and finally revive the economy). Practical country programs could be a combination of the two approaches, depending on the prevailing situations, constraints, socio-political characteristics, and priority. In addition, bureaucratic procedures in the IMF should be streamlined so that decision making can be expedited at times of urgent needs. Nonetheless, given the gigantic size or network of the IMF and its complicated institutional framework, the above-recommended steps of revamping are very difficult to achieve, if possible at all. Politics is another factor that could easily obstruct or prolong the renovation of IMF, regardless of how valid the reasons are for the overhaul.

The next step of repairing the international financial disorder is regional lender of last resort (Figure 3). A regional monetary organization is nothing new. For example, the Arab Monetary Fund[1] was set up by the Economic Council of the League of Arab States in 1976, with the aim of assisting member countries in eliminating payment and trade restrictions, in achieving exchange rate stability, in developing capital markets, in correcting payment imbalances through short- and medium-term loans, in coordinating monetary policies, and in encouraging capital flows among member countries. Another regional monetary organization is the Latin American Reserve Fund,[2] established in 1991 as the successor to the Andean Reserve Fund. The aims are to assist members in correcting payment imbalances through loans or guarantees with maturities of up to four years, to coordinate monetary and exchange rate policies, and to promote liberalization of trade and payments in the Andean sub-region. What remain to be analyzed are how justifiable is a regional lender of last resort, on what grounds, how it should function, and its relationship with the IMF.

Figure 3

To improve order in the international financial system

1. overhaul the IMF
2. set up regional LOLR

Developing countries in the same region have:

1. small sizes, small reserves
2. similar culture, similar resources and specialties

[1] There are 22 members of the Arab Monetary Fund. Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, and the Republic of Yemen

[2] There are 5 members of the Latin American Reserve Fund: Bolivia, Columbia, Ecuador, Peru, and Venezuela. Details of the Arab Monetary Fund and Latin American Reserve Fund can be found on the IMF web site.

Developing countries in the same region or proximity tend to have common characteristics, such as the following.

1. Small size and small amount of foreign exchange reserves
2. Similar culture
3. Similar natural resources and specialties

Consequently, it is rational for them to form a regional lender of last resort or pooling of foreign exchange reserves because of the following reasons (Figure 4).

Figure 4

Rationales for regional LOLR

1. To cope with capital mobility and tone down exchange rate fluctuations
2. More access to rescue funds
3. Strong acquaintance, and better monitoring
4. Vulnerable to contagion, and mutual benefits
5. Regional linkages
6. Reliable review and surveillance

1. The volume of international capital flows through each small developing country is huge or far more than multiples of its foreign trade and services. Those small developing countries are thus better off sharing their foreign exchange reserves to cope with capital mobility. Such sharing will enable concerned authorities to tone down the excessive magnitude of exchange rate fluctuations which tend to be an outcome of massive capital flows. Consequentially less exchange rate volatility will help facilitate resource utilization on the home front.

2. Each member country will have access to more rescue funds than those from the IMF whose quota system represents a formidable constraint. Besides, as there are fewer member countries in the regional group than in the IMF, each of them is given a larger share of borrowing from the common pool of emergency foreign exchange.

3. Strong acquaintance with member countries' socio-economic-political-cultural background enables the regional lender of last resort to closely and efficiently monitor the overall situations of member countries, detect subtle symptoms, arrive at correct assessment, and give proper advice or policy recommendations.

4. As member countries are in the same proximity and have similar resources or specialties, they are most vulnerable to contagion of financial crisis which occurs in any particular member country. Therefore, forming a regional lender of last resort creates mutual benefits. That is, the crisis country, which encounters a liquidity shortage, is not the only party that benefits from the regional lender of last resort. Its neighboring countries, which contribute to the regional lender of last resort, are also saved from possible contagion. In other words, if crisis occurs, investor confidence may deteriorate to such an extent that triggers an exodus of capital funds, thus dwindling foreign exchange reserves in the region. So the common funds help both the troubled country and her neighbors in preventing liquidity crisis as well as its consequential financial contagion.

5. Regional economies are increasingly linked up with each other through trade, investment, and financial transactions. For example, intra-ASEAN exports grew from 18% of total ASEAN exports in 1992 to 22% in 1994-97. In these circumstances, each country has a strong stake in the financial status of its neighbors.

6. Peer review is likely to be more reliable and updated than the ones by outsiders. In other words, there is a case for regional surveillance and monitoring because it is better tailored to local circumstances and situations.

However, small developing countries in most regions typically do not possess much foreign exchange reserves (see reserves of Thailand, Malaysia, Indonesia, Philippines in contrast with those of NIC and industrial countries in Table 3), pooling those reserves may not suffice as a common bufferstock. The regional lender of last resort may have to tap funds from commercial sources to supplement members' contributions (Figure 5). This participation of private creditors will not do any harm, since the regional lender of last resort will not

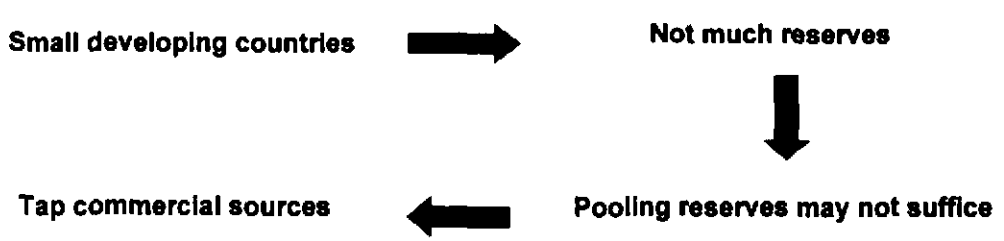
operate on a concessional basis and more private participation means more market discipline and accountability.

Table 3: Foreign Exchange Reserves of Asian and Other Countries

(In million US dollars)

Country	1993	1994	1995	1996	1997	1998
Thailand	24,078	28,884	35,463	37,192	25,697	28,434
Malaysia	26,814	24,888	22,945	26,156	20,013	24,728
Indonesia	10,988	11,820	13,306	17,820	16,087	22,401
Philippines	4,545	5,866	6,235	9,902	7,147	9,101
Sum (T, M, I, P)	**66,425**	**71,458**	**77,949**	**91,070**	**68,944**	**84,664**
Taiwan	83,575	92,457	90,311	88,040	83,505	90,339
Hong Kong	42,986	49,251	55,398	63,808	92,804	89,601
South Korea	19,704	25,032	31,928	33,237	19,710	51,963
Singapore	48,066	58,177	68,695	76,847	71,289	74,928
Sum (NIC)	**194,331**	**224,917**	**246,332**	**261,932**	**267,308**	**306,831**
China	21,199	51,620	73,579	105,029	139,890	144,959
Sum (NIC + China)	**215,530**	**276,537**	**319,911**	**366,961**	**407,198**	**451,790**
Germany	72,727	72,219	77,794	75,803	69,853	64,133
France	20,008	23,520	23,142	23,120	27,097	38,753
Switzerland	31,650	33,554	34,685	36,775	36,899	38,346
U.K	34,630	38,530	39,180	37,120	28,880	27,360
Italy	25,140	30,107	32,942	44,064	53,431	25,447
Canada	10,471	10,219	12,629	18,028	15,122	19,911
Japan	88,720	115,146	172,443	207,335	207,866	203,215
Sum (7 industrial countries)	**283,346**	**323,295**	**392,815**	**442,245**	**439,148**	**417,165**

Figure 5



If the rationales for establishing a regional lender of last resort as mentioned above are agreeable, then some may question whether it may overlap with the operations of IMF, and thus entailing a wasteful use of resources. Others may even argue for the IMF in that the prescribed policies (e.g., fiscal austerity, high interest rates, reforms of financial system) were the factors that deserved credit for successful retrieval of some investor confidence, as evidenced by the building up of foreign exchange reserves. But it is obvious that whichever successes that the IMF side may claim, they came at high social costs (e.g., poorer living conditions, higher unemployment). Therefore, the two sides should reach a compromise, i.e., a regional lender of last resort be set up while the IMF be adjusted (Figure 6). Their functions should be separated in consonance with a major principle in economics, i.e., division of labor depending upon different comparative advantages. The regional lender of last resort should be responsible for cushioning only liquidity, while solvency problems are left to the IMF, because of the following reasons (Figure 7).

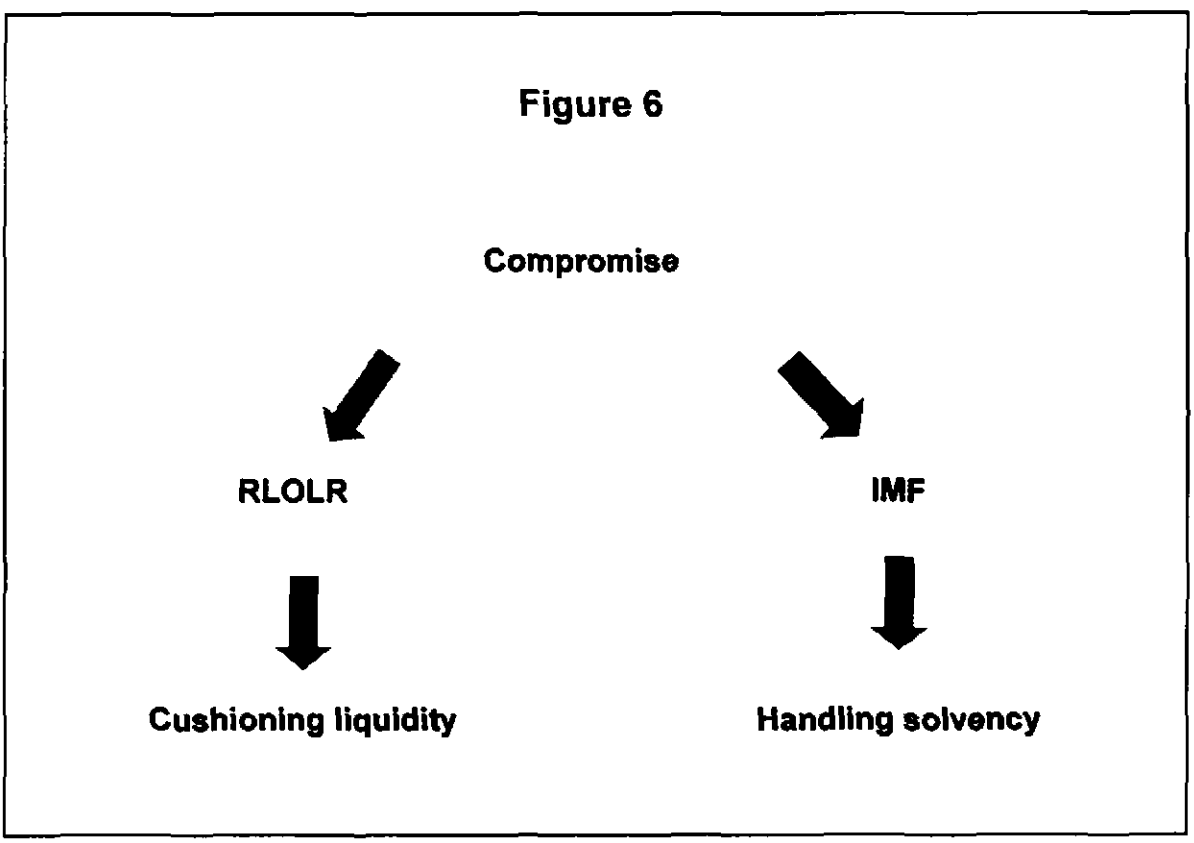


Figure 7

Why liquidity for RLOLR?

1. IT, K-mobility, liquidity threat
2. Better monitoring and surveillance
3. Smaller size, less bureaucracy, quicker move
4. Vulnerability to common and abrupt external shocks
5. Dependent on commercial funds

1. Advancement in information technology, telecommunications, and integration of financial markets around the world has increased the pace and extent of capital mobility. That poses a powerful liquidity threat to developing countries, since foreign investors (e.g., hedge funds) can move or react very quickly (depending upon market sentiment) resulting in strong and ominous volatility of capital flows.

2. The regional lender of last resort can closely monitor and correctly assess the economic as well as financial status of its member countries. Its surveillance will indicate their updated and genuine liquidity positions. The best function that it could serve is thus liquidity provision.

3. Its smaller size and less bureaucracy than the IMF's will enable the regional lender of last resort to move quicker, which is more suitable with liquidity shortage and necessary short-term adjustments.

4. Countries in the same region are subject to the common set of external shocks. When those "monsoonal effects" come, they are often abrupt and acute. That is why the regional lender of last resort should be assigned to extend liquidity assistance.

5. Parts of the resources of regional lender of last resort come from commercial sources of funds, which typically demand reasonable rates of returns in a short time frame.

The IMF, on the other hand, should handle only the countries encountering insolvency problems due to the following reasons (Figure 8).

Figure 8

Why solvency for IMF?

1. Time needed
2. Diverse staff and experiences
3. Not counting on commercial funds

1. Resolution of structural disequilibrium normally takes time, thus corresponding to the IMF's bureaucracy and its time lag.

2. Diverse staff and experiences of the IMF are qualified to set targets for desirable structural reforms, and to devise efficient ways and means to achieve such targets.

3. As the IMF hardly counts on commercial sources of funds, it is not under much pressure from creditors regarding the time frame or maturities of its loans extended to ailing member countries.

To tactfully accomplish its goal as a liquidity cushion, the regional lender of last resort should lay down a definite guideline for its organization and operation, such as the following (Figure 9).

1. It must possess an explicit and efficient department of monitoring and supervision because economic surveillance and monitoring is the bedrock on which coherent policy formulation rests. This department has to keep in close touch with liquidity positions as well as economic fundamentals of its members. Regular and rigorous check-ups are essential for the preventive care and crisis prevention is as equally important as crisis remedy. The obtained information will help detect and distinguish liquidity or solvency problems at their early stage so that proper remedial or preventive actions are timely and neither too troublesome nor costly.

2. It has to clearly stipulate definite conditions and terms of lending, otherwise moral hazard may occur among central banks of its member countries. Examples of those conditions or prerequisites are as follows.

Figure 9

Guideline for organization and operation of RLOLR

1. Efficient monitoring department
2. Definite terms of lending
   - precondition: liquidity problems
   - enough and internationally marketable collateral
   - limits on extent and maturity of credits
   - restriction on frequency
   - commercial interest rate
3. No subjectivity or political influence

2.1 Credits are available only for liquidity purposes or when liquidity-related problems arise, e.g., when net capital outflows amount to A% of reserves per week for B consecutive weeks, local currency depreciates by C% per week for D consecutive weeks.

2.2 In exchange for credits from the regional lender of last resort, borrowers have to place enough collateral which is internationally marketable. Examples of collateral are government securities and debentures of corporates which have good enough credit rating. This collateral helps ensure that credits are for liquidity, not solvency, needs. In addition, the requirement of collateral will help restrict the volume of borrowing from the regional lender of last resort.

2.3 Across-the-board limits are placed on not only the extent but also the maturity of credits available from the regional lender of last resort. The extent will have no relationship with quota or GDP such as the IMF, while the only maturity will be short-term.

2.4 The frequency of borrowing from the regional lender of last resort is restricted in order to confine the total effective volume and maturity of lending, improve financial discipline or management, and prevent moral hazard.

2.5 The interest rate to be charged on loans from the regional lender of last resort will be on a commercial, not concessional, basis and slightly above the market rate because of three reasons: (a) member countries have to contribute their scarce foreign exchange reserves to this regional pooling on top of the contributions to the IMF, (b) some funds are borrowed from commercial sources for relending, (c) moral hazard is to be averted.

2.6 As a means to prevent future crises, the regional lender of last resort will give advice to its member countries on how to manage their liquidity positions given the likely course of global financial markets. The suggestions are not compulsory but the countries which follow are given normal access to their regular credit lines, otherwise the credit lines are reduced proportionately or their terms are toughened. In any case, relevant details must be explicitly stated and proper steps strictly adhered to so as to achieve objectivity.

3. All the above-mentioned conditions must be announced in advance. Otherwise, some biases in lending may emerge as occurred in the IMF due to subjectivity or political influence. The absence of advanced announcement will leave the market with uncertainties regarding the whole repayment capacity of debtor countries, and so investor confidence is not strengthened as originally desired by the regional lender of last resort. Announcement of lending conditions beforehand will not induce moral hazard on the part of member countries' central banks because the conditions clearly indicate that available credits are limited and solely allotted for liquidity purposes. On the contrary, announcement of clear-cut terms ahead of time will encourage borrowers to be more cautious on their cash management.

Thus far, it may be noted that moral hazard is frequently mentioned. That is so because although required collateral helps ensure that borrowing is for liquidity, not solvency, purposes, but collateral cannot guarantee against moral hazard on the part of member countries' central banks. A regional lender of last resort must therefore carefully monitor borrowers' true status and intentions. As for private

creditors of the regional lender of last resort, they are not prone to moral hazard because demand for funds or credits extended by the regional lender of last resort have limits explicitly stated beforehand.

A regional lender of last resort as suggested above will lead to more available emergency credits for member countries facing liquidity problems. That will help maintain financial stability and preserve (or restore) investor confidence in the region.

5. Complements, Cautions, and Supplements

Setting up a regional lender of last resort to prevent and rescue liquidity crises while narrowing the responsibilities of IMF to cover only solvency crises ought to help preserve the global financial order more efficiently, as each agency is assigned the duty that it has comparative advantages. Furthermore, an establishment of regional pools will complement, not supplant, the IMF in several respects, as follows (Figure 10).

Figure 10

Complement the IMF, due to

1. More resources
2. Quicker pace
3. More information from reliable surveillance

1. Available resources for international last-resort lending will increase, enhancing the ability to maintain financial stability in the world market. To certify this point, Table 4 demonstrates that the five ASEAN members (Thailand, Indonesia, Malaysia, Philippines, Singapore) together with South Korea, China, and Japan (or Big 3) commanded substantial and growing surplus on their current account as well as balance of payments throughout the 1990's. Had they formulated an ASEAN+3 lender of last resort in the early 1990's, they would have been able to prevent the Asian financial crisis.

Table 4: External Accounts of East Asian Countries

(Amounts in million U S dollars)

	Current Account								
	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Thailand	-7,281	-7,572	-6,304	-6,364	-8,086	-13,554	-14,691	-3,024	14,230
Indonesia	-2,988	-4,260	-2,780	-2,106	-2,792	-6,431	-7,663	-4,889	3,972
Malaysia *	-870	-4,183	-2,167	-2,991	-4,520	-8,469	-4,596	-4,792	9,376
Philippines	-2,695	-1,034	-1,000	-3,016	-2,950	-1,980	-3,953	-4,351	1,287
Singapore	3,122	4,880	5,915	4,211	11,400	14,436	14,509	15,032	17,614
ASEAN	**-10,712**	**-12,169**	**-6,336**	**-10,266**	**-6,948**	**-15,998**	**-16,394**	**-2,024**	**46,479**
South Korea	-2,003	-8,317	-3,944	990	-3,867	-8,507	-23,006	-8,167	40,558
China	11,997	13,272	6,401	-11,609	6,908	1,618	7,243	29,718	n a
Japan	44,080	68,200	112,570	131,640	130,260	111,040	65,884	94,354	120,696
Big 3	**54,074**	**73,155**	**115,027**	**121,021**	**133,301**	**104,151**	**50,121**	**115,905**	**161,254**
ASEAN + 3	**43,362**	**60,986**	**108,691**	**110,755**	**126,353**	**88,153**	**33,727**	**113,881**	**207,733**
	Financial Account								
	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Thailand	9,098	11,760	9,475	10,500	12,167	21,909	19,486	-16,877	-14,508
Indonesia	4,495	5,697	6,129	5,632	3,839	10,259	10,847	-603	-10,347
Malaysia *	1,784	5,621	8,746	10,805	1,288	7,639	9,479	2,742	-2,550
Philippines	2,057	2,927	3,208	3,267	5,120	5,309	11,277	6,498	959
Singapore	3,947	2,346	1,793	-1,212	-8,841	-4,734	-2,812	-3,851	-17,641
ASEAN	**21,381**	**28,351**	**29,351**	**28,992**	**13,573**	**40,382**	**48,277**	**-12,091**	**-44,087**
South Korea	2,896	6,741	6,994	3,216	10,732	17,273	23,924	1,922	-3,424
China	3,255	8,032	-250	23,474	32,645	38,674	39,966	22,978	n a
Japan	-30,710	-67,660	-100,280	-102,210	-85,110	-63,980	-28,100	-118,050	-116,760
Big 3	**-24,559**	**-52,887**	**-93,536**	**-75,520**	**-41,733**	**-8,033**	**35,790**	**-93,150**	**-120,184**
ASEAN + 3	**-3,178**	**-24,536**	**-64,185**	**-46,528**	**-28,160**	**32,349**	**84,067**	**-105,241**	**-164,271**
	Current Account + Financial Account								
	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Thailand	1,817	4,188	3,171	4,136	4,081	8,355	4,795	-19,901	-278
Indonesia	1,507	1,437	3,349	3,526	1,047	3,828	3,184	-5,492	-6,375
Malaysia *	914	1,438	6,579	7,814	-3,232	-830	4,883	-2,050	6,826
Philippines	-638	1,893	2,208	251	2,170	3,329	7,324	2,147	2,246
Singapore	7,069	7,226	7,708	2,999	2,559	9,702	11,697	11,181	-27
ASEAN	**10,669**	**16,182**	**23,015**	**18,726**	**6,625**	**24,384**	**31,883**	**-14,115**	**2,392**
South Korea	893	-1,576	3,050	4,206	6,865	8,766	918	-6,245	37,134
China	15,252	21,304	6,151	11,865	39,553	40,292	47,209	52,696	n.a.
Japan	13,370	540	12,290	29,430	45,150	47,060	37,784	-23,696	3,936
Big 3	**29,515**	**20,268**	**21,491**	**45,501**	**91,568**	**96,118**	**85,911**	**22,755**	**41,070**
ASEAN +3	**40,184**	**36,450**	**44,506**	**64,227**	**98,193**	**120,502**	**117,794**	**8,640**	**43,462**

* 1998 figures came from Department of Statistic, Malaysia and Bank Negara Malaysia

Source: International Financial Statistics 1999, IMF

2. The quick pace of regional lender of last resort's operation will provide liquidity to problem countries in time, and avert crisis. Timing is extremely vital in this matter because if liquidity rescue comes too late, crisis could easily emerge and become rampant as a result of weakening investor confidence and immediate retrieval of funds.

3. Detailed information from reliable surveillance conducted by regional lenders of last resort will certainly be useful to the IMF, as the former are in closer touch with member countries than the latter. And those data will serve the IMF well in designing correct and appropriate policy prescriptions for problem countries so as to achieve both rescue and prevention purposes. Information sharing will also help in constructing and operating effective early warning systems.

Nonetheless, five cautions deserve some attention (Figure 11). First, in order to stave off biases on resource allocation or utilization, the IMF's country quota and voting system (which is based on quota) should not be adopted by regional lenders of last resort. Instead, their decision on lending should be objective, strictly adhering to the prior regulations which are non-discriminatory nationwise. Such impartial operations will be consistent with the commercial orientation of private sources of funds which regional lenders of last resort depend upon to some degree. Second, as substantial contributions to regional lenders of last resort may come from wealthy nations, lending decisions may be subject to political interference. Best efforts should be exerted to avert such interference. For instance, regional last-resort lenders' market-oriented definite rules and rates will help obliterate political prejudices. Besides, offering credits to troubled countries in the region at the prevailing market prices will automatically pressure those countries to manage their economies more prudently. Third, in order to be agile and fit for liquidity flux, each regional lender of last resort should not consist of a large number of member countries. Otherwise, it may not have the comparative advantages as mentioned above. For example, an Asian Monetary Fund could be too big to handle liquidity provisioning and problems such as the ones experienced by the IMF may easily arise. Fourth, regional lenders of last resort should be as much transparent and accessible regarding information disclosure as they can. That will help facilitate market mechanism and subdue speculation as well as herding. Fifth, regional lenders of last resort should continually perform close country monitoring and surveillance, the duty in which they have better capability than the IMF because of proximity, acquaintance, and peer pressure. Yet they should cooperate with the IMF in debtor monitoring and information sharing as well as timing of credit extension.

Figure 11

Cautions for RLOLR

1. No country quota or voting system
2. No political interference
3. Not comprising too many members
4. Transparent
5. Close monitoring and surveillance

Another market-oriented channel that regional lenders of last resort may employ is credit guarantee. This is almost equivalent to direct lending in that the agencies will have to closely monitor country profiles and evaluate credit risks of possible client countries so that they can charge appropriate premium. However, this option will fortunately lessen the chance of prejudices because it necessitates less funds and thus less contributions from member countries.

Supplements to regional last-resort lending should not be neglected (Figure 12). Direct fund recycling within the region, e.g., via the development of regional bond markets, merging of mature capital markets, will help facilitate flows of funds from surplus to deficit units, bypassing financial intermediaries especially those outside the region. These means of intra-regional direct fund recycling are suggested for the purpose of reducing the credit exposure to out-of-the-region or external markets, thereby decreasing the vulnerability to massive withdrawals of funds across region. In other words, debtor countries must be prudent about the extent and terms of net capital inflows, since possible problems on net capital outflows are their consequences.

Furthermore, countries within each region ought to try their best at reducing currency exposure as well because considerable exchange risks together with deteriorating investor confidence can also spark financial crises, as exemplified by the Thailand case in 1997. Various methods of lowering currency exposure should be explored to see whether they are workable in different regions. Examples of those methods are bilateral payment arrangement and its generalized forms,

Figure 12

Supplements

1. Credit guarantee
2. Intra-regional fund recycling
3. Reduce currency exposure via
   - bilateral payment arrangement
   - regional clearinghouse
   - direct quoting and trading
   - regional currency index
   - regional forward foreign exchange market

clearinghouse for regional trade settlements, direct quoting and trading of regional currencies (not via major vehicle currencies), development of regional currency index as an option for financial settlements, and establishment of regional forward foreign exchange markets which will help encourage more uses of local currencies in intra-regional trade transactions by offering direct forward cover between one regional currency and another. Major vehicle currencies should be avoided, since their drastic shifts in exchange rates can spur substantial capital outflows burdening regional lenders of last resort. In contrast, a regional currency index should be devised, which will also facilitate the development of regional bond markets.

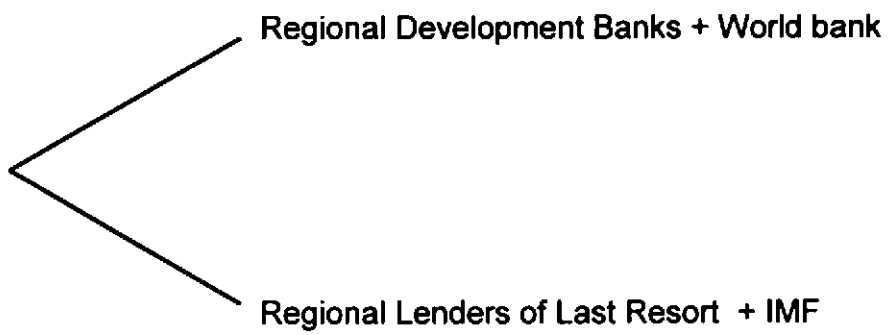
6. Conclusive Remarks

An immediate analogue to the pairing between regional lenders of last resort and the IMF is the one between regional development banks and the World Bank (Figure 13). If left by itself, the World Bank can hardly cover details of all member countries' development programs. Neither can it closely monitor implementation or progress of concerned projects, given that its staff are far apart from action sites. So a regional development bank in each continent, such as the Asian Development Bank and Inter-American Development Bank, can play complementary roles because they are closer to and more acquainted with the countries which undertake development projects. These regional units are able to closely oversee the progress, obstacles, and (in)efficiency of fund utilization. Such information is

valuable not only to regional development banks but also to the World Bank, since the World Bank does need as good a monitoring and surveillance as possible. Some critics may argue that the two represent unnecessary duplication and wasteful uses of resources. However, if they are thoroughly aware of how complicated plus far-reaching development projects are in 146 member countries of the World Bank, and also of how bureaucratic plus time-consuming a huge institution like the World Bank can be, they are likely to agree that dividing responsibilities to regional development banks can help expedite the progress of most development projects to a satisfactory degree.

Figure 13

Analogue:



The same is applicable to the pairing between regional lenders of last resort and the IMF. However, the name "lender of last resort" may be misleading because the regional lenders as recommended are to offer only liquidity credits and on commercial terms. Therefore, these lenders are better branded as regional liquidity cushions (RLC). Such name clearly indicates the complementary role of RLC to those of the IMF.

What should be stressed here (Figure 14) is that short-term credits or balance-of-payments support alone is not enough. Regional liquidity cushions

should be continually cautious that what matters most for developing countries is long-term macroeconomic adjustment. In other words, proper structural adjustments are needed before developing countries can attain sustainable economic growth or their degree of vulnerability to crisis decreases satisfactorily. A mere survival from liquidity crisis does not guarantee that other economic or financial difficulties will not recur in the future. And chronic or recurrent liquidity shortages could easily become insolvency problems whose resolutions are truly formidable.

Figure 14

Deserving strong attention:

1. Short-term credits are not enough, as sustainable economic growth necessitates proper structural adjustment
2. Gradualism and consistency
3. Moral hazard and investor confidence

In order to offset or minimize IMF's weaknesses and properly assist ailing countries, an international financial reform should aim at the following direction.

1. Setting up regional liquidity cushions (RLC) together with firm and unbiased rules on their operations, contributions, funding, credit extension, and the terms involved.

2. Dividing responsibilities or functions of the IMF and RLC so that the former takes care of the countries troubled by long-term structural imbalances, while the latter offer liquidity rescues to the countries facing short-term financial difficulties.

3. Organize systematic cooperation between the IMF and RLC.

The above three steps will enable developing countries to gain robust investor confidence, successfully cope with dynamic capital mobility, and achieve desirable structural adjustment. More liquidity resilience and improved economic

fundamentals will help reinvigorate crisis countries and such changes will favor industrial countries as well.

An example of a group of nations which can formulate a strong RLC is the one consisting of ASEAN countries together with South Korea, China, and Japan or the so-called ASEAN+3. This ASEAN+3 agreed at the ADB meeting in Chiang-Mai, Thailand in May 2000 to commit swap arrangements that will help each other handle any foreign exchange predicament. What could be done further is to gradually institutionalize such commitment and then enlarge it to offer multilateral credit facilities, instead of just swaps. The evolution will reach its final stage when those multilateral credit facilities become operations of the ASEAN+3 RLC.

Lessons from the past suggest that gradualism and consistency be continually adhered to. Before any step of financial reform is undertaken, it should be assured that all concerned parties are ready to cope with. Too rapid a change can bring about disaster or turmoil later on. Policy consistency is also essential. Otherwise, desired results may not materialize. Financial liberalization when financial intermediaries were immature, opening up capital account without liberalizing exchange rate movements in Southeast Asian countries in the early 1990's, and subsequent financial crisis serves as a good example that gradualism and consistency should be given top priority before any policy actions are pursued.

Finally, most central monetary authorities must be aware by now that dealing with capital mobility is a very delicate issue and so are RLC. For instance, supervision or surveillance alone does not certainly prevent problems of excessive commitments in credit markets. Similarly, frequent liquidity aids may tempt borrowers and lenders to be imprudent. On the other hand, if RLC reduce rescue packages for the sake of avoiding moral hazard, that could weaken investor confidence and instigate or aggravate liquidity crunch. In short, moral hazard and investor sentiment is very sensitive. Capital mobility can foster growth and development. But it should be well managed, and RLC can play an important role. Otherwise, liquidity tension could emerge and capital mobility slackens, forgoing the benefits of global financial integration.

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Policy Recommendations on the Use of ASEAN Currencies for Trade Settlements and Regional Business Transactions

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Abstract

Intra-ASEAN trade and business transactions should utilize more local currencies in order to reduce currency exposure and conserve foreign exchange Among several methods (bilateral payment agreement, generalized barter trade, direct quoting and transactions, forward market and exchange rate guarantee, common currency and currency index), netting via pure clearinghouse is deemed more appropriate than others, because it involves neither transfer of risks nor distortion of market mechanism However, this pure clearinghouse system should be adopted only by countries which are ready to participate The attempt to experiment a pure clearinghouse system among ready ASEAN countries is definitely worthwhile given the past successes of similar mechanisms in Europe (Euroclear and CEDELBANK) In its first pilot endeavor, the pure clearinghouse system in ASEAN ought to take a multilateral format so as to reduce both relevant costs and possible liquidity difficulties

*The Thailand Development Research Institute wishes to express its sincere gratitude to ASEAN Secretariat and UNDP for sponsoring this study and holding a workshop among pertinent ASEAN officers on 20-21 November 2001 as a means to collect actual market sentiments on the suggested pure clearinghouse scheme Most of those opinions are incorporated in this study.

Contents

Tables

1. Foreign Exchange Predicament

1 In the first half of the 1990's ASEAN countries incurred a stupendous sum of external debts (Table 1), engendering considerable debt service obligations afterward, especially the ones in U.S dollar (Table 2) Carrying substantial currency exposure is definitely risky, since the major currency to which the domestic one is linked may move in conflict with domestic policy or situation, sparking harmful exchange rate speculation or capital movements Such circumstance has already occurred several times, resulting in distressing financial crises In the Asian version (1997) the controlling authorities in ASEAN decided to float the exchange rates of their currencies against the U S dollar Such move, together with massive and dynamic capital flows in the world market, has generated wild fluctuations of ASEAN exchange rates, depending upon market sentiment at each moment in time Those volatility clearly demonstrates the powerful influence of exchange risk, as it brings about not only price instability but also scary uncertainties to the real economy

2 Amid such threatening atmosphere, since the volume of intra-ASEAN trade amounted to a large and rising portion of trade between ASEAN and the world (Table 3, Figure 1), if intra-ASEAN trade can be conducted in local currencies, that should help reduce currency exposure Less currency exposure makes foreign exchange management less formidable and settling foreign trade in local currency can help speeding up transactions, thus inviting more private participants. At this point some critics may question that such "if" is just a hypothetical statement Nonetheless, once they examine currency profiles of trade and financial flows actually conducted among ASEAN countries, they will discover that the U S dollar was utilized predominantly (Table 4, Figure 2) So resorting to local currencies as a means to conduct intra-ASEAN trade is a promising possibility Furthermore, should such route be adopted, it will immediately enhance the ability of ASEAN central banks to preserve the exchange rate stability of their currencies. That is so because at present a sizable portion of their foreign exchange reserves must be spared to cushion foreign trade financing More uses of local currencies in intra-ASEAN

trade will enlarge the central banks' usable reserves for the sake of exchange rate policy. In short, that option will help ASEAN central banks conserve, or avoid unnecessary use of, foreign exchange

3 Other than the two benefits mentioned above (less currency exposure and more usable reserves), more use of local currencies in intra-ASEAN trade will help decrease cross-border foreign exchange settlement via vehicle or third currencies such as U S dollar That will certainly lower transaction costs to some extent, thus facilitating more intra-ASEAN trade

4 While more local currency uses seem likely to generate many pluses, most traders in intra-ASEAN trade still prefer U S dollar They are reluctant to accept other ASEAN currencies even though in the past all ASEAN exchange rates virtually moved in the same direction and proportion against U S dollar (Table 5, Figure 3) Traders' unwillingness or lack of confidence in other ASEAN currencies is due to several factors, for example, vague perception of economic prospects and political uncertainties in other ASEAN countries Besides, ASEAN currencies have not yet gained worldwide credibility to such an extent that they are equally liquid or tradable as U S dollar, Euro, and yen

5 Although most private traders in ASEAN hesitate to accept other ASEAN currencies as a means of payments, ASEAN governments can cooperate in some payment schemes for the purpose of reducing dependence on U S dollar as a settlement currency

6 A survey was conducted by Thailand Development Research Institute in June-July 2000 to find out the possibilities and practicality of using local currencies in intra-ASEAN trade Interviewees include the following Department of International Economic Relations at the Bank of Thailand, EXIM Bank of Thailand, the Thai Bankers Association, foreign exchange traders of influential commercial banks, major exporters and importers, research departments of financial institutions, Thai and foreign academics The followings will elaborate various payment schemes of using local currencies in intra-ASEAN trade Examples of those schemes are netting and generalized barter trade

2. Netting Settlement

7 Netting represents the process in which payments for imports and exports are netted in local currency within the country before the excess is brought to settle across border. This process certainly helps pare down the amounts that need to be paid internationally Netting has many formats but the most well-known one is bilateral payment arrangement that Malaysia has adopted with many of her trading partner countries

The following countries have signed bilateral payment arrangements with Malaysia

1	Iran	8	Zimbabwe	15	Seuchelles
2	Venezuela	9	Chile	16	Tunisia
3	Nigeria	10	Fiji	17	Iraq
4	Mexico	11	Peru	18	Vietnam
5	Mozambique	12	Sudan	19	Philippines
6	Romania	13	Algeria		
7	Botswana	14	Pakistan		

8 Bilateral payment arrangement (BPA) is a system of settlement of financial obligations arising from trade between two countries It typically involves four parties, i e importers, exporters, commercial banks, and central banks The BPA's opted by Malaysia thus far fall into two categories Iranian model, ALADI model The Iranian model is based on the agreement (signed in August 1988) between the Iranian central bank (Bank Markazi Jomhouri Islami Iran) and the Malaysian central bank (Bank Negara Malaysia) Under this model, each central bank guarantees payments to exporters of the other country in the event of default by their respective importers. The ALADI model is based on the agreement (signed in August 1990) between Banco Central de Venezuela and Bank Negara Malaysia Under this model, each central bank pays its exporters immediately, for sales of goods to the other country (Figure 4). The exporters receive payments from their central bank through designated banks in domestic currency The central banks will settle

the net amount due to each other afterward, on a periodic basis, in U S dollar

9 The common features of the Iranian and ALADI models are the following

(a) The two central banks designate a number of commercial banks for the purpose of issuing and negotiating letters of credit under the BPA The arrangement continues to use the existing banking system to handle trade transactions

(b) The central banks are directly involved in the settlements of financial obligations arising from trade By guaranteeing or remitting payments to exporters, the BPA converts commercial risks in trade transactions into sovereign risks

10 However, the ALADI model differs from the Iranian model in the following respect The ALADI model requires each central bank to pay its own exporters the domestic currency equivalent to the export proceeds, through the designated banks. Meanwhile, the importers' central bank reimburses the exporters' central bank and subsequently claim the amount from the respective importers in the domestic currency equivalent, through their designated banks (Figure 4) Under the Iranian model, the designated banks of exporters and importers settle the trade transactions directly among themselves Each central bank will play a role or honor its obligations only when its importers default

11 The ALADI BPA apparently yields four benefits First, some foreign exchange reserves are saved because trade flows cancel each other before cross-border fund movements are effected Second, cost saving can also be achieved due to less conversion between domestic currencies and foreign exchange Third, the risk of non-payment to exporters is removed Fourth, importers have easier access to banking facilities Nevertheless, Malaysia and her trading partners impose some restrictions upon trade financing via BPA For instance, only products of Malaysian origin and trading partners' origin are eligible A limited number of commercial banks are allowed to participate as designated banks in the program And the limit for eligibility in

financing is at the discretion of designated banks Prices are typically quoted by exporters in U.S. dollar. So are net settlements between central banks at the end of the settlement period.

12 The latest BPA was between Malaysia and the Philippines The Malaysia-Philippines BPA has the settlement period of 3 months and it was claimed that along the clearing process there is no exchange risk since the spot rates are used

13 Though the above-mentioned BPA may seem attractive, it was not mainly designed to maximize local currency use in conducting foreign trade. Instead, its primary objective is to promote trade between Malaysia and other developing countries where potential for such trade exists but there are some hindering factors such as lack of direct banking relationship, trade financing, trade information, business contact The Malaysian BPA involves several steps of government intervention and subsidy which can hardly be acceptable by other ASEAN countries For instance, when central banks offer credit guarantee or release trade-financing credits directly, that means the central banks bear credit risks on behalf of commercial banks and convert them into sovereign risks Such practice not only interferes in the central banks' monetary policy but also generates moral hazard upon commercial banks as well as traders, especially when importers are charged by their central bank only after the exporters' central bank already pays its exporters In short, the BPA does not particularly aim at using local currencies in financing international trade The Malaysian BPA has not been popularly practiced as a means to use local currencies in trade financing principally because the central bank of Malaysia limits the number of commercial banks which can participate in the BPA, and there are several restrictions on product origin (to promote local products) before products become eligible Besides, the information about availability of BPA is not widespread On some occasions, BPA is utilized only when exporters in one country have doubts about payments from importers in another country Otherwise, BPA is neglected Nonetheless, if BPA is refined to its core, the virtue of netting will become evident

14 Pure clearinghouse (PCH) is an intervention-free netting process through central agencies which offer no credit guarantee and bear no credit risks This neutral stance of PCH, as elaborated below, should make it acceptable to ASEAN member countries Figure 5 shows that PCH is similar to BPA in that importers and exporters, via commercial banks, settle their payments in local currencies before the net amount is settled across border in U.S. dollar However, PCH differs from BPA in four respects, as follows.

14 1 The PCH in the exporting country will remit payments to exporters' commercial banks only after it is informed by the PCH in the importing country that importers' commercial banks have already rendered funds (Figure 6)

14 2 The above item immediately implies that PCH does not bear credit risks Neither does it offer any credit guarantee to any importers

14 3 Since PCH assumes no credit risks, all commercial banks can participate in this netting plan In other words, commercial banks are not screened and granted (or rejected) a privilege status as designated banks which have access to the netting like BPA In this regard, all commercial banks hold the same status (Figure 7) And whether any commercial banks will collapse or default is the responsibility of their corresponding central bank, not PCH This setting will also encourage market mechanism to function more efficiently For instance, importers will examine and select only reliable commercial banks to deal with

14.4 Central banks are excluded from this netting scheme Otherwise, their monetary or exchange rate policies would be interfered. Commercial banks, on the other hand, are given freedom to participate in the program or not The reason why joining the netting program should be voluntary for commercial banks is that normally commercial banks are allowed to manage their foreign exchange cash flows already Such function is equivalent to netting at the micro level Therefore, netting at the macro level via PCH should be accessible to commercial banks as an optional channel to square their unbalanced foreign exchange position or arrive at any desired status

15 Overall, netting via PCH is not meant to interfere with the market mechanism at all Instead, it is suggested as a means to achieve two objectives reduce the country's dependence on foreign exchange in funding foreign trade and payments, capture benefits from pooling and matching foreign exchange positions of commercial banks or authorized dealers (Figure 8)

16 One important feature that PCH has to consider cautiously is the settlement period for netting between two countries Too short a period may decrease the volume of internal netting (within each country) That lessens the major merit of this netting program even though short settlement period will help lower exchange risk and interest rate risk to some extent On the contrary, long settlement period will definitely increase the volume of internal netting and thus minimize cross-border foreign exchange settlement as desired However, problems on exchange risk and interest rate risk can easily emerge and become formidable In short, there is a trade-off between the length of settlement period and exchange as well as interest rate risks (Figure 9)

17 Conceptually, exchange and interest rate risks should be borne by commercial banks and/or their clients, not PCH However, such assignment may become a disincentive for commercial banks to join the netting program Thus, a compromise may be reached on how much each party will agree to be responsible for the concerned risks or their costs of protection Partitioning those risks or costs also depends on the structure and ownership of PCH A joint venture may suggest division of risks or costs in the same proportion of ownership.

18 With regard to costs and benefits of PCH, the positive macro impact is rather unquestionable ASEAN countries will be able to use less U S. dollar or conserve foreign exchange in trade financing. The degree of PCH's success will be enhanced if the central authorities stipulate that exporters convert their foreign exchange earnings into local currency within a certain period of time Meanwhile, the functioning of PCH will not interfere with central banks' monetary policies Besides, netting will help each country to economize on transaction costs, since a large number of commercial banks'

requests for financial settlements can be concluded in a single deal between two PCH's (Figure 10) Gains to each micro unit are equally clear-cut because giving opportunities to commercial banks to pool and match their long or short foreign exchange positions in domestic markets via PCH will yield more flexibility to the banks Moreover, instead of having to contact many end-points abroad, each commercial bank can process all deals only once through the PCH That should help reduce commercial banks' overhead cost as remittance fees paid by commercial banks are ordinarily based on the number of transactions, not amounts of remitted funds Once commercial banks can lower their overall transaction costs, they are definitely capable to lessen their commission fees charged upon their clients In addition, commercial banks can curtail their costs of hedging against exchange risks Overall, how much PCH will be able to attract the private sector and commercial banks depends on how much reduction in transaction cost that it can help achieve

19 What remains uncertain from the survey is how the cost reduction will be divided between commercial banks and their customers Commercial banks indicate that they are willing to participate in the PCH program, but the degree of their willingness depends on the degree of efficiency of how PCH is operated, despite the fact that ASEAN countries are closer to each other time-zone-wise than to Europe or the U S Other than its overhead and operating costs, the ways that PCH handles exchange risk, interest rate risk, and maturity mismatch certainly affect the efficiency of its operation

20 Similar to the above-mentioned PCH is the Asian Clearing Union (ACU) which was established in 1975 by central banks in 8 countries comprising Bangladesh, Bhutan, India, Iran, Myanmar, Nepal, Pakistan, and Sri Lanka The ACU represents a simple form of payment arrangement whereby payments for intra-regional transactions are settled on a multilateral basis by the members' central banks Its main objective is to facilitate payments among member countries for eligible transactions, thereby economizing the use of foreign exchange reserves and transfer costs Another consequence is trade promotion among participating countries Thus far, the ACU represents a successful mechanism as the total trade among

ACU countries grew from 88 million US dollars in 1975 to 6 8 billion US dollars in 2000

21 Other formats of netting or exchange can be done by other agencies than the PCH and commercial banks For example, generalized barter trade may take place in the form of government-to-government (G-to-G) package deal Each deal may consist of many commodities traded together, not necessarily one commodity for another (Figure 11) Besides, in financial terms the total value of one government's package may not necessarily equal that of another government's In such case, one government will pay the net balance to another, similar to PCH or BPA If G-to-G deals are to be continually opted, each government probably has to establish an explicit agency to handle the trade exchange and monitor its progress or obstacles Other than the G-to-G format, netting can be easily adopted by multinational corporations (MNC) which have branches in ASEAN member countries For instance, the MNC which imports some items from and exports others to its subsidiaries in other ASEAN countries may net the amounts of transactions and remit only the excess across border (Figure 12). This netting is possible for many types of MNC's, e g manufacturing factories, trading firms What needs to be done is to give encouragement or incentives to those MNC's to opt for netting Examples of those incentives are tax exemptions and special access to potential customers abroad.

3. Direct Quoting and Transactions

22 In the 1997 Asian financial crisis the explicit culprit was the dollar-pegged exchange rate policy and the dollar centered system Two lessons from this financial turmoil are immediately evident First, the currency stability should not be measured in terms of U S dollar any more In other words, another currency or combination of currencies ought to be adopted as a reference currency when exchange rate stability is to be measured or maintained Second, equilibrating the country's balance of payments position is an equally important objective of exchange rate policy as stability

23 The above-mentioned two lessons suggest that trading between two ASEAN countries be denominated and settled in local currencies In

addition, direct quoting and transactions between ASEAN currencies should be encouraged These recommendations are based on the following reasons.

(a) Direct quoting and transactions would lead to the exchange rates which genuinely reflect balance-of-payments equilibrium Otherwise, crossing exchange rates via vehicle currency such as U S dollar provides a channel for fluctuations of vehicle currency's exchange rate to interfere In other words, to use an outcome from crossing may inflict extraneous disturbances on ASEAN countries' external transactions and accounts, so speculations and acute exchange rate volatility may easily arise (Figure 13)

(b) Ordinarily, there is a transaction margin between buying and selling rates of foreign exchange One transaction via crossing is equivalent to two direct transactions, thus entailing two transaction margins Consequently, the margin or spread arising from crossing is wider than that from direct transactions Roughly speaking, transaction fees could be cut in half, which would definitely favor importers and exporters when direct transactions are resorted to

24 Given that around 20% of ASEAN's trade is with ASEAN itself, some parties may argue that, based on the above grounds, it is time to create or encourage some means to develop direct quoting and transactions between ASEAN currencies However, other parties, especially the monetary authorities, tend to oppose such recommendation The opponents assert that direct transactions would expand offshore local currency (Figure 13) And once those offshore funds flourish, they could easily generate two adverse repercussions First, they can energize streams of perilous currency speculation which are hard to subdue in the current arena of dynamic capital movements Second, local currency offshore can interfere, distort, or even nullify monetary policies as conducted by the pertinent authorities In short, ASEAN currencies have not "matured" as much as U S dollar, Euro, and yen to be traded offshore to a large extent

4. Forward Market and Exchange Rate Guarantee

25 One factor that can motivate more uses of local currencies in intra-ASEAN trade is a reduction of exchange rate risk Therefore, one means to

do so is via forward foreign exchange markets of ASEAN currencies Nevertheless, to establish or encourage such markets is an arduous venture due to the following impediments.

(a) Most ASEAN monetary authorities are against offshore local currencies for the reasons stated above That obstructs direct quoting and transactions in both spot and forward markets

(b) Rarely do any interest rates and exchange rates represent true benchmark rates which could serve as a reliable basis for calculation of appropriate premium or discount for forward exchange rates

(c) Even if the ASEAN forward foreign exchange markets can be established, immaturity could lead to thin volume of transactions, resulting in wide swings of premium and discount which discourage traders to participate in the markets

26 In the past, even after the 1997 financial turmoil, there are good correlations among the levels and variations of ASEAN exchange rates versus U S dollar (Table 5) to the extent that these ASEAN exchange rates are largely stable versus each other (Figure 3) For instance, between May 1998 and April 2000 the Thai baht's levels and movements were more than 70% correlated with those of the Indonesian rupiah Those correlations were partly due to contagion effect in the foreign exchange markets However, traders in ASEAN countries themselves hardly believe or take these correlations for granted and rarely accept local currencies of their trading partners Their unwillingness is a result of the absence or thinness of direct trading between ASEAN currencies Otherwise, the hesitancy persists because, from traders' viewpoint, the correlations remain either unnoticed or unjustified

27 Some parties or agencies within ASEAN may have enough faith in the above-mentioned correlations. They may therefore be willing to set up an exchange rate guarantee fund (ERGF) as a central unit offering forward covers among ASEAN currencies This ERGF must be prudently operated so that the common funds are invested in the direction which harmonizes expected inflows and outflows of foreign exchange The services from ERGF,

if efficiently managed, can motivate more uses of ASEAN local currencies as desired

28 Nonetheless, three factors may hinder the workability of ERGF. They are the following

(a) The actual financial condition within each ASEAN member country may deviate from expectations and thus shift exchange rates away from the expected course That is probable because it depends on each country's monetary policies which are autonomously determined

(b) Political situation in each country differs from one another and may vary unexpectedly Political stability or uncertainty is one crucial determinant of investor confidence which have immediate impact upon movements of funds across countries and thus fluctuations of exchange rates.

(c) Capital mobility in the world markets now involves not only gigantic amounts of funds but also extremely rapid pace, subject to both financial and political situations Consequently, exchange rate volatility may occur to such an extent or in such a fashion that the previous high correlations among ASEAN exchange rate levels and variations may not prevail any more

29 The forward market and exchange rate guarantee fund represent "facilitators" for more uses of local currencies Though they may not sound feasible in the short run, they hint at another facilitator, i e common currency or currency index

5. Common Currency and Currency Index

30 Some people may quote the currency Euro in Europe as an example that since ASEAN countries trade with each other to a growing extent, they should be able to adopt a single currency However, detailed investigation of each ASEAN country's economic profile reveals that chances of common currency in ASEAN are slim because macroeconomic features of each ASEAN member differ from one another's drastically (Table 6) For example, in 1998 per capita GDP went from U S $ 483 in Indonesia to U S.$ 1,831 in Thailand and U S $ 21,807 in Singapore Such vast gap means contrasting costs of living and makes currency union rather impractical, as

integrating currencies is equivalent to unifying commodity prices across border Similar divergences occur on the inflation and interest rate fronts. Inflation in 1998 varied from -0 3% in Singapore to 8 1% in Thailand and 58 4% in Indonesia. Meanwhile, deposit interest rates moved from 4 6% in Singapore to 8 5% in Malaysia and 39 1% in Indonesia.

31. With respect to economic policies, the discretionary measures that each ASEAN country implemented diverged from each other's remarkably in terms of both timing and extent On fiscal measures, between 1990 and 1997 the Philippines' government cash balance swung from -37% of GDP in 1990 to 0% in 1997 while Singapore commanded continual and substantial fiscal surplus throughout averaging 13% of GDP On the money side, different monetary policies of ASEAN members led to different paces of credit expansion In 1990-98 average credit growth ranged from 14% in Singapore to 33% in the Philippines These varieties of implemented economic policies indicate that currency unification is an extremely difficult task, if possible at all.

32 Although currency integration is not easily achievable, currency cooperation is a good stepping-stone For instance, an ASEAN currency index (ACI) may be constructed to be used as a unit of settlement in the ASEAN pure clearinghouse (PCH) Since the duty of PCH is to clear net foreign exchange transactions among ASEAN member countries, it is logical to adopt ACI, instead of U.S dollar, as a settlement unit In other words, "internal" affairs should be handled by and denominated in "internal" unit. The components of ACI therefore consist of ASEAN currencies and the PCH authorities will announce official exchange rates between ACI and ASEAN currencies Variations of these exchange rates are contingent upon trade imbalances among ASEAN countries, as ACI is an instrument devised to help equilibrate external positions of ASEAN countries against each other's. For instance, if Thailand experiences an intra-ASEAN balance-of-payments surplus worth P% of GDP for Q consecutive months, or the three-month moving average of such balance-of-payments disequilibrium exceeds R% of GDP for S months, the baht currency will appreciate against ACI by T% The reason for equilibrating external positions is that though exchange rate stability is widely desired to facilitate international trade and capital flows,

such stability may not be sustainable if it engenders disequilibrium to such an extent that sparks detrimental currency speculation as experienced by Thailand in 1997. If sustainability is to be achieved, exchange rate should be linked with equilibrium of economic fundamentals Nevertheless, it is well recognized that disequilibrium can often occur on the external accounts of ASEAN countries Consequently, the ACI, which is meant to equilibrate external positions, may fluctuate and generate some exchange risks

33 ACI is not to function as another currency. It is meant to be used only by the pure clearinghouses (PCH) of ASEAN as a unit of conversion or settlement, not an asset or general medium of exchange like U S dollar Therefore, even if cross rates via ACI may not correspond with cross rates via U S dollar, arbitrage will not emerge The objective of ACI is to give correct market signals so that optimal resource utilization is pursued among ASEAN Using the ACI will help ASEAN by reducing currency exposure as settlement via PCH will be insulated from external disturbances, e g extraneous fluctuations of U S dollar exchange rates

34 The ACI should be constructed in a way that also reflects purchasing power parity as well as interest rate parity among ASEAN countries Possessing such quality, it will suggest both proper production and consumption patterns in the future Another reason for ACI is that regional integration has been widely recognized and has accumulated growing momentum worldwide, e g NAFTA, AFTA, APEC. ACI will therefore facilitate AFTA in financial settlements However, uses of ACI should be restricted, especially at its first stage For instance, ACI may function as a numeraire in the generalized barter trade or package deal of exchange stated above As for PCH, ACI serves as a unit of credits and debits But at the very beginning, it should be experimented as an optional unit of settlement, in addition to U S dollar, among PCH Choosing the original route of option for ACI will help avoid disruption among intra-ASEAN trade and also pave the way for gradual adjustment

6. Recommendations

35 Among all channels to encourage more uses of local currencies in ASEAN as covered above, the pure clearinghouse (see an example of PCH in the Annex 1 of this paper) is deemed more appropriate than others because it involves neither transfer of risks nor distortion of market mechanism But it will enable ASEAN to minimize uses of U S dollar or other major currencies as a medium of exchange.

36 The pure clearinghouse could be set up and operated by government agencies or private entities or joint efforts Several parties (e g chamber of commerce, commercial banks, central banks) may be invited as they would share the benefits from netting or the essence of PCH mechanism. For instance, transaction costs are trimmed while more foreign exchange reserves become usable International organizations (e g IMF, World Bank, ADB) represent another group of potential supporters since they ordinarily have strong interest on financial and exchange rate stability which can be strengthened by the PCH scheme Useful advice should be tapped from foreign organizations' experts who have had long experience in dealing with similar clearinghouse to PCH such as CEDELBANK and Euroclear

37 To adopt pure clearinghouses for the purpose of netting and performing cross-border settlements, an international agreement has to be reached among ASEAN members regarding the length or timing of settlement period, who will bear the brunt of consequential exchange risk and interest rate risk, which rates will be used as benchmarks in calculation, and which parties will contribute to buffer stocks so as to cushion excess payments of PCH

38 As financial sectors in different ASEAN countries have achieved different stages of development, they do not fit the same recommendations on PCH In other words, proper recommendations for each specific ASEAN member country are likely to be tailor-made, depending upon the current status and/or problems of its financial sector development This tailor-made orientation is also applicable to the roles of central banks, since different

central banks may play different roles or have different discretion in the course of economic development In short, the PCH scheme should be piloted by the countries which are able, willing, and ready (such as ASEAN 5), as the scheme has strong potential to generate promising benefits (cost reduction, more usable foreign exchange reserves, and exchange rate stability) from more use of local currencies and pooling of foreign exchange positions of commercial banks or authorized dealers

39 In the first stage, a very short settlement period (such as one day) should be adopted in order to minimize exchange risks of all concerned parties After all parties become adequately acquainted with the PCH system, the settlement period could be lengthened as a means to gain more netting of foreign trade transactions within each country

40 Even though all the above-mentioned explanations about PCH involve only two countries (e g. Figures 5, 6, 10, 14), the pure clearinghouse system recommended for ASEAN countries is multilateral (Figure 15 which is based on actual data in 2000 as presented in Annex 2) due to the following reasons

(a) Netting foreign transactions of each country versus those of all other ASEAN countries via multilateral PCH will raise the frequency of offsetting Otherwise, bilateral PCH will necessitate more time before offsetting can be achieved

(b) The multilateral PCH system can help each country's PCH avoid liquidity problems which could easily occur if that PCH has to deal with other countries' PCHs on a bilateral basis.

(c) Since the Central PCH will clear all settlements of each country's PCH by executing only one cross border transaction in each settlement period, it will certainly entail less transaction costs than the bilateral PCH system In other words, the summation of cross border transactions in the multilateral PCH (after netting) is always fewer than the summation of cross border transactions in the bilateral PCH (Figure 15 and Annex 2)

41 Although the multilateral pure clearinghouse seems to represent a promising method for regional trade settlements, the following two precautions deserve careful consideration

(a) Financial transfers between every member country's PCH and central PCH ought to be effected within the same (one) day In other words, these PCHs should not be allowed to make transactions by transferring funds in their accounts abroad such as those in the U S or Europe This suggestion is meant to avoid time lags which could easily generate difficulties arising from exchange rate fluctuations

(b) If some shareholders of pure clearinghouses are traders (exporters or importers), some conflict of interests may emerge because on one hand, traders ordinarily wish the PCH to maximize netting so as to raise the benefit from cost reduction On the other hand, traders as PCH shareholders may also desire to maximize their profits from more commission charges which mean less netting or more frequent transactions. So organizers of PCH should be careful about who will be proper major shareholders of PCH

42 The multilateral pure clearinghouse as suggested above is similar to the "trade account" or barter trade which has recently gained attention from some ASEAN countries, including the less advanced ones such as Vietnam, Laos, Cambodia, and Myanmar These countries want to exchange trade items with their neighbors' since they currently possess inadequate purchasing power or foreign exchange reserves Meanwhile, the multilateral PCH enables not only these poor or underdeveloped countries to fulfil their wish but also more advanced ASEAN members to undertake foreign trade by using local currencies

43 The following are step-by-step recommendations on how the PCH system can be set up and operated Included are new units to be established and their functions Also attached are the agencies which should be responsible for those suggested policy actions

Steps and Functions	Responsible Agencies
1 • Investigate relevant rules and regulations concerning international trade • Investigate multilateral agreements governing international finance Both of these steps are meant to examine whether the PCH system will engender any inconsistency or conflict	1 ASEAN Secretariat
2 Set up the PCH system by	
2 1 Publicize the system and its intentions to commercial banks in and out of ASEAN, central banks and ministries of finance in ASEAN, international organizations (ADB, IBRD, IMF, etc).	2 1 ASEAN Secretariat
2 2 Organize the central PCH (which coordinates functions among various national PCH's) and its operational and administrative duties, e g international transfer of funds	2 2 ASEAN Secretariat in conjunction with international organizations, e.g. ADB, IBRD, IMF, etc.
2.3 Establish a national PCH office in each country which is ready In the initial stage these offices should be administered by officials from central banks and/or local banks and/or multinational banks	2.3 Each country's central bank and cooperation with one another for the sake of consistency within the PCH system
3. Arrange a system of examining/ monitoring/appraising national PCH's and the central PCH for the sake of efficiency and impartiality	3 ASEAN Secretariat and member countries' central banks
4 Prepare to accommodate new members from the remaining ASEAN Countries and to diversify ownership of PCH from central banks to private entities	4 Central banks of ASEAN countries

Table 1: External Debt Outstanding

(Millions of U S dollars)

	1990	1992	1993	1994	1995	1996	1997	1998
ASEAN-4								
External Debt	143 945	182 889	203 974	243 168	279 663	299,537	322,814	329,637
Short-term debt	25 790	41 679	52,607	60 541	79 614	88 880	94 434	59,477
(% of total debt)	17 92	22 79	25 79	24 90	28 47	29 67	29 25	18 04
Long-term debt	118 155	141 210	151 367	182 627	200 049	210 657	228 380	270 160
(% of total debt)	82 08	77 21	74 21	75 10	71 53	70 33	70 75	81 96
Thailand								
External Debt	28 165	41 864	52 717	65 596	83 093	90,778	93 731	86,172
(% of GNP)	33 4	38 4	42 9	46 4	50 5	51 4	62 8	76 5
Short-term debt	8,322	14,727	22,634	29,179	41 095	37 613	34 836	23,523
(% of total debt)	29 55	35 18	42 93	44 48	49 46	41 43	37 17	27 30
Long-term debt	19 843	27 137	30 083	36 417	41 998	53 165	58 895	62 649
(% of total debt)	70 45	64 82	57 07	55 52	50 54	58 57	62 83	72 70
Malaysia								
External Debt	15 328	20,018	26 149	30,336	34 343	39 673	47 228	44,773
(% of GNP)	37 5	36 3	42 9	44	41 3	42	49 8	65 3
Short-term debt	1 906	3 639	6,951	6 189	7 274	11 068	14 939	8,656
(% of total debt)	12 43	18 18	26 58	20 40	21 18	27 90	31 63	19 33
Long-term debt	13 422	16 379	19 198	24 147	27 069	28 605	32,289	36,117
(% of total debt)	87 57	81 82	73 42	79 60	78 82	72 10	68 37	80 67
Philippines								
External Debt	30 580	33 005	35 936	39 412	37 829	40,145	45,682	47,817
(% of GNP)	69 4	61 3	65	60	49 7	46 5	53 3	70 1
Short-term debt	4 427	5 256	5 035	5 716	5 279	7,969	11,794	7,185
(% of total debt)	14 48	15 92	14 01	14 50	13 95	19 85	25 82	15 03
Long-term debt	26 153	27 749	30,901	33,696	32,550	32 176	33,888	40,632
(% of total debt)	85 52	84 08	85 99	85 50	86 05	80 15	74 18	84 97
Indonesia								
External Debt	69 872	88,002	89 172	107,824	124 398	128 941	136,173	150,875
(% of GNP)	64	66 2	58 7	63 3	64 6	58 3	65	176 5
Short-term debt	11 135	18,057	17 987	19 457	25 966	32 230	32 865	20,113
(% of total debt)	15 94	20 52	20 17	18 05	20 87	25 00	24 13	13 33
Long-term debt	58,737	69,945	71 185	88 367	98,432	96 711	103,308	130,762
(% of total debt)	84 06	79 48	79 83	81 95	79 13	75 00	75 87	86 67

Source Global Development Finance, 2000, World Bank

Table 2: Currency Profile of Long-Term External Debt

(Percent)

	1990	1992	1993	1994	1995	1996	1997	1998
Thailand								
U S dollar	15 8	21 7	21 6	22 8	27 1	32 4	47 0	49 0
Japanese yen	42 9	47 0	49 9	50 8	47 9	44 7	38 8	40 0
Others	41 3	31 3	28 5	26 4	25 0	22 9	14 2	11 0
Malaysia								
U S dollar	31 8	27 7	29 4	35 1	48 5	55 6	55 8	58 7
Japanese yen	36 5	35 4	37 5	37 5	34 6	28 2	26 5	29 6
Others	31 7	36 9	33 1	27 4	16 9	16 2	17 7	11 7
Philippines								
U S dollar	36 2	33 9	30 4	28 0	27 5	29 8	33 9	33 9
Japanese yen	31 0	34 6	38 2	40 4	39 5	38 1	36 8	38 6
Others	32 8	31 5	31 4	31 6	33 0	32 1	29 3	27 5
Indonesia								
U S dollar	20 9	19 9	19 9	20	21 5	24 3	27 2	47 3
Japanese yen	34 6	36 4	37 6	38	35 3	34 5	32 9	32 6
Others	44 5	43 7	42 5	42	43 2	41 2	39 9	20 1

Source Global Development Finance, 2000, World Bank

Table 3: ASEAN's Trade Volume Classified by Destination

		1992	1993	1994	1995	1996	1997	1998
ASEAN	(Millions of U S dollars)							
	Exports	33 515	40 393	56 767	69 893	73,403	75 116	61 066
	Imports	30,599	36 888	46 887	55 732	60 646	62,698	52,427
	Ex+Im	64,115	77 281	103 654	125 625	134,049	137,814	113,493
World	(Millions of U S dollars)							
	Exports	180 415	206,421	254 713	311 428	329,498	340,449	321,682
	Imports	194,630	223 025	271 118	344 789	357,821	355,549	263 611
	Ex+Im	375,045	429 446	525,831	656,217	687,319	695,998	585,293
Share	(Percent)							
	Exports	18 58	19 57	22 29	22 44	22 28	22 06	18 98
	Imports	15 72	16 54	17 29	16 16	16 95	17 63	19 89
	Ex+Im	17 10	18 00	19 71	19 14	19 50	19 80	19 39

Source Direction of Trade, IMF, 1999

Table 4: Currency Composition of Thailand's Exports and Imports

(Percent)

	1998				1999			
	US$	Yen	Baht	Others	US$	Yen	Baht	Others
Exports								
U S A	97 5	0 0	0 1	2 4	95 2	0 0	1 1	3 7
Japan	83 2	14 1	2 6	0 1	74 2	18 1	7 5	0 2
EU	89 0	0 0	0 9	10 1	83 2	0 0	1 4	15 4
ASEAN	88 3	1 3	6 5	3 9	94 1	1 5	2 7	1 7
Imports								
U S A	89 0	0 0	0 1	10 9	85 8	0 4	0 5	13 3
Japan	65 8	32 5	1 5	0 2	54 4	41 4	2 1	2 1
EU	61 9	0 0	2 5	35 6	68 6	0 0	2 8	28 6
ASEAN	88 3	2 2	3 0	6 5	88 3	3 3	3 7	4 7

Source Bank of Thailand

Commercial Banks' Purchases and Sales of Foreign Exchange in Thailand

(Millions of Baht)

	1994	1995	1996	1997	1998	1999
a Purchases						
U S dollar	8 044 379	13 206 671	23 626 402	24,821,336	11,217 693	6 556,295
Yen	83,367	102 193	134,709	148 844	260,952	259 119
D M	25 476	28,244	26 253	33 811	42 711	39,558
Pound Sterling	10 896	10 183	11 444	21,826	20 894	19 659
S dollar	11 599	11 315	11 096	16 577	14 543	12 714
H K dollar	11,018	11 264	10 323	14,947	12 974	9 018
M dollar	3,419	4 714	4 778	6,692	8 934	5
Other Currencies	28,520	39 593	37,839	40 451	52 319	87,612
Total	**8,218,674**	**13,414,177**	**23,862,844**	**25,104,484**	**11,631,020**	**6,983,980**
b Sales						
U S dollar	7 799,008	12,830 990	23 378 849	24 951,152	11,215,030	6,417 060
Yen	188 688	224 929	229 628	251 493	291 008	354,877
D M	66 069	85 432	82 407	80,270	63,846	38,663
Pound Sterling	22 449	24 301	29 123	41,574	27 794	21,856
S dollar	28 446	29 294	28 682	31,846	23 937	20 445
H K dollar	16 851	13 712	14 222	14 593	10,085	8 388
M dollar	28 939	17 003	13 732	14 781	8 775	31
Other Currencies	76 837	77 674	80 035	88 314	83,337	100 361
Total	**8,227,287**	**13,303,335**	**23,856,678**	**25,474,023**	**11,723,812**	**6,961,681**

(Percent)

a Purchases						
U S dollar	97 9	98 5	99 0	98 9	96 4	93 9
Yen	1 0	0 8	0 6	0 6	2 2	3 7
EU	0 4	0 3	0 2	0 2	0 5	0 8
Other Currencies	0 7	0 5	0 3	0 3	0 8	1 6
b Sales						
U S dollar	94 8	96 4	98 0	97 9	95 7	92 2
Yen	2 3	1 7	1 0	1 0	2 5	5 1
EU	1 1	0 8	0 5	0 5	0 8	0 9
Other Currencies	1 8	1 0	0 6	0 6	1 1	1 9

Source Bank of Thailand

Table 5: Correlation of ASEAN Currencies versus U.S. Dollar

	Thailand	Malaysia	Singapore	Philippines	Indonesia
Level					
Thailand	1 00				
Malaysia	0 72	1 00			
Singapore	0 32	0 40	1 00		
Philippines	0 62	0 44	0 13	1 00	
Indonesia	0 77	0 73	0 26	0 34	1 00
Change					
Thailand	1 00				
Malaysia	0 36	1 00			
Singapore	0 67	0 42	1 00		
Philippines	0 52	0 12	0 32	1 00	
Indonesia	0 73	0 22	0 57	0 17	1 00

Period May 1998 - April 2000

Source ASEAN Central Banks

Table 6: Macroeconomic Characteristics of Five ASEAN Countries

Exchange Rates (per U.S. dollar)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Thailand	25 59	25 52	25 4	25 32	25 15	24 92	25 34	31 37	41 37	37 84
Indonesia	1842 8	1950 3	2029 9	2087 1	2160 8	2248 6	2342 3	2909 4	10013 6	7808 9
Malaysia	2 7049	2 7501	2 5474	2 5741	2 6243	2 5044	2 5159	2 8132	3 9244	3 8
Philippines	24 31	27 48	25 51	27 12	26 42	25 71	26 22	29 47	40 89	39 09
Singapore	1 8125	1 7276	1 629	1 6158	1 5274	14174	1 41	1 4848	1 6736	1 695

Source International Financial Statistics 1999 (for data 1990-98), IMF and Central Bank websites for data 1999

Deposit Rate (%)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Thailand	12 3	13 7	8 9	8 6	8 5	11 6	10 3	10 5	10 7
Indonesia	17 5	23 3	19 6	14 6	12 5	16 7	17 3	20 0	39 1
Malaysia	5 9	7 2	8 0	7 0	4 9	5 9	7 1	7 8	8 5
Philippines	19 5	18 8	14 3	9 6	10 5	9 4	9 7	10 2	12 1
Singapore	4 7	4 6	2 9	2 3	3 0	3 5	3 4	3 5	4 6

Source International Financial Statistics 1999, IMF

Table 6 (Continued)

Inflation (%)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Thailand	6 0	5 7	4 1	3 4	5 0	5 8	5 8	5 6	8 1	0 3
Indonesia	7 8	9 4	7 5	9 7	8 5	9 4	8 0	6 7	58 4	20 5
Malaysia	2 6	4 4	4 8	3 5	3 7	5 3	3 5	2 7	5 3	2 7
Philippines	13 2	18 5	8 6	6 9	8 4	8 0	9 0	5 9	9 7	6 7
Singapore	3 5	3 4	2 3	2 3	3 1	1 7	1 4	2 0	-0 3	0 4

Source International Financial Statistics 1999 (for data 1990-98) and World Economic Outlook May 2000 (for data 1999), IMF

Per Capita GDP (U.S. dollar)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Thailand	1 528	1 736	1 945	2 158	2,459	2,830	3 024	2 540	1,831
Indonesia	638	703	751	842	928	1,043	1 156	1 074	483
Malaysia	2,408	2,595	3,062	3 281	3,605	4 221	4,690	4 538	3,389
Philippines	715	713	812	812	934	1,054	1,166	1 132	866
Singapore	13,784	15,758	17,619	20,339	24,181	29,672	30,509	31,071	21,807

Source Key Indicators 1998 (for data from 1990-97), ADB and International Financial Statistics 1999 (for data 1998), IMF

Government Cash Balance (% of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Thailand	5	4	3	2	3	3	1	0	3
Indonesia	-1	-1	-1	-1	1	0	1	-1	n a
Malaysia	-3	-2	-1	0	2	1	1	2	n a
Philippines	-37	-24	-13	-16	9	5	3	0	n a
Singapore	11	9	13	16	16	14	14	10	16

Source Key Indicators 1998 (for data from 1990-97), ADB and International Financial Statistics 1999 (for data 1998), IMF

Domestic Credit Growth (% p.a.)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Thailand	27	15	18	23	29	23	14	32	-1
Indonesia	50	20	13	26	21	22	23	42	54
Malaysia	21	17	7	14	12	28	24	25	0
Philippines	31	1	3	146	20	32	39	28	-2
Singapore	14	12	9	13	14	19	15	12	18

Source Key Indicators 1998 (for data from 1990-97), ADB and International Financial Statistics 1999 (for data 1998), IMF

Figure 1
Intra-ASEAN Trade/Total ASEAN Trade

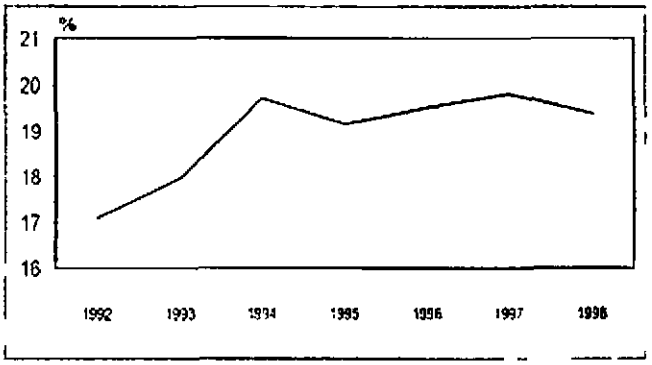


Figure 2
Currency Profile of Thailand's Exports and Imports to ASEAN in 1998-99

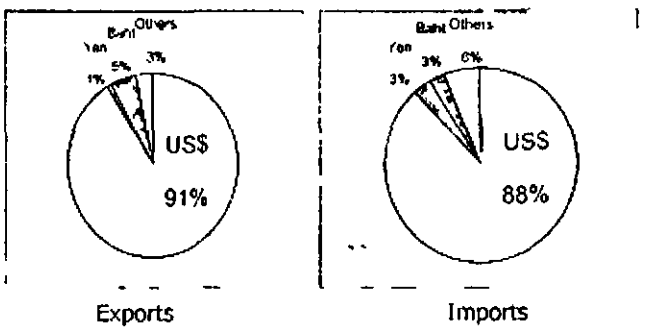


Figure 3

Exchange Rates of ASEAN Countries

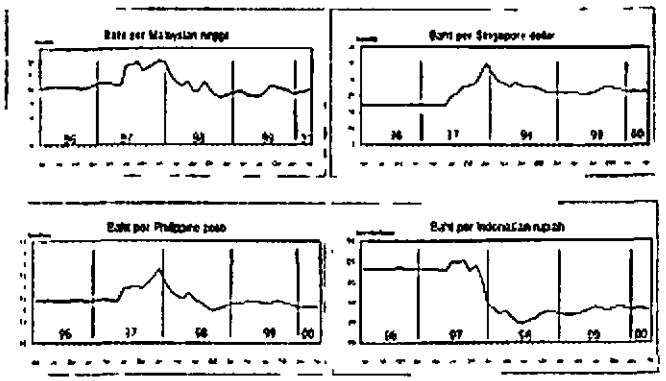


Figure 4

Bilateral Payment Arrangement
ALADI Model

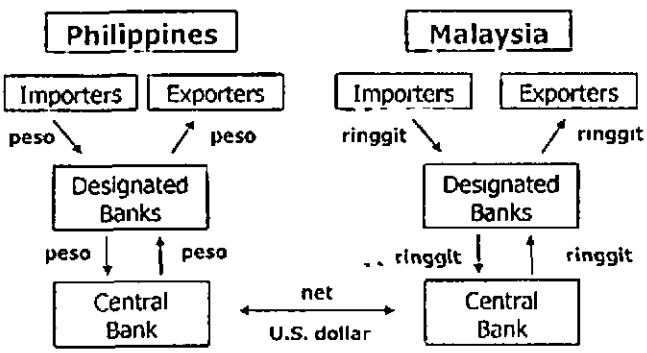


Figure 5

Pure Clearinghouse (PCH)

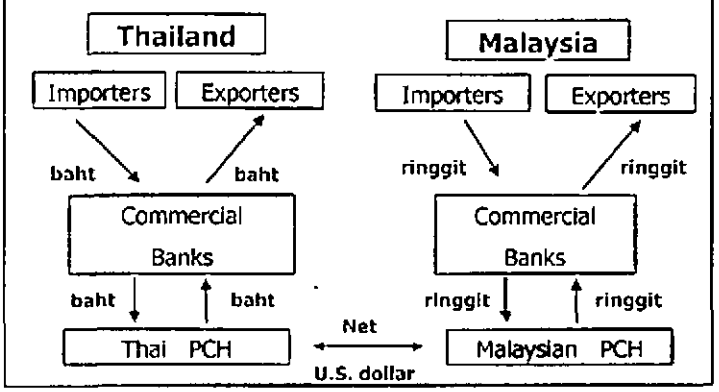


Figure 6

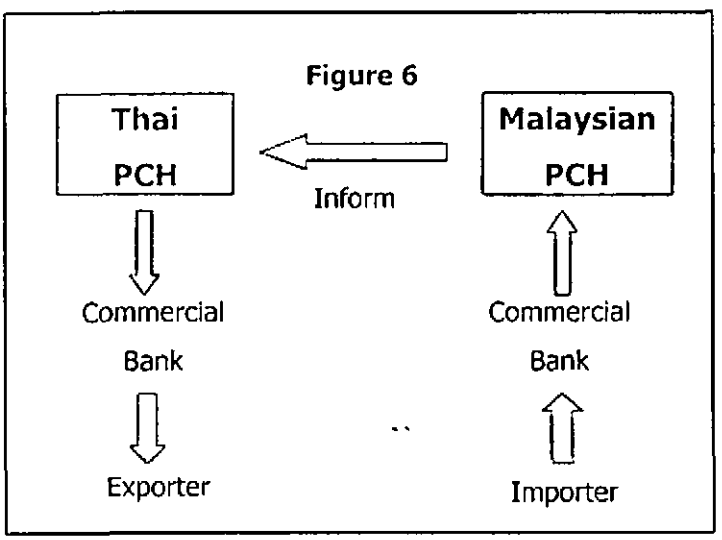


Figure 7

All commercial banks are allowed.

No central banks are involved.

Figure 8

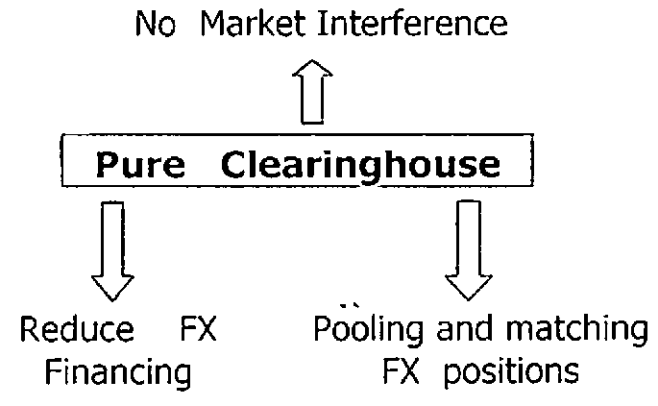


Figure 9

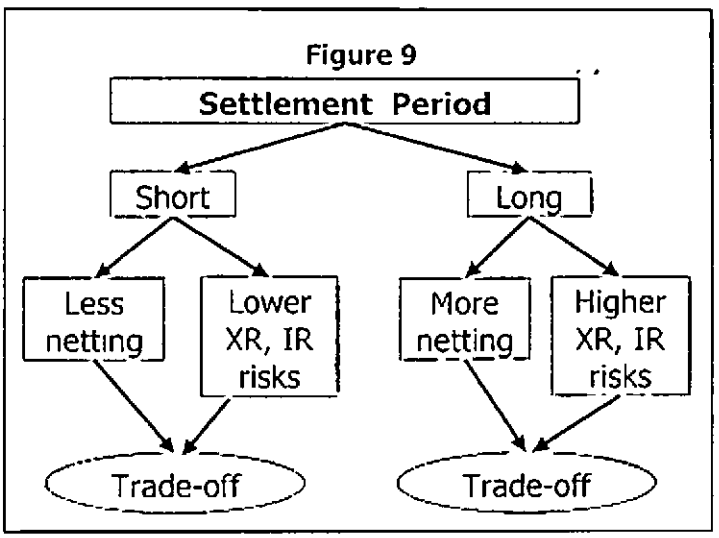


Figure 10

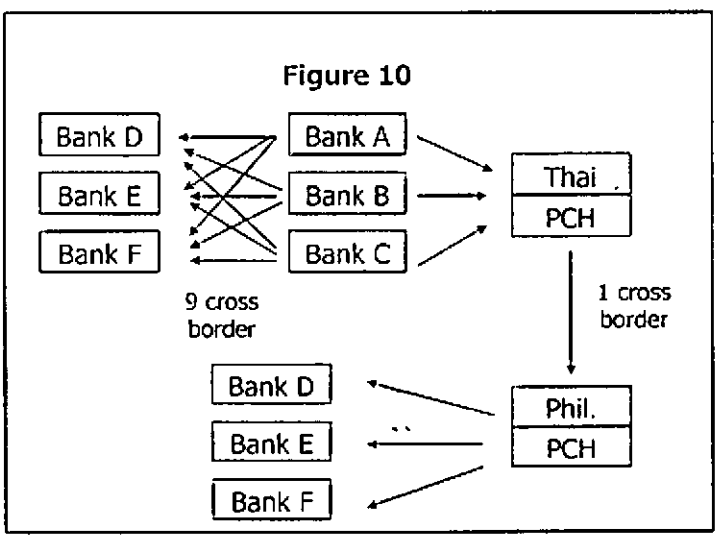


Figure 11

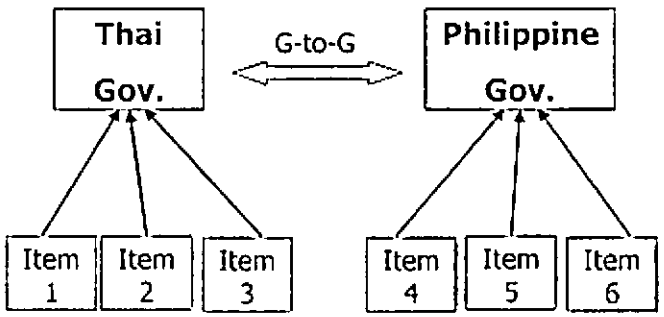
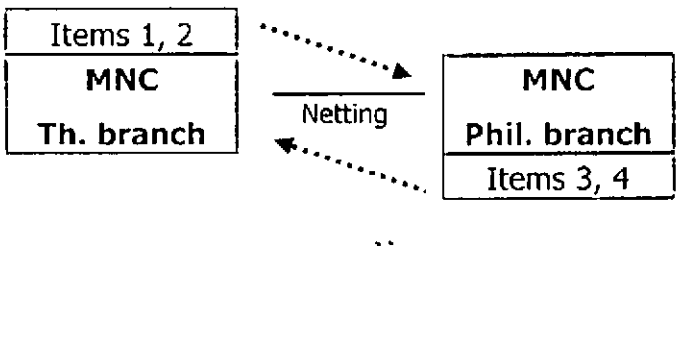


Figure 12



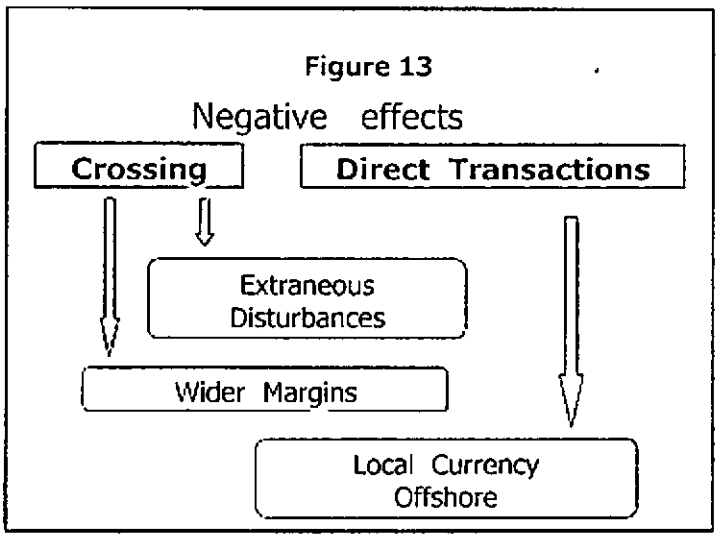


Figure 13
Negative effects
Crossing
Direct Transactions
Extraneous Disturbances
Wider Margins
Local Currency Offshore

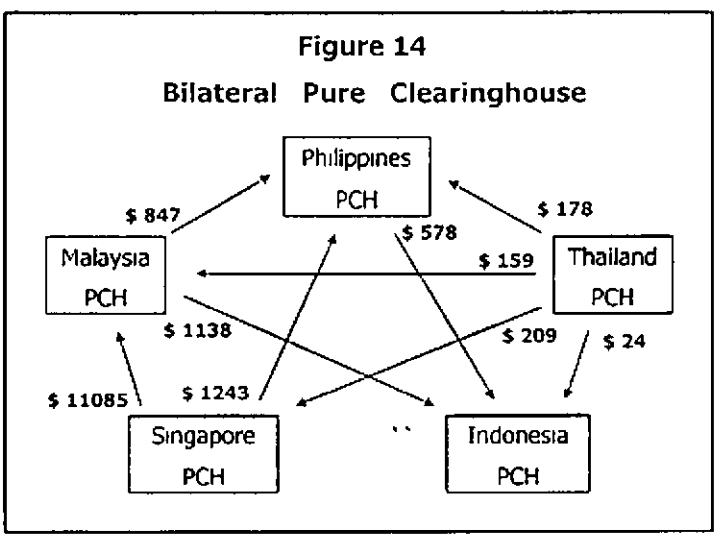
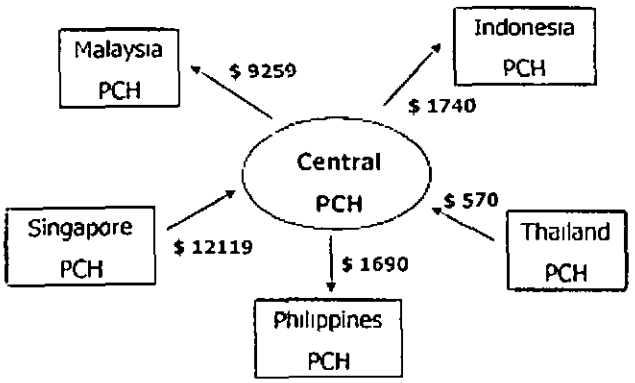


Figure 14
Bilateral Pure Clearinghouse
Philippines PCH
Malaysia PCH
Thailand PCH
Singapore PCH
Indonesia PCH
$ 847
$ 178
$ 578
$ 159
$ 1138
$ 209
$ 24
$ 11085
$ 1243

Figure 15

Multilateral Pure Clearinghouse



Annex 1
An Example of a Pure Clearinghouse

Details of the recommended pure clearinghouse (PCH) scheme are presented below. It will not only describe the working mechanism but also give a numerical example of PCH between Thailand and Indonesia

In this hypothetical case, no trade credit is present while other assumptions and figures are shown in Table 1. Chart 1 demonstrates a typical trade settlement ordinarily handled by commercial banks. Each scenario involves 2 days of trade transactions, thus allowing for possible appreciation or depreciation of baht in the second day On day 1, Thai export worth $80 and import worth $100 are processed through Thai bank A and Thai bank B respectively, resulting in total fund transfer of $180 in 2 cross-border transactions and a trade deficit of Thailand worth $20 Local Thai banks (A and B) are assumed to charge their clients (traders) 0 25% commission on transferred amounts as transaction cost As for the commission that their correspondent banks (Citibank and Chase) charge local banks, although actual charges are based upon the number of transactions and not the amounts involved, for the sake of simplicity these correspondent banks are hereby assumed to charge local banks 0 20% commission on cross-border transferred amounts A similar event is to occur on day 2 with total fund transfer of $90 in 2 cross-border transactions and a trade surplus of Thailand worth $10 Altogether, total fund transfers amount to $270 in 4 cross-border transactions with commission charges calculated in cases whereby the baht appreciates to 38 baht/US$ or depreciates to 42 baht/US$ in the second day (see Tables 2 and 3)

Under the PCH scheme, the PCH clears trade transactions within each country first and remits only the trade imbalance across country afterwards The duration of settlement by PCH can be either short or long as desired. In the case of daily settlement as displayed in Chart 2, PCH (Thai) sends $20 to PCH (Indo) on day 1 and receives $10 from PCH (Indo) on day 2 Altogether, total fund transfers amount to $30 in 2 cross-border transactions These are

far less than the ordinary settlement, resulting in saving of transaction costs Moreover, cross-border commission fee is expected to fall from 0 20% to 0 17% because PCH (Thailand) is a joint venture among several Thai commercial banks, so they can share the cost of aggregate PCH cross-border transactions Besides, PCH (Thailand) and PCH (Indonesia) could also cooperate upon cost sharing (Table 7) Consequently, the lower cross-border transaction fee (from 0 20% to 0 17%) enables commercial banks in each country to reduce their commission charged upon traders from 0 25% to 0 23% Overall, the PCH scheme helps curtail the transaction costs of both commercial banks and traders as shown in Tables 3, 5 and 6

Chart 3 shows the case whereby the duration of netting via PCH is lengthened to 2 days, as many may argue that total trade transactions between Thailand and Indonesia within 1 day may not be large enough to such an extent that netting will yield any benefit In the case of two-day settlement, the PCH scheme necessitates a buffer stock which cushions receipts from importers and payments to exports a day before the PCH settles the accumulated net balance Chart 3 and Table 2 represent the likely case that when the duration of PCH settlement is lengthened, the amount after netting is smaller So the PCH will not only remit less funds across border but also entail fewer cross-border transactions Therefore, transaction costs are lowered benefiting all parties involved However, longer duration of PCH settlement tends to require more buffer stock, especially in countries which enjoy continual trade surplus

At this point, it should also be mentioned the PCH generates macro benefits as well, since less foreign exchange will be needed to fund international trade transactions, thus buttressing the country's foreign exchange reserves which represent an essential ingredient to preserve stability in the flexible exchange rate system

The saving of transaction costs as a result of PCH will occur in both Thailand and Indonesia no matter how the baht exchange rate moves as shown in Tables 5 and 6 And the requirement of buffer stock (Table 4) will not create any difficulty because PCHs in different countries can cooperate

with one another in sharing excess liquidity (received from importers) with liquidity shortage (because of payments to exporters) Besides, since commercial banks are primary shareholders of PCH, they can easily support the buffer stock, or even resort to buffer stock as one channel of lending at the time of liquidity glut

The above hypothetical case is expected to demonstrate the benefits of PCH in both micro (pooling and netting foreign exchange positions of commercial banks before undertaking cross-country transactions, thus lowering transaction costs) and macro (reducing the need of foreign exchange for trade financing, thus strengthening the country's reserves) context In short, these gains from PCH are derived from pooling and reducting international financial transactions when conducting inter-country transactions The above model is also workable in the situation where international financial intermediaries charge a flat fee ($10-15) per transaction, instead of a percentage of the amounts involved as assumed above

Table 1

	Exchange rate		Thai		Indonesia	
	per U S $			US$		US$
Day 1	40	Baht	Exporter	80	Exporter	100
	10 000	Rupiah	Importer	100	Importer	-80
			Total fund transfer	180		180
			Net fund transfer	-20	Net	20
			Commission fees charged by			
			Thai banks	0 0025	Indo banks	0 0025
			Foreign banks	0 002	Foreign banks	0 002
	Exchange rate		Thai		Indonesia	
				US$		US$
Day 2						
Appreciate to	38	Baht	Exporter	50	Exporter	40
	10 000	Rupiah	Importer	-40	Importer	-50
			Total fund transfer	90		90
			Net fund transfer	10	Net	-10
Depreciate to	42	Baht				
	10 000	Rupiah				
				US$		US$
Day 1&2			Net	-10	Net	10
			Commission fees charged by			
			Thai banks	0 0023	Indo banks	0 0023
			PCH (Thai)	0 0017	PCH (Indo)	0 0017
			Inter PCH	0 00075		

Assumptions

1 No trade credit
2 Transaction volume between traders and local commercial banks is in net position
3 Each scenario involves 2 days of trade transactions one with baht appreciation in the second day the other with baht depreciation in the second day
4 Transaction cost between local commercial banks and traders is 0 25% of total transferred amount
5 Transaction cost between local commercial banks and foreign commercial banks abroad is 0 20% of total transferred amount
6 Under the PCH scheme transaction cost between local commercial banks and traders is reduced to 0 23% of total transferred amount
7 Transaction cost between PCH and local commercial banks is 0 17% of total transferred amount
8 Thai exporter deals with Thai bank A
9 Thai importer deals with Thai bank B
10 Indonesia exporter deals with Indo bank K
11 Indonesia importer deals with Indo bank L
12 Thai bank A and Indo bank L deal via CITI bank
13 Thai bank B and Indo bank K deal via Chase bank
14 Buffer stock is financed by PCH of each country
15 Inter-PCH transaction cost is 0 15% of total transferred amount equally shared by each country s PCH

Table 2: Total Fund Transfer

	Thailand						Indonesia					
	Ordinary Settlement		Settlement via PCH				Ordinary Settlement		Settlement via PCH			
			1-day		2-day				1-day		2-day	
	$	Baht	$	Baht	$	Baht	$	Rupiah	$	Rupiah	$	Rupiah
Baht appreciate	270	10,620	30	1,180	10	380	270	2,700,000	30	300,000	10	100,000
Baht depreciate	270	10,980	30	1,220	10	420	270	2,700,000	30	300,000	10	100,000

Table 3: Commission Charges Collected from Each Party in 2 days

(Thai in baht, Indo in rupiah)

	Thai Traders			Indo Traders			Thai bank A			Thai bank B			Indo bank K			Indo bank L		
	ordinary case	via PCH		ordinary case	via PCH		ordinary case	via PCH		ordinary case	via PCH		ordinary case	via PCH		ordinary case	via PCH	
		1-day	2-day		1-day	2-day		1-day	2-day		1-day	2-day		1-day	2-day		1-day	2-day
Baht appreciate	26.55	24.426	24.426	6,750	6,210	6,210	10.2	8.67	8.67	11.04	9.384	9.384	2,800	2,380	2,380	2,600	2,210	2,210
Baht depreciate	27.45	25.254	25.254	6,750	6,210	6,210	10.6	9.01	9.01	11.36	9.656	9.656	2,800	2,380	2,380	2,600	2,210	2,210

Table 4: Buffer Stock for 2-day Settlement via PCH

(Thai in baht, Indo in rupiah)

		Thailand			Indonesia		
		Inflows	Outflows	Net	Inflows	Outflows	Net
Baht appreciate	Day 1	4,000	3,200	800	800,000	1,000,000	-200,000
	Day 2	1,520	1,900	-380	500,000	400,000	100,000
	Total	5,520	5,100	420	1,300,000	1,400,000	-100,000
Baht depreciate	Day 1	4,000	3,200	800	800,000	1,000,000	-200,000
	Day 2	1,680	2,100	-420	500,000	400,000	100,000
	Total	5,680	5,300	380	1,300,000	1,400,000	-100,000

Table 5: Saving Derived from PCH (Thailand)

(baht)

Thailand	Appreciate			Depreciate		
	Commission fees		Saving	Commission fees		Saving
	Base	PCH		Base	PCH	
Traders	26.55	24.426	2.124	27.45	25.254	2.196
Thai Bank A	10.2	8.67	1.53	10.6	9.01	1.59
Thai Bank B	11.04	9.384	1.656	11.36	9.656	1.704

Table 6: Saving Derived from PCH (Indonesia)

(rupiah)

Indonesia	Appreciate			Depreciate		
	Commission fees		Saving	Commission fees		Saving
	Base	PCH		Base	PCH	
Traders	6,750	6,210	540	6,750	6,210	540
Indo Bank K	2,800	2,380	420	2,800	2,380	420
Indo Bank L	2,600	2,210	390	2,600	2,210	390

Table 7: Commission Charged upon Each PCH

Commission fees	PCH (T)		PCH (I)	
	1 day	2 days	1 day	2 days
Baht appreciate	0.885	0.285	225	75
Baht depreciate	0.915	0.315	225	75

Chart 1

Ordinary Settlement via Commercial Banks

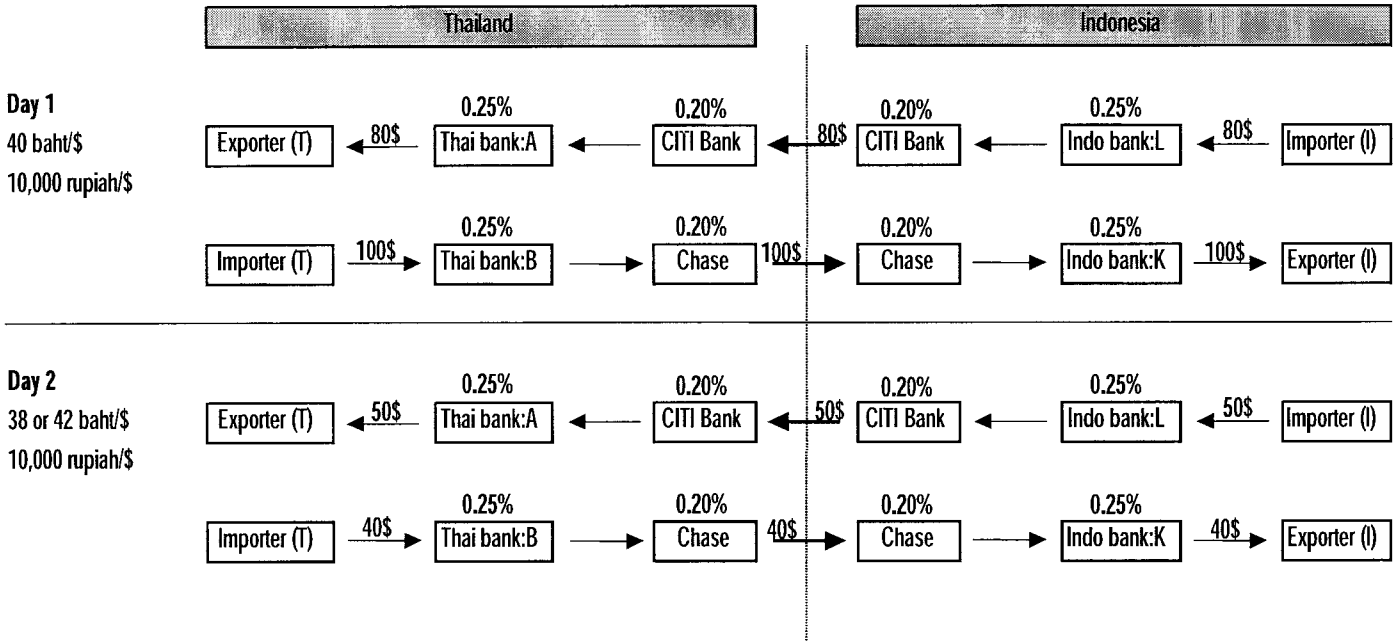


Chart 2

Daily Settlement via PCH

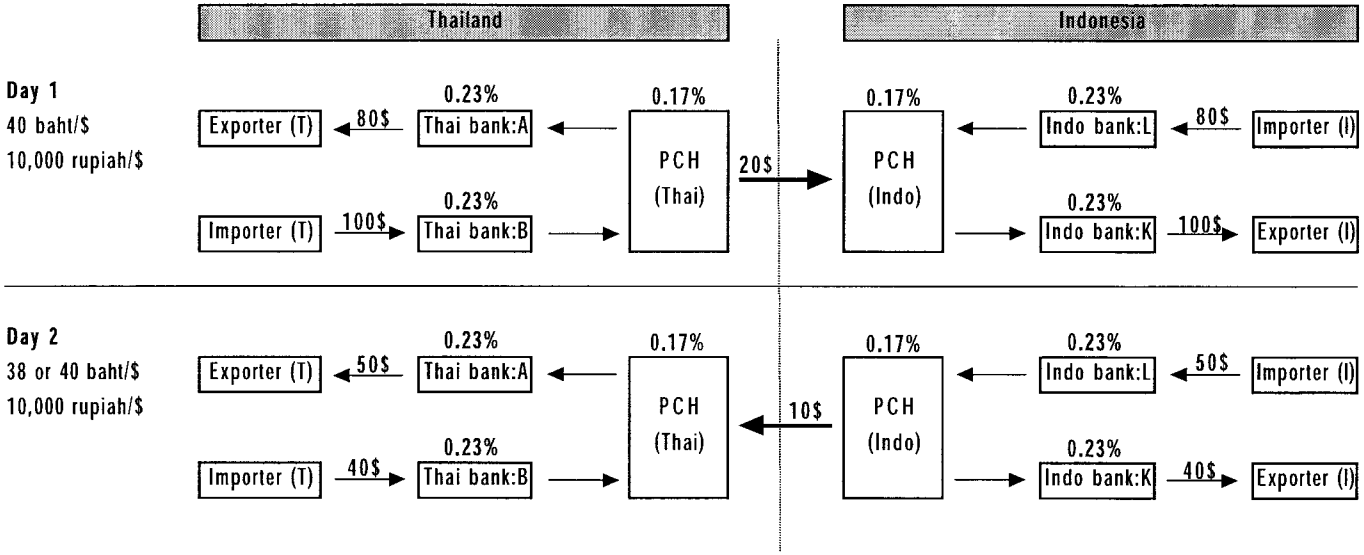
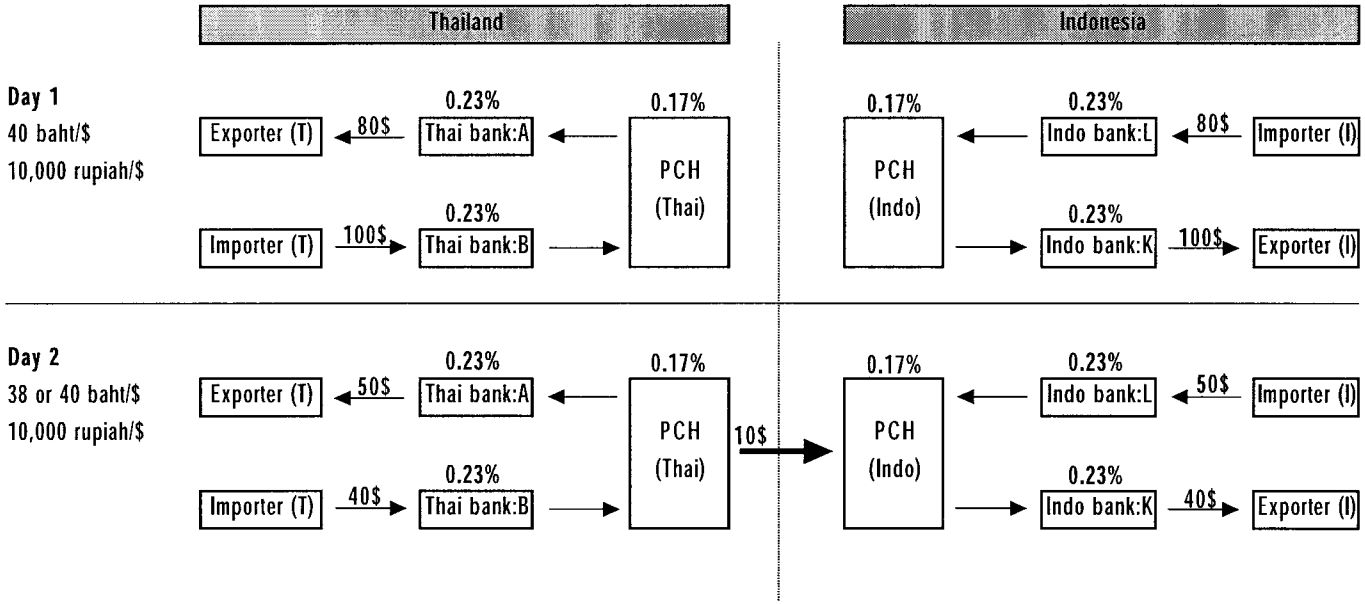


Chart 3

Two-day Settlement via PCH



Annex 2

Trade Balances Among ASEAN 5 Countries

		Partners					
	1997	Thailand	Malaysia	Indonesia	Philippines	Singapore	Sum
H	Thailand	0	74	-17	317	3667	4041
o	Malaysia	-74	0	-599	109	9521	8957
s	Indonesia	17	599	0	646	n.a.	1262
t	Philippines	-317	-109	-646	0	-304	-1376
s	Singapore	-3667	-9521	n.a.	304	0	-12884

		Partners					
	1998	Thailand	Malaysia	Indonesia	Philippines	Singapore	Sum
H	Thailand	0	61	-55	223	2466	2695
o	Malaysia	-61	0	-850	-403	7789	6475
s	Indonesia	55	850	0	593	n.a.	1498
t	Philippines	-223	403	-593	0	570	157
s	Singapore	-2466	-7789	n.a.	-570	0	-10825

		Partners					
	1999	Thailand	Malaysia	Indonesia	Philippines	Singapore	Sum
H	Thailand	0	-174	-164	9	1415	1086
o	Malaysia	174	0	-1151	-656	8127	6494
s	Indonesia	164	1151	0	650	n.a.	1965
t	Philippines	-9	656	-650	0	1194	1191
s	Singapore	-1415	-8127	n.a.	-1194	0	-10736

		Partners					
	2000	Thailand	Malaysia	Indonesia	Philippines	Singapore	Sum
H	Thailand	0	-159	-24	-178	-209	-570
o	Malaysia	159	0	-1138	-847	11085	9259
s	Indonesia	24	1138	0	578	n.a.	1740
t	Philippines	178	847	-578	0	1243	1690
s	Singapore	209	-11085	n.a.	-1243	0	-12119

Source: Direction of Trade 2000, IMF

Annex 3

Comments from the Workshop on "The Pure Clearinghouse (PCH) Scheme. Promoting the Use of ASEAN Currencies in Intra-regional Trade and Business Transactions" sponsored by UNDP and held in Bangkok, Thailand on 20-21 November 2001 Participants included central bankers, commercial bankers, exporters, importers, and representatives of chambers of commerce in ASEAN member countries

1 The financial sectors in different ASEAN countries have achieved different stages of development So the PCH scheme is unlikely to be applicable to all ASEAN countries. Its usage should be "tailor-made" in accordance with the prevailing status of each country's financial sector.

2 Central banks of different countries apparently play different roles. Therefore, the adoption of PCH should be "tailor-made" as well, depending upon the policy of each ASEAN member on the role of its central bank.

3 If exchange risks are to be handled easily and efficiently, the frequency of netting should be increased as much as possible In the first stage of PCH, one-day settlement period is the most attractive.

4 The establishment of PCH should be undertaken as a pilot project with ASEANSEC acting as a center and coordinating agency This PCH should be pursued by ASEAN-6 in a multi-track fashion which hinges upon each country's readiness Several parties in ASEAN (central banks commercial banks, chambers of commerce) have strong interest in setting up PCH because they can obtain various benefits from the netting process (e.g. cost reduction, more usable foreign exchange reserves). International financial organizations (IMF, IBRD, ADB) will have interest as well since they favor financial stability, especially with respect to exchange rates Useful advice should be tapped from foreign organizations' experts who have had long experience in dealing with similar clearinghouse to PCH such as CEDELBANK and Euroclear.

5. If the Bilateral Payment Arrangement (BPA) is compared with PCH, even though they may seem similar, the BPA have numerous shortcomings such as the following BPA involves steps of government

intervention and subsidy, e g specification of eligible items, credit guarantee, trade-financing credits extended by central banks, limit on the number of commercial banks which can participate, generating moral hazard upon commercial banks as well as traders.

6. PCH should take the following precautions.

(a) Time lag is definitely meaningful in international transfers of funds. So those transfers should not be carried out via New York accounts or offices. Instead, they should be completed in one or the same day in ASEAN countries And the Central PCH office of multilateral interaction and settlement must be located only in the ASEAN area.

(b) Some multinational commercial banks have already undertaken internal netting within themselves.

(c) If some shareholders of pure clearinghouses are traders (exporters or importers), some conflict of interests may emerge because on one hand, traders ordinarily wish the PCH to maximize netting so as to achieve cost reduction On the other hand, traders as PCH shareholders may also desire to maximize their profits from more commission charges which mean less netting or more frequent transactions So organizers of the PCH system should be careful about who will be proper major shareholders of PCH.