CHAPTER 1

INTRODUCTION

1.1 OVERVIEW

In July 1997, all the Southeast Asian countries' (SAC) currencies experienced significant devaluaion. This triggered debate on the main causes of the Southeast Asian Currency Crisis (SACC). Among the reasons given are as follows :-

1. Weak economic fundamentals.
2. Unregulated world financial market.
3. Cronyism and nepotism.
4. Colonisation.

This research paper attempts to address only the issue of economic fundamentals which include macroeconomic deficits, competitiveness in exports and weaknesses in the financial institution.

This comparative study will take Singapore as the benchmark for making comparisons. Singapore is selected as the point of reference because it was the least affected country in the SACC. This can be shown by the three following facts :-

1. Among all Southeast Asian Countries, the Singapore GDP growth rate of -1 per cent in year 1998 was the highest compared to its neighbouring countries.
2. Among all SACs, Singapore dollar was the least devalued currency which fell only by about 15 per cent.
3. Among all SACs, the Straits Times Index was the least affected stock market index which dropped by just 65 per cent to the year's low of 801 points.

Bearing in mind that even if we find that Singapore held significantly "better" economic fundamentals than Malaysia prior to SACC at the end of the analysis, we cannot attribute the SACC solely to local factors. There are both external and internal economic factors which interact upon each other. One of the salient socio-economic factors besides the above four might be 'herd instinct', which remains unquantifiable.

In fact, in terms of historical background, development status, economic structure and development philosophy, Malaysia and Singapore have been taking different paths in the last 40 years. The main purpose of doing this comparison is to ascertain to what extent the economic fundamentals of Malaysia differ from that of Singapore prior to the SACC. If the deviation is significant, it suggests that underlying fundamental may have aggravated the 1997 SACC. If so, there will be a need to further determine the parameters which define the economic systems.

1.2 SINGAPORE - ECONOMIC BACKGROUND

Singapore rose to the ranks of a newly industrialized country (NIC) in 1990s. After the independence on 9th August 1965, the government under the leadership of the prime minister then, Sir Lee Kuan Yew, acknowledged that natural resources were scarce and thus people appeared to be the only asset to the republic. Given Singapore's geographical characteristics, the option of agriculture was out. Manufacturing was then targeted as the next engine of economic growth. Nevertheless, a limited domestic market with a population of around one million people encouraged the government to embark on an export oriented industrialisation strategy instead of an import-substitution industrialisation strategy.

Now manufacturing is clearly seen as the most significant industry in the Singapore's economic structure. Its share of Gross Domestic Product (GDP) climbed from 12 per cent in 1960, to 20 per cent in 1970, and 29 per cent in 1980. In the 1990s, economic growth has been dominated by manufacturing and financial and business services. Manufacturing accounted for 34.2 per cent of GDP in 1996 and 35.7 per cent in 1997. Electronics accounted for more than two thirds of Singapore's non-oil exports in 1997 (Monetary Authority of Singapore's Annual Report (MAS) : various year issues).

Transport and communications has been growing tremendously too. Singapore has emerged as the world's second busiest port after Hong Kong. The most dynamic service sector was tourism. Financial and business services are expanding. The city-state becomes a major regional financial center. In the 1990s, the service sector contributes most to economic growth, close to two thirds of GDP. In 1997, financial and business services grew at 11.7 per cent. Commerce and transport and communications sectors expanded by 8.1 per cent and 9.6 per cent respectively during the same year. Thus the service account surplus has always been huge. In 1985 and 1995, the service account surplus was US$3,039 million and US$16,695 million respectively, an increase of 450 per cent in 10-year time (MAS : various year issues).

Construction increased from 2 per cent of GDP in 1960 to 8 per cent in the 1980s and 1990s. It was deemed important to avoid bottle-neck in economic development by improving infrastructure such as roads and highways, ports and airports, industrial estates and schools as well as housing the increasing population which had reached over 3 million people in 1997. Construction sector grew at 19.5 per cent in 1996, a reduction from 13.3 per cent in 1997. This trend reflected the property glut that must be dealt with a gradual decrease in construction growth in the mid of 1990s (MAS : various year issues).

Since the independence in 1965, its annual GDP growth performance has been astonishing. GDP growth was 8.4 per cent in the 1960s, 9.4 per cent in the 1970s and average of 8.6 per cent in the 1990s. Two oil crises in 1970s and economic recession in the mid of 1980s could not stop the rapid GDP growth although it did sustain a negative growth of -0.2 per cent in 1985 (MAS : various year issues).

1.3 MALAYSIA - ECONOMIC BACKGROUND

Historically different from Singapore, since independence on 31st August 1957, Malaysia depended largely on agriculture. The country practiced laissez faire policies with mild import substitution industries, agricultural diversification, rural development and increasing ethnic based policies (Jomo : 1990). This post-colonial conservatism period lasted for 12 years under the government led by the prime minister then, Tunku Abdul Rahman (1957-69). British interests continued to be looked after by the post-colonial government. The less than successful import substitution industries (ISI) prompted Malaysia into export oriented industries (EOI) in the late 1960s. Due to the racial riots on 13rd May 1969, laissez faire policies were discarded in 1970 with increasing state intervention aimed at inter-ethnic income redistribution. It was initiated under New Economic Policy (NEP) which had spanned 20 years (1970-1990). It was then replaced by New Development Policy (NDP) of 1991-2000, with the overriding objective of creating a more united and just society. During the period of 1970-76 and 1976-81 that was led by Tun Abdul Razak Hussein and Tun Hussein Onn respectively, the transition to EOI was pronounced as the limits of ISI became apparent and a new international division of labor emerged. By the 1980s, Malaysia was initiating joint ventures with the Japanese in heavy and import substituting industries. This initiative was taken by Mahathir Mohamad's Look East Policies in tandem with the 'flying geese' effect from Japan after signing Plaza Accord in September 1985. Due to that joint market intervention, the yen which had then strengthened from 238.536 yen per US$1 in 1985 to 168.520 yen per US$1 in 1986 had forced Japanese transnational conglomerates to relocate their production plants to SACs as the goods manufactured in Japan were no longer competitive. According to Ministry of International Trade and Industry's (MITI) Annual Report (various year issues), between 1985-90, the total Japanese foreign direct investment (FDI) had increased by US$2.2 billion (1985 - US$77.2 million, 1986 - US$157.0 million, 1987 - US$162.7 million, 1988 - US$386.4 million, 1989 - US$672.3 and 1990 - US$722.4 million).

In the mid of 1980s, due to heavy fall in commodity prices and mounting government debt problem, Malaysia went into economic recession. Public enterprises have been accused of being responsible for the huge public debt. According to Bank Negara Malaysia's Quarterly Economic Bulletin (various year issues), the per cent share of medium and long term external debt by the Federal Government and public enterprise between 1985-1990 was 56.3 per cent and 33.9 per cent respectively but they were then be trimmed down to 33.9 per cent and 33.4 per cent respectively between 1991-1996. To alleviate the problem, Malaysia turned to privatisation and liberalisation, opening the door to massive foreign capital flows into the country. This was successful as the total net private capital flows for 1983-88 and 1989-1994 in per cent of GDP was 3.1 and 8.8 respectively, an increase of almost 200 per cent in 6-year time (IMF : various year issues).

The liberalisation that started in the late 1980s has structurally transformed the Malaysian economy. Agriculture's share of GDP has fallen from 30.8 per cent in 1970 to 12.1 per cent in 1997 but its annual growth rate was still remained positive. In 1997, the growth in the agriculture sector was 3 per cent. Starting from the mid of 1980s, the performance of the agriculture sector has been eclipsed by manufacturing sector. Manufacturing's share of contribution to GDP rose from 12.2 per cent in 1970 to 35.7 per cent in 1997. The percentage share of the manufacturing sector in gross exports in 1997 was 80.8 per cent. Electronics, electrical, machinery and appliances accounted for 53.7 per cent of the total manufacturing exports. Agricultural output contributed only 10.5 per cent to the gross exports, in which palm oil took up about 4.9 per cent of the total (Economic Report : various years).

The Malaysian government deemed that the development of the financial sector must not lie behind other economic sectors and in fact, it should be the work-horse in propelling the whole economic system. The Malaysian government has been putting a lot of efforts in order to attract surplus funds in the Asia-Pacific region, as well as foreign investors to operate from its shore and subsequently provide Malaysia with greater access to the international markets. One of them was the inception of International Offshore Financial Centre (IOFC) in Labuan on 1st October 1990 and this centre has marked another milestone in the government effort to liberalize Malaysian financial industry. Nevertheless, the imposition of the selective exchange control on 1st September 1998 to insulate the economy from external speculative attack on Ringgit Malaysia might hamper the last 6-year's efforts in carving out Labuan as one of the competent international financial centers.

In the mid nineties, it became apparent that to remain strong economically, the country could no longer depend on the manufacturing sector as there are new-emerging countries with lower cost of production such as China. Hence, Multimedia Super Corridor (MSC) was launched in 1996 as the future hub for global information technology companies to conduct their technology research.

1.4 OBJECTIVES

1. To determine the economic fundamental conditions of Malaysia and Singapore prior to the SACC.
2. To explore the possibility that economic fundamentals might have exacerbated the SACC.
3. To objectively assess the economic systems using structural models with identical behavioral assumptions.

CHAPTER 2

LITERATURE REVIEW

2.1 THE CAUSES OF THE SACC

Chia's (1998) findings show that prior to the SACC, Singapore had a very open economy, both in the current and capital accounts, but the impact of the crisis had not been as severe as in several less open regional economies. She concluded that economic openness and globalisation were not sufficient to trigger the SACC. She further argued in her analysis that despite sound fundamental macroeconomics policies, Singapore did not escape the fallout from the regional crisis. Among the areas incorporated in her analysis were economic and financial fundamentals, macroeconomics and financial policies, dependency on foreign direct investment and foreign loans, corporate governance and credibility of government policies. She then concluded that these positive factors were insufficient insurance against overreactions and herd behaviour of currency traders and speculators which she claimed was the main culprit of destroying the Singapore's economy in the SACC.

In fact, what Chia has argued is only partly correct. She is correct in the sense that Singapore had the strongest economic fundamentals among all its neighbouring countries. However, the negative impact diffused by the SACC continued to affect Singapore's economy. Having said these, her argument might not be quite correct in the sense that the consequences suffered by Singapore were not as harsh compared to countries like Malaysia, Indonesia and Thailand. As such, these differences might have been due to their respective economic fundamental conditions prior to the SACC.

Yap's (1998) findings, however, showed that the economic fundamentals of Malaysia prior to the SACC had been deteriorating. In his study on the SACC's genesis, he noticed that in Malaysia, economic growth was above the trend or potential output. There had been loss of efficiency in the economy, pervasive current account deficits and excessive credit expansion especially to non-productive sectors. The results obtained by Yap are quite bias. His analysis was not done thoroughly and thus the findings are misleading. He only assessed a few economic variables and the approach is somewhat flawed. He ignored factors which should have been included such as inflation rates, unemployment rates, low government's external borrowings, just to name a few. However Yap has managed to objectively show the weaknesses of Malaysia's economic fundamentals prior to the SACC.

Suresh et al (1997) argued in their study that there are five main factors that had exacerbated the SACC. These included large inflows of short-term capital, mismanagement of the exchange rates by Bank Negara Malaysia (BNM), rapid and unbalanced lending to the private sector, current account deficit and the confidence factor. They contended that disequilibrium in macro-aggregates deserved early attention, even if they did not appear to be immediately threatening. In addition, the fundamental soundness of the Malaysian economy had not been conveyed effectively to the market given the contradictory pronouncements by the political leadership and the lack of transparency in financial and big corporate dealings. Due to the asymmetric information, investors had followed the herd instinct and the Malaysian economy was categorized as being no different from that of Thailand, Indonesia or the Philippines.

Their argument, although sounds reasonable, is too broad. They fail to point out the exact causes of the SACC and merely discuss common factors being bandied about in the market. As such, it is very difficult to find any clear guidance from their study in order to resolve the SACC.

Meanwhile, Tan (1997) in his study on the present Malaysian economic crisis with reference to the crisis of the mid-1980s argued that the challenges currently faced by the economy were quite distinct from those experienced in the mid-1980s though there were aspects which were similar in experience and official policy responses. While the present crisis was sparked off by a crisis of confidence in the financial markets involving massive withdrawals of funds, the crisis of the mid-1980s was triggered off by a protracted international economic recession that began in the early 1980s. He contended that the recent problem was even more structural and less cyclical in nature.

In his study, he also touched on Singapore's economy. He argued that although Singapore had massive international reserves, zero debt position and cash-rich state corporations, it did not spare from the SACC of confidence. Among the reasons given are firstly, its massive investment in the Asian region implied that the value of this investment and its prospective returns in terms of the Singapore dollar has eroded in tandem with the battered regional currencies. Secondly, as much as 70% of Singapore's export trade was with the region and thus the depreciation of regional currencies would have a negative impact on its export earnings. And finally, the sound Singapore banking system has been undermined by heavy credit exposures to the troubled Indonesian economy.

2.2 REAL EFFECTIVE EXCHANGE RATE (REER) AND EXPORTS

Balachandher's (1993) findings showed that the growth rates of all sectors, except the petroleum products and transport equipment sectors, experienced the most pronounced peak between 1986 and 1987 when the ringgit was depreciating. This has verified that the depreciation of the Ringgit Malaysia (RM) did increase domestic exports. One possible reason for the much less pronounced peak in the growth of the exports of the petroleum products and transport equipments during the mid-eighties might be that the price of these exports are determined externally in the world markets. Furthermore, most of these exports were likely be denominated in US dollar.

He further argued that the growth rate of the exports of the electrical and electronic products, rubber products and the manufactures of metals seemed to have declined from 1988 to 1990 during which time the RM appreciated against the US dollar. Again, this is consistent with the conventional belief that appreciation of a currency is unfavourable to export growth. Although textile, footwear and the furniture and wood product industries experienced increasing growth rate in exports during 1988-89 when the ringgit appreciated slightly against the US dollar, he contended that this might be due to the improvement in labor productivity and technical efficiency. These had made the domestic products more competitive in international markets; to this extent it must also be pointed out that the appreciation of the ringgit in 1989 was not very significant.

Nevertheless, Tan (1995) has argued otherwise by using the cointegration and error correction techniques respectively to estimate the long-run equilibrium real bilateral exchange rate of Malaysia and its short-run dynamics. His findings show that no evidence can be found of any sustained overvaluation or undervaluation of the REER over the period 1975 through 1987. Furthermore, the very fact that a cointegration exists would suggest that there has been no exchange rate misalignment in the case of Malaysia. He also argued that it has not been a deliberate policy of Malaysia to maintain an 'undervalued' position for its currency in its development pursuits. Based on attempts to link real exchange rate movements to economic performance via real exports, it was interesting to note the absence of any relationship amongst them.

These two contradictory findings obtained by Balachandher and Tan shows that there is no conclusive economic relationship between REER and exports in Malaysia, in spite of the general argument that their relationship is positive. The contradiction might probably due to the differences in their methodologies and analyses. Bearing in mind that since Malaysia's exports mostly depend on the world economic conditions, particularly United States, REER is only playing a minor part in affecting the exports. No doubt to say that the increasing REER in the past might have boosted the exports but the causality might not be very great. Therefore, by using the cointegration and error correction techniques, Tan's findings are expected to have showed the absence of any significant economic relationship between the REER and exports.

Mahinda (1997) has conducted a general equilibrium analysis on Singapore's economy. A computable general equilibrium (CGE) model of the Singapore economy was simulated to project the impact of the appreciation of the Singapore dollar under different export demand elasticity scenarios. This was achieved by using an eight-sector general equilibrium model of the Singapore economy. The CGE model provides an effective analytical tool, enabling a sensitivity analysis by adopting different degrees of export demand elasticities. His findings show that the macroeconomic and sectoral results are not very sensitive to variations in the export demand elasticities over the elastic range. A significant change in the projections is apparent when highly inelastic export demand curves are adopted. These results are consistent with the economic performance of Singapore over recent years under the strong currency regime.

Mahinda's findings are as expected as Singapore could no longer be regarded as a small country in the global context. This has indicated that Singapore faces price elasticity of export demand which is well above unity, implying that the country is a price taker in world markets. It leads to the belief that Singapore is coming to enjoy some degree of market power. In fact, it contradicts to many economists' belief that the appreciation of the Singapore dollar would generally erode the country's external competitiveness. Singapore's economic performance over recent years indicates that this is not the case.

2.3 TOTAL FACTOR PRODUCTIVITY (TFP)

Baumol and McLennan (1985) argued that the failure of United States (U.S.) productivity to keep abreast of that other countries had caused direct economic consequences. They added that in the short run, such a productivity lag might erode U.S. competitiveness in the international market place and make it more difficult to find purchasers for U.S. exports and thereby contributing to unemployment and other domestic economic problems; although this will not be true in the long run and need not even hold in the short run, lagging U.S. productivity will cause changes in the pattern of exports and imports. They also argued that products that were once exported without difficulty but in which the relative productivity lag is getting severe will find foreign markets closed to them; U.S. will be driven toward the production and export of other goods in which the relative productivity performance has not been quite so weak.

Their argument is quite similar with Lie (1971) one. Lie argued that in order to meet the requirements of foreign exchange for the relatively high imports in both capital goods and raw materials in their initial development, the developing nations had to increase their exports - the markets of which was highly competitive ; the only way to penetrate this crowded market was to improve the [1]quality productivity in those commodities and industries where each nation could hold its own in the world. He further argued that although there had been much discussion on the trade policy, no appropriate study of such productivity techniques had been undertaken in the developing countries, and this had impeded the expansion of exports in the past.

Nevertheless, Krugman (1990) rebuked their views by using an *economy without trade thought experiment* (See Appendix III). His argument is as follows :-

> "......they think that productivity is important for the wrong reasons, such as to help our international competitiveness.......since many people think that productivity is important precisely because we need to be productive to compete on world markets, but this isn't really right......In practice,

[1] Quality productivity is a phenomenon where increased output is obtained from more efficient use of resources which are already employed.

> then, the trend in U.S. living standards is determined by our own rate of productivity growth - full stop. International competitiveness has nothing to do with it. If that's the case, however, what does it mean when people talk about U.S. "competitiveness"? The answer, sadly, is that it almost always means that they don't know what they are talking about."

The unorthodox theory on productivity growth proposed by Paul Krugman seems to be inappropriate in this research paper. Baumol and McLennan's and Lie's argument should be the one to be taken into consideration. In Paul Krugman's proposed model, assumptions that have been made were productivity growth abroad can expands our overseas markets and, faster productivity growth in foreign industries that compete with our exports will generally be reflected in higher wage growth, which can more than wipe out any relative cost gain. The first assumption is flawed because no one can objectively shows that the expanding overseas market of Malaysia and Singapore in the last 20-year was due to the increasing productivity growth in the two countries. In fact, Malaysia has been facing declining TFP problem in the early of 1990s. The second assumption is also flawed because he has excluded the possibility that a higher productivity growth will always trim down the workforce and consequently reduce the total payroll. This will result in cost gain.

2.4 RETURN ON ASSETS (ROA) OF EAST ASIAN CORPORATES

Claessens, Djankov and Lang (1998) had conducted a study on the growth, financing and risks over the last decade (1988-1996) on 5550 East Asian firms. The gist of their findings show that there were large differences in performances and financial structures across countries like Malaysia and Singapore. Profitability, as measured by real return on assets in local currency, was relatively low in Singapore throughout the period, while corporates in Malaysia had high returns, on average twice higher than those recorded in Germany and the United States over the same period. Meanwhile, the result shows that the corporates of Malaysia and Singapore were having a fairly same operational margin throughout the period. The operational margin is calculated as the difference between sales and costs of goods sold, as a share of sales. They added that these differences in performance did not show up as much in sales growth as investment rates were high and continued to drive output growth rates. The combination of high investment and relatively low profitability in the sample country meant that much external financing was needed. As outside equity was used sparingly, partly as stock markets were depressed, leverage was high in country like Malaysia.

Their findings indicate that prior to the SACC, Malaysia's firms had a stronger footing in terms of profitability or ROA compared to the Singapore's ones. However the results seem to be misleading. Firstly, they had selected only firms listed on a stock exchange. In fact, there are so many firms which are not listed on their national bourses have a higher ROA or profitability. Secondly, they did not attempt to correct for cross-country differences in industrial structure. If a country data set has many utility or heavy infrastructure construction firms (which does happen in Malaysia), average leverage might be higher and profitability lower.

2.5 REAL EFFECTIVE EXCHANGE RATES (REER) AND DOMESTIC STABILIZATION POLICIES

Claassen's (1992) study on financial liberalization and its impact on domestic stabilization policies of Malaysia and Singapore had clearly explained the movement of the REER of the two countries. He argued that full convertibility on the capital account brings with it the danger of real appreciation of the domestic currency as a consequence of additional net capital imports. The real appreciation, in its turn, disfavours exports. At the end of the 1970s, Singapore and Malaysia had liberalized almost completely their international capital flows. During the first half of the 1980s, both currencies went through a considerable appreciation of their REER, since at that particular period both pegged their currencies to the U.S. dollar. Ih 1985, both went into recession. The recession was an outcome of their domestic stabilization policies. Singapore, which developed towards an international financial centre had to assure the "quality" of its domestic currency in order to overcome the regulatory and fiscal advantages of Asian dollar deposits. The Singapore dollar became misaligned since financial priorities overruled commercial considerations. In contrast, Malaysia's REER was the outcome of its huge government expenditures since it fell into the trap of the Dutch disease after the commodity price boom of 1979/80.

Claassen's argument indirectly shows that Malaysia and Singapore had the sufficient market power to easily influence the REER via their respective domestic stabilization policies.

In order for them to have the little hegemony in the international market, they must have a substantial share in their international trade of goods, services and flow of capitals. In the early of 1980s, Malaysia was just a small developing nation whereas Singapore had then yet to become a developed nation. Therefore we cannot contribute their REER appreciation in the 1980s as the result of their respective domestic stabilization policies, although these might have scantily influenced the money market during the time.

2.6 BANKING SECTOR

Obiyahthulla (1998) had examined Malaysia's current banking sector problems. He found out that the problems were clearly deep-seated and systemic in nature. The severity of the crisis may be evidence that the problems are a culmination of previous excesses. As with banking crises elsewhere, there were multiple causes. The currency crisis appeared to have been the catalyst. However, the policy response by the government to the currency crisis aggravated the banking problems to crisis proportion. He argued that some of the same factors that caused currency vulnerability also led to banking sector fragility. Over the seven period preceding the currency crisis, Malaysia had a set of expansionary, rapid growth strategies characterized by loose monetary policies. The banking system simply intermediated the fast growth in monetary aggregates into domestic credit. The result was excessive credit growth lending to an overleveraged corporate sector, asset inflation and an over extended banking system.

Meanwhile, Kaminsky & Reinhart (1995) had examined twenty five banking crises and found three broad themes. First, in eighteen of the cases, the financial sector had been liberalized within the five year period preceding the crisis. Second, that lending booms, terms of trade deterioration and a sharp fall in equity markets are leading indicators of banking crises. The best indicator being the sharp decline in equity prices. Finally, they observed that a sharp real exchange rate appreciation preceded crisis.

Thillainathan (1997) in a study on the Malaysian banking crisis had found out that prior to the SACC, the banking system's priority sector lending requirement, which was subject to an interest rate ceiling, had come down from the peak of 25 per cent of its loan portfolio in the mid-80s to around 5 per cent shortly before the eruption of the SACC. This had improved the profitability of the banking system. In addition, there was a marginal decrease in the liquid asset requirement from 20 to 17 per cent and paucity of fixed-rate long-dated papers. This had reduced the exposure of the banking system to interest rate risk from its holdings of liquid assets. However, he did caution that domestic banks relied on offshore funding up to around 10 per cent or less of their portfolio. Such reliance could cause a price and liquidity crunch from the shift in investor sentiments and the ensuing capital outflows. This happened during the SACC. Beside that, the poor US dollar funding position of local banks with offshore operations had affected the onshore banking sector's profitability and balance sheets quite substantially.