ASIAN MONEY: In Theoretical Considerations

Aimy Md.Yusof & M.Azali, Phd.

Abstract

The 1997 Asian Financial Crisis has left most Asian countries with much damage. Businesses collapsed and public confidence shattered. Asians staggered to rebuild their economies, hoping to make a comeback into the international competitive market. Several measures, some of which are extreme, have been applied in desperate attempt to revive the economy. Capital control, IMF funding, major corporate restructuring and business mergers has since helped to somewhat stabilize domestic financial markets hence providing much needed support for our Asian currencies. Many are afraid that Asia might fail to heed future warnings and thus relented to another similar fate. The 1997 crisis hit most as a costly surprise. Dreadfully, the recent temporary drawback puts pressure on safeguarding the economy against possible reoccurrence in the future. Of late, economists and policy makers are contemplating the idea of adopting **a single currency area** in Asia, much like having a Euro for the European Union (EU). By having a common currency to represent all, transactions can be expanded at a lesser cost. Also by being members of a union, Asian countries will have the opportunity to utilize shared resources and technologies towards building back the once strong Asian connection. Talks of creating our very own "Asian money" calls for further examination of the integration level between Asian countries. This paper discusses theoretical issues pertaining to forming a single currency area and looks at the readiness of the Asian economies to unite as a monetary union. Steps of forming a union are presented along with interesting arguments of its advantages and disadvantages. Among others, a region must first establish a free trade zone in which an effective common market can operate. Only then, a decision can be made in order to pursue with setting up own central bank and finally implementing a common currency. Countries also need to address certain issues of

independency in which individual members will lose control over some policy instruments. Policy design will take a new form of accommodating all members with a main objective of serving the interest of the whole community instead of an individual country. As barriers abolished to promote domestic utilization within the Asian borders, separate restrictions might be needed to guard regional economy in competing with other giants in the world market. Of course, the "Asian money" will require all the support from member countries to go strong against the US Dollar and the new Euro. This paper looks at a 12-year span of economic performance by selected Asian countries to try to establish a general guideline to the level of integration currently exist in the region. Several convergence criteria previously used upon signing up memberships for the EU are applied to recent data to see whether Asia is ready for a single currency. Results show that there is support of these economies to move together over the years and have experienced similar shocks throughout. Unfortunately, according to the Maastricht Convergence Criteria, we have not satisfied the specific convergence criteria required to form a monetary union just yet. Thus, we may still need to wait a little while longer before the "Asian money" can materialize.

Aimy Md Yusof
Post-Graduate Student,
Master Science (Economics)
Universiti Putra Malaysia, MALAYSIA.
Mailing address: 35, Jalan Meranti 1, Taman Impian Ehsan, 43300 Balakong, Selangor. MALAYSIA.
E-mail address: aimyyusof@yahoo.com
Phone no.: +(603)-89622590

M. Azali, PhD
Lecturer,
Department of Economics,
Faculty of Economics and Management,
Universiti Putra Malaysia, MALAYSIA.
Mailing Address:
M. Azali, PhD
Department of Economics,
Faculty of Economics and Management,
Universiti Putra Malaysia,
43400 UPM Serdang, Selangor, Malaysia.
Voice: +(603)-89467626 Fax: +(603)-86566175
http://www.econ.upm.edu.my/~azali

1. Intoduction

In the excitement over the success of European countries establishing the European Union (EU) and since the glamorous introduction of its very own Euro money, heads are now turning towards Asia in expecting a similar action to emerge in the near future. Many regard Asia as a likely candidate for a new economic and monetary integration. Over the past millennium, Asians have come forth in making history be it in war or peace. Economically, Asian giants such as China, Japan, Singapore and Hong Kong continue surprising the world with their competitiveness in the world market. Recent decades have seen smaller economies such as Malaysia, Thailand, Indonesia, the Philippines, and even Vietnam have developed so much in hope to provide better offer for the rest of the world to come and do business with them. However, since our currencies came down under the late 1990s speculative attacks and later succumbed following the worst financial crisis Asia has ever experienced, policy makers are scrambling to their feet to find resolutions that may prevent such disaster in the future.

Among others, the idea of having an economic and monetary union (EMU) seems like a very good idea to help protect Asia. Having an economic block of our own, Asia may face the world competition with better confidence. To uphold such identity and taking the cue from the newly created Euro, it is prudent that we have a common currency of our own to further fortify the union. Nonetheless, forming such union and common currency is more complicated than it seems. This paper thus offers some of the theoretical issues imperative to keep in view as we work towards realizing a

common currency in Asia. Recent data will later provide the present readiness of selected Asian economies in joining a union if one should exist.

1. Forming A Monetary Union

Basically, an EMU requires the merging of national monetary authorities between a group of countries that use the same money. It is a process that involves two major steps; through interlocking their exchange rates and merging their monetary polices. In addition to policy integration, having a common currency is no doubt a welcome advantage to add credibility to the EMU and to secure economic benefits against other financial and trading blocks.

Theoretically, an economic union should offer no formal barriers to trading or making payments between member countries, no formal restrictions to movements of labour and capital across national borders, and, a harmonised and centralised economic policies for all countries. A monetary union requires a single market in goods and services, in which buyers and sellers within the union have less restriction to participate in economic activities and have the opportunity to share common grounds in technological developments. Skilful labours are free to seek higher wage and benefits within the region, encouraging healthy competition in acquiring working knowledge and skill. On the other hand, less developed countries are welcomed to learn from highly advanced members of the union to help push production at par and consequently support the region in international market. Last but not least, the increasing mobility of capital, especially the financial capital, between members will definitely provide stronger economic support at a much larger scale. Once the policies

are integrated, measures can be taken to protect regional businesses hence providing much needed security if we are to compete with others in the global market.

Politically, a union stands to promote integration and stability within the region. Being different in political backgrounds as our Asian countries are, the objective of making a monetary union work for the sake of overall economic growth could be what we need to pull everyone together and start focusing on achieving a political stability as a region, rather than as an individual country. By far, political relationships between Asian country leaders have been most nurturing and supportive of one another. Strong political links provide strong economic links that will result in a much stronger collective security. Many agreements and constructive economic collaborations have been achieved and such cooperation is vital as a foundation to form a monetary union. Most important, money can also act as a symbol of political unity for Asia once a single currency is adopted in the region.

Economic Gains and Losses

An EMU integrated policy system requires a centralised financial support system, namely, its very own central bank, to oversee monetary regulations. An EMU also needs a common currency to serve as a medium of transaction between member countries with one another and also with the rest of the world. Economic benefits from having an EMU thus include savings in transaction costs from removing the need to convert currencies in transactions within Asian member countries and also in transactions involving foreign economies with any one of us. Savings also include minor search costs of acquiring price information that has been normally quoted only

in respective currencies. And once the financial system in Asia is fully integrated then procedures will be much less complicated enhancing efficiency and convenience of doing business. Also, by offering a new currency to replace the use of several different currencies, we eliminate exchange rate uncertainty in cross-border trade and investment. We may be able to avoid unpredictable longer-period fluctuations that can destroy the profitability of investment in export facilities or foreign manufacturing operations. If common currency proves to be strong enough against the majestic US dollar and Euro, then it will be more widely held abroad than the currencies it replaced. Also, Asian securities dominated in the new currency will be more attractive in the eyes of foreign investors hence bringing in more capital for Asian businesses. This shift in international portfolio holdings in favour of single-currency assets will help show the signs of returning confidence by the international community towards the Asian economies.

Nonetheless, in committing to having an EMU, Asian countries need to be prepared to make major adjustments that will incur costs that are not minimal. The expense and dislocation in replacing national currencies by the new money involves, among others, currency production and currency distribution by a newly appointed central bank. In addition, existing national banks need to realign their operating systems to accommodate a dual-currency in the earlier phase of transformation. Later, they need to cooperate in creating a system mutually serving all member and non-member countries once the single currency is in full force of its implementation. Vast changes are to be expected in information and accounting systems for local and foreign banking institutions alike. For example, billions of Euros were expected in costs to finance the conversion processes in the EU banking sectors alone following its

adoption of single currency. These costs will definitely be much higher if we include similar coordination changes for all other institutions that have any connection at all with the financial sectors. There are the stockbroking, unit trusts, and asset management companies with their comprehensive documentation system. There are also business retailers with their extensive price lists. But economists strongly believe that these transformation costs are mostly a one-time expense and will be outweighed by all the savings to be gained from greater efficiency as the economy carries on with higher volume of trade and transactions. And for everyday individuals, the transformation will only cost them more in the nature of certain mental efforts and psychological conversion.

En route to EMU

As welcomed as the idea of a single currency is, there are five stages to begin with should Asian countries decide to pursue the route to forming an EMU.

5 STAGES OF INTEGRATION

Stage 1.	Free Trade Area (FTA)
Stage 2.	Customs Union (CU) = FTA + Common External Tariff (CET)
Stage 3.	Common Market (CM) = CU – NTBs + factor mobility
Stage 4.	Economic Integration (EI) = CM + fixed exchange rates + macroeconomic policy coordination
Stage 5.	Economic + Monetary Union (EMU) = EI + **single currency** and central bank + unified economic policy

Looking back at the design of the EU, few guidelines are offered for other regions should they choose to have an EMU of their own. To transform a region into one economically and monetarily integrated community, Vickerman (1992) highlighted five stages required by the EU which are the Free Trade Area (FTA), the Customs Union (CU), the Common Market (CM), the Economic Integration (EI), and finally the Economic and Monetary Union (EMU).[1]

The FTA begins with eliminating trade barriers between member countries in hope to boost domestic economy and to provide a platform of technological sharing hence encouraging regional production growth. Next, the CU involves forming a protective common tariff to protect regional business in competing in the international market, providing security in trade. Thirdly, the CM eliminates non-tariff barriers (NTBs) and offers a wider acceptance of factor mobility between members through establishing a common market within the region. Fourthly, member countries should agree upon a fixed exchange rate regime and come by an integrated and coordinated macroeconomic policies that serve everybody's interest. Finally, after having coordinated their policies and exchange rates, the last step is to join all member countries together with a common currency. This final step of introducing a new currency however requires the powerful weight of a central bank that will produce, distribute, and monitor its implementation. The central bank will also be the one that give instructions to national central banks and approve, suspend, annul or defer their individual decisions.

A Central Bank For All

[1] Vickerman, R.W. (1992) "The Single European Market: Prospects For Economic Integration", St.Martin's Press, New York.

A common monetary policy is best made possible with the establishment of a community central bank to act on behalf and decide for individual national central banks in a union. Bergeijk (2000) believes that extensive convergence of economic policies is vital in achieving the objectives of a single currency.[2] The commitment from member countries at this stage is most important in helping the central bank to utilise economic policies and realise their full benefits. Member countries of the EMU have to make sure that no national government can influence its individual central bank's decision-making as well as its compliance to decisions made by the community central bank.

In another review, Arbuthnott (1979) proposed that a community central bank can also be the centre of the community federal reserve system, offering a strong monetary platform for developing economies in the region.[3] The central bank can help sort out policy issues such as those involving money credit and interest rates, as a highly coordinated policies are much needed to ensure the success of an EMU. Other policy issues that Arbuthnott found to be important concern fiscal budgetary and income policies, as well as short-term and medium-term planning policies. And finally, member countries can also benefit through an international reserve currency and the community central bank's supportive policies to help overcome the problems of Balance of Payments disequilibria, inflation, and unemployment. Of course, without a central bank, a common currency for the EMU would be impossible.

2. Forming a Common Currency

[2] Bergeijk, P.A.G., Berndsen, R.J. & Jansen W.J. (2000) "The Economics of The Euro Area", Edward Ulgar Publishing Ltd., Cheltenham, UK.
[3] Arbuthnott, H. & Edwards, G. (1979) "A Common Man's Guide To The Common Market: The European Community", Mac Millan, London.

Clearly now a common currency has much benefits in store for an EMU. Nonetheless, we still need to understand the theory behind this perfect symbol of a successful monetary union. Over the years, economists like Robert Mundell have made the effort to build the foundation for a single currency area. Mundell proposed in his renowned **Theory of Optimum Currency Area** in 1961 that a common currency is the best opportunity to pull several countries together in a union with a fixed exchange rate.[4] Mundell believes that exchange rate flexibility is unrealistic and ineffective in small open currency areas especially when the countries involved are a long shot of being independently strong against fierce international market competition. When a group of countries agree to join an EMU, they must have agreed to all the union properties including a free trade area within the zone, a common market shared by members, a free flow of capital across national borders and extensive economic cooperation in a harmonised environment of policy coordination. Then, there is the community central bank to represent all national central banks in overseeing all operations and to offer a single currency to represent all previous national monies.

Moreover, by agreeing to have a common currency, EMU members stand to benefit from smoother inter-regional adjustment of the current account to capital flows and a well-coordinated community monetary system can protect and support the weak economies and bring them up to date with stronger member countries. In addition, a fixed exchange rate system can serve as the most effective barrier against inflation by eliminating pressure of exchange rate targeting policies and the union can remain insulated from internal and external disturbance through unified macroeconomic polices and budget discipline. Gaining a regionally low inflation rate gives an EMU an upper hand in establishing international competition and improves

[4] Mundell, Robert, A., "Optimum Currency Areas", presented at the Conference on Optimum Currency Areas, Tel-Aviv University, December 5, 1997.

its terms of trade hence making way for wider economic expansion. Based on the assumptions of new classical economics, Dornbusch (1989) provides supportive argument that inflation differential between joining members will be corrected as high inflation countries will disinflate towards the agreed low inflation equilibrium as per required by the union.

Fixed Exchange Rate

A fixed exchange regime is especially valued for in an EMU as it can shield the region from negative effects of the previous flexible exchange rates. Noted that by having a flexible exchange rate, uncertainty is inevitable in international trading and investment, as it has a tendency to fluctuate in a more volatile manner. Traders then tend to stick to local markets alone rather than venturing into international markets thus limiting their chance of profits. But if we have a common currency that is stronger and more stable, not only that members can participate more in international markets with greater confidence, but also foreign investors are more likely to be interested to invest in our local markets. Secondly, flexible exchange rates tend to cause destabilizing speculation. Our national currencies are more vulnerable to speculations individually compared to having only one common currency that is backed by all. Thirdly, flexible rates can be ineffective in small open economies since the effects of a depreciation or devaluation between wages and currency tend to offset one another. Changes in exchange rates do not have much effect if wages increase in proportion of the decrease in the currency value. Thus a fixed exchange rate regime suits better for our group of small economies. Fourthly, flexible rates are inflationary by nature, as depreciations increase prices of traded goods but appreciations do not contribute parallel price reductions. Flexible rates also tend to be relatively unstable

due to small trade elasticities. Such cases include in which an increase in values of imports following currency depreciation is greater than the decrease in the quantity of imports. This unwelcoming result may cause more damage when depreciation causes further depreciation over the years. Finally, there is the threat of structural unemployment with flexible rates as production halt following the increasing cost of local exports.

Rewards versus Trade Offs

Rewards of joining an optimum currency area seems feasible for small countries that may need extra help and support in improving their economies especially since our last experience in the 1997 Asian Financial Crisis. Some other reasons by which a country may want to join in having a common currency include:

- To gain a regionally low inflation rate
- To eliminate the cost of maintaining a separate national currency
- To reduce the transaction costs from dealing in multiple currencies
- To shield the exchange rate from internal and external shocks
- To solve inter-country shifts of demand through regional factor mobility through collective macroeconomic policies
- To establish an automatic mechanism that helps enforce monetary and fiscal discipline
- To strengthen competitive ability and improve terms of trade

Nonetheless, the trade-offs are not to be taken lightly either. Countries that agree to join the EMU and accept the new currency may wish to consider the following issues:

- The inability to use individual exchange rate policy as a tool of employment policy and attract labour from neighbouring countries
- The inability to continue generating monetary expansion through exchange rate targeting to finance its government spending
- The inability to avoid sacrificing seigniorage from the use of its own money especially for a large country
- The inability to protect its economy from poorer and less economically and especially politically stable partner countries

Perhaps the most controversial challenge to accepting this new currency and the new community central bank is the giving up of a country's independent monetary policies. However, Mundell (1999) believes that the loss of a country's central bank and monetary independence may be less than expected and will be much compensated by all the economic benefits derived from having a single currency in the area. But first, in order to secure these benefits, a country must first pass the test of convergence criteria that examines its compatibility in joining a monetary union.

3. Convergence Criteria

For the purpose of setting a standard entry requirement for the European countries to join the EU, the committee had derived a set of convergence criteria to be fulfilled by interested parties. After intensive negotiation, European leaders have finally agreed upon the Treaty on European Union at Maastricht, in December 1991.[5]

[5] Pitchford, R. & Cox, A. (1997) "EMU Explained: Markets and Monetary Union", Kogan Page, England.

The Maastricht Treaty is an agreement that established the EU and bestowed EU citizenship on every national of its member states, provided for the introduction of a central banking system and a common currency, and committed the member states to work toward a common foreign and security policy. Signed in 1991, it was ratified and took effect in 1993. The treaty stresses that candidate countries need to fulfil these convergence criteria in order to be considered eligible of joining the EMU. These criteria are selected, as a guideline to evaluate previous economic performance of candidate countries as well as to justify the sustainability of the economic stability within the union should a particular country be included. The selected criteria are as follows:

THE MAASTRICHT TREATY CONVERGENCE CRITERIA

1. Inflation rate should not be 1.5% higher than the average of the 3 lowest inflation rate in the community;
2. Long-term interest rate should not be 2% higher than the average observed in the 3 low-inflation countries;
3. Country should not experience a devaluation during the 2 years prior to entry
4. Government budget deficit should not be 3% higher of its GDP
5. Government debt should not exceed 60% of its GDP

The first criterion secures the goal of price stability for the EMU. An average of consumer price inflation during the year before examination should not exceed by more than one and a half percentage points that of the three best performing member states. The second criterion specifies that average nominal long-term interest rate must be within two percent of the average rate in the three countries with the lowest inflation rates. Interest rates shall be measured on the basis of long-term government bonds or comparable securities. The third criterion concerns the exchange rate stability, in which for at least two years the country concerned should have kept within the 'normal' fluctuation margins provided for the European Exchange Rate Mechanism (ERM) without demonstrating severe tensions at least during the last two years before examination. The fourth criterion gauges a country's budget deficit and requires that the annual government deficit must not exceed three percent of total GDP. Finally, the last criterion checks upon the total government debt of the country with a requirement of its total outstanding government debt must not exceed 60% of GDP.

In another study by Bergeijk (2000), the convergence criteria required in order to join a monetary union are summarized into four major categories;[6]

The Inflation Criterion

This criterion aims to find a sustainable convergence of inflation rates between member countries that will allow the community central bank to pursue effective monetary policies for the EMU. The effectiveness of these policies is argued to be vulnerable to the differentials between member countries' individual inflation rate.

[6] Bergeijk, P.A.G., Berndsen, R.J. & Jansen W.J. (2000) "The Economics of The Euro Area", Edward Ulgar Publishing Ltd., Cheltenham, UK.

High inflation country may regard the ‘uniform’ rate of the union to be too low hence feared to be ineffective to combat inflation.

The Low Level of Long-term Interest Rates Criterion

The second criterion aims to find an interest rate convergence between countries to provide a fair financial market perception that promotes integration in the monetary union. However, higher level of interest rates may be a sign of the success of individual country’s existing policy measures.

The Budgetary Position Criterion

This criterion offers a protective measurement that recognizes plausible danger in admitting a country with excessive deficit into a union. Excessive deficits may stimulate inflation that jeopardizes the goal of price stability of the monetary union and drives the interest rates up hence upsetting the low interest rate target.

The Exchange Rate Criterion

Finally, this last criterion calls for a closer inspection of the deviations and trends of national currencies, to determine potential compliance with the proposed common currency. Aspects such as similarity in trends between national currencies of member countries may suggest better conformity should they be replaced with one common currency. The previous performance of national currencies also provides potential support of the union’s exchange rate stability objective.

4. A Common Currency In Asia

Now let us examine the position of our Asian economies today, whether we are ready for a common currency of our own. Have we achieved the 'sustainable' economic convergence? Have we fulfilled the convergence criteria and passed to form a monetary union? For the purpose of this study, seven Asian countries have been selected to represent the region. The seven selected countries are Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand, and Singapore. These countries were badly hit by the 1997 financial crisis and are now on their route to recovery. According to recent statistics reported by the United Nations Economic and Social Commission For Asia And The Pacific (ESCAP), the total Gross Domestic Product (GDP) for all seven countries have reached US$ 5.74 trillion in a market serving 0.5 billion people in the year 2000 alone.[7] This amount has increased substantially from US$ 5.48 trillion in 1999 and US$4.71 trillion in 1998.

Table 1: Selected Macroeconomic Indicators For The Year 2000

	Population (million)	GDP per capita (US Dollars)	GDP total (billion US$)	Exports (billion US$)	Imports (billion US$)
Indonesia	210.5	728	153.2	62.1	33.5
Japan	126.9	37429	4750.9	479.2	379.5
Korea	47.3	9675	457.6	172.3	160.5
Malaysia	23.3	3853	89.7	98.1	82.2
Philippines	76.5	977	74.7	39.8	33.8
Singapore	4.0	22962	92.3	138.0	134.7
Thailand	61.8	1978	122.2	69.1	61.9
TOTAL	550.28	77602	5740.6	1058.6	886.1

Source: http://www.unescap.org.

[7] Source: Statistics Division, United Nations Economic and Social Commission For Asia and The Pacific (ESCAP)

With the external trade data showing that no less than US$ 1.05 billion worth of goods were being exported out and US$ 0.8 billion more being imported into the region, consider the great savings in transaction costs can be gained if the market is to operate using one single currency. Moreover, the most popular destination and origin of trade recorded for the year 2000 for these countries was between themselves and the U.S., presented here in Table 2.

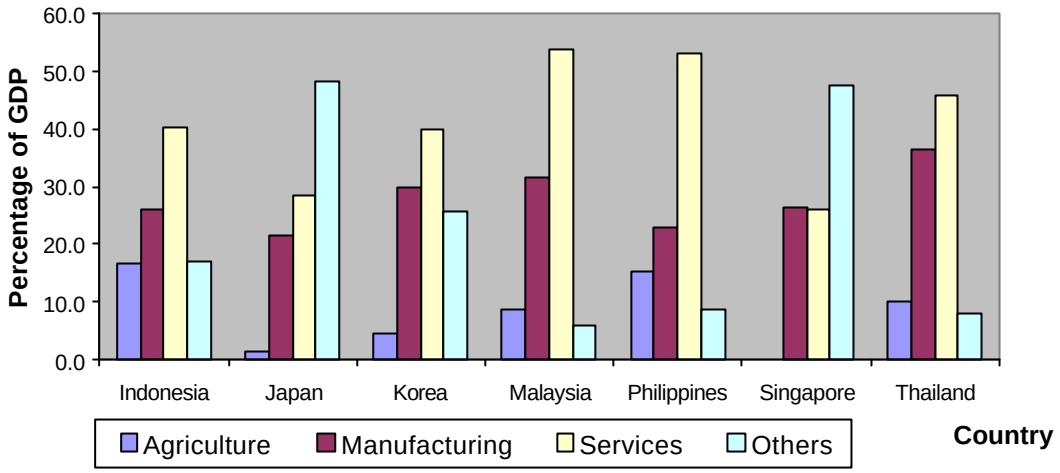
Table 2. Directions of Trade For The Year 2000 (shown as percentage of GDP)

	Exports	**Imports**
Indonesia	Japan 23.4%, U.S. 13.8%	Japan 16.3%, Singapore 11.4%
Japan	U.S. 29.7%, Korea 6.4%	U.S. 19%, Korea 5.4%
Korea	U.S. 20.7 %, Japan 11%	Japan 18.9 %, U.S. 15.9%
Malaysia	U.S. 20.2%, Singapore 16.9%	Japan 19.2 %, U.S. 16.0%
Philippines	U.S. 28.7%, Japan 14.1%	Japan 19.2%, U.S. 15.5%
Singapore	Malaysia 18.2%, U.S. 17.3%	Japan 17.2%, Malaysia 17.0%
Thailand	U.S. 21.2%, Japan 14.8%	Japan 23.7%, U.S. 10.7%

Source: EIU Country Report.

Of course, by relying on Asian neighbours as trade partners and potential competitors, Asian economies may need to recognize that having similar production structure is a bonus. As forming a monetary union will promote factor mobility across national borders, it is thus important to establish that our Asian economies possess similar production structure between one another. Figure 1 shows that although the manufacturing sector used to dominate the production in most countries, but the service sector has become more popular of late. Similarly, more countries have diversified their production to include other industries such as transport and communications in Japan and Singapore, tourism industries in Korea, as well as electricity, gas and water supply in Malaysia and Indonesia.

Figure 1. Production Structure Of Asian Economies - 2000

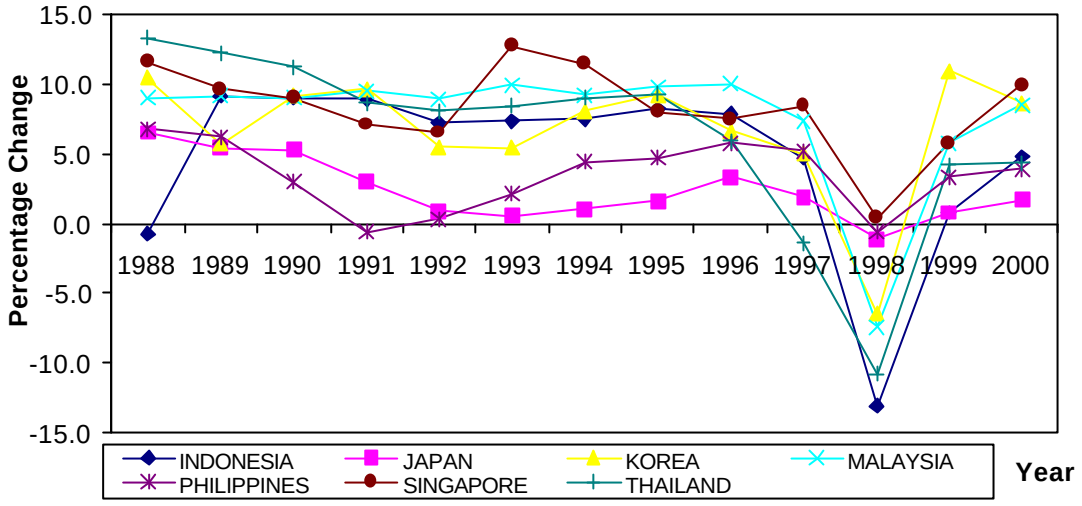


Source: EIU Country Report

Evidence of Convergence In Asian Countries

How far or how close have Asian countries converge with one another? Let us take a closer look at the trends of these macroeconomic indicators of the seven selected countries over a 12-year period. Data presented in Figure 1 seems to show that GDP growth of these countries possess a similar trend of movement since 1988, capturing parallel shocks throughout the period. This is especially observable during the time in which the Asian economies suffered from the financial crisis in the late 1990s. Japan and Singapore seemed to absorb the shocks better than the smaller economies and had managed to keep their growth rate within reasonable margin during the ordeal. Korea, on the other hand, marked the highest rebound from the crisis recovering from a – 6.5 percent growth in 1998 to a huge 10.9 percent growth in 1999. Meanwhile, other countries were satisfied to have slight recuperation while maintaining a positive growth rate after the crisis.

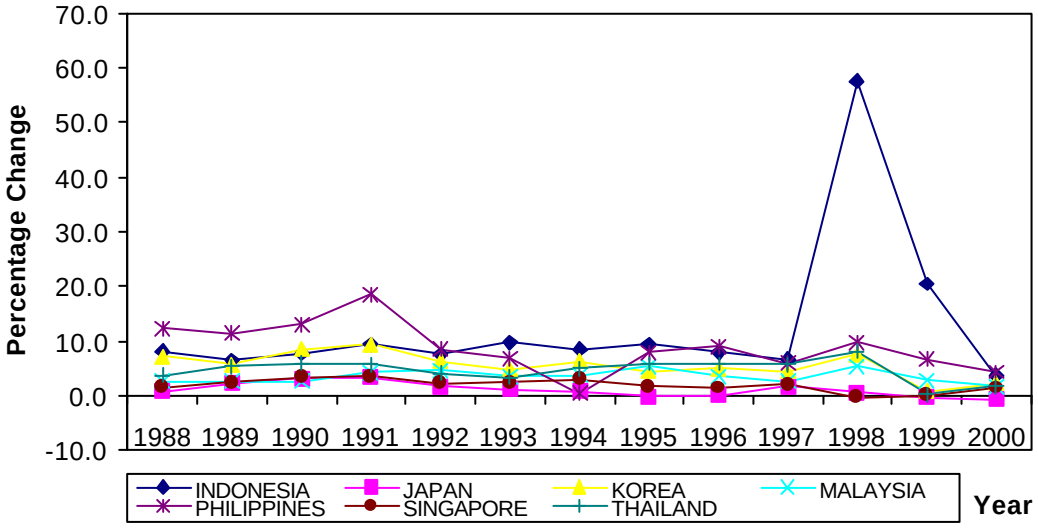
Figure 2. Real GDP Growth Rate 1988-2000



Source: International Economic Trends, Federal Reserve Bank of St. Louis

Figure 3 provides the overview of the inflation rate in these Asian countries for the past twelve years and not only they demonstrate remarkable order of keeping the value low, but once again they seem to move in tandem with one another. All except Indonesia have shown some degree of control in price fluctuations and managed to confine the inflation rate to a single digit value. This may suggest that these countries may be able to follow and support the price stability objective of a monetary union.

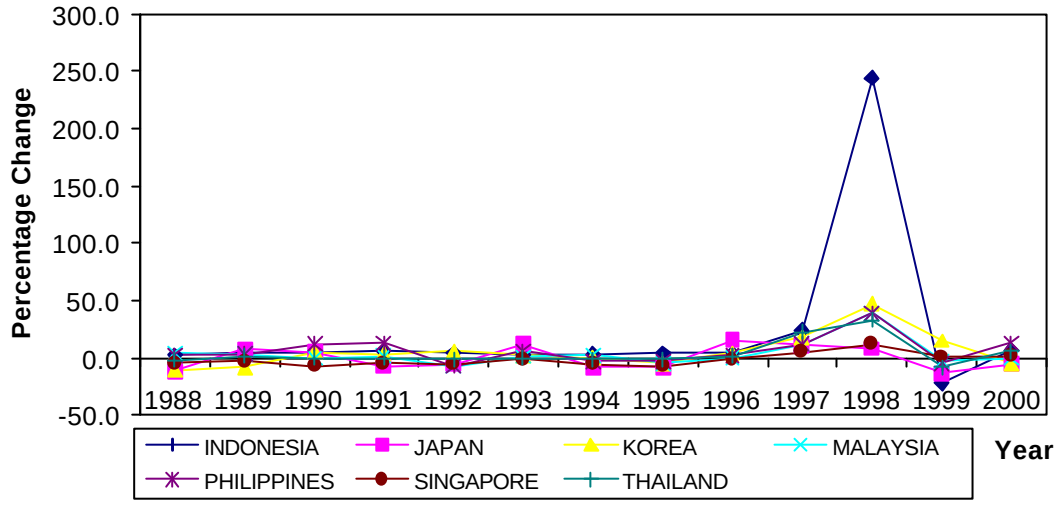
Figure 3. Inflation Rates 1998-2000



Source: International Economic Trends, Federal Reserve Bank of St. Louis

Another important criterion in assessing economic convergence is the fluctuation of the individual currency. In order to join a monetary union and hence to adopt a common currency for the region, individual currencies need to establish certain degree of compatibility and compliance. As we can see from Figure 4, Asian currencies surprisingly held a fairly moderate fluctuation between them during the 12-year period except Indonesia, which had an alarming spike following the crisis.

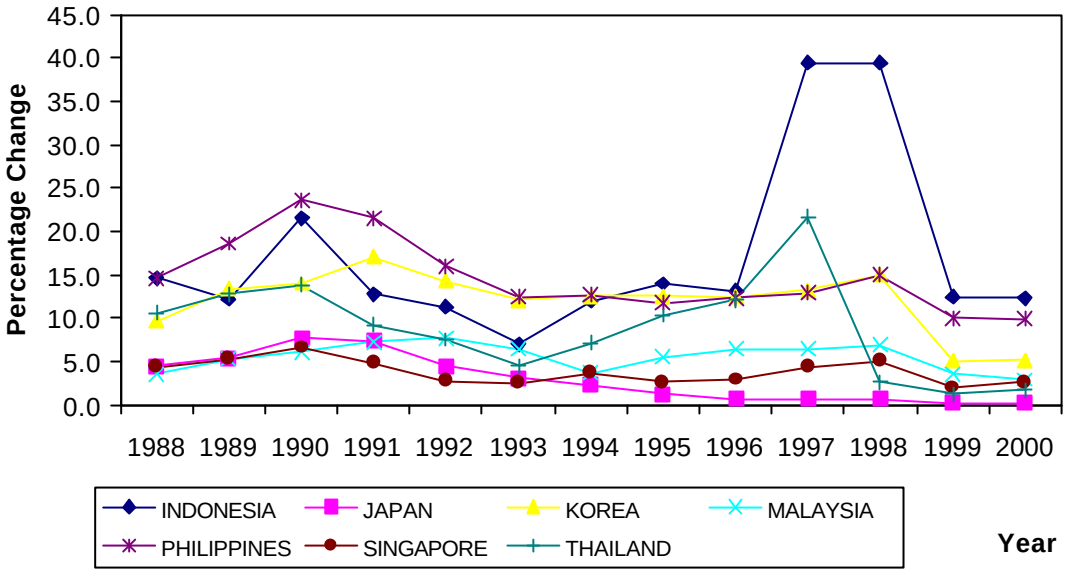
Figure 4. Exchange Rates 1988-2000



Source: International Economic Trends, Federal Reserve Bank of St. Louis

Besides exchange rates, a monetary union will require member countries to align with corresponding interest rate policies, monitored by the community central bank. Unfortunately, data on long-term interest rate are quite hard to come by hence short-term interest rates are being used in this study instead. Nonetheless, this data has served to capture some convergence trait that the Asian countries have had during the period of study. Once again, Indonesia has demonstrated the exceptionally highest percentage change during the crisis with an increase in its interest rate by as much as 39 percent for two consecutive years. Meanwhile, Japan proudly held an average on only 2.9 percent change over the years especially towards the end of the period.

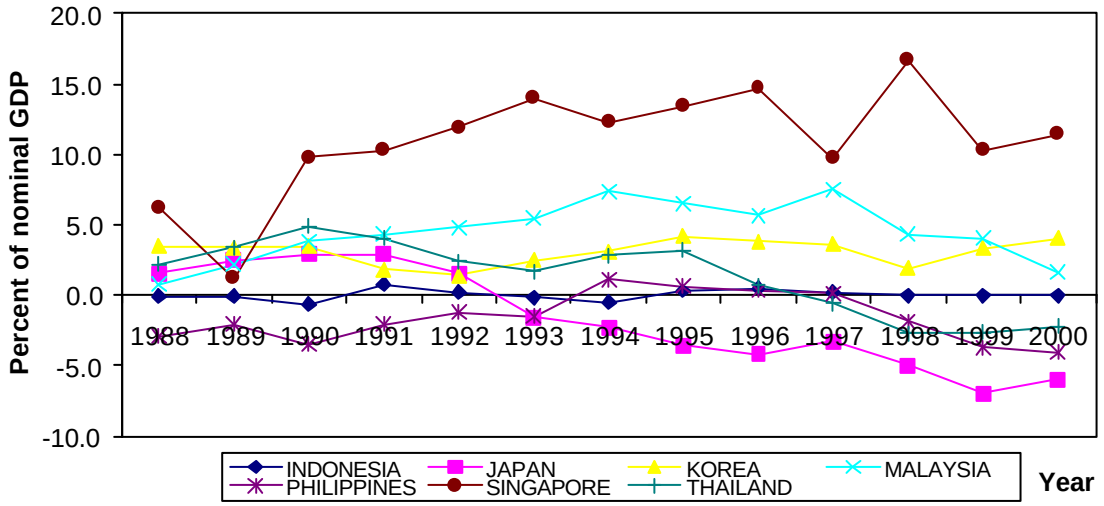
Figure 5. Short-Term Interest Rates 1988-2000



Source: International Economic Trends, Federal Reserve Bank of St. Louis

Finally, there is the requirement with regard to government budget deficit or surplus before a country can join the monetary union. Surprisingly, Japan has reported a series of deficits since the early 1990s while Singapore remains strong with huge surpluses with an average of 10.9 percent of its nominal GDP. While Indonesia could barely keep the budget at a surplus, Thailand and Philippines seemed to follow the trend of Japan.

Figure 6. Government Budget Deficit or Surplus



Source: International Economic Trends, Federal Reserve Bank of St. Louis

Have We Passed The Test?

Although the selected macroeconomic indicators presented in this study seem to support the tendency of co-movements between the GDP growth rate, the change in consumer prices, the exchange rate, the interest rate, and the budget deficit among each Asian countries, further statistical tests are required to establish the degree of convergence for these economies. What our data has to offer is that Asian economies appear to react similarly following disturbances, but the degree to which they respond to and being affected by these shocks depends heavily on the overall strength of the economy itself. Countries that have established themselves and have the capability to compete in the international market like Japan and Singapore have better chances to survive a crisis. Meanwhile, smaller economies especially those relying on agricultural based products and inter-regional trade are more susceptible to cave in under attack. Now, this is why Asians need a monetary union – to help each other by sharing our knowledge, technology and skills and protect the region from future unexpected surprises. As Asian countries have long complemented each other in resources and trading considerably within and outside the region, a monetary union can provide greater efficiency and economic stability. However, based on the Maastricht Treaty convergence criteria and the year 2000 statistics, we may not be as close to forming a union just yet. By far, only Singapore seemed to satisfy most of the requirements to join an EMU whereas other countries have yet to fulfil the criteria. Even so, choosing a base currency from the existing national currencies can be misleading unless we wait for the economies to fully recover from the recent crisis.

Table 3. The Maastricht Treaty Convergence Criteria

	Inflation rate	Interest rate	Exchange rate	Budget Deficit
Indonesia				Ö
Japan	Ö	Ö		
Korea				Ö
Malaysia	Ö	Ö		Ö
Philippines				
Singapore	Ö	Ö	Ö	Ö
Thailand	Ö	Ö		Ö

5. Conclusion

As much as Asia wishes to benefit from having a common currency and a monetary union of our own, careful considerations should be taken considering all other factors as well. Other supporting factors may include the political stability of member countries at present and the need to identify one national currency to serve as the anchor for the region's new money. How would smaller economies feel about having the strongest member to dictate the economic policies on behalf of the union and what if the notions of political union become unattractive for the existing strong economies and jeopardize their monetary sovereignty? The Maastricht Treaty convergence criteria are mere guidelines used by the European Community to recruit joining members to the EU. Perhaps there should be another set more suitable for Asia, one that is specially designed to accommodate the process of joining countries in this region in an EMU. Nonetheless, the early peek at our compatibility in qualifying the test of the Maastricht Treaty convergence criteria may suggest that we are indeed, a long way from forming the union. We have yet to pass the first stage of forming our Asian Free Trade Area (AFTA) and still need to prove our ability to share a common

market, integrate our macroeconomic policies and agree upon setting up a community central bank to represent everyone. Only then, along with stronger statistical evidence of convergence between countries and solid foundation of political integration between smaller and bigger economies, we may see the dream of having our own "Asian money" comes to life.

References

Arbuthnott, H. & Edwards, G. (1979) *A Common Man's Guide To The Common Market: The European Community*, Mac Millan, London.

Bergeijk, P.A.G., Berndsen, R.J. & Jansen W.J. (2000) *The Economics of The Euro Area*, Edward Ulgar Publishing Ltd., Cheltenham, UK.

Corden, W.M. (1977) *Inflation, Exchange Rates and The World Economy*, Oxford University Press, Oxford.

De Brouwer, G. (1999) *Financial Integration In East Asia*, Cambridge University Press, Cambridge.

De Grauwe, P.D. (1997) *The Economics of Monetary Integration*, 3rd Ed., Oxford University Press, Oxford

Economists Intelligence Unit, *EIU Country Report*, various issues.

Federal Reserve Bank of St. Louis, *International Economic Trends*, http://www.stls.frb.org/

Gibson, H.D., & Tsakalotos, E., *Economic Integration and Financial Liberalization*, Mac Millan, London.

Hinshaw, R. (1975) *Key Issues In International Monetary Reform*, Marcel Dekker Inc. New York.

Levi, M.D., (1996) *International Finance*, 3rd Edition, McGraw-Hill Inc., New York.

Mundell, Robert, A., *Optimum Currency Areas*, presented at the Conference on Optimum Currency Areas, Tel-Aviv University, December 5, 1997.

Pitchford, R. & Cox, A. (1997) "EMU Explained: Markets and Monetary Union", Kogan Page, England.

Statistics Division, United Nations Economic and Social Commission For Asia and The Pacific (ESCAP), http://www.unescap.org.

Vickerman, R.W. (1992) *The Single European Market: Prospects For Economic Integration*, St.Martin' s Press, New York.

World Bank. *World Development Indicator*, various issues.