UNIVERSITY OF SOUTHAMPTON

ECONOMIC POLICY AND DEVELOPMENT IN SOUTH-EAST ASIAN ECONOMIES

by

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ABSTRACT

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The importance of South-east Asian economies in the world economy became apparent through their rapid increasing shares in the world trade. The fast growing trade sector in these countries enabled a near double digit economic growth rate in the 1970s and 1980s. When a group of under-developed economies quickly turns themselves into emerging economies and gain a reputation as an 'Asian Miracle', this naturally attracts economists' attention into the field. The key driving force of the growth rate in these countries was seen to be exports and investment, this has been emphasized and accepted in a large number of papers.

However, an equally interesting question concerns the relative growth rates of economies within the region, an issue which the first paper, ***Comparative Economic Development***, of this thesis will investigate. Korea, Thailand and the Philippines were at a similar state of development with comparable level of GNP per capita in 1960, but had achieved very different levels of economic success by 1990. Ironically, among the three countries in consideration, the Philippines was endowed with the most favourable human and capital resources but turned out to be the least successful economy 30 years afterward, and the opposite is true for Korea. Although regression results confirm that their growth rates have been influenced by common factors such as exports and investment, their relative success can partially be explained by differences in other factors captured in the model. To what extent do these other factors play a role in explaining their relative growth rate during 1960-1990? Were they country-specific factors - or can they be duplicated in other countries? The first paper attempts to provide insights to these questions and to identify the key ingredients of economic success.

Regardless of relative economic success found within the region, these South-east Asian countries have recorded the highest average growth rates among developing countries. However, this reputation was shattered when the financial crisis broke out in one of the fast growing economies in the region, Thailand. This crisis was largely unanticipated in terms of its timing and severity and economists are still to agree on its root causes. The second paper tries to identify the cause of the crisis by examining what actually happened during the few years preceding the crisis in the original country where the crisis broke out. This paper first puts Thailand in the context of its neighbouring countries in order to illustrate (1) weak economic fundamentals was not the cause of the crisis, although this followed as a result of the crisis after it unfolded and (2) although the accumulation of short-term capital inflows has been noticeable in the worsening of capital account, this was overlooked by foreign investors due to their perceptions of implicit government guarantees. More importantly, there is other underlying evidence to justify why the lack of central bank (of Thailand) independence can be drawn as a different rationale for the Asian Financial Crisis. Thus, this paper, ***The Asian Financial Crisis : A Different Rationale for Central Bank Independence (CBI)***, also cites the successful case of establishing CBI in New Zealand and other proposals from existing literature which could be considered as options in enhancing the independence of the Bank of Thailand. Nevertheless, these approaches can, by no means, be adopted uncritically.

After having explored the *actual* causes of the breaking out of the crisis in Thailand, it is sensible to produce *practical* recommendations which is the most important part of the third and the last paper in this thesis, ***The IMF's Package : How Should They Have Been Tailored Differently.*** Despite the fact that the IMF's conditions have been heavily criticized by commentators, they may be seen as a crucial part of economic recovery. However, this paper argues that it was the timing and intensity of policy tightening(s) imposed by the IMF that were inappropriate which in turn caused an adverse effect on the recipient economy. Using the IMF's rescue package imposed on Thailand as a main frame in building up (alternative) policy recommendations, a survey has been conducted in order to pull together *insiders' perspectives* on the issues.

Of over 200 experts' opinions from a diversified group of high ranking authorities, senior bankers and well-experienced academics, the responses show a high level of agreement but do not necessary coincide with the *outsider's perspective*, the IMF. The survey responses also brought out other concerns which have not received much attention by international experts and the local authorities. Most importantly, the responses tell us that there are problems other than the collapse of financial markets which insiders perceived as urgent problems. Their views about desirable policy options were also included in the responses. Hence, this last paper offers crucial policy recommendations from a different perspective -- that of the insiders who are people in the affected economy whose voices have not been widely heard.

How can the Thai economy be brought back on to track? This dissertation uncovers some of the key issues. Paper I identified the key driving forces of economic growth, and Paper II and III have shown the need for restructuring of financial markets and for developments in both the real sector and the social sphere.

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Introduction to the Thesis

This thesis comprises of three papers that focus around issues in developing economies and East-Asian economies in particular. Together with a literature review paper[1], Paper I is on *Comparative Economic Development* which examines the determinants of growth rates among developing countries in general. This Paper sets the background to the thesis and leads to the next paper *on The Asian Financial Crisis : A Different Rationale for Central Bank Independence* which examines the causes and solutions for the crisis, focusing especially on Thailand, the economy in which the crisis first appeared. Lastly, Paper III, *How Could the IMF's Package Have Been Tailored Differently? An Observation From the Insiders' Perspective : Thailand*, reports on a survey of alternative policies to that of the IMF's by gathering insiders' perspective on the issues.

Also, this introductory section discusses the focus, the main findings, and contributions of each paper to the existing literature. **Paper I** sets the background of the thesis by examining determinants of economic growth among developing countries in general and relative growth rates among economies within the region during 1960-1990. It argues that although determinant factors drawn from the existing literature could explain growth rates among developing countries in general well, they are not able to capture the relative growth rates of developing countries within the region. This paper first examined growth rates across countries using cross sectional data and found that exports and investment make important contributions to their growth rates from the beginning of the development period. However, other factors such as initial conditions, the role of government, human capital and political instability are important only during particular periods, not the whole period of 1960-1990. These findings, however, are commonly found in a large number of papers.

[1] Literature Review is called Paper 0. The paper reviews literature relevant to the thesis, and provides the background to the next three papers. In this Paper 0, determinants of growth among developing countries are first discussed followed by theories of central bank independence and financial crisis.

More importantly, this paper investigates further issues on relative growth rates among countries in the region, an area to which not much attention has been paid. The three countries under consideration are Korea, Thailand and the Philippines, who started off their development in 1960 with similar conditions and adopted similar policies but had reached different state of success by 1990. As the cross sectional studies adopted in this paper were not able to capture the relative growth rates among these countries, the second part of the paper examined their relative economic success using time series data. The main findings in this second half of the first paper are that while these countries are known to have used extensive policy tools such as monetary policies and intense government intervention at the firm level in directing their economies, these factors do not have a direct impact on growth but operate indirectly via exports and investment. The results show that proxies for these interventions, monetary policies and industrialization policies are important determinants of export and investment in the most successful economy, Korea, while their impacts are not as apparent in the case of Thailand and the Philippines. These findings confirm the channel of growth in the Korean economy that has largely been discussed but not fully captured in a regression model.

Hence, two conclusions can be drawn from the first paper. First, cross sectional study has confirmed the important determinant factors of economic growth among developing countries as exports and investment, however, they are not able to capture relative economic growth among countries within the region. Thus, the issue is examined by time series analysis using variables drawn from the cross sectional studies together with monetary policies and industrialization policies as factors to discriminate relative growth rates in Korea, Thailand and the Philippines. Second, using the time series data in analysising their relative growth, investment and exports are found to be important factors but the policy variables do not have impact on their (relative) growth rate. Knowing that policy variables were used to direct their economies, these variables are examined against exports and investment. As a result, these policies are found to have large influence on exports and investment growth of the Korean economy while this evidence is not apparent in the case of Thailand and the Philippines. These findings can, therefore, explain relative growth rates among the economies within the region, which satisfies the objective of the first paper.

Paper II examines the Asian financial crisis in 1997 and focuses on a narrower group of countries than the first paper. The countries in consideration in this paper are those in East Asian countries who have been affected by the crisis, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. The main argument in this paper is that the existing literature (Krugman, 1979 and Obstfeld, 1986) of currency crises could neither detect nor explain what happened in Asia, since the core of the problem lies in the *moral hazard* of over-investment allowed by poor supervision and under-regulated financial markets in the country where the crisis broke out, Thailand. Indeed, the poor supervision and under-regulated financial market are caused by incompetence[2] of the authority in charge of the monetary policy, the central bank. Thus, in order to correct these problems, it is suggested that the central bank be granted independence so the central bank governor could make monetary policy without interference from politicians and private bankers. In fact, after the crisis itself, economists have identified that the crisis was (at least partly) caused by moral hazard – the expectation of government bailout and implicit government guarantees explained why a financial crisis could occur in the absence of weak macroeconomic fundamentals.

Although moral hazard induced from the under-regulated financial markets is not necessarily unrelated to the poor supervision of the authority in charge of monetary policy, Paper II discussed, provided evidence, and put the incident of the financial crisis in the context of a different rationale for Central Bank Independence (CBI). Furthermore, the Paper suggests that granting the central bank independence would be essential in discouraging interference from politicians and private bankers. Existing theories suggested that an assigned numerical target for monetary policy which is tied to the central bank governor chair, central bank legal reform, and a separate entity to regulating the financial market could be a route to achieving the CBI. Also, a recent issue of the World Bank Research Observer (February, 1998) gathered a selection of papers on public sector reform which argue that restructuring the legal framework in developing countries many help to enhance economic development. Using New Zealand as a case study, these authors argued that it maybe premature for developing countries to adopt New Zealand reforms because they need to undertake other basic reforms first before the CBI can be effectively achieved, and there is no short cut in taking public reform. (Schick, Bale and Dale, 1998). A

[2]There is evidence to support the view that the Bank of Thailand was 'incompetent'. It first opened up a capital account alongside fixed exchange rate and misused the international reserves to rescue a small commercial bank.

configuration of these policies, if pursued effectively, could help regain the foreign investors' confidence and speed up the financial market restructuring.

Hence, the main contribution of the Paper II is, first, providing evidence to support why a dependent central bank can and has largely contributed to the Asian financial crisis. The line of argument in this paper begins by analysing the chronology of the plunge in illustrating the fundamental cause of the crisis in the country where the crisis broke out. Second, and more importantly, it gathers several recommendations in granting the central bank independence, an independence which can enhance the role of monetary policy-makers as financial market regulators not as price controllers. Lastly, the Paper points out the gap in the existing literature on central bank independence that focuses only on the bank's duty as price controller, which is not necessarily the only task required by the central banks in developing countries. And this was why the recommendations in granting the Bank of Thailand independence as financial market regulator may *not* be found to be clearly supported by the theories and to some extent inconclusive. Nevertheless, this leads to Paper III which gathers the cure for the Asian financial crisis from a different perspective that is found to be more interesting and practical in assuring the smoother path of financial market restructuring and economic recovery in Thailand.

The important point which has been made in the previous section is that the Asian financial crisis was the first of its kind such that the IMF experienced numerous problems unprecedented during its existence. However, overall, can we say that the IMF was wrong in its handling of the crisis? The IMF has been criticized when it could not contain the spread of the crisis and it has been alleged that its initial policy recommendations have actually worsened the economic situation. Thus, **Paper III** examines the rationale behind the IMF's understanding of the crisis, its objectives in imposing conditions and most importantly, whether there are additional or alternative measures that could have been adopted. Unlike a large number of papers which focus on the causes of the crisis from an international, or outsiders' perspective, this paper adopts a different approach by conducting a survey of opinions from the insiders' perspective in Thailand. Thus, the main contribution of this paper lies in the appropriateness of the alternative / additional policies to the IMF's recommendations.

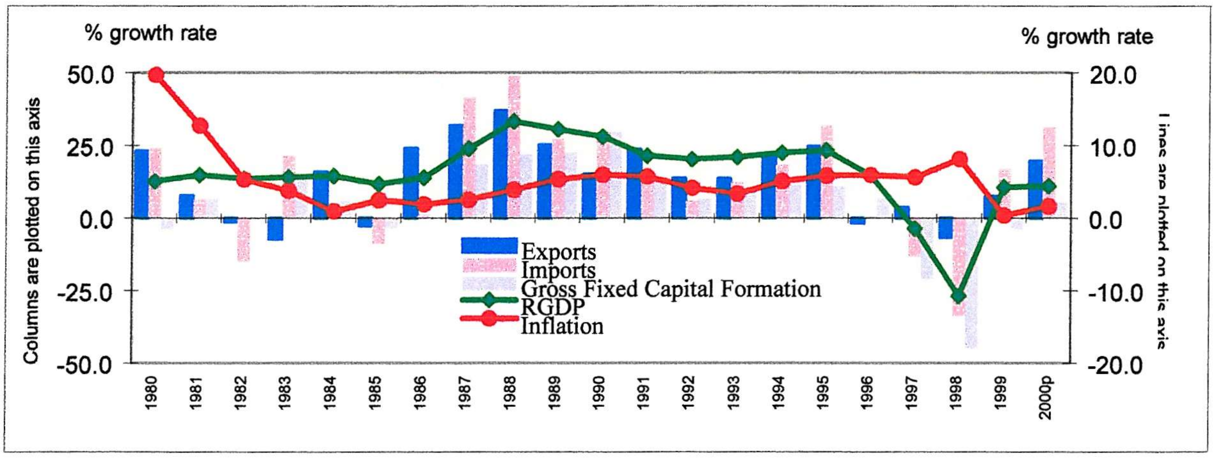
To what extent are the survey results logical and relevant as alternative policies to the IMF's? There are a few criteria which the paper has taken into account in conducting the survey. First, the questionnaire has been administered to several institutions in 3 different sectors which are referred to as financial sector, public sector and academic which fairly represent the three sides of policy takers, policy markers and the neutral academic group. Likewise, the sample size has been drawn from the number of qualified respondents at each of the institutions. Therefore, in terms of the sample set, parties directly involved in the event of financial crisis are reasonably included in the sample.

Second, the questions asked in the survey are divided into four parts which attempt to find out the perceptions of respondents on the financial crisis in general; the issues which have attracted criticism from both the insiders' and outsiders' on monetary and fiscal policy[3]; structural reform and long-term economic recovery plan; and the last part contains specific questions regarding financial and social sector reform to respondents in financial sector and other institutions concerned with social sector. To some extent, part III and part IV are considered the most important parts because as these structural reforms are being undertaken, suggestions can help to shape better structural reforms. Since these reforms are mostly involved with domestic fundamentals, it is particularly helpful to hear what respondents, from their domestic perspective, have to say about them. Indeed, these suggestions on structural reform are what the government should be targeting as they help to strengthen economic fundamentals, ensure economic growth and stability and reduce vulnerability in the future.

Third, at the end of the paper, the survey results evaluated. Therefore, Paper III has made an interesting contribution by gathering alternative policies to that of the IMF's from the insiders' perspective which has rarely been heard. But most importantly, the discussions regarding diversification / qualification of respondents, issues covered in the questionnaires and their relevance to the theories showed that the findings in this paper can be useful as recommendations to the local government in pursuing economic recovery plans during the aftermath of the crisis. Therefore, survey results from this paper should be taken as complementary to the IMF package in dealing with the particular crisis in Asia.

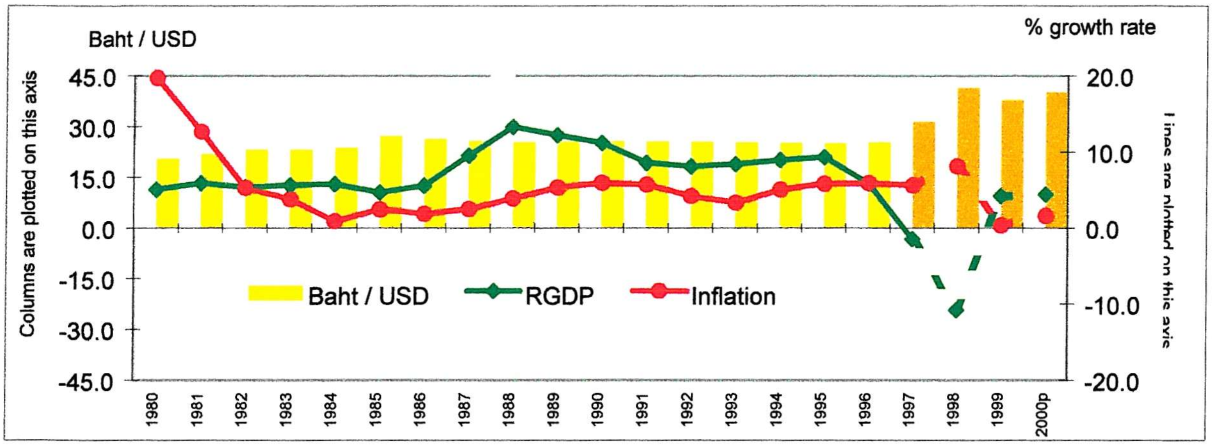
In conclusion, the thesis first focuses on the nature of economic growth amond developing countries in general. Then, the narrower group of Asian economies are examined as their path of high growth rates have been disturbed by the financial crisis in 1997. Lastly, the thesis focuses specifically on the one country, Thailand, as a case study in recommending the route in which the country could take in rebuilding economic growth that will be sustainable and less vulnerable to shocks. Thus, it is helpful to look at a selection of key economic indicators of Thailand from 1980 (when Thailand started to experience stable / high growth rates) to 2000 (three years after the crisis) to provide a context for the study. Figure I_1 plots real growth rates of exports, imports and investment in columns (units are on primary axis) together with RDGP and inflation rate in line graphs (units are on secondary axis). The figure shows that exports, imports and investment are strongly correlated with the growth rate of RGDP. As a period average, both export and import growth rates are recorded at 15 per cent per annum while investment is recorded at 10 per cent per annum. Also, during the economic boom around 1988-90 when Thailand recorded double digit growth rates, exports and investment rose over 40 per cent per annum and 30 per cent per annum, respectively.

Figure I_1 : Thailand's key economic indicators



[3] See section 3.2.1 : the IMF and its critics for criticism from the outsiders' and section 3.4 (part II), for criticisms from the insiders'.

Figure I_2 : Real exchange rate, RGDP growth and the inflation rate (Thailand)



Likewise, figure I_2 shows exchange rate of Baht/USD together with RGDP and inflation rate. It is seen that prior to the crisis (1997) when the Baht was pegged with the stronger currency, economic growth and inflation averaged 7.8 per cent and 5.5 per cent.[4] This shows that the economy has been performing well during the long span of 20 years period. However, as a result of the crisis, the fixed parity was broken causing the currency to depreciate sharply by almost 100 per cent[5] within 6 months while the economic growth rate fell almost 11 per cent in 1998, the lowest rate sonce data have been compiled.

[4] These figures are period averages during 1980-1997. However, if we exclude data during the oil crisis (1980-1983), these figures will be even more impressive at 8.6 per cent for RGDP and 4 per cent inflation rate.

[5] The full extent of the depreciate is not visible in figure I_2, which is based on the annual data. The exchange rate was recorded at 24.81 Baht / USD during the last week of June 1997 when Baht was still pegged to stronger currency. The Baht started to depreciate from the moment that the Bank of Thailand adopted the floating regime (on July 2, 1997) reaching an all time low at 53.36 Baht / USD during the last week of January 1998. Not until the last quarter of 1998, did it stabilize at around 38 Baht / USD until present (07/2001).

PAPER 0 : LITERATURE REVIEWS

This paper reviews related literature for the three papers that make up this thesis. Section 0.1 reviews empirical studies on economic growth for developing countries in particular. This section first discusses the determinants of growth among developing countries in general and the determinants of relative growth rates of Korea, Thailand and the Philippines which are referred to in Paper I : Comparative Economic Development. Section 0.2 discusses theories of central bank independence that are relevant in the context of developing country which is the focus of Paper II. Lastly, section 0.3 discusses models of currency crisis which is referred to in both Paper II and Paper III.

Section 0.1 : Literature review on growth models for developing countries

Recent empirical studies have told us that growth and development in the developing countries are driven by factors somewhat different from those in the existing growth theory. Ghatak (1995) has nicely summarised how growth theories and their relevance to Less Developed Countries (LDCs) developed where he stated that sometimes growth just happened and theorists decided to explain it. (p. 49) He first discussed how classical theories of growth by Smith, Mill, Malthus, and Ricardo were too simple to account for all the complex factors which influence growth in the LDCs. For instance, labour is not a homogenous input and nor is capital in the LDCs – different types of labour and capital could affect growth differently. Also, attitudes, culture and traditional institutional values exert varying degrees of influence on growth. On the other hand, it is now well acknowledged that one of the major problems in the use of neoclassical theories (Solow, Swan, Hicks and Meade) is that they do not provide a satisfactory explanation of changes in technology and productivity growth. The change in technology is usually taken as a proxy for the autonomous change in productivity that is known as the '*residual*' element to explain output growth rate i.e. the part of output growth which is not explained by the growth rates of inputs like labour and capital. Since this 'residual' factor is assumed to be exogenous but its role in the empirical studies of economic growth of DCs is found to be significant, a number of economists (Romer 1986,1990 and Lucas 1988) attempted to analyse the role of the residual in growth theories by endogenizing it. (Ghatak, 1995:49-71)

Thus, **section 0.1.1** will examine these key factors and findings from other relevant papers as they seem to be significant in explaining growth in developing countries. In addition it will also discuss other factors such as initial conditions, political instability, role of government and human capital as they have been found to play an important role. All of these factors will therefore, be included in the cross sectional analysis of economic growth among developing countries in the first part of Paper I.

It is also important to be aware of regional differences. Singh (1993) pointed out that both groups of Asian and Latin American countries were especially successful in the post second World War, but a striking feature of the world economy in the 1980's has been the interruption of the growth process in Latin America, whilst the industrial revolution has proceeded apace in the Asian economies. (p. 267) This period in Latin America and Africa became known as the 'Lost Decade' at a time when high and, in some cases, double digit growth rates of Asian economies in the late 1980's to early 1990's led to talk of the 'Asian Miracle.' Nevertheless, it is also recognised that there is still some degree of relative difference in the performance amongst the economies within the region. Among others, Findlay (1986), Sarker (1996) and Booth (1999) have focused on the relative economic performance within the Asian region. For example, the Newly Industrialized Countries (NICs) which are the resource poor economies have done better comparative to their neighbours in the region and far better than those other developing countries elsewhere.

However, not much attention has been paid to the influence of macroeconomic policies on economic growth. Fischer (1991) examined whether macroeconomic policies (monetary and fiscal policies) have an independent influence on economic growth or whether they instead operate almost entirely by affecting investment. He concluded that while cross-sectional results on the determinants of both growth and investment rates suggested that macroeconomic factors have important effects, they do not tie down the channel of influence, nor the precise macroeconomic factors that matter most. He also pointed out that it is unlikely that further cross-sectional regressions will pin down the transmission mechanism between macroeconomic variables and growth, therefore, suggested that time series evidence for individual countries might just do the job. (p. 331, 346-7) Hence, **section 0.1.2** will review the *role of macroeconomic policies* as these factors will be used in the time series analysis in the second part of the paper I in an attempt to investigate the relative growth rate and development among the 3 countries within the region – Korea, the Philippines, and Thailand during the 1960s to 1990s. In addition, there are other factors which these countries were endowed with prior to their initial development that are believed to have contributed to their relative growth rates. These 'endowed' factors will be discussed at the end of this section.

0.1.1 Determinants of economic growth among developing countries

(a) Initial conditions

Initial conditions in this paper are identified as the stage of the economy at the initial period of development. This will be proxied by the initial level of income per capita **(IGAP)** and share of agriculture in total output. **(AGRSH)** Barro (1991) pointed out the main element behind 'convergence' is diminishing returns to reproducible capital which suggests that economic growth should have a negative relationship with initial income per capita. Thus, given that poor countries have low ratios of capital to labour, they should have high marginal products of capital and the potential for rapid growth. His cross sectional study of 98 countries (including both DCs and developing countries) during 1960-86 did not support this view of convergence except by correcting for investment in human capital. His paper concluded that a poor country tends to grow faster than a rich country *only if* that country is endowed with high quantity of human capital. (p. 407-9) Likewise, Mankiw, Romer and Weil (1992) argued that much of the cross-country differences in income per capita could be traced to differing determinants of the steady state in the Solow growth model, thus the model does not predict convergence; it predicts only that income per capita in a given country converges to that country's steady-state value. In other words, the Solow model predicts convergence only after controlling for the determinants of the steady-state, a phenomenon that might be called 'conditional convergence.' (p. 422)

Given the abundance of natural resources and cheap labour, developing economies tend to take advantage of such resources as a means for their development. Empirically, Findlay (1984) argued that the main difference between Newly Industrialized Countries[6] (NICs) and other developing countries in Asia is that the first group have no primary sector or hinterland to exploit, which may explain why the NICs have succeeded so well in making the best of their purely urban resources instead of surviving at the expense of agriculture. (p. 37) In addition, Laudau (1983) pointed out that if a country has less agricultural land per capita, the opportunities for increasing agricultural output would be more limited, and this might slow growth. However, countries with more limited agricultural possibilities may be forced to make more radical economic and institutional adjustment and thus they ultimately grow faster. (p.786) In fact, this evidence suggested why NICs who either have poor resource endowment or limited agricultural land embarked on promoting industrialization in the early stage of development. As a result, it was the nature of manufacturing products which permitted these countries to grow relatively faster than those associated with producing agricultural products as means of development. Thus, in this paper, we hypothesise initial conditions, proxied by IGAP and AGRSH to have negative relationship with growth rate.[7]

(b) Exports and Investment

The relationship between trade, economic growth and development strategy has long been one of the main focuses of development economics and it is generally accepted that exports is an important factor in promoting economic growth and development. Emery (1967) pointed out many direct benefits from a high export growth rate **(XGR)** that helps in promoting general economic growth. An increasing level of exports will enable a country to increase imports which include capital goods that are an essential contribution to economic growth. The country would also be able to take greater advantage of the international division of labour which helps increase the efficiency of industry. Also, the country gains from economies of scale since producing for international markets would permit larger-scale operation. Lastly, the necessity of remaining competitive in international markets tends to maintain pressure on the export industries to keep costs low and to constantly strive for more efficient operations. (p. 471)

This relationship has been investigated in many forms to eliminate bias that could occur from the nature of the data. (Emery, 1967, Michaely 1977, Belassa 1978, Tyler 1981, Feder, 1982, Findlay, 1984, and Jung and Marshall, 1985) This relationship between exports and economic growth has been examined among the *developing countries* where their relationship is found to be particularly strong relative to other groups of economies, *developed countries* and *less developed countries*. Also, this relationship is strongest among fast growing countries, in particular, Asian, while some have found that this does not exist at all among the least developed. Thus, it seems that growth is affected by export performance only once countries achieve some minimum level of development. (Michaely, 1977:50-52) Jung and Marshall (1985) have examined the causality between exports and growth in 37 developing countries using the

[6] Hong Kong, Taiwan, Singapore and South Korea

[7] Interestingly, it is noted that Singh (1982) considered size of debts as an initial condition that was unfavourable for Latin American and African economies and it was the reason that caused a reversal of growth rate in these countries in the 1980s while most of the Asian economies with relatively less debts recovered and resumed growth rate soon after. He argued, in contrast with the mainstream theses, that the chief reason for the collapse of economic growth in Latin American economies and Asian economies was the differential size of the external economic shocks which they were subjected to. (p. 23-26)

Granger tests of the direction of causation and found that effect of export promotion on growth is weaker than previously thought. (p. 11)

Likewise, investment in physical capital and either the level or the rate of change of human capital have been entered in models with significant results. Levine and Renelt (1992) found the share of investment in GDP to be very robust across 101 countries over the period of 1960-89. In the context of developing countries, investment also plays an important role in explaining growth rates. Edwards (1992) found the ratio of gross investment to GDP to have a significant impact across both 30 and 51 developing countries during 1970-82. Empirically, exports and investment, in terms of structural share, growth, etc. are found to be very robust in studies, even with different estimation methods. Thus, we hypothesise exports and investment to have significant and positive effect in both cross sectional and time series analysis in Paper I.

(c) Political instability

Political instability **(RIOT)** is expected to be an important indicator. It is recognised that political instability is likely to be harmful to economic growth especially as the country becomes more internationalised. This is because foreign investors which bring about sources of funds and technology transfers consider the political factor prior to their investment decisions. Implicitly, political stability would enable the government to adopt long term policies that anticipate rather than simply react to changing circumstances. This would ensure economic growth and stability in the long run. Barro (1991) has proxied the political instability by the number of revolutions, coups and political assassination which are found to be negatively associated with economic growth and investment among 98 developing countries during 1960-85. He argued that these relations could involve the adverse effects of political instability on property rights and the linkage between property rights and private investment. The correlation could, however, also reflect a political response to bad economic outcomes. (p.432-7)

However, Edwards (1992) argued that Barro's variables refer mostly to political violence and that they do not directly capture the country's degree of instability, understood as the perceived probability of government changes. Arguably, it is the degree of political volatility that mostly affects growth via actual or potential changes in law, regulations and property rights, factors which are very much a concern of foreign investors when considering the country potential growth and stability. Hence, Edwards (1992) used a political instability index[8] that measures the perceived probability of government changes. He found the coefficient of this estimated index of

[8] This index was constructed as the estimated probability of government changes computed from a pooled time series cross-section probit analysis for 79 countries over the period 1948-1982. (Edwards 1992:48-49)

political instability to be negative, though not statistically significant, indicating that higher political volatility has tended to reduce aggregate growth. (p. 48-49) Therefore, we hypothesise the effect of political instability as having negative influence on growth, keeping in mind that availability and reliability of data is of crucial importance in evaluating our hypothesis.

(d) The role of government

Landau (1983) groups arguments of economists for and against the effect of government consumption and intervention **(GOV)** on economic development. On the one hand, Adam Smith made powerful argument that free markets are the best routes to prosperity and economic growth. A strong believer in the free market would expect government expenditure to be less efficient than private even if it was in the field of human capital and thus would predict that the higher government consumption, the lower the economic growth rate. On the other hand, many development economists of what Chenery (1985) called the 'Structuralist School' would contend that certain government expenditures have been and will be necessary to remove impediments to economic growth. For structuralists, under certain circumstances, a higher GOV would be associated with faster growth. In the developing countries where the private sector is weak, government intervention is essential for the economic development process. (p. 784)

In addition, Rao (1998) gathered empirical studies that analysed effects of public expenditure on economic growth and found that existing literature have offered mixed views on the issue. Marsden (1983) found a negative relation between tax to GDP ratios and economic growth for a cross section of 20 LDCs and DCs during the 1970-1979 period. Also, Landau (1986) found a negative relationship between the share of per capita GDP for a cross section of 96 LDCs and DCs over various time periods between 1961-1976. At the same time, Barro (1991) and Easterly and Rebelo (1993) inferred a negative relationship between government expenditure on economic growth. In contrast, Kormendi (1983) found that government expenditure on goods was complementary to private investment and concluded that government spending may then be positively related to the economic growth. Nevertheless, some (Kormendi and Meguire, 1985) have found no relationship between government expenditure and economic growth rate. Therefore, these studies then implied that there is no generally accepted theory of how the GOV determines the economic growth. (Rao, 1998:674)

However, could government have a positive impact on economic growth? One plausible explanation could be the differences in definition / classification of the data, for example, some countries include other public investment under the government consumption category. For example, Landau (1986) suggested that the nature and the definition of the data could be misleading in the sense that substantial proportions of government 'consumption expenditure' are in fact investment in the broader sense, especially education and health care. Thus, higher government consumption does not necessarily reduce capital formation even if it is at the expense of conventional investment. (p. 784) Focusing on the role of government in developing countries, it is can be argued that government spending may have positive influence on economic growth. Rao (1998) found that in the case of High Performing Asian Economies (HPAEs) state intervention need not necessarily be undesirable, and policy intervention properly articulated can lead to economic and social development. His argument on the positive influence of government intervention on economic growth rests on the fact that the functioning of the market cannot, by itself, activate the signaling, response and mobility of economic agents to achieve efficiency in both static (allocative efficiency) and dynamic (shift in the production frontier) terms. Thus, he concluded that these countries could achieve a high standard of physical and social infrastructure even with relatively low spending. (p. 673, 692)

In this paper, it is argued that other forms of government intervention (such as its role in resource allocation, and tax subsidies) is much more intense in the developing countries especially in Asia and their economic success is largely due to the government intervention. Amsden (1995) pointed out that the degree of government intervention in East Asia has been immense *but* their impact on each country varied depending on the quality of the intervention, ability of government to impose performance standards at the firm level. Sakong (1993), Kwack (1994), Smith and Wahba (1994) and Song (1997) recognised that Korean government interventions were most pronounced among HPAEs whereby these interventions have produced positive results on their economic growth. In fact, the government intervention in this context goes beyond just the share of government consumption in total output. However, this kind of intervention may be difficult to measure. Thus, in contrast to conventional results from developed countries, we hypothesise in Paper I that GOV is likely to show a positive relationship with economic growth in the developing countries.

(e) Human capital

Cross countries studies have used the level of school enrolment ratios both at primary and secondary levels as proxies for human capital. This type of variable usually entered the model as an initial condition for economic growth with the assumption that it is expected to have positive relationship with economic growth. In other words, countries with low endowment of human capital will tend to grow slower than others with relatively higher initial levels of human capital. Among others, Barro (1991) found human capital proxied by level of school enrolment ratios or increases in life expectancy to be positively related to economic growth rates across 98 developed and developing countries. Although Edwards (1992) did not explicitly try to examine the role of human capital, he entered secondary school attainment and enrollment in his study of the relationship between trade orientation and economic growth rate among 30 developing countries during 1970-82 and found that they have indeed played an important role in the poorer countries long-term growth experiences. (p. 47) These variables did not produce significant impact in all of his equations, but they do have the correct sign. Since these variables are trend variables which increase slowly over time, it is possible that they might not have enough variation to provide convincing evidence.

On the other hand, some developing countries like East Asian countries already had a high level of human capital stock prior to their industrialisation period thus little improvement in human capital in such terms can be made. When examining growth rates across Asian countries, investment in education is included in the model in addition to the stock level of human capital. Given the relatively high level of human capital that these economies were already endowed with in the beginning of their development, the rise in education (that was re-enforced by macroeconomic and trade policies that generated demand for skilled labour) was better measured by investment in education. Birdsall, Ross, and Sabot (1995) argued that investment in education is a key to sustaining growth both because it contributes directly through productivity effects and because it reduces income inequality. (p. 477, 503)

In addition, Mingat (1998) has gone into further detail in examining the main features of educational policies among HPAEs and found that primary education appeared to be the single largest contributing factor to economic growth among the NICs, ahead of physical investment. He found that a striking feature of estimates obtained from a large world-wide cross-sectional of countries is the very specificity of NICs which stems from the fact that controlling for those growth accounting variables, which are statistically significant, NICs have managed to obtain substantially higher rates of growth in the long run than other comparable countries. (p. 695-6) Now that most developing countries have reached a certain level of human capital stock, it is the quality of the human capital that counts. This also implies that we may have to find a more appropriate proxy for human capital which will reflect the quality of human capital beyond the level of primary or secondary school attainment when it comes to comparing impact of human capital among these countries. Nevertheless, the Human Development Index is used as a proxy for human capital in this paper as it comprises of educational as well as other aspects of the quality of life.

0.1.2 Determinants of relative growth rates in Korea, Thailand and the Philippines

In addition to the factors behind growth rate in general, this section examines another group of factors which are believed to have contributed to relative economic success in Korea, Thailand and the Philippines. Discussions here are needed to be thorough in order to bring the insights as to why factors such as government intervention in terms of policy orientation and implementation, and endowed factors can be crucial (and were, in fact, crucial) for these economies' relative success. This section first discusses industrialization policy which focuses around export orientation and import substitution as common policies adopted by the three countries. Then, the role of governments, which has an important impact in determining the success of these policies, will be discussed. The industrialization strategy and the role of government can be thought of as policy factors, or the *non-endowed factors,* which has been adopted by each country in pursuing their development. In addition, this section also discusses the other type of factors, *endowed factors,* which these economies already possessed with prior to their development period, and which are believed to have an impact on their development paths and their relative success.

0.1.2.1 Macroeconomic policy : the non-endowed factors

(a) Industrialisation policy

Industrialisation is a common strategy that developing countries have adopted in order to achieve a faster growth rate and higher standard of living especially in LDCs.(Ghatak, 1995) At the beginning of the development stage in 1955, Korea, Thailand and the Philippines were agriculturally based economies in which a substantial component of production was composed of agricultural products and where a large proportion of the population was in farming. Since the decrease in share of agricultural output relative to other components of GDP indicates the degree of industrialisation of an economy, the Philippines' pursuance of industrialisation appears to have failed. The table shows that the Philippines' share of agricultural output has remained relatively the same throughout the period compared to Korea and Thailand. The Philippines' continued dependence on agricultural sector may partially explains why its performance has been relatively weak.

Table 0.1 : Changes in Agriculture's share of GDP during 1960-91 (percentage)

	1960	1970	1980	1990
Korea	37	26	16	8
Thailand	40	26	25	12
The Philippines	26	30	23	21

Source : World Bank, World Development Report 1982, 1993 (in East Asian Economies by Kawagoe, T, p. 202)

In addition, the industrial development strategies employed can be divided into import substitution (inward looking) and export orientation (outward-looking) schemes. It is common for the developing economies to adopt the import substitution (IS) during their initial stage where IS appears to be preferable for saving foreign currency. Producing for imports is seen as an easy way to promote domestic production and create employment. Moreover, as most of these countries are resource abundant, exporting them seems natural in terms of comparative advantage. However, due to the nature of commodity exports, this causes uncertainty in income. Thus, it was justifiable that they turn to promote exports to strengthen economic growth and improve external balance. This pattern of development through industrialisation is seen in many developing countries. However, these two strategies exhibit major differences *not* only in trade, foreign exchange rate, fiscal and monetary and foreign investment policies, but also in the features of goods markets and factor markets. It is also the case that export orientation (EO) is superior to IS in promoting growth. This has been generally been accepted as a conventional wisdom by economists. (Ghosh (1984); Edwards (1992); Ghatak (1995)).

This pattern of industrialization policy is also evidenced in the three countries as they started off with import substitution and then, at different points in time, switched to export orientation. In the beginning, the import substitution scheme may be justified for a labour abundant economy that lacks technology and capital goods. The economies with abundant natural resources like the Philippines and Thailand would tend to stay with the import substitution strategy for longer period as they have more resources to exploit. On the other hand, Korea had a relatively poor natural resource endowment and thus adopted an outward orientation policy rather earlier in the 1960's whereas Thailand and the Philippines did not employ it until the 1970's. Thus it seems that the poor natural resource of Korea forced the policymakers to adopt an export orientation scheme at the beginning of development period.

(b) Government intervention

It is evident that these three countries are highly regulated by the government in different respects and that these regulations have different impacts on the economy. This is mainly due to the formulation of economic plans and their implementations. The extensive degree of government intervention in Korea began to be felt when President Park came in power in the early 1960's. His strong commitment was to bring Korea out of poverty and catch up with the North (Korea.) Industrialisation was to be the route that would achieve these goals. One of the most aggressive movements was to nationalise the commercial banks so that the interest rates could be strictly controlled and funds could be allocated according to the objectives in promoting the economic growth rate. Though aggressive industrialisation in the favour of large conglomerate 'Chebol' could be an example of an unfair government policy, this strategy is not wasteful. In addition, market information and access of exports markets during the early period of development were only possible through the government channel of supports. (Song, 1994)

Even if some have argued that the Korean government is very dictatorial, they accepted that much of the success was through this channel. In part, the long-term and stable government has helped to ensure the completion and success of the long-term projects (President Park was also in office for almost 20 years from 1961 to 1979 when he was assassinated.) To some extent, *'Confucianism'* -- the well disciplined labour force and acceptance of authority help the government in pursuing this aggressive measure to bring the economy to success. If the government was torturing people and engaging in corruption, the government probably could not have stayed in power for long. (Song, 1997) In other words, Korean economic success is not really a miracle in the sense that it stemmed from the fact that it has relatively poor natural resources endowment, limited arable land, and high stocks of human capital. These initial endowments alone could not have allowed Korea to perform so well without the right policies and effective implementation.

It is also evident that the Philippines has the potential of being the most successful economy among the three, ironically, its development was constrained by the lack of appropriate policies and effective implementation. Though the initial endowment is not unrelated to economic success, this is not a sufficient explanation. Since the policy factor in Korea was not endowed, we need to examine how it was oriented and how has it been implemented in such a way that brought its economy into a special case. To understand the importance of *intensity* and the *quality* of the government intervention, it is helpful to look at the orientation and the implementation of the individual countries. This would help explain some aspects behind the relative success of these three countries, which the model was not able to capture.

> *Pomfret (1997) stated that any self-respecting Less Developing Countries (LDCs) has a development plan, but some were only paper plans to show the government's commitment to economic development or to satisfy aid donors. In practice, a number of biases characterised the actual planning process. Resources were devoted to constructing macroeconomic considerations, i.e. the concern was over how much to invest in which industries rather than over the desirability of individual projects. Quantifiable aspects of development (e.g. investment/output ratio) were stressed to the relative neglect of non-quantifiable aspects such as creating incentive, improving education or promoting social change beneficial to development. Finally, too much attention was paid to formulation and too little to their implementation, so that, even when governments had serious intentions to plan, the actual impact was dubious. (p.31)*

b. 1 Orientation of the policies

The formulation of an explicit industrialisation strategy has been an important component of the industrialisation process. Most of the developing countries have followed the path of import substitution and export orientation as the most common strategy of industrialisation. Why is promoting the international trade sector the common route to economic prosperity? A short explanation is that for the developing countries, the exports and imports sectors together are the largest component of GDP (two thirds and above for Asian economies).

The economic development plans of Korea and Thailand set out the government medium-term objectives which are helpful in formulating the appropriate measures needed in accomplishing them. The Korean government, especially during the President Park Era, was known for setting ambitious economic targets. In contrast, the Thai development plans were often inconsistent and the targets were rarely met. Compared to the Korean ambitious numerical target growth rates, the Thai numerical targets and aims during each plan were more realistic. However, the government failure to meet targets was often blamed on the frequent changes of government and the lack of seriousness / competence of the monitoring body. At the same time, the Philippines government seemed to have been adopting various development strategies to accomplish the goals and tackle problems as they occur along the road. (Song 1997, and Warr, 1994) For Korea, the Economic Planning Board (EPB) is the agency responsible for implementing and monitoring the plans in order to improve the economy. Though the plan was initiated in 1960, the first plan was carried out under the establishment of the EPB when President Park came to power in 1962. Likewise, Thailand has the National Economic and Social Development Board (NESDB) to do the same task. For Thailand, the initiation of its national development plans follows a visit of the World Bank mission in 1957. (Warr, 1994)

In contrast, in the Philippines there are a few factors which seem to have led to inappropriate policies. First, the Bell Trade Act passed by the US congress was the major constraint on the Philippines government in pursuing its import-substitution. This imposed free trade between the US and the Philippines for 8 years from its independence in 1946 to 1954. Thereafter, the Philippines government was allowed to gradually raise tariffs on US imports to the full duties in 1973. On the other hand, its exports of certain traditional products to the US were subject to absolute quotas throughout the entire period of agreement. Since the US was the main customer for exports from the Philippines, the agreement has severely limited its income stream.

Second, Yoshihara (1994) pointed out that bad treatment under the US rule left Filipinos with a negative impression of foreigners. It was this reason that prevented the Philippines from benefiting from Chinese entrepreneurship. In fact, the Philippines government has passed a number of laws that discriminate against Chinese. In contrast, Chinese entrepreneurship and business networks have been mentioned by e.g. Yoshihara (1994), Amsden (1995) as an important factor that has contributed to Thailand economic development since the 1950's especially in terms of managerial and accounting skills.

Lastly, the unspecific and short-term policies have put the government in a vulnerable position for corruption. Among others, Yoshihara (1994) has been the most critical in his discussion on how severely corrupted the Filipino system is. He pointed out that the national police system is probably the most corrupt government agency and even the integrity of the judiciary is also suspected. Certainly, there is corruption in every country but the corruption in the Philippines was extreme. The corruption in Thailand is serious, but when compared to the Philippines, it was peripheral. On the other hand, the Korean government had foreseen this problem and thus tried to make the policies as transparent as possible. (Song 1997) This problem in the Philippines is a fundamental part of national organisation and is almost certain to remain and to continue to act as a constraint on economic growth. The rosy economic picture painted for the Philippines numerous times in the past did not materialise, largely because very little was done to rectify institutional constraints. (Yoshihara, p.viii-ix and p. 192)

In summary, the objectives of Korea and Thailand national plans are broadly similar. Both countries were pursuing import substitution during their early stages but Korea switched to export orientation in early 1960's while Thailand did not pursue such a strategy until the mid 1970's. Can this factor alone be accountable for the extensive variation of success between Korea and Thailand? Generally, export orientation is a more effective policy in promoting economic growth than import substitution. Apparently, the main difference between the two economies is the different time period in which they changed their policies from IS to EO. Thus, this difference could partially explain their relative success. While it is also true that Thailand and the Philippines adopted the EO at about the same period, however, this more favourable strategy did not have the same impact for the two countries. By mid 1990's, the Philippines economy still relied much more on its agricultural sector and much less on the industrial sector relative to Thailand. It will be shown that other than the policies themselves, more importantly, the effectiveness of policy depends largely on their implementation and the seriousness of the authority in achieving their objectives which essentially boils down to the type of government prevailing in the country.

b.2 Implementation of the Policies

This section argues why similar policies may be more or less effective in promoting economic growth depending on the way they are carried out. The discussion will be around the Korean's government strategies and the moral incentives that, perhaps, play a far more important role than monetary and fiscal policies. Chia Siow Yue (1996) argued that government intervention is needed for a successful industrialisation. The capacity for successful intervention depends not only on appropriate polity instruments (Thailand has appropriate instruments) but on the competence and goals of decision-makers and on the institutional framework. There are some unique institutional features which Korean government had but which did not appear to be present for Thailand and the Philippines.

- The central decision-making is staffed by administrative and managerial talents; and they are insulated from pressure groups (business owners)
- Decision-makers have to be imbued with growth-oriented goals and have a centralised structure through which to order and co-ordinate priorities.
- A credit-based financial system enables the government to directly influence the sectoral and firm-level allocation of credit. Nationalising all commercial banks in Korea.
- Success requires a high degree of public and private corporations and information sharing.
- The flexibility and close monitoring of the plans.

Song (1997) also found that the Korean's EPB, which is the main decision making body in charge of the economic plans has been particularly effective at policy implementation. In the case of trade policy, for example, the monthly Export Promotion Meeting was institutionalised by the President to implement export expansion. The personal attendance of the President, economic ministers and other high-ranking officials, representatives of trading companies and related organisations, and heads of economic research institutes and selected academic economists underscored the high priority given to trade matters. This is what Song called 'moral' incentive. Korea's decision making machinery also has been highly outward-looking in the sense that it sought to learn from experiences of other countries through Korea's involvement with international organisations such as the World Bank and the International Monetary Fund. (p.142-3) It is also evident in Korea that when policy mistakes are made, corrective measures can be quickly put in place so that economic downturns and loss of competitiveness are only temporary. Rao (1998) observed that the Korean Government is also flexible with its plan to maintain macroeconomic stability. In 1961, when the Korean government called for massive public investment which caused the price to increase by over 30 per cent, the government did not hesitate to cut the expenditure ratio to GNP by over 7 per cent. Similarly, in the early 1970's, the heavy and chemical industrialisation program was abandoned when its expansion fuelled macroeconomic instability. In addition, the effective implementation was also due to political stability, as each government has at least completed its term in the house if not re-elected for the second term. During the past 4 decades, Korea only had 6 Presidents.

In this case, it can be argued that the higher the efficiency of government in carrying out the policy, the more successful its economy will become. In this case, the Korean government does not only have strong commitment to achieving economic growth, it is also highly efficient in carrying out the policy. (Grabowski, 1994) Since the authorities play a significant role in the development process, Thailand, on the other hand, has to some extent suffered from the 'less' efficient government. The low effectiveness of policies which brought about the relatively lower success of the **Thai** economy can be explained on a number of grounds. One obvious explanation of this was the frequent change of government, which caused changes in priority of objectives and delay in their implementation. More importantly, the policymakers and the autonomy of institutions have been criticised as underlying barriers to economic efficiency. There are two possible reasons for this criticism. First, it is the lack of expertise of policymakers, which was often caused by the (irregular) transfers of executives. Secondly, most policymakers either have contacts or belong to different 'interest' groups. This, to some extent, can interfere with policy making and implementation. At the same time, political stability in the Philippines (measured by long-term government) did not result in the effective implementation of the plans while the long-term government in Korea is seen as a favourable factor for effective implementation.

Table 0.2 : Evaluation of National Institutions

	Korea	**Thailand**	**the Philippines**
National Plans	EPB	NESDB	-
Institutions			
Number of governments during 1960-present	6	Over 20	11
Autonomy of the organisation	Yes	No	No
Efficiency			
Rationale of the plans : foreign expert advises	Yes	No	No
Co-ordination within government (ministries)	Yes	No	No
Co-ordination with private sector, feedback etc.	Yes	No	No
Degree of corruption	Minimal	High	Extreme

It is seen in this section that the effectiveness of the plan largely depends on the implementation by the government. For the Philippines, not only are the long-term plans are not present, the corrupt government has dampened the economy even further. For Thailand, the plan was very similar to that of Korea but the implementation was not as effective, which was blamed on the frequent changes of the government. Lastly, Korea is the winner with good plans and effective implementation. As Song (1997) stated that the EPB has been quite successful in its planning function and generally meets the three tests of a good planing function suggested by Nobel Laureate economist Arthur Lewis. He states that an effective agency must : '(1) have the support of the head of the government; (2) allow all the leading decision makers in the economy to participate in drawing up the plan; (3) control crucial decisions at the stage of implementation.' (p. 142)

Therefore, the government intervention is seen as a crucial aspect of economic development especially in these three economies and other developing economies. The idea of an intense degree of government intervention on the economic development may seem outrageous at first. But if we imagine an under developed economy that was ruined by the war with half of the population in poverty (like these economies were in the 1950's), it would not be a surprise if the destination of that economy would depend on the hand of its government. The government, who at that point in time, was the agent most capable of getting the economy back on the track. Thus, the organisation of bureaucracies is also very important ; poor planning and organisation adversely affect implementation, enforcement and efficiency. (Jomo, 1998) So it is fair to conclude this section by saying that for the developing countries, the government intervention is very crucial which could have difference consequences for economic development depending on its objective, plan and implementation of policies.

0.1.2.2 Endowed factors

(c) Natural resources endowment

Given that Thailand and the Philippines are resource rich countries, it was common for these countries to make use of their resources as the engine of their economic development. On the other hand, being separated from North Korea where the natural resources are concentrated, South Korea was left with relatively poor natural resources. It is fair then to say that during their early period of development in 1950's, natural resources had enabled Thailand and the Philippines economies to grow more successfully than Korea. However, as agriculture-dependent economies have often been seen to suffer from price fluctuations and deterioration in terms of trade, natural resources alone cannot get the economy very far. In contrast, the poor natural resources forced the policymakers to adopt an export promotion scheme at an early stage. The superiority of the export promotion strategy over the import substitution strategy for accelerating the economic growth has been accepted as a conventional wisdom. (Ghosh (1984); Edwards (1992); Ghatak (1995); and Ray (1998))

(d) Colonial Rule

Landau (1986) found the coefficient for colonialism to be negative, but this was not even close to statistical significance thus, he concluded that colonialism is not slowing the growth of the former colonies down. (p. 64) Nevertheless, it is argued that factors like colonial rule can influence the path of economic development and that it is partially responsible for relative growth rate among the three countries under study. For example, Korean industrialization was influenced by and benefited from its former colonial ruler, Japan. In fact, Korea has received a great deal of the Japanese technology through the transfer of funds that were tied war reparation. From this point of view, colonial rule has had a positive effect on Korean economic development and industrialization. In contrast, colonization had a negative impact on the Philippines economy. War reparation and aid from US was tied to several trade obligations (the Bell Trade Act) between the two countries. Furthermore, bad treatment under the US rule left Filipinos with a negative impression of foreigners. It was this reason that prevented the Philippines from benefiting from Chinese entrepreneurship. In fact, the Philippines government has passed a number of laws that discriminate against Chinese. (Yoshihara, 1994)

(e) Geopolitical Setting

During the early 1900s, Western countries were exploring Southeast Asia for its natural resources. Thailand was as rich in natural resources as its neighbors but due to its location, it was left as a buffer state between rival colonial powers. Geographically, Thailand is surrounded by Myanmar, Laos, Cambodia, Malaysia (and China before it was forced to give away part of its land in the north to France in exchange for peace). These countries were occupied by various Western states. However, most Thais believed that their independence and freedom was due to a strong King and his soldiers. This allowed the military to be very strong as it had played a major role in governing the country until as late as 1991. (Thailand only had its first elected 'non-military' Prime Minister in 1992)

It will be argued that although Military ruling has brought Thailand much of political turbulence, paradoxically its political situation is considered to have been stable throughout the period. This is firstly due to the loyalty of people and their great respect for the King which endowed him with a significant political role. Secondly, since the majority of Thai is Buddhist, social classes are not divided which indicates a relative degree of social unity. However, such a factor would not become an issue if the Philippines did not suffer from social unrest so much, it became one of the significant barriers to their economic development. (Factors such as the division of social classes; many different religion practices; and different values of people from different islands have occasionally caused unnecessary clashes.)

Nevertheless, Mingat (1998) has stressed that, however, there are two reasons that we should not give too much emphasis on the 'cultural factors'. First, economists are reluctant to consider them as convenient excuses for an unsuccessful theory, although this does not imply that cultural factors do not exist. Second, the Asian cultural factors now sometimes used to explain the good performance of these countries, in particular the 'Confucian ethic' (the Asian instinctive acceptance of authorities), were put forward 30 years ago to explain why Asian countries would have difficulty in developing. Whatever the validity of the cultural factors, it remains that some countries have done better within similar cultural contexts, and cultural factors constitute only one context in which policies play, hic and nunc, a major role. (p. 696)

Section 0.2 : Literature review on Central Bank Independence (CBI)

There is evidence to support the view that poor supervision and under-regulated financial markets were caused by incompetence of the authority in charge of the monetary policy, the central bank. The Bank of Thailand (BoT), in 1993, has liberalized the capital account – allowing the capital to flow freely while maintaining the fixed exchange rate. A few years later when a small commercial bank (Bangkok Bank of Commerce) was beginning to erode due to its accumulation of non-performing loans which were owed mostly by politicians, the BoT has repeatedly rescued the bank using the international reserves. These loans were, indeed, politically motivated. Thus, in order to correct these problems, it is suggested that the central bank be granted independence so the central bank authority could make monetary policy without interference from politicians and private bankers.

This section first defines the significance of central bank independence (CBI) and its objective as to why a country would want to grant independence to its central bank. It then discusses the measurement of CBI and argues that the legal measurement of CBI suggested by the literature does not reflect the real independence of the authority of the central bank. (Maxfield, 1994) Lastly, it discusses the role of central bank in the context of developing countries and argues why price stability may not necessarily be the most important objective in achieving CBI in developing countries.

0.2.1 Definition and Objectives of CBI : why is CBI needed?

Bade and Parkin (1987) have defined *'political independence'* as the ability of the central bank to select its policy objectives without influence from the government. This measure is based on factors such as whether or not its governor and the board are appointed by the government, the length of their appointments; whether government representatives sit on the board of the bank; whether government approval for monetary policy decisions is required; and whether the 'price stability' objective is explicitly and prominently part of the central bank statute. Then, there is an *'economic independence'* which is defined as the ability to use instruments of monetary policy without restrictions. The most common constraint imposed upon the conduct of monetary policy is the extent to which the central bank is required to finance a government deficit.

The general understanding is that the main objective in granting the central bank independence is to achieve price stability. Given that price stability could stem from other factors[9], and while a large number of studies showed that granting a central bank independence may not result in a low inflation, one may ask why has price stability long been an important objective in granting a central bank an independence. Perhaps, this question may be best answered by explaining what is likely to happen when a central bank is *not* independent. In other words, in what circumstances would a *dependent* central bank inflate?

Cukierman (1992) pointed out several motives for monetary expansions in terms of employment, revenue (deficit financing), mercantilistic, and financial stability. However, it is the first two motives that are often reasons why a *dependent* central bank is likely to inflate. As he puts it,

> *First, the dynamic inconsistency is the inflationary bias of monetary policy in the presence of employment objectives. Conventional wisdom in macroeconomics implies that employment and output can be influenced by unanticipated inflation and therefore by unanticipated monetary growth. This can result from either the existence of Fischer (1977)-Taylor (1980) long-term contracts or a Lucas (1973) type short-run Phillips curve. To the extent that monetary policymakers find the natural level of employment too low, they may be tempted to create surprise inflation in order to push employment above its natural level even at the cost of some inflation. Second, it is the seigniorage or deficit financing which Cukierman (1992) defined as the amount of real purchasing power that government can extract from the public by printing money. While a government with large budget deficit will be tempted to borrow from the central bank or even ask it to print money, these actions may be restrained by law in countries such as Germany or the United States. However, this law may not exist in many other countries. (Cukierman,1992, p. 27-47)*

Thus, the concepts of political and economic independence can indeed be put in the context of inflationary bias that is attributed by the dynamic inconsistency of monetary policy or to the revenue motive of the inflation tax or both. This explains while central bank independence may not necessary help lower inflation rate, a central bank may likely to inflate if it does not have an independence.

[9] Factors such as macroeconomic stability, a strong exchange rate or the influence of the world economy.

0.2.2 Measurement of CBI

Since inflation and the budget deficit are the two main reasons why the central bank may be likely to be restrained from being granted independence, they are the two sets of variables normally included in the models. Thirdly, there are legal variables such as terms of governor, objective of the bank and etc. in measuring the *degree* of central bank independence. Most studies on CBI were conducted by using data across countries to formulate the model measuring the independence in relative terms. Among others, Cukierman (1992) who is the mainstream author on measurement of CBI, proposed three different set of indicators for CBI. The first set includes various proxies of *legal independence*. The other two indicators are designed to proxy deviations of actual from legal independence, actual turnover of CB governors and the aggregate of coded responses to questionnaires. In his paper, the independence of Bank of Thailand (BoT) is measured both in terms of legal independence and actual turnover of CB governors relative to other countries while the questionnaire variable (self-assessment) could not be included. The variables under the legal independence definitions are the terms of governor, formulation of policy, objectives of the bank, and the bank's limitations on lending which are weighted 0.20, 0.15, 0.15 and 0.50, respectively. His measurement indicated that the BoT shows relatively low independence in these terms. (p. 397)

The inflation rate is used as a determining factor of CBI under the assumption that the central bank's main objective is to stabilize the prices. Hence, the hypothesis is that CBI will induce a low inflation rate. Bade and Parkin (1987), Alesina and Summers (1993) found that there is positive correlation between low inflation and CBI in their samples which concentrated on the DCs. In contrast, Posen (1995) found that legal measurement fails to capture the actual independence of the central bank and that CBI does not cause low inflation. (Posen, 1995) De Haan and Van'T Hag (1995) gave the example that while Japan has a relatively dependent central bank, it has also an average inflation rate which belongs to the lowest within the OECD area. Similarly, according to Cukierman's ranking (1992), Greece has a relatively independent central bank and quite a high level of inflation. (p. 335) In addition, Siklos (1995) also found that, using the Cukierman's legal measure, the central banks of Chile, Venezuela and Mexico are even more independent than either the Swiss National Bank, the German Bundesbank, or the US Federal Reserve.(p. 363)

In addition, Goodman (1991) tested Bade and Parkin's (1987) legal measurements and incorporate a set of deficit financing – limits on direct central bank financing of government deficit and limits on central bank purchases of government bills on central bank of France, Italy and West Germany. He found that Bundesbank has the most independence while the Bank of

France has the most dependence with the Bank of Italy bridging the gap between the two. This measurement may be more applicable in the developed countries where the market mechanism is able to operate more efficiently, which leaves only the price-controlling job to the central bank.

On the other hand, if by CBI is meant the ability of the central bank body to make monetary policy changes without interference from the politicians and business owners, then it is inevitable that we have to find such measurement that will take into account the relationship between these parties, not to mention the rationale behind the judgement of the central bank governor in making monetary decision which is almost impossible to measure. Fry (1998) has made a further effort in taking, for example, the number of meetings between central bank governors and private bankers and self-evaluating questionnaires of authorities at central banks into account as he thinks they reflect the level of CBI. Thus until we can measure the degree of moral judgement of the central bank governor, we are still at least a step away from obtaining efficient measurement of independence of the central bank. Nevertheless, this is not to conclude that the independent judgement made by the policy makers at the central bank would even guarantee low inflation.

However, the robust findings from these studies is that high correlation between CBI and low inflation rate can be found when samples are restricted to developed countries and in a very limited context of legal measurement. The next sub-section gathers evidence which suggested that this relationship does not hold when it comes to developing countries especially in Asia. Furthermore, legal measurement is found to be misleading in Latin American countries. (Fry, 1998)

0.2.3 CBI in the context of developing countries

In the case of developing countries and as argued in Paper III, the independence of the central bank is sought in order for the bank to have freedom to make monetary policy without interference from politicians and business owners. This is all comes down to the moral judgement of the policy maker at the central bank especially the governor who is often the key decision maker in determining crucial monetary policies, movement or reforms. Fry (1998) suggested that this yet another issue to be tested – that once fiscal problems are resolved, CBI in a typical developing country is determined largely on the basis of policy-making competence. (p. 527)

Interestingly, even before the central bank reforms in the countries considered were introduced, the monetary authorities of Argentina, Chile, Mexico and possibly Venezuela were more independent than an aggregate index for the G7 countries. In no instance, however, were the inflation rates in the 5 countries near the average inflation rates for the G7. Thus, while the CBI coupled with some explicit mandate for the bank to aim for price stability are important institutional devices for assuring of price stability, legal CBI may be neither necessary nor sufficient for low inflation. (De Haan and Van'T Hag 1995, p. 335-363)

Fry (1998) has used the fiscal position approach to determine the degree of CBI in 70 developing countries. He included in his model the autonomous measures of CBI based on Cukierman (1992) with the emphasis on a number of fiscal factors, the size of the government's deficit and the methods by which it is financed. In his hypothesis, there are four ways in which the budget deficits can be financed ranging from the zero cost of borrowing from the country's central bank to the market cost of borrowing from the private sector. He suggested that the bigger its deficit and the more a government relies on its central bank, the less independent its central bank. (also see Cukierman 1994) So the size of the deficit and the methods by which it is financed together determine the extent of the CBI. He also found that the central banks with greatest independence are located in high growth countries. (p. 527)

In contrast, Sikken and De Haan (1998) found no relationship existed between CBI and government budget deficits in a group of 30 developing countries. This was done by running cross sectional regressions of the accommodation coefficients on the indices of CBI and the conclusion was that only if the turnover rate of CB governors or political vulnerability index is used as proxy for CBI, monetary accommodation of deficits is negatively related to CBI. These findings seem to suggest that both economic growth and low budget deficits are positively correlated with the degree of CBI. It is also reasonable to think that there is a link between economic stability (with low deficit and low inflation) and the high degree of CBI.

Thus, legal measurements which are derived from developed countries do not tell us very much about the independence of central banks in the developing countries. Since this is the case, would channels in granting central bank an independence suggested from these papers be effective in the Bank of Thailand or other central banks in developing countries? Mas (1995) pointed out that, 'merely establishing an CBI may not bring about its professed benefits in developing countries with *shallow financial markets* where there is limited scope for a truly independent policy. The benefits of CBI may be eroded by conflicts between fiscal and monetary policy and by inherent problems of central bank institutional design, so that problems of dynamic inconsistency associated with monetary policy are not solved but merely transformed.'

(p. 1639) The next sub-section gathers some of these suggestions and discusses whether they could be adopted in developing countries.

0.2.4 Granting central bank an independence by appointing a conservative central banker

Rogoff (1985) argued that by appointing a conservative central banker who is strongly opposed to inflation and does not share the social objective function is not optimal since low inflation could come at the cost of distorting the central bank's responses to unanticipated disturbances. Indeed, his important conclusion is that it is not generally optimal to legally constrain the central bank to hit its intermediate target (or to follow its rule) exactly, or to choose 'too' conservative an agent to head the central bank. Thus, rigid targeting is appropriate only in certain very special cases. (p. 1170-1) On the other hand, Walsh (1995b) suggested that principal-agent framework would determine how a central banker's incentives should be structured to induce the socially optimal policy. (p. 150) In fact, Walsh's method has been adopted by the central bank of New Zealand via an inflation target where the governor is contracted to control inflation at a certain level, otherwise, he will be dismissed.

Fischer (1995) put Rogoff's and Walsh's theories of granting CBI in the context of *goal independence* – a central bank that sets its own policy goal and *instrumental independence* – a central bank that is given control over the levers of monetary policy and allowed to use them. While Rogoff's (1995) theory offers central banker both control over monetary policy and independence to maximize his or her own utility function, central bank governor has both goal and instrumental independence. In contrast, Walsh's theory only grants central bank governor instrumental independence as the bank objective is set by the government while governor has independence to achieve such (contract) goal. Fischer (1995) also emphasised that, in a well defined sense, the latter situation of central banker in the principal agent framework is held accountable for the outcome of monetary policy. In the New Zealand case, the central bank governor is also held responsible for such outcome. He also concluded that central bank should have only instrumental independence in fulfilling a given set of goals by the government and held accountable for doing so. This accountability is needed for two reasons, first, to set incentives for central banker to meet its goal and explain its actions, and second, to provide democratic oversight of a powerful political institution. His preference probably rests on the possibility of the central banker being too independent. And though Fischer pointed out that independence implies the central bank should be free of any obligation to finance government budget deficits, the central bank may help the treasury in its short-term cash management operations. (p. 201-3)

Posen (1995) thoroughly discussed the role of the financial sector in forcing the central bank to maintain the price at a moderate level as being essential for the performance of the financial sector. Similarly, in the developing countries, the financial sector and private bankers have an even stronger impact on the central bank and the governor since the financial sector is the main external source of information and advice on monetary policy. However, the financial sector in the developing countries was not so concerned about low inflation, as this was being assured by the exchange rate regime, thus private bankers have no interest in granting the CBI. Instead, as the central bank in the developing countries plays the role of financial regulator, private bankers, known as having a large influence on the central bank governor, tend to interfere with policy decisions in such a way as to favour their interests.

0.2.5 Relevance of CBI in the case of Thailand

However, in the case of Thailand and other developing countries with shallow financial markets, Mas (1995) argued that establishment of CBI may not bring about its professed benefit because there is a limited scope for a truly independent monetary policy. This view is also supported by Bowles and White (1994) as they stated that in a country where the financial sector is undeveloped and the country is highly dependent on flows of external finance, the idea of CBI is largely irrelevant. (p. 257) At the same time, Fischer (1995) also argued that although the question of whether the central bank should supervise banks remains open, it is of not much importance (p. 203) As a matter of fact, these arguments seem to suggest that independence of central bank is not essential if the objective of seeking that independence is anything other than the price controlling task. This is because the theory of CBI is derived from developed countries where financial markets are operating efficiently and there is not a role for the central bank as financial market developer or regulator.

Lastly, Maxfield (1994) pointed out that the origin of the central bank may explain its behavior and relationship with its government. '*There are two stereotypes about central bank origins. In every Western setting, central banks emerged as a response to needs for a central institution to serve other banks. If this is the predominant reason for the birth of central banking institutions, why would such institutions ever have emerged in developing countries where, in contrast to advanced countries, private financial markets have always been undeveloped? The typical answer is that central banking institutions in developing countries are born in response to the financial needs of government.' (p. 563)* In the case of Thailand where the government budget has been relatively low and in surplus, the government has less need for a suppliant central bank. Thus, there is a greater likelihood that the private financial community will be robust and will take the lead in founding a central bank designed to serve its interests by maintaining overall monetary stability and the exchange rate, guaranteeing private bank transactions, and restricting excess competition among other private and foreign banks. The more financially vulnerable banks are, the more they depend on central bank facilities – in the form of loans, regulations or reduced reserve requirements – to keep them afloat and the greater their preference for loose monetary policy and state intervention in financial markets. (p. 564-5)

Section 0.3 : Literature review on the models of Currency Crises

The Asian financial crisis has been examined in the literature, with a focus on the causes and consequences of the crisis extensively. This framework is popular because the crisis was largely unexpected by the market and while Krugman (1994) had predicted the event, he also accepted that the severity of the crisis was beyond anyone's expectation as he puts it, *'than even the most negative-minded anticipated.'* Furthermore, it is argued that the IMF rescue package needed to be more carefully designed in recognition of the particular characteristics of the Asian countries in crisis.

This section first looks at Polak's model (1957) which the IMF introduced in the 1950s in approaching balance of payment problems and 2 main theories of currency crises which have been exemplified prior to the Asian financial crisis known as 'first generation' models of currency crisis by Krugman (1979) and 'second generation' models by Obstfeld (1986). The first generation models explain crises as the product of budget deficits in which the government pursues an expansionary monetary policy in order to finance its deficit. This then ensures the eventual collapse of a fixed exchange rate, and the efforts of investors to avoid suffering capital losses when collapse occurs provoke a speculative attack when foreign exchange reserves fall below a critical level. In addition, other macroeconomic fundamentals indicators such as investment ratio, money growth, inflation rate, current account deficit, real exchange appreciation and output growth, are indicators which drive 'first generation' crisis models. Instead, second generation models by Obstfeld (1994) explained the crises as the result of a conflict between defending a fixed exchange rate and letting it float. In this case, even a sustainable fixed exchange rate in a fundamentally sound economic situation may be subjected to a speculative attack when investors begin to suspect that the government will choose to let the parity go. Thus, speculative attack could happen based purely on self-fulfilling prophecy.

Then, this section will look at another set of theories which economists have derived from the Asian financial crisis itself. These post-Asian crisis theories are pointing in the similar direction of moral hazard (Krugman, 1999, and Corsetti, Pesenti, and Roubini, 1998) and fragile financial markets (Sachs, 1998) However, have these theories fully reflected what happened in Asia? Could these theories justify the degree of severity of the crisis? Krugman (1999) did not think so. He has recently proposed yet another set of factors in trying to capture the core cause of the crisis in Asia which he called a 'third generation' crisis. He believes that the role of balance sheet difficulties in constraining investment by entrepreneurs and the impact of the real exchange rate on these balance sheets are two essential pieces of the puzzle. (p.4) (This paper is still in a preliminary draft form.) Lastly, the chapter briefly discusses the policy implication for these three different causes of a crisis which will be referred to as first-, second-, and third-generation of crisis justified by Krugman (1979), Obstfeld (1994) and Krugman (1999). Thus, the review of literature will help clarify why the crisis was not anticipated whether there are particular features in these economies which prevented the IMF's measures from being effective, and, perhaps, tells us that the 40 year-old model failed to rescue the Asian economies simply because the IMF lack true understanding of the causes of the crisis and of local conditions.

0.3.1 The IMF's monetary model (Polak, 1957)

The IMF has been using the Polak (1957) model since its inception in 1947 when it opened its door for business and allowed member countries to borrow funds to meet their financial difficulties. One key characteristic of the model is its simplicity. Polak (1997) pointed out that at the analytical level, simplicity was inevitable because of limitation of economic data during the early post-war years. The only two sets of statistics that were generally available were banking data and trade data. In addition, simplicity kept the model focused on the key variable that *government* could control, domestic credit creation, that was seen as crucial to the correction of the balance of payments problems for which the IMF assistance had been invoked. (p. 16) Indeed, in the IMF experience, it is often the case that countries which come under its programme have suffered from the financial crisis caused by the accumulation of public debt which eventually led to the balance of payment difficulties.[10]

The model was designed to study the effects on both income formation and the balance of payments of the two most important (exogenous) variables, changes in exports and the creation of domestic banking credit, or, in monetary terms, foreign and domestic autonomous additions to country's money supply. The dynamic character of this model derives from the fact that it contains both income and the change in income. Polak (1997) claimed that solving the model

[10] This was the case for the Tequila crisis in 1994. However, in the case of the financial crisis in Asia, collapse in financial markets stemmed from the accumulation of short term debts created in the *private sector*, and all of these countries had enjoyed either budget surplus or budget deficits of below 2 per cent (as percentage of GDP). Thus, what is right for one economy need not be right for the world as a whole.

this way gives values for the variables that are determined by the model, such as income and the changes in foreign reserves, as weighted averages of the values of the current and past years of exports, capital inflows of the non-banking sector, and the change in the domestic credit of the banking system. Thus, the dynamic of the IMF model, in contrast to most of the academic monetary models of the balance of payments, yields not only the final equilibrium value of the endogenous variables but also the time path toward these values. (p. 16-17)

In addition, Polak (1997) pointed out that although the IMF has continued to use essentially the same model as the foundation of its credit arrangements, the model has been adapted to changing circumstances. For example, the credit creation was split into credit to the *private sector* (usually to be encouraged) and credit to the *government sector* (usually to be discouraged). Furthermore, many IMF supported programmes in recent years have contained major policy understandings on structural adjustment, price and trade liberalisation, deregulation of the labour market, privatization, and many other policies. Thus, the contents of the IMF package became increasingly complex over the years. (p. 17)

However, Sheng (1997) argued that the world today is very different from 5 decades ago with very volatile and very large capital flows and it was the free movement of these flows that led the Asian economies into crisis within days. While the relatively simple elegance of models may have depended upon very strict assumptions on robust and efficient payment system, very good set of rules and law, proper banking supervision and transparency in information, most of the world is not like that. Thus, it is important not only to get the macroeconomic policies right, but to get the micro policies right. In short, Sheng (1997) commented that the Polak's 40 year old model is a flow model which has not taken into consideration the question of stocks. In particular, it looks at monetary creation, but it has *not* looked at the *quality of bank money*. Thus, the model did not correct and certainly cannot ensure that the sound and well-regulated banking systems. (p.1-2) Therefore, the IMF's traditional approach requires re-evaluation if it wants to be able to handle present day financial crises.

In addition, Sengupta (2000) pointed out that as the IMF's job description changed over time (from supporting the **fixed exchange rates** in many *developed countries* during 1950s-60s to promoting **exchange rate stability** in *developing countries* in 1970s), the model should have kept changing in response to the requirements of the changing clientele. Therefore, even after incorporating some Keynesian variables -- of demand management, the model did not work well with *developing countries*. Furthermore, as adjustment problems of developing countries could not be solved in a short period, the nature of the Fund's loans spread over 3-5 years seems to fall short. As a result, some countries had a number of successive stand-by programmes dealing with the same balance of payments problem. However, in spite of that, several of them went off-track and gave up the programmes in the course of their implementation. There were of course a number of cases of success in which the balance of payments deficits that called for Fund support were reversed. But even in those cases, the countries often found that while their balance of payments had improved, their growth performance or employment situation had deteriorated. Thus, both underlying models used in solving the balance of payment problems and repayment obligation, amount of funds and, etc., needed modification. (p. 117-118)

0.3.2 'First-generation' or fundamentalist crisis (Krugman, 1979)

Krugman (1979) explained a crisis as result of a government attempting to maintain its currency at a fixed level in order to finance its deficits which may cause its foreign reserves to be exhausted and its borrowing approach a limit. When the government has exhausted its foreign reserves, it will experience a balance of payments crisis and will eventually be forced to let its currency float. In this case, a speculative attack is likely to succeed if speculators think that the government budget deficit was becoming unsustainable as the government financing via seignorage ensures the eventual collapse of a fixed exchange rate. As Krugman puts it, when the government is no longer able to defend a fixed parity because of the constraints on its actions, there is a 'crisis' in the balance of payments. (p.311)

In addition, a government budget financing by monetary expansion may put pressure on domestic inflation to rise and become unacceptable. In either case, when the speculators were confident that the government was planning to let the currency float, they will sell the local currency in exchange for foreign currency (stronger currencies) which a government was holding in its reserves. Krugman (1979) described how a speculative attack on a government's reserves can be viewed as a process by which investors change the composition of their portfolios, reducing the proportion of domestic currency and raising the proportion of foreign currency. This change in composition of speculators' portfolio is justified by their expectation of currency depreciation as government's reserves was depleting. However, he also pointed out that sometimes the government is able to defend its exchange parity by calling on some kind of secondary reserve which can be in the form of other loans and emergency loans. If this is the case, then we will see a dramatic reversal of capital flows as outflows would return and the government would be able to accumulate its reserves back to the normal or pre-crisis level again. This would be the case when the speculators are convinced that the government is committed to its fixed parity. Nevertheless, the recovery would only be temporary if the speculators suspected that the fixed exchange rate would soon have to come to an end. (p.312)

As a matter of fact, he added, even in the situation when the fears of abandonment of fixed exchange rate were proven unjustified, speculative attacks could occur whenever the market is uncertain about how far the government would be willing to spend its reserves to defend the currency. This can be described as arbitrary speculative behavior or as Krugman puts it, a 'one-way option'. In this situation, speculators do not lose by speculating against the currency. (p. 312) Thus, depending on the government's financial capacity (amount of foreign reserves) to convince the speculators of its commitment to defend its fixed exchange rate scheme when speculative attack occurs, this produces the possibility of alternating the balance-of-payment crises and recoveries of confidence. (p. 323) Likewise, Kaminsky and Schmukler (1999) pointed out that crises occur when the economy is in a state of distress with a deteriorating current account, a slow down in growth, and real estate price bubbles. Thus, first-generation model of crisis generally says that 'weak domestic economic fundamental' is a major cause of currency crises. (p. 537-538)

In addition, Velasco (1987) examined how financial crisis and balance-of-payments crisis have affected Latin American economies, with particular reference to Chile, during the 1970's. He had explored the connection between the balance of payments and the health of the financial system and how they can affect macroeconomic stability. While the bank deposits are implicitly or explicitly guaranteed by the government, bank runs or sudden withdrawal of deposits can cause banks to have liquidity problems. If the banks collapse, the government will be liable for its guarantee and this is likely to create a deficit. which will eventually lead to a balance-of-payments crisis. (Velasco, 1987) Thus, regardless of how the government deficit is generated, i.e. over-spending or bailing out private banks, a budget deficit could create a fundamental cause of crisis via balance-of-payment crisis in the manner of Krugman.

On the other hand, Kaminsky, Lizondo, and Reinhart, (1997) have identified two sets of indicators from 25 selected empirical studies on currency crisis which examine sample periods that run from the early 1950's to the mid 1990's, and cover both industrial and developing countries which the emphasis on the latter. (p.8) From these papers, they concluded that variables which have the best track record in anticipating crises include : output, deviations of the real exchange rate from trend, equity prices, and the ratio of broad money to gross international reserves. In addition, they have proposed a 'signals' approach that essentially involves monitoring the evolution of a number of economic indicators that tend systematically to behave differently prior to a crisis. (p.4) These variables, indeed, are variables whose contribution to the prediction of crises was found to be statistically significant, based on the results presented in the original papers. At the same time, the focus was primarily on papers that examine the experience of various countries, as their findings are more likely to be suitable for generalization than the findings of papers that study a single experience. On the other hand, indicators which have proved to be particularly useful include international reserves, the real exchange rate, domestic credit, credit to the public sector, and domestic inflation. Other indicators that have received support include export performance, money growth, real GDP growth, and the fiscal deficit. Nevertheless, these findings indicated that macroeconomic and financial fundamentals are determinants of currency crises though none of the existing theoretical models were able to predict the Asian financial crisis. (p. 11)

0.3.3 'Second-generation' or self-fulfilling crisis (Obstfeld, 1984)

Even though Obstfeld does not rule out the possibility that weak economic fundamentals could induce speculative attack, he showed that speculative attack could also be a result of purely self-fulfilling prophecy. Among others, he described that such self fulfilling feature in fact stems from the speculators' expectation of government changing policy to abandon a pegged exchange rate. (Diamond and Dybvig (1983) Hence, even with strong economic fundamentals, a speculative attack occurs purely due to the speculators' anticipation of a government change of exchange rate scheme. In this case, speculative attacks appear to be self fulfilling, since they may occur even when the level of reserves seems sufficient to handle 'normal' balance-of-payments deficits. These crises are apparently unnecessary and cause the collapse of an exchange rate that would otherwise have been viable. (p. 72) Thus, even though the crisis is not inevitable, agents believe that the central bank will respond to crises by embarking on a programme of heightened inflation. The belief that the authorities will, in effect, ratify crises makes it unprofitable for any speculator to hold domestic currency while a run is taking place. (p. 79)

In this context, Obstfeld (1986) argued that balance-of-payment crises are very similar to bank runs presented by a stylized model of financial intermediation by Diamond and Dybvig (1983). In their model, there are two equilibria : one in which agents have confidence in the solvency of financial intermediaries, and one in which lack of confidence leads to a run involving self-fulfilling expectations because banks fail if, and only if, there is a run. Similarly, Flood and Garber (1984) gave an example of a self-fulfilling run which showed how an otherwise viable gold standard might break down if agents anticipate that it will collapse some time in the future. Thus, as in the example of self-fulfilling balance-of-payments crises by Obstfeld (1986), and for the same reason, indeterminacy arises only when agents expect the authorities to resort to inflationary finance in the wake of a regime collapse. (p. 79)

This shift between different monetary policy equilibria in response to self-fulfilling speculative attacks is also supported by Kaminsky and Schmukler (1999) who examined how rumours may be the trigger for a speculative attack. Interestingly, they used the 20 largest one-day swings in stock price of 9 developing Asian countries from the beginning of 1997 to mid 1998 to examine the reaction of financial markets to news, either rumors or fundamental, in order to capture herding behavior and contagion effects. Their main findings indicated that some of the largest one-day swings cannot be explained by any apparent substantial news, economic or political, but seem to be driven by herd instincts of the market itself. The results also indicate that rumors unrelated to the release of relevant information affect foreign markets as strongly as they affect domestic financial markets, suggesting the presence of important contagion effects. (p.588) Also, Radelet and Sachs (1998) emphasized in their paper the role of financial panic as an essential element of the Asian crisis.

Thus, the 'second-generation' model suggested that crisis is mainly caused by weak economic fundamentals that can be a result of self-validating shifts in expectations in the presence of multiple equilibria, provided that the fundamentals are weak enough to push the economy in the region of parameters where self-validating shifts in market expectations can occur as rational events. For example, if investors believe that the currency is likely to be devalued in the near future, their speculative behaviours will result in selling off such currency, triggering a crisis in a self-fulfilling way. This is better known as 'self-fulfilling crisis' model of crisis. (Corsetti, Pesenti, and Roubini, 1998, p. 2-3) Glick (1998) also pointed out that the nature of self-fulfilling of the second-generation model currency crisis models, liquidity-based financial panic models, as well as other multiple equilibrium each implies that in principle, anything could be the trigger – any arbitrary piece of information becomes relevant if market participants believe it is relevant. (p. 18) In short, the peg exchange rate system could suddenly collapse even in countries with sound economic fundamentals as evident in the case of Asian financial crisis.

These papers showed that speculative attacks reflect not irrational private behavior, but an indeterminacy of equilibrium that may arise when agents expect a speculative attack to cause a sharp change in government macroeconomic policies. In other words, a crisis induced policy change which, if anticipated, leads to indeterminacy of equilibrium and the possibility of self-fulfilling speculative attacks on a fixed exchange rate. Thus, expected government actions may lead to undesired outcomes in economies that would, otherwise, function more efficiently.

As Radelet and Sachs (1998) have quoted from Milton Friedman and Anna Schwartz (1960) in their paper presented at the NBER Currency Crises Conference in February 1998.

> *'Yet it is also true that small events at times have large consequences, that there are such things as **chain reactions** and **cumulative forces**. It happens that a liquidity crisis in a unit fractional reserve banking system is precisely the kind of event that can trigger – and often has triggered – a chain reaction. And economic collapse often has the character of a cumulative process' (p. 1)*

0.3.4 The 'Third-generation' crisis and its relevance during post Asian crisis period

Neither the fundamental- nor the self fulfilling- cause of financial crisis theories could explain very well the underlying cause of what happened in Asia in 1997. During the start of the speculative attack in the early 1997, key economic data like GDP, international trade or even inflation and unemployment which could tell us about economic fundamentals were, at best, be available up to 1995 or perhaps the first quarter of 1996. Thus, given the available economic data during the onset of the crisis, these indicators did not show signs of a possible crisis in the near future. In addition, no government in the region had shown any sign of intending to change its fixed exchange rate parity. Therefore, based on the existing theories of currency crises which predict crisis, the Asian financial crisis was largely unanticipated.

However, the degree and duration of the severity of crisis in Asian countries have been drawn to many economists' attention as they tried to find the model in capturing what happened in Asia. On the one hand, Roubini (1998) and Krugman (1999), among others, have suggested that moral hazard or implicit loan guarantees either by the government or international organizations like the IMF could induce creditors to lend money without a proper risk assessment. At the same time, such implicit guarantees could provide a sort of hidden subsidy to investment, so investors will tend to invest in a more risky project than they would otherwise. However, such low return investment will eventually collapse when visible losses lead a government to withdraw its implicit guarantees. On the other hand, Dybvig and Diamond (1983) and Velasco (1998) argued that a bank run is the cause of financial panic through a self fulfilling loss of confidence of short-term creditors. In such a case, these creditors will withdraw their loans even from solvent borrowers and liquidate their investment prematurely. As a result, a withdrawal of one creditor could induce other creditors to do the same and if the scale of such panic is large, all short-term loans could be called back causing a bank run and collapse in financial market, assuming there is no lender of last resort.

In addition, Glick (1999) pointed out that, to a large extent, the Asian crisis can be explained in terms of impulses and propagation mechanisms related to fundamentals, specifically general weaknesses and distortion in the financial sector – lending practices based on relationships, excessive risk taking, and inadequate financial supervision and regulation. Impulses and propagation mechanisms are terms which macroeconomists typically apply to economic fluctuations. Impulses are shocks that get things rolling which can come from shifts in economic policy or other fundamentals as well as from spontaneous changes in confidence or preferences, while Propagation mechanisms are structural features of an economy that amplify and / or prolong the effects of the impulses. A complete understanding of the crisis requires an identification of both the impulse(s) that initiated the crisis, and the propagation mechanism(s) responsible for the ongoing effects. (Glick, p. 1)

More importantly, when the financial panic was eventually over almost a year after it started in mid 1997, a number of economists have reexamined the root cause of the crisis. This group of economists focused their search for causes of the Asian financial crisis on corrupt and mismanaged banking systems and lack of transparency in corporate governance. They stressed that the turmoil demonstrates how policy mis-steps and hasty reactions by governments, the international community, and market participants can turn a moderate adjustment into a financial panic and a deep crisis. (Radelet and Sachs, 1998, p.1) Krugman (1998c) emphasized that the Asian story is really about a bubble in and subsequent collapse of asset values in general, with *the currency crises more a symptom than a cause* of this underlying real malady. He further argued that the problem began with financial intermediaries – institutions whose liabilities were perceived as having an implicit government guarantee, but were essentially unregulated and therefore subject to severe moral hazard problems. (p. 3) Among others, Corsetti, Pesenti and Roubini (1998) have gone further in playing theoretical catch-up by incorporating speculators' expectation of bailout by the government, moral hazard, as the main core in their model. This speculative attack models featuring bailout incentives are '*third generation*' crisis models that have been tailored to fit the speculative attack which happened in Asia. (Glick, 1999, p.8)

Corsetti, Pesenti and Roubini (1998) emphasized that poor investment and lending decisions in Asian were a result of moral hazard or the implicit government guarantee which led Asian financial institutions to expand their liability excessively by borrowing abroad. Counting on future bailout interventions, weakly regulated private institutions have a strong incentive to engage in excessively risky investment. Expectations of future bailouts need not be based on an explicit promise or policy by the government. Bailouts can be rationally anticipated by both domestic and foreign agents even when no public insurance scheme is in place and the government explicitly disavows future interventions and guarantees in favor of the corporate and banking sectors. (p. 3-4) The implicit guarantee by governments is a normal practice found in

Asian countries, however, the recent experience in Asia was the result of exhausting foreign reserves in bailing out troubled financial institutions which eventually forced the authority to let go its fixed exchange rate regime.

Corsetti, Pesenti and Roubini (1998) pointed out three different, yet strictly interrelated dimensions of the moral hazard problem at the corporate, financial, and international level. At the corporate level, political pressures to maintain high rates of economic growth had led to a long tradition of public guarantees to private projects, some of were effectively undertaken by government control. And with governments that appeared willing to intervene in favour of troubled firms, markets operated under the impression that the return on investment was somewhat 'insured' against adverse shocks. Such pressures and beliefs accompanied a sustained process of capital accumulation, resulting in persistent and sizable current account deficits. Common wisdom holds that borrowing from abroad to finance domestic investment should not raise concerns about external solvency. The extensive liberalization of capital markets was consistent with the policy goal of providing a large supply of low-cost funds to national financial institutions and the domestic corporate sector. The same goal motivated exchange rate policies aimed at reducing the volatility of the domestic currency in terms of the US dollar, thus lowering the risk premium on dollar-dominated debt. The international dimension of the moral hazard problem hinged upon the behavior of international banks, which over the period leading to the crisis had lent large amounts of funds to the region's domestic intermediaries, with apparent neglect of the standards for sound risk assessment. Thus, the core implication of moral hazard is that an adverse shock to profitability does not induce financial intermediaries to be more cautious in lending, and to follow financial strategies reducing the overall riskiness of their portfolios. Quite the opposite, in the face of negative circumstances the anticipation of a future bailout provided a strong incentive to take on even more risk. (p.21-23)

These new post Asian crisis theories seem to gather around fragile financial markets as being the main and possibly the weakest area. This is endorsed by the IMF, in relation to the three Asian economies who have come under the programme (Indonesia, Korea and Thailand). Nevertheless, while the moral hazard story and financial panic seem to have explained a great deal more, than the first- and the second-generation theories of crisis, of what caused the Asian financial crisis, Krugman (1999) argued that the financial distress in these economies cannot be solved by simply getting rid of last lender of resort or fixing the banks. His most recent theory on currency crisis explained the core causes of Asia crisis as the results of the role of companies' balance sheets and the impact of real exchange rate (effected by capital flows) on those balance sheets, which he claimed had been left out from any formal models to date. (p. 3)

In the context of the Asian financial crisis, Krugman (1999) described how the explosion in the domestic currency value of dollar debt had a disastrous effect on Indonesia firms, and the fear of corresponding balance sheet effects was a main reason why the IMF was concerned to avoid massive depreciation of its clients' currencies. Thus, the deterioration of these balance sheets played a role in the crisis itself. On the other hand, the prospects for recovery are now, by all accounts, especially difficult because of the weakened financial conditions of firms, whose capital has in many cases been wiped out by the combination of declining sales, high interest rates, and a depreciated currency. However, Krugman emphasizes it is important to note that while these balance sheet problems are in turn a cause of the problem of non-performing loans at the banks, they are *not* a banking problem. Thus, even a recapitalization of the banks would still leave the problem of financially weakened companies untouched. In other words, unlike the Diamond and Dybvig (1983) model which focused on financial market and banks as cause of a crisis, Krugman's newest theory implies that banks do not necessarily play a key role, although it could presumably be introduced. (p. 10-11)

0.3.5 Summary and policy implication

While the first generation theory by Krugman (1979) explains how weak economic fundamentals will eventually force the government to let its fixed parity go, Obstfeld (1984) argued that speculative attacks would occur as soon as speculators foresee such a change in exchange rate policy, which need not be induced by weak economic fundamentals. Since a speculative attack on a fixed exchange rate is a 'no-lose' situation, i.e. speculators lose nothing by selling local currency because the exchange rate is fixed while they will be safe from exchange rate loss if fixed exchange rate scheme is broken, it will take place as soon as there is an expectation of government's change in exchange rate policy. And if the speculative attack is not successful first time around, it will persist until the fixed parity is abandoned. Thus, both the first- and the second-generation models implied that speculative attack on fixed exchange rate is an inevitable result of unsustainable macroeconomic policies and that speculative attack will occur as soon as speculators anticipate a change in exchange rate policy regardless of the underlying reasons for the change of policy.

In the context of the Asian financial crisis, while speculative attacks may seem unjustified during the onset of crisis with the presence of strong economic fundamental and so on, once the crisis unfolds, there is always some fundamental reasons which explain why a government did not want to fix its parity. In other words, if it was not for the weak economic fundamentals as Krugman has claimed, there must be other fundamental reasons which make it costly for a government to defend its exchange parity. In the case of Asian economies, call back of short-term borrowings by creditors stemmed from the fact that these Asian economies have accumulated high level of debts which were no longer covered by foreign reserves if they were to be called back at once. This reason is more than enough to have triggered the crisis in Asia since speculators knew that a government would not be able to defend its parity, even if it was willing to use up its reserves. However, these pre Asian crisis theories of fundamentalist and self fulfilling could only explain a fraction of speculative attack on fixed exchange rate base on the assumption that speculators foresee that a government will not be able to defend its parity and will eventually have to let the currency float as its country's short-term debts were higher than its foreign reserves.

Then come other post Asian crisis theories which have been derived from the crisis itself. These theories gather around the issue of moral hazard and bank runs as the main factors which triggered the Asian financial crisis. Nevertheless, Krugman (1999) argued that fixing the fragile financial market and bank runs will not solve the problem in Asia because the mechanism of financial collapse is different. He explained that instead of creating losses via the premature liquidation of physical assets, a loss of confidence leads to a transfer problem. That is, in order to achieve the required reversal of its current account, the country must experience a large real depreciation; this depreciation, in turn, worsens the balance sheets of domestic firms, validating the loss of confidence. Moreover, once the crisis occurs it can have a sustained impact on the economy, because of that impact on balance sheets and the economy cannot return to normal until it manages either to repair the balance sheets of its existing entrepreneurs or grow a new set. (p. 11)

Of all the models, the most recent ones seem to have best described what happened in Asia as they have, indeed, been derived from the crisis itself. Nevertheless, what is crucial at present is the remedy of the crisis now that the core cause of the crisis has generally been identified. Furthermore, after plausible causes of the Asian financial crisis have been identified, it seemed that, in the open world market and free capital mobility, even the least skeptical move by the market participants or policy makers could be a start of a crisis. So, what policies then should Asian countries adopt in order to deal with the crisis and/or prevent it from reoccurring in the future? On the one hand, the first two theories suggested that an expected change of a government policy could induce speculative attack on its fixed exchange rate, now that these Asian currencies are freely floated, flexible exchange rate does not guarantee that there would not be another speculative attack in the future. Hence, from these two theories, a policy implication is that consistency of macroeconomic policy will help reduce possibility of speculative attacks.

On the other hand, moral hazard and financial panic suggest that law and regulation of financial markets need to be more transparent as well as standardized to the international practice. These policies have also been suggested by the IMF in restructuring financial market sector in Asian economies. While these practice would enhance financial market efficiency and reduce the possibility of bank runs, Krugman (1999) argued that these policies may not be enough to protect open economies from the risk of self-reinforcing financial collapse. He pointed out that the fact that foreign currency debt is long term does not protect the country from financial crisis. Suppose that his so called 'third generation' theory is correct, the key to resuming growth is either to rescue those entrepreneurs or to grow a new set of entrepreneurs or both. In this case, a likely source of new entrepreneurs is, of course, from abroad, in other words, a new wave of foreign direct investment. (p. 20-23)

Indeed, Krugman (1999) has suggested that, in the case of Asian crisis, a start to the new era after the crisis would be to create another set of entrepreneurs who used to drive investment and growth prior to the crisis. While capital required to restore growth is unlikely to be raised by the previous set of entrepreneurs, foreign investors could play a role of these new set of entrepreneurs which could only be allowed with greater liberalization both in financial market and real sectors. As a matter of fact, such liberalization scheme has also been insisted on the IMF and WTO for a very long time and as a result of the financial crisis, most if not all, domestic financial institutions have been taken over by foreign companies. Therefore, it can be said that policy implication suggested by the above theories have some relevance in dealing with the aftermath of the crisis and that most of these suggested policies have been imposed by the IMF as part of the financial market restructuring. Nonetheless, the problem in the financial market sector is only a part of many other problems which caused the Asian crisis.

PAPER I : COMPARATIVE ECONOMIC DEVELOPMENT

1.1 Introduction

1.1.1 Objective

This paper examines economic growth rates in developing countries during 1960-1990 in a cross sectional model using variables drawn from existing literature. Regardless of different background and economic conditions across the regions[1], the main findings are that exports and investment have been the important factors behind their economic growth. While other factors such as initial conditions, human capital and political instability played crucial roles during their development, they are not robust in the models. These findings are consistent with the theories. However, a more interesting question which will be the main focus in this paper concerns the relative growth rates of economies within the region: Korea, Thailand and the Philippines. These countries were at a similar state of development with comparable level of GNP per capita in 1960, but had achieved very different levels of economic success by 1990 -- the fact which cross sectional analysis was not able to capture. Thus, this leads to the examination of time series analysis

Thus, the main contribution of this paper will be to examine explanatory variables of growth rates found in the cross sectional analysis in capturing relative growth rates of the three countries in the time series analysis. The important findings in this paper are that, first, exports and investment are also found robust in the time series study. Second, while the governments in these countries are known to have used monetary policies extensively in

[1] 48 developing countries under consideration belong in different regions as shown in table 1.1a.

directing their economies, monetary policies do not have direct impact on growth but operate indirectly via exports and investment. And, lastly, these findings tell us that we can learn different things from cross sectional and time series analysis and by including country-specific factors, monetary policies, we were able to capture evidence of relative growth rate among the three countries which were not present in the cross sectional studies.

1.1.2 Background

Developing countries began to play an important role in the world economy after 1950 when total international trade of these countries accounted for over one third of the world trade. The leading groups in these countries were those in Latin America and Asia. (table 1.1a) In the 1960's, many of these countries especially in Latin America and Asia began to undergo an industrial revolution which Singh (1993) described as a revolution that they had been prevented from implementing 50 or 100 years earlier on account of the rather different world economic and political conditions which prevailed then. (p. 267) However, a clear pathway toward industrial revolution came during the 1970s when Latin American and Asian countries embarked on development of broad base industrial infrastructure through establishment of well trained labour, effective managerial skill and importing technological and scientific know how from industrialized countries. As a result, they were already exporting a range of basic manufacturing products to industrial countries toward the end of 1970 with intense competition among themselves. (Singh, 1984)

Table 1.1a : Share of exports of developing countries in total world trade by region

(%share)	**1950**	**1960**	**1970**	**1980**	**1990**
Developing Countries	**38**	**29**	**24**	**34**	**26**
1. Africa	7	5	4	5	2
2. Asia (all)	12	9	6	9	14
*NICs**	*3*	*2*	*2*	*4*	*8*
Other Asians	*9*	*7*	*4*	*5*	*6*
3. Middle East	5	4	5	13	3
4. Europe	5	3	4	3	3
5. Latin America	11	8	6	5	4

Source : International Financial Statistics, IMF, several issues

However, a series of economic interruptions in the 1980s beginning with the impact of the second oil crisis, the rise in world interest rates and the fall in commodity prices have disrupted *economic growth* of these developing countries. (Table 1.1b) It was during this period that we witnessed the development strategies which assisted the Asian economies to resume even more incredible growth rates after the disruption was over. The ability of Asian economies, especially NICs, to adjust and recover relatively more successfully than developing countries in other regions rests on the efficiencies of their economic development policies. As a result of this, Asian economies became known as the 'Asian Miracle'. In contrast, the Latin American and African economies, experienced the same shocks as Asian economies, but the impact of disruptions put their economic growth rates in a reversal. This period is also known as the lost decade for Latin American and African economies. This is also evidenced in the share of their exports to total world trade. Figure 1.1a illustrates that the total exports from Latin American countries has been decreased and that the opposite is true for the Asian economies, especially the NICs.

Nevertheless, Singh (1993), among others, argued that it was the level of debt service ratio in Latin American economies, which was twice as much as in Asian economies, that had a severe impact on their economies and put their economic growth rates in a reversal. However, this high debt during the 1980's is regarded as an initial condition which was caused by external economic forces that these countries could not control. The relatively larger external shock in Latin American economies disrupted their macro economic stability causing episodes of hyperinflation as well as capital outflows. On the other hand, Singh (1993) and other economists[2] argued that relative failure of Latin American economies was due to misallocation of their foreign borrowings in wasteful consumption, which was a result of corruption, and to the fact that they followed import substitution policies and adopted inappropriate exchange rates. (p. 270)

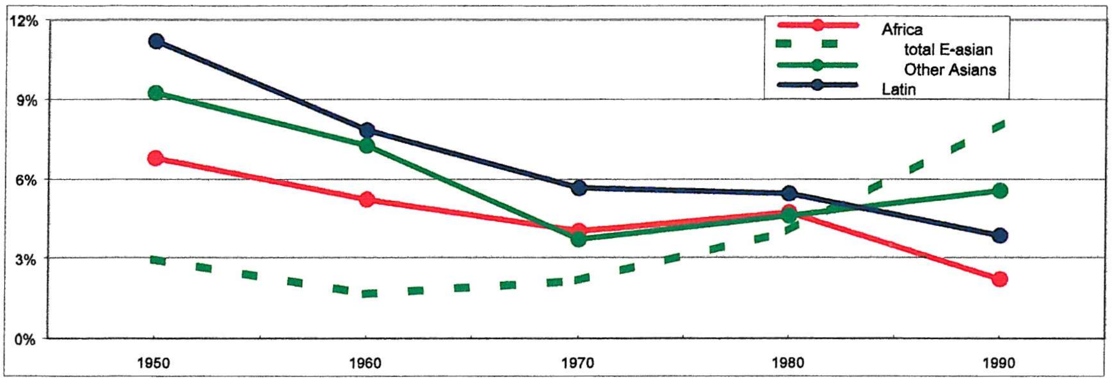
Table 1.1b : Average real GDP per capita growth during 1960's, 1970's and 1980's

Developing Countries	1961-70	1971-80	1981-90
1. Africa	1.8	1.9	-0.5
2. Asia (all)	3.1	4.1	3.1
*NICs**	*7.4*	*8.0*	*6.7*
Other Asians	*2.2*	*3.2*	*2.1*
3. Middle East	4.2	6.9	-4.6
4. Europe	5.6	4.5	2.5
5. Latin America	2.5	3.1	-1.3

Source : NBER's data (RGDPT in USD, 1985p) sorted by IMF classification of developing countries
NIC* : Newly Industrialized Countries

[2] Sachs (1985), Maddison (1985), Balassa et al (1986), Corden (1990b) and Summers and Thomas (1993)

Figure 1.1a : Trend in total share of exports of Africa, Asian and Latin American economies in the world trade

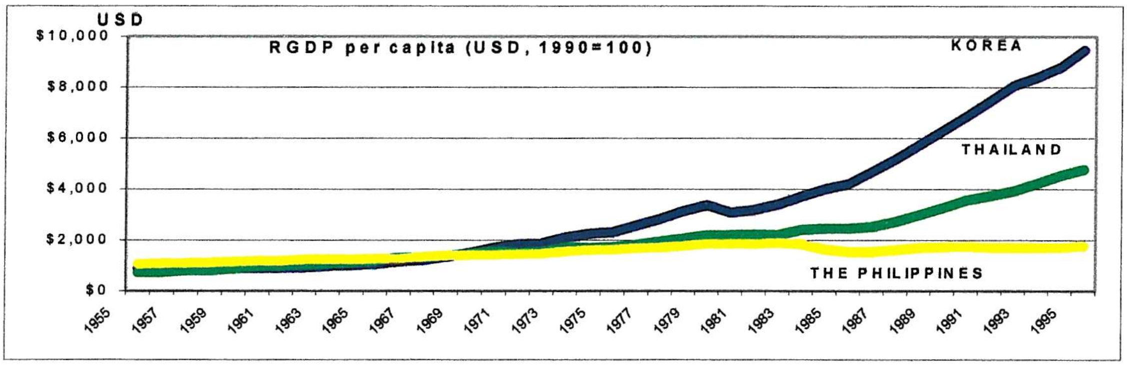


Given these various influences on the economic development process, it seems that there can be no single group of factors which could explain growth and development of developing countries in different regions during the past 3 decades of prior to 1990s. This is not only because there has been a structural change in the developing countries during the period, these countries have established different development strategies. As a result, the differences between growth rates among regions were noticeably large. (Table 1.1b) Experiences of the Asian economies (especially NICs), the debt crisis and hyperinflation in the South America and the economic stagnation of the Sub Saharan Africa have brought economists to review the theory of economic growth and development. Since most of the growth theories were derived from evidence relating to the western countries or developed countries, they often fail to explain economic growth and development in these regions.

These developing countries also performed differently in the different regions where Asian economies have always been cited as a successful example of the developing countries. Furthermore, it is recognised that there is still some degree of relative differences in the performance amongst economies within the region. While highly successful Asian economies have been examined in a large number of papers in trying to identify key factors behind sustainable high growth rates, not much attention has been paid to studies of relative growth rates among economies within the region. This paper is trying to do just that. Among others, Findlay (1984), Sarker (1996) and Booth (1999) have focused on the relative economic performance within the Asian region. Their findings are that East Asian economies, NICs, tend to grow relatively faster than the other Asian economies in the region and this was mainly due to the higher level of human capital and the earlier pursuance of export orientation. However, in this paper, we look at the relative growth from a different perspective as we are trying to examine three countries which share common initial factors but have reached different states of development. Thus, this type of investigation is likely to offer factors which explain relative growth rates or the key ingredients of economic success whilst identifying common initial factors.

Back in the early 1960s, Korea, the Philippines and Thailand were more or less at the same economic state with similar GDP per capita level and with a large number of people living in poverty[3]. (Figure 1.1b) In the 1960's, 45 per cent of the total population in Thailand was in poverty. Korea and the Philippines, on the other hand, have recorded a similar proportion of about 36 per cent of people in poverty in 1970/71. Furthermore, Korea, Thailand and the Philippines were rather closed economies with a high degree of financial regulation at the time. These countries also employed fixed exchange rates and had high restrictions on foreign competition and products, being highly protective of their domestic products. Also, during the past three decades, they have adopted similar economic development schemes : import substitution policy to begin with and then export orientation policy.

Figure 1.1b : RGDP per capita in USD (1990=base year for price deflator)



However, they had reached different stages of economic development at the end of 1990s. As a result, Korea has become the 13th largest economy in the world in terms of GDP value and is now a member of OECD (joined in 1996). At the same time, Thailand has become an emerging economy with structurally strong economic growth in recent years up until the mid 1990's. Ironically, the Philippines, which had more favourable resources (than Korea) and relatively higher RGDP per capita in 1960 comparative to other two countries performed rather poorly during the period. As a result, its income per capita is less than half of Thailand's in 1990 and far below Korea's. (figure 1.1b)

[3] The World Bank defines poverty as the inability to obtain a minimal standard of living. (World Development Report, 1990:2)

Also, Table 1.1b shows that the Philippines' share of agricultural output has remained relatively the same throughout the period compared to Korea and Thailand. The Philippines' dependence on the agricultural sector partially explains why its performance has been relatively weak. With their similar initial conditions and claims of having adopted similar development strategies, why should their present stage of economy be so different? A key issue is the extent to which the relative success of the three economies reflects domestic economic policies adopted, or whether this is due to resource endowments, or some configuration of policies and circumstances.

Table 1.1c : Changes in Agriculture's share (percentage share of total output)

	1960	1970	1980	1990
Korea	37	26	16	8
Thailand	40	26	25	12
The Philippines	26	30	23	21

Source : World Bank, World Development Report 1982, 1993 (in East Asian Economies by Kawagoe, T, p. 202)

1.1.3 Structure of the paper

Section 1.2 examines key factors of economic growth in 48 developing countries during the period of 1960s, 1970s and 1980s in a framework of cross section analysis using variables drawn from existing literature. A large number of earlier papers[4] on economic growth have included export and investment as crucial factors, and these are generally recognized as powerful factors in explaining growth rates of developing countries. Section 1.3 examines whether key factors derived from cross sectional analysis will be able to identify factors explaining relative growth rates in Korea, the Philippines and Thailand using time-series data. These countries which have similar initial conditions in the beginning (1960) but have arrived at different state of economy at the end of 1990. In addition to the set of regressors drawn from the cross sectional analysis, industrialization policy and monetary policies will be examined in this section of time series analysis. In fact, this will be the main focus of the paper in trying to identify to extent to which relative degree of success was due to initial conditions or economic policies adopted or a combination of the two. Section 1.4 then concludes what can be drawn from these models in the cross sectional analysis and their implication for the studies of relative growth rates among the three countries in the time series discussion.

[4] Stanley Fischer (1991:332) has pointed out 40 cross-sectional growth studies published since 1980 which are listed by Levine and Renelt (1990) and several other earlier cross-country studies listed by Chenery, Robinson and Syrquin (1986).

1.2 Cross Sectional Analysis

This section attempts to examine factors affecting economic growth among developing countries during the 1960s, 1970s and 1980s. Since these developing countries have gone through dramatic changes during these periods of industrialization, it is interesting to examine whether macroeconomic factors hypothesized in the existing literature played different roles during each decade of development period. In addition, the analysis from this section will be used as a background theory for the next section where time series analysis of Korea, Thailand and the Philippines will be examined as we hope to learn different things from the two approaches in the context of theoretical discussion. Since this paper attempts to examine *all* relevant explanatory variables of economic growth from the period as early as the 1960s, there is a limitation on the number of countries due to availability of explanatory variables. This analysis is intended as a way of highlighting the stylized facts about factors influencing growth rates in developing countries. In the end, this section also discusses the models' implications for Korea, Thailand and the Philippines by examining their residuals and introducing their dummies in the models as linkage to the next section, section 1.3, which will be focused on the relative growth rate of the three countries. The key issue under investigation is whether growth rates in these three countries can be fully explained by the variables in the model.

1.2.1 Determinants of growth : Theoretical consideration

This sub-section briefly discusses theoretical consideration for each group of explanatory variables.[5] Regressors in the model have been drawn from previous empirical studies which can be divided into 5 groups of initial conditions, government spending, exports and investment, human capital and political instability to regress against the dependent variable, GR, average growth rate of real GDP per capita during each period. (Table 1.2.1)

Table 1.2.1 : Explanatory variables (for cross sectional analysis)

	Variables	Explanation of variables	Sources
Dependent Variable	**GR**	Growth rate of RGDP per capita (period average)	**NBER**
Initial conditions	**IGDP60-70-80** **AGRSH**	Level of RGDP per capita in 1960, 1970, and 1980 Share of agriculture : total output (period average)	**NBER** **WDR**
The Role of the government	**GSH**	Share of government spending : total output (period average)	**NBER**
Exports **Investment**	**XGR** **INVGR**	Real growth rate of exports (period average) Real growth rate of investment (period average)	**WDR**
Human capital	**HDI**	Human Development Index at the initial year	**UN**
Political instability	**RIOT**	Number of riots during 1958-62 (for 1960s) and 1968-72 (for 1970s)	**Taylor***

* World Handbook of Political and Social Indicators, 3rd Edition, Vol. 2, by Charles Lewis TAYLOR

[5] A thorough discussion on theoretical background of explanatory variables in this section can be found in paper 0: Literature Review, section 0.1.

(a) Initial conditions

The first hypothesis investigated is the neoclassical hypothesis concerning the effects of initial conditions on economic growth which is proxied by initial level of real GDP per capita at the beginning of each of the three periods being examined in this paper, IGDP60, IGDP70 and IGDP80. If we assume that technical progress is exogenous, then given the fact that knowledge is relatively inexpensive to input, all countries (rich and poor) should attain, in the long term, the same technical progress in their production function indicating a 'convergence'[6] or 'catching up' process. Eventually, a system of convergence should produce the same per capita GDP meaning that countries with low GDP per capita should grow faster to catch up with countries with higher initial income. (Barro and Sala-I-Martin, 1995, p. 383) Thus, the initial income per capita is hypothesized to have a negative relationship with economic growth.

In addition, the share of agricultural output as a percentage of total output (AGRSH) is also used as a proxy for an initial condition under the hypothesis that an agriculturally based economy tends to suffer from deterioration in the terms of trade. As the relative price of primary products to manufactured products declines in the long term, this puts a country's growth rate in a more vulnerable position. (Gylfason, 1999) A fall in AGRSH is expected to be more powerful in its effect on growth rates among this sample group, which includes only developing countries, relative to when the sample includes developed countries. In other words, structural change among developing countries from agricultural base to industrial base is expected to be more apparent among developing countries. Thus, like the initial level of income per capita (IGDP60, IGDP70 and IGDP80), AGRSH is hypothesized to have a negative relationship with growth rate.

(b) Government Spending

Even though government spending (GSH) is perceived to have a negative impact on economic growth, empirical results have provided mixed pictures. Theoretically, those who believe in free markets would expect government spending to be less efficient than private and thus a rise in government expenditure is associated with lower growth rate. This is particularly true among developed countries where basic infrastructure is well developed and increases in government spending are likely to have a crowding out effect on private investment. On the other hand, Landau (1983) pointed out that the 'structuralist school' would contend that certain government

[6] This is referred to as absolute or β-convergence, the hypothesis that poor economies tend to grow faster, in per capita terms, than rich ones without conditioning on any other characteristics of economies. Whereas σ-convergence concerns cross-sectional dispersion which is measured by the standard deviation of the logarithm of per capita income across a group of countries that declines over time. (Barro and Sala-I-Martin, 1995, p. 383)

expenditures have been and will be necessary to remove impediments to economic growth. (p. 784) This latter hypothesis on government spending is likely to be applicable among developing countries where basic infrastructure, both physical and resource and development investment, would still require government investment. However, whether such impact will reveal a statistically significant influence on economic growth or not, could depend on the efficiency of government spending. Nevertheless, in the context of developing countries examined in this paper, we hypothesize government spending to have a positive relationship with economic growth.

(c) Exports and Investment

Average growth rate of export (XGR) and investment (INVGR) are recognized as one of the most important influences behind economic growth and development among developing countries during the past few decades. XGR and INVGR are found by most, if not all authors, to have positive and significant impact in promoting growth, especially among high growth Asian economies. Thus, we expect both variables to have positive and significant impacts on growth.

(d) Political Stability

Number of riots during 1958-62 and during 1968-72 (RIOT) is used as a proxy for political instability for the period of 1960s and 1970s. Political instability is recognized as harmful to economic growth because it discourages foreign investment, which is important to developing countries. Barro (1991) used both number of revolutions and coups (REV) and political assassinations (ASSASS) as proxies for political instability in his models which he interpreted as having adverse influences on property rights, and thereby negative influences on investment and growth. (p. 432) Certainly, political instability is hypothesized as having a negative impact on growth.

(e) Initial level of human capital [7]

Unlike other papers where human capital is proxied by the more specific variables for educational level and health factors such as school enrolment, literacy rate, life expectancy, mortality rate and fertility rate, instead, this paper uses the Human Development Index

[7] Initial level of human capital (HDI) is used as a proxy in representing the ***quality*** of standard of living at the initial state of development as opposed to initial level of income (IGDP60, IGDP70 and IGDP80) which represents the initial level of development. There is no evidence of multi-collinearity between the two variables, i.e., IGDP (or GDP70) in model 1970n38 (table 1.2.3a) and 1970n48 (table 1.2.3b) remain significant when HDI is dropped.

(which takes on values between 0 and 1). This is mainly due to the unavailability of the data especially during the early period in the 1960s. Nevertheless, as the trend in HDI which is defined as desirable standard of living (longevity, educational attainment, access to resources), it, perhaps, offers a better representation of *initial* level of human capital since the index incorporates these aspects of human capital.[8] Thus, We can expect HDI to have a positive impact on growth.

1.2.2 The empirical data

The data for this study come from National Bureau of Economic and Research (NBER), World Development Report (WDR), and United Nations (UN). (Table 1.2.1) This framework of cross sectional analysis is similar to that of Barro (1991) in terms of explanatory variables used but with different time frame and sample size. Explanatory variables are regressed against the dependent variable (GR) which is the average growth rate of real GDP per capita during the period examined using the OLS method of estimation. In this paper, the main objective is the attempt to identify *important* variables and their roles on economic growth among developing countries during each period of development under consideration -- 1960s, 1970s and 1980s. However, the results should be taken with caution since all explanatory variables (regressors) are assumed to be exogenous although long run growth rate of output (regressant) is determined within the model. In most cases, the oil-exporting countries[9] are found to be outliers or to lie outside the 2 standard error bands. As these countries can expect to achieve high levels of per capita income without industrialising, it is likely that the pattern of development differs from other developing countries. Thus, they have been excluded from the sample.

In addition, since our objective is to examine all relevant variables, numbers of countries included in each period vary between 38 to 48 developing countries depending on the availability of explanatory variables during a particular period. Table 1.2.3 shows the list of countries examined during each period, for example, column 1960n42 lists 42 countries being examined in the 1960s. Please note that 48 countries are being examined during 1970s and 1980s but they are not necessarily the same ones. In addition, the 38 shaded countries are those which have the same set of explanatory variables in each decade, hence,

[8] Since HDI already incorporates educational attainment, it is appropriate that other proxies for human capital are dropped.

[9] In this paper, there were 7 oil-exporting countries under consideration -- Iran, Iraq, Israel, Kuwait, Oman, Saudi Arabia and United Arab Emirates which were later dropped as a results of their outliers.

this offers a possibility for the analysis of panel data. So, what is the benefit of having varied sample sizes and would they be comparable across time periods? These issues are discussed in the next sub-section, 1.2.3. To start off with, the basic equations can be written as

$$GR_i = C + \underline{\beta_1 GDP60_i} + \beta_2 AGRSH_i + \beta_3 GSH_i + \beta 4XGR_i + \beta_5 INVGR_i + \beta_6 HDI_i + \beta_7 RIOT_i + \varepsilon_i \quad ...(1)$$

where n = 38 in the model 1960n38 (table 1.2.3a) and
n = 42 in the model 1960n42 (table 1.2.3b)

$$GR_i = C + \underline{\beta_1 GDP70_i} + \beta_2 AGRSH_i + \beta_3 GSH_i + \beta 4XGR_i + \beta_5 INVGR_i + \beta_6 HDI_i + \beta_7 RIOT_i + \varepsilon_i \quad ...(2)$$

where n = 38 in the model 1970n38 (table 1.2.3a) and
n = 48 in the model 1970n48 (table 1.2.3b)

$$GR_i = C + \underline{\beta_1 GDP80_i} + \beta_2 AGRSH_i + \beta_3 GSH_i + \beta 4XGR_i + \beta_5 INVGR_i + \beta_6 HDI_i + \varepsilon_i \quad ...(3)$$

where n = 38 in the model 1980n38 (table 1.2.3a) and
n = 48 in the model 1980n48 (table 1.2.3b)

It is noted that while the initial GDP is proxied by the log of initial level of GDP in the year 1960, 1970 and 1980, other explanatory variables are period averages either of growth or share during 1960s, 1970s, and 1980s. Also, RIOT is not included in the models during the 1980s because the data are not available.

1.2.3 Some basic empirical results

In this sub-section, the results of estimating cross-section regressions are reported in 2 parts where the first part (set A) discusses results from OLS regressions of the set of 38 developing countries during 1960s, 1970s and 1980s. (Table 1.2.3a) Similarly, the second part (set B) discusses that of varied set of countries during the same periods. (Table 1.2.3b) Hence, table 1.2.3a and table 1.2.3b report regression results of set A and set B, respectively. In addition, each table reports three separate regression results using different number of sample sets during different time period. For example, model 1960n38, 1970n38 and 1980n38 in the table 1.2.3a show regression results during 1960s, 1970s and 1980s using 38 countries. Likewise, in table 1.2.3b, regression results labeled 1960n42, 1970n48 and 1980n48 report results using varied set of samples, 42, 48 and 48 countries, respectively. (Table 1.2.3 : List of countries)

It will be seen that when number of countries increases (set B), more factors become significant, which was not the case in set A. In other words, some variables are found to be significant only in larger sample sizes resulting in the increases in R^2. However, the question arises as to what extent the regression results in set B are comparable across time

Table 1.2.3 : list of countries in different models varied by time periods

count	1960n42	1970n48	1980n48	38n	region
1	**Korea, Rep.**	**Korea, Rep.**	**Korea, Rep.**	1	asia1
2	**Thailand**	**Thailand**	**Thailand**	2	asia2
3	**Philippines**	**Philippines**	**Philippines**	3	asia3
4	**Benin**	**Benin**	**Benin**	4	africa1
5		Burundi	Burundi		
6	**Cameroon**	**Cameroon**	**Cameroon**	5	africa2
7	Chad	Chad			
8	Congo				
9	**Egypt**	**Egypt**	**Egypt**	6	africa3
10					
11			Ghana		
12	**Ivory Coast**	**Ivory Coast**	**Ivory Coast**	7	africa4
13	**Kenya**	**Kenya**	**Kenya**	8	africa5
14		Lesotho			
15	**Madagascar**	**Madagascar**	**Madagascar**	9	africa6
16	**Malawi**	**Malawi**	**Malawi**	10	africa7
17	Mali	Mali			
18			Mauritania		
19	**Morocco**	**Morocco**	**Morocco**	11	africa8
20			Niger		
21	**Nigeria**	**Nigeria**	**Nigeria**	12	africa9
22	**Senegal**	**Senegal**	**Senegal**	13	africa10
23			Sierra Leone		
24		Sudan			
25	**Togo**	**Togo**	**Togo**	14	africa11
26	**Uganda**	**Uganda**	**Uganda**	15	**africa12**
27		Zimbabwe	Zimbabwe		
28	**Bangladesh**	**Bangladesh**	**Bangladesh**	16	asia4
29	**China**	**China**	**China**	17	asia5
30	**Hong Kong**	**Hong Kong**	**Hong Kong**	18	asia6
31	**India**	**India**	**India**	19	asia7
32	**Indonesia**	**Indonesia**	**Indonesia**	20	asia8
33	**Malaysia**	**Malaysia**	**Malaysia**	21	asia9
34	Myanmar				
35		Nepal	Nepal		
36		P.N.Guinea	P.N.Guinea		
37	**Pakistan**	**Pakistan**	**Pakistan**	22	asia10
38	**Singapore**	**Singapore**	**Singapore**	23	asia11
39	**Sri Lanka**	**Sri Lanka**	**Sri Lanka**	24	**asia12**
40		Hungary			
41		Turkey	Turkey		
42	**Argentina**	**Argentina**	**Argentina**	25	Latin1
43	**Bolivia**	**Bolivia**	**Bolivia**	26	Latin2
44	**Brazil**	**Brazil**	**Brazil**	27	Latin3
45	**Chile**	**Chile**	**Chile**	28	Latin4
46	**Colombia**	**Colombia**	**Colombia**	29	Latin5
47	**Costa Rica**	**Costa Rica**	**Costa Rica**	30	Latin6
48	**Dominican Rep.**	**Dominican Rep.**	**Dominican Rep.**	31	Latin7
49	**Ecuador**	**Ecuador**	**Ecuador**	32	Latin8
50	**Honduras**	**Honduras**	**Honduras**	33	Latin9
51	**Mexico**	**Mexico**	**Mexico**	34	Latin10
52	**Nicaragua**	**Nicaragua**	**Nicaragua**	35	Latin11
53	**Panama**	**Panama**	**Panama**	36	Latin12
54			Paraguay		
55	**Uruguay**	**Uruguay**	**Uruguay**	37	Latin13
56	**Venezuela**	**Venezuela**	**Venezuela**	38	**Latin14**

periods where the number of sample countries under consideration varies between 42 to 48 countries.

Table 1.2.3a and b show that even though both set A and set B basically produce similar results, the usefulness of these results depends on the objective of what one wants to draw from this cross sectional analysis. For example, if the priority of this cross sectional regression is to examine how the specific group of countries behave during different periods, it may be preferable to be stricter with the same group of countries, set A regression (Table 1.2.3a). In contrast, if the focus is on the role of explanatory variables among a group of developing countries, it may be acceptable to examine a slightly different set of countries in allowing for an increase in robustness of the variables being hypothesized, set B regression. (Table 1.2.3b)

As the objective of this sub-section is to empirically examine factors affecting growth rates among developing countries, then set B regressions may be more preferable. In other words, set B regression with slightly larger but varied set of countries helps enhance our theoretical hypothesis behind growth models. Nevertheless, set A regression results are reported at this time in order to show that increasing number of countries allow us to accept more explanatory variables in supporting theoretical hypothesis. However, regardless of the more stimulating results with larger sets of samples in table 1.2.3b, the conformity of sample set in table 1.2.3a allows us to observe how changes in examining periods have impact on the development of these countries. Also, it allows a possibility of examining a pool data analysis.[10]

Set A : Basic regression results (table 1.2.3a)

Regression results labeled 1960n38 and 1970n38 in table 1.2.3a contain all of the 5 groups of explanatory variables that have previously been hypothesized in the literature review, however, the regression results in 1980n38 do not include political instability (RIOT) due to the unavailability of data. The table shows that <u>during the 1960s</u>, AGRSH and INVGR are the only two variables which are significant at 5 per cent level. While other explanatory variables have the expected signs, they are not statistically significant at conventional level of significance.

[10] See section 1.2.4 for reports on the panel data results.

During the 1970s, two more explanatory variables are found to be significant in explaining growth rate, i.e., IGDP70 has become significant at 5 per cent and HDI has become significant 10 per cent. At the same time, AGRSH and INVGR are still significant in this period. As a result, the same model (1960n38) has become more powerful when examined in the later period (1970n38) where its R^2 increased to 0.63 from 0.49 in the previous period.

Table 1.2.3a : Set A regression results with 38 countries

Dependent Variable : GR

Regressor	1960n38	1970n38	1980n38
C	10.438 *1.42*	24.913 *2.90*	-3.169 *-0.80*
IGDP*	-2.310 *-0.95*	-7.645 *-2.71*	-0.137 *-0.14*
AGRSH	-0.067 *-2.30*	-0.085 *-1.83*	0.050 *1.49*
GSH	-0.006 *-0.12*	-0.042 *-0.67*	0.010 *0.19*
XGR	0.081 *1.38*	0.067 *1.22*	0.328 *4.00*
INVGR	0.170 *2.21*	0.248 *4.16*	0.226 *3.87*
HDI	0.584 *0.16*	8.323 *1.93*	2.247 *0.85*
RIOT	-0.012 *-1.20*	-0.009 *-0.55*	n.a.
R-square	0.49	0.63	0.74
F-test**	4.17	7.32	14.73

*IGDP is initial level of RGDP per capita at the beginning year of each period, IGDP60, IGDP70, and IGDP80, respectively.

**F-critical (1%) of F(7,30) and F(6,31) are approx. 3.30 and 3.47, respectively.

Note : figures in italic are t-statistics.

Significant at 5%

Significant at 10%

Apparently, export growth (XGR) has, for the first time, become significant during the 1980s. (1980n38) This is a little surprising since industrialization via exports has been hypothesized as an important factor behind the growth rate of developing countries from the beginning of development period, however, XGR was not significant in either 1960s or 1970s. However, this can be explained by the choice of sample groups as it will be seen later that XGR becomes significant in a larger set of sample or when n increases from 38 countries to 48 countries. In fact, the regression result shows that during the 1980s, XGR and INVGR remain as the only two significant variables. Nevertheless, the R^2 in this 1980n38 regression has increased to 0.73. It is also noticed that while IGDP80 and HDI have in this later period, become insignificant, they still have the expected signs. In addition, it is noticed that during 1980, AGRSH has become insignificant.

Set B : Basic regression results (table 1.2.3b)

Regression results reported in table 1.2.3b are similar to those of table 1.2.3a in the previous section which examined the same set of explanatory variables and time periods, except that table 1.2.3b includes slightly larger and varied sets of countries. What is immediately noticed from the two tables is that INVGR clearly stands out in all of the regressions under consideration. This confirms that INVGR has been an important contributor to economic growth among developing countries from the beginning of the period up until present while other variables only played a role during a particular period. It is also noted that even in larger sample sets (1.2.3b), XGR still does not come out as an important explanatory variable during the 1960s. The last paragraph explains why.

Table 1.2.3b : Set B regression results with varied number of countries
Dependent Variable : GR

Regressor	1960n42	1970n48	1980n48
C	13.131 *1.42*	23.35 *3.79*	1.260 *0.40*
IGDP*	-3.27 *-1.65*	-7.61 *-3.56*	-0.964 *-1.11*
AGRSH	-0.084 *-3.14*	-0.06 *-1.85*	-0.002 *-0.07*
GSH	0.018 *0.40*	-0.02 *-0.44*	0.016 *0.40*
XGR	0.072 *1.32*	0.10 *2.23*	0.269 *3.58*
INVGR	0.182 *2.46*	0.22 *5.11*	0.252 *4.46*
HDI	1.809 *0.54*	9.611 *2.66*	1.174 *0.50*
RIOT	-0.015 *-1.79*	-0.012 *-0.83*	n.a.
R-square	0.54	0.66	0.67
F-test**	**5.68**	**10.91**	**13.61**

*IGDP is initial level of RGDP per capita at the beginning year of each period, IGDP60, IGDP70, and IGDP80, respectively.
**Critical values of F(7,34), F(7,40) and F(6,41) at 1% are approx. 3.30, 3.12 and 3.29, respectively.
Note : figures in italic are t-statistics
Significant at 5%
Significant at 10%

The first set of result reports in the model 1960n42 in this table shows that when the sample size is increased by four more countries, two more explanatory variables of initial condition (IGDP60) and political instability (RIOT) have become significant though at 10 per cent level. At the same time, AGRSH and INVGR remain significant in this model as in 1960n38 (Table 1.2.3a). As a result, R^2 has improved slightly from 0.49 in the model 1960n38 where a number of samples is 38 to 0.53 in model 1960n42. Likewise, by using the larger sample size, XGR has entered model 1970n48 significantly and this is in line with our hypothesis of substantial industrialization via exports during this period of development in the 1970s. In the 1980s, the same number of 48 countries have been included in the sample, however, they are not necessarily the same set as in 1970n48. Similarly, 1980n48 produces parallel results as that in 1980n38 except that AGRSH has become almost insignificant in the larger sample size.

In sum, four conclusions can be drawn from the Set A and Set B regressions. First, Set B results tell us that by including more countries, or by using larger sample sizes, more variables can entered in the models as significant factors in explaining the growth rate. In other words, an increase in the number of countries helps enhance the model in supporting the theory of growth. Second, even though larger sample sizes allow more explanatory variables to enter into models more significantly, they do *not* result in *significant* increase in R^2 and this is the case during the 1980's. Third, both sets of regression results show that our basic model becomes more powerful when it is tested against later periods. For instance, R^2 in both tables 1.2.3a-b gradually increased over time – from 1960s to 1970s and to 1980s implying that these variables can explain movement in GR in the latter decades of development better than in the earlier periods. This is especially true when considering the same set of samples throughout three time periods. (Table 1.2.3a) Lastly, as investment growth (INVGR) and, to a lesser extent, export growth (XGR)[11] are significant in all of the models, it can be said that they are key variables behind growth rate in developing countries during these periods. This is in line with other studies.

1.2.4 Reports on the panel data results and regional dummies

Using the data set from section 1.2.3 (Table1.2.3a : basic regression results with 38 countries) as a base model, this section reports the panel data results and tests for regional dummies. Panel analysis examines explanatory variables (IGDP, AGRSH, GSH, XGR, INVGR and HDI) in determining economic growth rate among 38 developing countries

[11] Michaely (1977) found significant impact of exports on growth using 40 developing countries during 1950-73. Also, Jung and Marshall (1985) reported a similar conclusion examining 37 developing countries during 1950-81. On the other hand, when a shorter time period during the 1960s and/or 1970s are examined, exports growth is found to be significant only among a specific group of high growth rate countries. For example, export is found to be significant in Balassa (1978) paper as he focused on 11 developing countries and, Findlay's (1984) as he focused on 13 high growth developing countries. It is also noted that these are high growth Asian economies, this may explain the insignificance of XGR in our models due to early sample period (1960s) and sample countries which include those other than Asian economies.

during 1960-1990.[12] (table 1.2.4a) The table shows similar results between OLS and random effects (RE) estimations as XGR and INVGR are found as important variables captured in both models.[13] On the other hand, fixed effects (FE) estimates shows that INVGR is the only important variable in the model. However, Hausman test tells us that FE is not significantly a better method that RE as Chi-square(6) is 10.427.[14] Nevertheless, among models (OLS, FE and RE) under panel data estimations in table 1.2.4a, FE model should be an appropriate specification since we are focusing on a specific group of 38 developing countries, and our inference is restricted to the behaviour of these countries.

Table 1.2.4a : Panel analysis
Dependent Variable : GR
T= 3, NOB = 114

	Plain OLS	Fixed Effects	Random Effects
IGDP	**-1.384** *(-1.66)*	**-1.597** *(-1.30)*	**1.441** *(-1.57)*
AGRSH	**-0.028** *(-1.18)*	**-0.004** *(-0.07)*	**-0.027** *(-1.28)*
GSH	**-0.032** *(-0.10)*	**-0.065** *(-0.91)*	**-0.035** *(-1.05)*
XGR	**0.099** *(2.29)*	**-0.033** *(0.57)*	**0.093** *(2.70)*
INVGR	**0.270** *(9.88)*	**0.258** *(6.00)*	**0.270** *(8.85)*
HDI	**1.331** *(0.72)*	**1.307** *(0.32)*	**1.390** *(0.76)*
C	**5.437** *(1.94)*		**5.658** *(1.80)*
R-squared	**0.60**	**0.76**	**0.60**

Hausman test of H0 : RE vs. FE : CHISQ(6) = 10.42, P-Value = [0.1078]

Therefore, considering the middle column in table 1.2.4a which shows the result of FE estimates of panel data analysis, what stands out in the FE estimate and other models (so far) is that the importance of INVGR in explaining economic growth rate among countries under consideration. As mentioned earlier, this finding is nothing new, which is why the paper has examined economic growth rates during particular decades in separate models in Table 1.2.3a (Set A regression result with 38 countries during 1990s, 1970s and 1980s),

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12 The is comparable with Set A regression results reported in table 1.2.3a excepted that table 1.2.4a is missing political instability (RIOT) variable as the data is not available in 1980s.

13 XGR and INVGR in both estimations are significant at 5 per cent while IGDP in OLS estimation is significant at 10 per cent.

where variables other than INVGR are found to be significant in explaining growth rates during particular decades.[15] This is because even though the panel analysis is supposed to capture the behaviour of variables across time period and countries, in this case, INVGR is the only significant variable across the three time periods and countries. In other words, in comparison with the cross sectional analysis (table 1.2.3a), the panel analysis (1.2.4a) could not capture other explanation of growth rate than the INVGR. As a result, it is the only variable captured by the FE model. Next, we will test for the regional dummies.

Table 1.2.4b : Test of regional dummies

n = 38

	1960n38	1970n38	1980n38
C	11.132	25.238	-4.480
	1.41	*2.67*	*-0.92*
GDP60	-2.179	-7.525	-0.125
	-0.85	*-2.51*	*-0.13*
AGRSH	-0.072	-0.094	0.049
	-2.38	*-1.78*	*1.54*
GSH	-0.005	-0.035	0.007
	-0.09	*-0.54*	*0.13*
XGR	0.085	0.061	0.207
	1.42	*1.03*	*2.38*
INVGR	0.157	0.244	0.187
	1.96	*3.86*	*3.32*
HDI	-1.227	7.279	4.074
	-0.29	*1.39*	*1.27*
RIOT	-0.013	-0.012	n.a.
	-1.30	*-0.66*	
ASIA	0.036	0.217	2.416
	0.04	*0.21*	*2.67*
AFRICA	-0.710	-0.334	0.896
	-0.68	*-0.24*	*0.85*
R-Squared	0.51	0.63	0.80

Varied n

	1960n42	1970n48	1980n48
C	13.216	25.770	-0.275
	2.02	*3.66*	*-0.07*
GDP60	-2.871	-7.808	-1.057
	-1.35	*-3.49*	*-1.19*
AGRSH	-0.089	-0.076	0.005
	-3.24	*-2.14*	*0.18*
GSH	0.021	-0.018	0.011
	0.45	*-0.38*	*0.29*
XGR	0.082	0.084	0.212
	1.47	*1.70*	*2.89*
INVGR	0.164	0.226	0.200
	2.12	*5.14*	*3.55*
HDI	-0.602	7.316	3.350
	-0.15	*1.76*	*1.19*
RIOT	-0.016	-0.018	n.a.
	-1.85	*-1.17*	
ASIA	0.086	0.158	2.217
	0.11	*0.18*	*2.74*
AFRICA	-0.782	-1.013	1.044
	-0.78	*-0.89*	*1.04*
R-Squared	0.56	0.67	0.72

Note : figures in italic are t-statistics

Significant at 5%

Significant at 10%

Countries in the sample can be divided into three regions of Asia, Africa and Latin America where table 1.2.4b shows the results of tests for regional dummies which used Latin American countries as the base group.[16] Similar results are seen between the two tables in table 1.2.4b with 38 countries and varied set of countries. The main finding is that either Asian or African

[14] At 10 per cent level of confidence, we can reject the null hypothesis which states that the difference in coefficients between RE and FE is not systematic.

[15] In comparison with FE model of ***panel data estimation*** in this section, table 1.2.3a in section 1.2.3 which contains regression results of ***cross sectional analysis*** show that in additional to INVGR which is significant variables across the three time periods (1960s, 1970s and 1980s), AGRSH is an important variable during 1960. At the same time, IGDP, AGRSH and HDI are found to be significant during the 1970s while XGR has impact on growth in the 1980s.

[16] In this case, as there are three categories of quantitative variables, we introduce 3-1 dummies variables in order to avoid the dummy variable trap of perfect multicollinearity.

countries performed differently from the whole group of sample in the 1960s and 1970s.[17] However, in the 1980s, Asian countries have outperformed other countries in the sample as its dummies is found to be significant in both set of tables with the conformed number of countries (38) and varied set of countries. In other words, the model is *not* able to explain growth rate of Asian countries well in comparison to other developing countries in consideration, i.e., African and Latin American countries.

1.2.5 The role of long-term variables : GSH and HDI

Since government spending (GSH) and human capital (HDI) are likely to have long term and accumulative effects on growth, lags of GSH and HDI have been examined in models in 1970s and 1980s in hoping that they may improve the model. (Table 1.2.4a-1.2.4d)

(a) Government spending (GSH)

From the previous section, it is noticed that not only GSH is insignificant in all of the basic regression results, but also they have mixed signs. In this section, table 1.2.4a-b shows that when lagged GSH is included, the impact of government spending on growth remains the same as the original models in 1970n38 and 1980n38. (Table 1.2.3a) For example, where the GSH in 1970n38 has negative impact on growth, using GSH60 instead of GSH produces the same negative insignificant impact on growth rate. (Table 1.2.4a) This is also the case when replacing GSH70 with GSH in 1980n38 model. Moreover, GSH70 caused the IGDP80 in this model to become completely insignificant with the t-stat equal to 0.000. As a result, while period average share of GSH has little impact on growth in the 1980s, its lagged value is totally irrelevant, causing the R^2 to remain unaltered as seen in table 1.2.4b. Nevertheless, empirical results tell us that the impact of GSH could be inconclusive on growth rate which is also the case in this paper.[18]

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[18] Even though share of government has been hypothesised to have negative impact on growth during to its crowding out effect on private investment, this is only applicable to the developed countries. Whereas in the developing countries, certain government expenditures have been and will be necessary to remove impediments to economic growth. Thus, in the developing countries where private sector is weak, government intervention is essential for the economic development process. Please see section 0.1.1(d) for a detailed discussion on the issue.

Table 1.2.5a : 1970n38 model with GSH(-1)

	1970n38	1970n38 with GSH(-1)
C	**24.913** *2.89*	**25.471** *3.02*
GDP70	**-7.645** *-2.71*	**-7.580** *-2.74*
AGRSH	**-0.085** *-1.83*	**-0.081** *-1.78*
GSH	**-0.042** *-0.67*	
GSH60		**-0.085** *-1.30*
XGR	**0.067** *1.22*	**0.059** *1.10*
INVGR	**0.248** *4.16*	**0.253** *4.31*
HDI	**8.323** *1.92*	**7.732** *1.83*
RIOT	**-0.009** *-0.55*	**-0.006** *-0.37*
R-square	0.63	0.65
R-bar-square	0.54	0.56

Note : figures in italic are t-statistics

significant at 5%

significant at 10%

Table 1.2.5b : 1980n38 model with GSH(-1)

	1980n38	1980n38 with GSH(-1)
C	**-3.169** *-0.75*	**-4.019** *-0.89*
GDP70	**-0.137** *-0.14*	**0.000** *0.00*
AGRSH	**0.050** *1.49*	**0.051** *1.51*
GSH	**0.010** *0.19*	
GSH70		**0.027** *0.47*
XGR	**0.328** *4.00*	**0.316** *3.76*
INVGR	**0.226** *3.87*	**0.235** *3.81*
HDI	**2.248** *0.85*	**2.553** *0.96*
RIOT	n.a.	n.a.
R-square	0.74	0.74
R-bar-square	0.69	0.69

(b) Human Capital (HDI)

Likewise, a similar attempt is examined with the HDI. Although the HDI in both 1970n38 and 1980n38 models already has the correct sign, it is significant at 10 per cent in 1970n38 but not significant at all in 1980n38. (Table 1.2.5c-d) After replacing HDI with its lagged value, table 1.2.5c shows that HDI during the period is a better explanatory variable of GR in 1970 than its lagged value, HDI(-1). However, using HDI(-1) in the 1980s, this has resulted in a slight increase in the level of significance, but the increase is marginal and so is the impact. Thus, it can be said that HDI played only a minor role in explaining growth rate except in the 1970s and that its accumulative effect on growth is rather weak as HDI(-1) is not statistically significant in any of the models. Apparently, the magnitude of the effect of human capital found in this paper is not as strong as found in other empirical papers.[19] Why is this the case? First, this may be due to the fact that we are using HDI instead of the more specific proxies for human capital like level of school attainment, literacy rate, and life expectancy. And while educational variables used in other papers have been reported as significant explanatory variables among developing countries, their impacts may be offset by other human capital indicators like longevity and access to resources when incorporated in the HDI. Lastly, developing countries in Asia are

[19] Among others, Barro (1991), Edward (1992), Birdsall, Ross, and Sabot (1995), Mingat (1998) found human capital as an important variable in explaining economic growth rate.

known to have endowed with high level of human capital prior to their development state in the early 1960s, as a result, there is not much room for improvement during the development process.[20]

Table 1.2.5c : 1970n38 model with HDI(-1)

	1970n38	1970n38 with GSH(-1)
C	**24.913** *2.89*	**22.628** *2.50*
GDP70	**-7.645** *-2.71*	**-6.212** *-2.19*
AGRSH	**-0.085** *-1.83*	**-0.097** *-2.054*
GSH	**-0.042** *-0.67*	**-0.059** *-0.99*
XGR	**0.067** *1.22*	**0.083** *1.49*
INVGR	**0.248** *4.16*	**0.248** *4.00*
HDI	**8.323** *1.92*	
HDI60		**5.301** *1.22*
RIOT	**-0.009** *-0.55*	**-0.010** *-0.61*
R-square	**0.63**	**0.61**
R-bar-square	**0.54**	**0.51**

Note : figures in italic are t-statistics
significant at 5%
significant at 10%

Table 1.2.5d : 1980n38 model with HDI(-1)

	1980n38	1980n38 with GSH(-1)
C	**-3.169** *-0.75*	**-3.212** *-0.792*
GDP70	**-0.137** *-0.14*	**-0.163** *-0.17*
AGRSH	**0.050** *1.49*	**0.051** *1.632*
GSH	**0.010** *0.19*	**0.014** *0.26*
XGR	**0.328** *4.00*	**0.331** *4.09*
INVGR	**0.226** *3.87*	**0.229** *3.94*
HDI	**2.248** *0.85*	
HDI70		**2.746** *1.073*
RIOT	n.a.	n.a.
R-square	**0.74**	**0.74**
R-bar-square	**0.69**	**0.70**

1.2.6 Implications for Korea, Thailand and the Philippines

Since the main objective of this paper is to investigate the relative economic development of Korea, Thailand and the Philippines, it is helpful to look at how the three countries have performed among the larger group of developing countries. This can be examined by looking at the residuals of the three countries and by introducing country dummies. Dummies for Korea, Thailand and the Philippines are introduced in the models (1.2.3a-b) in order to examine their relative economic performance among other developing countries in the sample. What do we expect the results to be? Keeping in mind that Korea's economic performance (measured in terms of RGDP per capita) has been more successful than that of Thailand and the Philippines, respectively, so we can expect to see Korea's residuals and dummies during all of the three

[20] Recent papers tend to measure the level of human capital in terms of investment in human capital rather than level of school attainment. This is especially the case when examining the level of human development among Asian economies. Among others, Birdsall, Ross, Sabot (1995), and Mingat (1998) included investment in education and educational policies in capturing the improvement of human capital among East Asian economies. Please refer to literature review section 0.1.1 for a thorough discussion on the issue.

periods to be positive and more significant than the other two countries'; if there are specific country effects not captured by the variables in the model.

Table 1.2.6a-b show residuals of these three countries together with their actual values and fitted values during the three time periods which come from the basic regressions results in section 1.2.3. (These tables are also illustrated by graphs in figure 1.2.6a and b as their relative differences can be easily observed.) Table 1.2.6a-b report residuals of the three countries during 1960s, 1970s and 1980s and show that models are able to capture growth rate of Thailand well during the three periods, however, this is not the case for Korea and the Philippines. The residuals for the Philippines seem to be quite large during the 1970s and this is also the case for Korea in the 1980s.

Table 1.2.6a : Residuals of Korea, Thailand and the Philippines from 1.2.3a regression results with 38 n

		1960n38			1970n38			1980n38	
	Actual	Fitted	Residual60	Actual	Fitted	Residual70	Actual	Fitted	Residual80
Korea	6.60	7.2	**-0.6**	6.3	6.9	**-0.6**	8.4	5.5	**2.9**
Thailand	5.0	4.1	**0.9**	3.6	4.0	**-0.4**	5.0	5.6	**-0.6**
The Philippines	2.1	3.2	**-1.1**	2.7	4.5	**-1.8**	-0.5	-0.5	**-0.0**

Figure 1.2.6a : Residuals with 38n

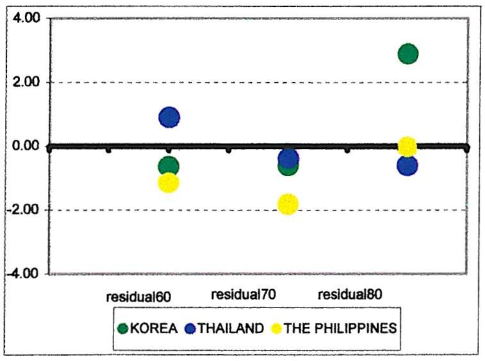

Figure 1.2.6b : Residuals with varied n

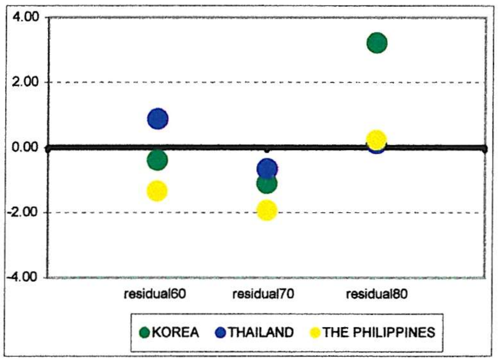

Table 1.2.6b : Residuals of Korea, Thailand and the Philippines from 1.2.3b regression results with varied n

		1960n42			1970n48			1980n48	
	Actual	Fitted	Residual60	Actual	Fitted	Residual70	Actual	Fitted	Residual80
Korea	6.60	7.0	**-0.4**	6.3	7.4	**-1.1**	8.4	5.2	**3.2**
Thailand	5.0	4.1	**0.9**	3.6	4.3	**-0.7**	5.0	4.9	**-0.1**
The Philippines	2.1	3.4	**-1.3**	2.7	4.6	**-1.9**	-0.5	-0.7	**-0.2**

Likewise, figure 1.2.6a-b illustrated that during the 1960s, these three economies have performed similarly to other developing countries. This also means that the model could predict these three countries' growth rate during the period rather well as their actual values are not largely different from their fitted values resulting in small residual of around 1 (one). However, during the 1970s and using such models, the residuals tell us that these countries have performed relatively poorer than other developing countries in consideration. In contrast, not only these three countries have outperformed others in the 1980s but, more importantly, the Korea residuals showed that its economy has done far better than Thailand and the Philippines. Thus, it can be said that residuals observed from these regression results generally support our assumption of the three countries' relative growth rates. In other words, the variables in the cross section model do not fully explain relative growth in these three countries.

Second, we incorporate the three countries' dummies into these basic models (again, from section 1.2.3) and observe their signs and significant to cross check whether they exhibit similar results to that of residuals'. Table 1.2.6c-d show basic regression models with dummies for Korea, Thailand and the Philippines which are denoted as KOR, THAI, and PHIL, respectively. Dummies in these regressions clearly reflect what residuals have previously said about their relative performance

Table 1.2.6c : Models with 38n and the three countries' dummies

	1960n38	1970n38	1980n38
C	**10.832** *1.40*	**25.516** *2.85*	**-3.413** *-0.81*
GDP70	**-2.512** *-0.99*	**-8.004** *-2.72*	**-0.172** *-0.18*
AGRSH	**-0.070** *-2.31*	**-0.078** *-1.16*	**0.055** *1.62*
GSH	**-0.002** *-0.05*	**-0.042** *-0.66*	**0.018** *0.34*
XGR	**0.132** *1.36*	**0.076** *1.21*	**0.328** *3.86*
INVGR	**0.157** *1.85*	**-0.257** *4.10*	**0.199** *3.31*
HDI	**0.825** *0.21*	**9.191** *2.02*	**2.302** *0.88*
RIOT	**-0.008** *-0.77*	**-0.007** *-0.44*	n.a.
<u>THAI</u>	**1.088** *0.58*	**-0.558** *-0.26*	**-0.288** *-0.16*
<u>KOR</u>	**-2.041** *-0.64*	**-1.005** *-0.42*	**3.402** *1.82*
<u>PHIL</u>	**-0.966** *-0.55*	**-2.083** *-0.95*	**0.005** *0.00*
R-squared	**0.51**	**0.64**	**0.77**
R-bar-squared	**0.33**	**0.51**	**0.69**

Note : figures in italic are t-statistics

Table 1.2.6d : Models with varied n and the three countries' dummies

	1960n38	1970n38	1980n38
C	**14.144** *2.22*	**23.530** *3.74*	**0.897** *0.29*
GDP70	**-3.610** -1.69	**-7.742** *-3.54*	**-0.984** *-1.15*
AGRSH	**-0.088** *-3.11*	**-0.057** *-1.74*	**0.004** *0.16*
GSH	**0.019** *0.40*	**-.021** *-0.44*	**0.023** *0.56*
XGR	**0.091** *1.18*	**0.115** *2.29*	**0.267** *3.51*
INVGR	**0.172** *2.11*	**0.227** *5.12*	**0.219** *3.73*
HDI	**2.168** *0.60*	**10.042** *2.71*	**1.272** *0.54*
RIOT	**-0.014** *-1.47*	**-0.010** *-0.71*	n.a.
<u>THAI</u>	**0.955** *0.51*	**-0.844** *-0.43*	**0.536** *0.28*
<u>KOR</u>	**-0.900** *-0.33*	**-1.557** *-0.72*	**3.853** *1.96*
<u>PHIL</u>	**-1.317** *-0.76*	**-2.139** *-1.08*	**0.267** *0.15*
R-squared	**0.55**	**0.67**	**0.70**
R-bar-squared	**.041**	**0.58**	**0.64**

1.2.7 Summary

In this section, we have examined the role of several factors namely, initial conditions, the role of government, exports and investment, human capital and political instability on economic development of 48 developing countries during the last three decades and found that these factors played different roles during a particular period. It is noticed that while initial conditions

(RGDP per capita and AGRSH) are significant during the early periods of development, XGR became more important in explaining growth rate during the latter periods, 1970s and 1980s. However, INVGR is the only variable which is significant throughout the three periods regardless of sample sizes which implies that INVGR has been a very important factor behind growth rate among developing countries.

Since the main objective of this paper is to examine the relative growth rate of countries within the same region, Korea, Thailand and the Philippines, the residuals of these three countries have been examined from these regression results. These residuals tell us that the models are not able to capture the Korean and the Philippines growth rate very well comparative to Thailand whose residuals were smallest. This leads to the next section which focuses on the analysis of growth factors among the three countries in the time-series fashion. Keeping the findings in this cross sectional analysis in mind, we will also introduce additional set of variables in order to explain relative growth rate among the three countries. In doing so, we are hoping to learn different things from the two approaches in the context of theoretical discussion.[21]

[21] Fischer (1991) pointed out that sometime when the relationship between macroeconomic indicators and growth ... are not robust, it is *unlikely* that further <u>cross sectional regressions</u> will pin down the transmission mechanism, thus, <u>time series evidence</u> for individual countries may help do so. (p. 346-7)

1.3 Time series analysis

1.3.1 Background

This section attempts to capture determinants of growth rates among countries within the region – Korea, Thailand and the Philippines, countries which have started off with similar conditions in 1960 but reached different stages of economic success in the 1990s. Also, it is interesting to examine whether these factors from the time series analysis will be similar to those found in the previous section or whether additional factors can be identified. In the previous section, we have identified key growth factors among developing countries using cross sectional data and concluded that while investment growth is the only variable that is significant across 3 time periods, other variables are important during particular decades. For example, initial conditions are significant during the early periods (1960s and 1970s) of economic development while export growth only began to play a significant role in the later periods (1970s and 1980s). In addition, the residuals of the three countries (section 1.2.5) also support our hypothesis of relative success between these economies – the Korean economy always out-performs the other two economies and the opposite is true for the Philippines.

Hence, this section explores country-specific factors that may help to explain these differences, including some influences that may be more easily captured in a time-series context. In particular, the different policies adopted by governments in the three countries are examined. Hence, keeping these findings from the cross sectional analysis in mind as common growth factors among the three countries, we also included additional regressors called 'industrialization' in this time series analysis in order to discriminate between relative growth rates in the three countries. This so called 'industrialization' variable attempts to capture structural change of the economy from agricultural-based to industrial-based which is believed to be a key determinant of growth among the three economies. Even though each of the countries has adopted similar industrialization policies, their timings and different degree of government commitment has appeared to affect their economic success greatly. It was the substantial industrialization scheme which the Korean government has adopted in turning its economy around in 30-year period.[22] This salient impact on the Korean economy is thoroughly

[22] The extensive degree of government intervention in Korea began to be felt when President Park came in power in the early 1960's. His strong commitment was to bring Korea out of poverty and catch up with the North (Korea.) Industrialisation was to be the route that would achieve these goals. One of the most aggressive movements was to nationalise the commercial banks so that the interest rates could be strictly controlled and funds could be allocated according to the objectives in promoting the economic growth rate. Though aggressive industrialisation in the favour of large conglomerate 'Chebol' could be an example of an unfair government policy, this strategy is not wasteful. In addition, market information and access of exports markets during the early period of development were only possible through the government channel of supports. (Song, 1994,p. 26-33)

discussed in the literature review (section 0.1) as it helps to explain why some explanatory variables may not necessarily be measurable in the regression model.[23] In addition, this success has been accomplished regardless of its poor natural resources and lowest GDP per capita of the three economies in 1960. On the other hand, the Philippines economy which was seen as a country with highest potential among the group has barely managed to double its GDP per capita during the period comparative to an increase of 8 times and 4 times for Korea and Thailand, respectively.

Section 1.3.2 discusses, in addition to the previous section, determinants of economic growth in the context of the three countries. It will focus on additional factors such as *industrialization policy* and *monetary policy* which are seen as discriminating factors of growth rate among the three countries. This section will also discuss the expected signs of these additional explanatory variables. Section 1.3.3 reports regression results, first, by presenting regression results of the three individual countries using variables drawn from the cross sectional study. Then, the role of 'industrialization' and 'monetary policy' variables on growth will be observed in separate regression. If *no* single model fits all three economies (which should not be surprising since we are examining their relative growth), we will then propose models which best fit each individual economy in section 1.3.4. This is in order to confirm our hypothesis of relative development -- that these economies have been driven by different factors.

1.3.2 Theoretical consideration in the context of three countries

This section discusses a set of explanatory variables which will be used as regressors in the time series analysis of Korea, Thailand and the Philippines during 1960-1990. Table 1.3.2a shows that, in addition to variables which have been drawn from the cross sectional analysis, 'industrialization'[24] which is proxied by structural share of exports to total output and 'monetary policy' which is proxied by exchange rate, interest rate and inflation (as seen in the shaded area in table 1.3.2a), will also be used as regressors in this section. It is first helpful to discuss briefly the variables which have been taken from the previous section and other additional variables with their expected signs before proceeding to the regression results.

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[23] Section 0.1.2.1 on Macroeconomic policy : the non-endowed factors discusses industrialization policy and government intervention in Korea and how its government oriented and implemented policies in pursuing some aggressive measures in promoting higher economic growth.

[24] Data on the sectoral composition of GDP are not available for the full range of countries in the sample, so an alternative proxy variable is required. Expressing sectoral exports as a percentage of GDP provides a measure that reflects both sectoral change and the increasing importance of exports in total output. Thus, an increase in the ratio of exports of manufactures to total output reflects both a sectoral shift in economic activity and increasing export activity. Conversely a fall in the share of raw material exports in total output represents a fall in dependence on primary production.

Table 1.3.2a : Explanatory variables (for time series analysis)

Hypothesis	X's	Description of Variables
1. Initial condition	**AGRSH**	Share of agriculture : total output
2.Government	**GSH**	Share of government spending : total output
3. Investment	**INVGR**	Real investment growth rate
4. Export	**XGR**	Export growth
5.Industrialization Policy	***RWMGDP***	*share of exports of RAW MATERIAL : total output*
	MNFGDP	*share of exports of MANUFACTURED PRODUCTS : total output*
	MCHGDP	*share of exports of MACHINERY : total output*
6. Human capital	**PRIM**	Primary enrolment
	SEC	Secondary enrolment
7. Monetary policies	***WON/BAHT/PESO***	*Real exchange rate*
	RDIST	*Real discount rate*
	IGAP	*Interest rate gap (local loan rate minus 30-year US T-bill)*
	CPI	*Growth rate of consumer price index*

Note : While 1, 2, 3, 4 and 6 are drawn from the cross-sectional analysis, 5 and 7 are additional sets of variables expected to play important role in discriminating relative growth rate among the 3 countries

(a) What have been drawn from the cross sectional analysis

Structural share of exports :

Since the analysis goes back to the 1960s when these economies were barely developed, it is important to find proxies which represent more than just an increasing share of exports or rising growth rate of investment. In 1990, exports and investment among these countries comprised over two thirds of their total output compared to one third in the 1960s, thus it can be said that exports and investment have played an important role during the 30 years development period. Nevertheless, although the increasing shares and growth rates of these factors could explain economic growth rather well (as shown in the cross sectional analysis), they could not capture the three countries' relative development during the period. As a result, the structural share of exports will be used in the hope that it will enable discriminating between the relative growth rates of the three countries. The variables used are the shares of exports of raw materials, manufacture products and machinery to total output or RWMGDP, MNFGDP, and MCHGDP, respectively. Considering the terms of trade and the nature of the export products, RWMGDP can be expected to have negative impact on GR while the opposite is true for MNFGDP. However, as these countries only began to export machinery in 1970, and as this sector still has not grown very much, MCHGDP is not expected to have a strong impact on GR.

Educational variables :

In the time series analysis, the level of primary and secondary enrolment is also used instead of HDI which was in the cross sectional analysis. This is mainly due to two reasons. First, HDI is comprised of 3 factors : longevity, access to resources and educational attainment. The first two are quite similar in the three countries. However, the difference in the third component of HDI or educational attainment (especially secondary school enrolment) is more clearly noticeable among these three countries. Second, data on HDI is not available on an annual basis, instead the data comes out every ten years which makes it inappropriate to be included in the time series analysis. For these reasons, PRIM and SEC are more preferable than the HDI.

However, including PRIM and SEC in the same model is likely to cause multi-collinearity since the two variables are related. As these countries has already achieved high levels of primary school enrolment (PRIM) at the beginning of their development in 1960, it is appropriate that secondary school enrolment (SEC) is used instead of PRIM. Also, it is important to keep in mind that these are trend variables which always tend to increase only gradually over time, hence, in the time series analysis where economic growth rates fluctuate, they may not come out as significant explanatory variables.

(b) What are new variables introduced in the time series analysis

Monetary policy :

Monetary policy is proxied by real exchange rate per unit of US dollar (WON, BAHT, PESO), real discount rate (RDIST), interest rate gap between domestic interest rate and US interest rate (IGAP), and inflation rate (CPI). These variables have been chosen as they reflect the cost of investment and competitiveness of exports, i.e., the main driving force of growth. Although exchange rates of these countries have been pegged with a stronger currency, the data tell us that they have been depreciated over the period. During the 30 years period, the Korean Won and the Philippines Peso have depreciated roughly around 100 per cent while Thai Baht has depreciated 25 per cent. This implies that exchange rate policy has been used as important tool in strengthening their competitiveness. At the same time, the interest rate gap indicates the level of return on deposit which foreign investors could enjoy without having to invest directly in other domestic markets. Also, the higher the gap, the more domestic banks tend to borrow from abroad to lower its cost. This source of inflows can, in turn, help finance domestic investment.

For these reasons, we can expect exchange rate and interest rate gap to have positive impact on growth, i.e., the higher the exchange rate (WON, BAHT, and PESO) and the interest rate gap (IGAP), the higher the growth rate. On the other hand, the real discount rate (RDIST) reflects the cost of investment as it is the rate which central bank charges commercial banks. However, the significance of RDIST on growth also depends on how actively commercial banks borrow from this source. Nevertheless, RDIST is hypothesized to have a negative impact on growth. Lastly, for the inflation rate (CPI), it can be expected to have negative relationship with growth.

In addition, there are other factors such as culture, colonial rule and geographic setting which have had a crucial impact in shaping these countries' development but are not measurable.[25] For example, these initial factors of natural resources, colonial rule and geopolitical setting are, at the beginning of the development period, believed to have played a role one way or another in influencing policymakers in adopting policies which have brought their economies such relative success. In this particular case of comparative study, these 'endowed' factors seemed to have been most helpful in explaining why the Philippines economy has been relatively less successful by pointing out some initial constraints. On the other hand, the spectacular success of the Korean economy cannot be attributed to the endowed factors, which were weak. Nevertheless, RGDP per capita has clearly showed that the Korean economy is the most successful in comparison with Thailand and the Philippines. Keeping in mind that relative growth rate may not be captured in the model due to these reasons, we need to examine other measurable variables.

1.3.3 Basic results

This section reports regression results of time series analysis for Korea, Thailand and the Philippines using a similar set of explanatory variables as in the cross sectional analysis and 'policy' variables (industrialization and monetary) which have been introduced in this section. Regression results are reported in two parts. Part (a) presents regression results for each individual country using explanatory variables drawn from the cross sectional analysis. Part (b) then provides specific models for each country where each of the policies is separately examined in the models.

(a) Primary models for individual country using variables drawn from the cross sectional analysis

This sub section attempts to examine the impact of variables, which have been identified as 'important' drivers of economic growth among developing countries from the cross sectional analysis, on the three countries in the time series fashion.

[25] Literature review section 0.1 discusses *industrialization policy* and *government intervention* at length in order to explain and offer some examples of how they are not measurable yet crucial to the success of the Korean economy and the relative failure of the Philippines economy.

Table 1.3.3a : Primary models using variables drawn from the cross-sectional study

Dependent variable = GR, N = 31 (1960-1990)

	Korea	Thailand	The Philippines
C	17.200 *1.62*	1.988 *0.24*	-17.795 *-2.70*
AGRSH	-.303 *-0.97*	-0.007 *-0.05*	0.272 *1.58*
GSH	-0.387 *-0.36*	-0.057 *-0.10*	1.149 *2.25*
INVGR	0.950 *2.15*	0.223 *3.65*	0.148 *4.08*
XGR	0.048 *1.12*	0.018 *0.52*	0.052 *2.31*
SEC	-0.031 *-0.19*	0.056 *0.38*	0.032 *0.86*
R-squared	0.43	0.62	0.71
DW-statistic*	1.73	1.98	1.63
F-test(5,25)**	3.74	8.13	12.21

*For (k=5, n=31), d_L and d_U are 0.897 and 1.601, respectively.

**F-critical(5,24) at 1% and 5% are approx. 3.90 and 2.62, respectively.

Note : figures in italic are t-statistics.

Significant at 5%

Significant at 10%

Hence, regressions in this sub section are called 'primary models' because they include all relevant variables as in the previous section in cross sectional analysis. This is in order to get the feel for each of the explanatory variables against the dependent variable (GR) of Korea, Thailand and the Philippines. In other words, the purpose of these regressions is to show the relationship or the impact of relevant variables which have been adopted from the cross sectional analysis and growth rates of the three countries in the time series fashion. As a result, the table shows that INVGR is the only robust variable across three economies. In addition, for the Philippines, the model also shows GSH and XGR as important variables for its growth. And even though both Korea's and Thailand's have INVGR as the only important variable, low r-squared for Korea, comparative to that of Thailand and the Philippines, tells us that this model cannot capture the growth rate of Korea as well as it did for Thailand.[26]

(b) Test for business cycle

In this section, we test for business cycle effects[27] in the time series analysis by including the *time trend*[28] variable (T) in the primary model from table 1.3.3a. This is in order to examine

[26] The finding for Korea is in line with the previous finding from the cross sectional study which was why the paper attempted to examine the growth rate in the time series analysis. This is in hoping that the time series study will be able to explain growth rate of Korea as well as the relative growth rate among countries.

[27] See Miles and Scott (2002) for definition, measurement, characteristics, etc. of business cycles. One way of defining the business cycle is that it is the fluctuations in output around its trend and that business cycles are only temporary -- whether in an expansion or recession, output is eventually expected to return to its trend level. (p. 369-371)

whether there were any medium term fluctuations in the three economies during the 30 years of development period (1960-1990). Table 1.3.3b shows the regression results of the primary model with a time trend variable which is similar to table 1.3.3a. Again, INVGR is the single most important explanatory variable among the three economies while GSH and XGR remain significant for the Philippines economy. The table also shows that T has no impact on any of the three economies as they are not found to be significant in any cases. This is also supported by figure 1.3.3a, b and c which illustrate that the business cycles are not noticeable in any of these economies during the 30 year period.[29]

Table 1.3.3b : Primary model with time trend

Dependent variable = GR, N = 31

	Korea	Thailand	The Philippines
C	19.871	-1.888	-12.958
	1.82	*-0.19*	*-1.82*
AGRSH	-0.028	-0.094	0.036
	-0.07	*-0.53*	*0.16*
GSH	0.381	0.156	1.895
	0.29	*0.25*	*2.76*
INVGR	0.094	0.222	0.123
	2.14	*3.59*	*3.17*
XGR	0.048	0.016	0.060
	1.12	*0.47*	*2.66*
SEC	-0.853	0.513	-0.183
	-1.06	*0.78*	*-1.29*
T	1.897	-0.370	0.283
	1.04	*-0.72*	*1.57*
R-Squared	0.45	0.63	0.74
DW-statistic*	1.89	1.98	1.72
F-test (6,24)**	3.31	6.73	11.19

*For (k=6, n=31), d_L and d_U are 1.020 and 1.920, respectively.

**F-critical(6,24) at 1% and 5% are approx. 3.67 and 2.51, respectively.

Note : figures in italic are t-statistics.

Significant at 5%

Significant at 10%

[28] There are many ways of testing for business cycles, but due to limitation of the nature of data under consideration which is the annual type of 30 years period, we test for business cycle by including the *time trend.*

[29] Business cycles or medium term fluctuations in the economy are normally completely contained within a decade. (Miles and Scott, 2002, p. 369)

Figure 1.3.3a : standard deviation of RGDP per capita -- Korea (1960-1990)

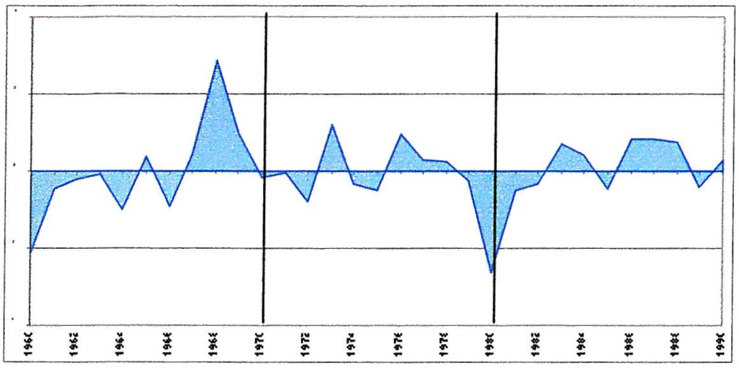


Figure 1.3.3b : standard deviation of RGDP per capita -- Thailand (1960-1990)

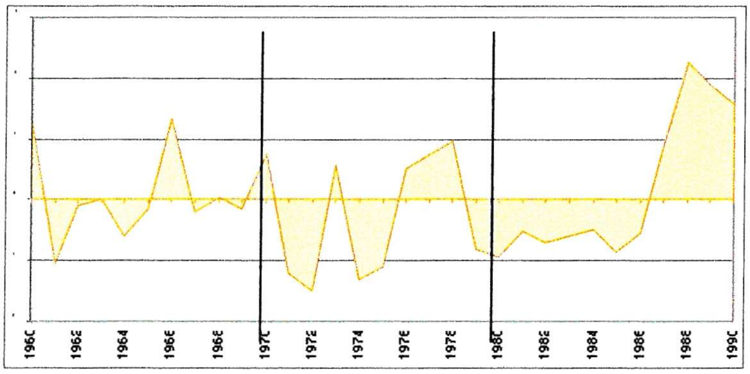
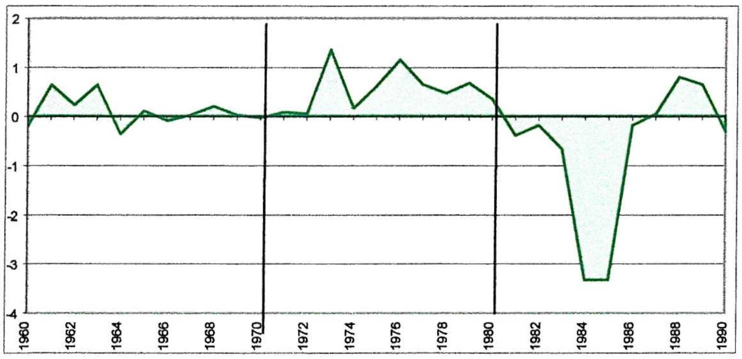


Figure 1.3.3c : standard deviation of RGDP per capita -- the Philippines (1960-1990)



In addition, recalling figure 1.1b which shows RGDP per capita of the three economies during 1955-1995 that is adjusted for exchange rate and price deflator, it can be seen that the levels of per capita income are upward sloping. The figure illustrate that the levels of RGDP per capita in the case of Korea and Thailand and to a lesser extent, the Philippines, had clearly been moving upward during the 40 years period of development. However, this is not to say that these economies' growth rates have not fluctuated (for example, during the two oil shocks and periods of high interest rates, which are disturbances that often cause output to fluctuate) but the magnitude and duration may have varied. Also, this may due to the fact that we are examining economies during their period of development (from relatively poor initial level) where economic growth (and RGDP per capita) would tend to rise over long period of time rather than fluctuate between high and low period of activities. This is especially the case for high growth economies like Korea and Thailand whose, by 1990, RGDP per capita have increased over 8 and 4 times from their initial levels in 1960.

(c) Specific models : examination of each policy variables in separate models

If we look at the list of explanatory variables in table 1.3.2a, it should be noticed that some variables cannot be put in a regression at the same time. For example, the HDI cannot be included with PRIM and / or SEC due to their collinearity. As a result, table 1.3.3c1 and c2 show regression results of individual countries which include industrialisation policy (RWMGDP, MNFGDP and MCHGDP) and monetary policies (WON/BAHT/PESO, IGAP, RDIST, and CPI) together with other regressors, respectively. For the time being, these individuals will be called specific models as they examine the role of each policy separately in the models in attempting to observe their roles in discriminating growth rate among the three countries, the job these policies variables were introduced to do.

Using 'primary models' as base models, monetary policy is excluded in table 1.3.3_c1 in order to examine the impact of variables drawn from the cross sectional analysis together with industrialization policy (RWMGDP, MNFGDP and MCHGDP). As a result, table 1.3.3_c1 contains models for each of the countries which include all of the variables except monetary policy. Likewise, table 1.3.3_c2 reports regression results of models, in which monetary policy is included instead of industrialization policy.

Table 1.3.3_c1 : The role of industrialization policy
Dependent variable : GR, n = 31 (1960-1990)

	Korea	Thailand	The Phil
C	44.384 *1.89*	-11.349 *-0.65*	-113.282 *-3.83*
AGRSH	-0.647 *-1.27*	0.027 *0.20*	5.076 *3.41*
GSH	-0.189 *-0.15*	0.693 *0.85*	0.344 *0.47*
INVGR	0.119 *1.99*	0.236 *3.52*	0.105 *3.32*
XGR	0.041 *0.87*	-0.001 *-0.17*	0.055 *2.40*
RWMGDP	-2.234 *-0.78*	0.342 *0.78*	0.051 *0.28*
MNFGDP	0.786 *1.26*	-0.820 *-0.35*	-3.723 *-2.69*
MCHGDP	-0.064 *-0.09*	2.298 *0.62*	40.765 *3.22*
SEC	-0.450 *-1.22*	0.016 *0.03*	-0.764 *-3.75*
WON, BAHT, PESO			
RDIST			
IGAP			
CPI			
R-squared	0.48	0.65	0.84
DW-statistic*	1.87	2.10	2.25
F-test**	2.43	5.04	14.64

Table 1.3.3_c2 : The role of monetary policy
Dependent variable : GR, n= 31 (1960-1990)

	Korea	Thailand	The Phil
C	13.232 *0.74*	8.448 *0.69*	-17.438 *-1.63*
AGRSH	-0.061 *-0.12*	0.108 *0.59*	0.158 *0.33*
GSH	-0.896 *-0.65*	-0.798 *-0.82*	1.544 *2.46*
INVGR	0.063 *1.13*	0.163 *1.99*	0.118 *2.34*
XGR	0.044 *0.84*	0.011 *0.29*	0.054 *2.27*
RWMGDP			
MNFGDP			
MCHGDP			
SEC	0.086 *0.30*	0.333 *0.97*	-0.040 *-0.28*
WON, BAHT, PESO	-0.002 *-0.26*	-0.273 *-0.88*	0.761 *0.24*
RDIST	-0.023 *-0.04*	0.054 *0.14*	0.357 *1.01*
IGAP	0.099 *0.16*	-0.151 *-0.39*	-0.320 *-1.33*
CPI	-0.173 *-0.32*	-0.073 *-0.23*	0.310 *0.89*
R-squared	0.46	0.65	0.74
DW-statistic*	1.68	2.07	1.79
F-test**	2.05	4.35	6.59

Note : Figures in italic are t-stat.
*For (k=8, n=31), dL and dU are 0.879 and 2.120, respectively.
*For (k=8, n=31), dL and dU are 0.810 and 2.226, respectively.
**For table 1.3.3_b1, critical values for F(8,22) at 1% and 5% are approx. 3.45 and 2.40, respectively.
**For table 1.3.3_b2, critical values for F(9,22) at 1% are 5% are approx. 3.35 and 2.34, respectively.
Significant at 5%

When considering the policy variables in separate models, table 1.3.3_c1 which considers industrialization policy shows that INVGR is an important variable in all of the models. In addition, for the Philippines, AGRSH, XGR, MNFGDP, MCHGDP and SEC are also found to be important to its growth rate. What do these variables say about the Philippines economic growth during the period then? It is noticed that AGRSH and RWMGDP, which reflect how much a country depends on agricultural-based activities, standout as having impact on the Philippines growth. This implies that an agricultural sector has been an important influence on economic growth of the country. It is discussed in the literature review, section 0.1.1, that agricultural dependent economies could be at a disadvantage in economic growth as opposed to those dependent on producing manufacture products.

Thus, in this context of structural share of exports, the more a country exports raw material and / or agricultural products, the more uncertain its economic growth. To some extent, this finding of the Philippines model explains why has its economy been relatively less successful in comparison with Korea and Thailand. This finding also reflects the illustration in table 1.1b which indicates up until 1991, 20 per cent of the Philippines output is comprised of agricultural output. In fact, during the 30 year-period (1960-1990), the share of this sector has remained relatively unchanged (from 26 per cent in 1960 to 21 per cent in 1991). At the same time, Korea and Thailand have become less dependent on their agricultural sector as these shares have been decreased significantly during the period.

In addition, educational variable, SEC, has turned out to be either insignificant or significant with theoretically incorrect signs. Also, as educational variable is long-term variable, it is unlikely to have immediate impact on growth. In other words, the results from these tables are not very stimulating as only a few variables turned out to have significant impact on growth and that there is inconclusive evidence regarding the presence or absence of positive first-order serial correlation.

What about the role of monetary policy in explaining their relative growth rates? This is considered in table 1.3.3_c2. The monetary policy has been identified as an important tool which these governments, and other governments in East Asian economies in general, have used in increasing their competitiveness in the international trade. While these currencies, WON/BAHT/PESO, (which were already pegged with stronger currencies) were often under-valued[30], interest rates charged on loans for investment was also subsidized by the government[31] in lowering the cost of investment for private firms. Nevertheless, the table shows that the four proxies for monetary policy do *not* have impact on economic growth rate of any economies. In addition, F-tests tell us that we cannot reject that the coefficients of parameters for Korean model is simultaneously equal to zero.

However, after having recognised that the monetary policy was used to promote economic growth via the channel of exports and investment, it is sensible that we examine the impact of monetary policy on XGR and INVGR. In other words, we cannot rule out the possibility of multi-collinearity problems between variables within the models as variables such as monetary

[30] This is also known as competitive devaluation. During the 30 years period (1960-1990), the Philippines' PESO, the Korean WON and the Thai BAHT have been depreciated by 140%, 70% and 25% and these depreciation is on top of currencies' levels which have been claimed to be fixed exchange rates.

policy is likely to have impact on XGR and INVGR. In the next sub-section, we examine these issues.

Table 1.3.3_c3 : The impact of monetary policy on INVGR and XGR

	Korea		Thailand		The Philippines	
Dependent Variable	INVGR	XGR	INVGR	XGR	INVGR	XGR
C	41.703 *1.21*	-100.191 *-3.08*	-9.269 *-0.721*	-4.531 *-0.26*	9.257 *1.36*	12.944 *1.06*
WON/BAHT/PESO	-0.048 *-1.16*	0.170 *4.33*	-1.261 *-0.72*	-1.926 *-0.82*	-5.452 *-2.16*	3.308 *0.73*
WON/BAHT/PESO(-1)	0.033 *1.11*	-0.010 *-0.35*	2.782 *1.49*	2.694 *1.08*	6.765 *2.35*	-4.331 *-0.84*
RDIST	4.048 *2.08*	5.682 *3.08*	1.687 *1.23*	0.603 *0.33*	-2.031 *-1.26*	0.898 *0.31*
RDIST(-1)	-4.849 *-2.31*	-8.829 *-4.44*	-3.143 *-2.21*	-0.257 *-0.13*	-0.304 *-0.17*	0.590 *0.19*
IGAP	-2.920 *-1.37*	-7.558 *-3.74*	-0.726 *-0.47*	-1.457 *-0.70*	1.378 *0.94*	-1.828 *-0.70*
IGAP(-1)	4.364 *1.95*	10.465 *4.93*	0.964 *0.54*	0.372 *0.16*	-0.945 *-0.66*	2.538 *1.00*
CPI	2.986 *1.53*	5.475 *2.95*	2.004 *1.61*	1.501 *0.90*	-2.186 *-1.41*	0.442 *0.16*
CPI(-1)	-4.768 *-2.44*	-7.364 *-3.98*	-3.329 *-2.57*	-1.408 *-0.81*	-0.292 *-1.78*	-0.088 *-0.03*
R-squared	0.57	0.72	0.48	0.36	0.64	0.29
F-test (8,21)	3.44	6.69	2.45	**1.44**	4.61	**1.06**

Note : Figures in italic are t-stat.
*Critical values for F(8,22) at 1% and 5% are approx. 3.45 and 2.40, respectively.
Significant at 5%
Significant at 10%

Table 1.3.3_c3 shows that monetary policy has large influence on exports (XGR) and investment (INVGR), especially in the case of Korea. However, the importance of the policy was not captured when regressed directly against economic growth. In other words, while XGR and INVGR played an important role in explaining growth rate of the Korea economy, these variables have been favoured by monetary policies via exchange rate and interest rate. This finding is also in line with the fact that the Korean government has extensively used monetary policies as important tools in directing trade and investment sectors which are the main components of GDP.[32] Nevertheless, since all of the models suffer from an incorrect functional form according to the diagnostic tests[33], we will have to adopt a different method, or an alternative approach in choosing a true model for these countries.

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[31] The governments ususally offer attractive rates for investment that will spure economic activities and gorwth. The more extensive example of this can be seen in the case of Korean government which has nationalized commercial banks in order to gain control over both the interest rates and the use of funds.

[32] This issue of briefly discussed in the previous sub section and thorough discussion can be found in literature review, section 0.1.

[33] The diagnostic statistics are referred to R^2, t, F and Durbin-Watson d. While models in other sections focus on the relationships between explanatory variables and GR, section 1.3.4 focus on finding models which satisfy the diagnostic

1.3.4 An alternative approach

This sub-section is necessary because the result found for the Philippines is not only inconsistent with the theory, it suffers from an incorrect functional form which makes the primary models (table 1.3.3c) questionable. Considering the two issues of theoretical inconsistency on the one hand, and the usual regression diagnostic on the other hand, we regress each of the variables alone against the GR. Does this approach make sense? What can be learnt by this approach? This approach is adopted in order to examine the robustness of the individual variable on GR while diagnostic tests can be easily observed. In addition, this methodology of testing significance of a single variable against the dependent variable is common in the cross sectional studies.[34] But more importantly, the results show that this is the first time models are able to capture important factors behind the Korean growth rate even though this explanation of growth was transmitted through XGR and INVGR. In contrast, monetary policy was not able to explain INVGR in either Thailand or the Philippines well in comparison with Korea's INVGR. Furthermore, the policy has no impact at all on XGR of both countries where the F-test shows that we cannot reject that coefficients of parameters are jointly equal to zero.[35]

We know from the cross sectional analysis that INVGR is the only significant variable across three time periods and that it is the only common growth factor found in all of the models for the three countries except in the primary models in 1.3.3c. Thus, INVGR is the first variable to be regressed against GR. As expected, INVGR alone can explain about 23 per cent, 58 per cent and 50 per cent of GR for Korea, Thailand and the Philippines, respectively. Then, other variables were examined against GR and this is repeated for all of the three countries. Also, special attention is paid to the two groups of 'industrialization policy' and 'monetary policies' variables as they are the key factors in discriminating factors among the three countries in this section.

During the process, auxiliary regressions are also performed for particular pairs of regressors where it was found that there is some strong collinearity between regressors. For instance, in the case of Thailand, MNFGDP is highly collinear with AGRSH and SEC with r-square of 0.81

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tests (R^2, t, F and Durbin-Watson d) as well as correction functional form (Ramsey Reset) and normal distribution of error terms (Jarque-Bera).

[34] It can be noticed from the literature review section 0.1 that the important role of the 5 explanatory variables (initial conditions, government spending, exports and investment, human capital and political instability) are, in most cases, individually examined against GR. By doing so, this allows authors to focus on the role of a particular variable whereas a large set of countries could be included in the sample.

[35] Gujarati (1995) shows how F and R^2 are related. When $R^2 = 0$, F is zero, ipso facto. The larger the R^2, the greater the F value. In the limit, when $R^2 = 0$, F is infinite. Thus the F test, which is the measure of the overal significance of the estimated regression, is also a test of significance R^2. (p. 249)

and 0.87, respectively, so their pairs cannot be put in the model. Also, RDIST is strongly correlated to INVGR and CPI in the case of Korea. Interestingly, although the Philippines model always produces variables with significant results and high r-squared, they are not acceptable under, at least, one of the diagnostic tests, i.e., Durbin Watson d statistics.

Table 1.3.4 : An alternative approach

Dependent variable = GR, N = 31

		Korea	Thailand	The Philippines
	C	-161.681 *-2.52*	1.720 *3.46*	-0.525 *-0.25*
Initial condition	AGRSH	0.570 *2.10*		
Government	GSH			
Investment	INVGR	0.077 *1.84*	0.223 *6.63*	0.096 *2.49*
Exports	RWMGDP			0.227 *1.71*
	MNFGDP		0.154 *2.13*	
	MCHGDP			
Human capital	PRIM	1.536 *2.67*		
	SEC			
Monetary Policy	WON/BAHT/ PESO			-1.354 *-3.31*
	PESO(-1)			1.483 *3.26*
	RDIST			
	IGAP			
	CPI	-0.178 *-1.85*		
	R-squared	0.48	0.71	0.73
	DW-statistic*	2.00	2.30	1.65
	F-test**	6.17	33.23	17.74

*For (k=2, n=31), d_L and d_U are 1.297 and 1.570, respectively.
*For (k=4, n=31), d_L and d_U are 1.160 and 1.735, respectively.
**F-critical for F(4,26) and (2,26) at 1% are approx. 4.41 and 5.53, respectively.
Note : figures in italic are t-statistics

In other words, what we have done in this section is to attempt all plausible combinations of variables in a regression in trying to come up with a true model. And keeping the two issues of theoretical consistency and regression diagnostics in mind as the main reasons why we are pursuing this alternative approach, we came up with table 1.3.4 which shows regression results for individual country. These models include only significant variables, they do not suffer from the standard diagnostic test and they are consistent with the theories.

Considering the methodology used in deriving models in table 1.3.4, it can be said that there is no specific approach in deriving a model, however, one can claim a success of a model based on the set criteria. In this case of deriving specific model for these individual countries, it has been shown that the chosen models can be accepted based on the general criteria of theoretical consistency and usual regression diagnostics which satisfy our objectives of deriving specific models. In addition, there are several points which could be drawn from deriving specific models for individual countries.

1. Using an alternative approach to find the specific models (1.3.3_c1 and c2) for the individual countries, INVGR is found as the only explanatory variable which is significant in all of the three countries' models. This in line with the findings in the cross sectional analysis and other models in this section.

2. Referring back to our objective of trying to capture the relative growth rate among these three countries in which we have introduced 'industrialization' variables and 'monetary policy' to do the job, has our objective been met?

   2.1 Considering, first, models for Thailand which has MNFGDP as another significant variable and the Philippines' which as RWMGDP as a significant variable, these findings imply that 'industrialization' which has been proxied by structure of exports could capture the relative difference in of growth rate between the two countries. (table 1.3.4)

   2.2 Second, has 'monetary policy' which is proxied by exchange rate, interest rate and inflation been successful in discriminating their relative growth rate? Table 1.3.3_c2 tells us that when proxies for monetary policies are included, they do not have direct impact on growth. However, when they are regressed against XGR and INVGR, table 1.3.3_c3, their impacts have become evidenced especially in the case of Korea. Hence, it can be said that monetary policies have large influence on GR via their impact through XGR and INVGR. This finding is also in line with the fact that, in comparison with Thailand and the Philippines, Korea has been relatively most aggressive in using monetary policies in directing its economy during the period.

1.4 Summary

This paper has examined the key factors affecting growth rate and development among developing countries during the past 3 decades in separate regressions. Regressors in the model of cross sectional analysis have been drawn from previous empirical studies which can be divided into 5 groups of initial conditions, government spending, exports and investment, human capital and political instability. The main findings from this first part of the analysis are that while initial conditions such as RGDP per capita and share of agriculture played important roles in economic growth rates during the early periods (1960's, and 1970's), export growth only began to play an important role during the latter periods (1970's and 1980's). But most importantly, investment growth was found to be the single most important factor behind growth rate among developing countries in all regression models.

In addition to examining the data in separate regressions, we also examined pooled data in order to see whether it could capture other information not found in the cross sectional analysis. The result shows that the panel data estimation (fixed effects estimates) could capture only INVGR as an important variable in explaining growth rate among 38 developing countries during 1960-1990. Thus, in comparison with the cross sectional data analysis, the panel estimation, which is intended to capture the behaviour of variables across time period and countries, failed to capture other variables but INVGR. However, this could due to the fact that we are examining developing countries from their initial state of development in 1960 throughout 1990 which these economies' growth have been driven by various factors during particular periods. As a result, estimating cross sectional data during particular decades in separate regressions allow us to capture important variables which played different roles in different stages of development.

Hence, these findings are used as background in examining the main objective of this paper which is the analysis of relative growth rates among developing countries within the region, Korea, Thailand and the Philippines. It was previously discussed in section 1.1 and found in cross sectional study that although developing countries share some commonality, different degrees of economic success are recognized among different regions. This, however, is not surprising as there are region specific factors that resulted in varied performance among developing countries in different regions. However, a more interesting issue concerns the relative growth rates of economies within the region.

In capturing factors behind the relative growth rates of Korea, Thailand and the Philippines (countries which were at a similar state of development with comparable of GNP per capita in 1960, but reached very different levels of economic success by 1990), the second part of the paper examines their growth rates using time series analysis. The main findings from the cross sectional analysis which can be kept in mind in analysing relative growth rate among the three countries are that (1) investment is the only factor that is robust in all the regressions and (2) the dummies for Korea, Thailand and the Philippines show that the model in the cross section is not able to capture growth rate of Korea well in comparison with other two countries. Thus, the time series analysis is introduced in hoping that it will be able to capture the relative growth rate among countries that cross sectional analysis was not able to explain.

In the time series analysis, the additional set of explanatory variables of industrialization policies (proxied by the structural share of exports) and monetary policies (interest rates, exchange rate and price level) are introduced as they are believed to have been the key factors which could explain the relative growth rates among the three economies. In this section, variables from the cross sectional analysis were regressed against growth rates of the three countries and it is found that investment is a single important explanatory variable across three countries while government spending and exports growth are also important for the Philippines' economy.

Also, we examine for business cycle effects in these three economies to see whether they have experienced medium term fluctuations during their development period. However, the results show that there is no evidence of business cycles even though their growth rates have fluctuated at time of oil shocks and interest rate rises which are common sources of business cycles. At this point, what is interesting is that we have not, so far, found a model which could explain the Korean economic growth well. Even though export growth is the single explanatory variable for Korea and Thailand, diagnostic tests tell us that there are other variables which could explain the Korean economy but are not included in the model. However, this may be because our hypothesis of relative growth rates, 'policy' variables, have not been examined in the model.

Next, we introduced 'policy' variables in the models and found that, first, by including industrialization policy (proxied by structure of exports (table 1.3.3_b1)), the result shows that these variables are significant for the Philippines but they, however, are not able to capture movement in the growth rates of Korea and Thailand. Again, the diagnostic tests show that these variables are not significant for Korea. Second, by including monetary policies proxied by interest rate and exchange rate, these variables are not, at all, important for any of the countries. Thus, by examining these 'policy' variables against growth rate of GNP per capita, they did not do a very good job of explaining growth rate among these countries or support our hypothesis of their relative growth rate.

However, recognizing that monetary policy is a common tool used in many of the East Asian countries in promoting growth via the channel of exports and investment, it is sensible that we examine the impact of monetary policies on exports and investment. As a result, interesting findings have been found. First, it is evident that monetary policy has a large influence on exports and investment, especially in the case of Korea. And more importantly, this is the first time that the model for the Korea has become significant (determined by diagnostic tests), not to mention that it is also the most powerful among the three countries. Second, this finding for Korea is in line with the literature survey in section 0.1 regarding the extensive use of monetary policy in directing its international trade. Nevertheless, the impacts of these policies were not captured when regressed directly against economic growth rate but through exports and investment. On the other hand, the impact of monetary policies were found to be less apparent in the case of Thailand and the Philippines.

In summary, the paper shows, to some extent, what different things we have learnt from the two approaches of cross sectional analysis and time series analysis in the context of theoretical discussion. As Fischer (1991) pointed out sometime when the relationship between macroeconomic indicators and growth ... are not robust, it is unlikely that further cross sectional regressions will pin down the transmission mechanism, thus, time series evidence for individual countries may help do so. (p. 346-7)

PAPER II : CAUSES OF THE ASIAN FINANCIAL CRISIS : A DIFFERENT RATIONALE FOR CENTRAL BANK INDEPENDENCE

2.1 Introduction

2.1.1 Background of the paper

The recent Asian financial crisis suggested that traditional views (Krugman, 1979 and Obstfeld, 1986) of currency crises could neither detect nor explain what happened in Asia, since the core of the problem lies in the *moral hazard* of over-investment allowed by poor supervision and under-regulated financial markets in the country where the crisis broke out, Thailand. Indeed, the poor supervision and under-regulated financial market were caused by incompetence[1] of the authority in charge of the monetary policy, the central bank. Thus, in order to correct these problems, it is suggested that the central bank be granted independence so the central bank governor could make monetary policy without interference from politicians and private bankers. In fact, after the crisis itself, economists have identified moral hazard as a cause of the crisis – expectation of government bailout and implicit government guarantees which explained why a financial crisis could occur in the absence of weak macroeconomic fundamentals.

There are reasons to believe that interference by politicians and private bankers with the operations of the central bank of Thailand contributed substantially to the Asian financial crisis. First, even though the crisis was triggered by a call back of short term loans made by the private sector in Thailand in mid 1997, the accumulation of these loans was made possible under the opening up of the capital account via establishment of Bangkok

[1]There is evidence to support the view that the Bank of Thailand was incompetent. It first opened up a capital account alongside fixed exchange rate and misused the international reserves to rescue a small commercial bank.

International Banking Facilities (BIBF) in 1993. Since Thailand was then employing a fixed exchange rate regime, there was no need for these short-term loans to be hedged against exchange rate risk. As a result, the economy was flooded with liquidity which came into the country to make profit from the interest rate gap[2]. This excessively liberalized financial market without contingency plan is part of the government's ambition of becoming the regional financial centre in Southeast Asia. However, the conflicting objectives of liberalized capital account and fixed exchange rate kept exporters and private bankers happy for a considerable period of time before the currency began to experience speculative attacks. The first speculative attack took place in early 1995 when Latin American countries faced crisis and then come another round of heavy speculative attack during 1997. This time, the fixed parity finally broke.[3]

Second, during the few years after financial liberalization and before the floatation, financial institutions began to suffer from bad loans caused by the collapse of the real estate market in 1996. The Bangkok Bank of Commerce (BBC), a small commercial bank, was the first to run into trouble with bad loans. It later became clear that there were some unusual practices going on within BBC where loans had been politically motivated. Also, not only did the central bank fail to file criminal action against the BBC former executives, it also misused the fund drawn from Financial Institutions Development Fund (FIDF) to repeatedly rescue the BBC. The botched attempt at a take-over of BBC's management and the BoT's failure to file a criminal action against former BBC's executives is seen by commentators as the BoT's mismanagement of the BBC affair. Thus, the opening up of the capital account alongside the fixed exchange rate, on the one hand, and the incident at the BBC, on the other hand, provide justification for seeking to make the central bank of Thailand independent, enabling the bank to make monetary policy and to regulate financial markets independently from politicians as well as private bankers. Therefore, it is argued that granting the Bank of Thailand independence is a crucial step toward stabilizing financial markets and regaining foreign investors' confidence in the Thai economy.

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[2] The interest rate gap refers to the difference between the domestic interest rate (Minimum Loan Rate) and international lending rate (LIBOR) which was roughly between 5-6 per cent during the period.

For the industrialized economies, the independence of the central bank is sought in order to obtain price stability, which strengthens the exchange rate and enhances economic growth. However, this paper argues that for the developing economies, the objective of central bank independence (henceforth CBI) does not focus on the issue of price stability. There are two reasons for this. First, the duty of the central bank in controlling inflation is not significant, since exchange rates in the case of emerging Asian economies are often pegged to the major currencies such as the US Dollar or Pound Sterling, so that inflation rate tends to conform with these economies', which are moderate.[4] Second, financial markets in the developing economies are comparatively small and less efficient, thus the central bank tends to play a greater role as financial market regulator. (Mas, 1995) Hence, the need for the independence of the central bank in the developing economies rests on its ability to regulate the financial market independently from the government rather than to stabilise prices.

2.1.2 Structure of the paper

There are two main issues to be discussed, first, the actual causes of the *Asian financial crisis* in the origin country which is tied to the second issue of how such crisis can be a different rationale for *central bank independence*[5]. The first part of the paper (section 2.2) examines how the Asian financial crisis stemmed from moral hazard – implicit government guarantee and under-regulated financial market in Thailand. In addition, it puts Thailand in the context of other five East Asian economies (Indonesia, Korea, Malaysia, the Philippines, and Singapore) in order to identify the 'moral hazard' type of crisis in a more practical way by pin-pointing some of the common indicators shared by these six economies. Then, the second part of the paper (sections 2.3 and 2.4) focuses on Thailand alone by providing the insight to questions such as what actually happened in the country prior to the crisis? What has triggered the crisis? And, most importantly, why has the authority finally failed to resist the pressure from the international speculators in July 1997? Therefore, the paper addresses these issues as a different rationale for the CBI.

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[3] Section 2.3 shows how Thailand was able to survive the speculative attack in the 1995 and illustrates how deterioration of the country's financial position and accumulation of short-term debts have forced the authorities to finally let go of the fixed parity in 1997.

[4] Mas (1995) argued that CBI becomes relatively less meaningful under fixed exchange regime as monetary policy is bounded by other objectives other than the price stability. (p. 1644)

Therefore, this paper is divided into 4 sections. **Section 2.2** discusses the background of the Asian financial crisis by identifying some similarities or differences among six Asian economies (Indonesia, Korea, Malaysia, The Philippines, Thailand, and Singapore). Since a large number of papers have pointed out that the economic fundamentals of these Asian economies did not warrant an economic disruption to the degree that occurred, it is helpful to first examine macroeconomic indicators of these countries in clarifying to what extent these countries were in good health prior to the crisis. The comparative analysis distinguishes between *macroeconomic factors* and *financial market factors* as this structure of analysis helps explain why neither of the first- and second-generation models of crises could detect the Asian crisis at its onset, although, their relevance became more apparent as the crisis unfolded. More importantly, the framework of comparative analysis helps clarify what sort of indicators one could have looked for in detecting the 'moral hazard' type of crisis.

Section 2.3 provides the background of the Bank of Thailand (BoT), mismanagement of the monetary policy and chronology of the crisis in order to support the (re-)establishment of CBI. This section shows that while the BoT was known historically to have high reputation first due to its high quality staff and because the governors were recognized to be independent from the government, the BoT had very little role to play as financial market regulator as the financial market was rather closed prior to the 1990s. However, it was not until the early 1990s when the financial market was being extensively liberalized that BoT began to play a more apparent role as financial regulator and that was when its reputation began to erode. Indeed, the financial liberalization meant that the Thai financial market can and will be exposed with more opportunities as well as risk which the market and financial regulator will have to be more prudent.

Mundell (1965) and Krugman (1998a) have referred to the impossible dilemma faced by central bankers in trying to maintain perfect capital mobility whilst also operating a fixed exchange rate regime and trying to control money supply. The chronology of the plunge provides some evidence to support the argument that the under-regulated market, opening

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[5] A brief literature review on these two topics of central bank independence and currency crises can be found in section 0.2 and 0.3, respectively.

up of the capital account alongside a fixed exchange rate and the incident at BBC have not only damaged the Bank's reputation, but also largely contributed to the financial crisis in Thailand.

Lastly, **Section 2.4** suggests that granting the central bank independence would be essential in discouraging interference from politicians and private bankers. Existing theories suggested that assigned numerical target of monetary policy which is tied to the central bank governor chair, central bank legal reform, and a separate entity to regulating the financial market could be a route to achieving the CBI. Also, a recent issue of the World Bank Research Observer (February, 1998) gathered a selection of papers on public sector reform which argue that restructuring the legal framework in developing countries many help to enhance economic development. Using New Zealand as a case study, these authors argued that it may be premature for developing countries to adopt New Zealand reforms because they need to undertake other basic reforms first before the CBI can be effectively achieved, and there is no short cut in taking public reform. (Schick, Bale and Dale, 1998) Configuration of these policies, if pursued effectively, can help regain the foreign investors' confidence and speed up the financial market restructuring. Lastly, this section gathers some of the domestic opinions that are related to the central bank's responsibility for the crisis and suggestions in enhancing the CBI. And, remarkably, these opinions reflect most of what the theories have to suggest about enhancing the BoT independence.

2.2 A Comparative Analysis of Six Developing Asian Countries

This section attempts to explain how Thailand's neighbouring countries[6] have got themselves into financial crisis, given their strong economic fundamentals[7] and that the crisis was not self-fulfilled. During the aftermath of the crisis, the 'moral hazard' of implicit government guarantees, under-regulated financial markets, and rapid financial market liberalization process of these countries prior to the crisis have been identified as causes of the crisis. However, it can also be argued that these characteristics defined as 'moral hazard' had existed in these Asian countries since the founding of their financial markets. Yet, these financial markets were able to operate effectively and provide financial needs to countless investment projects resulting in rapid economic development and high growth rate during the past few decades. Hence, questions arise as to why 'moral hazard' had just recently become harmful and caused the crisis to occur in Thailand when it did? Also, the other Asian economies who had been affected by the crisis showed strong economic fundamentals, and should have been robust in resisting the crisis, so why should they have fallen into the same situation?[8]

This section first examines how financial market structures changed from mid 1980s, and argues that rapid financial liberalization in the 1990s may have affected the foreign creditors' perception of the worth of the government implicit guarantee. Furthermore, it examines the cause of the crisis by identifying similarities of the macroeconomic factors and financial market structure among Thailand and its neighbouring countries. In other words, if we could identify what these countries had in common, this would, at least, enable us to predict yet another type of financial crisis which could occur in the absence of weak economic fundamentals. This comparative analysis may be best illustrated by graphs and summary tables where the common symptoms in these economies will noticeably stand out. However, due to the small sample size and the short time period, it is not possible to examine relationships of these variables and their causality using econometric methodology.

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[6] Thailand's neighbouring countries under consideration in this paper are Indonesia, Korea, Malaysia, the Philippines, and Singapore.

[7] By strong economic fundamentals, it meant above 5 per cent growth rate of GDP per capita, less than 5 per cent trade deficit : GDP and health fiscal positions during 1990-1997.

[8] Nixson and Walters (1999) pointed out that 'Although there were weaknesses and underlying problems in the Asian economies, they were essentially sound but were under-regulated and that it was financial panic that was the basic element in the Asian crisis.' (p. 500-501)

2.2.1 Role of the Financial System : financial liberalization and foreign exchange policy

(a) Financial liberalization and the role of capital inflows

- Pre-liberalization Period (1980s)

Asian economies were the major recipients of the Japanese investment wave in the early 1980s. The strength of the Japanese Yen forced domestic investors to relocate their industrial base to where labour and material costs were cheaper. By relocating their industrial sites in the developing Asian countries, Japanese investors could also benefit from market orientation which enabled them to sell products at a more competitive price without tariffs. Thus, massive inflows into these Asian economies occurred in the form of foreign direct investment (FDI) which was thought to be productive to the economy, given that technology can be transferred through the production process. Governments of developing economies have encouraged this channel of inflows by offering various types of investment facilities and tax holiday schemes. As a result, the recipients have experienced economic booms and in many cases, double digit growth rates.

However, toward the end of the decade, the slowdown of FDI became apparent. This was due to many reasons. As the production capacity of some industries had been reached and markets had been fully expanded, it became difficult to maintain profitability. Also, as these host economies have become more industrialized, raw materials have been exhausted and labour costs have increased, causing them to become less competitive. This is seen in the structural change of their exports. Thus, in order to keep inflows coming in and to meet the World Trade Organization (WTO) obligations, governments in these developing countries began to liberalize their financial sectors rapidly.

- Post-Liberalization Period (1990s)

As a result, financial deregulation and opening up of capital accounts together with fixed exchange rate parity attracted foreign inflows beyond expectation. In these countries as a whole, capital inflows increased from an average of 1.4 per cent of GDP between 1986-90 (pre-liberalization) to 6.7 per cent between 1990-96 (post-liberalization). (Radelet and Sachs, 1998) In Thailand, the inflows were the most extreme, most of these inflows being in the form of offshore borrowing by commercial banks and private corporations. In the other 4 countries, net portfolio capital inflows averaged less than 2 per cent of their GDP. In Malaysia, where short-term foreign investors have been harshly criticized, net portfolio inflows were either very small or actually negative in each year of the 1990s. Most importantly, Malaysia is an exception, where extraordinarily large FDI inflows (6.6 per cent of the GDP) were larger than bank and private sector borrowing (3.6 per cent of the GDP.) More importantly, net government borrowing was less than half a percent of GDP in each country, except in the Philippines, where it averaged 1.3 per cent of GDP. In Thailand, Korea and Indonesia, banks and private corporations were the main forces behind the capital inflows, not the government. These massive capital inflows, as Radelet and Sachs (1998) have stressed, were attracted into the region during the 1990s, the core of the Asian Financial Crisis. (p. 8)

Table 2.2.1a : Contributing factors to the capital inflows

Factors	Pre-liberalization	Post-liberalization
Domestic Factors		
Strong economic growth	Economic boom	Strong / moderate
Financial deregulation		*
Inadequate financial supervision		*
Stable exchange rate (fixed)	*	*
Investment incentives	*	*
International Factors		
Appreciation of major currencies (Yen, USD)	*	
Foreign interest rates	Low	High

Source : Summary of Radelet and Sachs (1998) description of inflows (p. 9)

In the beginning of 1997, the withdrawal of capital inflows started in Thailand after the announcement of Bangkok Bank of Commerce's (BBC) bankruptcy in 1996. At the same time, signs of economic slowdown also discouraged new inflows as well as encouraging outflows which immediately affected the stock market. Domestic interest rates began to rise leading to a tightening of domestic credit whereby liquidity was drying up. Since the country had been financing its external debts with foreign capital inflows, this directly pressured the real exchange rate to depreciate. Radelet and Sachs (1998) pointed out that the combination of real exchange rate depreciation and sharp rise in interest rates led to rapid increase of non-performing-loans (NPLs) in the banking sector where many projects, especially real estate projects went into bankruptcy. As a result, a substantial portion of the market value of bank capital in Indonesia, Thailand and Korea was wiped out. (p.7)

(b) Fixed exchange rate regime

In these countries, nominal exchange rates were pegged to the US dollar with either marginal variation or very predictable change. (Table 2.2.1b) This stable currency movement ensured the foreign investors' confidence and reduced their levels of perceived risks of exchange rate loss.

It further encouraged capital inflows, especially after the financial liberalization when inflows were allowed in other forms than the FDI. As FDI in these countries began to slowdown in the early 1990s when they became exhausted in terms of natural resources and less competitive in terms of labour cost, the open capital account alongside the fixed exchange rate attracted another round of inflows into the countries but this was through the banking channel instead of the traditional channel of FDI. In addition, unregulated capital inflows could make macroeconomic management more complex which was the case for Asian economies where inflows were large, volatile, and poorly managed and utilized.

Radelet and Sachs (1998) explained that macroeconomic pressures tend to manifest themselves through two channels. First, capital inflows lead to a real appreciation of the exchange rate, and to an expansion of non-tradable sectors at the expense of tradable sectors. Second, high levels of capital inflows place new pressures on under-developed financial market because commercial banks and the central bank cannot keep pace with the high levels of international capital inflows. Both of these kinds of pressures, over time, contribute to increasing financial risk. There is no reason, however, to expect a sudden and sharp reversal of capital inflows. As they put it, the preceding inflow of foreign funds into Asia was a precondition for the subsequent crisis, but the capital inflows do not, by themselves, provide a full explanation of the crisis that followed. (p.9-10) Hence, it is appropriate that we now turn to examine two other sets of macroeconomic indicators and national financial positions to see whether their behaviour signaled signs of the crisis.[9]

Table 2.2.1b : Exchange Rate Regime of 6 Developing Asian Economies

Countries	Exchange rate Regime
Indonesia	Crawling peg
Korea	Crawling peg
Malaysia	Crawling peg
The Philippines*	Pegged exchange rate to USD
Thailand	Pegged exchange rate to USD
Singapore	Pegged exchange rate to USD

* Technically, the Philippine Peso operated under a floating regime, but there was so little variation in the exchange rate that it was perceived to be effectively pegged to the dollar by market participants.
Source : Radelet and Sachs, The Onset of the East Asian Financial Crisis, p. 6

2.2.2 Macroeconomic indicators

This sub-section examines a number of macroeconomic indicators among the six Asian countries during the 1990-1997 which have been identified by Kaminsky, Lizondo and

[9] Similar comparative study can be seen in Nixson and Walters (1999).

Reinhart (1997) as 'signals' or leading indicators of currency crises. They have identified two sets of indicators from 25 selected empirical studies of currency crises which examine sample periods that run from the early 1950s to the mid 1990s, and cover both industrial and developing countries with the emphasis on the latter. (p. 8) From these papers, they concluded that variables which have the best track record in anticipating crises in the context of the 'signals' approach, include : output, exports, deviations of the real exchange rate from trend, equity prices, and the ratio of broad money to gross international reserves. Likewise, these indicators have also been identified in the first-generation models of crisis. Examining the macroeconomic fundamentals of these economies using indicators in the 'signals' approach can help answer the question of how indicators from the past currency crises could have predicted the Asian financial crisis, and why the particular crisis was not anticipated. It can be seen that the potential indicators of crisis for Thailand were not noticeably different from those of other countries. Indeed, some indicators such as output growth and fiscal position are even more impressive than its neighbours'. On the other hand, Singapore is also included in this comparative analysis because it is in the Southeast Asian region and while its economic indicators do not stand out from the crowd, its external balance and debt positions are very much stronger than the rest. This explains why Singapore did not suffer from the crisis to the same degree as others.

(a) Economic growth

Economists would generally perceive a high economic growth rate to be a positive sign of a healthy economy. **(Figure 2.2.2a)** Paradoxically, Roubini (1998) argued that high economic growth may make an economy more vulnerable to a crisis, for instance, high growth rates may induce overly-optimistic beliefs that the economic expansion will persist unabated in the future. Such expectations can then drive both a consumption and investment boom, as well as large capital inflows that make it easy to finance the increasing demand. In such circumstances, an external shock that leads to a sudden change in expectations can cause a rapid reversal of capital flows and trigger a currency crisis. In the specific case of the Asian financial crisis in 1997, the argument is strictly related to the debate on the causes of the Asian 'economic miracle'. This issue in that debate is the extent to which output growth in Asia was due to total factor productivity (TFP) growth, as opposed to growth in the availability of inputs, reflecting increasing rates of investment and labour participation in the region. (p.12)

Figure 2.2.2 (a) : Output growth (1990-1997)

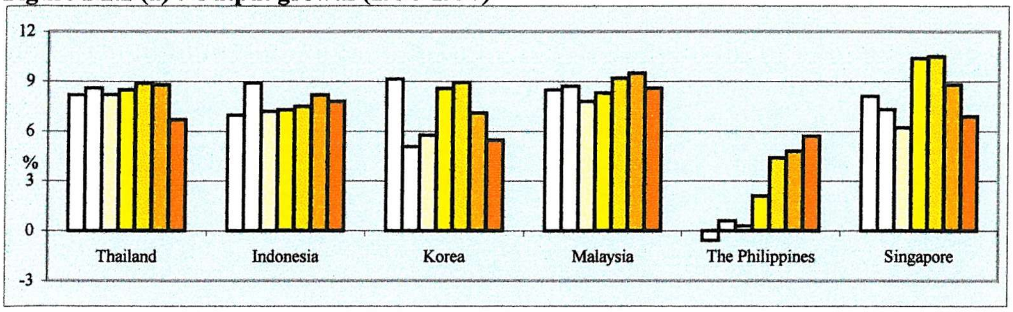


Figure 2.2.2 (b) : Trade balance as % of GDP (1990-1997)

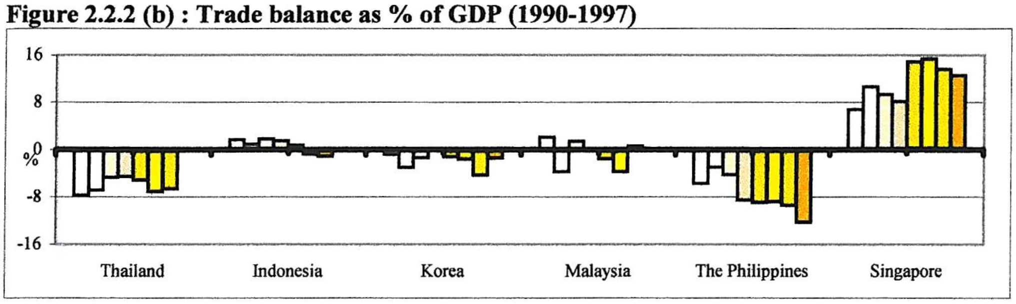


Figure 2.2.2 (c) : Deviation of real exchange rate from trend (1990-1997)

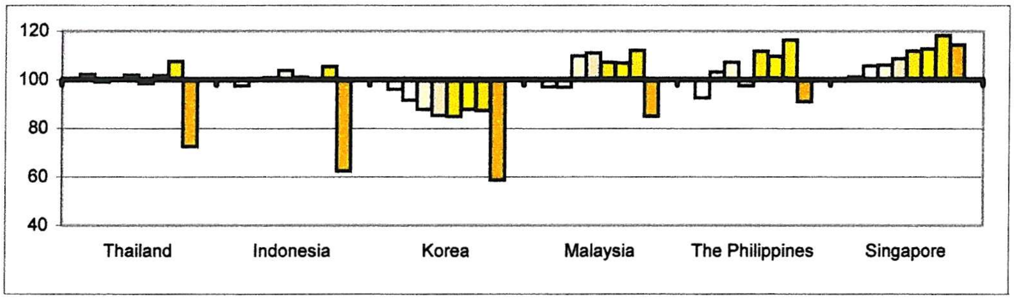


Figure 2.2.2 (d) : Stock market price indexes during 1991-1997 (% growth)

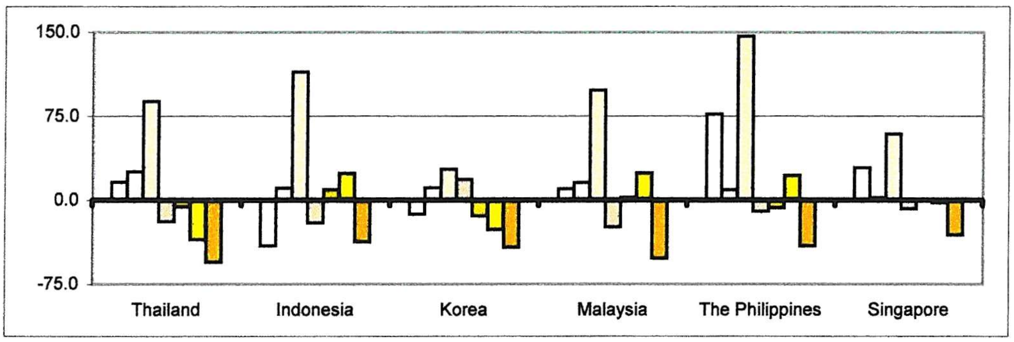
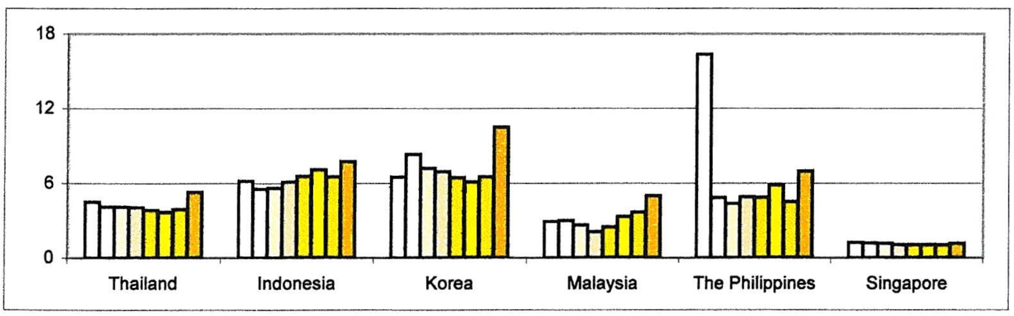


Figure 2.2.2 (e) : The ratio of broad money to gross international reserves (1990-1997)



Source : Corsetti, Pesenti, and Roubini (1998)

Also, Krugman (1994) popularized the controversial view that the contribution of TFP to output growth in Asia was less sizable than commonly believed, suggesting that the very rapid growth that Asian countries experienced in the past decades could not be sustainable in the long run. In fact, according to Glick and Rose (1999) economic growth is a broad indicator of investment and lending decisions of foreign investors. Since these economies have been growing at a consistently high rate, foreign inflows have been pouring into the countries without careful assessments. During the past few decades, such growth generated cash flows and expectations of future returns that shield firms from incurring losses from the adverse affects of their decisions. (p. 15) Lastly, the records supported the argument that massive inflows after the financial liberalization in most countries are of a short-term nature, and are subject to immediate withdrawal, thus, being unproductive for the economy and creating vulnerability. These poorly utilized inflows have led to a real appreciation of the exchange rate which has, in turn, resulted in an increase in consumption and imports of luxury goods but a decrease in export competitiveness. This is why high output growth can be a misleading indicator of economic efficiency as growth rates in these countries were largely driven by low factor productivity. (Radelet and Sachs, 1998, p.9)

(b) Trade deficits

Consistent levels of trade deficits show that these countries are largely dependent on imports. **(Figure 2.2.2b)** Where the international trade sector accounts for a substantial part of total output, a slowdown in exports growth means that output growth will be directly affected. And since the major shares of imports are comprised of manufacturing products and technology-related products essential for the production process, reducing imports will likely be result in a decline in exports and, thus, overall output growth. Nevertheless, trade deficits in these countries are seen as a common economic feature of developing countries. In addition, the balance of payment surpluses in these countries implies that these countries' debts have been financed by capital inflows.

Corsetti, Pensenti and Roubini (1998) also pointed out that these Asian economies are relatively open in terms of international trade, which makes them more vulnerable to terms of trade shocks and to restrictive trade policies in other countries. In other words, a large trade sector implies inter-economic linkage, therefore, dependence on other trading partners. For example, significant negative terms of trade shocks were experienced by several East Asian economies in 1996 with a fall in the prices of some of their main exports, namely, semiconductors and other manufacturing products. (p. 19) Given that Singapore is a port country where shipments from all around the world come into trade, its trade surplus could be over-estimated.

(c) Real exchange rate

The sharp appreciation of the US dollar against the Japanese Yen and the European currencies in the 1995 caused these Asian currencies to appreciate as they are practically pegged to the US dollar. **(Figure 2.2.2c)** Nominal currency appreciation has automatically resulted in raising their export prices, thus reducing their competitiveness. Corsetti, Pensenti and Roubini (1998) found that the extent of real appreciation was evident in Malaysia and the Philippines in 1997, while in South Korea, Thailand and Indonesia, real exchange rate indicators had not moved significantly relative to 1990's levels. Nevertheless, movements of exchange rates are not necessarily dependable measures of changes in external competitiveness, since this can also be affected by shocks that do not translate into a relative price increase. (p. 5 and 22)

(d) Equity markets

The boom in equity markets is evidence of a structural change in the capital inflows and a result of a fall in the FDI channel. **(Figure 2.2.2d)** As returns on investment in real economic sectors have declined while the interest rate differential remains, inflows have continued to flow in through money and equity markets in these countries. Also, property and real estate booms have driven up the prices of the stock markets in these sectors. All of these countries' property sectors have at least doubled, especially, the property sector in the Thai Stock Exchange, which increased dramatically by nearly 4 times between 1990-1993, causing the stock indices to record an all time high. However, during the latter half of the 1990's, over-supply of office building and real estate became apparent while many more projects were still under construction. The sharp increase of stock indices during the first half the of the 1990's and rapid decline in the latter half clearly reflects over-investment in land and real estate during the period. (Corsetti, Pensenti and Roubini, 1998, p. 15-16)

Radelet and Sachs (1998) argued that stock prices were the only indication of growing concern among market participants in the months preceding crisis. They noted that the Thai stock market fell continuously from January 1996, a full 18 months before the crisis. The main index fell 40 per cent in 1996 alone, and dropped an additional 20 per cent in the first 6 months of 1997 as concern grew over the health of property firms and the financial institutions which are major lenders. The Seoul bourse also fell sharply during 1996 and early 1997. In the case of Thailand, the stock market decline was matched by a slight decline in foreign bank lending in the first half of 1997. In the case of Korea, foreign bank lending continued to rise in the first half of 1997, albeit at a slower rate than in 1996. In Indonesia, by contrast, both the stock market and bank lending showed continued confidence until mid 1997. In Malaysia, the stock market began to slow down in March, while foreign bank lending rose very strongly in the first half of 1997. (p. 12) This evidence confirms that massive foreign capital inflows after the financial liberalization were mostly invested in these sectors, real estate and property, through the channel of portfolio investment. These countries have been dependent on these inflows in financing what they believed to be investment in productive economic sectors, however, this was not at all the case.

(e) Supply of broad money

Corsetti, Pensenti and Roubini (1998) pointed out that since these economies depend on capital inflows in financing their external debts, a risk of speculative outflows can become a more important source of foreign pressure than trade imbalance. Hence, a better indicator of reserve adequacy has then become the ratio of money assets to foreign reserves, since in the event of an exchange rate crisis or panic, all liquid money assets can potentially be converted into foreign exchange. **Figure 2.2.2e** shows that most Asian countries' ratio between M2 and foreign reserves was dangerously high in 1996-97. It is also noted that the M1 to reserves ratio are much smaller, reflecting the importance of 'quasi money' included in M2 but not M1. (p. 35-36)

In summary, these five indicators from the 'signals' approach, which are similar to that of the first generation model, provide little reason to expect a major crisis in any of the Asian countries and even if these economies were weak, it is difficult to imagine that speculative attack on the weak financial fundamentals alone could cause such severity. In contrast, the indicators which have attracted most attention are those which represented the financial positions of these economies, namely, current account balance and external debt positions. These indicators are stressed by Corsetti, Pensenti and Roubini (1998), Mussa (1999), among others, as signs of the Asian financial crisis.

2.2.3 Indicators of Financial positions

In addition, Glick and Rose (1999) argued that the Asian crisis mainly involved a sudden interruption in liquidity associated with an arbitrary shift in market confidence not necessarily related to economic fundamentals, that disrupted capital inflows to Asia. Indicators of financial position, current account balances and short-term debts, will be discussed in this sub-section in order to illustrate how the crisis could stem from unsound financial positions in the affected economies.

(a) Current account balances

Current account balances in these countries are very similar to their trade balances, reflecting that services and transfers including payment in kind and grants are proportionally marginal. Though no such natural rate of current account deficit has been specified as alarming, Lawrence Summers, the US Deputy Treasury Secretary warned that a country with a current account deficit of higher than 5 per cent of GDP should be watched closely, particularly if it is financed in a way that could lead to rapid reversals. Current account deficits for Thailand were exceptionally large relative to other economies in this study – at almost 10 per cent of GDP. **(Figure 2.2.3a)** While the current account deficit has been at this level for the past decade, it was believed to be sustainable as it has also been financed by FDI. However, as FDI declined, not only was the level of foreign capital inflows sustained, as a result of the financial liberalization, it was overshot by short-term inflows. This is why current account deficits, even though not noticeably higher than in the past, have become a concern because of the way in which they are financed.

(b) Short-term foreign inflows

Figure 2.2.3b shows that Thailand's and Korea's short-term debts are about half of their total debts where other countries' proportion of short-term debts stand at about one fifth of the total. It is noticeable hat Thailand and Korea short-term debts have been on an increasing trend since 1993 following the financial liberalization period. In addition, short-term debts as a percentage of foreign reserves in **figure 2.2.3c** indicates potential problems with the debt servicing ability of these economies, if these short-term foreign debts were ever called back at the same time. As the maturity of these short-terms foreign debts is normally 3-months, the sudden withdrawal of these loans can easily wipe out foreign

Figure 2.2.3 (a) Current account as % of GDP during 1990-1997 (BoP definition)

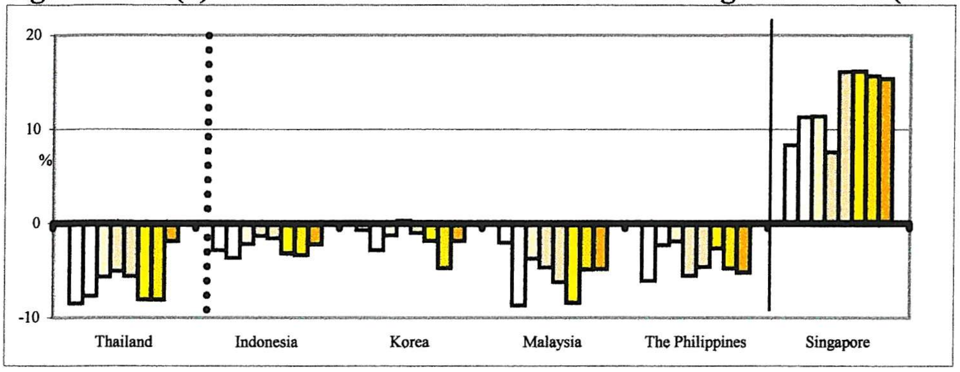


Figure 2.2.3 (b) Short term debts as a % of total debts during 1990-1997

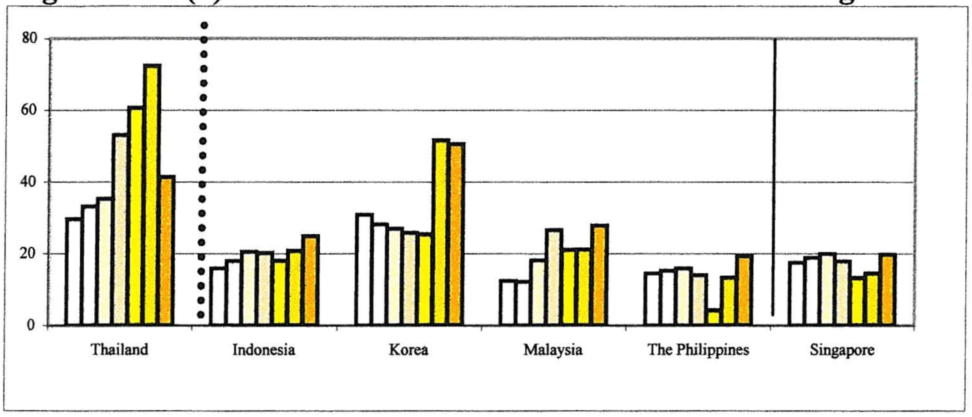


Figure 2.2.3 (c) Short term debts as a % of foreign reserves during 1990-1997

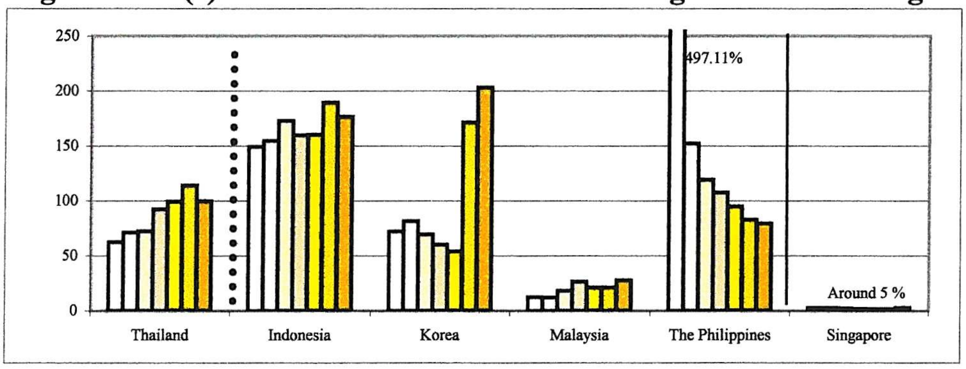
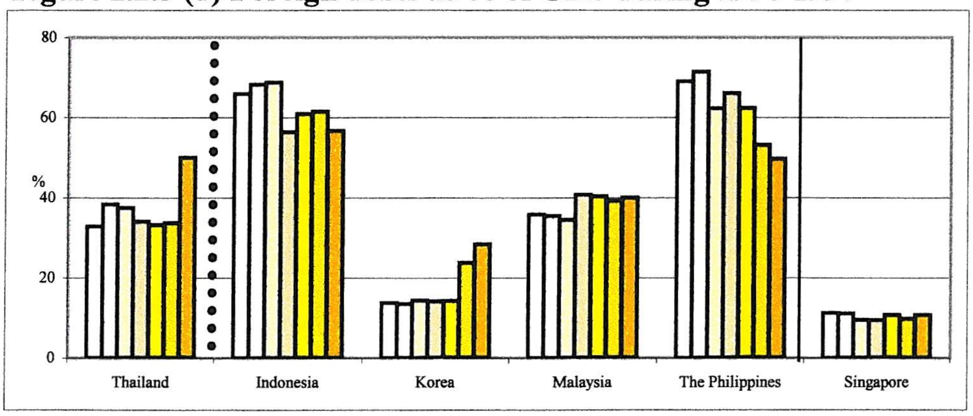


Figure 2.2.3 (d) Foreign debts as % of GDP during 1990-1997



Source : Corsetti, Pesenti, and Roubini (1998) reserves in about same 3-month's time. (However, in normal circumstances, it is unlikely that this will happen and as long as these foreign debts are covered by foreign reserves, the government, who is not necessarily the debtor, would be able to bail the country out in any case.) These figures also showed that Indonesia, Korea and Thailand, who were severely damaged by the crisis and called for the IMF's assistance, have the highest level of short-term debts. In contrast, Singapore's data clearly illustrate why, among these economies, it has been the least affected by the crisis. Roubini (1998) pointed out that policy analysts tend to resort to more practical criteria where a popular 'test' of solvency in practical terms is a non-decreasing foreign debt to GDP ratio. (p. 8) Again, **figure 2.2.3d** shows that total foreign debts of the three most severely damaged economies are on an increasing trend.

As explained by Diamond and Dybvig (1983), even well-managed banks or financial intermediaries are vulnerable to runs, because they traditionally engage in maturity transformation, accepting deposits with short maturity to finance loans with longer maturities. Maturity transformation is beneficial because it makes more funds available to productive long-term investors than they would otherwise receive, while it provides liquidity to savers with unexpected consumption needs. Under normal conditions, banks have no problem managing their portfolios to meet expected withdrawals. However, if all depositors decided to withdraw their funds from a given bank at the same time, as in the case of a run, the bank would not have enough liquid assets to meet its obligations. On the other hand, if the central bank raises interest rates and limits liquidity injections to sustain the peg, the bank crisis may then be unabated. Moreover, even allowing a flexible exchange rate will not necessarily prevent runs by foreign creditors holding foreign-exchange denominated claims on domestic residents. (p. 11-12)

2.2.4 External factors contributing to the crisis

The evidence presented above suggest that the Asian financial crisis mainly stemmed from the *domestic factors* of both originating countries and other affected economies. Nevertheless, it is also helpful to consider the external factors, if any, in analyzing the Asian financial crisis so that the most appropriate solutions can be addressed. Among others, CPR (1998) pointed out that the misalignment of Asian currencies was exacerbated by a number of external factors, namely, *(a) prolonged economic recession in Japan*, who is the major importer of these economies' exports. Furthermore, *(b) rising world interest rates* mean a narrowing of the interest rate gap, which therefore increases the cost of foreign investors in investing abroad and decreases the rate of return on investment both in the real sector and monetary sectors. While the economic recovery in Europe and US could eventually increase demand for imports from Asia, this is unlikely to be significant. (p. 22-23) As a matter of fact, *(c) the increasing weight of China in total exports from the region* means that these economies' share of exports have been reduced to a certain extent. Even though the recent surge in China's share of the region exports may be due to the devaluation of China's currency in 1994, the fact that the Chinese economy has been moving up toward this group of Tiger economies is likely to have a long term impact on their export growth. Major exports of these countries have been pressured by Chinese as it has cheaper cost of labour and raw materials which are essential for producing manufacturing products – the main exports of Asian economies. (Nixson and Walters, 1999, p. 501-2)

2.2.5 Summary

This comparative study has illustrated, in the case of Asian Financial Crisis, how crisis could occur in the absence of weak economic fundamentals. At least, Thailand and Korea can be expected to be able to deal with the speculative attacks under *normal* conditions. However, the vulnerability in the financial positions of these economies was clearly a factor in the onset of the crisis. In particular, economies with the most vulnerable financial sectors (Indonesia, Korea and Thailand) experienced the most severe crises. Thus, these countries have been proven vulnerable to yet another kind of crisis which stemmed from speculative investment allowed by imprudent financial market regulator in the under-regulated financial market. In contrast, economies with more robust and well-capitalized financial institutions (such as the Philippines and Singapore) did not experience disruptions of similar magnitude, in spite of slowing economic activity and declining asset values. And as for the Philippines, its economic fundamentals have always been the weakest among the six countries included in this study. This confirms that economic fundamentals could not have been the main causes of the Asian financial crisis, instead, weak economic fundamentals were the result of the crisis once it had struck. (Glick and Rose 1999, p. 13-14)

Weaknesses and distortions in financial system arise from particular structural characteristics of Asian financial systems, often referred to as the 'Asian model' of capitalism. First, Asian countries generally favored centralized and behind-the-scenes relationships between financial institutions, business, and government for the intermediation and allocation of capital. ...Secondly, financial institutions and other agents lacked the incentives to manage effectively and bear the full cost of failure. This was particularly the case with the system which, with bond and equity markets relatively underdeveloped, generally carried out financial intermediation in most Asian countries. ... The bank themselves were typically given implicit guarantees of a government bail-out in the event of adverse financial conditions. The presence of such financial insurance posed a clear moral hazard problem, that distorted the incentives to carry out a proper assessment of investment projects. (Glick and Rose 1999, p.6-7)

Thus, in the next section, Thailand is examined as a case study to show how the mismanagement of the monetary policy and under-regulation of financial market (under the guidance of its central bank) can cause a collapse of its financial market and severely damage its economy.

2.3. The Bank of Thailand : What Went Wrong?

This section first discusses the background of the Bank of Thailand (BoT) and its organizational structure. (Sections 2.3.1 and 2.3.2) It argues that prior to the financial liberalization the bank was highly independent in the context of what it *can actually do* because it had high influence over politicians in shaping up important policies including fiscal policies. However, the bank's reputation began to erode after excessive financial liberalization took place in the early 1990s. Two serious accusations by the state were brought against the BoT on its action regarding the establishment of Bangkok International Banking Facilities (BIBF) and the incident at Bangkok Bank of Commerce (BBC). These accusations are examined in section 2.3.3 and 2.3.4. After the collapse of financial markets in mid-1997, an investigation by a Commission headed by Nukul Prachuabmoh was conducted. These reports provide evidence to suggest that both incidents, especially the latter one, were caused by officials at the central bank being influenced by the politicians and private bankers. Lastly, section 2.3.5 summarizes what happened by presenting a chronology of the plunge to support the argument that the financial crisis can be, in a large part, attributed to the mismanagement of the authority in charge of the monetary policy.[10]

2.3.1 Background of the Bank of Thailand (BoT)

Maxfield (1994) examined how central banks in certain developing countries were established in explaining other sources of central bank independence which legal measurement may fail to capture. She argued that the interests and capacities of early central banking institutions are shaped by the financial interests of those in a position to delegate authority to central banks : government politicians and private banks. In the case of Thailand, its central bank evolved out of an existing private bank. The private Siam Commercial Bank came to operate as Thailand's first quasi central bank as it handled government deposits but did not make loans to the executive branch. Although private banks were not directly involved in the founding of the central bank because it occurred rapidly in a situation of geopolitical crisis[11], the close

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[10] Although it may have been a few years after the crisis has occurred, the issues discussed in this section as well as the information provided are likely to remain sensitive, therefore the author would like to present only the facts and raise interesting issues relating to these facts and keep own-opinion to the minimum.

[11] Foreign pressure was the final catalyst for founding the BoT. The Japanese proposed establishing a central bank under their control. ... The existence of the National Banking Bureau and Thailand's nominally independent status allowed the government to put the Japanese off by creating their own Bank of Thailand. (Maxfield, 1994:69)

collaboration between central bank and private bankers can be seen in the 1962 revision of commercial banking legislation that was designed through extensive consultation among themselves. And in the absence of large government deficits requiring central bank finance, central bank behaviour tended to reflect the interests of Thailand's private banks. (p.567-9)

Likewise, Ball (1999) pointed out that institutional structure at the BoT has been extremely supportive of monetary restraint which has included a deep historical tradition of aversion to international indebtedness and price instability. As Thailand had witnessed the colonization of one neighbour after another, remaining free of external debt and maintaining stable trade and economic relations were seen as a means of avoiding any pretext for foreign intervention. The fact that the overall climate for economic policy making has been conducive to restraint does not mean that the BoT has faced no challenges. During the second oil shock which resulted in deterioration in terms of trade, the bank was able to adjust to the shock with a series of devaluations[12]. These devaluations were opposed by many agencies, including the military, Association of Thai industries and labour unions. However, none of these sources of opposition succeeded in derailing the reforms. (p. 1831-2)

Nevertheless, according to Cukierman's (1992) measurement of *legal* independence, the BoT ranked 0.27 compared with 0.69 for the most legally independent central bank in the world, the Bundesbank. This is because, in Thailand, the executive branch has unconditional discretion to dismiss the central bank governor, and the bank has neither *legal* role in the budget process or *legal* authority over the formulation of monetary policy. At the same time, government borrowing from the central bank is relatively unrestricted. However, in reality, as Maxfield (1994) puts it, in terms of its ability to influence economic policy, the Bank of Thailand is one of the *strongest* central banks in the world. This is evident in its *traditional,* but not legally guaranteed, role in the national budget process.[13] The most public source of disagreement was over the role of military personnel on the boards of commercial banks. In one instance, Puey tried to encourage two generals on the board of the failing Thai Development Bank to

[12] See appendix A for Thailand's experience of Baht devaluations.

[13] Discussions over the federal budget in Thailand begin with a meeting between the central bank, the Ministry of Finance, and two non-ministerial agencies closely linked to the Prime Ministry : the Budget Bureau and National Economic and Social Development Board (NESDB). The bank presents its estimate of the maximum possible government spending consistent with monetary stability. Over the course of several meetings there many be some dispute about the ceiling set by the bank, but the bank almost always prevails and in policy disputes with the military, the bank has also often won. Interview with Prachitr Yossundara, Bangkok, July 19, 1991. (Maxfield, 1994, p. 560-1)

intervene; they refused and the bank became insolvent. Chagrinned, the generals reportedly apologized to Puey for their obstinacy.[14] One may ask what relationship does the BoT's strength over the formulation of budget have with its independence in monetary making decision? As Ball (1999) explained it, a country's fiscal stance and capabilities are especially important because of the fact that fiscal pressures are so often the underlying source of pressure for monetary expansion. Institutional arrangements that restrain spending and enhance tax collection can, therefore, be an important complement to institutions for restraint on the monetary side.

Also, Yoshihara (1994) pointed out that in a country like Thailand where corruption is rife, the Bank of Thailand was considered the only institution where it was unthinkable that any corrupt practice could be found. The reputation of incorruptibility gave it considerable moral authority and prestige and allowed it to enjoy a certain degree of autonomy. (p. 75) In addition, the rise of the BoT's independence on monetary and financial matters can be explained by a succession of capable leaders with principles and integrity. The pinnacle of this exemplary leadership had been reached during the long tenure as governor of the famous Puey Ungphakorn during the 1960's, perhaps the finest governor in the central bank's history.[15] A man of principle, ideas and ability together with personal honesty and integrity, Mr. Puey was accepted unquestioningly as a guardian of Thailand's monetary and financial matters by successive government leaders, an unusually highly entrusted national role which he never abused. The unique position of Mr. Puey not only meant that the BoT's performance was exceptional and exemplary but it is a good example of power earned through able and respected leadership. In addition to its exceptional governor, the BoT is also recognized as the most prestigious institution where it was staffed with the most qualified and skilled personnel in the government service where most of the staff were chosen from among the top students in Thai universities and have received the BoT's scholarships to study at some of the world's most outstanding universities. (Bangkok Post_1)

2.3.2 Who (mis)managed the policies?

This description of the BoT's value system and organizational structure described above is accepted among domestic commentators. (Maxfield, 1994, Yoshihara, 1994, Warr and

[14] From footnote 8, Interview with Prachitr Yossundara, Bangkok, July 19, 1991. (Maxfield, 1994, p. 561)
[15] The history of BoT under Puey Ungphakorn (June 1959-August 1971) can be found in Yoshihara (1994, p. 75-77) The BoT was, during the period, known as the best-run civil bureaucracy.

Nidhiprabha, 1996) So, when and why did the reputation of the BoT start to erode? Puey's successors can be divided into two different generations. The first used to work with or for him. The second generation, beginning with Governor Vijit Supinit followed by Governor Rerngchai Makaranond and Governor Chaiyawat Wibulswasdi, could perhaps be labeled 'Mr. Puey's children'[16], in a good sense of young capable people who were awarded Bank of Thailand Scholarships, initiated and greatly expanded during Mr. Puey's governor-ship in order to strengthen the central bank with future capable leaders and personnel. In addition to the difficulties faced by his successors in trying to follow his influence and example, quite a few either have been fired or forced to resign, a phenomenon hitherto unheard of. (Bangkok Post_2)

The reputation of the BoT seems to have started its descent with Governor Vijit, the first of 'Mr's Puey's children' to become leader. Since the departure of Governor Vijit, the credibility of the central bank has been eroded greatly, while accusations ranging from incompetence to mismanagement, being part of the problem and even abuse of power and authority have intensified. Governor Rerngchai, Governor Vijit successor's, before resigning in 1997, accepted the accusation of his responsibility as the central bank governor in the Sor-Por-Ror report, and apologized for his failure to avert the economic crisis. (Bangkok Post_3) On the other hand, it is ironic that the decline of the Bank's reputation started during the same period when excessive financial liberalization began to take place. Putting it differently, the decline in reputation of the bank occurred when the bank's role as financial market regulator became more apparent and the bank became more exposed to external financial markets – and it often became involved with private bankers. According to this fact, one cannot exclude the possibility that, as the bank was becoming more exposed to the financial market sector, this increases the likelihood that officials at the central bank would be influenced by politicians and private bankers.

Given that the BoT does not have *legal* authority to make major monetary policy changes, like opening up the capital account without parliament approval, can accusations of the mismanagement of monetary policy be blamed solely on the central bank? The Bank of Thailand, Ministry of Finance and the ruling government at the time are generally viewed as one unit of organization at blame. To a certain extent, this must be true. Major policy

[16] Governor Vijit Supinit, Governor Rerngchai Makaranond and Governor Chaiyawat Wibulswasdi can be referred to as CBG1, CBG2, and CBG3 in the Table 2.3.4 : Changes of the Central Bank's Governors and Finance Ministers during the pre-crisis.

movements, such as, accepting the Article VIII of the IMF in liberalizing interest rates and opening up the capital account were thought to have been initiated by a group of intellectuals at the BoT, must be approved by all responsible institutions before being implemented. For this reason, the mismanagement of policies is the responsibility (though not legal) of all of these institutions. However, unity cannot be expected when it comes to taking blame for the mistake.

Among the technocrats belonging to the political parties and the permanent officials, it is clear that most, if not all, financial and monetary movements come from the BoT. Under the current law, the governor has to report to the court of directors before implementing important economic policies. The governor and two of his deputies must be present at the meeting. The legal amendment would require the directors to be given advance notice of plans to implement policies, and more parties would be involved in the meeting. This law clearly gives the governor and his deputies immense power in making policies. These decisions are then viewed and unofficially approved by the shadow department at the Ministry of Finance before they are referred to the Cabinet for final approval. (Bangkok Post_4) Since the Cabinet is run by politicians, whose economic team are not necessarily experts in economic affairs, they tend to approve, if not all, most of the proposals. It should be noted here that the reliance of politicians on the permanent officials was not only caused by their lack of expertise on the issue. If we look at how short is the term of each government in power[17], the government would not be expected to be so enthusiastic about passing or not passing such long term policies, as they would not stay long enough to take credit (or discredit) for them. The next two sections discuss and provide evidence to clarify how the 'policy mistakes' were actually made and under whose authority they were carried out.

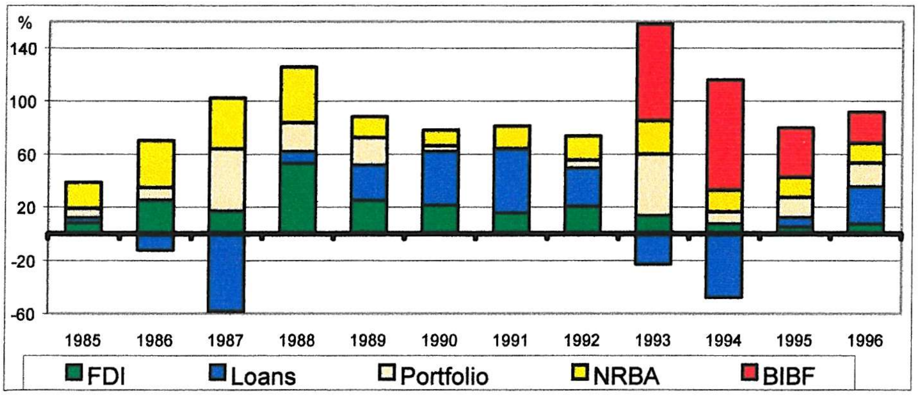
2.3.3 The establishment of BIBF : Consequences of perfect capital mobility alongside the fixed exchange rate

During the period, liberalization was a positive response to world economic recovery while an ambitious aim of wanting to become a regional financial centre accelerated the opening up of Thailand's financial market.[18] In March 1993, the Bangkok International Banking Facilities (BIBF) was established to allow perfect capital mobility. This was welcomed by domestic and international markets. Prior to the establishment of the BIBF, the BoT had categorized inflows

[17] Thailand had over 20 prime ministers during 40 years period although a full term is 4 years.
[18] See appendix B : Financial liberalization during 1985 – 1997.

into 5 different channels of FDI, NRBA (Non Resident Baht Account), Portfolio Investment, Direct Loans and others. **(figure 2.3.3a)**

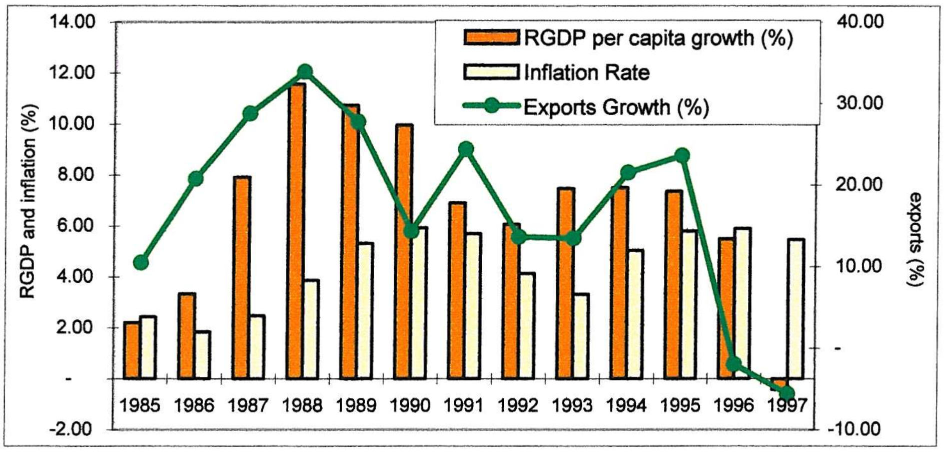
Figure 2.3.3a : Net private capital inflows classified by channels (as % of total inflows)



BIBF allowed all funds to flow into the country freely without declaration of destination. Since the high interest rate gap between domestic and international interest rates and the fixed parity enabled foreign funds to come into the country to benefit from interest rate differentials and the stable exchange rate, the banking system was flooded with liquidity. By 1994, the size of capital inflows increased to almost 20 times the flows prior to the first stage of liberalization in 1988. However, both portfolio investment and BIBF have main characteristics of being short-term and unproductive and being more volatile than other channels of (long term) inflows, foreign direct investment (FDI). In addition, they are less likely to be beneficial to economic activity in the long term. **Figure 2.3.3a** also illustrates that after the establishment of BIBF in 1993, the private flow through this channel has doubled, whereas, the FDI has gone down significantly. However, the BoT at this time argued that the surge in BIBF was productive as it classified 80 per cent of these flows as being into productive economic activities.

As the BIBF offers private banks a lower cost of bank borrowing which can be on-lent at a higher domestic interest rate, the benefits from these transactions are substantial. Thus, there was no reason why private banks or the financial sector would be opposed to the opening up of the capital account, because they are the major beneficiaries of the policy movement. Since the fixed exchange rate will insure against exchange rate loss, commercial banks operating BIBF were making profit from the opening up of the capital account alongside the fixed exchange rate regime. This massive inflow spurred economic activities (investment and exports) thereby boosting the economy to grow at a double digit rate. This was at a time when inflation was proceeding at a rate of below 5 per cent. The authorities in charge of the monetary policy namely, *Central Bank* and *Finance Ministry*, seemed to have taken these figures as an indication the success of its financial liberalization scheme. **(figure : 2.3.3b)** As a matter of fact, these inflows had permitted faster growth, but they had also allowed domestic banks to expand lending rapidly, fueling imprudent investments and unrealistic increases in asset prices.

Figure 2.3.3b : Key macroeconomic indicators (1985-1997)



Krugman (1998a) used a so called 'eternal triangle' in illustrating that there are three goals of *adjustment, confidence* and *liquidity* which central bankers want to achieve. However, he pointed out that they can only achieve any two at a time.[19] (p. 1-3) The Bank of Thailand has long been maintaining the fixed exchange rate (*confidence*) and by 1993, it decided to abolish the interest rate ceiling as well as capital controls. The perfect capital mobility spurred another round of high economic growth as the country was flooded with short-term capital inflows (*liquidity*) which came into the country to benefit from the interest rate gap. The capital gain was also assured by the fixed exchange rate regime. However, this in turn forced the bank to give up its control of money supply (*adjustment*). In other words, liberalizing the capital account meant that foreign capital could now flow in and out of Thailand without conditions. Under the maintained fixed exchange rate, this meant that the domestic interest rate will be influenced by world interest rate.

[19] Adjustment means the ability to pursue macroeconomic stability. Confidence means the ability to protect exchange rates from destabilization. Liquidity means short-term capital mobility. (Krugman, 1998a, p. 1)

More specifically, Mundell's model (1963) tells us that monetary tightening would only have *temporary impact* in reducing money supply in the market.[20] This is since a higher interest rate (than the world interest rate) would attract foreign inflows, and these inflows would continue until the money supply curve returns to its original position, in other words, to the interest rate level where the domestic interest rate is equal to world interest rate. Putting it differently, foreign capital flows into the country to replace money supply which has earlier been absorbed by the central bank in raising the interest rate. Thus, it can be said that in an economy under a fixed exchange rate regime with perfect capital mobility, monetary policy is not effective in controlling money supply. As Krugman (1998a) explains, suppose that a country decides that it simply cannot accept an unstable currency ... this means that it must either peg its exchange rate or at least manage it strongly. But if it also tries to maintain liquidity - by allowing unrestricted flows of capital - then it will be subject to severe speculative attacks whenever the market suspects that stabilization concerns will lead to a devaluation. (p. 1)

However, indicators in **figure 2.3.3b** have also blinded the central bank from the consequences of unscreened capital inflows alongside the fixed exchange rate regime. Glick (1998) pointed out that the absence of hedging, made possible by the fixed exchange rate regime, could significantly lower the cost of funds in the short-term. Likewise, this also created significantly heavy exposure of foreign currency loans to the effects of possible exchange rate changes as well as the refusal of creditors to roll over these loans. Thus, financial systems characterized by capital allocation through relationship and by lax bank regulation, such as in Asia, may have been *particularly susceptible* to a deterioration in confidence about the quality of investment decisions. (p. 13-14 and 17)

This can partially answer why the crisis happened when it did. In other words, financial distortions of maturity mismatching of the financial institutions and under-regulated financial supervision by the authority were already in place right after the financial liberalization, but the strong economic fundamentals shielded these economies from being exposed to crisis. Once the economic fundamentals had been weakened – slowdown in export growth, deteriorating current account deficits – there was nothing to ensure the lenders' return on their money and

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[20] Also, this *temporary impact* of monetary policy in controlling money supply, according to Krugman (1998a), means that while the Bank of Thailand insisted on maintaining *confidence* (fixed exchange rate) and *liquidity* (perfect capital mobility), it will be forced to give up *adjustment* (in other words, the ability to control money supply).

encourage new capital flows as rate of return on investment had gone down. At the same time, rising world interest rates meant a narrowing of the interest rate gap and that higher return can be captured back in investors' home country. In the case of international lending in foreign exchange, a panic can arise from the concern that a country's central bank holds insufficient reserves with which to pay off all short-term foreign exchange claims. (Glick and Ross, 1999, p. 11)

The question arises as to whether or not the central bank was aware of these consequences of operating a fixed exchange rate regime alongside an open capital account. It is difficult to imagine that the central bank was truly satisfied with the situation and did not recognize the consequences of the conflicting monetary policy scheme it has chosen to employ. The phenomena can, perhaps, be explained by the fact that the BoT was afraid of capital flight and wanted to maintain the competitiveness of exports. Knowing the consequence of the conflicting policy, these facts had tied the governor's hand to monetary restraint. (Ball, 1999, p. 1827)

2.3.4 BBC's Incident : Misuse of the reserves

Another mistake of the misuse of national reserves in rescuing the Bangkok Bank of Commerce (BBC) is considered very damaging to the reputation of the central bank. The bankruptcy of BBC could be seen as the beginning of the financial market collapse caused by an accumulation of bad loans. The problem at the BBC became clearer in 1994 when the BoT submitted a brief report to the Attorney-General's Office for criminal action against some former BBC senior executives. However, it was not until 1996 that a parliamentary debate revealed to the public the extent of politically motivated loans made by previous officers of the BBC. This resulted in massive withdrawal of deposits which cost the BoT the sum of US$7 million from its Financial Institution Development Fund (FIDF). Concurrently, bad loans were both the cause of and the effect of the call back of foreign short-term loans. Toward the end of 1996, the series of attacks on Thai baht currency by speculators started to take place.

Several issues need to be investigated here. Why did it take the BoT 3 years before it tackled the BBC's loan problems? Does the BoT have the authority to use the exchange reserves, in this situation, US$7 million from its FIDF in bailing out such a small commercial bank, the BBC? To what extent were loans from BBC made to politicians and their relatives? As the evidence showed that a high proportion of BBC's bad loans were politically motivated, it was difficult to believe that it has repeatedly escaped the authority's attention. The Democrat party, who was the opposition party at the time, raised the issue at BBC that had trouble with 78 billion baht of doubtful debts, mostly caused by the provision of loans with insufficient collateral to companies owned by the bank's top executives and top advisors as well as loans to a group of politicians – the so-called group of 16 faction of Chart Thai Party[21].

It was also pointed out that the professional ethics of the central bank governor, during the time, were questionable due to his close personal link to the BBC's chief executive. In addition, the investigation showed that not only were most of these loans real estate or property related loans, they belonged to a particular bank, BBC. In fact, borrowers at BBC are commonly politicians and their relatives. During the boom time, servicing these loans was not a problem, which was probably why the criminal action against the mismanagement of loan approving at the bank was not brought earlier. However, the rapid increase of doubtful loans at the bank became noticeable when the real estate market went bust. At the same time, the bank's economic forecasts suddenly became systematically inaccurate and the governor as well as the finance minister were forced to resign. (Lauridsen, 1998:1580-1)

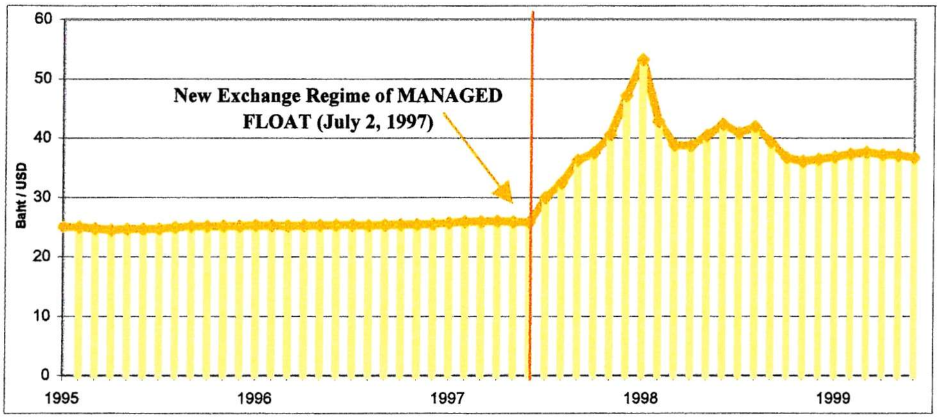
As a result, the loan problems were suddenly realized at finance companies and the run rapidly developed onto the smaller banks. Likewise, the liquidity problems at these institutions were eased by further loans from the FIDF. During the first quarter of 1997, 16 finance companies were suspended from their operations until the capital requirements were raised. However, the BoT would guarantee all the deposits while there was also talk of the guarantee being extended to the creditors of the finance companies as well. By mid-1997, the attack on Baht became increasingly intense forcing the BoT into the inevitable floatation of the baht, at the worst possible time.

Figure 2.3.4 shows that the baht depreciated by more than 100 per cent within 3 months of the establishment of the new exchange rate regime, managed float. Together with the BBC incident, these events pressured the Prime Minister (Gen. Chavalit Yongchaiyut) and the BoT's

[21] Chart Thai Party was in power for 16 months before the head of the party was forced to resign from Prime Minister in September 1996. And it was during his time as a Prime Minister when the government was involved in two developments which came to affect the financial crisis in 1997. The first development was the declining autonomy of and the increasing interference in the working of the macroeconomic agencies and in particular in the activities of the BoT. The second and related development was the BBC scandal. (Lauridson, 1998:1580) Then, New Aspiration Party came to power under General Chavalit Yongchaiyut who, likewise, was forced to resign when the financial market collapsed in the mid 1997. The current government (during the time of this writing in Dec. 2000) is run by Democrat Party under Chuan Leekpai as the Prime Minister who is a successor of Gen. Chavalit.

governor to take responsibility by resigning. In addition, most of the BBC debtors turned out to be politicians and their relatives. Also, during the Gen. Chavalit period, there were non-routine changes of three BoT's governors and two of the Ministry of Finance's Permanent Secretaries. These non-routine movements of the key financial regulators are examples of political interference. Within 2 years prior to the crisis, Thailand had 4 different central bank governors and 7 different finance ministers under just 2 governments. It is also noted that the new Prime Minster under the second government came in power after the resignation of the Gen. Chavalit Yongchaiyut. At the time of this writing (October, 2000) the new team under the current Prime Minister Chuan Leekpai, Minister of Finance and Central Bank Governor who have come to the office after the crisis are still in their positions. (Table 2.3.4)

Figure 2.3.4 : Exchange rate movement of Baht : USD



Source : Bank of Thailand

Table 2.3.4 : Changes of the Central Bank's Governors and Finance Ministers During the Pre-Crisis

Date	Events / Policy movements	Central Bank Governors (CBG)	Finance Ministers (FM)
Dec. **1994**	Mexico Crisis → 15% devaluation of Peso	**CBG 1** (Oct. 1990 – Jul. 1996)	**FM 1** (Sept. 92 – Jul. 95) **FM 2** (Jul. 95 – May 96)
Nov-Dec **1996**	First speculative attack on Baht	**CBG 2** (Jul 1996 – Jul 1997)	**FM 3** (May 96 – Sept. 96) **FM 4** (Sept 96 – Nov. 96) **FM 5** (Nov. 96 – Jun 97)
Jun **1997**	16 finance was suspended	**CBG 2** (Jul 1996 – Jul 1997)	**FM 6** (Jun 1997 – Oct 97)
Jul **1997**	Floatation of Baht	**CBG 2** (Jul 1996 – Jul 1997) **CBG 3** (Jul 1997 – May 1998)	**FM 6** (Jun 1997 – Oct 97)
Dec **1997**	Financial institutions who have met the restructuring requirements were allowed to re-open their businesses.	**CBG 4** (May 1998 – present*)	**FM 7** (Dec 97 – present*)

Source : Nukul Prachuabmoh's report, p. 169-173
* October 2000

2.3.5 Summary : Recapturing what happened through the chronology of the plunge

The chronology of the plunge and the above discussions pointed out at least two possible causes of the financial crisis in the context of policy mismanagement in Thailand where the crisis originated. First, the incompetence of the authority has caused them to overlook the consequences of the rapid financial liberalization in 1993 and the need for a contingency plan. Chaun Leekpai's government during 1992-1995 was accused by the Chavalit government for implementing financial liberalisation hurriedly under pressure from commitments to the GATT. However, it was the Chaun's party that was re-elected to run the government after the resignation of Chavalit. Krirkiat Pipatseritham, the Dean of the University of the Thai Chamber of Commerce, argued that there was nothing wrong with the opening up of the capital account via establishing of the BIBF, which provided low-cost foreign funds to local borrowers, instead, the crisis was caused by the misuse of the funds. At the same time, most bankers argued that the central bank has to be held responsible for failing to monitor use of the money as this was not a responsibility of the government. (Bangkok Post_5)

Second, the management structure, that has worked well in preserving the bank from the interference of the government in the past, may not be relevant to the present-day environment. Internally, as the staff were trained under the scholarship scheme, they tend to pursue a lifetime career at the bank. As a result, this could create competitive pressure among themselves as they climb up to narrower levels of executive positions at the bank. On the other hand, as the economy has become more liberalized, the role of the central bank becomes more active. This has put the bank in a vulnerable position as far as government interference is concerned. In addition, since the term of the BoT governor is not fixed and the Minister of Finance has power to appoint and dismiss the governor, this implicitly forces the governor to follow the current political line.

Therefore, the chronology of the liberalization stages illustrates how the financial market was mis-managed by the authorities. Two important issues of the opening up of the capital account alongside the fixed exchange rate regime and the misuse of national reserves have been emphasised as the root causes of the financial crisis. The consequence of the first issue, in the most extreme case, could to be thought of as the result of the official's incompetence which is difficult to take legal action. However, the use of FIDF to rescue BBC was obviously a wrongdoing. (Bangkok Post_6) This leads to the next section on how to reduce the political interference as well as enhance the independence of the Bank of Thailand.

2.4 Granting the Bank of Thailand Independence

While the developed countries sought the independence of central bank for the purpose of price stability, developing countries, such as Thailand, are desperate to grant their central banks independence from political influence as financial market regulator. The previous section has provided evidence to support that the Bank of Thailand (BoT) lacked independence and this has, in large part, contributed to the financial crisis. The attempt to operate an open capital account alongside a fixed exchange rate was an indiscreet monetary policy, but the incident at BBC[22] was the direct outcome of an under-regulated financial market, and resulted from undue influence of politicians and private bankers over officials at the central bank. The previous section has also pointed out that prior to the financial liberalization in the early 1990s, the BoT was highly independent from political interference and this was due to unique character of its past governors. However, the financial crisis had challenged the authority at the bank in the present generation to regain that independence.

Studies in the literature have suggested several ways of granting central bank independence[23]. These solutions, however, are based on the objective of obtaining price stability. A question arises here as to what extent these solutions can be adopted to enhance the independence of the BoT as financial market regulator but not as price controller. Mas (1995) argued that establishing an independent central bank may not bring about its professed benefits in developing countries with shallow financial markets where there is limited scope for a truly independent monetary policy. On the one hand, there is no principle on how to develop the financial market efficiently, in this case, steps of liberalization and regulations on financial institutions. On the other hand, although such principle is not entirely unknown, the consequences could vary depending on the timing and the market responses of such development. Therefore, it is difficult, if not impossible to pass such law to ensure the *actual* independence of CB in acting as financial market regulator. The desirability of granting CBI in LDCs should be examined by looking at their inherent characteristics rather than merely as an extension of what seems to work in successful OECD countries. (p. 1639-40)

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[22] In the case of Thailand, the danger of an open capital account arose because these capital inflows were unscreened with short term maturity.

[23] Literature review on granting CBI in the international context can be found in section 0.2 while this section discusses CBI in the context of developing countries and Thailand.

However, this section argues that granting the central bank independence for price stability (whether through conservative central banker manner (Rogoff, 1985) or principal agent manner (Walsh, 1995b) means that central bank will be allowed certain independence without political interference to complete its task. Because this *'task'* is mainly the price stability which could come in a form of a numerical target that can be set and tied to punishment, therefore, the success of the task is easily observed and assessed. While establishment of CBI lies on the completion of numerical target performance, once a contract-based task is met, granting central bank its independence is considered successful. Only if the kind of independence we seek for BoT as financial regulator can be translated into a measurable target can the theory of granting central bank independence be adopted uncritically in Thailand.

Hence, in this section, we examine two solutions from the existing literature that are the most relevant in granting the BoT an independence where price stability is not a primary objective but financial market regulation. These are *setting up a separate entity as financial market regulators* and *institutional reform* which was undertaken by the Bank of New Zealand in preparing the bank before assigning an inflation target to it. While New Zealand adopted excessive institutional reform as a way toward enhancing its CBI, by the same token, setting up a separate entity to supervise financial market would also require that such entity be independent from political and financial market sector interference. Either way, these solutions pointed to the necessity for institutional reform, and it is this institutional reform that we propose the BoT should undertake as the first basic step in enhancing its independence. In addition, it may be necessary to amend the law regarding the appointment and dismissal of the central bank governor. If this is in the hand of a politician (finance minister) the independence of the central bank is compromised. We now turn to discuss these solutions – *the institutional reform adopted by the Bank of New Zealand and setting up of a separate entity as financial market regulator* – and conclude by putting them in the context of what can be adopted at the BoT.

2.4.1 New Zealand Experience of Economic Reform

As a result of a foreign exchange crisis in 1984, New Zealand introduced a major economic reforms in all areas. Among them, monetary reform is the most notable reform which includes the establishment of CBI before the inflation targeting scheme was assigned as the primary objective of the bank. (Evans, Grimes, Wilkinson and Teece, 1996:1856, EGWT) In the context of this paper, it is appropriate that we focus on the two key reforms of monetary policy *target* and *implementation* and bring out what could be adopted by the BoT in enhancing its independence. According to EGWT (1996), there are 5 principles underlying the Reserve Bank of New Zealand concerning monetary policy targets which are

- a clear single target
- published specific target
- transparency of objective-setting
- Reserve Bank operational independence and
- accountability[24].

Ironically, the Act does not specify how the Bank should implement its policy (of inflation targeting) except that policy be implemented *'efficiently'*. (p. 1865-6)

In fact, the New Zealand Act which granted central bank independence for price stability arises from the principal agent argument by Walsh (1995b), the structuring of a contract that imposes costs on the central banker when inflation deviates from the assigned level. In other words, the Governor of Reserve Bank agrees on a target inflation path with the government, with his job on the line if he fails to achieve the targets. (Fischer, 1995, p. 202) However, in the context of an inflation target, monitoring success is easily accomplished, as a measurable target for inflation can be set and quantified. In seeking independence of BoT to act as financial regulator, it is less straightforward to set transparent and measurable targets by which success can be monitored.

Furthermore, Bale and Dale (1998) identified that the reform intended to replicate, as closely as possible, the types of incentives structures for performance that might be found in a well-functioning private-sector concern. Their approaches have similar characteristics as those which have previously been suggested by EGWT (1996). They also emphasized the importance of a well-defined role of central bank governor and that of politicians (finance minister) which would be necessary if they are to be held accountable for their actions. When the law is

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[24] Evans, Grimes, Wilkinson and Teece (1996:1864-5) The Reserve Bank of New Zealand Act was passed by Parliament in late 1989 which the key factors underlying the Act are

(a) **A clear single target** : the primary function of the bank is to formulate and implement monetary policy directed to the economic objective of achieving and maintaining stability in the general level of prices.
(b) **Published specific target** : The Act requires that the agreement between Finance Minister and the Bank Governor on specific policy targets be contained in a published Policy Targets Agreement (PTA).
(c) **Transparency in objective-setting** : Any government can override the price stability objective (for a period of up to one year) and replace it with some other stated economic objective but must do so publicly in advance and table the decision in Parliament.
(d) **Reserve Bank operational indepenence** : The bank is independent of political direction in implementing monetary policy toward the specified monetary policy objective.
(e) **Accountability** : The Bank must report publicly every six months with respect to its implementation of monetary policy over the past six months and its future intentions.

amended to make their roles more explicit, the transparency of policy-making decisions is induced and this leads to efficiency in operation. (p. 106-7)

On the other hand, Schick (1998) argued that although New Zealand has been successful in introducing structural and operational reform of government departments and agencies, he also pointed out that developing countries which are dominated by informal markets or shallow markets (the term used by Mas (1995)) have a high chance of failing to adopt the kind of structural reform applied in New Zealand because they first need to undertake rule-based government and pave the way for robust markets. Schick (1998) believes that many developing countries have formal management control systems that prescribe how government should operate but these systems are overseen by powerful central agencies such as the finance ministry, the civil board, and the procurement agency. Nevertheless, this is not to say that, in an informal system, rules are always ignored or that corruption always flourished, although these pathologies may occur. (p. 123,125-128) Thus, Schick (1998) suggested 3 logical orders of development toward modernizing of public sector, i.e., the central bank.

- *First is to formalize the market sector which does not always ensure reciprocal changes in public institutions. However, these developing countries typically have a competitive sector that is open, formal and lightly regulated, as well as a heavily regulated sector that depends on informal contracts, embedded traditions, and government protections. The two cultures can operate independently of one another for an extended period, but sooner or later they will be driven by scandal, financial mismanagement, or citizen pressure to modernize the public sector.*
- *Second, modernizing the public sector means establishing reliable external controls which is an essential phase in the development process. ... Nevertheless, this process can bear fruit only if the controls are exercised in a fair and realistic manner.*
- *Thirdly, politicians and officials must concentrate on the basic process of public management. ... They must operate in integrated, centralized departments before being authorized to go in alone in autonomous agencies. (Schick, 1998:129-130)*

2.4.2 What can be adopted at the BoT?

It is difficult to identify what principle might apply in enhancing the CBI in the case where price stability is not the primary objective. While New Zealand has adopted the principal agent approach in granting its central bank independence, we believe that it is the institutional reform at the bank that can be crucial in enhancing the independence of BoT. Therefore, this sub-section examines reforms which the Reserve Bank of New Zealand has taken in inducing efficiency and preparing itself for the new task of achieving a numerical target and discusses how these reforms can be adopted at BoT in order to prepare itself as an independent financial market regulator in the post crisis period.

(a) Institutional reform

Ball (1999) suggested that an array of institutional arrangements for restraining monetary policy other than the standard independent central bank can be effective. He also observed that the appropriate design of the institutional arrangement for governing monetary policy may differ depending on the nature of endowment of such institution. If the endowment is extremely unpropitious for the maintenance of monetary restraint, rigidly binding formal rules may be necessary, but if the endowment is inherently supportive of restraint, strict formal checks on, for example, monetary expansion may *not* be necessary. (p.1822) Indeed, this is an accurate description of the BoT before and after the financial liberalization.

In the case of BoT, Ball (1999) pointed out that the strong institutional endowment at the bank has helped restrain monetary policy and has contributed to price stability, but this was subject to break down in the establishment of financial market liberalization that had exposed the bank in the area of unfamiliarity in which the bank failed to maintain its independence. While the BoT was able to operate independently on the strong reputation before the excessive liberalization took place, institutional reform is needed as the BoT has failed to maintain its independence as financial regulator. The recent financial crisis tells us that the flexibility, irregular check and absence of transparency in monetary decisions have, in turn, put the authority at risk in abusing that authority and undermined credibility of the authorities at the BoT. Liberalization has challenged the moral commitment of the officials at the BoT and the need to select conservative central bank governor – an approach of enhancing the CBI suggested by Rogoff (1985). Thus, considering the strong reputation at the BoT, it is not difficult for the BoT to adopt institutional reform successfully.

However, the reform which is more worrying is the policy making practice at the central bank and roles of central bank governor and financial minister that needed to be made more transparent where efficiency can be induced. Also, there is a need to amend the law which would legally reduce the dependence of the central bank governor on the minister of finance in terms of electing the governor – the two important issues to which we now turn.

(b) Reform of Legal Infrastructure at the Central Bank

> *Posner (1998) argued that, if it is not possible to demonstrate as a matter of theory that a reasonably well-functioning legal system is a necessary condition of a nation's prosperity, there is empirical evidence showing that the rule of law does contribute to a nation's wealth and its rate of economic growth. It is plausible, at least, that when law is weak or nonexistent, ..., the cumulative costs of doing without law in a*

> *modern economy may be enormous. Likewise, Gray (1997) also pointed out that legal and economic reform should be pursued simultaneously and without economic reform, demand for legal reform may be weak because the most powerful economic actors will have alternatives to obtain their ends, such as government bailouts. At the same time Hay, Sheleifer and Vishny (1996) pointed out that inexpensive and less time consuming type of legal reform offers a possibility of good start to the legal reform and that they may assist in creating preconditions for operation of efficient market.* (Posner, 1998, p.3)

Indeed, these arguments underline the significance of legal reform in enhancing economic growth and the need for a modernizing economy to have standardized law in interacting with international markets. The survey results from Paper III showed that the absence of a bankruptcy law in Thailand has left investors and depositors unprotected as a result of financial crisis. As a result, bankruptcy law, among other laws necessary to standardize the financial market have been amended and/or passed. More importantly, in the past, as BoT has been acting as a lender of last resort and understood as provider of *implicit* guarantees of debts and deposit, creditors and depositors tend to take higher risk than they would otherwise. Likewise, the financial crisis illustrated that in a situation in which the financial market has been modernized (in this case, opened up) but the legal infrastructure has not, things can go badly wrong when implicit guarantees are not sufficient to allow the government to pursue its traditional practice of protecting everyone as it used to in the past.[25] In the case of BoT, its reputation in the past was taken as 'informal substitutes' – the term used by McGrory (1995) for the legal enforcement and protection.

In addition, the bank's objective(s) have to be announced publicly, which will put pressure on the bank to achieve that commitment and while these objectives will have to be clearly spelled out, the bank's performance can be evaluated against such objectives. Given these performance measures, the governor is free to conduct policy with discretion and without direct interference. These are the kind of adjustments in legal reform that we propose that the BoT could adopt in inducing its operating efficiency and in regaining its credibility. In part, it is the legal reform as well as institutional reforms that reflect commitment because the new structure will provide an integrated linkage from the objective of policy in the short run to achieve the objective in the long run and ensure the accountability of the central bank. However, until some of the

[25] These examples, in large part, demonstrate the argument by Stiglitz (1994), *that it used to be common in the economic literature on development numerous sources of market failure and prescribe complex government interventions to cure them without paying much attention to equally numerous sources of government failure.* (Posner, 1998:1)

commitments have been demonstrated, the credibility of the central bank is unlikely to be achieved (or regained) in the public eyes. (Walsh, 1995b:245-6)

However, a question arises as to whether these laws will be committed to by policy makers and whether they would be enforced without political interference – an environment that is taken for granted in wealthy nations. (Gray, 1991) It has been pointed out by Posner (1998) that effective legal reform depends on the political will to reform which in turn is likely to depend on politicians. If the dominant political groups are willing to risk the loss of political control over the economy that modern economic conditions dictate, they will also want legal reform. This law will have to be well-defined and may require the establishment of a special court to help ensure that laws are enforced. (p. 8-9) It is this type of amendment in central bank law that can induce independence of the BoT even if there is no numerical-base performance to achieve. For example, changes in central bank legislation can be amended in order to empower central bank governor in making monetary decisions without the consent of the finance minister; and change the way in which the appointment or dismissal of central bank governor depends on politician, finance minister. The next section looks at electing of central bank governor and how it can be amended to improve central bank governor independence from political influence.

(c) Election of the Central Bank Governor

Election of the central bank governor is also a crucial factor in inducing the CBI. The bank's governor would feel more free in making monetary policy if his or her appointment and dismissal do not depend on the politician but a separate body. (However, this issue is not crucial in the case of New Zealand because the central bank governor chair is tied to a performance based contract.) In the case of Thailand, if the election of central bank governor is not to be made dependent on the finance minister, who or which group should then elect the governor? And to what extent, must it be a political position? It can be argued that the finance minister will need full cooperation from the central bank governor in forming economic policy. On the other hand, while the objective of the central bank is unclear, it could easily be influenced by the minister.

Posen (1995) suggested that the central bank governor should be elected by private bankers because private and financial sectors play a significant role – and they are fearful of inflation. While it is true in the case of Thailand that the financial firms do have a strong impact on the central bank authorities, the private bankers' influence seems to have done more harm than good because they do not share the same objective. The previous section has clearly illustrated that BBC is a case where private bankers' influence on the central bank has interfered with the bank's autonomy as financial regulator, and they have tended to interfere with policy decisions in such a way that favours their interests. Mas (1995) pointed out that in Thailand where private bankers are well connected with the government officials and authorities at the central bank, it is not difficult to imagine that they are likely to have a large influence on policy making as well as having access to privileged information. (p. 1641) Thus, as long as the central bank has the job of financial developer/regulator and financial markets such as the one in Thailand still need to be regulated, it is indiscreet to have private bankers appoint the central bank governor.

2.4.3 Setting up a separate entity to regulate financial market

Posen (1995), among others, has raised the issue of setting up an independent agent to regulate the financial market while the sole duty of central bank is only to monitor and control inflation. In addition, Bale and Dale (1998) point out the role of public agent should be clear in order for its performance to be assessed. In their view, it is important to distinguish between policy advice and service delivery. While policy advice is a specialized business that is inherently different from service delivery, separating them reduces the potential for policy bias. In the context of a central bank, if an agency provides both advice as financial market regulator and is also responsible for maintaining price stability, a potential conflict of interest could arise between the two functions. (p. 109)

De Hann and Hag (1995) have pointed out that the most important argument in favour of separating the monetary policy and prudential supervision functions is based on the fear that the central bank's anti-inflationary stance would be undermined by a large injection of liquidity, aimed at keeping one or more important financial institutions from going under. Another argument for keeping prudential supervision out of the central bank is that experience suggests that bank failure or rescue operations can be messy and thereby damaging to the central bank's reputation and thus affect its autonomy. (p. 339) This first fear has, indeed, been illustrated by the incident of the BBC case when the central bank has repeatedly rescued the BBC knowing that it was less likely to succeed as the BBC non-performing loans had been accumulated over a long period of time. Also, the central bank was criticized for not taking appropriate action in the BBC case due to the governor 's close personal links to the BBC's chief executives. (Lauridsen, 1998, p. 1581)

As a matter of fact, there has been a relatively small literature on this issue as the main task of central banks in developed countries focuses on the price stability. As Fischer (1995) puts it 'the question of whether the central bank should supervise banks remains open, but that is not of much importance.' (p. 203) His statement, perhaps, is only applicable to the developed countries where financial markets are already operating efficiently and central banks need not play a significant role neither as financial market developers or as regulators.

So far, issues such as institutional reform, legal infrastructure reform, electing of the central bank governor, and setting up a separate entity as financial regulator have been suggested as options for granting the BoT independence. On the other hand, it is also clear that the kind of independence we seek for the BoT as financial regulator may not easily be accomplished since the governor's judgement and encounter with politicians and private bankers can neither be measured nor evaluated. Hence, a question arises as to whether there is, in addition to the above theoretical suggestions, a more applicable and practical path toward inducing the BoT independence? The next sub-section attempts to answer this question by offering some domestic perspectives.

2.4.4 Strengthening supervision of the financial sector : domestic perspective

Local commentators generally agreed that the financial supervisory function was not handicapped because of inability, but rather a lack of will to take decisive action among the top leadership at the bank. However, a greater concern of the central bank's supervisory role is that officials at the bank were too focused on theories, lacking operational experience in the private sector. Thus, they suggested that there should be an exchange of executives between private commercial banks and central banks in broadening minds of both regulators and those being regulated. In addition, the BoT also needed to change its philosophy and perceptions of financial markets and institutions. In the past, regulators consistently supported ailing institutions, conflicting with the basic need to formulate monetary policy. (Bangkok Post_7)

On the other hand, Chewakrengkai (a former chief economist at Deutsche Morgan Grenfell) pointed out her concern regarding the published economic data released by the bank. She said that , prior to the crisis, disclosure of key figures and economic data by the BoT was poor and while dissemination of information has improved during the months after the crisis, greater transparency is still needed. Information should be accompanied with explanation and analysis by the central bank because without official clarification, the public lacks confidence in the transparency of the information. In addition, economists at the National Economic and Social Development Board (NESDB) suggested that the term of the central bank governor should be clearly fixed and limited to restrain political interference. The central bank had to change both its examination and supervision systems, rather than concentrating authority in the hands of the governor, a 'task force' could be assembled to help formulate monetary policy. (Bangkok Post_8) All of these suggestions clearly pointed out to the need of institutional reform at the bank, most of which has been adopted by the Reserve Bank of New Zealand (section 2.4.1).

Lastly, the president of the Thailand Development and Research Institution (TDRI) also added that the role of the central bank had to adjust to the *changing macroeconomic environment*. The relationship and roles of the finance minister and the central bank governor should be clearly spelled out, with the minister in particular playing a greater role in oversight of policy decisions. This remark, however, implies that although the central bank governor should be independent of the ministry of finance, he should also follow the consent of the minister, of course, given that such policy is of good faith. Is this a conflicting suggestion? According to Walsh (1995b), this can be viewed as a principal agent approach, adopted by the Reserve Bank of New Zealand, which stated that the central bank will be allowed certain independence to complete its assigned task without political interference. He also added that it was *unnecessary* for supervision and examination of financial institutions and the formulation of monetary policy be handled by the same organization, the central bank. (Bangkok Post_9) This seems to have suggested that the supervising role is given to a separate entity.

In the end, these suggestions do not contradict what the theories have to suggest about routes in enhancing the central bank independence. But what can and should be adopted at the Bank of Thailand, this is a difficult question to answer as there are quite a few problems at the bank which may, perhaps, require configuration of these measures to tackle them. Thus, several options are to be agreed by the authorities, however, infrastructure at the bank is the one proceeding that can be accepted as an *essential first step* toward enhancing the BoT independence.

2.4.5 Summary : the routes to granting BoT independence

This section has suggested the BoT needed to undertake *institutional reform* which may not be so difficult to pursue since the bank is largely endowed with what New Zealand had to undertake the reform to establish. For example, staff at BoT are highly qualified and the bank is already endowed with a supportive environment. (Ball,1999) Second, it is suggested that central bank legislation be amended so that appointment or dismissal of central bank governor is no longer in the hands of politicians. Third, although setting up a separate entity to regulate financial market can be a good option, such institution would still require political independence. So, this goes back to square one of establishing an independent institution to regulate financial market whether it is a separate entity or a body within the central bank.

Although Posen's (1995) suggestion of having *private bankers elect the central bank governor* may not be appropriate in the case of Thailand, he did make a point of having the central bank governor elected by those whose interest cannot be in conflict with the central bank's duties. Hence, the central bank governor needed to be made independent by law, and while no numerical target-base-performance can be assigned on the moral performance, institutional reform would necessarily be the first step toward granting the BoT the independence. However, whether changes in central bank law and institutional reform will be sufficient in granting the BoT its independence is beyond the scope of this paper. Also, the extent to which these suggestions will enhance the independence of the BoT cannot be examined until after it has taken up these first necessary steps.

Given a moderate level of inflation in Thailand, setting the *inflation target* is not viewed as the primary objective in establishing CBI. Nevertheless, this is not to disregard the importance of the price stability objective as it is too early to say whether the inflation will be controllable in the long term after the exchange rate has been floated. In other words, price stability is not, at present, an urgent issue whereby establishing an independence via setting inflation target is not likely to be an effective route in granting independence as a financial regulator. A brief review of domestic opinions seem to reflect what the theories have to suggest as routes to enhancing the CBI. This implies that the BoT has, perhaps, several options in enhancing its independence. However, this is by no means that these approaches can be adopted uncritically.

In summary, the main contribution of the Paper II is, first, providing evidence to support why dependent central bank can and has largely contributed the Asian financial crisis. The line of argument in this paper is rather simple and more practical in a way that it sequenced the chronology of the plunge in illustrating the fundamental cause of the crisis in the country where the crisis broke out. Second, and more importantly, it gathers several recommendations in granting the central bank independence, the independence in which can enhance the role of monetary policy-makers as financial market regulators not as price controllers. Lastly, the

Paper points out the gap in the existing literature on central bank independence that focuses only on the bank's duty as price controller, the issue concerned among developed countries which is not necessarily the only task responsible by the central banks in developing countries. And this was why the recommendations in granting the Bank of Thailand independence as financial market regulator may be found un-clearly supportive by the theories and to some extent inconclusive. Nevertheless, this leads to the Paper III which gathers the cure for the Asian financial crisis from a different perspective that is found to be more interesting and practical in assuring the smoother path of financial market restructuring and economic recovery in Thailand.

Lastly, this paper can be concluded by noting Ball's remarks (1999) on two important points that are most applicable to Thailand.

- *First, efforts to implement reforms of the institutional arrangements governing monetary policy can be greatly enhanced by complementary structural and public sector reform.* (p. 1823) *Also, reform in areas other than monetary policy can be crucial in enhancing likelihood of success of reforms of institutional arrangements governing monetary policy.* (p. 1828)
- *Second, international financial institutions such as the WB or the IMF are not likely to provide effective sources of external restraint when a country's institutional arrangements and institutional endowment are badly aligned. When a country has achieved a commitment to maintaining restraint, however, these agencies can provide valuable support.* (p. 1823)

PAPER III : HOW COULD THE IMF'S PACKAGE HAVE BEEN TAILORED DIFFERENTLY? AN OBSERVATION FROM THE INSIDERS' PERSPECTIVE : THAILAND

Section 3.1 : Introduction

3.1.1 Background

Why have situations in Asian countries not improved since governments' acceptance of the IMF program? The Asian financial crisis broke out in Thailand after the authority was forced to abandon its 14 years old pegged exchange rate on July 2, 1997. This was a result of series of speculative attacks on the baht since the beginning of 1997 and massive outflows in the form of call back of short term foreign debts. The Bank of Thailand's ability to defend the baht became impossible when its foreign currency reserves were exhuasted, forcing the bank to float the baht at the worst possible time. Six weeks later, the Indonesian Rupiah was forced to float for similar reasons. Korea, who has stronger economic fundamentals, was able to maintain exchange rate stability until October when its currency began to depreciate sharply as it, too, had accumulated a high level of *short-term* foreign debts.[1]

Up until the present, there is still widespread debate going on about why the crisis has been so severe beyond what was previously anticipated at the outbreak and what could have been a more appropriate set of measures to deal with the crisis. On the one hand, Corsetti, Pesenti and Roubini (1998) pointed out that the Asian financial crisis reflected structural and policy distortions in the countries of the region. Fundamental imbalances triggered the currency and financial crisis in 1997, and once the crisis started, market over-reaction and herding caused the plunge of exchange rates, asset prices and economic activity to be more severe

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[1] Stiglitz (1998) pointed out that the crisis in Asia is different from other crises in that it revolved around ***private debt***, not public debt. The biggest worry has not been the overall indebtedness of the countries but the level of ***short-term debt*** and portfolio outflows. (p. 2)

than were warranted by the initial economic conditions. (p.1) On the other hand, Radelet and Sachs (1998) argued that sudden shifts in market expectations and confidence were the key sources of the initial financial turmoil, its propagation over time and regional contagion. While the macroeconomic performance of some countries has worsened in the mid 1990s, the extent and depth of the 1997-98 crisis should *not* be attributed to a deterioration in fundamentals, but rather to panic on the part of domestic and international investors, somewhat reinforced by the faulty policy response of the IMF. (p. 1)

Like other financial crises in the past, the IMF has always been there to help get the economies back on their tracks. Accepting the IMF funds which are tied with conditions only means that a country is accepting that it has problems and is seeking help. To a certain extent, an agreement with the IMF could serve as an assurance that the problems will be handled efficiently and comprehensively by experts. Initially, available funds from the IMF would help build up depleting international reserves and avert the deteriorating financial position of a country in financial crisis.[2] Unfortunately, the IMF funds and its normal prescriptions of fiscal and monetary tightening have not been able to resolve all the crises and especially this Asian financial crisis. In particular, some have argued that the IMF's conditions have worsened the Asian financial crisis and put these economies into a deeper recession. (Schwartz, 1998, Feldstein, 1998, Thacker, 1999, Dornbusch, 1999, Nixson and Walters 1999)

Hence, this section first addresses the approach by which the local authorities (under supervision of the experts, IMF) dealt with the situation, which have brought them altogether into such depth of crisis. The focus is on evaluating the IMF's package imposed on Thailand, one of the three Asian economies that suffered from the Asian financial crisis and came under the IMF program. The question here is how well the IMF fund and its conditions helped the Thai economy to recover and whether the policies could have been tailored differently. Whereas other papers have expressed views on the remedial measures based on the outsiders' perspective, this paper will try to answer this question by gathering a domestic perspective on the issue. In other words, instead of gathering ideas from the *outside observers* on what has gone wrong with the IMF's package in assisting the Asian economies from the financial crisis, this paper asked how the *inside observers* and

[2] Section 3.2 explains the economic underpinning of the IMF in handling the Asian Finance Crisis (Polak's model, 1957)

participants in the crisis have perceived the crisis. More importantly, it is interesting to find out the domestic views on the IMF's package in order to shed some light to the question of how the package could have been tailored differently in assisting a smoother recovery path.

3.1.2 Structure of the paper

Section 3.2 focuses on the background of the IMF and its conditions imposed on the 3 Asian economies, Indonesia, Korea and Thailand, who have come under the IMF program. It is helpful to know what is the rationale behind the IMF's conditions attached to the fund in order to understand why the IMF's assistance in Asian economies has been criticised. The IMF has claimed that these decisions were made according to its understanding of what caused the crisis. Monetary and fiscal tightenings as well as structural reform are examined and these are followed by some inferences why they were not successful measures for the Asian crisis. For example, the fiscal tightening was later turned into fiscal stimulus (by the IMF) as it has squeezed the public spending out of the economy and as private investment has been paused as a result of the crisis, the absence of economic activities have deepened the recession.

This is partially why, on the one hand, comments have been on the IMF's wrong understanding of the crisis which has resulted in inappropriate policies and that inappropriate policies, on the other hand, were partially forced by an interest group, the US, who is the IMF's largest fund provider. This section also offers a brief discussion of who are for and against the IMF and reasons behind their arguments.

Section 3.3 discusses the methodology used in this research which is based on a survey conducted in Thailand. This is in order to gather the *perceptions*[3] of domestic observers in the crisis as opposed to section 3.2 where the IMF and outside observers' perceptions on the IMF package have been presented and discussed. A questionnaire was administered to respondents in three sectors, the financial sector, the public sector and academic sector. Financial institutions and commercial banks are two main target groups under the financial sector because this particular sector has been the most severely damaged by the crisis. Public sector is represented by several divisions responsible for making monetary policy,

[3] As Stiglitz (1997) puts it, 'The countries of East Asia are not bankrupt. There has been a loss of confidence. Restoring confidence is as much a matter of social psychology as economic science, as much a matter of perceptions as of realities.' (p. 2)

fiscal policy and social policy. Lastly, lecturers in economics departments from universities as well as officials at the World Bank representative office in Thailand were asked to complete the questionnaire. Therefore, in terms of the sample set, parties directly involved in the handling of financial crisis are included. Likewise, the sample has been drawn from qualified respondents at each of the institutions.

The questionnaire is divided into several sections which ask about respondents' perceptions of the financial crisis in general, and their perceptions of the IMF's conditions attached to the loans. The most contentious, monetary and fiscal policy, which have been highly criticized by general public are also debated. Lastly, the questionnaire asks about macroeconomic policy in the future, and the direction and speed in which trade and financial liberalization should be pursued. The structure and order in which questions are asked reflect the order and detail of how the IMF has described its conditions. In order to make the most sense out of the survey, the questionnaire is structured in the same format as how the previous section (section 3.2) has presented the IMF's conditions and objectives of the conditions.

Section 3.4 discusses perceptions of the same issues gathered from *inside observers* in Thailand. This is unlike section 3.2 which gathered perceptions and analysis of the *outside observers* on the IMF's conditions on 3 Asian economies in crisis in hoping to shed some light on the debate of why has the IMF's assistance went drastically wrong in rescuing the Asian economies in crisis. This survey does not only allow us to reveal the perceptions from the domestic perspectives, it also allows us to go a step further in identifying alternative measures to the IMF's conditions, which have been criticized by commentators as inappropriate in rescuing economies during the onset of the crisis.

This section discusses mainly the respondents' opinions about the Asian financial crisis, the government's response to the crisis, and most importantly, their evaluation of the IMF's conditions and suggestions on alternative measures. Though section 3.3 explains how inside observers can fairly represent the domestic perspective, the question arises in this section as to what extent their opinions are unbiased and could be taken into account as valuable recommendations for the government in proceeding with the economic recovery plan. In addition, it is interesting to find out whether their interpretation of the crisis could be of different variety since one third of the respondents do not have formal training in economics. Furthermore, would it be the case, when respondents are asked for alternative measures to the IMF's conditions, that their recommendation as policy-makers and policy-takers perspective be so outrageously different toward their interests? After all, we cannot learn much from these perceptions, in terms of policy recommendations, if they appeared to be unprofessionally and unrealistically biased toward one's position. These issues will be examined in this section.

Section 3.5 concludes by re-emphasising why, in the context of Thailand, the policy tightening imposed by the IMF failed to correct the problems, to stop the currency from depreciating or to prevent capital outflows. Most importantly, it gathers what respondents have identified as structural problems and how they should be tackled. Nevertheless, there is one important sector, the real sector, which was very often mentioned by the respondents as the sector which faced serious difficulties as a result of the crisis. Respondents also identified problems associated with the sector and suggested policies in dealing with the problems.[4] Thus, by drawing the main findings from the previous section, we are able to close the loop between perception and economics in evaluating (alternative) policies that are recommended by insiders.

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[4] Evaluating the actual impact of the crisis in the real sector is beyond the scope of the present paper but it will be an interesting area for further research as the sector by itself is clearly of key importance to the Thai economy.

Section 3.2 : The IMF and its conditions imposed on the Asian economies

This section first offers a brief background to the IMF (International Monetary Fund) and its original objectives in order to understand the role of the IMF in the international community. Although the IMF became involved in a growing number of countries, its assistance has not always been successful and this has been criticized by commentators. These criticisms are considered in examining the IMF's assistance in the Asian crisis. It then discusses the IMF's understanding of the causes of the financial crisis in Asia in rationalizing whether its attached conditions imposed on the 3 Asian economies, Indonesian, Korea, and Thailand were appropriate in dealing with the crisis. These attached conditions are mainly policy tightening and structural reform, known as the IMF's standard prescription[5] which the institution imposed on its member countries who faced financial difficulties and have come under the program. The main discussion in this section will be on the IMF's objectives in imposing monetary and fiscal tightening as well as structural reform on the 3 Asian economies and whether these objectives have been met. And if the standard prescription is evidently flawed, are there alternatives?

3.2.1 The IMF and its critics

The IMF was established in 1944 as a permanent monitoring body to look over fixed exchange rate system. The IMF (now has 182 members) likes to think of itself as a cooperative institution which accumulates its financial sources from its members' subscriptions called quotas. These resources are available for temporary lending to any member that experiences difficulties in paying its import bills and/or servicing its foreign debts and that agrees to undertake reforms to correct the imbalances that underlie the problem. In other words, the IMF was meant to encourage co-operation between nations, smoothing world commerce by reducing foreign exchange restrictions. (Driscoll, 1998, p. 1) However, after the dollar standard was abandoned, in order to monitor the exchange rate system, the IMF was required to look at monetary policy at the national level. And although the IMF has no authority over the domestic policies of its member, it can (and often does) tie the loan to conditions which it sees appropriate.

Feldstein (1998) pointed out that the IMF's role in the 1980's was still appropriate. For example, during the tequila crisis in 1994, the IMF helped Latin American economies by

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[5] The IMF's monetary approach to the balance of payments is based on Polak's model (1957). One key characteristic of the model is its simplicity, which maintained a focus on the key variable that governments could control, domestic credit creation, that was seen as crucial to the correction of balance of payments problem for which IMF assistance had been invoked. (Polak, 1997, p. 16)

imposing monetary and fiscal discipline as these countries were facing a liquidity problem rather than insolvency. That is they were temporarily unable to pay current foreign obligations but were not permanently unable to honor their debts. Then with the collapse of the Soviet Union and liberation of its former European satellites, these countries needed to shift from central planning to a market economy and to integrate themselves into international financial markets. In this case, the IMF provided useful advice on strategies of privatization, banking systems, and tax structures. However, the IMF acted in much the same way in the Asian crisis as it had in other countries, insisting on fundamental changes in economic and institutional structures as a condition for receiving the IMF funds even though the situation in Asian countries are very different. (p. 1-2)

Among critics, Sachs (1997b) strongly opposed the IMF's recipes in tackling the Asian financial crisis. He describes the crisis as a panic of self-feeding frenzy that is very different from the set of problems that the IMF typically aims to solve. In the past, the IMF faced the problems of government trying to finance its deficits by printing money at the central bank, which results in inflation together with a weakening currency and a drain of foreign exchange reserves. In this situation, the IMF's normal prescription makes sense, however, in Asian countries, the circumstances are simply the opposite. The problems in Asian countries emerged from the private sector, and to a varying extent in all of the three countries who have come under the IMF program, the short-term borrowing from abroad was used to support long-term investments in real estate and other non-exporting sectors. (p. 1-2) In addition, Stiglitz (1997) emphasized, 'it is important to recognize the differences between the present crises and earlier ones in other parts of the world that in the present environment of collapsing private demand, public policies strongly restricting aggregate demand have a greater potential for recessionary impact. Hence, the appropriate policy response is likely to be *different* than that in an environment with government budgets out of control or loose monetary policy.' (p. 2)

Thus, in the Asian crisis, as Feldstein (1998) puts it, the IMF is risking its effectiveness by changing from its traditional task of helping countries cope with temporary shortages of foreign exchange to imposing structural and institutional reforms on countries facing financial crisis in the exchange of funds. A country in desperate need of short-term financial help does not give the IMF the moral right to substitute its technical judgements for the outcomes of the country's political process. In addition, he argues, the IMF should not use the opportunity to impose other economic changes that, however helpful they may be, are not necessary to deal with the balance-of-payments problem and are the proper responsibility of the country's own political system. Apparently, the IMF has taken the advantage of unclear boundary of monitoring exchange rate system by imposing other conditions (financial and trade liberalization) beyond what is necessary to maintain a stable exchange rate to the loans. (p. 5) These other conditions, beyond what are necessary to maintain stable exchange rate, are agreed by commentators as unjustified. (Schwartz, 1998, Feldstein, 1998, Thacker, 1999, Dornbusch, 1999)

In contrast, Roubini (1998) explained how the opposite measures would have been more disastrous to the Asian economies. He gave the example of how loose money policy and low interest rates was made possible for Japan in dealing with its internal crisis as it is a large net foreign creditor with sizable current account surpluses. Because of the Japanese surplus position, the effects of a weaker yen on the Japanese economy are qualitatively and quantitatively different from the effects of low interest rates and exchange rate depreciation in countries with large external debt denominated in foreign currency like these three Asian economies. In addition, in support of the IMF's demand for fiscal discipline in Asian economies, Roubini also pointed out that loose fiscal policy at the onset of the crisis would have raised doubts about the policymakers' commitment to reducing the outstanding current account imbalances, threatening the credibility of their plans. (p. 16-17) However, it is the timing and magnitude that jeopardized the success of the IMF in helping economies get back on track. Roubini (1998) has put together a comprehensive chronology of the agreements between the IMF and the Asian economies during the period after the crisis started in July 1997 to August 1998 when interest rates have fallen back to pre-crisis levels. There are two issues which could be drawn from the record.

On the one hand, Roubini pointed out that the IMF's targets did not remain unchanged over time. As the situation in Asia progressively deteriorated, the conditions imposed by the IMF became less restrictive. This is clearly seen in the case of fiscal restriction which will be discussed later on in this section. On the other hand, others who are against the IMF's conditions seem to think that even though the IMF's adjustments in the conditions could be seen as flexibility of the institution's policy, the flexibility was forced upon simply because it had the wrong perception about the Asian economies to begin with and that the changes occurred too late. (p. 15-16) As Nixson and Walters (1999) put it, despite the admission by the IMF that errors had been made, which might have prolonged and even deepened the crisis, this initial failure appears to have had little direct effect on the IMF's evaluation of its role. (p. 515) The next section discusses how the IMF, to some extent, recognized the core problems in Asia, yet failed to deal with the crisis and help economies to recover.

3.2.2 The IMF's understanding of the causes of the Asian financial crisis?

It is important to identify the IMF's understanding of what caused the Asian financial crisis before judging whether the standard prescription of policy tightening and structural reform would have been appropriate in dealing with the crisis. The IMF has identified the characteristics of the Asian problem as following;

As Hamann (1999) puts it, the Asian crisis was different from other crises in the IMF's experience in that 'the crisis was caused primarily by financial system vulnerabilities and other structural weaknesses which occurred in the context of unprecedentedly rapid moves toward financial market globalization.' (p.9) These three countries, Indonesia, Korea, and Thailand, have some broad similarities in (a) weaknesses in financial systems which stemmed from inadequate regulation and supervision and, to a different degree, a tradition of government guarantees and a heavy role of government credit allocation. Next, (b) Weaknesses in governance at a more general and fundamental level – these had been evident in the misallocation of credit and inflated asset prices. And most critically, (c) all these countries shared large un-hedged private short-term foreign currency debt where the corporations were highly geared. In Korea and Thailand, debt was mainly intermediate through the banking system, while in Indonesia the corporations had heavier direct exposure to such debts. (p. 9)

These weaknesses came about once these countries had opened up their capital account as part of financial liberalization. However, maintaining a fixed exchange rate regime alongside an opened capital account seemed fine in the beginning when the countries' short-term debts were much below their foreign reserves. Soon after, short term un-hedged debt began to accumulate as a result of the limited degree of exchange rate variability, making currencies vulnerable to speculative attacks. The IMF has, in fact, recognized these characteristics and stated that the short term foreign currency-denominated debt created two kinds of vulnerabilities. First, fears that trigger liquidity attacks can be self-fulfilling and induce the possibility of bank runs, especially in these countries with no deposit insurance but only the implicit government guarantee. Second, it is the exchange rate exposure of debt which was either borne by financial institutions and passed on to local borrowers or directly by local borrowers who were engaged in businesses which required foreign currency transactions. These elements are further complicated by the interaction of exchange rate and credit risks : if currency depreciation results in a widespread insolvency whereby any decline in market confidence can become both self-fulfilling and contagious across countries. (Hamann, 1999, p. 9)

Furthermore, the IMF also recognized that although financial vulnerabilities had occurred since the beginning of financial liberalization, a few years before the crisis, it only became apparent when the economic fundamentals began to slowdown and show signs of problems, i.e. slow export growth and high current account deficits. As a matter of fact, the most apparent sign was a slowdown in the stock market and fall of asset prices, especially the property market. Hamann (1999) pointed out that the declines in stock and property prices and the slowdown of economic activity reinforced each other, aggravated the stock imbalances, and led to a self-perpetuating process of bankruptcies and bank failures in all three countries. In other words, it was the declining asset prices that depressed economic activities through negative wealth effects on domestic demand, while the deteriorating outlook for growth put pressure on asset prices. (p. 15) Therefore, it was clear that though these countries' growth rates were on a decline during the years proceeding the crisis, the most critical problems were in the area of financial markets, and it was the panic reaction of the market players who brought these countries into crisis.

Recognizing that the crisis in Asia was different from others under the IMF program, it has nevertheless imposed the standard package of policy tightening on the three Asian countries. The following section will discuss, in detail, each of the policies, the country's reaction, and discuss why policy has been publicly criticized. In general, what the IMF has overlooked is not only the severity of the crisis but, most importantly, it misjudged / over estimated the effectiveness of its normal prescription of policy tightening in tackling the unique problem in Asia. This was mainly because, unlike other countries in crisis, these Asian economies were not confronted directly with weaknesses in economic fundamentals but with other factors which no country under an IMF program had experienced before. However, different causes of crisis resulted in a similar characteristic of sharp currency depreciation, the symptom of any crisis. Thus, it was this symptom which convinced the IMF to impose the standard remedial measures in dealing with crises. However, it may be that different timing and sequencing of solutions would have been more appropriate in accommodating these Asian economies onto a smoother recovery path.

3.2.3 The IMF's conditions imposed on the Asian economies

The effectiveness of the IMF assistance can be evaluated by looking at the IMF conditions, which can be examined in two separate parts. First, policy tightening of budget cuts and an increase in interest rates and second, structural reforms which normally include trade liberalization, privatization, and improvement in governance which are known as normal prescriptions of the IMF. In the case of the Asian financial crisis, one needs to ask whether the policy tightening is appropriate and what is the rationale behind the structural reform.

3.2.3.1 The IMF's monetary tightening policy

(a) Objectives of the IMF's monetary tightening

Even though there is no specific target of interest rate rise in these countries, it was understood that the interest rate would be maintained at a high level if not increased in order to restore currency stability and prevent depreciation-inflation spirals. On the other hand, a high interest rate was expected to prevent outflows. Ghosh and Phillips (1999) found that, by examining evidence on various monetary indicators, monetary tightening in these 3 Asian countries was not extreme, either in degree and duration, in relation to other crises elsewhere. However, as discussed earlier, the Asian crisis is rather different from other financial crises which countries under the IMF program have experienced. The IMF occasional paper on the Asian financial crisis has summarized the relationship between interest rates and foreign exchange rate in the *short-term* and found mixed results on the impact of high interest rate on a rising exchange rate. (p. 46)

Goldfajn and Baig (1998) tested the correlation between the real interest rate and the effective exchange rate in the Asian countries during the aftermath of the crisis using simple regressions. They reported that during the one-year period after the crisis started, the evidence on the relationship between real interest rates and real exchange rates is mixed. (p.4) The relationship is only positive for Hong Kong, Indonesia, Malaysia, and the Philippines. In contrast, the opposite results were found in Korea and Thailand. Nonetheless, they concluded that there is neither evidence of overly tight monetary policy in the Asian crisis countries in 1997 and early 1998, nor evidence that high interest rates led to a weaker exchange rate. (p. 28) It is also noted that Korea and Thailand are two of the three Asian countries under the IMF program whose exchange rate depreciations were mainly a result of the financial crisis while the Indonesian economy was also confronted with political instability and inflationary pressure. As a result, the Indonesian Rupiah depreciated 5 times more than others in the region. Nevertheless, it would be foolish to suggest that the opposite, reducing interest rate, would help maintain exchange rate.

In contrast, Kunimune (1999) has tested the effectiveness of a high interest rate policy in maintaining the exchange rate by expanding the IMF's interest rate policy model into a dynamic model through which he examined the relationship between interest rate policy and exchange rates in the short-run. His finding is that the IMF's theoretical model is suitable for analyzing long-term equilibrium. Thus, the failure of the monetary tightening, as Kunimune puts it, is a result of the IMF's use of a *long-term* equilibrium model in examining a *short-term* macroeconomic stabilization policy. Using Thailand's data, it is suggested that the IMF's type of high interest rate policy simply had the effect of hampering the inevitable real exchange rate depreciation. He also concluded that the IMF's high interest rate policy itself was one cause for the risk premium. (p. 351-2)

(b) Why did the IMF's monetary policy tightening not work?

Theoretically, an increase in interest rates helps to strengthen foreign exchange and control inflation. This tool of monetary policy is also known to be effective in the short run, but in the context of the Asian crisis, it had some unintended effects. After the floatation of the Baht, the main force which had driven the Baht down sharply was the continuous outflows and withdrawal of local capital. Most of this capital was in the stock market and in form of deposits that were liquid enough to be withdrawn quickly. It was seen above that even having the short term interest rate continuously raised during the 6 months after the floatation could neither stop currency depreciation nor outflows. Indeed, the high interest rate was only the indication of tight liquidity and it was the local firms who suffered from the high debt burden from high interest rates, and for some, exchange rate loss while foreign investors had decided to cut these losses and leave the country. In the end, high interest rates had adverse effects on local people and the economy because it wiped out many businesses with short-term foreign debts, many of which could had survived had the loans been rolled over. Sharp currency depreciation also has affected foreign liabilities of these countries to increase sharply.

Therefore, an interest rate hike was an inappropriate policy because it was aimed to correct the symptom rather than the cause of depreciation and outflows. The immediate measure should have helped to stop outflows which was the main force behind currency depreciation. It seems that the IMF was trying to use interest rates to do too many things, in particular to stop the currency from depreciating in the hope that it would slowdown the outflows and prevent the expected inflation. At this point, there are two ways in which the IMF misjudged the situation. First, the IMF thought its normal prescription could solve the Asian currency crisis like other crises it has experienced because they have the same symptom of sharp currency depreciation, but it overlooked the cause of such depreciation. Second, even if the IMF realized that the outflows were the main push behind currency depreciation, the interest rate rise was, nevertheless, inappropriate because the main attraction of these inflows were the fixed exchange rate schemes that these countries had pursued in the past. In fact, the cost of fund hedging foreign investors could save from fixed exchange rate scheme has outweighed the interest rate gap which has been narrowed as a result of the US interest rise, and the rate of return on investment in the real sector has also been narrowed as a result of the economy reaching full capacity during the years prior to the crisis.

Shirazi (1998) pointed out that the Asian financial crisis is a crisis of confidence, in other words, a self-fulfilling crisis. (p.2) This analysis is also accepted by the IMF, as it agreed that exchange rates in these countries initially depreciated far beyond the real levels consistent with medium term fundamentals. This also explains why the interest rate rise has failed to stop currency depreciation and outflows. From the investors' point of view, the interest rate rise could not help restore confidence because the problems of the crisis stemmed from the financial sector, accumulation of short-term foreign debts, which local debtors could not honour and that *monetary tightening* was not enough to bring back the investors' confidence. In fact, this misjudgment of the problems and misuse of the measures may have added pressure for currency depreciation and discredited the IMF and governments in their handling of the crisis.

3.2.3.2 The IMF's fiscal tightening

(a) Initial objectives of the IMF's fiscal tightening

According to the IMF Occasional Paper (1999), the programs sought to reduce the need for current account adjustment associated with these capital outflows by providing official financing and restoring confidence to encourage a recovery of private sector flows. This fiscal adjustment can have positive effects on confidence mainly to the extent that it is expected to have effects on investors' prospects of repayment. To the extent that fiscal adjustment has positive effects on the external current account and thus reduces the need for currency depreciation, it would tend to reduce both the expectations of currency depreciation and country risk premiums. Moreover, as reducing fiscal deficits also reduces the likelihood of their monetization, this would tend to lower expectation of inflation. Another reason for fiscal adjustment in the initial programs was to make room for costs of bank restructuring, which was to include closing nonviable banks and providing an injection of public funds to recapitalize some viable ones. (Lane and Tsikata, p. 57-8)

(b) From fiscal tightening to fiscal stimulus

Although the IMF has accepted that not all of the fiscal adjustment suggested above needed to have been taken in the year the shocks occurred, it also believes that a credible start with such adjustment would be needed to convince markets and the public that a sound fiscal position would indeed be achieved in the medium term. The original fiscal targets were formed on the basis of current policies and assumptions in the Asian economies. However, as both economic activities and exchange rates had major direct effects on fiscal balances, the IMF had to change its course of fiscal tightening in response to the situation.

The IMF accepted that the recession had a substantial effect on fiscal balances, primarily through its negative effect on revenues. At the same time, exchange rate depreciation also had a substantial negative impact on corporate income tax receipts, as the domestic currency cost of servicing foreign-currency-dominated debt was revalued, lowering corporate taxable income. (Lane and Tsikata, 1999, p.62) At the same time, Bello (1999) and other critics pointed out that as the crisis had not been brought about by government profligacy, the IMF's prescription of squeezing the government budget killed off the remaining active stimulus to capital expenditure. The government stimulus package was probably the only channel the economy had at that time to reverse the situation, as the private sector would not be keen on investment.

Taking all these effects together, the depreciation weakened all three countries' fiscal positions substantially. In Korea and Thailand, both revenues and expenditures were adversely affected, whereas in Indonesia, about half of the increase in expenditures associated with depreciation was offset by the increase in tax revenues. As a result, the IMF assumptions behind the fiscal targets in the IMF-supported programs proved to be drastically wrong. In Asian crisis countries, program revisions accommodated a substantial part of the expansionary effect of changing economic conditions on the fiscal position from the start of 1998. Later in the programs, revisions went beyond accommodation to incorporate some additional stimulus. (Lane and Tsikata, 1999, p. 63)

3.2.3.3 The IMF's structural reform

(a) Objectives of structural reform

Other conditions under the structural reform scheme (which included trade and financial liberalization) are seen as rushing these developing countries to open up prematurely. From the developing economies' perspective, they are gradually liberalizing these sectors through different phases under the obligation of GATT. Rushing them to open up more rapidly can greatly interfere with the readiness and competitiveness of countries.[6] In fact, the rapid financial liberalization has been proven unwise in the case of Thailand where it had liberalized too rapidly without adopting proper measures. As a result, this contributed largely to the financial crisis.

For this part of the program, the World Bank and Asian Development Bank played essential roles in developing the structural components of the programs. In the case of Asian financial crisis, there are 4 major areas of structural reforms which have been suggested by the IMF, namely, (i) financial sector and corporate restructuring, (ii) governance and competition, (iii) current and capital account liberalization, and (iv) social sector reform. The strategy pursued in these reforms included main strands to structural measures: dealing with the consequences of the crisis and establishing a prudential framework to help prevent a recurrence. (Hamann and Schulze-Ghattas, 1999, p.67)

(b) The IMF's structural reform and the US Agenda

However, these structural reforms of trade and financial liberalization are seen by the public as conditions imposed by the IMF under pressure from the US as its main funding contributor with a majority vote (18 per cent), enough to veto any decision. Vasquez (1998), Feldstein (1998), among others, have often questioned what is the US interest in being the largest Fund contributor of the IMF while it is unlikely to use the Fund. During the time of crisis, the media was also keen to discuss the politics behind the IMF. In the New York Times, President Clinton was quoted as saying that a prosperous Asia will help American exporters, and if Asia sinks into recession, they would not be able to buy the goods the US would like to sell to them. (Sanger and Stevenson, 1998, p. 2) This justified the impression that the US control behind the IMF is for its own sake : trade purposes, and the liberalization of the financial sector enables

[6] Stiglitz (1998) pointed out that 'we need to be realistic and recognize that developing countries have less capacity for financial regulation and greater vulnerability to shocks and there is a need to take this into account in policy recommendations in all areas, especially in the timing and sequencing of opening up capital markets to the outside world and in the liberalization of the financial market sector. In addition, we must bear in mind too in designing policy regimes (such as opening up capital market) that we cannot assume that other aspects of economic policy, such as macroeconomic policy or exchange rates, will be flawlessly carried out.' (p. 8)

US investors to expand their business in developing countries as well as giving them access to hold local assets. William Niskanen, the former head of Reagan's Council of Economic Advisors, has also described the US relationship with the IMF as like being a limited partner in a financial firm that makes high-risk loans. So, what is the US getting out of being the largest fund provider of the IMF, which Robert Rubin insisted, did not cost the US tax payer a dime? (Vasquez, 1998, p.1)

Bello (1999) argued that the IMF's conditions of structural reform is merely a continuation of its policies since the early 1980s when the IMF and the WB imposed structural adjustment programmes on over 70 third world countries. These organizations took advantage of these indebted countries by lending them funds in order for them to service their debts to western countries, while imposing conditions that they accepted programs of radical liberalization, deregulation, and privatization. However, as the IMF has substantially transformed these Latin American and African economies in a free-market direction, it also presided over a decade of economic stagnation from which these economies have never really recovered. At the same time, the US stepped up its campaign to open up the Asian economies in the late 1980s but with the structural programme becoming ineffective, it relied on other mechanisms – trade sanctions and retaliation as well as a strong push for the Asian economies to implement the GATT agreement. However, the liberalization in Asian is not really getting underway. And the US sees the financial crisis in Asian as a golden opportunity to open up the Asian economies via the IMF channel. (p.2-6)

The IMF's lending to these countries is seen as a resource to service their foreign debts to foreign creditors, and structural reform is viewed as an instrument in getting Asian economies to open up to the western world. Commentators do not see the IMF's package as aiming to help the recipient economies, but to benefit the foreign creditors and the US. At the same time, structural reform was aimed to accommodate the outsiders rather than the countries in crisis and their people. In other words, it was the foreign creditors who were rescued, and its largest fund provider, the US, benefited, but not the recipient economies.

As Bello (1999) puts it,

> *From this perspective, the central element of the IMF program in Thailand, Indonesia and Korea is not the cutback in government spending nor the bailout of the banks but the drastic rollback of the trade and investment protectionism and activist state intervention that were the key ingredients of the 'Asian miracle'.*
>
> *The IMF, for instance, has gotten the* ***Thai*** *government to remove limitations on foreign ownership of Thai financial firms and is pushing the government harder to enact even more*

*liberal foreign investment legislation that would. allow foreigners to own land. ... Moreover, in the most recent re- negotiation of the IMF accord with **Indonesia**, the most prominent feature is the virtual abandonment of Indonesia's attempted at strategic industrial policy : the 'national car project' that has upset Detroit and Tokyo and the plan to manufacture indigenously designed passenger jets that has worried Boeing. ... In **Korea**, the centerpiece of the agreement with the IMF is Seoul's assenting to the IMF demand that foreign investors be allowed to own up to 55 % of the equity of Korea firms.*

Though the IMF has always been a unpopular figure in the third world, never has its connection to its principal 'stockholder' been displayed as prominently as it is today, when the words of wisdom coming from the US Treasury Secretary Robert Rubin and IMF Managing Director Michel Camdessus have become virtually indistinguishable. (Bello, 1999, p. 4-5)

3.2.4 What could have been a more appropriate measure and were there other alternatives?

Despite a prolonged currency depreciation of the countries under the program, the IMF has claimed that its basic objective of avoiding a depreciation and inflation spiral in both Korea and Thailand have been achieved. And even though monetary tightening has a cost for the real economies, the alternative would have been more costly. However, the IMF did not clarify its other alternatives and did not say if they were considered or presented to the governments under the programme. (Ghosh and Phillips, 1999, p. 50)

Hence, in finding out if there were such other 'alternatives' to the IMF's rescue package, we shall examine how the other countries[7] have tackled problems of the crisis and if their economies are doing any better. *The Philippines* was already under the programme and *Singapore* was less severely affected because it had no short-term debt problem. However, *Malaysia* who exhibited similar symptoms as Indonesia, Korea and Thailand and should have come under the programme, instead took its own route and declared a debt moratorium to stop outflows and resume the fixed exchange rate regime to stabilize its currency. These immediate responses, at the time, were seen as irresponsible as the country seemed to have escaped having to confront the problems. Of course, these measures immediately stopped outflows and currency depreciation and fulfilled the Malaysian government objectives. Observing the currencies of countries under the programme depreciate sharply with contracting economic growth rates, perhaps the Malaysian approach was the most appropriate as an *immediate measure* to tackle the problem at the time.

[7] These countries are other East Asian economies (Malaysia, the Philippines and Singapore) which have been affected by the Asian currency crisis *but* did not come under the IMF programme. These countries are also included in the studies in Paper II.

In addition, the Malaysian's *immediate* measure to tackle confidence crisis was proven effective in protecting local businesses from going bankrupt and in stabilizing its economic growth. In such a confidence crisis as the Asian crisis, the moratorium measure has ironically turned out to be more of an appropriate measure and less harmful to the declared country's economic and creditworthiness. In the end, debt moratorium is, perhaps, only appropriate in the case of Malaysia due to its unique characteristic which proves that, among a great number of similarities the East Asian countries share, a small difference may not allow them to respond effectively to the same measure.[8]

3.2.5 Summary

This section has discussed, first, the role of the IMF in the international market and its understanding of the crisis. It then gathered arguments from the two sides who are in favour of the IMF's conditions and those who dislike the conditions imposed on Asian economies in crisis. What the institutions believed to have been the cause of the Asian financial crisis was explored to evaluate whether the conditions imposed on the Asian economies were justifiable. Although the IMF has recognized that the Asian crisis was caused by a very different set of factors than those that the IMF has historically handled, the IMF has, nevertheless, imposed what is known as normal prescriptions, policy tightening and structural reforms, on these Asian economies. As a result, these policies failed to reverse the situation at the onset of the crisis. This section then looked closely at objectives of each of the IMF's conditions imposed on the three Asian economies, Indonesia, Korea and Thailand who have come under the programme and discussed whether the IMF objectives have been met.

1. For the *monetary tightening* scheme, the interest rate rise failed to rescue the currencies for many reasons. (1) Currency depreciation was driven by investor's panic together with the loss of market confidence rather than something fundamental. Monetary tightening may thus not be the appropriate solution. (2) Although monetary policy is known to be effective in short-run, it is not fast enough to tackle the sharp fall of currency, instead, a more immediate and direct measure is needed. (3) Monetary tightening is seen as unnecessary because it is also aimed to correct other problems such as inflation which these Asian economies are not confronting. In addition, high interest rates increase the debt burden on

[8] In the midst of the crisis situation, governments were faced with difficult choices of whether to intervene by imposing capital controls to maintain confidence or to let financial markets collapse and make bad investment pay the price. While the Malaysian government has taken the first choice in saving its economy from financial crisis, it is important to recognize that the success of such intervention will result in moral hazard in domestic lenders and lose foreign investors' confidence in the future prospects.

local firms, on top of exchange rate loss. This has, in fact, put many businesses in bankruptcy, many of which could had survived if other measures[9] have been implemented. However, it can be argued that the rise in interest rates was ***not*** sufficient as an immediate measure to tackle the sharp currency depreciation in Asian economies, which was different from other crises in the IMF's past experiences.[10] Since, in the first place, the weakness in financial market and accumulation of short-term private debts were the cause of currency floating and outflows, why could the IMF not concentrate on correcting the currency depreciation and outflows from the financial market perspective? From several financial institutions' and business owners' perspectives, there are several things which could have been done in the area of financial market to stop the outflows and thus curb the currency depreciation.

2. Likewise, for *fiscal tightening*, according to the IMF Occasional Paper (1999), the IMF had to change course from fiscal tightening to fiscal stimulus by early 1998. This was since the IMF has underestimated the recession which had a substantial effect on fiscal balances, primarily through its negative effect on revenues. At the same time, exchange rate depreciation also had a substantial negative impact on corporate income tax receipts, as the domestic currency cost of servicing foreign-currency-dominated debt was devalued, lowering corporate taxable income. At the same time, commentators also pointed out that as the crisis had not been brought about by the government profligacy, the IMF's inappropriate prescription in squeezing the government budget killed off the remaining active stimulus to capital expenditure. The government stimulus package was probably the only channel the economy had at that time to reverse the situation in the period in which the private sector was not keen on investment. However, since budget balances in these countries have been in surplus, it was not difficult for the IMF to later reverse the course of the policy. As a result, later in the programmes, revisions went beyond accommodation to incorporate some additional stimulus. Thus, overall, how appropriate are the policy tightenings in the case of the Asian crisis? Nixson and Walters (1999) stated, 'A diagnosis which centralized financial panic rather than macroeconomic disequilibrium also denies the need for the sharp policy tightening required by the IMF.' (p. 516)

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[9] Section 3.4 discusses measures which have been suggested by the insiders as additional / alternative policies to the closure of financial companies.

[10] See Bordo and Schwaltz (1998) for details of the IMF past experiences in rescuing economies in crisis.

3. However, the question remains whether *structural reform* through economic liberalization by taking up practices and measures already being practiced in developed countries, are appropriate for developing countries? As pointed out by Hamann (1999), the crisis was in part due to rapid financial liberalization schemes in these countries. What is always most crucial is not the policies themselves but the timing and sequences of the policies After all, the IMF needs to take many considerations into account, such as the economic conditions of these countries and the readiness of domestic firms. More importantly, these structural reforms of trade and financial liberalization have been seen by commentators as political issues between the IMF and its largest fund provider, the US.

Thus, unlike the first two policy tightenings, the structural reform is more of a long term policy. And while it is still being implemented, it is the only area among the IMF's attached policies where *'how the package could have been tailored differently'* can actually make a contribution. It is also the most critical area, as a reform can bring about stronger economic fundamentals which will help these economies in obtaining more stable growth as well as shielding them from a economic crisis. If the conditions are not effective in correcting the problems then the funds and conditions are considered inappropriate, however, if the conditions actually induce weak economic fundamentals in the economies, the IMF conditions are then not only inappropriate but harmful. Once harm is done, this could have multiple effects in terms of currency depreciation, depressing demand and causing high inflation and slow growth. Worse yet, in the long term, it could prolong the process of economic recovery and dampen investor confidence. An objective of this paper is to evaluate, from the domestic perspective, how the IMF's package could have been tailored differently in assisting these economies. These alternative measures, suggested by the domestic perspective, Thais, will be discussed in section 3.4 (after the methodology of the analysis is explained in the next section, section 3.3) using the same framework as in this section.

Section 3.3 : Methodology

The previous section has argue that a key failing of the IMF package of policies was that they were insufficiently tailored to local conditions, and to the underlying fundamentals of the Asian economies. This being so, could local knowledge have produced a more appropriate set of measures? In order to explore this issue, a questionnaire was administered to a number of Thai people who were in the position of observing the crisis from *within*, as it evolved. The intention is to explore their perceptions of the crisis, the IMF package, and of alternative measures that could have been adopted to deal with the situation. Thus, first, this section presents the methodology of the survey, and discusses sample selection and response rate. The questions are also presented with their rationales. Then, this section explains why respondents are suitable to fill this set of questionnaire.

3.3.1 Sample set and sample size

The questionnaire has been administered to several institutions in 3 different sectors which are referred to as financial sector, public sector and academic sector as shown in table 3.3.1. How the set and the size of sample have been drawn from each institution is described below.

Table 3.3.1 : Sample set and size

Sectors	Handed out	Came back	Excluded*	Net	sector share (%)
Financial					
FINCO	88	77	5	**72**	**53%**
BANK	60	54	13	**41**	
Public					
FPO	31	31	7	**24**	
BB	28	28	11	**17**	**26%**
TDRI	9	9	1	**8**	
NESDB	6	6	0	**6**	
Academics					
BOT	10	6	0	**6**	
UNI	33	33	0	**33**	**21%**
WB	5	5	0	**5**	
Total	**270**	**249**	**37**	**212**	**100%**
Percentage of the total		**92%**	**14%**	**79%**	

*questionnaires with unknown years and under 2 years of working experience have been excluded

Financial institutions (FINCO) and commercial banks (BANK) are two main target groups under the financial sector because this particular sector has been the most severely damaged by the crisis. Prior to the crisis, there were 142 financial institutions and 16 commercial banks.

However, more than one third of financial institutions have been suspended and about 20 surviving institutions have come under strict supervisions and/or nationalized as a result of the crisis. Therefore, it is the sector which received relatively high priority for restructuring and special attention from the IMF and the government.

The public sector consists of several divisions -- the Fiscal Policy Office (FPO) and the Bureau of the Budget (BB) who are responsible for making fiscal policy have been asked for their opinions on these issues. In addition, social sector reform is also included in the IMF's rescue package whereby people at the Thailand Development and Research Institute (TDRI) and National Economic and Social Development Board (NESDB) are asked for their opinions particularly on the social issue. Lastly, high ranking officials at the bank of Thailand (BOT) who are responsible for making monetary policy together with lecturers in economics department from 5 universities (UNI) were asked to complete the questionnaire. Also, 5 of the 30 officials at the World Bank representative office in Thailand (WB), whose responsibilities involve in the matter, were kind enough to cooperate.

Therefore, in terms of the sample set, parties directly involved in the event of financial crisis are reasonably included in the sample. Likewise, the sample size has been drawn from qualified respondents at each of the institutions. For the financial sector, questionnaires were handed to 1 or 2 senior managers in the foreign exchange department, economic research division and the fund managing department. On the other hand, for the public sector, heads of the divisions down to junior officials were asked to fill in the questionnaires. Lastly, 6 officials at the BOT, 33 lecturers at UNI and 5 officials at WB made up the total of 270 respondents. (Please see table 3.3.1) However, as the objective of this research is to gather evaluations of inside observers of the IMF's package and to draw up alternative measures to the IMF's imposed conditions, it is important that respondents have long experience and background knowledge in the field. In order to ensure that these criteria are met, arrangements were made with target respondents before questionnaires were personally delivered to them.

These questionnaires were collected within 1-3 weeks after they were distributed, during which period some respondents were monitored by personal visits and / or phone calls.[11] This contributed to the high response rate of 92 per cent which is 249 out of possible 270 responses.

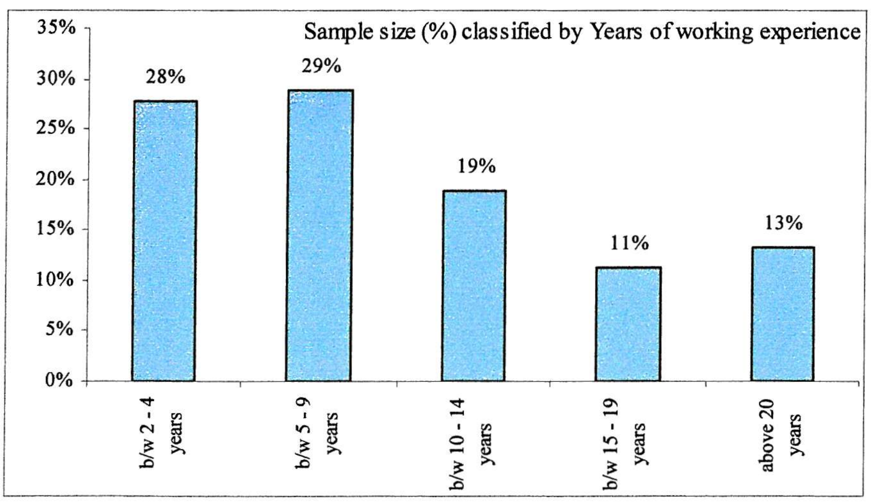
[11] The questionnaire was administered during May-June 2000.

Nevertheless, respondents who did not give information on years of their working experience and those with less than two years of working experience have been excluded from the sample in order to ensure that only those with certain qualifications are included. This is important since respondents will be asked for their perceptions and personal judgements in order to form an alternative policy to the one which the IMF has proposed and the Thai government has accepted. In other words, their responsibilities and experience in the field are what make their perceptions of interest in this matter. As a result, the sample size has been reduced to 212 respondents or only 80 per cent of what was originally aimed for. Therefore, responses from 212 respondents of the possible total 270 are analyzed for in this research.

3.3.2 Qualification of the respondents

The questionnaire started off by asking a few questions on the personal characteristics of respondents. If we assume that middle managers should have at least 5 years of working experience, over 70 per cent of the respondents are then middle managers, at the same time, two thirds of this 70 per cent has between 10 to more than 20 years of working experience. (Figure 3.3.2) In addition, two thirds of the respondents hold at least one degree in economics. It is also noted that most of those who do not have formal training in economics have degree(s) in Business Finance and/or Engineering. These are people in debt and foreign exchange departments at financial institutions.

Figure 3.3.2 : sample size (%) classified by years of working experience



3.3.3 Descriptions of questions

The questionnaire[12] is divided into 4 parts each containing 2 sections as shown in table 4.2. (Please see Appendix A and B for the questionnaire) Section A attempts to find out the perceptions of respondents on the financial crisis in general. Section B then asks respondents about their perceptions of the IMF's assistance regarding the loans and to evaluate, in general, the IMF's conditions attached to the loans. These sections are discussed in part I : respondents' experiences with the crisis and the IMF.

Table 3.3.3 : Summary of questions

Section	Issue	Target group
	PART I	
A	General questions about the crisis	All
B	Perception of the IMF & its package	All
	PART II	
C	Monetary policy	All
D	Fiscal policy	All
	PART III	
E	Structural reform	All
F	Prospect for the future	All
	Part IV	
G	*Financial sector reform*	*COMBK, FINCO*
H	*Social sector reform*	*TDRI, NESDB, WB*

The issues which have attracted criticism from the general public are debated in section C and D on monetary and fiscal policy, respectively. Not only do these sections ask respondents whether each of the IMF's package have been successful, they also ask for alternative policies or ways in which the policy could have been tailored differently. Section C and D focus particularly on the monetary policy and fiscal policy which have been implemented right at the beginning when the crisis broke out in the mid 1997. These discussions can be found in part II : Policy tightening – Immediate policy response to the financial crisis.

Part III is on structural reform and the long-term economic recovery plan. This part begins with section E which focuses on the structural reform that is being implemented at present. Section F then asks about macroeconomic policy in the future, and the direction and speed in which trade and financial liberalization should be pursued. It has now been three years the crisis and the Thai economy is beginning to recover. Therefore, it is helpful to clarify in which direction

[12] Questionnaire is in *English* and that open-ended answers are reported as they were written by respondents. (Appendix E)

the economy should be heading in order to maintain economic growth and stability in the future. This section also asks questions on corruption and the cause of inefficiency, which is of much concern to the private sector and foreign investors.

Lastly, part IV contains section G and H which ask specific questions regarding financial and social sector reform to respondents in financial sector and other institutions concerned with social sector (TDRI, NESDB and WB), respectively. Section H asks the concerned parties to specify problems using, mostly, open ended questions. For example, G asks respondents in the financial sector to identify problems they were confronting and the nature of the assistance they required and received from the government. Likewise, H asks officials at the divisions responsible for social policy making to identify existing social problems and the way in which they can be corrected.

To some extent, part III and part IV are considered the most important parts because as these structural reforms are being undertaken, suggestions can help to improve the design of structural reforms. Since these reforms are mostly involved with domestic fundamentals, it is particularly helpful to examine what respondents, from their domestic perspective, have to say about them. Indeed, these suggestions on structural reform may help the government to strengthen economic fundamentals, ensure economic growth and stability and reduce vulnerability in the future.

3.3.4 Summary

This section has presented and discussed the methodology of the survey and how the sample set has been drawn. Then, it presented personal information of respondents and used the background knowledge together with years of working experiences in justifying their qualification in completing the questionnaire. Furthermore, it briefly discussed the structure of the questionnaire which are divided into 4 parts and several sections following the framework discussed in Section II. Likewise, this framework is the same one and the same order which the results and analyses will be reported in the next Section.

Section 3.4 : Results and analysis

Unlike section 3.2 which gathered perceptions and analysis of the *outside observers* on the IMF's conditions on three Asian economies in crisis, this section discusses perceptions on the same issues gathered from the *inside observers* in Thailand and presents it in the same framework. Although there has been a large and growing literature about the crisis written by outside observers, there has never been any gathering of the inside observers' perceptions of the same issue. This paper is doing just that. This section offers the view from the domestic perspective in hoping to shed some light on why the IMF's assistance has gone drastically wrong in rescuing the Asian economies in crisis. This inside observation is gathered by a survey as already discussed in the previous section. This survey does not only allow us to reveal the perceptions from the domestic perspective, it also allows us to go a step further in exploring alternative measures to the IMF's conditions, which have been criticized by commentators as inappropriate.

This section discusses the respondents' opinions about the Asian financial crisis, the government's response to the crisis, and most importantly, their evaluation of the IMF's conditions and suggestions on alternative measures. As mentioned earlier, the evaluations and suggestions on the alternative measures to the IMF's conditions are the main objective of this paper in offering different perspective from inside observers as opposed to the outside observers who have merely observed the crisis. Although the previous section has explained how the sample set in this survey, inside observers, can fairly represent the domestic perspective, the question arises in this section as to what extent their opinions are unbiased and could be taken into account as valuable recommendation for the government in proceeding with the economic recovery plan. One may ask whether their perceptions vary according to their own positions in the private sector, financial sector, or academic sector. Furthermore, would it be the case, when respondents are asked for alternative measures to the IMF's conditions, that their recommendation as policy-makers and policy-takers perspective be so different toward their interests?

The survey results told us that respondents' perceptions on most issues are surprisingly similar regardless of which sector they belong to and that their opinions always harmonized to either end of the scale, for example, when they are asked to evaluate policy or rank their preferences on the scale of 1 to 4. And although one third of the respondents do not have formal training in economics, there is no evidence to suggest that they have significantly different perceptions of the crisis, perhaps because of their experience as practitioners in business and finance. In other words, differences of opinions within and between the three sectors are not noticeable regarding their positions and background knowledge. Discussion in this section is divided into 5 parts following framework previously discussed in Section 3.2. **Part I** discusses respondents' experience with the crisis and their perceptions on the IMF's conditions. **Part II** and **Part III** discuss policy tightening and structural reform imposed by the IMF, respectively. **Part IV**, then, covers specific issues on financial and social sector reforms which were discussed exclusively by respondents in such sectors. **Part V** concludes by examining the overall picture of the respondents' perceptions[13] on the IMF's conditions and, most importantly, its relevant on policy prospect.

PART I : respondents' experiences with the crisis and the IMF

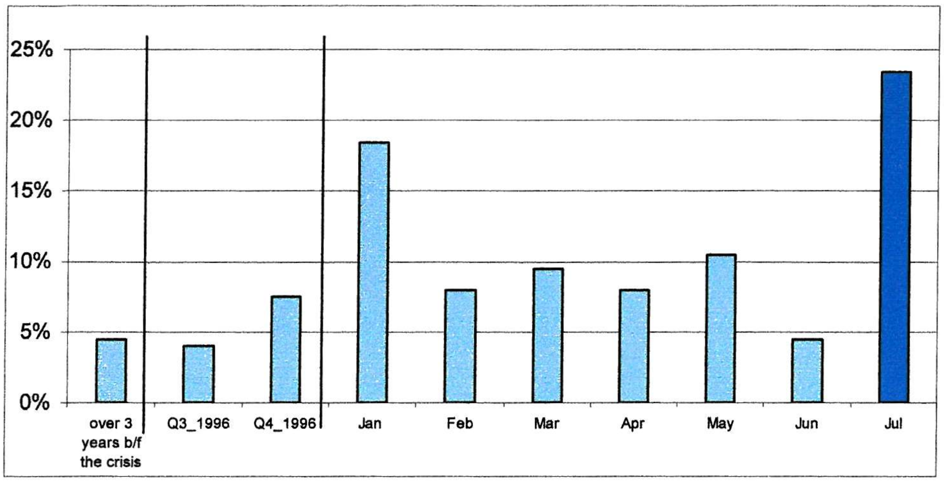
Section A : Respondents' perceptions on the financial crisis in 1997

This section aims to investigate the perceptions of respondents of the financial crisis. It asked respondents whether or not they anticipated the crisis, and their views of the causes of the crisis. It also asked respondents to rate the government's handling of the crisis as well as their views of any alternative policies to the flexible exchange rate regime which the government adopted.

A series of speculative attack on the Thai Baht began in early 1997. Only one third of the respondents, most of which belong in financial institutions, saw that the crisis was coming 6 months before it actually occurred. Indeed, 50 per cent of the respondents has only become aware of the attack 3 months prior to the crisis and half of these people had no idea of speculative attacks until the 2nd of July when the government actually announced the floating exchange rate regime. **(q. 1)** Survey results also show that most of people in the private sector were aware of the attack which is not surprising as they are in the financial market. The question arises as to why other sectors were largely unaware of the situation. **(Figure A1)** Were they not aware of this only because they were not in the financial market while the BOT had occasionally intervened the market during several speculative attacks since the beginning of the year? Or is this because the BOT's interventions in the money market were never public news? The Prachuabmoh's report told us that several interventions prior to the financial crisis were not publicly announced and only high ranking officials at the central bank and Finance Ministry knew of these interventions.

[13] Please see Appendix E for *all* of the actual statistical results for each question, however, some of the figures will also be shown in the text. The discussion of each question is labelled as q1, q2, q3,…., q41 in blue.

Figure A1 : When did you become aware of the speculative attack on the Baht?



It is argued in the literature review (section 4.3) that neither the hypothesis of weak economic fundamentals (Krugman, 1979) nor the self-fulfilling hypothesis by Obstfeld (1995) can explain what happened in Asia very well as the cause of the crisis lies in moral hazard of under regulated financial markets with the presence of healthy economic conditions.[14] His model suggests that it may be difficult to find a tight relationship between fundamentals and crises, as sometimes crises may take place without a previous significant change in fundamentals. (Kaminsky and Lizodon, 1998, p. 7) However, it is important to note that when the crisis began to spark in the early 1997, certain economic indicators like GDP, investment, international trade or even unemployment and inflation may officially only be available up to 1994/95 due to the time lags that occur in publication of data. Therefore, at the onset of the crisis when commentators referred to strong economic fundamentals, they were looking at the set of data in at least a year or two prior to the crisis. Economic data such as GDP, investment, and international trade were looking strong in 1994/95, a few years preceding the crisis.

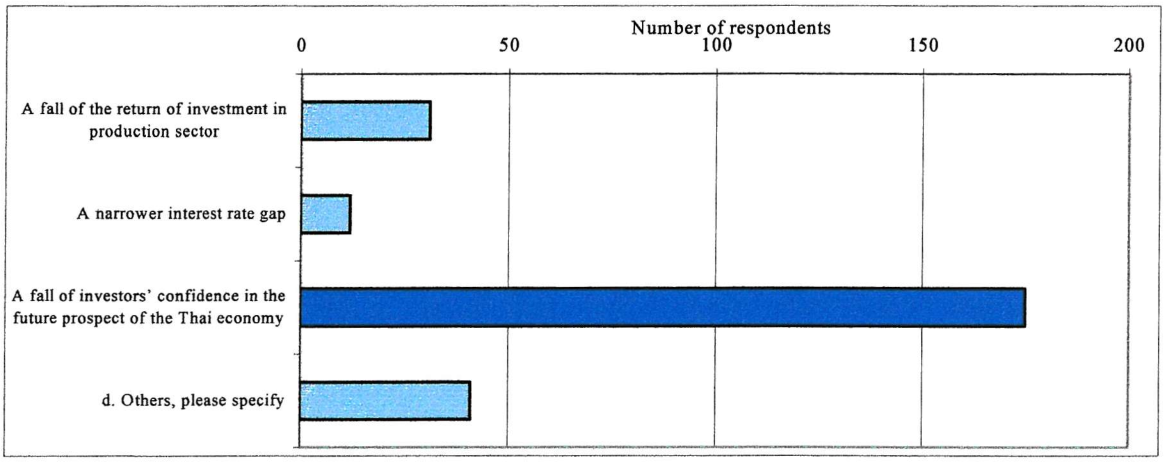
Even at the time of writing in 2000, when the official data up to 1998 have become available, the record shows that although economic indicators in 1997 are obviously weaker relative to 1994/95, these indicators are not alarming. In contrast, other *accounting* data such as short-term foreign debts, capital account, and stock market, which were available with a few month lags, showed clear sign of deterioration. Hence, these are variables which have, indeed, indicated to investors that Thailand was facing trouble. In other words, it was this set of indicators that have

[14] Paper II on central bank independence (section 2.2 : Comparative analysis of the six Asian countries) discussed the two types of macroeconomic indicators and financial market indicators and explained how the collapse in financial market could occur with the presence of healthy economic conditions.

triggered the crisis not the other set of indicators which are acclaimed as economic fundamentals.

As a result, 70 per cent of the respondents thought the main reason for capital outflows was a fall in investors' confidence sparked by accumulation of short term debt rather than weak economic indicators. **(q. 2)** **(Figure A2)** Worsening of the national accounts (rising C/A deficits and decreasing BoP surpluses) and, in particular, accumulation of short-term debts is the only distinct economic indicator which became alarmingly high during the years preceding the crisis. Of several choices, respondents think the rising current account deficit was the main reason which had triggered the speculative attack followed by the accumulation of short-term debts and outflow of foreign capital from the stock market, respectively. In addition, most respondents stated that the exchange rate was unrealistic and that foreign exchange dealers had been expecting the currency to devalue. **(q. 3)**

Figure A2 : Causes of the foreign capital outflows (choose whichever apply)



Since the central bank had exhausted its foreign reserves in defending the Baht, they had no other choice but to let it float. Two thirds of the respondents agreed that there was no other alternative but to let the baht float while the rest thought that the government should have pursued partial devaluation and imposed capital control *like Malaysia.* **(q. 4)** It is important to note here that the group of the respondents who were in favour of capital controls were probably influenced by how successful the Malaysian government was in using capital control in gaining back its economic momentum. In contrast, the group that is opposed to the adoption of capital controls pointed out that imposing capital controls would have meant that after all these years of financial liberalization, Thailand had gone back to the beginning. In other words, they believe that imposing even a *temporary* capital restriction would destroy the country's commitment to financial liberalization. Respondents also believed that if the government imposes capital controls every time the country is threatened by capital flight, it would discourage foreign investors from doing business with the local economy, as the government would restrain them from withdrawing capital out of the country whenever the country faces financial problem.

However, these beliefs were built on the assumption of strong confidence in Thai economic prospects and, in particular, on unanticipated severity of the crisis. It is discussed in section D how a number of respondents have changed their mind about the idea of capital controls as being inappropriate. Indeed, after having experienced what may have been the worse financial market turbulence in history, and after having seen how the Malaysian economy has escaped from the financial market turbulence by announcing capital controls, this measure of capital controls may have been a more appropriate solution after all. The question here is whether or not capital controls would have been viable for Thailand during the time of the crisis? This controversial issue is discussed more thoroughly in section D of part III.

At the same time, more than half of the respondents (57%) thought it would have been more appropriate if the Baht was devalued down by certain percentage instead of freely floated. The majority of respondents in favour of devaluation believed that the Baht should be devalued down by 20 per cent. Apparently, the Baht/USD had depreciated by over 100 per cent during the 3 months after the crisis, it then climbed back to stabilise at 40 Baht/USD from the beginning of 1998 onward. This level of exchange rate at 40 Baht / USD is equivalent of 45 per cent devaluation from the fixed exchange rate prior to the crisis. **(q. 5)**

As a result, almost 90 per cent of the respondents thought the crisis has turned out to be worse than they first anticipated. **(q. 6)** This shows that respondents have underestimated the power and influence of speculators, and at the same time, they have under estimated the severity of financial market problems. The record showed that, after several revisions, figures of bad loans has turned out to be much higher than expected. Therefore, on the scale of 4 to 1 from good to bad, respondents have rated the Thai government's handling of the crisis at 2.2 on the aggregate average and interestingly, the average score of each sector is similar. **(q. 7)**

<u>Section B : The IMF's assistance and its conditions</u>

Among heavy criticism from the public about the IMF's inappropriate package in rescuing the Asian financial crisis, 80 per cent of the respondents said they agreed with the Thai government's acceptance of the IMF's assistance as they thought there was no alternative. **(q. 8)** Nevertheless, respondents were asked to rate the possible alternative policies of *partial devaluation of* *currency, imposing capital control, and borrowing from other sources.* The survey results showed that respondents rated all of these alternatives around 2.2. **(q. 9)** This implied that, on average, respondents are neutral between these alternative policies. At the same time, the below-average scores also meant that they do not think these policies were appropriate in any case.

One explanation of this unusual distribution of scores is that some respondents did not know of other international sources of borrowing, therefore, they did not see this channel as an option. Anonymous officials at the Ministry of Finance also pointed out that the government had asked several central banks and international organization for the loans but that these attempts were unsuccessful. Furthermore, they realized that the government would never accumulate enough loans for the bailout; and, in any case, borrowing was not the correct strategy to cope with the crisis. It is likely that some respondents were aware of this attempt and were therefore influenced by it. As a result, respondents' opinions are evenly spread between scores. **(q. 9b)**

Regarding the amount of USD 17.2 billion Loans, two thirds of the respondents thought it was sufficient.[15] **(q. 10)** They also believed that the government acceptance of the IMF's assistance helped increase investors' confidence. **(q. 11)** Accepting the IMF's assistance has two important implications. First, it means that the government has admitted that they have problems and, second, it agreed to undertake certain reforms in exchange for USD 17.2 billion loans they need for rebuilding the economy. Thus, it is these implications that are helpful in increasing investors' confidence in the economy. However, accepting that the economy needs assistance is different from agreeing that such assistance offered is appropriate. The survey showed that 56 per cent of the respondents did not think it was appropriate for the IMF to impose conditions attached to loans on top of interest payment. **(q. 12)** When asked to rate, on the scale of 4 to 1 from essential to inessential, how essential were the IMF conditions in assisting the economic recovery, the weighted average came out at 2.2. **(q. 13)** Nevertheless, this is not to say that the IMF's attached conditions are not helpful in reviving an economy facing financial crisis. **(figure B13)** Instead, it is the fine-tuning of conditions in terms of timing and intensity that respondents thought were inappropriate. Thus, the majority of respondents agreed with accepting the IMF's assistance and its loan size, but it is the attached conditions that they dislike.

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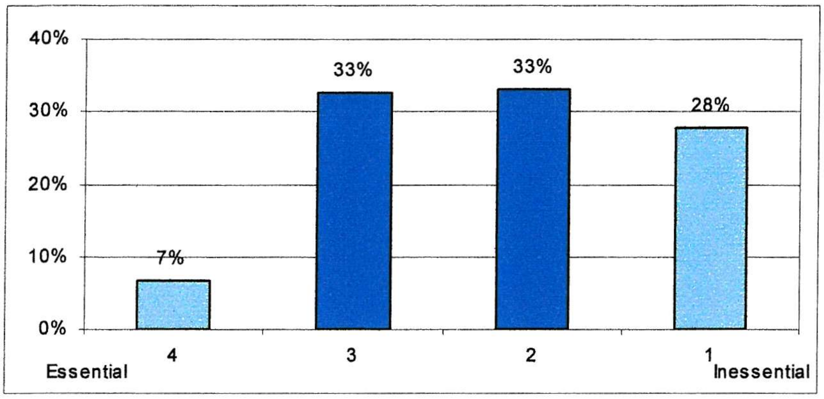
[15] Sengupta (2000) pointed out that 'developing countries adjusting to globalization have financial needs entirely different from those the IMF was originally set up to meet. Countries in the first phase of globalization with current account convertibility need growth-oriented adjustment programmes. Those in the second phase (Asian economies) with capital account convertibility need protection from severe market fluctuations. The IMF must play a supportive role, and to do so, it needs increased quotas and funds from other development banks. It could also be a lender of the last resort to countries which become objects of negative market expectations. (p. 115)

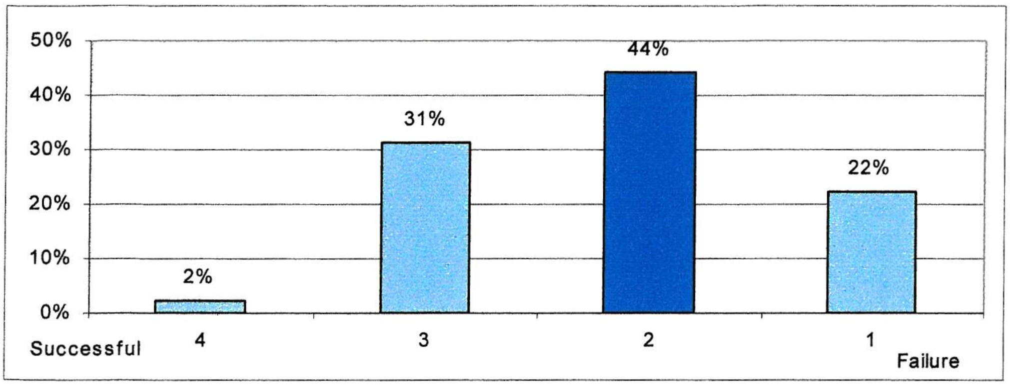
Figure B13 : How essential were the IMF conditions in assisting recovery?



Half of the respondents answered an open ended question of *what other assistance could the IMF have offered the government in dealing with the crisis?* **(q. 14)** In other words, if they dislike the IMF's attached conditions, what did the respondents think the IMF could have offered instead? These suggestions can be grouped into 3 different categories which will be discussed in order of popularity. First, the magnitude and timing of monetary and fiscal tightening was criticized. Respondents blamed this unnecessarily aggressive tightening on the IMF's lack of knowledge of the local economy. Flexibility and performance criteria are also suggested as strategic policies in using monetary and fiscal tools. As one of the senior managers who has more than 30 years of working experience said, 'never apply a shock treatment to a weak patient.' Some of the respondents also suggested that the IMF should have negotiated the roll over of short-term loans with foreign creditors in order to buy some time to slow down capital outflows as well as currency depreciation. While some others have gone further in suggesting that the IMF should have guaranteed repayment of these short-term loans. These suggestions, however, could induce the moral hazard.

Secondly, respondents had expected more direct assistance to the real sector, as they suggested that certain exporting industries should have been given financial support. This issue is also related to the previous comments on the first issue of aggressive monetary tightening. This was because of high interest rates which worsened the financial position of many businesses in the real sector. This is especially harmful to exporting industries because they were already suffering from exchange rate loss and with rising interest rates, their debts burden had been worsening. Hence, this was why some businesses were unnecessarily wiped out.

Figure B15 : Has the IMF assistance been successful in assisting recovery?



Lastly, respondents stressed that the government needed, in particular, technical assistance in dealing with financial problems. This assistance could be the establishment of consultant teams of professionals to deal with each problem; cooperation between private and public sector in identifying problems and solutions; the establishment of a monitoring body to evaluate the progress; and that the IMF representatives should spend more time with the authority in seeing the problem through. They also thought that the government was unorganized in planning a reform package. Therefore, it seems that respondents do not think the government alone was capable of handling the crisis not to mention that they only trust the IMF to a certain extent, as the rating they gave to the overall IMF assistance was only 2.1. **(figure B15)** This is, again, on the scale of 4 to 1, ranging from 4 as being successful to 1 as being failure. **(q. 15)**

Part II : Policy tightening – Immediate response to the financial crisis

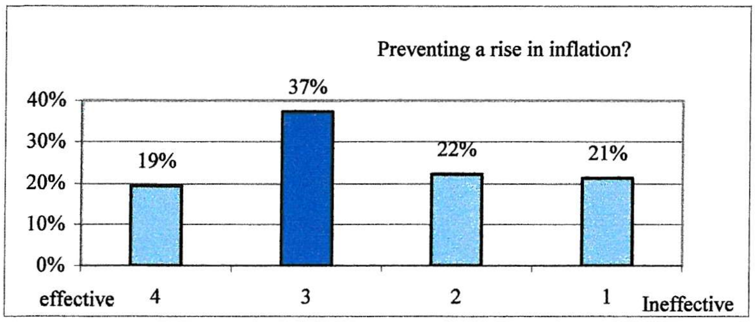
Section C : Monetary Policy

This section[16] discusses the monetary tightening imposed by the IMF. The questionnaire respondents were asked to rate how effective was the substantial rise in interest rates in curbing currency depreciation, preventing inflation and reducing foreign capital outflows. These 3 problems, as the IMF has claimed, were major concerns in which rising interest rates were intended to deal with. (Ghosh and Phillips, 1998, p. 35) On the scale of 4 to 1 ranging from 4 as being effective to 1 as being ineffective, respondents gave 2.5, 2.2 and 1.9 to rising interest rates in dealing with rising inflation, currency depreciation, and foreign capital outflows, respectively. **(q. 16)**

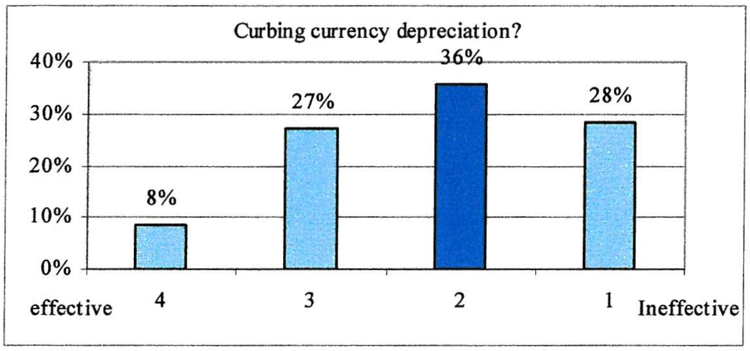
[16] This section on monetary policy contains question 16-21 (of the questionnaire), however, question 19-21 are discussed in section G : financial reform.

Figure C16 : How effective did the substantial rise in interest rates in dealing with a inflation spiral, currency depreciation and foreign capital outflows?

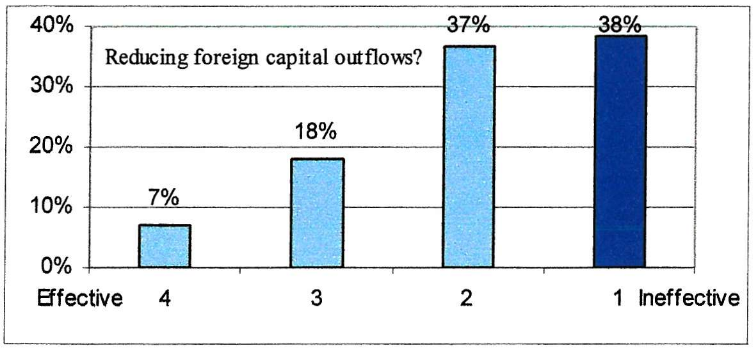
16.1 Preventing a rise in inflation



16.2 Curbing currency depreciation



16.3 Preventing capital outflows



While the IMF has imposed substantial interest rate rise in dealing with *currency depreciation*, the record showed that the Baht depreciated over 100 per cent within three months of the hiking of interest rates. Not until nearly a year later did the Baht currency bounce back to stabilize at 40 Baht / USD. This exchange rate is approximately 50 per cent lower than the level prior to the crisis when the rate was fixed at 25 Baht / USD. This evidence suggested why respondents gave a below average rating of 2.2 to the IMF's suggestion on interest rate tightening. Disagreement with the IMF's recommended policy tool of rising interest rates has led us to ask another question of what did they think then were alternative measures in dealing with currency depreciation, rising inflation and capital outflows? *For capital outflow problem and currency* *depreciation,* most respondents suggested that the government should impose capital controls as well as gradual currency devaluation. **(q. 17a and 17c)** It was discussed earlier that respondents did not think these policies were appropriate during the time of the crisis. At the same time, if the Thai government wanted to borrow loan from the IMF, it was unlikely that the IMF would have allowed such policies as the institution is keen on promoting financial liberalization and flexible exchange rates.

In clarifying this controversial issue, half of the respondents accepted that during the time of the crisis, they thought imposing capital controls was highly inappropriate. However, after having seen how the Malaysia government depreciated the Ringgit at a certain level and how the economy was brought back its momentum by imposing capital controls, these alternative policies may had been appropriate after all. It is also interesting to note that the Malaysian government has witnessed Thailand as the first Asian country to have experienced the financial crisis and its choice to have come under the IMF's programme; and once the crisis hit the Malaysian economy, its government chose a different path.

For the inflation problem, most respondents said that they did not anticipate a problem with inflation as a large part of the CPI is comprised of food items which are domestically produced, thus, unlikely to be affected by currency depreciation. In fact, a fall of demand as a result of economic depression during the crisis would automatically hold the price from rising. Nevertheless, if there is a pressure of inflation to rise, price controls on food items and an increase in import taxes on luxury goods would be an effective measure in controlling the price level. Survey results showed that respondents gave 2.5 to the effectiveness of interest rate rise in curbing inflation. This is the highest score in comparison with the other two problems of currency depreciation and capital outflows which respondents gave 2.2 and 1.9 to the effectiveness of the interest rate. **(q. 17b)**

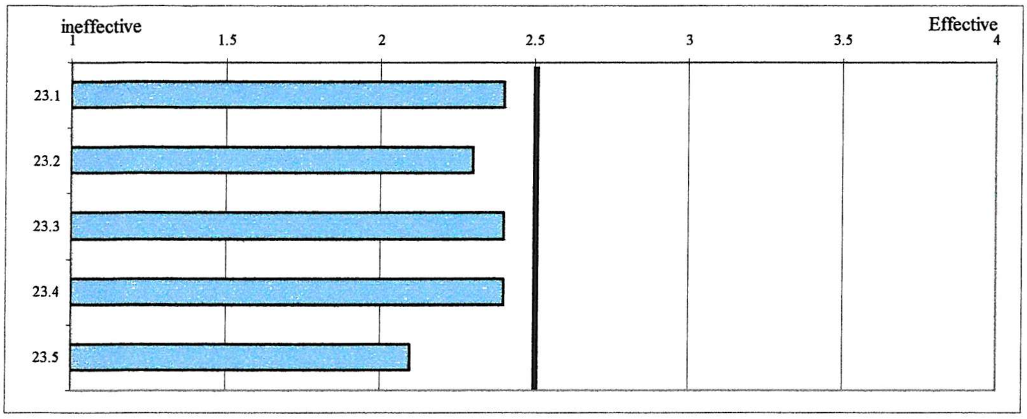
In addition, respondents also identified several features of Thailand in the crisis that prevented monetary tightening from being effective. These are, for example, fragile financial markets which had created pressure from speculators so severe that rising interest rate were not enough to curb falling exchange rate, if it was the correct measure at all for the particular market panic situation. Furthermore, respondents stressed that they did not have confidence in the government's handling of the crisis as the floating exchange rate was forced upon the authority to adopt rather than being willing to do so. And even after the acceptance of the IMF's assistance, the currency was still sliding down further while capital was flowing out of the country which showed that foreign investors were not confident in the way the crisis was being handled. In relation to the foreign investors' loss of confidence, the result showed that political instability has been the major concern which contributed to an unclear direction of the way forward for economic recovery. In any case, these features of fragile financial markets, lack of confidence in the economy, and political instability may not be uncommon for economies facing financial crisis, but their combination together with an intense pressure from the international market had made the Asian financial crisis much more severe than anyone would have expected. **(q. 18)**

Section D : Fiscal Policy

This section focuses on fiscal policy which has been imposed by the IMF and, like the prior section, it asked respondents to evaluate the effectiveness of fiscal tightening in dealing with the crisis and suggest alternative policies, if any. Before we begin with the discussion, it is important to note that this part of the questionnaire on fiscal policy had a high rate of unanswered questions (nearly 10 per cent) comparative to other sections which rarely have unanswered rate of 1 per cent of less. However, in the case of fiscal policy, this high rate of unanswered questions may be explained by several reasons. First, the fiscal policy is known to have less impact in directing the economy comparative to monetary policy both in terms of intensity and timeliness. Second, the government has rarely used fiscal stimulus to direct the economy and even if it has, it was not excessive. Third, it might have been difficult for respondents to see the need for a budget cut since the government has been disciplined with its spending, with a record of budget surplus for over a decade prior to the crisis. As a result, the survey showed that more than two thirds of the respondents did not think it was necessary to reduce government spending during the crisis. **(q. 22)** Partially, this was because the government had been enjoying fiscal surplus for almost a decade prior to the crisis, hence, respondents think there was no need to squeeze the budget, given the circumstance, it could be the only channel to stimulate the economy and reverse the situation. However, the IMF insisted that fiscal discipline is needed in order to ensure that government is committed to correcting growing current account deficits.

As a result, the IMF imposed fiscal tightening in order to achieve *(a) increasing investors' prospects of repayment; (b) balancing the composition of the unavoidable current account adjustment between public and private sector; (c) reducing the external current account deficits and thereby reduce the need for currency depreciation; (d) reducing expectation of currency depreciation and country risk premium; and (e) reducing likelihood of monetization and thus lower expectation of inflation and currency depreciation.* (Lane and Tsikata, p. 57-8) However, **figure D23** showed that of the 5 issues which IMF's said the fiscal tightening was imposed to accommodate, respondents gave very similar average score of 2.3-2.4 to the effectiveness of fiscal tightening. **(q. 23)** Nevertheless, it is noted that high rate of unanswered questions as well as neutrality of the answers can be explained by unfamiliarity with the policy and its use.

Figure D23 : How effective is the budget cut in dealing with the following issues?



23.1 Increasing investor's prospects of repayment
23.2 Balancing the composition of the current account adjustment between public/private sectors
23.3 Reducing the external current account deficit, thus reducing the need for currency depreciation
23.4 Reducing expectation of currency depreciation and country risk premium
23.5 Reducing likelihood of monetization, thus lower expectation of inflation/currency depreciation

As a matter of fact, the recession had a substantial effect on fiscal balances, primarily through its negative effect on revenues. At the same time, exchange rate depreciation also had a substantial negative impact on corporate income tax receipts, as the domestic currency cost of servicing foreign-currency-dominated debt was revalued, lowering corporate taxable income. In other words, as both economic activities and exchange rates had major direct effects on fiscal balances, the IMF had to change the course of fiscal tightening to respond to the situation. Nevertheless, one third of the respondents felt that during the 3 years period between 1997-1999, budget expenditure had been cut between 3-5 per cent of GDP while the revenue had declined by more than 5 per cent of GDP. **(q. 24 and 25)**

However, the record showed that the average share of budget revenue to GDP during the 3 years after the crisis has remained exactly the same, 26 per cent of GDP, as that of 3 years before the crisis. As the share of budget revenue has consistently been maintained at this percentage since the early 1980s, this implies that the revenue collection is in large part influenced by the performance of economy. However, their estimation is quite accurate as the revenue collection in 1998, the year following the year of the financial crisis, had declined by about 5 per cent from 1997 while, in 1999, the government managed to maintain its revenue collection stable. In contrast, the record showed that the share of budget expenditure to GDP varies between 22-31 per cent of the GDP during 1994-1999. In addition, the average share of budget expenditure to

GDP during the 3 years before the crisis is recorded at 23 per cent and has increased to an average of 29 per cent during the 3 years after the crisis. Therefore, regarding the actual amount of budget expenditure, it had remained the same throughout the years following the crisis. As a result, while the GDP has recorded clear contracting growth rates, the unchanged budget expenditure had resulted in a so called 'budget stimulus.' These figures confirm the changing course of the IMF conditions from fiscal tightening to fiscal stimulus as it has underestimated the impact of the crisis on economic recession.

Part III : structural reform and long-term economic recovery plan

The main difference between the previous 2 sections on monetary and fiscal policies in part II and the following sections regarding structural reform and future prospect of the economy in this part is that the policy tightening have already been implemented while the structural reform is still being implemented. Hence, it is the structural reform policy which can still be corrected, if needed. In other words, regardless of how policy tightening has been criticized, there is nothing we can do about that now except to learn from the experience and mistakes. Instead, what is crucial now is how to implement the structural reform in the way which will bring the economy back to its track and maintain growth as well as stability. Therefore, structural reform is, indeed, what the authority should be focusing on.

Section E : Structural reform

The IMF has encouraged the Thai government to take up four areas of structural reform which are *(a) financial reform and corporate restructuring (b) governance and competition policy (c) capital account liberalization and (d) social sector reform.* Although all of these reforms are essential, respondents were asked to prioritize how essential are these reforms to economic recovery because in reality, there is not enough resources and capital to pursue all reforms at once. Therefore, this section examines from the domestic perspective, how essential each of the structural reforms is seen to be for economic recovery and whether this order of importance matches how respondents think the IMF has prioritized them. For example, if the domestic market and the government together with the IMF believe that a certain reform is urgent, both sides will devote resources to implement such reform, as a result, such reform will be more successful than others. In other words, these comparisons between the domestic perspective of reforms and their views of the IMF's priority on these reforms help explain, to a certain extent, how each of the reform will be seriously pursued and thus the likeliness of each reform being successful.

The survey results showed that *financial market reform (reform (a))* is the area of most concern to respondents and they also believe that it is the reform to which the IMF has given the highest priority. In addition, its central role in economic recovery also matches the respondents' perception of the IMF's priority at 3.6. **(Figure E1)** (scoring for this section goes from 4 to 1 from essential to inessential) Likewise, current and *capital account liberalization (reform (c))* was given 2.6 for its importance to the economic recovery which exactly matches respondents' perception of how the IMF had prioritized the reform. **(Figure E2)** These results have two implications. First, in terms of urgency, respondents think that financial market reform is the most essential for the economic recovery and that current account liberalization has the second priority with the clear cut scores of 3.6 and 2.6, respectively. Second, these scores match, exactly, the respondents' given scores on the IMF's prioritization. This implies that these two reforms (*reform (a) and (c)*) are likely to be more successful in implementation compared to the other reforms *(reform (b) and (d))* which received different scores of importance as well as priorities by respondents and their expectation of the IMF's prioritization, respectively. **(q. 26-27)**

Figure E1 : Financial sector reform

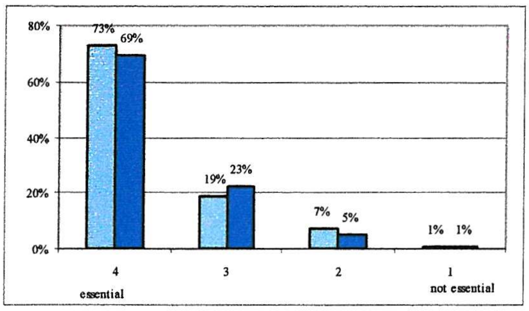


Figure E3 : Governance/competition policy

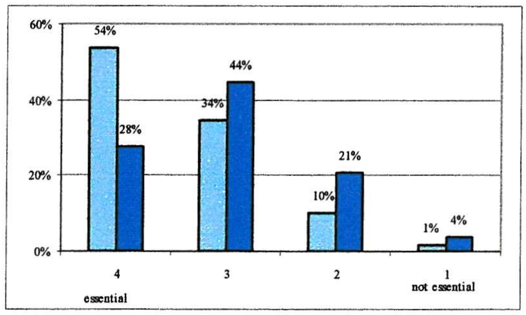


Figure E2 : Current / capital account liberalization

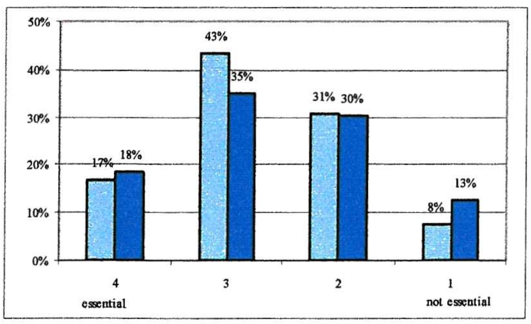
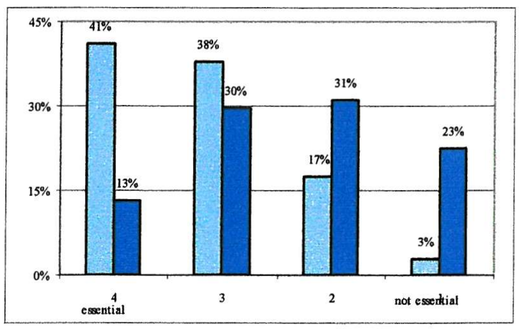


Figure E4 : Social sector reform



Q26. How essential do you think they are to economic recovery?
Q27. How do you think the IMF has prioritized the following?

In contrast, respondents gave scores of 3.4 and 3.2 to governance reform *(reform (c))* and social sector reform *(reform (d))* while they think that the IMF prioritized these reforms at 3.0 and 2.3, respectively. Figure E3 and E4 clearly illustrate the differences in scores between the importance of both reforms given by the respondents and their perceptions of the IMF's prioritization on these reforms. However, of more concern for these two reforms is not on the given orders of importance but it is the differences in the scoring which are large comparative to the other two reforms previously discussed. Figure E4 illustrated that more than half of the respondents gave 4 (the most essential) to governance reform which corresponds to the previous sections on how respondents strongly believed that political interference and transparency of law and regulations as well as the corruption were extensively responsible for the financial crisis. The governance reform is ranked the second most essential reform after financial market reform.

At the same time, the respondents think that IMF has prioritized this reform as the third most important. What the IMF had in mind under governance policy are dismantling state sponsored monopolies and cartels; privatization of state enterprises; improving corporate disclosure requirements; increasing the transparency of economic and financial data.[17] While most of these schemes proposed by the IMF have to do with standardizing rules and regulations, respondents are more concerned with the feasibility of passing such laws and their enforcement, as well as punitive measures for wrong doers. In other words, it is the lack of serious punishment and law enforcement which brought about inefficiency, and corruption is what is behind the weak system. The next section will show how the respondents have rated all suggestions for reducing corruption as being the most effective measures. This implies that the corruption problem is quite severe and any practical suggestions that would help reduce the problem should be welcomed.

Lastly, respondents ranked social sector reform *(reform (d))* as being the third most important reform essential for the economic recovery with a score of 3.2. **(Figure E4)** At the same time, they think that it is the last item on the IMF's list of priority as the matter should be more appropriately tackled by other international organization like the World Bank (WB) or the Asian Development Bank (ADB). The social reform will be discussed in more detail in the section H which social policy makers at Thailand Development Research Institute (TDRI) and National Economic and Social Development Board (NESDB) as well as WB are asked specific questions on the social issue.

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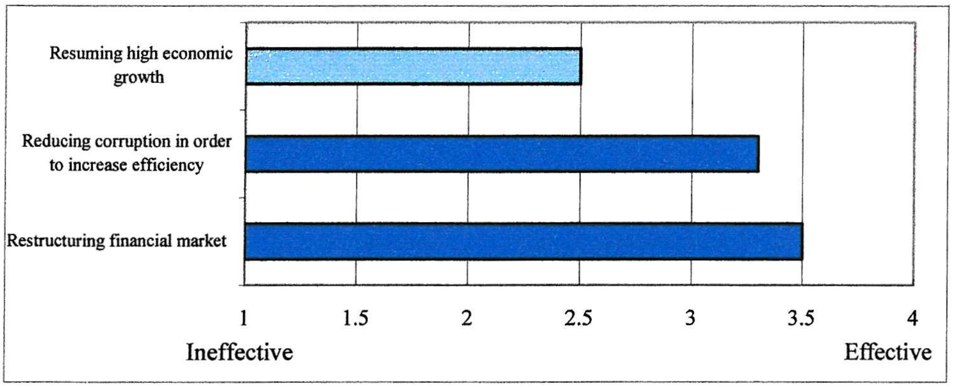
[17] Stiglitz (1998) pointed out, 'perhaps even more important than the dissemination of misleading information being disseminated, at least in some countries, was the general lack of information which makes it difficult for investors to distinguish between firms and financial institutions that are healthy and those that are not. In response, investors shied away from all. With more credible information systems, firms that remain healthy would be able to retain access to credit. (p. 8)

Section F : Future prospects

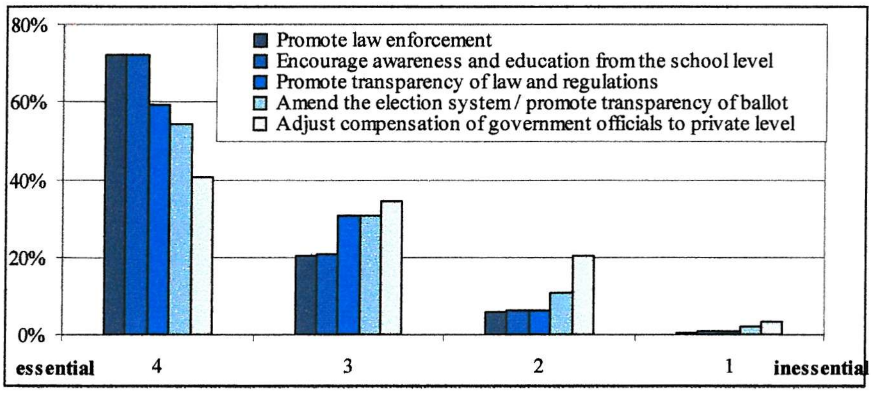
Growth and stability are two important factors in enhancing future prospects of the economy. This section discusses how growth and stability can be ensured for the Thai economy during the aftermath of the financial crisis. Although the questionnaire was administered three years after the crisis, respondents still believed that the government should give higher priority to enhancing economic stability than to restoring economic growth. From the domestic perspective, fragile financial markets, the high degree of political interference, and corruption are the main problems the Thai economy has been confronting for a long time, this is especially true for the latter problem. Thus, before the underlying problems have been improved, it is unlikely that the economy will go very far. The survey result showed that on the scale of 4 to 1 from high priority to low priority, respondents gave 3.5, 3.3 and 2.5 to *restructuring financial market, reducing corruption,* and *restoring economic growth,* as the order of priority the government should pursue in order to restore the economy. **(figure F28)** In this case, the first two choices of priorities can be thought of as ways in improving economic efficiency which is a fundamental factor of economic development. **(q. 28)** It is appropriate that restructuring of financial markets be discussed in section G in the last part.

Figure F28 : How do you think the government should prioritize the following as a strategy for economic recovery during the aftermath of the financial crisis



Turning to a rather different channel in promoting efficiency, respondents are asked to rate, on the scale of 4 to 1 from effective to ineffective, how effective are several schemes in reducing corruption? These schemes are (a) *promoting law enforcement* (b) *encouraging awareness and education from the school level* (c) *promoting transparency of law and regulations* (d) *amending the election system / promote transparency of ballot,* and (e) *raising salary of government officials to private level.* **(q. 29) Figure F29** shows that first two schemes are most favored by more than 70 per cents of the respondents while the second two schemes are strongly recommended. This leaves a scheme of adjusting compensation of government officials to private level as the last but not inessential scheme. The figure illustrated that all schemes are highly essential in reducing corruption as 4 (four) has been the most chosen score for all schemes while all their averages are above 3. In addition, respondents also raised the issue of morality of politicians and government officials together with level of voters' education as a combined reason for prolonged corruption in Thai society. Respondents think that the corruption problem is worsening and nothing is being done to prevent it. This is probably why all schemes have been chosen as effective as they have received scores at a much higher than the average. However, as the survey results have shown that these schemes can be prioritized in three groups, these priorities may very well be the steps the government should take in reducing corruption.

Figure F29 : Corruption has been highlighted as one of the major drawbacks in promoting economic efficiency. <u>In the context of Thailand</u>, please indicate how essential are the following schemes in reducing corruption?



Though it has previously been suggested that promoting economic stability is more essential at this stage than restoring economic growth, nevertheless, economic growth will have to be taken into consideration as the economy is starting to recover. The respondents are asked to rate how effective are *promoting domestic investment and exports; promoting foreign direct investment*; and *merging of local firms with international firms* in encouraging economic growth. On the scale of 4 to 1 from effective to ineffective, the above strategies are rated at 3.3, 2.9 and 2.4, respectively. This can be interpreted as that respondents are not convinced whether cooperation with international firms by giving stakes in local companies, or being under management of foreigners is a wise way forward. In other words, respondents thought that a rapid liberalization and international exposure without contingency plans was partially responsible for the crisis. As a result, *merging with international firms* are given the lowest average score of 2.4. **(q. 30)**

At the same time, respondents think *promoting FDI* is one effective strategy as they have given an average score of 2.9 for this strategy. After all, it was the FDI that once boosted the Thai economy up to double-digit growth during the period of Japanese wave in the late 1980's. Nevertheless, respondents have also learnt that transfer of technology and know how through FDI did not make a significant contribution in improving local technological strength. They pointed out that, during the time, FDI was attracted to the country due to cheap and relatively skilled-labour comparative to other relocating sites. (Thailand's neighboring countries) Also, Thailand was geographically located in the middle of Asian continents which is a good location for products to be re-exported. Other factors like political stability and exchange rate stability during the time were also important for Japanese investors. Thus, FDI is more of an opportunity to the investing country than to the host country. Although Thailand experienced extraordinary high growth rate during the period, it did not gain much more than that, and at present, economic growth is not the priority. As a result, promoting FDI is seen as a more effective strategy comparative to merging with international firms but it is not really a channel toward *sustainable* growth.

Among the three strategies, respondents feel that *promoting investment and exports* is the most promising strategy in encouraging economic growth as the two sectors combined accounted for over two thirds of the GDP. From this ranking of effective strategies in encouraging economic growth, it is noticed that respondents are most in favour of strategy with the least international involvement. This implies that respondents are being cautious with international involvement, preference to rely on domestic strengths. In addition, respondents have suggested alternative measures in encouraging economic growth by improving productivity in the real sector, speeding up technological improvement, and improving R&D, most of which have to do with promoting efficiency in the real sector. However, this is not to say that they are opposed to international exposure, i.e. market liberalization, but they feel that domestic firms are still lacking competitiveness which is, among other things, largely due to domestic inefficiencies in many areas. As a result, respondents gave 3.3 to *promoting investment and exports* as being the most effective strategy in promoting sustainable economic growth.

Likewise, in reducing vulnerability in the future, respondents prioritized government *investment in R&D as the most essential strategy*, followed by *promoting regional cooperation*, *encouraging capital-intensive import substitution*, and *encouraging foreign ownership*, respectively. **(q. 31)** This result coincided with the previous findings that improvement in quality of human resources is crucial in ensuring the sustainable growth, then, it is the international trade sector which is the channel in promoting economic growth. In addition, respondents also expressed the view that privatization of public enterprise would be one way of increasing efficiency and competitiveness. Other suggestions included improving the well-being of low-income earners through education and health programmes and offering more technical assistance as well as financial support to the real sector. Interestingly, these suggestions can easily be fulfilled via government budget. For example, the privatization programme, that has been included in the national plan but has never been enthusiastically implemented due to political reasons, can be a channel which earns the government revenue to finance other programs. **(q. 28d)**

PART IV : Financial and social sector reforms

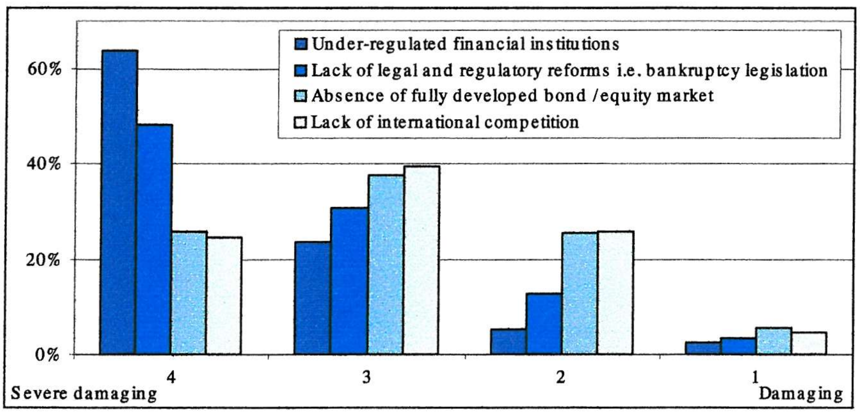
This part contains section G and H which ask specific questions regarding financial and social sector reform to respondents in the financial sector and other institutions concerned with social sector (TDRI, NESDB and WB), respectively. These sections ask respondents to specify problems using mostly open-ended questions. Furthermore, respondents are asked to prioritize the urgency of problems in the order which they believe the government should take them up. As mentioned earlier, this part as well as the previous part are considered most important, because as these structural reforms are still being undertaken, suggestions can help shape better structural reforms. Since these reforms are largely involved with domestic fundamentals, it is helpful to hear what respondents, from domestic perspective, have to say about them. In addition, appendix F shows summary tables on the eight Letters of Intent which the Thai government has pledged to pursue under the IMF's programme.

Section G : financial market reform

This special section on financial market reform can be divided into two parts. The first part discusses questions regarding weaknesses of the Thai financial market, closure of some financial companies and financial liberalization. These questions were addressed to 212 respondents in all sectors. Then, the second part asks specific questions to 113 respondents in the financial sectors regarding the impact of the crisis on their companies. More importantly, this group of 113 respondents are asked to identify assistance they needed and received from the government during the time, then, to suggest alternative policies.

The whole group of respondents have identified the given options, in order of severity, *(a) under-regulated financial institutions (b) lack of legal and regulatory reform (c) Lack of international competition and (d) absence of fully developed market* as damaging to the financial crisis. On the scale of 4 to 1, from severely damaging to not damaging, respondents gave 3.6, 3.3, 2.9 and 2.9 to the above weaknesses in the Thai financial market, respectively. The orders and scores in which respondents have rated these weaknesses can be categorized into two groups of the regulation problems and the market instrumental development problems. **Figure C19** clearly showed that *under-regulated financial institutions* and *lack of legal and regulatory reform* are the two weakest area of financial market as they both received 4 (four) from 62 per cent and 48 per cent of the respondents, respectively. On the other hand, it showed that *lack of international competition and absence of fully developed market* are not as severely damaging as the first two areas where majority (39%) of respondents gave a score of 3 (three) to both issues. In other words, it is the financial market regulations which need to be strengthened first before market development proceeds. **(q. 19)**

Figure C19 : The followings have been identified as weak areas of the Thai financial market. How damaging were they (have they contributed) to the financial crisis?



It is noticed that while respondents in the public sector did not express much opinion as to why the regulations needed reform, respondents from the financial sector and UNI aggressively blamed authorities at the central bank and other bodies for their ignorance in making prudent policies. In turn, political instability has brought about inconsistency and indiscreet policy which was especially true for financial liberalization schemes. These respondents expressed the view that authorities were under the influence of political pressure as there was unprofessionally too much political involvement in financial market which could have resulted in an immoral action. (Thorough discussion on this issue can be found in paper II)

As a result of the under-regulated financial market, one third of financial companies have been suspended. The record showed that these companies had high gearing, high level of risky assets, high level of doubtful loans, and under capitalization, all of which were conceived under ill-regulated financial market. When respondents was asked whether widespread closure of financial companies were justified or not, over 70 per cent of respondents said yes. Interestingly, if we look at the disaggregated results, they showed that it is the financial sector who thought the closure of companies among themselves were justified as 80 per cent of respondents at financial sector agreed with the closure while only 60 per cent of respondents in other sectors said *yes* on the question. **(q. 20)**

For those who said *no* to the proposition, their reasons gathered around the issue of unclear criteria and unfair treatment among companies. They pointed out that, to begin with, it was the authority, the central bank, who have overlooked problems at financial institutions and once the crisis broke out, most companies faced serious liquidity problems. After the acceptance of the IMF's assistance, the government rushed into closing down insolvent companies without giving support to companies with good standing who were simply facing *liquidity crisis*. Panic withdrawal of deposits and exchange rate depreciation had immediately put most companies in serious financial problems. As these companies have been suspended from operation, their financial positions were worsened while not sufficient time and assistance were offered to these companies during the period of suspension. In addition, the government failed to discriminate between companies with large non-performing loans (NPLs) and those with liquidity problems, so many more companies have been permanently closed down than would normally have been the case. Furthermore, closing down companies with serious NPLs problems automatically turn good loans at these companies into doubtful loans which may take a long time to recover.

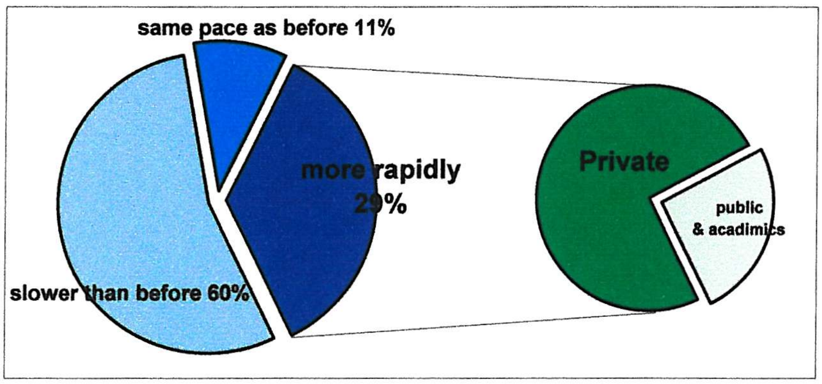
In short, respondents seem to think that the closure of these financial companies should be considered case by case. However, respondents in the public sector said that closure of insolvent financial companies was part of an agreement with the IMF. Nevertheless, they agreed that the authority should have stepped in much sooner before things went out of control, many companies should have been safe, good loans should have been kept honoured and etc.

As Sachs gave his opinion in an Interview with Asiaweek, February 13, 1998

> *In my view, although it is a minority opinion, the IMF did a lot of confidence-reducing measures. In particular, I blame the IMF for abruptly closing financial institutions throughout Asia, sending a remarkably abrupt, unprepared and dangerous signal [...] that you had better take your money out or you might lose it.*

In the end, after having recognized that rapid financial liberalization without contingency plans partially contributed to the financial crisis, respondents were asked at what pace do they think the government should pursue financial market liberalization? **Figure C21** shows that only 10 per cent of all 212 respondents thought that liberalization should be proceed at the same pace as before the crisis, which implies that 90 per cent of respondents prefer anything but what they had before. At the same time, 60 per cent of the respondents thought the government should step back and slow down the financial liberalization process. In contrast, 30 per cent of respondents not only disagree with the majority, they think that financial market should continue to liberalize even more rapidly than before. **(q. 21)**

Figure C21 : At what pace should the government have pursued the financial liberalization during the post crisis?



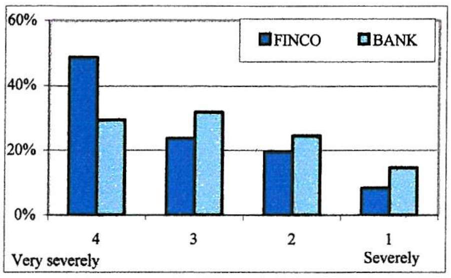
Interestingly, the survey result showed how the financial companies, the group which have been identified by others and themselves as the most severely damaged sector by the crisis, have strong preference on the rapid pace of financial liberalization process from other individual group of institutions. In other words, while others have a score distribution of 30 per cent, 10 per cent and 60 per cent for faster, same pace, and slower than before for the financial liberalization pace, financial companies has a rather opposite distribution of 50 per cent, 10 per cent and 40 per cent, respectively. Nevertheless, some of the respondents in financial companies explained that there are few reasons behind this discrete preference. First, it is the nature of business which mostly engages in activities with foreigners and it is also the fact that no domestic financial company is strong enough to compete in the international market. Also, domestic companies lack professional experience together with advanced technological assistance and training support programmes for employees. As a result, domestic companies are way behind the world standard. Second, respondents realized that this kind of professional training may be most effectively undertaken by letting foreigners come in and help set up certain systems. However, hiring a professional team on a contract basis has been proven unsuccessful. Inevitably, most companies ended up having to sell stakes or merge with foreign financial companies, otherwise, they would not be able to compete and survive. As a result of the crisis, a majority of financial companies have either merged with or have been acquired by foreign financial companies. (Even though it seems from q. 39 that half of the surviving financial companies' ownership structures have remained unaltered after the crisis, this was because foreign companies were already holding stakes in these companies before the crisis took place.) These are the reasons why respondents at financial companies preferred that financial markets be liberalized more rapidly as this is beneficial to their interests in strengthening their companies' competitiveness. **(q. 21)**

Let's now turn to the second part of this section where the focus will be on a specific group of respondents in the financial sector. The focus is on how these financial institutions have been affected by the crisis and the kind of assistance they required and received from the government. The majority of respondents at financial institutions said that their businesses have been severely affected by the interest rate rise and exchange rate depreciation. On the scale of 4 to 1 from very severely to no impact, respondents at these institutions gave average of 3.1 and 3.0 to the effect of interest rate rise and currency depreciation on their institutions. On the other hand, respondents at commercial banks thought that their banks were not as severely affected by the interest rate rise and exchange rate depreciation as the financial institutions were. The average scores bankers gave to the impact of these two incidents are the same at 2.8. **(q. 32)** To some extent, these results reflected the fact that two thirds of financial institutions have been closed down as a result of insolvency while the number of existing commercial banks remained the same (though the ownership structure have changed). In other words, as finance industries were engaged in higher risk activities than banking industries, financial institutions were more severely damaged by the interest rate rise and exchange rate depreciation. In addition, about half of these operating financial institutions and banks are still under the central bank intervention. (BoT's website)

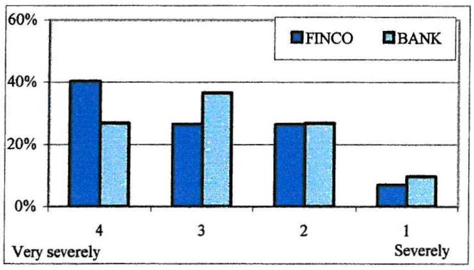
However, it is noticed that score 4, 3 and 2 also received roughly equal votes of 30 per cent from respondents at commercial banks. This is unlike the scores distribution given by the respondents at financial companies that are downward sloping from score 4 (four) having the highest votes down to score 1 (one) with the least votes. Evidence was found from an earlier section (section D) that if scores are evenly distributed, one should ask why did respondents have different views on the same issues, especially, in this section where respondents belong in the same industry, banking industry. The data also tell us that equal distribution of scores is not a cancelling out of certain banks that were not affected by the incidents from the other banks that were affected far more severely. In other words, it was not the case that respondents think that their banks were able to cope with the incidents far better than the others'. This means that even respondents from the same bank have different perspectives on the impact and intensity of interest rate rise and exchange rate depreciation on their bank. To what extent, is this an effect of respondents being in different department within the same bank? It is not known. **(q. 32)** In addition, **figure G32** also illustrates that, overall, the financial companies seemed to have been more affected by the currency depreciation and interest rate rise than commercial banks.

Figure G 32 : How severely have the rising interest rate and exchange rate depreciation affected your institution?

Affected by interest rate rise

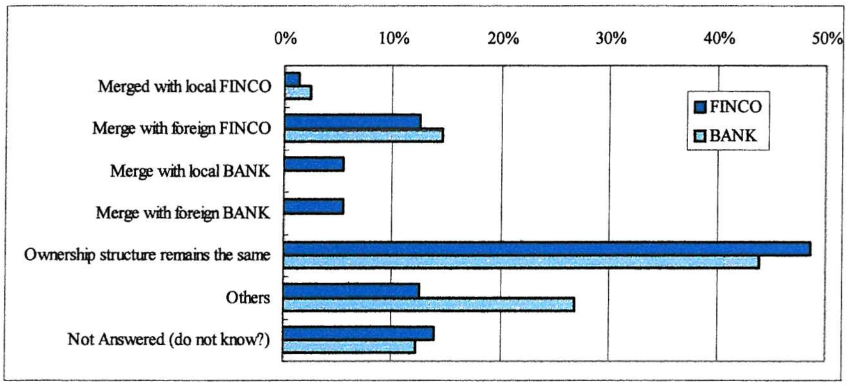


Affected by currency depreciation



It was mentioned earlier that there has been a widespread closure of insolvent financial companies, at the same time, the surviving companies were required to increase their capital within certain period of time. As a result of this requirement, respondents were asked whether the ownership structure of their institutions have been altered in any way, for example, *merging with local and/or foreign financial companies and/or banks.* Unfortunately, 10 respondents at financial companies (14%) and 5 bankers (12%) declined to answer, hence it is assumed that they do not have an answer to the question. This 'do not have an answer' is assumed rather than 'do not want to answer' because respondents rarely skipped any questions and for this particular question, the change in ownership structure, if any, must have been finalized by the time questionnaire was administered and respondents were either informed or uninformed about it. Otherwise, the survey results showed that roughly half of surviving financial companies (49%) and banks (44%) have managed to keep their ownership structure unaltered. This record is in line with the number of financial companies and banks who were not required to come under the central bank's intervention. **(q. 33)**

Figure G33 : Has the ownership of your institution been altered as a result of the crisis?



In the case of financial companies, the two most popular solutions in increasing their capital were to merge with foreign financial companies (13%) and to sell shares to other local and foreign institutional buyers (13%). Of the rest, 6 per cent have merged with local banks and the same proportion has merged with foreign banks. On the other hand, 27 per cent of commercial banks have found themselves in a rather different situation as the ownership structures of their banks have been altered slightly just because some major shareholders were bankrupted. In this case, these major shareholders are likely to be those financial companies which were suspended. Otherwise, raising capital has been accompanied by selling stakes to institutional buyers both local and foreign. It is also noted that no commercial bank has merged with other commercial banks, either with local or foreign banks. **(q. 33)**

This section further asked respondents what kind of assistance did respondents' institution require and receive *from the government* during the crisis in accommodating their businesses? Lastly, it asked respondents what other assistance did they think the government needed *from the IMF* in assisting the financial market recovery? It is noticed that respondents at financial companies are much more keen in answering these open-ended questions comparative to respondents at commercial banks. However, this may be influenced by the previous results which tell us that banks were not as severely damaged by the crisis as financial companies.

Respondents pointed out two main focus of assistance which they needed *from the government* as being financial and technical supports. On the one hand, they suggested that the government could help by providing soft loans (low interest loans) and injecting liquidity in the market as immediate measures and then allow tax waiver and relaxation of certain capital requirement in a longer-term perspective. On the other hand, technical assistance like negotiating the roll over with foreign creditors and loan guarantee could have been offered. Respondents also pointed out that regulatory reform especially bankruptcy law needed to be standardized to protect firms' owners, creditors and depositors in the future. In addition, they said that it would have been helpful if they were asked to participate in brain storming of measures in assisting the financial sector. It was often the case that nobody knew who to ask. In other words, during the time of the crisis, there was no communication between the government and financial sector which they thought were important, after all, they were the one whom the crisis was affecting. **(q. 34a)** However, without direct communication between the government and these institutions, some assistance that they needed was provided. Respondents accepted some soft loans and liquidity injection have been given together with government guarantees for loans and bond issuing. Nevertheless, the respondents said that these assistance should have been provided much sooner. **(q. 34b)**

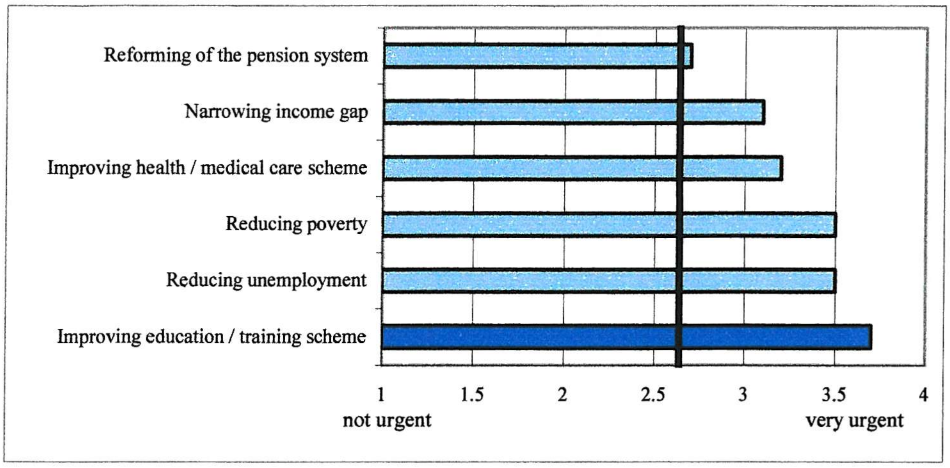
In addition, respondents indicated two broad forms of assistance the government needed *from the IMF* in assisting financial market recovery. First, they all agreed that a loan would be needed (please refer back to q.16 regarding the amount of loan) and again, they did not think that policy tightening attached to the loan was appropriate. Second, technical assistance in many areas was needed, for example, *financial reform* and *regulatory reform* regarding financial law. They stressed that, on the one hand, the government needed a *step-by-step* guideline from the IMF in forming these reforms. On the other hand, the IMF needed to do thorough homework on the Thai economy before offering guidelines as the reform would only be effective and efficient when they suit the problems. In other words, these guidelines should be *tailor-made* specifically for the Thai economy. In regards to regulatory reform, respondents stressed that they would like the IMF to follow up the process in which some important laws, like bankruptcy law, are being passed. Although the government may not be pleased with such suggestions, respondents feel that the IMF's special assistance on this matter would ensure the contents of laws are standardized and that such law are passed within a reasonable period, as well as ensuring that there would be no political interference. Likewise, quite a few respondents believed that the government needed to be monitored closely by the IMF for a longer period. **(q. 35)**

Section H : social sector reform

This section asked officials at the divisions responsible for making social policy (NESDB, TDRI, and WB) to identify existing social problems and ways in which they can effectively be corrected as these institutions were asked to take part in the social restructuring program. **(q. 36)** On the scale of 4 to 1 from sufficient to insufficient, three quarters of the respondents gave 2 to the sufficiency of social safety nets in Thailand while nobody gave 4. **(q. 37)** However, before discussing any further, it is important that we address where Thailand stands in terms of basic needs by international standards. Even though the level of development in developing countries is nowhere near developed countries when it comes to factors which represent how the economy is advanced with sophisticated technology such as number of technicians per population, access to telephone, etc., developing countries have acquired most of the basic needs. In fact, Thailand is ranked in the group of 'high human development' in the Human Development Index (HDI) produced by the United Nation (UN).

Figure H38 showed that when respondents are asked to rank from 4 to 1 from very urgent to not urgent, no respondent gave 1 to any of the social problems. This implies that respondents believed that all problems are urgent and needed attention from the government. Also, average scores for all of the *social issues, education, poverty, unemployment, health care, income gap and pension fund*, are above average. Among the 6 social issues, respondents saw (a) *educational problem* as the most urgent problem which is given the highest average score of 3.7, only receiving rankings of 4 and 3. However, the lack of sufficient educational programme refers to secondary and higher education level together with other training skills rather than basic educational training. The next two issues under social problems that needed attention are *(b) poverty and (c) unemployment* which equally received the same distribution of scores, hence, the average scores of 3.5, placing them in the second priority next to educational reform. Furthermore, the figure illustrates that *(d) health care and (e) narrowing of income gap* fall in the third most important priority, leaving *(f) reforming of pension fund scheme* as the last priority, yet, on the urgent list. **(q. 38)**

Figure H38 : Please indicate how urgently these social problems need correcting



The scores given by respondents confirm that they regarded the improvement of the social sector as indeed a very critical issue for Thailand. In addition, these scores have classified social issues into a list of priorities which makes a lot of sense, for example, the first two priorities are closely related. In the long term, an efficient educational system is likely to have an immense effect on reducing poverty and unemployment. On the other hand, health care and pension fund programs are seen as essential but not as urgent at this stage. It is, in large part, the responsibility of the government to support these programmes. Lastly, respondents pointed out that the income gap is a problem which may naturally be narrowing as the standard of living of people is improving. At the same time, with lack of secondary education and training, it is very difficult for people with only primary education or poor secondary education to find a secure job. Moreover, there is no social safety net for these people to fall back to when unemployed, and it is the long-term unemployment which consequently puts people in debt and poverty.

Respondents also gave interesting comments to *the problems in setting up a social safety net.* Firstly, they pointed that social reform does not only have to be coherent for the Thai society, it also has to be tailored to fit different needs of people in urban and rural areas. They explained that the social infrastructure of western countries is already very different from the social infrastructure of Thailand's capital city, and it is nothing like that of rural areas in Thailand. As mentioned earlier, the income gap is one of the social problems and this income gap reflects other gaps and differences, life-style, belief, and values, among the Thais especially between rural and urban areas. Thus, the government should give a thorough consideration to setting up a social welfare system as the duplication of western welfare schemes may only be adopted as guidelines. They are not likely to respond, directly, to the real need of people in a developing country such as Thailand. **(q. 39)**

Secondly, the respondents suggested that decentralization would be one fast and effective way to get to the bottom of problems in the rural area where many of the poor are concentrated. It is the problems of poverty, medical programme and, to some extent, unemployment which are the major concerns in the rural areas rather than problems such as pension fund and the improvement of secondary education which are more urgent issue for urban people. However, respondents reminded that even if these programs could in the future be set up in the rural areas, they are afraid that corruption could eat up chunks of welfare before they reach the needy people. And unlike urban people, rural peasants may not be able to raise their voices and make complaints. Thus, the social program in the rural areas will have to be well planned, an area which the government may need advice from experts and international agencies in setting up a transparent scheme. Lastly, once the system has been set up, its effectiveness would then depend on the amount of funds which could be allocated to building social infrastructure, as many schools and hospitals are needed to be set up in rural areas. As the budget is likely to come via the Ministry of Education and the Ministry of Labor and Welfare, respondents are hoping that ministers would see the importance of improving welfare of people through education and health care schemes, especially in the rural areas. **(q. 39)**

This section concludes by asking respondents, *what kind of assistance does social sector need from the international organizations like the IMF and the WB?* It has been discussed in section E that respondents, as a whole group, believed that the IMF has placed the social reform as the least important reform of all and, ranging from 4 to 1 from high priority to low priority, they gave 2.3 to how did they think the IMF has prioritized the social reform. As the score of 2.3 is already below average implying that the whole group did not expect the IMF to take up the social reform seriously, this sub group of social policy making bodies gave an even lower average score of 1.7 when asked a similar question, *how do you think the IMF has regarded the importance of social sector reform?* No respondents in this sub group gave 4 to the question. **(q. 40)**

As a result, it is not surprising to see some negative answers like, 'the IMF should not get hands on the social issue' or 'the IMF assistance is not needed in this area'. Instead, respondents wished that the IMF had taken working class people, especially, peasants into consideration when recommending tough measures. Taking, for example, the interest rate rise, respondents pointed out that working class and peasants are people who have high debts, for their levels of income stream. As many peasants cannot honour their debts, they ended up losing their collateral, which are probably the only piece of land they have and living on. Likewise, they said that an appropriate macroeconomic stabilization policy the IMF could suggest would be the one that does not increase economic growth at the expense of widening income inequality, as in the past, resources and development seem to be concentrated in the capital city. To some extent, these messages are in line with the general understanding which respondents have expressed that economic fundamentals need to be revived before stimulating economic growth. **(q. 41a)**

On the other hand, respondents think that the WB is a more appropriate organization who could lend both technical as well as financial assistance in accommodating social projects.[18] As the welfare scheme is not properly set up, the WB could lend technical support and experts in helping the government in the matter at an early stage. Respondents at the WB clarified that any developing countries who are at the same stage as Thailand will need somewhat a similar social package but they also recognized that the key success is to implement them in such a way that is suitable for local people, in this case, the Thais. One respondent said that, 'the Bank is learning to understand now to apply the social sector reform concept to Thailand in the way that fits with Thai's society.' They also suggested that setting numerical targets is an appropriate strategy in correcting long term and structural problems such as poverty and unemployment. Poverty level and unemployment targets may be set to achieve in certain years while these numerical targets will have to be realistic as well as flexible. Respondents at NESDB pointed out that these plans and targets are usually parts of NESDP (National Economic and Social Development Plan) and that Thailand is under the 9th Plan but they have rarely been achieved. Most importantly, the government has to commit to improve the social scheme which means financial support and technical assistance, whether they are from the government budget or the WB loans, will have to be devoted to the social sector. **(q. 41b)** Since these institutions have been asked to take part in social restructuring reform program by the government during the crisis, it will be seen in a few years time how seriously the government has taken their advice.

[18] Stiglitz (1998), Senior Vice President and Chief Economist at the World Bank, stated that the World Bank is a development institution, not a crisis fighter thus the Bank focuses on project lending and structural reform. ... In East Asia, however, the roots of the crisis have been at least as much in the structural features of the economies, like the systems of financial regulation, as they have been in the macroeconomic dimensions. As a result, structural reforms, and the World Bank's support and technical assistance, have been an important part of the short-run stabilization strategy in East Asia. ... In supporting these goals, the World Bank pledged roughly $16 billion to the region which comprise $1.5 billion to Thailand, $4.5 billion to Indonesia and up to $10 billion to Korea. (p. 12)

PART V : Overall picture of the respondents' perceptions on the IMF's conditions

This section has discussed the opinion of the Thai respondents or the inside observers from various sectors regarding their perceptions of the crisis, the government and the IMF's handling and, most importantly, the IMF's conditions and alternative measures. Surprisingly, survey results told us that respondents' perceptions on most issues are similar regardless of which sector they belong to and that their rankings and evaluations of policy choices are always concentrated to either end of the scale. Furthermore, though one third of the respondents do not have formal training in economics, their experiences and background in finance and business told us that their interpretations of the crisis are not very different from any economists.

Overall, the survey results showed that respondents rated the government and the IMF's performance as unsatisfactory as they gave the below average scores for how well they have handled the crisis. The problem with the government's handling of the crisis was largely due to its interference from the bankers in the past. At the same time, they generally agreed with the IMF's conditions but it was the timing and magnitude of tightening that they disliked. In terms of structural reform, they think that financial market restructuring is heading in the right direction, but it would be more helpful if the IMF could offer more technical assistance and monitor the government in passing important financial laws. In contrast, they think that the IMF does not have a full understanding of the Thai social structure, and they do not think the IMF gives high regard to social problems. In any case, this task should be more appropriately taken care of by other international organizations like the World Bank or the Asian Development Bank.

It is also noted that corruption is of much more concern to all sectors than expected. Even respondents in the public sector are concerned about the corruption problem keeping in mind that they think it is the politicians who are corrupt, not themselves. Likewise, social problems are of much concern not only to respondents in the public sector but also the private sector. While public sector respondents expressed that the well being of people and poverty should be seriously taken care of, the private sector is largely concerned with the social problem from a different perspective. Private sector is more concerned with the quality of labour and the efficiency of educational system.

In addition, even it has been quite a while since the crisis, respondents are still more concerned with fundamental restructuring than economic growth. In other words, they seem less ambitious about being the number one in the region. This can be taken as a good sign for prospect of the economy in the future. Lastly, the real sector has very often been mentioned by the respondents as the sector which faced serious difficulties as a result of the crisis. Respondents also identified problems associated with the sector and suggested policies in dealing with the problems. However, this is an interesting area for further research and the sector by itself is large enough to be a separate research on its own.

Section 3.5 Closing the Gap between Perception and Economics

The previous section argued that the Asian financial crisis proved resistant to the standard IMF policy package, perhaps due to the particular configuration of local circumstances that characterized the affected economies. A number of alternative policy proposals were identified drawing on the informed local knowledge of qualified Thais. These alternative policy suggestions need to be evaluated in the light of economic analysis.

Hence, this section concludes the paper by examining whether the alternative suggestions are theoretically sound as alternative policies to the IMF's conditions, and if they are sensible as recommendations to the government in pursuing a smoother recovery path. It is also important to examine the extent to which the respondents' criticisms of the content and implementation of the IMF policy are justified. It will be seen that suggested measures are largely involved in the area of micropolicy on which the insiders, in the author's opinion, are better suited to comment. Thus, in making the most of the survey results, one should take these suggested measures by the insiders as *complements* to the macroeconomic theories. It is helpful to first summarize the findings of each part with the focus on the two areas of policy tightening and structural reform and then compare them with those imposed by the IMF.

However, the more important question we need to ask is whether the alternative policies suggested by the respondents are theoretically sound? Table 3.5a-c summarize the IMF's imposed policies especially in the area of policy tightening and structural reform in comparison with the respondents' suggestions on the problem issues, and offer a brief evaluation in terms of economic and operational validity.

Table 3.5a : The IMF's imposed policy tightening : Interest rate rise

Interest rate rise		
IMF's measures	**Policy suggestion**	**Evaluation**
The objectives of the programme were to avoid the depreciation-inflation spiral and to discourage foreign capital from flowing out of the country.	In addition to an appropriate level and period of interest rate rise, partial devaluation, temporary capital control and price control have been suggested as measures in tackling depreciation-inflation spiral and capital outflows at the onset of the crisis.	Currency depreciation and capital outflows were not caused by the lower return but collapse in financial market (private sector), therefore, interest rate rise alone was insufficient because it was imposed to tackle the characteristics of the crisis but not the core cause. Excessive and prolonged policy tightening severely weakened economic activity. Partial devaluation could have helped stabilize the currency and saved a large number of corporates from bankrupcy caused by exchange rate loss. At the same time, temporary capital controls could have saved healthy but highly geared corporates with tight liquidity from bankrupcy. On the other hand, inflationary pressure was not likely to become a problem due to the country's track record of low inflation. If inflation had threatened, then price controls could have been used to augment the interest rate rise, and thus the severity of the crisis. However, this would only have been a short-term expedient as the distortionary effects of price controls are well-known. Some of these measures proved successful in the Malaysian case, which did not come under the IMF's programme but has chosen its own path in dealing with the crisis by declaring debt moratorium and capital controls.

Table 3.5b : The IMF's imposed policy tightening : Budget cut

Budget cut		
IMF's measures	**Policy suggestion**	**Evaluation**
The IMF accepted that fiscal deficit is not a major concern in Thailand for much of the period leading up to the crisis but, nevertheless, imposed cuts in spending mainly to raise investors' prospects of repayment. In addition, fiscal adjustment would reduce the need for currency depreciation and expectation of inflation, country risk premiums, and likelihood of monetization.	Respondents have not suggested alternative policy to that of the IMF's fiscal tightening as they did not see the need for the cut in spending.	The crisis was caused by the fragile financial market and accumulation of S-T debt made by ***'private sector'***, thus, imposing the <u>conventional</u> strict discipline on ***'public sector'*** spending was seen as inappropriate. Furthermore, strict discipline in the 'public sector' is not likely to have a significant impact in increasing investors' confidence or reducing country risk premium and other objectives. Like the monetary tightening policy, budget cuts have the side effect of weakening economic activity and with the lack of private investment, this has led the economy into a recession. And even though the IMF has later admitted to this by changing its course from fiscal tightening to fiscal stimulus, growth rate in 1998 (a year after the crisis) already fell by 5% from its projected 3.5%.
		As Thailand had enjoyed fiscal surplus and moderate level of inflation during years proceeding the crisis, respondents feel that fiscal tightening was not necessary. Considering the objectives which the budget cut was meant to achieve, they may have been tackled by more specific measures. The objectives of controlling inflation and stabilizing currency have been suggested in the previous table. As for raising investors' prospects of repayment, respondents argued that the single largest creditor of the government is the IMF so that foreign investors are unlikely to be concerned about the fiscal stance.

Table 3.5c : The IMF's structural programme

Structural reform		
IMF's measures	**Additional suggestions**	**Evaluation**
Financial sector & corporate restructuring		
Close down inslovent institutions	They should have been considered case-by-case because some corporate simply suffered from the lack of liquidity not insolvency. Soft loans and other supports should have been offered much sooner.	During the onset of the crisis, government seemed to have rushed into closing down 'insolvent' companies as this was required by the IMF. But, certainly, not all of the closed companies suffered from insolvency, thus, the more considerate measures could prevented many bankrupcies.
Establish legal reform	The IMF could lend technical support in helping the government to amend and establish financial law and bankruptcy law. It is essential that these laws are passed within a reasonable time as lengthy process has been known as a major obstacle.	This is one of the most important tasks in restructuring financial market, however, it is crucial that the new laws and severe punishment are enforceable. Also, law and legislation need to be introduced and also standardized to the international market.
Current & capital account liberalization		
Liberalize trade and capital account	Trade sector is almost fully liberalized under the GATT agreement. Supports on trading channel and export promotion are essential for medium and small size firms, especially, those labor intensive products as Thais labor is relatively skilled. However, capital account liberalization has not been seen as appropriate. Financial market efficiency should be raised before it is fully liberalized.	Trade liberalization is agreed by respondents as the country has achieved certain level of competitiveness. However, the financial crisis has suggested that Thailand is not ready the full liberalization at present. As a matter of fact, fully liberalized financial market in developing countries has been seen as the US agenda.
Governance and competition		
Reduce informal ties b/w private & public sector	Transparent of law, regulation and efficiency of information (for example, accurate and up to date financial and economic data) could help reduce the need for informal ties. It is also important that severe punishment is enforceable when unprofessional practice is found.	Although the establishment of legal reform, enforceable punishment as well as transparent in practice could help discourage such informal ties, this is really the issue of politics and domestic culture and it will take generations for the informal practice to die out.
Privatize & dismantle monopoly	Only profitable public enterprise (national airline, water and electricity companies) should be privatized while the non profitable like transport enterprises (local bus and coach) should remain under government ownership as most customers are students and working class people.	Selling profitable public enterprise is the way of increasing government revenue as well as reducing high rank officials from receiving privileges as the board members in this companies. Although bus service could be improved under the private management, it is unlikely that these non profitable enterprises will be bought by the private investors. Thus, they could be kept under the public ownership as part of the government's social programme.
social sector reform		
Broaden social safety net Reduce unemployment Increase access to health care & education	People in the rural and urban areas require different kind of social service; the policy in each area needs to be tailored to fit different needs. Decentralization is a fast & effective way to get to the bottom of problem. After setting up needs consistent supports (funds, advises, evaluation)	It is essential to make sure that allocated budget gets to the hand of those who need them the most. Corruption can be a major obstacle in accomplishing these programmes especially in the rural areas. It is, thus, crucial to set up a body to monitor and evaluate the programme on a regular basis. Also, the success of the programmes largely depend on the seriousness of the government in carrying them #out.

3.5.1 The IMF and its conditions

Important issues in this part are focused around the IMF's understanding of the cause of the crisis and its conditions imposed on Thailand. The IMF has accepted that the major problems were not macroeconomic mismanagement but deficiencies and mismanagment in the financial sector in the form of weak financial institutions, inadequate bank regulation and supervision, uncontrolled foreign borrowings and unwise investments by the private sector. Nevertheless, the IMF has imposed its standard conditions which have been given to countries who have experienced macroeconomic instability. And although its imposed conditions have in the past been helpful in reviving economies from some forms of crisis, the nature of the crisis did require additional assistance rather than just macroeconomic discipline.

Regarding the respondents' opinions on this issue, we asked whether it was appropriate that the IMF imposed conditions with its loan which the government was forced to accepted? And, if the respondents disagreed with the IMF's conditions, are their suggested alternative measures realistic? Since the loans from the IMF were not free of charge, the borrowing countries should be fully responsible for their own actions on the issues beyond payment problems. However, the modern functions of the IMF have been modified to include the imposition of major structural and institutional reforms in addition to facilitating adjustments in the balance of payments.

In other words, these conditions must be undertaken in order to receive loans and as these loans are released by slots of payments, the IMF can observe whether the country is following its rules or not before releasing the next payment. Without these loans, the Thai government would likely to have declared a debt moratorium but since the government has choosen to ask for the IMF's assistance, it has to obey conditions attached to the loans, perhaps, regardless of its consent. If its assistance fails to turn these economies in the Asian crisis, should the IMF be held responsible and obligated to compensate the economy then? Strickly speaking, the accountability issues would not have been raised if the IMF has kept to its traditional role of lender.

3.5.2 Policy tightenings

The key issue in this section is to ask whether interest rise and budget cut were effective in doing what they meant to in judging if they were appropriate. Respondents think monetary and fiscal tightening were meant to do too much, as they are imposed to correct too many problems. At the same time, the tightening was prescribed according to the symptoms of the problems not their causes. For example, some of these problems (currency depreciation and capital outflows) are very severe and they needed more specific measures whereas some are not as severe (inflationary pressure). Nevertheless, not only Thailand but all the affected countries who have come under the programme were required to raise interest rates. As a result, the interest rate rise did not only fail to achieve its objectives, it actually turned out to be harmful. In addition, even though *rising inflation* could have been a concern, a large proportion of CPI is food items which are domestically produced. This makes hyperinflation unlikely, so, increasing and maintaining high interest rates might not have been a necessary measure in dealing with inflationary pressure.

Respondents have identified that *currency depreciation* was a direct result of *capital outflows* and that massive outflows were due to the loss of foreign investors' confidence in the economy as well as the way in which the crisis was being handled by the government and its professional assistant, the IMF. As a result, the interest rate rise together with other measures was not able to bring back confidence in the economy.[19] Furthermore, prolonged high interest rates have increased the liabilities of many firms and unnecessarily caused bankrupcies. Some have also said that the interest rate gap after the interest rate rise was neither high enough to keep the existing capital in the country nor to attract new inflows. Thus, respondents have suggested alternative policies to deal with currency depreciation, inflationary pressure, and capital outflows – namely gradual currency depreciation, price control and temporary capital controls in coping with the crisis during the time. Also, long term policies like financial market restructuring policy is also suggested as crucial in bringing back foreign investors' confidence and for the economic recovery.

For the financial market reform, *under-regulated financial institutions* and *lack of legal and regulatory reform* have been identified as the two weakest areas in the Thai financial market which were caused by mismanagement of policy by the authorities, in particular, the

[19] The key issue is how to restore confidence, or equivalently, how to persuade people to keep their capital in the country? Stiglitz (1998) explained, at the first blush, the obvious answer is to increase the rate of return or the interest rate. *But* we need to ask the deeper question, why are people pulling their money out of the economy in the first place? Often it is because they do not believe that they will receive the promised rate of return, that is, they are worried about the possibility of default. Higher rates increase the *promised* return, but in many circumstances they will also create financial strains, leading to bankrupcies and thus increasing the expectations of default. As a result, the *expected* return to lending to the country may actually fall with rising interest rates, making it less attractive to put money into the economy. (p. 6)

Bank of Thailand. In addition, majority of respondents thought that widespread closure of financial companies was justified while the rest believed that some financial companies have been closed down unnecessarily due to liquidity problem not structural problems. They thought that companies in good standing could have been saved if the government had been more considerate and lent more assistance during the time of the crisis. Since rapid financial liberalization has been identified as one of the reasons behind the crisis, 60 per cent of respondents believed that the government should slow down the pace of liberalization. However, financial companies (which have been hardest hit by the crisis) thought the government should pursue financial liberalization at an even faster pace than before the crisis. In fact, this is in line with the IMF's objective of fully liberalized financial markets.[20]

On the fiscal side, respondents think that the problems which fiscal tightening was imposed to correct were irrelevant. It was not appropriate to impose a period of strict discipline. This is similar to the inflation issue which respondents did not see as being a problem. In other words, the IMF's prescription of policy tightening is seen as some kind of conventionality that countries facing financial crisis should adopt. Unfortunately, this conventional solution could neither effectively solve many of the problems nor buy back foreign investors' and speculators' confidence in the economy. Indeed, as a result of the IMF's underestimation of the crisis, it later had to change course from fiscal tightening to fiscal stimulus, as it was the only channel available during the time to help the economy back on track.

Although there seems to be endless argument on the appropriateness of the monetary tightening, it is, however, more clear on the fiscal programme that it was too harsh on the economy. By the time the IMF had admitted to this, the fiscal tightening had led Thailand into severe recession and fuelled social upheavals in Indonesia. Nevertheless, it cannot be over emphasised that as the nature of the crisis did not arise from the conventional causes and these troubled countries were not suffering from the loose economic discipline, thus standard measures were less likely to help improve the areas that needed no improvement.[21] And, perhaps, the tailor-made package may have been more appropriate in correcting

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[20] Nevertheless, Stiglitz (1997) suggested mild financial controls, such as interest-rate ceilings, may be useful under certain circumstances, because they can help *raise* banks' profits and so *reduce* the incentive for risky lending. He also worried that too much haste in opening a country's banking market to foreigners could cause excessive competition, and instability to follow. However, his concerns are controversial as financial liberalization is a critical part of the US agenda. **(The Economist, 1997)**

problems at their cores, where policy tightening was not the most effective measure for the job.

3.5.3 Structural reform

The main focus in this part is on the four reforms[22] and the question of how they are likely to be implemented. Of the four reforms, financial market reform and capital account liberalization are given the first and the third order of urgency by respondents.[23] These matches indicated that the two reforms have high potential of being successful. In contrast, respondents ranked the governance and social sector reforms as the second and the third most important reforms while they think the IMF regards these reforms as having low priorities. It is helpful to have this general setting of what have been identified as structural problems and their priorities in mind in order to understand why some reforms are likely to be more or less successful with constraint on the budget and without the international support / pressure. Also, table 3.5.3 summarizes measures which the government (under the IMF's guide) has taken in restructuring several areas of the economy and the respondents' alternatives/additional measures in such areas.

Likewise, problems in the social sector look as worrying as the financial sectors where improvement can be made in every step of the way. And even though social problems have persisted for a very long time, they became more apparent and worsened when the financial crisis hit.[24] Respondents accepted that the government will need technical as well as financial assistance from organizations like the WB (but not the IMF) in setting social restructuring program. Experience with the IMF conditions in 1997 told respondents that social restructuring program will definitely have to be tailor-made to Thailand, in other words, the Thai society and people. Respondents at WB have also agreed with this point and accepted that the Bank is learning to understand differences in culture. In addition, urban and rural people have different problems and the Thai government will have to recognize these differences in order for the programmes to be implemented effectively. Decentralization has been suggested as one plausible route in getting down to the bottom of

[21] As Thailand and other countries in crisis had enjoyed fiscal surplus and moderate level of inflation during years preceeding the crisis, it is not necesary that fiscal and monetary tightening were most strict in these countries.

[22] This refers to the suggested structural reforms by the IMF (a) financial sector (b) current and capital account liberalization (c) competition and governance (d) social sector

[23] Question 26 and 27 discuss how the success of each reform depend on the IMF's prioritization.

[24] Nixson and Walters (1999) pointed out that, 'the extent of the currency falls and the size of the capital outflow meant that the 'Asian Crisis' quite quickly becaluse a crisis of real economy. ... This was arguably exacerbated by the intervention of the IMF ... This, in turn, generated a futher crisis; one of rising unemployment, destitution and poverty. In effect, therefore, the currency crisis has become a development crisis.' (p. 498)

problems. Most importantly, as social problems will take a very long time to correct, financial as well as technical assistance will have to be devoted to the sector seriously and continuously and this will require strong commitment of the government.

3.5.4 Long term economic recovery plan and future prospects

In terms of future prospects, after having experienced what is probably the worst financial crisis in history, respondents largely agreed that improving domestic efficiency is the priority. Even a few years after the crisis[25], respondents still think the government should focus on strengthening economic fundamentals and only later proceed with restoring economic growth. Even though this idea is shared by the IMF, it was not keen to specify how to go about strengthening economic fundamentals in other sectors than the financial markets. But, perhaps, this is the job of the local government. Considering the respondents' suggestions on this issue and the key strategies in reducing vulnerability in the future, promoting exporting sector, improving R&D, and reducing corruption have been suggested as key strategies. In fact, these measures are promised by all governments but the effectiveness of the policies is likely to depend on the seriousness of the government in pursuing them.[26]

In the end, has the IMF's measure been successful? According the commentators and domestic respondents, no. Were the IMF's imposed conditions inappropriate, then? Theoretically, *yes* but perhaps they were not appropriate in dealing with this Asian financial crisis as the crisis stemmed from other causes that the policy tightening is ineffective in dealing with. So, are there other alternatives to the IMF's policy? As the IMF's package has been roundly criticised, it can be argued that they could have been made more appropriate have other tailor-made-policies been imposed. In fact, this paper has gathered the tailor-made-policies as additional policies to the IMF's. As late as it may be for some of these suggestions to have corrected past mistakes, important lessons have been drawn for the damaged countries and the international experts, IMF. Thus, one should take the survey findings and policy suggestions as complementary to the macroeconomic theory.

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[25] It has now been 3 years after the crisis at the time of the survey.

[26] See appendix F for summary table for the eight Letters of Intent which the Thai government has pledged to do it order to improve its economy under the IMF's programme.

APPENDIX A* : Past experience of Baht devaluations

It is helpful to briefly discuss past experiences of currency devaluations in Thailand during 1982 and 1984 in clarifying why the recent currency devaluation in 1997 has resulted in such an economic severity. It was found that macroeconomic fundamentals during the previous devaluations were relatively weaker than during the recent crisis in 1997, yet, after the devaluations, the economy was able to recover quickly. In fact, devaluations in 1982 and 1984 were seen as adjustments which the government had taken in bringing back economic balance. In contrast, the currency depreciation in 1997 was not a result of the government intended devaluation, rather, a forced devaluation, as there was no other alternative. A comparison of these currency depreciations will partially answer why the crisis happened when it did and explain why the recent currency devaluation is much more severe than in the past and will have long-lasting impact on the economy.

(a) Baht devaluaions in 1982 and 1984 : effects from oil shocks

Since currency devaluation is an inevitable outcome of the financial and currency crises, the currency devaluations in 1982 and 1984 in Thailand will be examined in comparison with the 1997's. In addition, during these devaluations and adoption of floating exchange rate in 1997, IMF rescue packages have been called for when the funds were also received. The table below shows that the IMF fund for the crisis in 1997 has been approved almost immediately after the crisis occurred and much quicker than the previous two devaluations. Therefore, these three events can justifiably be characterized as financial crises.

Table 1 : Thailand's Financial Arrangements by IMF

Unit : SDR : million

Type	Devaluation period	Fund Approval Date	Amount Approved	Amount Drawn
Stand-by	July 1997	August 1997	2900.0	2500.0
Stand-by	November 1984	June 1985	400.0	260.0
Stand-by	July 1981	November 1982	271.5	271.5

Source : IMF, www.imf.org (Thailand : Position in the Fund)

There are many factors and circumstances which led the government to devalue its currency in 1982 and 1984. In the early 1980's, Thailand was already vulnerable prior to the second oil shock as its agricultural exports suffered a severe price decline in the world markets. As a result, the terms of trade fell 20 per cent between 1980-82 (manufactured goods were still only 30 per cent of total exports at the time), and the trade deficit rose to 9 per cent of GDP during those years. External debt rose from $2.3 billion in 1975 to $6.7 billion in 1980 largely to fund defence spending and subsidize loss-making public enterprises. High world interest rates were at double-degit levels between 1980-85, peaking at 21 per cent in the 1982. This high interest rate directly affected Thailand as it did other developing countries which borrowed dollars as floating commercial rates, for example, Mexico threatened default on its international financial obligations in 1982. Another important factor was Thailand's fixed exchange rate policy, particularly the pegging of the baht to the US dollar. The peg made Thailand particularly vulnerable in the early 1980's as the US emerged from a deep recession and experienced strong economic recovery. As a result, the dollar appreciated by about 50 per cent during 1980-84. This appreciation caused the Thai baht to appreciate by about 10 per cent in real terms during the same period. An appreciating currency was the last thing that Thailand needed given the weak internal economy. (Saicheau, 1995, p.7)

Furthermore, Thailand's fiscal deficit grew and appeared uncontrollable during the 1980's. Budget expenditures, a major cause of expenditure overruns, combined with optimistic revenue collection targets brought about a larger-than-expected budget deficit. Budget deficits expanded from about 2 per cent of GDP in the first half of the 1970s to 3.5 per cent of GDP during the latter half of the decade. In 1980, the budget deficit was 4.7 per cent of GDP and peaked at 6.0 per cent of GDP in 1982. At the same time, domestic interest rates were subjected to ceilings which kept real interest rates negative while credit rationing was practiced to restrain loan growth. The collapse of domestic financial institutions and political turmoil (there were two attempted coups) in the early 1980s added to the uncertainty about the country's overall prospects and well being. Specific factors relevant to the period in which devaluations took place can be summarized as follow;

1982

- Exports growth rate decreased to 4.7 per cent from 13.8 per cent in 1981.
- Capital inflows fell from 47.4 billion baht in 1981 to 31.2 billion in 1982.
- Both total external debt and debt service ratio continued to rise.

1984

- Exports fell by 7.7 per cent in 1983 which must have come as a shock in a country which has enjoyed 15 per cent exports growth rate on average.
- A 21.2 per cent growth of imports in the same year led to a serious deterioration of the trade and current account forcing a $780 million deficit in the balance of payment.
- International reserves fell to a low of $2.6 and $2.7 billion in 1983 and 1984, the equivalent of only 3 months of imports. One month before the November devaluation, reserves were only $1.6 billion, less than 2 months worth of imports.
- Debt service ratio rose to 20 per cent in 1983 and 1984. It subsequently peaked at 22 per cent in 1985.

The devaluation of 1984 was also important because it brought about fundamental changes in Thailand's exchange rate policy. Prior to 1984, it was considered appropriate to peg the baht to the value of dollar as a means of promoting certainty and stability in the trade sector. However, the rapid appreciation of the dollar between 1982-84 in line with the strong economic recovery of the US placed Thailand in a very difficult position. As argued earlier, the Thai economy was at its weakest during the first years of the 1980s and a forced appreciation of the baht worsened the situation. (Saicheau, 1995, p. 6)

In addition, the devaluation of 1984 changed the way in which Thailand sets its exchange rate. The baht was since tied to a basket of currencies, its value to be announced daily by the Bank of Thailand. Among other research centers, Phatra Research Institutions, from compiling the past data, has concluded that the dollar dominates the basket with a weight of about 80 per cent. More importantly, the crucial point is that the Bank of Thailand has given itself a great deal of flexibility in adjusting exchange rates since the weights are confidential and can be altered at any time. Thus, while Thailand's exchange rate is more flexible, it is unlikely to be volatile if economic fundamentals remain stable and if the authorities do not persist in defending exchange rates that stray significantly from equilibrium. Since 1984, the Bank of Thailand has avoided maintaining an overvalued currency, if anything, the bias is towards keeping the baht slightly undervalued. As a result, the undervalued currency has enabled the authorities to appreciably increase Thailand's foreign reserves. (Saichuea P.6-8)

(b) Nearly a Devaluation : The Effect From the Taquila crisis in 1995

The peso crisis in Mexico prompted foreign investors to doubt the stability of currencies of several emerging market economies. In the case of Thailand, the doubt was sufficiently strong for investors and speculators to sell baht for dollars which some research houses estimated to be worth as much as US$2 billion between 12-13 January 1995. The quick end of the speculation is indicative of the success that the Bank of Thailand had in its all out effort to defend the baht. In large part, many believed that the defence of the baht was also successful because of Thailand's good economic fundamentals and strong external position.

In other words, the quick end of speculative attack on Thai baht would not have been possible without a quick regain of investors' confidence, especially, the foreign ones. During the period, domestic inflation at 5 per cent was low by regional standards and comparable to world standards. Economic growth has been sustained at the rate of close to 8 per cent over the past two decades (1975-95), driven primarily by a globally competitive export sector which has been expanding at an average rate of 16 per cent per annum. A high domestic savings rate of around 30 per cent of GDP and a government that has sustained fiscal surpluses for 7 consecutive years (1988-95) added to the economy's fundamental strength. Careful monetary management also meant a commendable external position. Thailand has had a balance of payments surplus every year for the past 10 years. This has enabled the country to build up international reserves which increased nearly 10 times during the period. Reserves in 1995 stand at about US$30 billion, the equivalent of 7 months of imports. While current account deficit in 1994 was at 5.9 per cent of GDP, it has been on a downward trend since 1990 when it peaked at 8.5 per cent of GDP.

(c) Floatation of Baht in 1997

Despite the economic miracle in the early 1990's and a lucky escape from the devaluation during the Taquila crisis in 1995, a number of authors continue to believe that the possibility exists for another speculative attack sometime in the future. Among others, Saicheau (1995) expected that Thailand will experience chronic current account deficit that may be unsustainable in the coming years. Financial liberalization which has heralded massive inflows of short-term capital to finance such deficits are volatile by nature and therefore cannot be trusted. Thus, Thailand is left vulnerable to future speculative attacks against the baht particularly if its economic fundamentals were to weaken. (p. 2)

Furthermore, there are reasons to believe that the crisis was fundamentally caused by the mismanagement of the Bank of Thailand (henceforth BoT) though, literally, the crisis was triggered by the call back of private short-term loans. These short-term loans began to accumulate in early 1993 when the capital account was opened up when the Bangkok International Banking Facilities (BIBF) was established. As a part of financial liberalization, these loans were not classified. During the period, the economy was growing at about 8-9 per cent per annum with a moderate inflation rate of below 5 per cent. High foreign exchange reserve (6-9 months of imports) also bolstered investors' confidence whose return on investment was ensured by the fixed exchange rate against the US dollar and the interest rate differential.

In early 1996, the slowdown of the economy was signaled by a decrease in exports for the first time since the late 1980s. At the same time, financial institutions began to suffer from bad loans caused by the collapse of the real estate market. (Real estate loans played a key role in the Thai credit market when land prices were rising rapidly during the boom years of 1988-1995) The Bangkok Bank of Commerce (BBC), a small bank, was the first to run into trouble with bad loans. Also, the bank was repeatedly rescued by the Bank of Thailand with the use of national foreign reserves. This was considered a misuse of foreign reserves which seriously damaged the reputation of the BoT. It later became clear that there were some unusual practices going on within BBC where loans were politically motivated. The botched attempt at a take-over of BBC's management and the BoT's failure to file a criminal action against former BBC's executives is seen as the BoT's mismanagement of the BBC affair.

Most important of all, the incident at the BBC will be critically examined where the investigation by **Prachuabmoh, Nukul,** a committee set-up especially for the investigation in prosecuting of the former prime minister and finance minister responsible for depleting the country's foreign reserves and triggering the economic crisis. Those names in the report include the prime minister and finance minister of the time, Chavalit Yongchaiyudh and Amnuay Viravan and five executives at the central bank, including the governor, Chaiyawat Wibulswasdi. The relationship among the central bank authorities, private bankers and the politicians will be examined. These discussions have supported the argument that the lack of CBI induced by a complicated relationship between these parties is, in large part, the fundamental cause of the financial crisis in Thailand.

* This appendix is referred to in section 2.3.1 Background of the Bank of Thailand (BoT)

Appendix B* : major financial Liberalisation and Reforms since 1985-1997

Date	Major Financial Liberalisation and Reforms
March, 1985	Bank of Thailand encouraged commercial banks to introduce BIBOR (Bangkok Interbank Offered Rates as a reference for the pricing of floating rate loans to customers.
1986	Ceiling of interest rate charged for credit was lifted
June 1989	Ceiling of interest rate on time deposits with more than one-year maturity was lifted
May, 1990	**First stage of liberalisation, acceptance of obligation under Article VIII of the IMF's Articles of Agreement and relaxation of foreign exchange control by liberalising all current account transactions and reducing restrictions on capital movement.**
April, 1991	**Second stage liberalisation on foreign exchange control which includes more liberal outward transfer of funds for investments provision for foreign investor to repatriate investment dividends projects and proceeds from the sales of stocks.**
1992	
January	Removal of ceiling of interest rate on savings deposit
March	Expansion of scope of activities of commercial banks, finance companies and securities companies. Enactment of the Securities and Exchange Act
June	Ceiling on saving deposit rates and all lending rates are abolished
1993	
January	Adopting of the BIS standard (capital to risk asset ratio) for commercial banks
March	The Bangkok International Banking Facilities (BIBF) was established. Participants may provide three types of services (a) banking to non-residents in foreign currencies and baht ('out-out' transactions), (b) banking to domestic residents in foreign currencies only ('out-in' transactions), and (c) international financial and investment banking services.
July	The first credit rating agency, the Thai Rating and Informational Service (TRIS) was established.
August	The Export-Import Bank of Thailand was promulgated to be effective from September 1993. The establishment of EXIM bank was in February 1994.
October	Commercial banks are required to announce the Minimum Lending Rate (MLR), the Minimum Retail Rate (MRR) and maximum margin to be added to MRR as a reference rate for customers other than those eligible for MLR.
1994	
February	**Third Round of the liberalisation on foreign exchange control** **(a) increased the limit on the amount of baht that can be taken out to countries sharing border with Thailand, and Vietnam, from 250,000 baht to 500,000 baht.** **(b) Abolished the limit on the amount of foreign currencies that may be taken out when travelling abroad.** **(c) increased the limit on the amount of foreign investment by Thai residents (which require no prior approval) from BoT US$5 million to US$10 million.** **(d) allowed residents to use foreign exchange that originates from abroad to service external obligations without surrendering or depositing in domestic banking account.**
March	Allowed finance companies and finance and securities companies to open Credit Office outside Bangkok and vicinity.
May	Allowed BIBF to open branch outside Bangkok and vicinity
July	Adopting of BIS standard for finance companies. Finance companies are required to maintain 7 per cent of capital to risk asset ratio.
November	Set up of the Bond Dealer's Club which functions as a secondary market for debt

	instruments.
1995	
February	The cabinet approved the Finance System Development Plan (1995-2000) drawn up jointly by the Bank of Thailand, the Ministry of Finance and the Securities and Exchange Commission.
May	Adopting of the BIS guideline for commercial banks on risk management of derivative trading. Allowing finance companies to mobilise funds from the public by issuing Bill of Exchange (B/E). The minimum amount of each domestic B/E is 10 million baht. Finance companies may also issue B/E abroad after seeking approval from the Central Bank. Allowing credit foncier companies to operate as loan service agent.
July	Allowing commercial banks to act as customers' unsecured debenture holder representatives.
August	Adjustment in calculation of liquidity assets of commercial banks on non-resident baht account from 7 per cent of liquid assets to 7 per cent depositing at the Central Bank.
September	Adjustment the measurement of net foreign exchange exposure for Thai banks.
October	Allowing finance companies to issue Bill of Exchange (B/E) and Certificate of Deposits (CDs) in foreign currency offered in offshore market and with maturity not less than 1 year.
1996	
January	Adopting new guideline for the Central Bank lending to commercial banks, finance companies, and finance and securities companies. The Loan window is now operated under repurchase agreement instead of securities pledging.
March	Announcement of issuance of long-term Bank of Thailand bonds (a) bonds with maturity of 1 year will be auctioned every 2 months for 1,000 million baht. (b) bonds with maturity of 2 years will be auctioned every quarter for 500 million baht. Qualified participants include commercial banks, finance companies, the Government Savings Bank and Financial Institutions Development Fund.
May	Adopting of the provision against doubtful debt ratio at 100 per cent for finance companies, finance and securities companies, and credit foncier companies.
June	Short-term offshore borrowing by finance institutions is subject to a 7 per cent liquidity requirement.
October	Increased the first-tier capital fund to risk asset ratio of commercial bank from 5.5 to 6 per cent, and the overall capital to risk asset ration to 8.5 per cent. Increased the capital to risk asset ratio of finance companies from 7 to 7.5 per cent, with the existing ratio for the first-tier capital fund.
November	Upgraded 7 new foreign BIBF's to full branch.
1997	
January	Adjustment of the form of balance sheet and income statement of financial companies, finance securities companies and credit foncier company same as the form of public company limited.
March	Adoption of the provision against sub-standard asset ratio at 15 per cent for banks and 20 per cent for all other financial institutions.
April	Establishment of Property Loan Management Organisation for purchasing property loan.
June	❑ Request commercial banks not to sell Thai Baht in the offshore market. ❑ Allow commercial banks and all other financial institutions to set up property loan management companies. Issuing guideline on liquidity reserve requirement by (a) allowing debt instrument issued by FIDF as liquidity reserve (b) excluding the deposit for Out-out transaction on calculation base

	Issuance 4 emergency decrees for ; (a) amending the Commercial Banking Act to relax regulation on foreign shareholder limit (b) amending the Act on the Undertaking of Finance Business, Securities Business and Credit Foncier Business to encourage and remove the obstacles to the merger and acquisition of financial institutions. (c) Establishing the juristic entity to operate securitization business (d) establishing the Secondary Mortgage Corporation • Suspend 16 finance companies from their operation for 30 days during which they had to submit the reform plan. • Impost temporary interest rate ceiling of finance companies of 11 per cent for at-call-borrowing and 14 per cent for time-borrowing, and commercial bank of 12 per cent for more than 3 months time-deposit account.
July	• **Changed foreign exchange system from basket to managed float.** • **The central bank notified Thai banks that have surplus of net FX position on spot and forward will have to sell them to the central bank by the end of August 97.** • **Financial institutions are allowed to sell Baht only to those non-residents who have businesses in Thailand.** • **Increased bank rate from 10.5 to 12.5 per cent.** • **Extended interest rate ceiling of finance companies from 11 to 13 per cent for at-call-borrowing and from 14 to 17 per cent for time-borrowing, and commercial banks from 12 to 14 for more than 3 months time-deposits account.**
August	• Suspended 42 more finance companies from their operation for 60 days during which they were required to submit the rehabilitation plan. • Establishing liquidity fund for financial institutions (FIDF as fund manager)
September	• Reduced the liquid asset requirement ratio on deposit and borrowing from 7 to 6 per cent which comprises of deposit at the central bank of not less than 2 per cent, cash in hand of not more than 2.5 per cent and the rest in forms of financial instrument. • Reduced cash reserve ratio from 7 to 6 per cent on short-term deposit and borrowing. • Issuing the guideline for interest rate which banks and finance companies pay to or collect from their customers by using interest rate average of five largest Thai banks as benchmark.

Source : Bank of Thailand

* This appendix is referred to in section 2.3.3 An establishment of the BIBF : Opening up the capital account alongside the fixed exchange rate

APPENDIX C* : REPRODUCTION OF QUESTIONNAIRES : Personal questions

<u>**Personal questions**</u>

P.1 What type of sector are you in and how many years have you been working in the sector?

a.	Public sector	____ years ____ months
b.	Private sector	____ years ____ months
c.	Academic	____ years ____ months
d.	Other, please specify ____________________	____ years ____ months

P.2 What position are you in? Or what do you consider yourselves as?

a. Junior-management

b. Middle-management

c. Senior-management

d. Other, please specify _______________________________________

P.3 Have you had any formal training in economics?

Yes No

* This appendix is referred to in section 3.3 Methodology

Note : The survey took place in June-July 2000

APPENDIX D* : REPRODUCTION OF THE QUESTIONNAIRE

PART I : Respondents' experience with the crisis and the IMF

A. General questions about the financial crisis in 1997

1. When did you become aware of the speculative attack on the Baht?
Please specify (month / year) ____________________________________

2. What did you think caused the foreign capital outflows? (choose whichever apply)
a. A fall of the return of investment in production sector
b. A narrower interest rate gap
c. A fall of investors' confidence in the future prospect of the Thai economy
d. Others, please specify ____________________________________

3. What did you think triggered the speculative attack? (choose whichever apply)
a. A narrower interest rate gap
b. Accumulation of short-term debts
c. Foreign capitals outflow, observable from the fall in stock market index
d. Others, please specify ____________________________________

4. Did you think the Bank of Thailand had other alternatives than to float the Baht during the intense speculative attack in mid-1997?
Yes No
If yes, please specify ____________________________________

5. Did you think the Baht should have been freely floated or devalued by some percentage during the crisis in 1997?
Freely floated
Devalue down by 10% 15% 20% 30% over 50%

6. Was the crisis worse or better than you anticipated?
Worse Better

7. How do you rate the Thai government's handling of the crisis?
Good 4 3 2 1 Bad

B. General perception of the IMF's assistance and its conditions

8. Did you, at the time of the crisis in 1997, agree with the government acceptance of the IMF assistance?
Yes No

9. How appropriate are the following options as other alternative policy the government should have pursued in handling the crisis than accepting the IMF assistance?
9.1 Devalue baht to a certain level and maintain the pegged system
9.2 Borrow from other sources
9.3 Declare debt moratorium like Malaysia
Appropriate 4 3 2 1 Inappropriate
9.4 Others, please specify ____________________________________

10. Did you think USD17.5 billion <u>loan</u> from the IMF was sufficient?

a. More than sufficient
b. Sufficient
c. insufficient
d. far below what was needed

11. Did you think the announcement of the government acceptance of the IMF's assistance helped to increase investors' confidence?

Helpful 4 3 2 1 Unhelpful

12. Did you think it was appropriate that the IMF imposed conditions, such as monetary and fiscal tightening and structural reform, with the loan?

Yes No

13. How essential were the IMF <u>conditions</u> in assisting recovery?

Essential 4 3 2 1 Unhelpful

14. What other assistance could the IMF have offered the government in dealing with the crisis?

Please specify____

15. <u>Overall</u>, has the IMF assistance been successful in assisting recovery?

Successful 4 3 2 1 Failure

PART II : Policy tightening -- immediate response to the financial crisis

C. <u>Monetary policy</u>

16. The IMF has called for a substantial rise in interest rates in order to avoid a depreciation / inflation spiral and to prevent foreign capital outflows. <u>In the context of Thailand during the crisis</u>, did you think such tightening was effective in dealing with

16.1 Curbing currency depreciation
16.2 Preventing a rise in inflation
16.3 Reducing foreign capital outflows

Effective *4* *3* *2* *1* *Ineffective*

17. <u>In the context of Thailand during the crisis</u>, what might have been a more appropriate measure instead of a substantial rise in interest rate, in dealing with the following?

17.1 Curbing currency depreciation
17.2 Preventing a rise in inflation
17.3 Reducing foreign capital outflows

Alternative measures : _________________________________

18. Were there particular features of Thailand in the crisis that prevented monetary tightening from being effective?

Please specify____

19. The followings have been identified as weak areas of the Thai financial market. How damaging were they (have they contributed) to the financial crisis?

19.1 Absence of fully developed bond / equity market

19.2 Under-regulated financial institutions

19.3 Lack of international competition

19.4 Lack of legal and regulatory reforms i.e. bankruptcy legislation

Severely damaging 4 3 2 1 Damaging

19.5 Other suggestions, please specify ____________________

20. Was widespread closure of financial companies justified?

Yes No

If no, please specify ____________________

21. It has now been 3 years after the crisis, at what pace do you think the government should have pursued the financial liberalization scheme at this period?

a. More rapidly than before the crisis

b. Same pace as before the crisis

c. Slowdown the liberalization phase until local firms have recovered

D. Fiscal policy

22. Did you think it was necessary to reduce government spending during the crisis?

Necessary 4 3 2 1 Not necessary

23. How effective is the budget cut in dealing with the following issues?

23.1 Increasing investor's prospects of repayment

23.2 Balancing the composition of the current account adjustment between public and private sectors

23.3 Reducing the external current account deficit and thus reducing the need for currency depreciation

23.4 Reducing expectation of currency depreciation and country risk premium

23.5 Reducing likelihood of monetization and thus lower expectation of inflation and currency depreciation

Effective 4 3 2 1 Ineffective

24. How much do you think the budget has been cut, on the average of the past 3 fiscal years?

a. Less than 1% of GDP

b. Between 1% - 2% of GDP

c. Between 3% - 5% of GDP

d. More than 5% of GDP

25. On the average of the past 3 fiscal years, how much did you think government revenue collection has been declined as a result of the financial crisis?

a. Less than 1% of GDP

b. Between 1% - 2% of GDP

c. Between 3% - 5% of GDP

d. More than 5% of GDP

PART III : Structural reform and long-term economic recovery plan

E. Structural Reform

26. The IMF has suggested 4 areas of structural reform. How essential do you think they are to economic recovery?

26.1 Financial sector reform and corporate restructuring
26.2 Governance and competition policy
26.3 Current and capital account liberalization
26.4 Social sector reform

Essential 4 3 2 1 *not necessary*

27. How do you think the IMF has prioritized the following, keeping in mind that there is not enough resource and capital to restructure all sectors at once?

27.1 Financial sector reform and corporate restructuring
27.2 Governance and competition policy
27.3 Current and capital account liberalization
27.4 Social sector reform

High priority 4 3 2 1 *Low priority*

F. Prospect for the future

28. How do you think the government should prioritize the following as a strategy for economic recovery during the aftermath of the financial crisis, keeping in mind that there is not enough resource and capital to do everything at once?

28.1 Resuming high economic growth
28.2 Restructuring financial market
28.3 Reducing corruption in order to increase efficiency

High priority 4 3 2 1 *Low priority*

28.4 Others, please specify ______________________________

29. Corruption has been highlighted as one of the major drawbacks in promoting economic efficiency. In the context of Thailand, please indicate how essential are the following schemes in reducing corruption?

29.1 Amend the election system / promote transparency of ballot
29.2 Promote transparency of law and regulations
29.3 Promote law enforcement
29.4 Adjust compensation of government officials to private level
29.5 Encourage awareness and education from the school level

Essential 4 3 2 1 *Inessential*

29.6 Other suggestions, please specify ______________________

30. How effective are the following strategies in encouraging economic growth to resume in the aftermath of financial crisis?

30.1 Promoting investment and exports
30.2 Promoting foreign direct investment
30.3 Increasing competitiveness of local firms through merging with international firm(s)

Effective 4 3 2 1 *Ineffective*

30.4 Other, please specify ______________________________

31. How essential are the following options as key strategies in <u>reducing vulnerability</u> in the future?

31.1 Introducing regional cooperation (trade-wise), re-emphasize the AFTA

31.2 Encouraging foreign ownership in order to strengthen competitiveness and increase technical knowledge of the local firms at low cost

31.3 Increasing government investment in human resources (World Bank suggestion)

31.4 Encouraging capital intensive import substitution (World Bank suggestion)

Essential 4 3 2 1 Unhelpful

31.5 Other suggestions, please specify____________________________

PART IV : Financial and social sector reforms

G. Financial market sector

32. How severely have the rising interest rate and exchange rate depreciation affected your institution?

32.1 Rising interest rate

32.2 Exchange rate depreciation

Very severely 4 3 2 1 No impact

33. Has the ownership of your institution been altered in any way as a result of the crisis?

a. Merged with local financial institution(s)

b. Merged with foreign financial institution(s)

c. Merged with local bank(s)

d. Merged with foreign bank(s)

e. Ownership structure remains the same

f. Other, please specify ______________________________________

34. During the crisis in 1997, what kind of assistance did your institution need and receive from the government?

34 (a) Assistance needed ____

34 (b) Assistance received ____

35. During the crisis in 1997, what kind of assistance did you think the government needed from the IMF in assisting the financial market recovery?

Please specify ____

H. Social sector

36. Was your institution asked to take part in the social restructuring reform program by the government during the crisis?

Yes No

37. Please indicate how sufficient are social safety nets in Thailand?

Sufficient 4 3 2 1 Insufficient

38. Please indicate how urgently these social problems need correcting, keeping in mind that there are not enough resources to improve all areas at once.

38.1 Narrowing income gap
38.2 Reducing unemployment
38.3 Reducing poverty
38.4 Improving health / medical care scheme
38.5 Improving education / training scheme
38.6 Reform of the pension system
Very urgent 4 3 2 1 Not urgent
38.7 Other social problems, please specify ____________________________

39. What do you think is the problem in setting up social safety nets?
Please specify ____

40. How do you think the IMF has regarded the importance of social sector reform?
High priority 4 3 2 1 Low priority

41. What kind of assistance does the social sector need from international organizations like the IMF or the World Bank?
41 (a) Assistance from the IMF____
41 (b) Assistance from the WB ____

* This appendix is referred to in section 3.4 Results of the survey
Note : The survey took place in June-July 2000

APPENDIX E : RESULTS OF QUESTIONNAIRES*

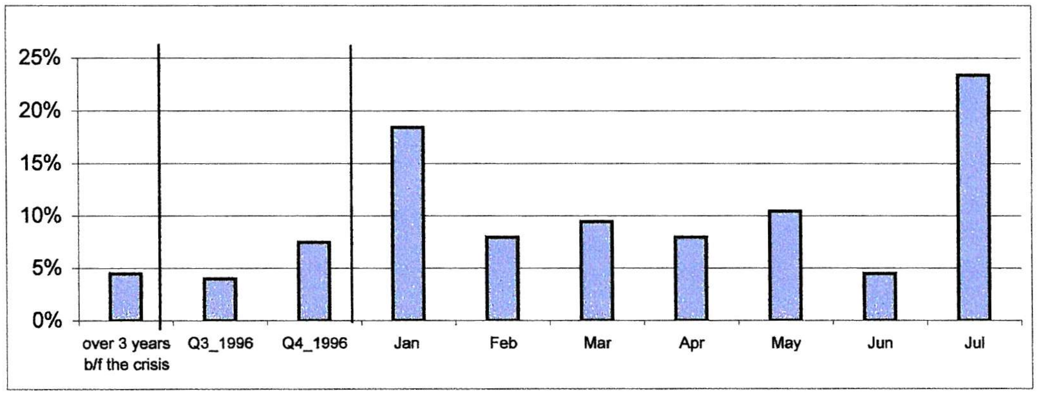
(*For the open-ended answers, responses are reported as they were written by respondents. Also, see appendix D for the completed questionnaires.)

PART I : Respondents' experiences with the crisis and the IMF

A. General questions about the financial crisis in 1997

1. When did you become aware of the speculative attack on the baht.

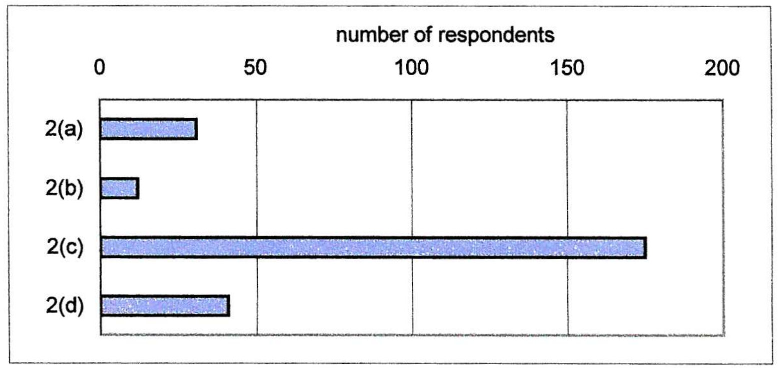
	over 3 years b/f the crisis	Q3_1996	Q4_1996	1997						
				Jan	Feb	Mar	Apr	May	Jun	Jul
Private										
Fincos (72)	5	0	8	15	5	10	7	11	2	9
Banks (41)	1	0	4	5	3	5	4	4	1	14
Public										
FPO (24)	0	3	1	5	1	1	1	3	2	7
BB (17)	2	3	0	1	1	0	1	1	3	5
TDRI (8)	0	0	1	3	0	0	1	0	0	3
Others										
Uni. (33)	1	2	5	6	6	3	2	2	1	5
BOT (6)	0	0	0	2	0	0	0	0	0	4
Total (actual)	**9**	**8**	**15**	**37**	**16**	**19**	**16**	**21**	**9**	**47**
Percentage	**4%**	**4%**	**7%**	**18%**	**8%**	**9%**	**8%**	**10%**	**4%**	**23%**



2. What did you think caused the foreign capital outflows?

(choose whichever apply)

	2(a)	2(b)	2(c)	2(d)
Private				
Fincos (72)	10	6	64	13
Banks (41)	7	3	36	9
Public				
FPO (24)	2	2	22	5
BB (17)	4	0	15	5
TDRI (8)	2	0	7	0
Others				
Uni. (33)	6	1	25	8
BOT (6)	0	0	6	1
Total (actual)	31	12	175	41



a. A fall of the return of investment in production sector
b. A narrower interest rate gap
c. A fall of investors' confidence in the future prospect of the Thai economy
d. Others, please specify ______________________

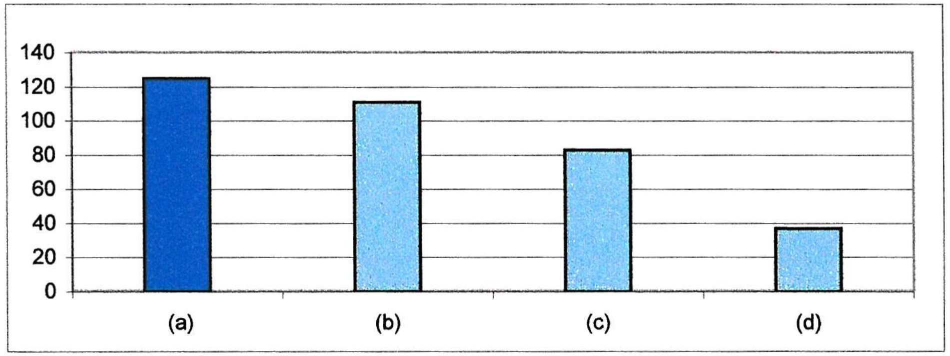
2. What did you think caused the foreign capital outflows? Others, please specify______________

FINCO	BANK	FPO	BB	Uni.
1. Imbalance policy of interest rate or exchange rate which created an arbitrage opportunity on interest rate differential b/w on-shore and off-shore while exchange rate is fixed resulting non-hedge borrowing on such speculative. Then there is too much capital after too little projects and a fall of return on investment.	1. Excessive current account deficits, speculative hedging effect, hedge fund operation	1. The Baht didn't reflect the real fundamental of economy or the Baht was much appreciated due to highly linking to the US $ at that time.	1. BOT let the foreign loan overwhelm in economic system cause of low interest rate and without controlling private sector invested on garbage projects. So when the pay back day start everything confront with the boom days is no economic security for anyone to trust. That why foreign capital outflow.	1. current account deficit
2. expected crash in econ. and during the last govt.	2. The market was mis-priced due to the work economic fundamental.	2. Huge amount of short term debt	2. spiral bond in Thailand	2. short term foreign loan to finance long term projects (real estate etc.) then..
3. less confidence in the Thai government at that time .	3. Rising foreign debt	3. Enlarging current account deficit; political outlook; condition of finance companies	3. Thai politic is not stable.	3. both Thai and foreigners moved their funds out of the country
4. Lost of confidence of foreign exchange stability and level of short term debt.	4. Bubble economy, short term foreign investment	4. Bad fundamentals, classic first generation model of speculative attack	4. structural problem declining investment when over investment	4. mismanagement of foreign reserve
5. hard instruct -panic reactions	5. lack of confidence in the Thai government's handling of the baht exchange rate management	5. financial system crisis	5. The Baht flotation that increased the foreign exchange risk	5. baht currency was overvalued
6. crisis in banking system and its incompetence an the economy	6. financial PLC (keirutsu), the largest players in stock market, signalled loss/ broke down			6. prospect of baht devaluation
7. declining confidence starting from , problems of over supply and over value in property sector followed by the fall of confidence in the financial sector.	7. A lost of investors confidence in local corporate' loan repayment capability - a lost of investors' confident in exchange rate system.			7. a big deficit in current account followed by a remove of baht devaluation, then capital outflow to pay debt and lately
over investment funded by debt / over-capacity	8. high spending on imported luxury items, capital control regulations.			8. afraid of baht devaluation
a continuously weaken currency.				
massive short term extent debt (current account deficit)				
current deficit and the problems in financial sector initiated by BBC.				
devaluation of Thai Baht				
uncertainty of Thai political system.				

BOT
1. Fall in financial performance of corporate sector 2. Surging of financial risks.

3. What did you think triggered the speculative attack? (choose whichever apply)

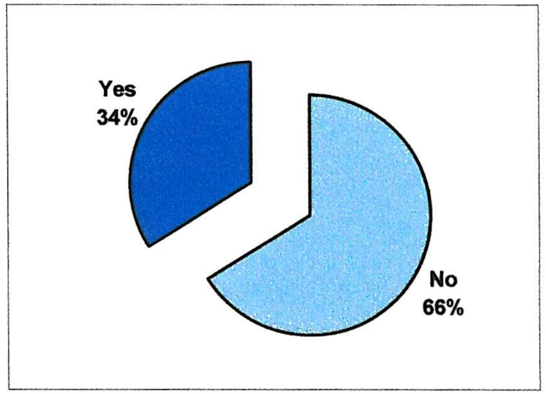
	(a)	(b)	(c)	(d)
Private				
Fincos (72)	43	38	30	14
Banks (41)	19	23	21	5
Public				
FPO (24)	14	15	11	4
BB (17)	12	9	7	2
TDRI (8)	7	5	1	1
NESDB (6)	4	4	2	5
Others				
Uni. (33)	21	13	9	5
BOT (6)	5	4	2	1
WB (5)	0	0	1	4
Total	**125**	**111**	**83**	**37**



a. A narrower interest rate gap
b. Accumulation of short-term debts
c. Foreign capitals outflow, observable from the fall in stock market index
d.Others, please specify ______________________________

4. Did you think the Bank of Thailand had other alternatives than to float the Baht during the intense speculative attack in mid-1997?

	No	Yes
Private		
Fincos (72)	39	33
Banks (41)	31	10
Public		
FPO (24)	14	10
BB (17)	8	9
TDRI (8)	8	0
NESDB (6)	4	2
Others		
Uni. (33)	28	5
BOT (6)	4	2
WB (5)	4	1
Total	**140**	**72**
Percentage	**66%**	**34%**



3. What did you think triggered the speculative attack? Other, please specify ____________________

Fincos	Bank	FPO	TDRI	Uni.
1. mismatch of the maturity. There should not be a lay lasting arbitrage opportunity in the market. In the L-T, everyone to pay. 2. As explain above, imbalance of capital try to find its equilibrium although their result in some from of transition surge 3.expectational profit due to support by Thai government with known limited resource to maintain such low exchange rate effectively 4. I think there are a lot of resons. speculators knew lots off our information on1. Government tried to should firm not to devalue Baht; 2. Thailand has limited foreign reserves ; 3. Baht was overvalued ; 4. Other 5. weakness in financial institutions, fixed exchange rate	1. Opportunity to make profit by fund management 2. rigid fix exchange of the Baht, stubbornness of the authorities to depreciate the fix exchange rate 3. unrealistic level of the fixed exchange rate 4. rising 'short dollar- long Baht ' swap agreements of the bank of Thailand	1. Triple deficits (fiscal,A/C, bop) 2. A significant reduction of export volume. 3. the likelihood of the burst of the bubbles 4. meltdown of the financial system	1. econ. Gr.	1. shadow exchange rate (based on ppp) exceeded the official exchange rate by 1995 2. all above are interrelated 3. exportation of baht devaluation 4. all above 5. a and b and with the ratio of short term debt to foreign exchange reserve
6. all of the above. The high short term debt, large current account deficit saving economy and lack of confidence about macro policy made the baht peg unsustainable 7. The view that Thailand could no longer keep " basket of currency system " as it was against the country's fundamental 8. THB peg policy which was unsustainable -private sector did manage market rate exposing 9. Baht fixed to USD in declining economic environment believe the Thai baht cannot remain pegged. the previous Dollar pegged exchange rate small country is easy to be attacked. baht over valued	5. fixed currency (fixed exchange rate system)	**BB** 1. lack of confidence in the government (corruption) 2. a crash in real estate and property sector and the postponement of debt repayment by the financial institution and private sector.	**NESDB** 1. mismatch used of capital : used short term capital to lend long term investment 2. all of the specified cause are party attributed to (of course) macroeconomics mismanagement and as well poor management in private sector itself. 3. government policy' s weakness in using fix exchange rate while allowing free financial movement 4. over interest in real estate, when Baht was depreciated, these became heavy debt burden and bad debt finally export slump in 1996 (in an environment of fixed exchange rate, large current account deficit are short term debt)	**BOT** 1. BBC, Finance, default in inter payment on some Baht of ECDs **WB** 1. Let to portfolio outflows self fall jealous expectations. Then, it because obvious that got will need to Pet the Baht go 2. Loss of confidence in repayment of debt : short fixed exchange of (long) investment in real estate with Baht reserve. 3. Misallocation of resources/ mis-financing of investment of projects / a, b caused long fixed exchange rate regime and opening of capital account. 4. panic

4. Did you think the Bank of Thailand had other alternatives than to float the Baht during the intense speculative attack in mid-1997? Other, please specify ______________________

Finco
the govt should slow down the econ. growth 2-3 years before the crisis in 1997 and manage the country capital funds.
fixed the exchange rate system
let loose the bubble air gradually i.e. , devalue Baht with a trading band (not free float) and some capital control. This will fence off speculative attack which result transition surge.
float it earlier
closed down some weak financial companies and gradually devaluate the Baht
Accelerated export in order to increase capital reserve and investors' confidence in Thailand economic.
devalue Baht at a certain amount
change the currencies portion in basket
to adjust the weight of basket of currency
change the Baht of currencies target
monitoring foreign exchange transaction, and doing swap only with onshore(banking portions)
but, BOT should have taken some measures to clam down the bubble economy in Thailand earlier
do the same like Malaysia did
govt announced Baht devaluation by fixed %
Increase the exchange bond
capital controls followed by government and IMF negotiating an extension of debt repayment schedule / govt guarantee
closed the door and reduce the debt
like Malaysia
readjust the composition of the basket. if world also make the Baht weaken at some controllable
they could have consider capital control- but that would have attracted enormous criticism
should be a managed devaluation to prevent a too strong impact on real economy
like Malaysia did
float the baht and not defend it
by using capital control policy
BOT may use semi floating system (floating within some interval)
control float with capital control

Bank
devalue and raise interest rate
try to find other ways out to boost the market and sentiment first. Take some period to look at the cause and try to resolve it. But if it is no way, the devaluation may be the last way out.
capital control
capital control
set interval range
use of currency and capital control
prevent outflow of currency like Malaysia did
The government should have let THB to float to a certain extent, that they can control, before the worst hit in March 1997
exchange control like Malaysia

FINCO_continue
Devalue by a fixed percentage
the floating is inevitable, but the timing was bad and how BOT people handled the situation was disappointing
capital control policy as applied in Malaysia
widen trading band of currency
capital control
the BOT may chose to fix Thai Baht with major foreign currencies similar to Malaysia's case.

FPO
BOT should expand the exchange rate band.
float with range (certain level)
controlled capital flow and devalued the Thai Baht
It could widen the exchange rate .... First to see whether that could help alleviate the consequence of those speculative attacks on the Baht
devalued by some percentage
capital control during the phase of the crisis
pegged to a fixed rate system with in a band
as Malaysian did

BB
devalue the Baht by some percentage
Through I am a patriot, I don' t like other countries than Thailand. But to solve this problem I' d like the way the Malaysian did, it work.
keep stable value of Thai baht, because the crisis happened before floating, (wrap)
devalue Baht
devalue the Baht and kept interest rate at high level a controlled the foreign exchange market.

Uni.
temporary fixed exchange rate (pegged system)
or very little, under that condition, in the short run
exchange rate control
step devaluation of baht
capital control

TDRI (none)

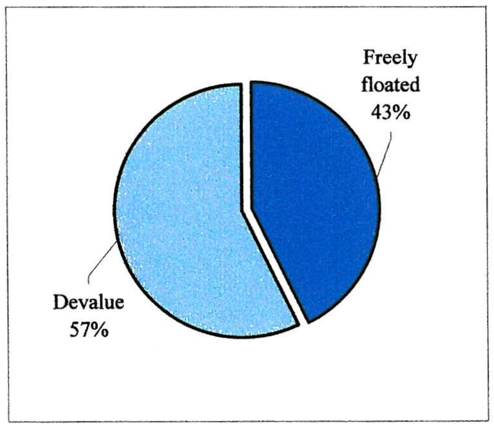
NESDB
instead of floating Thai Baht , BOT might use wide range for exchange rate : identity the min and max of the rate of exchange rate
peg Baht to the Japanese Yen could have been one possible way

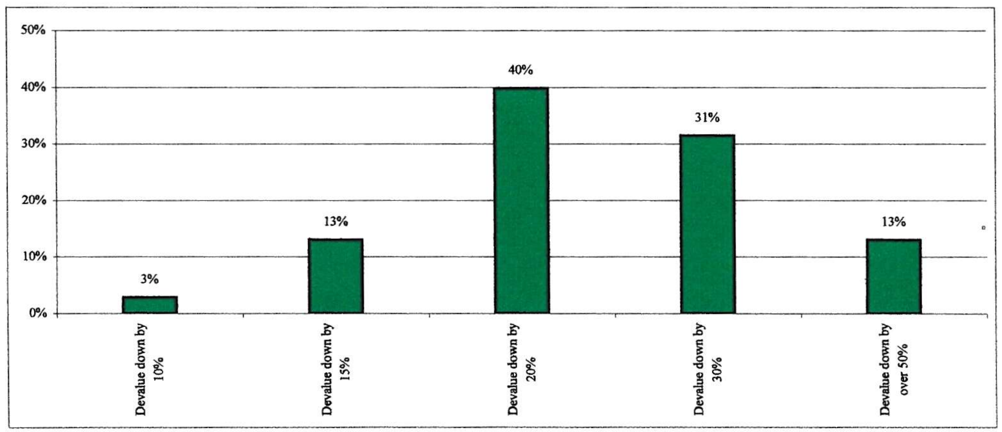
BOT
of Baht parity and restructuring of foreign debt under government guarantee(ST-->LT)

WB
float the currency when the liberalisation of financial sector earlier these foreign reserve can be saved, could be allocated into more productive sectors.

5. Did you think the Baht should have been freely floated or devalued by some percentage during the crisis in 1997?
Freely floated
Devalue down by 10% 15% 20% 30% over 50%

	Freely floated	Devalue	*Devalue down by*				
Private			*10%*	*15%*	*20%*	*30%*	*over 50%*
Fincos (72)	25	45	*2*	*3*	*20*	*15*	*4*
Banks (41)	15	26	*1*	*7*	*7*	*6*	*6*
Public							
FPO (24)	12	12	*0*	*2*	*3*	*4*	*1*
BB (17)	7	10	*0*	*1*	*3*	*4*	*0*
TDRI (8)	4	4	*0*	*0*	*2*	*2*	*0*
Others							
Uni. (33)	18	15	*0*	*1*	*6*	*3*	*3*
BOT (6)	4	2	*0*	*0*	*2*	*0*	*0*
Total	**85**	**114**	*3*	*14*	*43*	*34*	*14*
Percentage	**43%**	**57%**	3%	12%	38%	30%	12%



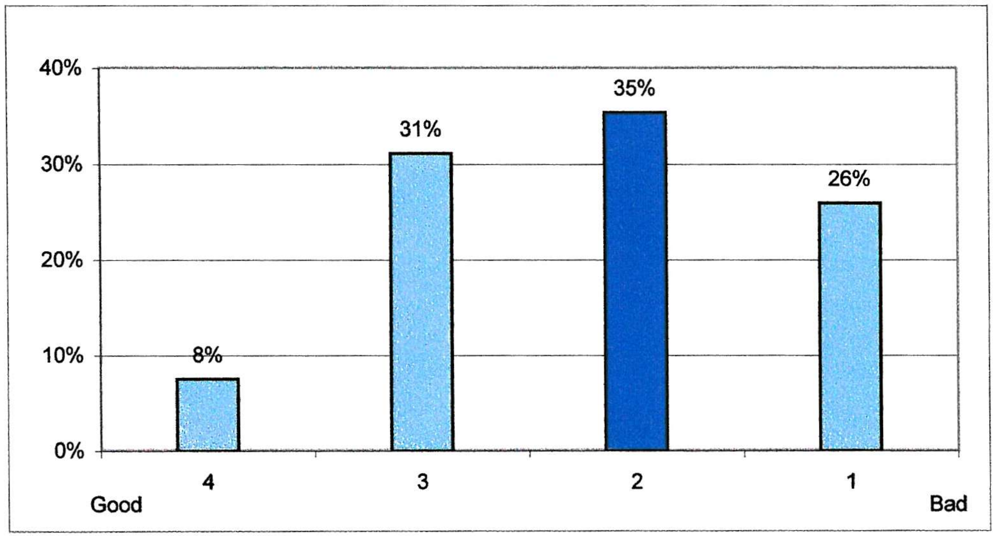


Note : only 1-2 % of respondents did not answer

7. How do you rate the Thai government's handling of the crisis?

Good 4 3 2 1 Bad

	4	3	2	1
Private				
Fincos (72)	7	13	34	18
Banks (41)	2	14	16	9
Public				
FPO (24)	3	11	3	7
BB (17)	0	4	4	9
TDRI (8)	0	3	3	2
NESDB (6)	0	4	1	1
Others				
Uni. (33)	3	10	11	9
BOT (6)	1	2	3	0
WB (5)	0	5	0	0
Total	**16**	**66**	**75**	**55**
Percetage share (%)	8%	31%	35%	26%



6. Was the crisis worse or better than you anticipated?

Worse Better

	Worse	Better
Private		
Fincos (72)	54	8
Banks (41)	33	8
Public		
FPO (24)	22	2
BB (17)	14	3
TDRI (8)	6	2
NESDB (6)	4	2
Others		
Uni. (33)	33	0
BOT (6)	5	1
WB (5)	5	0
Total	**176**	**26**
Percentage	**87%**	**13%**

B. General perception of the IMF's assistance and its conditions

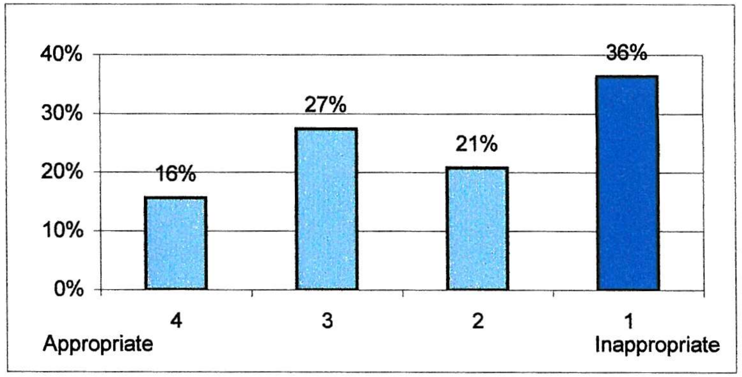
8. Did you, at the time of the crisis in 1997, agree with the government acceptance of the IMF assistance?

	Yes	No
Private		
Fincos (72)	58	12
Banks (41)	34	7
Public		
FPO (24)	17	7
BB (17)	7	10
TDRI (8)	5	3
NESDB (6)	6	0
Others		
Uni. (33)	28	5
BOT (6)	5	1
WB (5)	5	0
Total	**165**	**45**
Percentage	**79%**	**21%**

9. How appropriate are the following alternative policies the government could have pursued in handling the crisis?

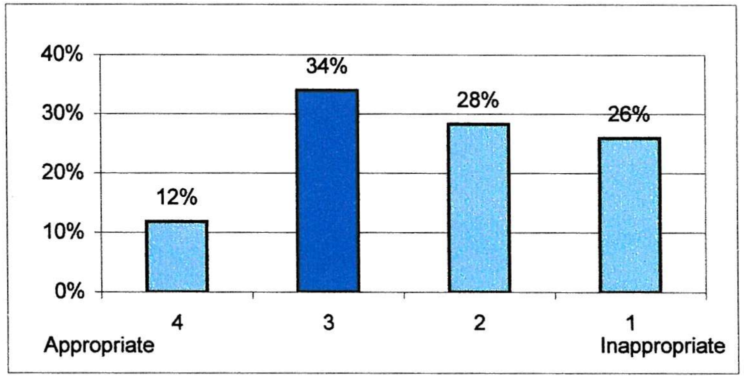
9.1 Devalue baht to a certain level and maintain the pegged system

	Appropriate			Inappropriate
	4	3	2	1
Private				
Fincos (72)	16	19	14	23
Banks (41)	5	11	15	10
Public				
FPO (24)	2	8	2	12
BB (17)	3	11	0	3
TDRI (8)	1	1	1	5
NESDB (6)	1	1	2	2
Others				
Uni. (33)	5	5	8	15
BOT (6)	0	2	2	2
WB (5)	0	0	0	5
Total	33	58	44	77
Percentage	16%	27%	21%	36%



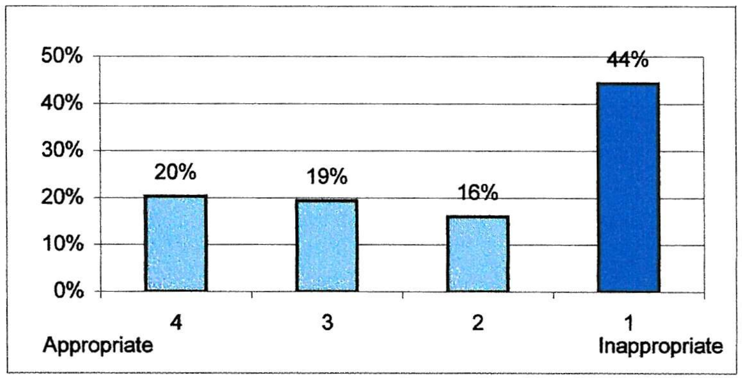
9.2 Borrow from other sources

	Appropriate			Inappropriate
	4	3	2	1
Private				
Fincos (72)	7	20	26	19
Banks (41)	1	12	13	15
Public				
FPO (24)	3	12	5	4
BB (17)	0	5	5	7
TDRI (8)	1	4	1	2
NESDB (6)	1	3	2	0
Others				
Uni. (33)	10	11	5	7
BOT (6)	1	2	2	1
WB (5)	1	3	1	0
Total	25	72	60	55
Percentage	12%	34%	28%	26%



9.3 Impose capital control like Malaysia

	Appropriate			Inappropriate
	4	3	2	1
Private				
Fincos (72)	13	14	13	32
Banks (41)	8	10	9	14
Public				
FPO (24)	3	3	3	15
BB (17)	5	7	2	3
TDRI (8)	2	1	3	2
NESDB (6)	1	1	1	3
Others				
Uni. (33)	9	3	2	19
BOT (6)	2	1	1	2
WB (5)	0	1	0	4
Total	43	41	34	94
Percentage	20%	19%	16%	44%



9. What other alternatives the government could pursued in handling crisis? Please specify______________

Finco
float and move freely
capital control and not guarantee debt by foreign/ international investor but guarantee only ordinary people
don't disclose BOT swap cotract until the crisis is under control
no short term solution - long term structural reform was required
none, because the Thai government does not follow the plan anyway
to implement the policy to protect currenciesspeculation, especially from hedge funds.
conduct in depth analyis regarding effect of crisis on the overall econ. & bus. sector.
none, they only have money.They should understand the local legal and financial framwork before facing countries to sign letter of intent or shut down finance firms.
There are lots of things the government could do to prevent the 97 crisis, warning signs everywhere.By ignoring them we did not have any choice left in 1997.
Before the crisis, the government intened to liberalise the country in various aspects i.e. the financial sector, relaxation on imported goods through AFTA scheme, and etc. However, the government did not impose any proper regulations or guidelines to develop those industries.There were no long term plans to develop those industries.
utilize the loan wiselly in needed sectors

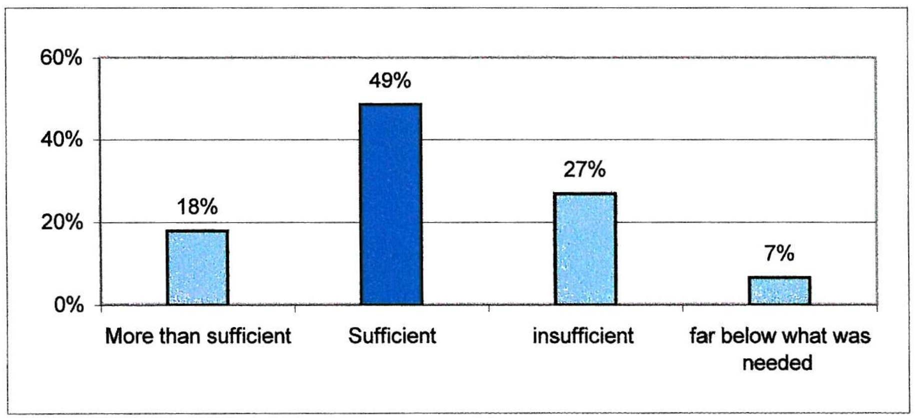
Bank	UNI
intense public communication for cause and effects.	capital control
	Alloowed financial institutions to collapse
	let the baht float
	the government should solve NPL first
	don't spend foreign reserve on Baht spectculative attack and freely float as soon as possible
	float with capital control

FPO	BOT
capital control	may be replaced by ST-->LT debt swap

BB	WB
Ignore to loan from foreign fund	floating exchange rate
control the foreign exchange transaction	could be done only the government is committed to reform. I am not sure whether W /O conditionalities imposed in the LOI, Thai government alone could enable the reform program.

10. Did you think USD17.5 billion loan from the IMF was sufficient?

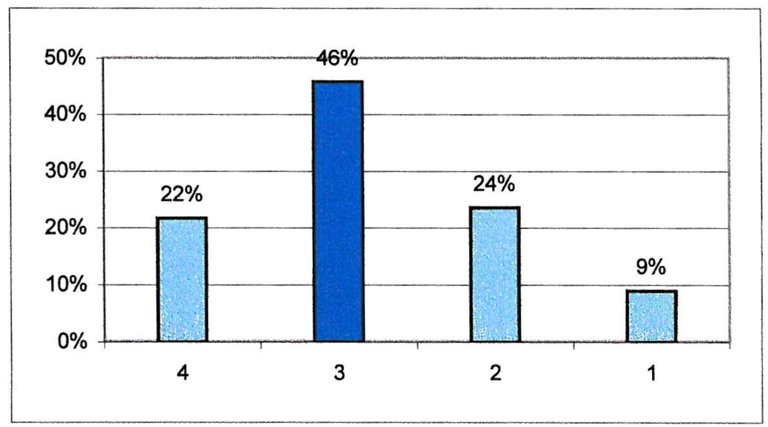
	More than sufficient	Sufficient	insufficient	far below what was needed
Private				
Fincos (72)	9	29	27	7
Banks (41)	11	21	5	4
Public				
FPO (24)	5	11	8	0
BB (17)	4	9	4	0
TDRI (8)	0	4	4	0
NESDB (6)	0	5	1	0
Others				
Uni. (33)	6	17	8	2
BOT (6)	1	4	0	1
WB (5)	2	3	0	0
Total	**38**	**103**	**57**	**14**
Percentage	**18%**	**49%**	**27%**	**7%**



Note : only 1-2 % of respondents did not answer

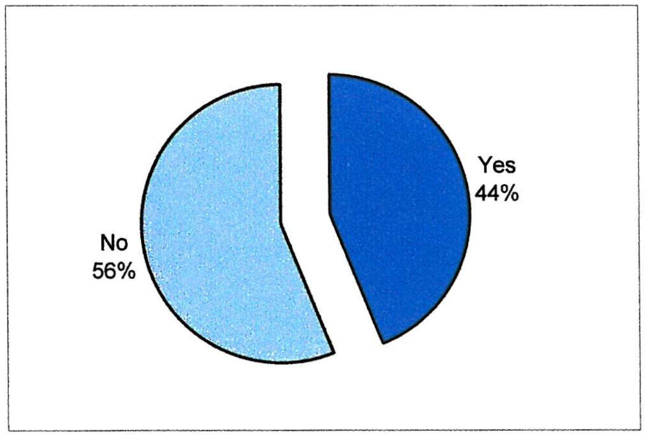
11. Did you think the announcement of the government acceptance of the IMF's assistance helped to increase

	helpful			Unhelpful
	4	3	2	1
Private				
Fincos (72)	20	33	11	8
Banks (41)	7	22	12	0
Public				
FPO (24)	8	7	7	2
BB (17)	1	5	6	5
TDRI (8)	0	4	2	2
NESDB (6)	1	3	2	0
Others				
Uni. (33)	6	17	8	2
BOT (6)	0	4	2	0
WB (5)	3	2	0	0
Total	**46**	**97**	**50**	**19**
Percentage	**22%**	**46%**	**24%**	**9%**



12. Did you think it was appropriate that the IMF imposed conditions, such as monetary and fiscal tightening and structural reform, with the loan?

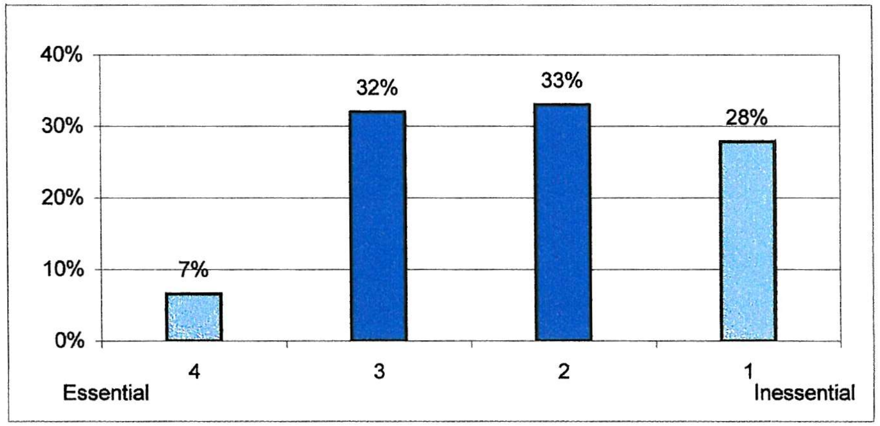
	Yes	No
Private		
Fincos (72)	34	38
Banks (41)	20	21
Public		
FPO (24)	11	13
BB (17)	6	11
TDRI (8)	2	6
NESDB (6)	3	3
Others		
Uni. (33)	13	20
BOT (6)	1	5
WB (5)	3	2
Total	**93**	**119**
Percentage	**44%**	**56%**



13. How essential were the IMF conditions in assisting recovery?

Essential 4 3 2 1 Unhelpful

	Essential			Inessential
	4	3	2	1
Private				
Fincos (72)	6	23	24	19
Banks (41)	0	18	13	10
Public				
FPO (24)	3	11	6	4
BB (17)	1	3	5	8
TDRI (8)	0	2	4	2
NESDB (6)	1	1	3	1
Others				
Uni. (33)	3	8	10	12
BOT (6)	0	1	3	2
WB (5)	0	2	2	1
Total	**14**	**69**	**70**	**59**
Percentage	**7%**	**32%**	**33%**	**28%**



14. What other assistance could the IMF have offered the government in dealing with the crisis? Please specify ______________________

FINCO

- more practical conditions
- guard off those speculative attack, free market a larger pool of reserve via a unify currency across the region
- work closely with the government to monitor the situation and adjust loan condition to reflect the real situation
- special education program to press people as well as public. Thai should be continuous process, logic for bankruptcy laws, etc.
- the monetary and fiscal policy to stimulate domestic consumption
- how to manage financial risk for financial institutions and how to regulate them
- IMF's assistance package was the tighten policy that caused Thai economic so worsen. Therefore, It should provide some social and welfare package to help unemployed / farmers who got directly effect from this crisis.
- IMF should pursue the funds to invest in real sector like a foreign direct investment with the fair price
- free fund to restructure real sector and financial sector
- get condition government can not get the private debt come to public debt. restructuring the corporate before the banking system
- put less stringent conditions to the country so that Thai enterprises could have survived and been protected from the foreign shoppers
- balance fiscal monetary policies more with social items.
- to stop outflow like South Korea did(supporting the government to guarantee /negotiation with foreign creditor to reschedule their loans .
- IMF prescription of very high macro policies was inappropriate. It should have worked until the Thai government to bring about an orderly outflow of capital that did not can collapse of the Thai economy in 1998
- thinking of the private and public debt so much
- force political revolution / cut down corruption
- give more reasonable conditions
- basically, I believe we need more discipline in handy monetary and fiscal issue as well as structural reform. However some IMF conditions could be handled with more flexibility i.e. high interest rate policy.
- loans without fiscal tightening policy conditions.
- social welfare especially unemployed person.
- IMF underestimated security of the problem and their measures were hence to austere which led to more economic construction than necessary.
- co-ordinate with other organisation to set up the initial plan to recover private businesses which were effected by their policy.
- the IMF should provide some grant to reform essential sectors in Thailand such as social, agricultural or even financial sectors.
- providing some amount of money to guarantee external debt payment so that this could reduce abruptly capital outflow and market panic.
- recommended the objectives to approach and help to evaluate the performance of Thailand.
- not interfering too much on our monetary and fiscal policy. Should give us more flexibility to think and do it.
- provide strong technical and professional advice in dealing with the crisis.

BANK

- 1) never apply a shock treatment to a weak patient. 2) Step by step correction in financial mismanagement. 3) Cut down imports and stimulate exports rigously.4) Apply flexible exchange rate scheme to attain the Baht's appropriate value. 5) Stimulate economic activities at large
- knowledge transfer
- lower interest rate policy to support real sector to service through crisis period.
- IMF should suggest have some confidence that help the financial system especially finance and security company step by step, not too tight
- the consultant team
- low interest rate
- long term and low interest rate
- appropriate monetary policy, more understanding in Thai situation
- the frightening period was too long
- deregulation
- free fund to compensate part of government's loss from financial restructuring program
- asked the government not to guarantee the country's foreign private loans
- should be only advice and not to do LOI. that cause Thailand inefficient to more and past economic recovery
- capital control later
- continuous strategy advisory
- comment on our monetary policy.
- guarantee payment on Thai government

FPO

- Do more homework about Thai economy and accept that the economic structure and condition are very from country to country. The measures imposed by IMF should have been flexible and adjusted accordingly.
- did not' t impose any conditions to Thailand, and let the Thai government rehabilitate economy by himself
- more loans
- macro economic data base management
- more loans
- leniency and more flexibility with record to imposed conditions and performance criteria
- the IMF should have loosened their tight polities
- any other but fiscal tightening

BB

- Thai government should not solve problems by borrowing more loan.
- The IMF should have imposed less conditions particularly on fiscal tightening since the government had needed money for some feasible investments such as investments on agri.- industries and agricultural production
- With having the bad condition to Thai government, it must do everything without conscious consideration for the benefit to Thailand such as Thai education institution must out of control from government.(it effected to the fee, tuition)
- debt free loan(it possible)
- soliciting foreign investor to invest more in Thai economy
- debt moratorium
- Tighten monetary policy to discourage low return loans and in order to decrease NPLs, however, level of tightening has to be regarded by liquidity.
- more relax with the fiscal tightening
- IMF should consider the fiscal policy more seriously as the monetary tightening caused the situation become worse. IMF should impose less strict condition on fiscal policies.

TDRI

- loans restructuring measures
- no assistance from IMF
- after the likely recovery of the crisis and more need for loan from IMF(LOI 8), IMF could assist by not intervening with Thai government
- give some technology and management assistance

NESDB

- technical assistance in handling monetary policy and supervisory financial institutions
- technical assistance and technical support in government reform
- consualtancy, learn more about the structure of Thai economy could have help them better understand the nature of the crisis.
- IMF and its staff should have able to identify that Asian crisis and South American's over are different term of sources of foreign debt , with hindsight. The economy was billed because of the prescription not by the disease
- technical assistance's
- initiate private sector investment in provide liquidity. More technical assistance in policy design, surveillance activity, infomation an international data and best practice

BOT

- since Thailand crisis is unique which makes Thailand a precedent case, the IMF should listen more to the Thai people. Be a lot more flexible whenever each condition adversely affects the economy. etc.
- technical assistance and consultative team

UNI

- more money, less restriction
- debt restructuring of foreign loans (creditors to cut loss previous loans and allow debtors to restructure their business)
- more flexible on conditionals to stimulate growth and process more effective social safety network.
- gradual slowdown of fiscal and monetary policy with out closing down finance companies and commercial
- giving advice to the government to help the real sector more or less rather than concentrating hearing on the financial sector as it did.
- no
- IMF has the American benefit on their back they give advice on that basis. Asian Fund is more suitable
- evaluate the microeconomic policies and structure
- study the appropriate monetary policy which suits to the Asian countries
- let a crisis hit country has more flexibility to manage their economy
- try to reduce import and promote export and investment
- financial sector reform and increase productivity in real sector
- how to do with the non performing loans of the financial institutions

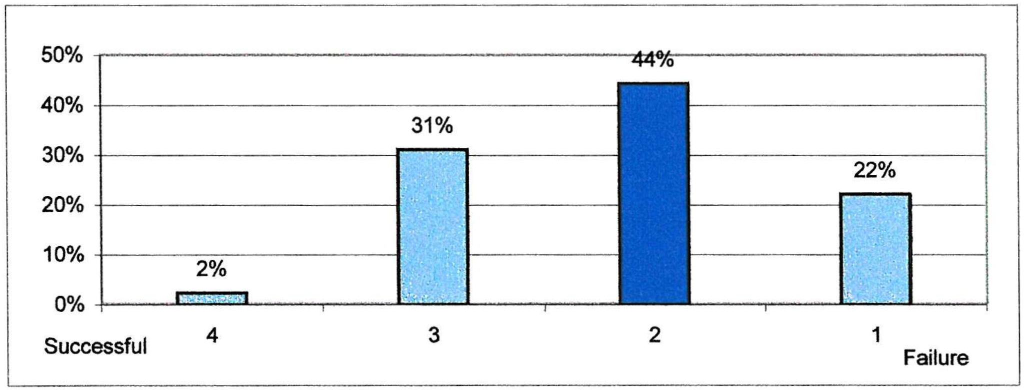
WB

- The IMF has a restricted the baht and others provide most of the technical support and monitoring of structural reform.

15. Overall, has the IMF assistance been successful in assisting recovery?

Successful 4 3 2 1 Failure

	Successful			Failure
	4	3	2	1
Private				
Fincos (72)	1	24	34	13
Banks (41)	1	17	17	6
Public				
FPO (24)	1	7	11	5
BB (17)	0	2	9	6
TDRI (8)	0	3	2	3
NESDB (6)	1	2	2	1
Others				
Uni. (33)	1	7	15	10
BOT (6)	0	1	2	3
WB (5)	0	3	2	0
Total	**5**	**66**	**94**	**47**
Percentage	**2%**	**31%**	**44%**	**22%**

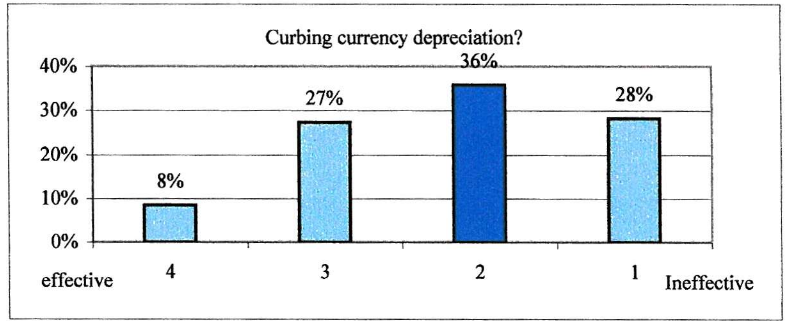


PART II : Policy tightening -- immediate response to the financial crisis

16. In the context of Thailand during the crisis, did you think substantial rise in interest rate was effective in dealing with

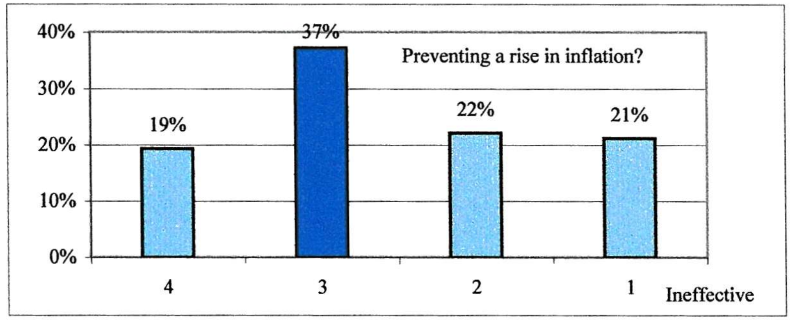
16.1 Curbing currency depreciation

	Effective 4	3	2	Ineffective 1
Private				
Fincos (72)	5	15	29	23
Banks (41)	4	11	14	12
Public				
FPO (24)	1	11	8	4
BB (17)	1	5	9	2
TDRI (8)	0	3	4	1
NESDB (6)	0	2	3	1
Others				
Uni. (33)	7	9	6	11
BOT (6)	0	0	3	3
WB (5)	0	2	0	3
Total	18	58	76	60
Percentage	8%	27%	36%	28%



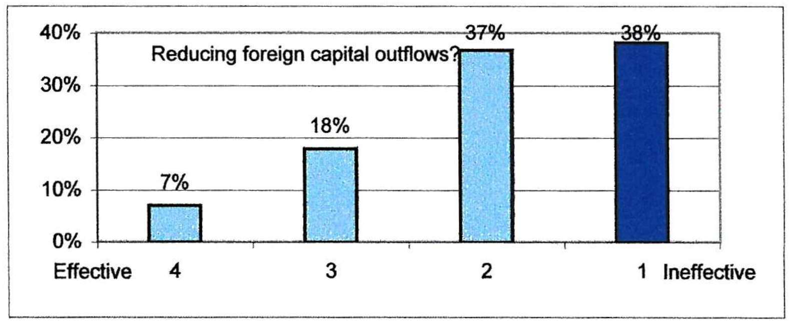
16.2 Preventing a rise in inflation

	Effective 4	3	2	Ineffective 1
Private				
Fincos (72)	12	29	15	16
Banks (41)	4	11	14	12
Public				
FPO (24)	3	14	2	5
BB (17)	2	9	4	2
TDRI (8)	1	1	4	2
NESDB (6)	4	0	2	0
Others				
Uni. (33)	15	12	5	1
BOT (6)	0	3	0	3
WB (5)	0	0	1	4
Total	41	79	47	45
Percentage	19%	37%	22%	21%



16.3 Reducing foreign capital outflows

	Effective 4	3	2	Ineffective 1
Private				
Fincos (72)	7	10	24	31
Bank (41)	0	11	12	18
Public				
FPO (24)	1	5	9	9
BB (17)	3	4	7	3
TDRI (8)	0	0	6	2
NESDB (6)	0	1	4	1
Others				
Uni. (33)	4	6	13	10
BOT (6)	0	1	1	4
WB (5)	0	0	2	3
Total	15	38	78	81
Percentage	7%	18%	37%	38%



17.1 Alternative measures in dealing with currency depreciation?

FINCO	BANK	FPO	UNI
regulations such as offshore- onshore split to limit supply of THB offshore is efficient	boosting export and promote tourism Improve confidence and expectation with structural reform	strictly tighten the private spending Devalue the Baht to a certain level and keep the pegged system.	do not thing It is the matter of timing. Rise in interest rate was adopted too late and too long.
fixed the exchange rates devaluation and capital control (tight)	let the currency float before the attack subsidise exporter to export more	float to certain level	let market determined
central speculative demand of financial derivative products, let go target foreign exchange range swap, set a global fund to support to prevent economy attack	recall creditability by giving support to real sector with tax policy, and some privilege or in business	controlled capital flows and stimulated the real economy	what ever measures raise exports; control measures for a short period
discipline in monetary and fiscal policy	tighten rule and regulation on fund transfer confidence, prompt reaction currency control	capital control, balance of deficit budget	the exchange must be more flexible (over wider band) capital control
the volume of export	implement shorter holding period for exporter in order to increase supply of hard currency	promote export and raise tariff on import duty esp. in unnecessary and luxury thing	
step- by- step devaluation change the portion of currencies in basket blacklist who do currency speculation devalue at the target and next step go to float system	capital control (*5 responses) managed float currency short term capital control currency and capital controls	increase interest rate not helping increase investors confident	temporary capital control stabilise exchange rate I.e. flexible rate short run capital control increase foreigners capital
impose capital control	To deal with currency devaluation, controlling inflation and reducing capital outflows, the authority should keep balance between Baht devaluation and interest rate hike.(Interest rate hire should work only to a certain extent.)	all these three measures are inter related. Though, there could be an alternative where the Malaysian model pop up into my head.	
devalue and widening currency exchange bond width	legal restriction on fund cross boarder transfer		very difficult to find an alternative policy because, during the crisis was a short period
orderly outflow of capital at a "reasonable" pace	do something that can build the confidence of the foreigner (I don' t have the specific idea also).	**BB**	**BOT**
Implement control on capital outflow / capital outflow restriction		reserve fund	Baht is supposed to be realigned
	interest rate should be kept low to enhance debt restrictions/ improvement in local banks' balance sheet ---> weak currency will result in lower unnecessary imports , higher export hence trade surplus	rise in reserves	
to devalue baht at a certain level and remain the pegged system. tightening off shore T/ market follow portly the Malaysian way capital control-peg fixed exch. rate limit the percentage of devaluation and apply the capital control. maintain the pegged system at a certain level		I don' t believe in quick fix measure by they tend to have negative later. The best way is to establish a LT program to improve national competitiveness aim for sustainable growth. Every measure taken control the foreign exchange market / transactions.	
can not curb depreciation but can provide less fluctuation which would reduce risk -->lower depreciation fiscally supported stimulate packages to export oriented industries.		**TDRI - none** **NESDB - none**	

17.2 Alternative measures in dealing with rising inflation?

FINCO
to keep the price of goods stable
maintain supply for basic need while let levy good price
monitor volume of money in the market and use interest rate as a tool from time to time , not very tight interest policy.
the CPI index
don't have to worry about it because Thailand is over capacity on producing consumer goods
price control in necessity items
persuade people to an only fundamental necessitate
not manage float
price control in key sectors
as long as there are no unusual panic, riots or social unrest, unusual extreme high inflation might not be the case
no problem here. If inflation had been straighter tighter, investor confidence would not have been affected
to strictly control price on key economy items
some from of price control, high but not excessive must late
to promote the sufficient economy measurement.
reduce money supply in the system gradually.
effect --> difficult to control
retail price ceiling approach towards basic goods and heavier taxation on luxurious goods.

BANK
supply side policy
Inflation is not a major problem for Thailand
keep price of essential goods low and let other prices rise
encourage people to save, higher import tax (for non-report), lower export tax.
Pay more concern about the budget ...to slow down the economy, but have to consider the budget which not effect for the foreign
necessary goods price control
rising interest rate is OK.
high tax rate
if 17.1 is success, 17.2 success
no impact of inflation due to asset price slowdown
free and increase of market mechanism in domestic trading on goods and services
control commodity price to stable
declared capital control
restriction on import goods
credit control
keep interest low to create " demand-pull " inflation rather than a " cost push " increase consumption to help growth in real sector.

FPO
good fiscal policy (tax increase)
price control
control price by allowed goods and services price rose in line with real production cost.
all these three measures are inter relatted. Though, there could be an alternative where the Malaysian model non
capital control, balance of deficit budget
make product more expensive increase ..cost of ...

BB
Issuing motes
Let it float not exceed 15%
keep cost and keep demand, (Thai government can not stop it except releasing floating price)
keeping low price of electrical for consumption products
decreasing import goods
no need to implement any measures the inflation will not rise so high. The slump of the economy caused the slump in demand.

TDRI
inflation targeting

BOT
depreciation may include cost-push inflation but striking in the demand may bring about counter excite imports

UNI
do not thing
let market determined
unavoidable to correct the economy to its realist (equilibrium).So far the contraction demand played significant rate.
balance budget policy
reduce the interest rate instead of increasing the interest rate
using fiscal policy
stimulate productivity
not necessary
very difficult to find an alternative policy because, during the crisis was a short period
control measures for a short period

17.3 Alternative measures in dealing with foreign capital outflows?

Finco
restrain 1-2 years capital oytflow
tigh the capital control and debt restructuring.
promote country for capital inflow
let go foreign exchange rate to float to an appropriate level
bring confidence by solving repidly the NPL/ strategic NPL , properly cure the non productive sector
the SET index and the FDI
control on short term financing and regulate financingon maturity mismasdring**
strengthen in foreign exchange control
issue the clearly policy to solve problems
capital control
let free flow with actual loss to creditor lenders.
capital control
IMF could support Thailand by providing Stand by credit USD 100 billion to speculators that no matter what happen, Thailand is role to cope with this situation.This can gain lots of confidence
capital control or government to support private sector to negotiate
to build up confidence in Thailand's economy and government by nominating a well qualified experience BOT's governor and Finance Ministry.
faster structural reform and new laws to support the reform should be finished and importanted in a faster and more effective manner.
capital control
to lift up Thai's business law to be more inter'l standard to strengthen investors / creditors' confidence.
stimulate economy and create confidnce of the country's economy.
capital control
I cannot think of any other way than rising interest rate

BANK
build up investors' confidence
same above
strengthening economic activities by select government spending i.c. keep the economy running to prevennt loss of confidence
great investment confidence like stable stock market
capital control policy by central bank but not more strictly.(debt moratorium)
Issue or change relations wich could convince the foreigner to invest in Thailand.
capital control (8 responses)
increase investment opportunity in real sector (fra' s auction, etc.)
moratorium- Malaysia' s control policy.

FPO
suitable rule and regulations on foreign exchange and business law
Declare debt Moratorium
the..... Of income tax with the certain ...
capital control
controled capital flows
all these three measures are inter relatted.Though, there could be an alternative where the Malasian model pop up into my head.
through early fiscal stimulus; early closure ..insolve
capital control
capital control, balance of deficit budget
impose moderate capital control

BB
pomoting sound investments and expots
garthering home capital, convince the multi - billionaire in Thailand to invest in the real sector without patred by foreigner but in high rate of economy return.
lower B/T
refinancing short loan
the government should have stopped the rumors about the financial institution collasped
restructuring debts and change the maturity from short term to long term loans.

TDRI
restructuring debt
capital control

UNI
do not thing
let market determined
control measures for a short period
consistency of macroeconomic policy
put an upper limit to the capital outflow
capital control or other direct measures,capital ba...
temporary capital control
reduce NPL
capital control
Sthrengthen fin. Insti.
very difficult to find an alternative policy because, during the crisis was a short period

BOT
swap againnst Baht denominated financial assets held by non resident

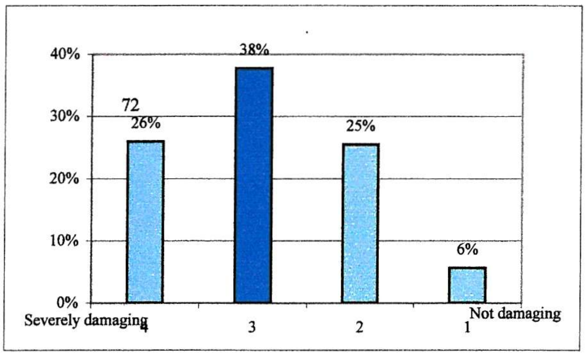
18. Were there particular features of Thailand in the crisis that prevented monetary tightening from being effective?

Finco	Bank	FPO	BB	UNI
monet. tightening might not be the right medicine, to begin with.	lack of investers' confidence	excess spending of Thai exporters	corruption problem and low efficiency of government agencies	people looking confidence
we are agree. economy related country	We would never have high inflation since food in a large portion of CPI. We did't have run away depreciation	Money corporate company were closed down due to the higher fin. cost. The FIDF distorted the mkt mechanism by borrowing via inter-bank and pushing the int. rate much higher.	The foreign outflows still go on until now because the deadline of loan become effective so this is why we can not the money tightening policy.	capital control
" psychological fear, Deficiency and huge S/t borrowing	foreign capital outflows will occur anyway .... Of the ..level (10% or 15%) if nudity....they believe that they will be lose more from continue devaluation	Soundness of financial institution and expectation of investors	no	private debt
political risk influences confidence of investors and people	1) It wipe out growth and accelerates depression. 2) It cuts short export revival and worsens the already weak compettitiveness.3) It encourage foreign -debt default and business bankruptcy. 4) It ruins the already fragile economics system.	politic and the basic of economics	corruption	the corporation from the commercial banks to raise the interest rate as they face non performing loans in substantial amounts.
speculative attack by using derivative products in speculative. It create large amount of " pure speculative" transaction without real need by real sector	foreign capital outflows still happened, in spite of high interest rate. The major reason is lack of confidence in Thailand	Bank of Thailand should increase money supply in the economy	debt moratorium	being a very small country
too high domestic interest rate	consumption down, more NPL -->real sector dead --> less than creditability --> capital outflows --> worse cycle	poor banks' conditions	a fall of confidence in Thai economy included Thai monetary instabilities.	political and social structure may!(note: any policy must be changed (modified) from time to time since dynamism of the economy.
cut back government budget on public work too much and too fast	exchange depreciation. And rate raise	public confidence in policy maker, people's lack of public awareness (selfish base)	effect to cost of production and investment	NPL's are overwhelms
There is no confident in the Thai financial system	gigantic amount of foreign loans was already schedule and the risk to invest in Thai assets over the high interest rate	political inconsistency	Thailand was one of the countries who feed the world so inflation would not increase rapidly especially in the real sector. The damage in the financial sector was so serve that high interest rate had weakened the real sector and the ability to pay debt of the private sector.	social pressures
direct investment by govt and reduce VAT	capital control	malfunction of the financial system without contingent credit facilities provided by the government	**TDRI**	(money) laundering and corruption
fundamental structure	fell into the liquidity trap	Thai politics, bribery and Thai people are only their own sake	the fixed exchange rate	monetary liberation
losing - confident situation	confident crisis	yes, money market (and that of domestic capital market)	according to my understanding, monetary	why showed there be tightening monetary policy to start with ?
panic, no directions, no appropriated various long term scenarios (way out) to prevent the crisis diving down further	yes, there were for example, the government's budget surpluses, little short term debt of government, large part of current account deficits came from private sectors.	no, I don't think so	political power and relationship between business owner and politician	we already have some lesson from the crisis dump Prem's administration, the increasing interest rates don't help reduce capital outflow
excessively high interest rate (23%) while economy was already over leveraged (loan/GDP rate was > 130%) meant certain collapse of the real sector	lack of investment confidence (rate of return could not offset the very high risk)		**BOT**	NPLs and public sector inefficiency in dealing with private financial institutions
Yes, BOT could prevent it but no experience to trade	In circumstance that Thailand needs to boost economic growth, monetary tightening does not seem to be effective.		such high interest rate will destroy payment ability of firm, leading to high NPL ,collapse of domestic trading credits and finally production of firm.	Floating exchange rate
afraid to do it aggressive	the capable team to handle the issue			incredible government policies
lack of confidence Thailand's economy and government by foreign and local investors.	corporate' debt repayment capability			loss confidence
too much politics the obstruct the pace to recovery.				
It basically killed the banks and weaker companies, giving rise to deep recession				
corruption				
financial institutions system of Thailand was not well developed for liberalisation.				
business sector is highly leveraged. High interest rate caused business to be in trouble				
the same logic as bankrupting finance firms giving very high interest rate but people still look their money to strong foreign banks during the crisis.				
no monetary tightening effectively works with the above negative outcomes.				

19. The following have been identified as weak areas of the Thai financial market. How damaging were they to the financial crisis?

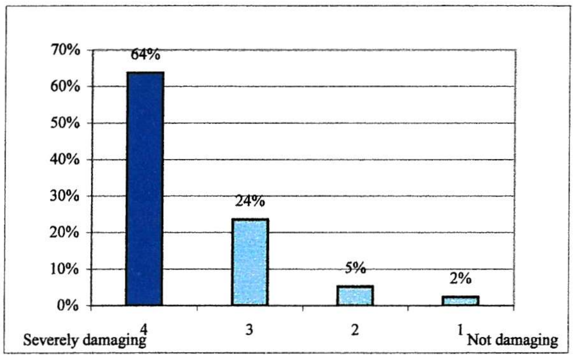
19.1 Absence of fully developed bond / equity market

	Severely damaging 4	3	2	Not damaging 1
Private				
Fincos (72)	18	24	24	6
Banks (41)	16	13	9	3
Public				
FPO (24)	5	10	7	2
BB (17)	7	7	3	0
TDRI (8)	0	7	1	0
Others				
Uni. (33)	9	13	10	1
BOT (6)	0	6	0	0
Total	55	80	54	12
Percentage	26%	38%	25%	6%



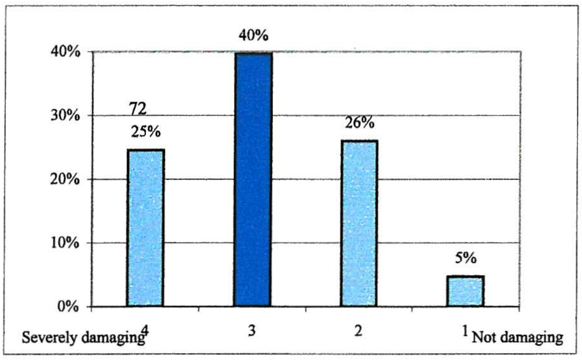
19.2 Under-regulated financial institutions

	Severely damaging 4	3	2	Not damaging 1
Private				
Fincos (72)	49	18	3	2
Banks (41)	26	13	1	1
Public				
FPO (24)	16	7	1	0
BB (17)	12	4	0	1
TDRI (8)	4	3	0	1
Others				
Uni. (33)	24	4	5	0
BOT (6)	4	1	1	0
Total	135	50	11	5
Percentage	64%	24%	5%	2%



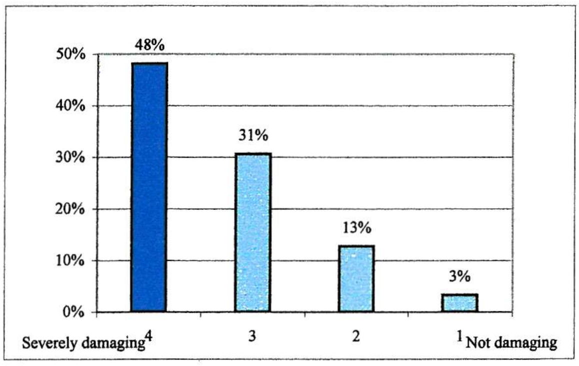
19.3 Lack of international competition

	Severely damaging 4	3	2	Not damaging 1
Private				
Fincos (72)	18	30	20	4
Banks (41)	12	17	9	3
Public				
FPO (24)	2	14	6	2
BB (17)	8	4	5	0
TDRI (8)	3	4	1	0
Others				
Uni. (33)	9	10	13	1
BOT (6)	0	5	1	0
Total	52	84	55	10
Percentage	25%	40%	26%	5%



19.4 Lack of legal and regulatory reforms i.e. bankruptcy legislation

	Severely damaging 4	3	2	Not damaging 1
Private				
Fincos (72)	40	22	8	2
Banks (41)	21	17	2	1
Public				
FPO (24)	9	8	5	2
BB (17)	11	4	1	1
TDRI (8)	0	3	4	1
Others				
Uni. (33)	19	9	5	0
BOT (6)	2	2	2	0
Total	102	65	27	7
Percentage	48%	31%	13%	3%



19.5 The following have been identified as weak areas of the Thai financial market. How damaging were they to the financial crisis? Others, please specify ________________________

<table>
<tr><th>FINCO</th><th>FPO</th><th>UNI.</th></tr>
<tr>
<td rowspan="1">the prudent political system that allows right people to do the right jobs without influenced by political pressure.

too aggressive BOT' s activities to support exchange rate, beyond capability.

no implement on financial risk management

lack of accountability from the BOT. Executive for the people of Thailand

mismanagement of the Thai governor and BOT

Financial institutions in Thailand doesn't' t regulated in terms of reporting and flexibility's in doing business. Thailand doesn't' t have good measures or mechanism to monitor and prevent hot many flow in and out of Thai financial system

no appreciation of volatile in interest rate fixed exchange

corruption
dependence hearty on foreign capital control
lack of strong punishment on wrong doers. People will try to cheat it they don't have to go to jail.</td>
<td>management in Bank of Thailand
unproductive spending and investment

BB

lack of control foreign capital outflow (out>in)

the knowledge and capabilities of the financial authorities and their mismanagement caused servile damage to the financial crisis.</td>
<td rowspan="3">Effective enforcement of regulations. Control the level of political involvement in financial market.

lack of the penalty to corruption in financial institution

rules and regulations for commercial banks activities should be revised</td>
</tr>
<tr><th>BANK</th><td></td></tr>
<tr><td>1) Unsophisticated risk management. 2) A mistake to allow Baht to be traded outside Thailand (important!!!!) . 3)Too much government stimulation on the BIBF growth (easy $ debt creation). 4) Too fast liberalisation policy.

Regulate about the liquidity ,also the asset /liability management and the ....and interest rate risk. Lack of the concerning and knowledge about the risk (both system management and officer)

serve punishment, free of political concern
lack of engineering innovation, copyrights law, and wrong incentive systems.

big corruption / in. of the bond of Thailand</td><td></td></tr>
</table>

20. Was widespread closure of financial companies justified? If no, please specify ____________

FINCO

it is the main problemmthat accelerate the pace of crisis. This is because depositor are protected while borrowers are no, resulting a big gap b/w assets annd liability

However, it can be less if the last government implemented proper measure more quickly and support good governance and spirit of bankrupcy laws.

it was discrimination

the BOT should regulate throughly financial companies and gave advices before the crisis

it blocked money flow

quick but dirty

but not back up policy to help good entity where borrow from these financial companies

it impacted the good businessmen who were also dragged into the ruin

This aggravated financial crisis

closure was OK. If new / intension** management ensure that loans continued to perform.In other words, there was a need to maintain asset quality of closed finance**

not all the case were justified, some were caused by a mistake of authority

stops money velocity.Collapse the interlocking financial system. IMF and BOT know that failure now.

BANK

not transrency,the standard regulations for closing were not clear and not explain to the public clearly.

widerspread closure of financial companyies with out immediate measurement that how to bring credit and people confident back lead financial crisis.

no appropriate procedure to manage the financial companies after closure

FPO

no certain criteria for the closure

too late to close the companies and too many companies were closed

BB

A lot of financial companies, that closed, the owner and executive board are rich.They are trausfued the precious asset out of the company before closed. So customer have to enfronted with collapse.

Actually, it was not justified for people who deposited and invested in those copanies.

most of the copanies that have been ordered to lose had shown signs of the problems long before 1997.In other hands, the authrity should tackled these problems much earlier.

Some companies hadonly the liquidity problem.Closing down some companies after other companies under the announcement of no more companies being could made the public worried and anticipated of the next round of events.Then, the confidence in the financial system was collapsed

UNI

Unjudged implementation caused no confidence among people

n creaked close doen of thousands of corporation that borrowed from them

it isn't affect the real sector

not suffecient measures followed

A case by case basis should be considered

limit widespread closed of fiance company

it make everything worse than expected

it was a misjustment to close them down at once

some have not insolvency if credits are extended

the closure should be on selective measures

BOT

their major problem at that time was short of adegnate .Liquidity to back public who's in widespread stock, not the Fis' fundamental weakness.Many people ones chose resualted in further economic crisis.

selection eriteria should focus more on Fis with seriously structed weakness.

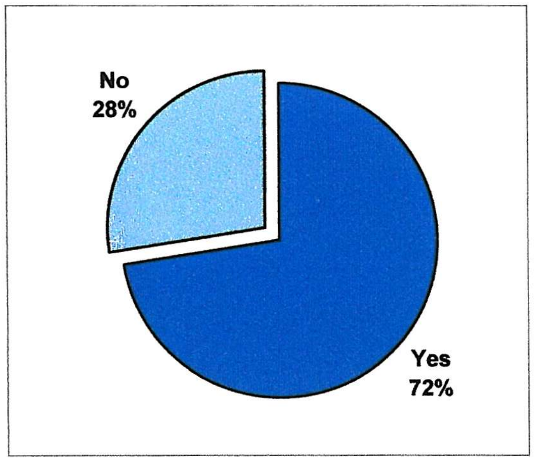
the 56 finances should have been taken care of by other financial institutions(bank).

20. Was widespread closure of financial companies justified?

Yes No

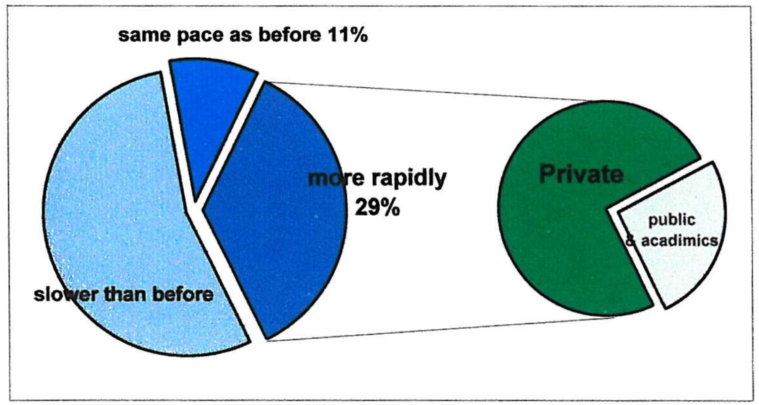
If no, please specify ______________________

	Yes	No
Private		
Fincos (72)	49	22
Banks (41)	37	4
Public		
FPO (24)	15	9
BB (17)	14	3
TDRI (8)	7	1
Others		
Uni. (33)	20	13
BOT (6)	3	3
Total	**145**	**55**
Percentage	**73%**	**28%**



21. It has now been 3 years after the crisis, at what pace do you think the government should have pursued the financial liberalization scheme at this period?

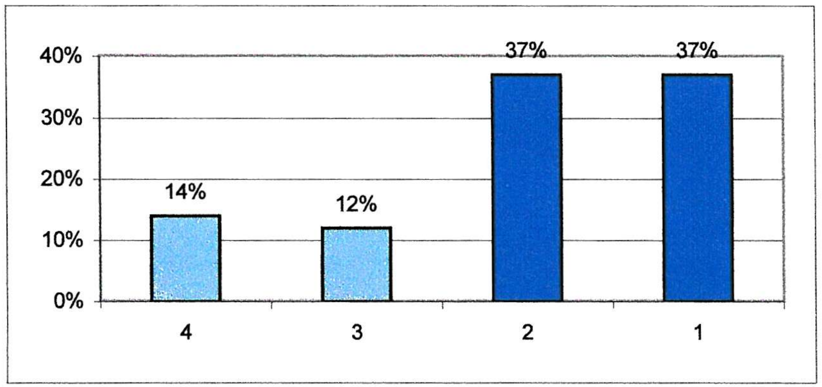
	More rapidly	Same pace as before	Slower than before
	1	2	3
Private			
Fincos (72)	36	9	27
Banks (41)	10	6	25
Public			
FPO (24)	2	3	19
BB (17)	4	0	13
TDRI (8)	0	0	8
NESDB (6)	1	1	4
Others			
Uni. (33)	7	3	23
BOT (6)	1	0	5
WB (5)	0	1	4
Total	**61**	**23**	**128**
Percentage	**29%**	**11%**	**60%**



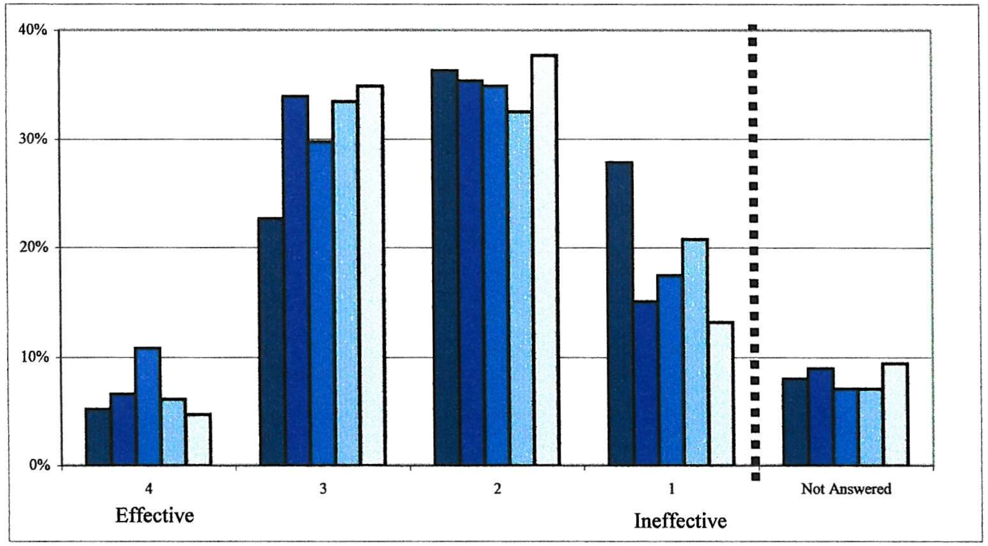
22. Did you think it was necessary to reduce government spending during the crisis?

Necessary 4 3 2 1 Not necessary

	Necessary 4	3	2	Not Necessary 1
Private				
Fincos (72)	4	9	14	20
Banks (41)	8	3	30	0
Public				
FPO (24)	1	3	8	12
BB (17)	5	2	1	9
TDRI (8)	0	2	4	2
NESDB (6)	1	1	0	4
Others				
Uni. (33)	7	2	11	13
BOT (6)	0	0	2	4
WB (5)	0	0	0	5
Total	**26**	**22**	**70**	**69**
Percentage	**14%**	**12%**	**37%**	**37%**

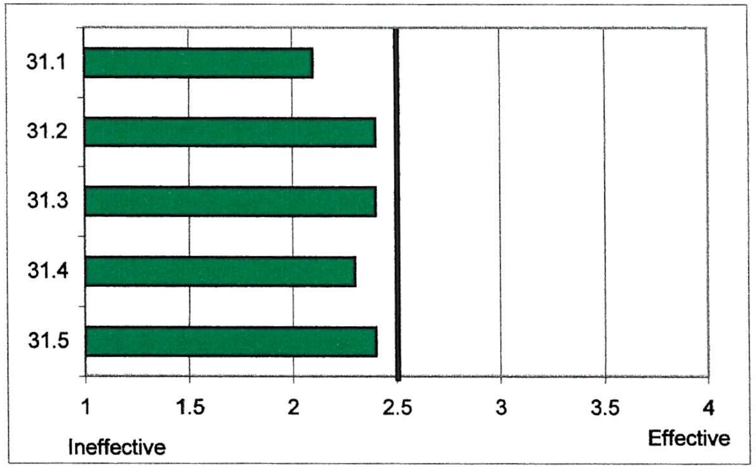


23. How effective is the fiscal tightening in dealing with the followings?



31.1 increasing investors' prospect of repayment
31.2 Balancing the composition of C/A deficits adjustment between public and private sector
31.3 Reducing the external C/A deficit and thus reduces the need for currency depreciation
31.4 Reducing expectation of currency depreciation and country risk
31.5 Reducing likelihood of monetization and lower expectation of inflation and currency depreciation

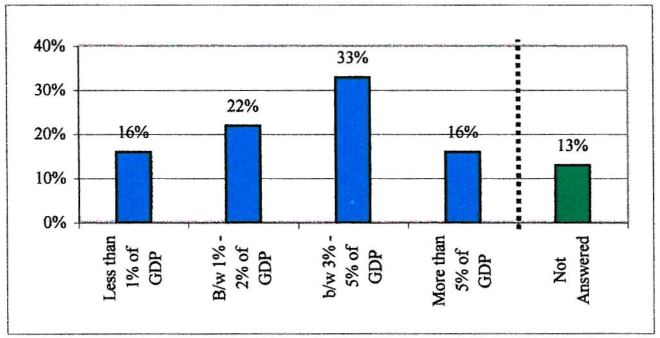
Average score on the effectiveness of fiscal tightening



24. How much do you think the budget has been cut, on the average of the past 3 fiscal years?

a. Less than 1% of GDP
b. Between 1% - 2% of GDP
c. Between 3% - 5% of GDP
d. More than 5% of GDP

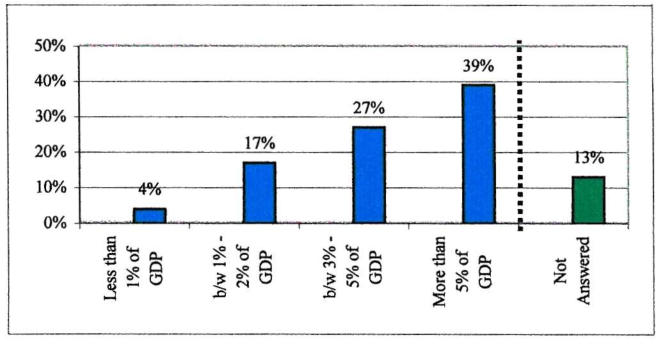
	Less than 1% of GDP	B/w 1% - 2% of GDP	b/w 3% - 5% of GDP	More than 5% of GDP	Not Answered
Private					
Fincos (72)	7	10	16	6	8
Banks (41)	6	15	14	5	1
Public					
FPO (24)	6	4	8	5	1
BB (17)	4	6	4	2	1
TDRI (8)	1	1	4	1	1
NESDB (6)	2	1	3	0	0
Others					
Uni. (33)	3	3	11	9	7
BOT (6)	1	0	1	1	3
WB (5)	0	2	0	1	2
Total	**30**	**42**	**61**	**30**	**24**
Percentage	**16%**	**22%**	**33%**	**16%**	**13%**



25. On the average of the past 3 fiscal years, how much did you think government revenue collection has been declined as a result of the financial crisis?

a. Less than 1% of GDP
b. Between 1% - 2% of GDP
c. Between 3% - 5% of GDP
d. More than 5% of GDP

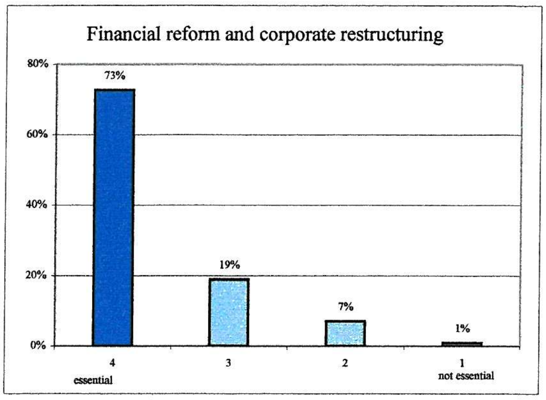
	Less than 1% of GDP	b/w 1% - 2% of GDP	b/w 3% - 5% of GDP	More than 5% of GDP	Not Answered
Private					
Fincos (72)	3	4	11	24	5
Banks (41)	1	8	13	18	1
Public					
FPO (24)	0	4	8	8	4
BB (17)	0	7	6	3	1
TDRI (8)	0	1	1	4	2
NESDB (6)	1	2	2	1	0
Others					
Uni. (33)	2	6	7	11	7
BOT (6)	0	0	0	3	3
WB (5)	0	0	3	1	1
Total	**7**	**32**	**51**	**73**	**24**
Percentage	**4%**	**17%**	**27%**	**39%**	**13%**



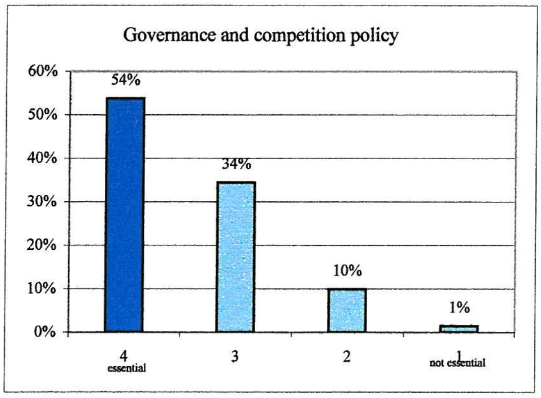
PART III : Structural reform and long-term economic recovery plan

26. The IMF has suggested 4 areas of structural reform. How essential do you think they are to economic recovery?

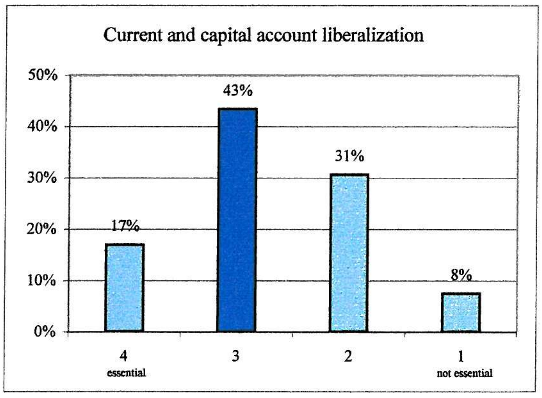
26.1	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	52	13	5	2
Banks (41)	32	3	6	0
Public				
FPO (24)	19	5	0	0
BB (17)	11	3	3	0
TDRI (8)	4	4	0	0
NESDB (6)	5	1	0	0
Others				
Uni. (33)	21	11	1	0
BOT (6)	5	0	0	0
WB (5)	5	0	0	0
Total	**154**	**40**	**15**	**2**
Percentage	**73%**	**19%**	**7%**	**1%**



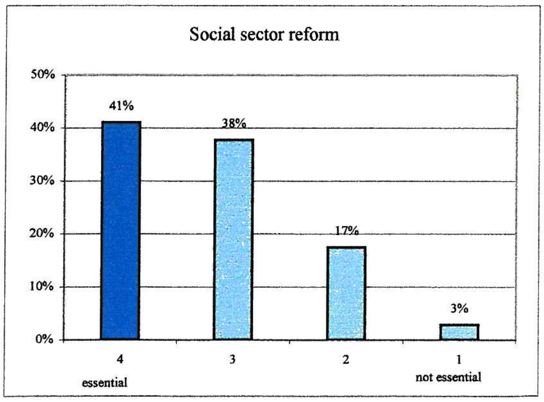
26.2	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	40	23	9	0
Banks (41)	21	16	4	0
Public				
FPO (24)	13	9	2	0
BB (17)	8	6	3	0
TDRI (8)	3	3	1	1
NESDB (6)	3	2	1	0
Others				
Uni. (33)	18	12	1	2
BOT (6)	4	1	0	0
WB (5)	4	1	0	0
Total	**114**	**73**	**21**	**3**
Percentage	**54%**	**34%**	**10%**	**1%**



26.3	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	9	37	24	2
Banks (41)	8	19	8	5
Public				
FPO (24)	4	6	10	3
BB (17)	4	6	6	1
TDRI (8)	1	6	1	0
NESDB (6)	2	2	2	0
Others				
Uni. (33)	6	11	11	5
BOT (6)	1	3	1	0
WB (5)	1	2	2	0
Total	**36**	**92**	**65**	**16**
Percentage	**17%**	**43%**	**31%**	**8%**



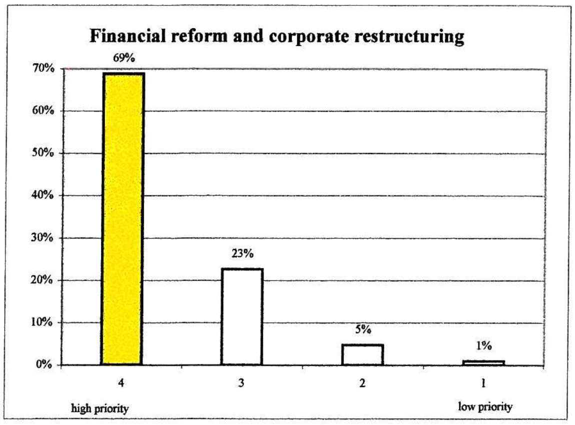
26.4	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	24	29	17	2
Banks (41)	17	15	6	3
Public				
FPO (24)	11	9	3	0
BB (17)	6	6	5	0
TDRI (8)	2	5	1	0
NESDB (6)	2	3	1	0
Others				
Uni. (33)	19	11	2	1
BOT (6)	2	1	2	0
WB (5)	4	1	0	0
Total	**87**	**80**	**37**	**6**
Percentage	**41%**	**38%**	**17%**	**3%**



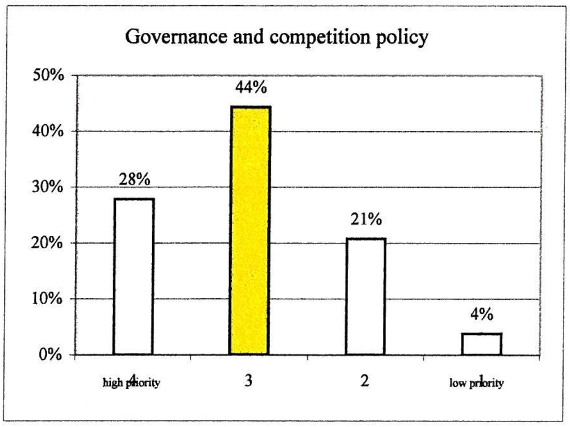
Note : only 1-2 % has not answered

27. How do you think the IMF has prioritized the following?

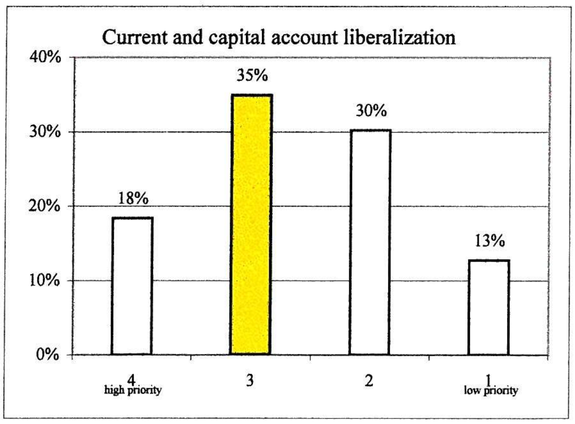
27.1	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	50	13	6	0
Banks (41)	25	13	1	1
Public				
FPO (24)	19	5	0	0
BB (17)	13	1	1	1
TDRI (8)	4	3	1	0
NESDB (6)	5	1	0	0
Others				
Uni. (33)	21	11	1	0
BOT (6)	4	1	0	0
WB (5)	5	0	0	0
Total	**146**	**48**	**10**	**2**
Percentage	**69%**	**23%**	**5%**	**1%**



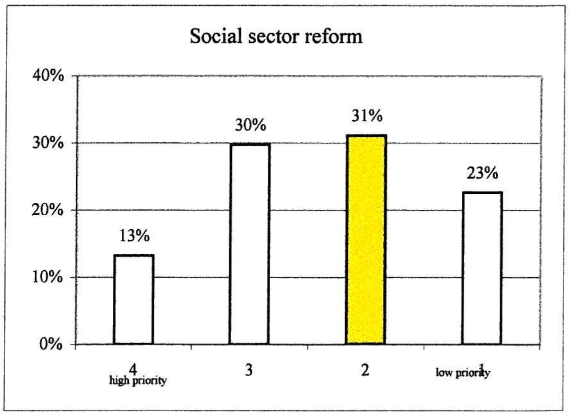
27.2	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	20	36	10	2
Banks (41)	10	18	11	1
Public				
FPO (24)	7	10	7	0
BB (17)	5	7	3	1
TDRI (8)	0	5	2	1
NESDB (6)	2	2	1	1
Others				
Uni. (33)	12	14	5	2
BOT (6)	2	0	3	0
WB (5)	1	2	2	0
Total	**59**	**94**	**44**	**8**
Percentage	**28%**	**44%**	**21%**	**4%**



27.3	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	10	19	30	10
Banks (41)	7	14	13	5
Public				
FPO (24)	6	8	4	5
BB (17)	4	6	4	2
TDRI (8)	2	4	2	0
NESDB (6)	2	3	0	1
Others				
Uni. (33)	6	14	10	3
BOT (6)	2	2	0	1
WB (5)	0	4	1	0
Total	**39**	**74**	**64**	**27**
Percentage	**18%**	**35%**	**30%**	**13%**



27.4	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	9	19	24	17
Banks (41)	3	17	11	8
Public				
FPO (24)	5	8	8	2
BB (17)	1	5	5	5
TDRI (8)	1	1	3	4
NESDB (6)	0	1	3	2
Others				
Uni. (33)	8	8	11	6
BOT (6)	1	2	1	1
WB (5)	0	2	0	3
Total	**28**	**63**	**66**	**48**
Percentage	**13%**	**30%**	**31%**	**23%**



Note : only 1-2 % has not answered

How people think the IMF has prioritied each of the structural reform vs. how essential people think these reforms are to economic recovery

26. The IMF has suggested 4 areas of structural reform. How essential do you think they are to economic recovery?
27. How do you think the IMF has prioritized the following?

Figure F1 : Financial reform and corporate restructuring

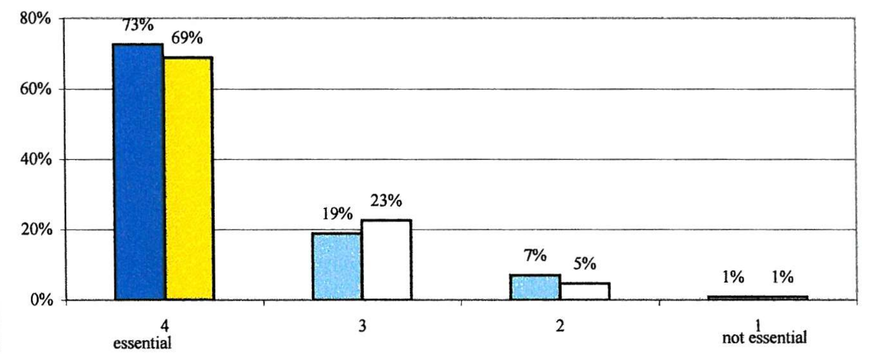


Figure F3 : Governance and competition policy

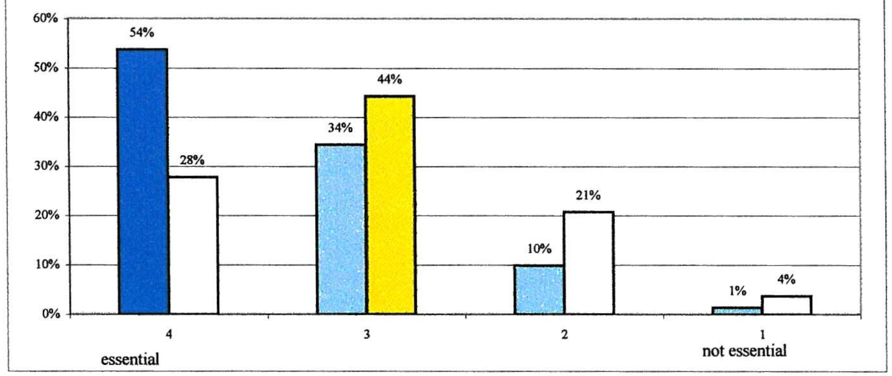


Figure F2 : Current and capital account liberalization

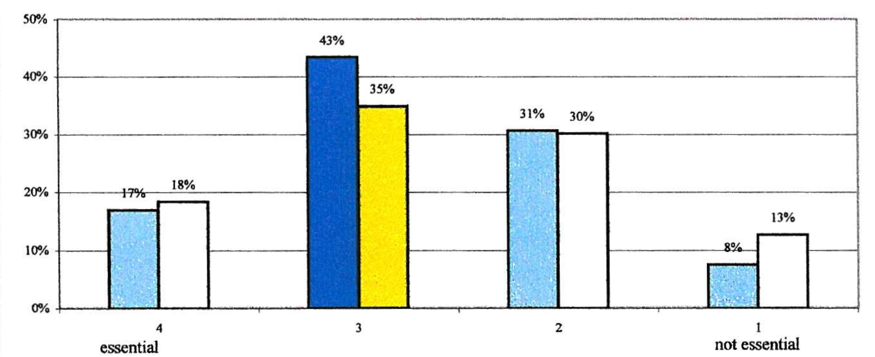
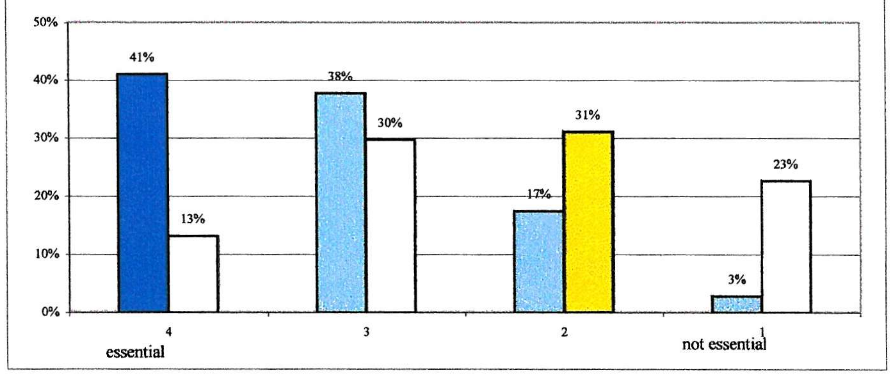
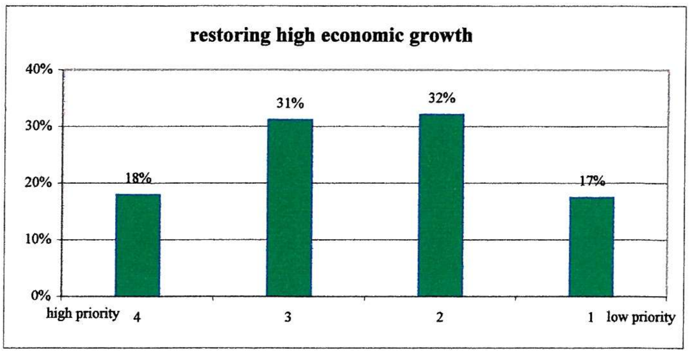


Figure F4 : Social sector reform

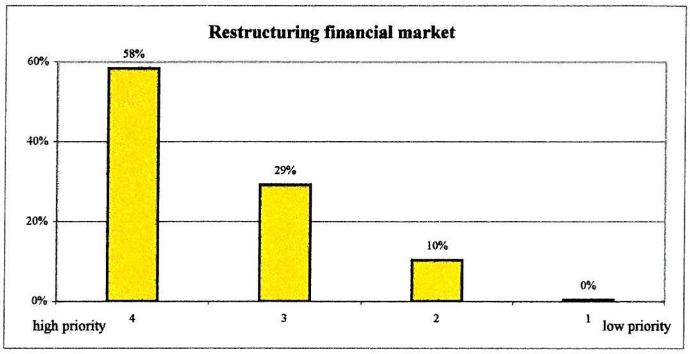


28. How do you think the government should prioritize the following strategies?

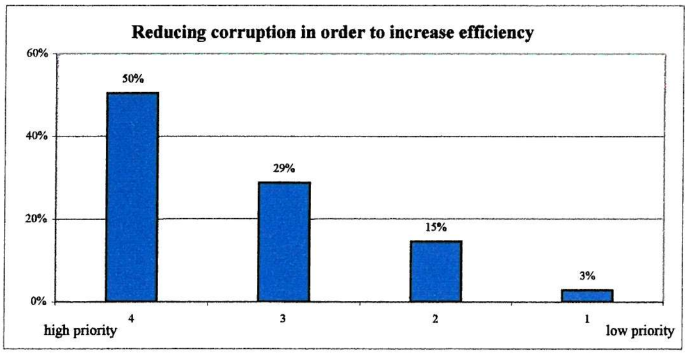
28.1	High priority 4	3	2	Low priority 1
Private				
Fincos (72)	11	18	31	10
Banks (41)	6	20	7	8
Public				
FPO (24)	3	8	8	5
BB (17)	5	4	5	2
TDRI (8)	0	1	5	2
NESDB (6)	0	1	5	0
Others				
Uni. (33)	10	10	6	7
BOT (6)	0	2	1	3
WB (5)	3	2	0	0
Total	38	66	68	37
Percentage	18%	31%	32%	17%



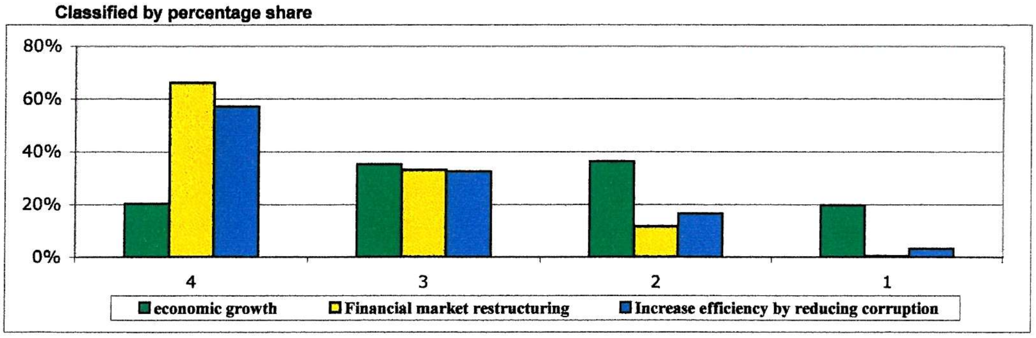
28.2	High priority 4	3	2	Low priority 1
Private				
Fincos (72)	47	17	6	0
Banks (41)	25	10	5	1
Public				
FPO (24)	14	8	2	0
BB (17)	8	4	4	0
TDRI (8)	3	4	1	0
NESDB (6)	4	2	0	0
Others				
Uni. (33)	15	15	3	0
BOT (6)	3	2	1	0
WB (5)	5	0	0	0
Total	124	62	22	1
Percentage	58%	29%	10%	0%



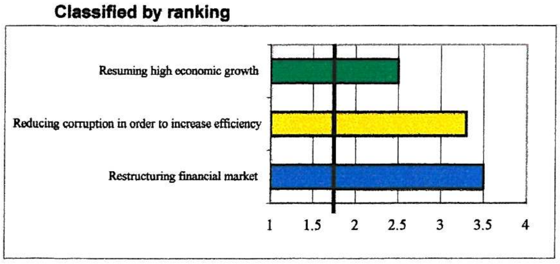
28.3	High priority 4	3	2	Low priority 1
Private				
Fincos (72)	31	29	8	2
Banks (41)	23	7	8	2
Public				
FPO (24)	10	9	4	1
BB (17)	9	6	0	1
TDRI (8)	5	3	0	0
NESDB (6)	5	0	1	0
Others				
Uni. (33)	22	3	6	0
BOT (6)	1	2	2	0
WB (5)	1	2	2	0
Total	107	61	31	6
Percentage	50%	29%	15%	3%



Classified by percentage share



Classified by ranking



Note : only 1-2 % has not answered

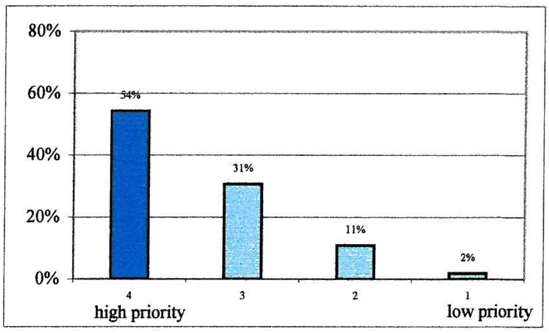
28. How do you think the government should prioritise the following strategies? Other, please specify

FINCO	FPO	UNI
restructuring real sector directly, not pass through financial institutions. public policy management corporate restructuring with high priority proactive government role indirectly helping real sector to restructure effectively good governance is very important. privatisation education and infrastructure Human Development We should focus on more self reliance and less on the outside world. Moderation, social value before economic growth. Should improve / develop long term planning strategies for the country particularly on the education system (social reform). Focus on long term sustain rather than growth. policy the major ministry and allocate major budget to them.	focus on regional economic Cupertino particularly among neighbouring countries as markets for our export social and public sector reform building up domestic cushion domestic and and equity market increasing competitiveness small and medium enterprises encouragement **BB** social and political development calculation to improve LT competitiveness of economy, legal reform to ensure level playing fixed bt effective economic, public sector reform to improve effective efficiency of bt* remain delivery etc.	restructuring long term plan in production (real) sector 28.2 and 28.3 are very important but not for economic recovery move on social spending public sector reform public administrative reform real sector

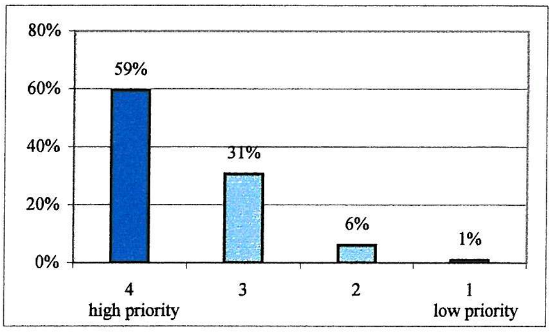
BANK	TDRI	BOT
law and regulations attract foreign investment, regain investor confidence, liberalize foreign ownership laws, the corporate cultures. promotion of self efficiency (The King's Initiatives) capital control (the second priority) - lowest cost legal reform / bankruptcy act	**NESDB** governance restructuring production sector, provide social safety net.	give more assistance to real secto,esp. SMEs. Stop following IMF advices. Learn lessons from neighbour

29. How essential are the following schemes in reducing corruption?

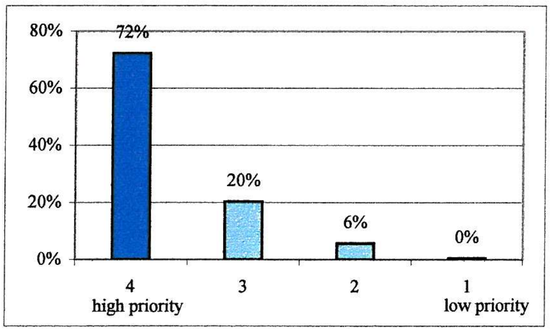
29.1	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	33	23	10	3
Banks (41)	22	15	3	1
Public				
FPO (24)	17	7	0	0
BB (17)	12	2	3	0
TDRI (8)	2	5	1	0
NESDB (6)	4	1	1	0
Others				
Uni. (33)	18	10	5	0
BOT (6)	4	1	0	0
WB (5)	3	1	0	0
Total	115	65	23	4
Percentage	54%	31%	11%	2%



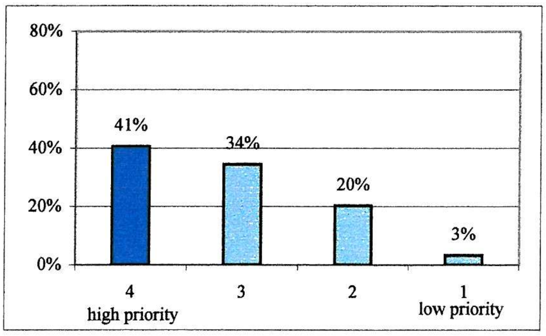
29.2	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	38	27	5	0
Banks (41)	23	9	4	1
Public				
FPO (24)	16	8	0	0
BB (17)	11	4	2	0
TDRI (8)	4	4	0	0
NESDB (6)	5	0	1	0
Others				
Uni. (33)	22	10	1	0
BOT (6)	4	1	0	1
WB (5)	3	2	0	0
Total	126	65	13	2
Percentage	59%	31%	6%	1%



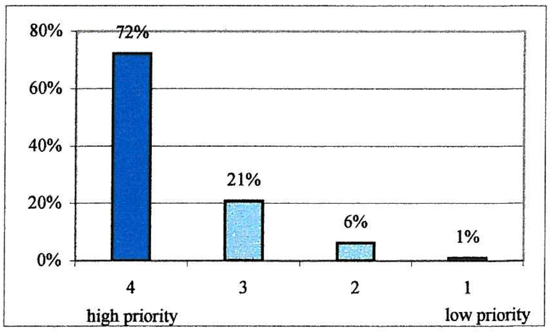
29.3	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	49	17	4	0
Banks (41)	25	11	4	1
Public				
FPO (24)	19	3	2	0
BB (17)	15	2	0	0
TDRI (8)	6	2	0	0
NESDB (6)	5	0	1	0
Others				
Uni. (33)	26	7	0	0
BOT (6)	4	1	0	0
WB (5)	4	0	1	0
Total	153	43	12	1
Percentage	72%	20%	6%	0%



29.4	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	25	25	18	2
Banks (41)	14	17	8	2
Public				
FPO (24)	14	8	2	0
BB (17)	10	2	4	1
TDRI (8)	5	3	0	0
NESDB (6)	2	4	0	0
Others				
Uni. (33)	12	11	9	1
BOT (6)	2	2	1	1
WB (5)	2	1	1	0
Total	86	73	43	7
Percentage	41%	34%	20%	3%



29.5	Essential			Not essential
	4	3	2	1
Private				
Fincos (72)	51	16	6	0
Banks (41)	28	9	4	0
Public				
FPO (24)	19	5	0	0
BB (17)	14	3	0	0
TDRI (8)	5	3	0	0
NESDB (6)	4	2	0	0
Others				
Uni. (33)	23	6	2	2
BOT (6)	4	0	1	0
WB (5)	5	0	0	0
Total	153	44	13	2
Percentage	72%	21%	6%	1%



29.1 Promote law enforcement
29.2 Encourage awareness and education from the school level
29.3 Promote transparency of law and regulations
29.4 Amend the election system / promote transparency of ballot
29.5 Adjust compensation of government officials to private level

29. How essential are the following schemes in reducing corruption? Other, please specify ____________

FINCO

encourage of spirit of the laws more than what were written.

encourage nationalism and elected people who has capacity and moral to govern the country

best way to fight comnpho** is to priivatize government function and maximize transparancy of government process

Monitor use of government budget plus eliminate waste and inefficiencies in government sector.

distribute the authority to the provincial areas.

serious punishment for corrupt people

FPO

promoting and encouraging people's participation

BB

Must have a serious penalty that effective for the bad guy. The law that base on the major side of the people not the senator and must be moderize.Finally these must have cooperate from the Massmedia.

punish the corruptive person seriously

public sector reform, increase compensation in order to decrease corruptions, moral of politicians

UNI

The problem was not of too few education, but of low quality education

economic growth is away out

morality prob.

BOT

social sanctions or those who are dishornest and corrupt.

BANK

Encourage the education to realized about thr transparancy or consumption have a big effect to the country, people and themselves.From the school level by practice not just a theory.

suspeending democretic elections, hire professional economist/ manages to manage the country

also emphasizing on the code of ethic and standards of practice of the financial-related professionals.

Increase penalty for corrupted officials wheter they can be fired / promoted based on their " performance. " Therfore, need to development performance evaluation system-- a transparent one.

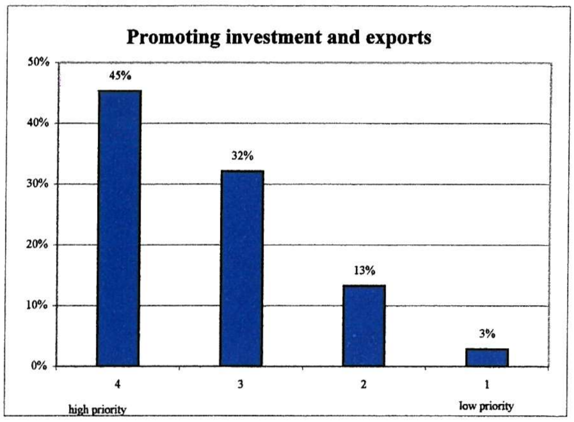
TDRI

NESDB

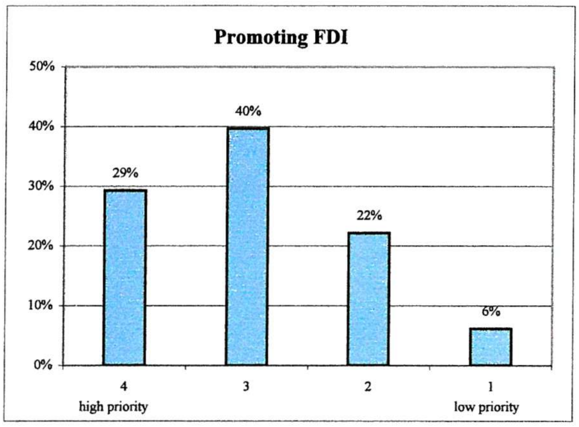
developing and strengtening corruption law

30. How effective are the following strategies in encouraging economic growth?

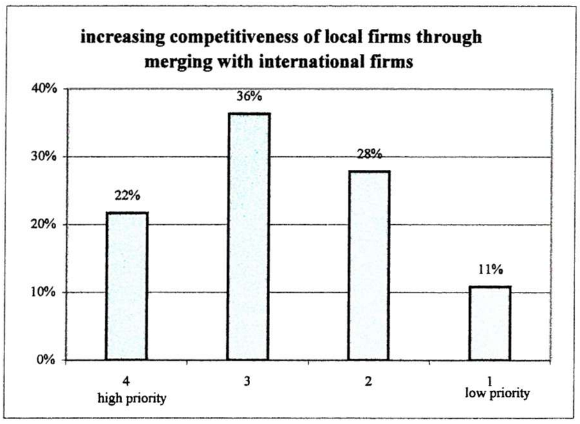
30.1	Effective			Ineffective
	4	3	2	1
Private				
Fincos (72)	39	21	8	2
Banks (41)	16	12	3	0
Public				
FPO (24)	12	7	4	1
BB (17)	8	5	3	0
TDRI (8)	1	6	0	0
NESDB (6)	1	4	1	0
Others				
Uni. (33)	14	8	8	3
BOT (6)	2	3	1	0
WB (5)	3	2	0	0
Total	96	68	28	6
Percentage	45%	32%	13%	3%



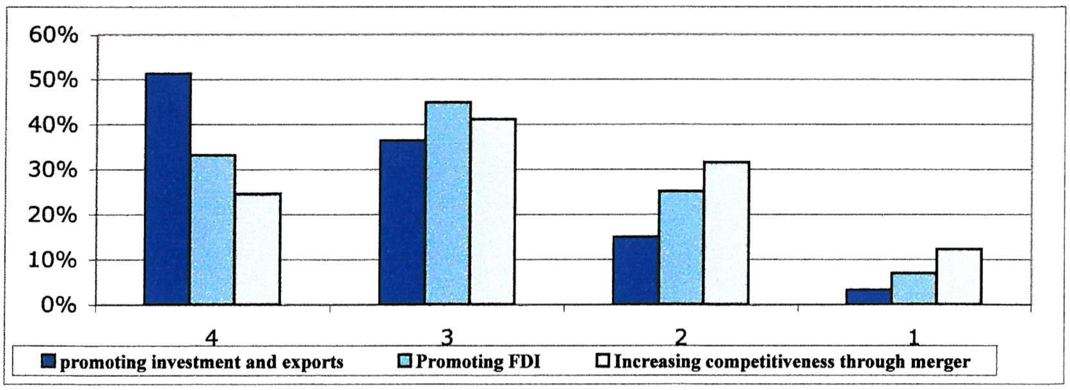
30.2	Effective			Ineffective
	4	3	2	1
Private				
Fincos (72)	21	35	11	2
Banks (41)	17	15	7	1
Public				
FPO (24)	8	7	5	4
BB (17)	4	7	3	2
TDRI (8)	0	5	2	0
NESDB (6)	0	1	4	1
Others				
Uni. (33)	9	10	12	2
BOT (6)	1	1	3	1
WB (5)	2	3	0	0
Total	62	84	47	13
Percentage	29%	40%	22%	6%



30.3	Effective			Ineffective
	4	3	2	1
Private				
Fincos (72)	16	27	22	5
Banks (41)	5	21	12	2
Public				
FPO (24)	7	7	5	5
BB (17)	4	5	5	2
TDRI (8)	4	1	1	1
NESDB (6)	1	2	2	1
Others				
Uni. (33)	7	11	11	4
BOT (6)	1	1	1	2
WB (5)	1	2	0	1
Total	46	77	59	23
Percentage	22%	36%	28%	11%



Classified by percentage



Note : only 1-2 % has not answered

30. How effective are the following strategies in encouraging economic growth? Other, please specify

FINCO
more research and development, find a base sector that competitive and pot all weight behind. Including R & D
allow some sector such as property development, to have some business in order to maintain done resources at sustainable level in long term
only long term, not portfolio investment.
strengthen the medium and small enterprises
to solve the route problem over leverage of corporate, reduce debt sell off non core asset/ non viable business
restructure weak companies and liquidate enviable companies to create investment opportunities and enhance economic competitiveness
promoting investment and exports should be the key strategies, but the government has failed to promote both sector
make banks lend again. demand for money is high formal sector but no loans
economic growth driven by foreign investment which not benefit Thai or all profits will be re... out. We get nothing.
re-educate workers
the government agencies act as the middle man to encourage or ever enforce to the debt restructuring process.

BANK
need to stimulate certain key industries create jobs (reconstruction) increase consumer spending
speeding up technological improvement and stress "quality"
restructuring industrial
increasing competitiveness of local enterprises to meet an international standard

FPO

BB
promoting labouring aboard
increase government spending to stimulate the economy.

TDRI
increasing productivity in all level of economy
sustainable development and sufficiency economy also important

NESDB
promoting domestic product and expand market

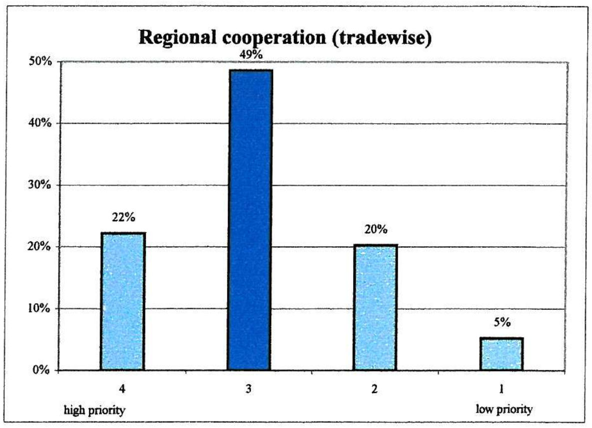
UNI
reconsider the local firms pack to compete with conglomerate firms. This is a better way to build jobs.
improve rules, regulation and enforcement
the strategies are important but the implementation of those strategies much to desire
more investment in technical training

BOT
Revitalise and promote capital market ,reduce NPLs. Also see 34.4

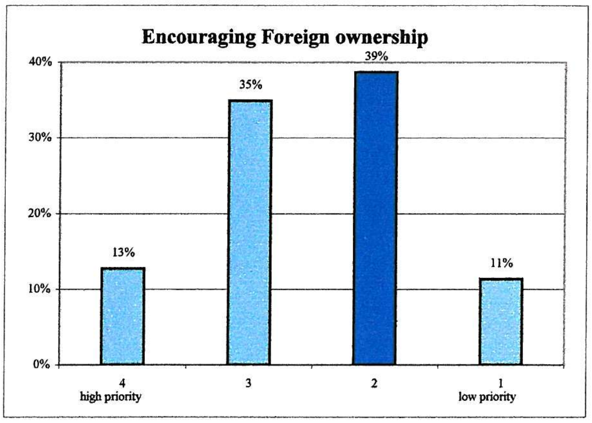
WB
competitiveness is expectation ... the medium team (shifts development)

31. How essential are the following in reducing vulnerabilities in the future?

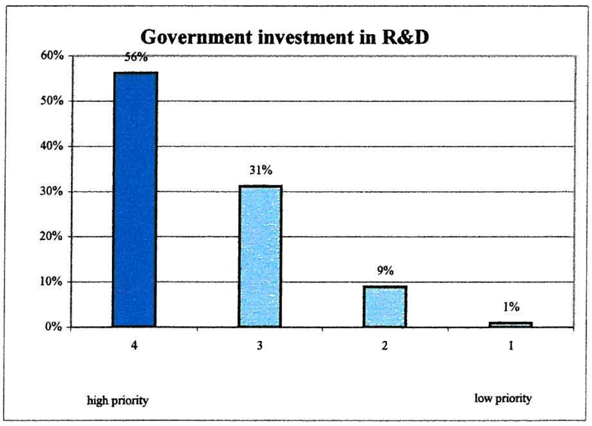
31.1	Essential 4	3	2	Not essential 1
Private				
Fincos (72)	14	36	15	3
Banks (41)	9	26	5	1
Public				
FPO (24)	6	9	6	2
BB (17)	7	7	3	0
TDRI (8)	3	5	0	0
NESDB (6)	1	3	2	0
Others				
Uni. (33)	5	13	7	5
BOT (6)	2	1	3	0
WB (5)	0	3	2	0
Total	47	103	43	11
Percentage	22%	49%	20%	5%



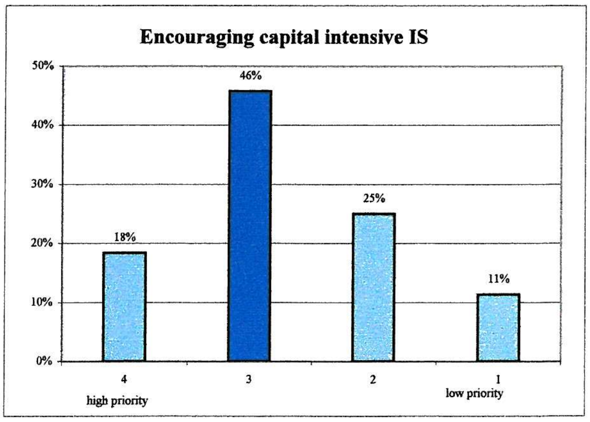
31.2	Essential 4	3	2	Not essential 1
Private				
Fincos (72)	8	19	36	5
Banks (41)	6	17	17	1
Public				
FPO (24)	3	11	6	4
BB (17)	5	6	5	1
TDRI (8)	0	3	5	0
NESDB (6)	0	3	1	2
Others				
Uni. (33)	4	9	10	9
BOT (6)	0	2	2	2
WB (5)	1	4	0	0
Total	27	74	82	24
Percentage	13%	35%	39%	11%



31.3	Essential 4	3	2	Not essential 1
Private				
Fincos (72)	40	21	6	1
Banks (41)	23	13	4	1
Public				
FPO (24)	11	9	4	0
BB (17)	9	7	1	0
TDRI (8)	4	2	2	0
NESDB (6)	4	2	0	0
Others				
Uni. (33)	22	10	1	0
BOT (6)	3	2	0	0
WB (5)	3	0	1	0
Total	119	66	19	2
Percentage	56%	31%	9%	1%



31.4	Essential 4	3	2	Not essential 1
Private				
Fincos (72)	15	36	11	6
Banks (41)	10	17	11	13
Public				
FPO (24)	6	11	7	0
BB (17)	3	9	4	1
TDRI (8)	1	5	2	0
NESDB (6)	1	4	1	0
Others				
Uni. (33)	3	11	12	4
BOT (6)	0	3	3	0
WB (5)	0	1	2	0
Total	39	97	53	24
Percentage	18%	46%	25%	11%



Note : only 1-2 % has not answered

31. How essential are the following in reducing vulnerabilities in the future? Other, please specify ______________

FINCO

separate trade issue from many market. Many market is rather relate, short term and speculative

support export of production which we are competitive, against unfair barrier of imports

reforming regulations and politic

control import goods especially in the luxury items/ promote local products

current pricing of foreign capital i.e. don't peg the Baht again

education

reduce corruption

we should aim for Stability not growth. More reliance on domestic demand not export or foreign investment. self restrained development.

BANK

government should decide the regulation and the auditing way to get some signal and be aware to find the way out before crisis occurred, human resource is very important. emphasise the industrial which are competitive in the world market

increasing high value - added production, ie., agricultueral related industries

FPO

strengthening politic system, good governance and sustainable development

set up the Asia Monetary Fund (AMF)

good fundamentals would be the best policy

mitigating social disparity and incomes distribution

BB

the best policy for this crisis is " Stand on your own legs " from the King' s policy.

Encouraging the international commercial between trader countries.

promote good governance in public and private sector

TDRI

NESDB

enhancing macroeconomic management and encouraging good governance in both private and public sector.

encouraging good governance in all sectors

UNI

BOT

diversify foreign markets ,goods and services. Proper exchange rates. Careful monetary and fiscal policies.

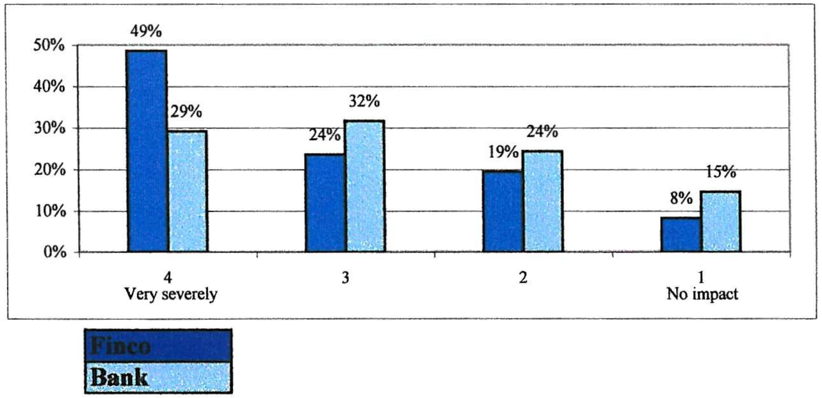
WB

strengthen financial system flexible exchange rate

PART IV : Financial and social reforms

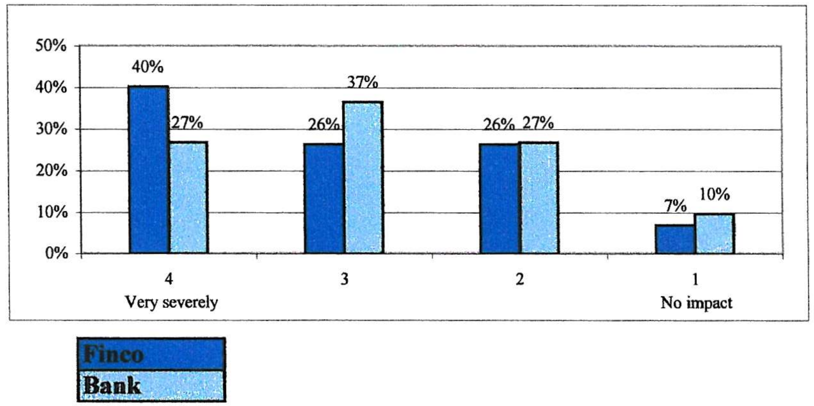
32.1 How severely have the rising in interest affected your institution?

	Very severely 4	3	2	No impact 1	average score
Finco	35	17	14	6	
% of total	49%	24%	19%	8%	3.1
Bank	12	13	10	6	
% of total	29%	32%	24%	15%	2.8
Grand Total	47	30	24	12	
% of total	42%	27%	21%	11%	3.0



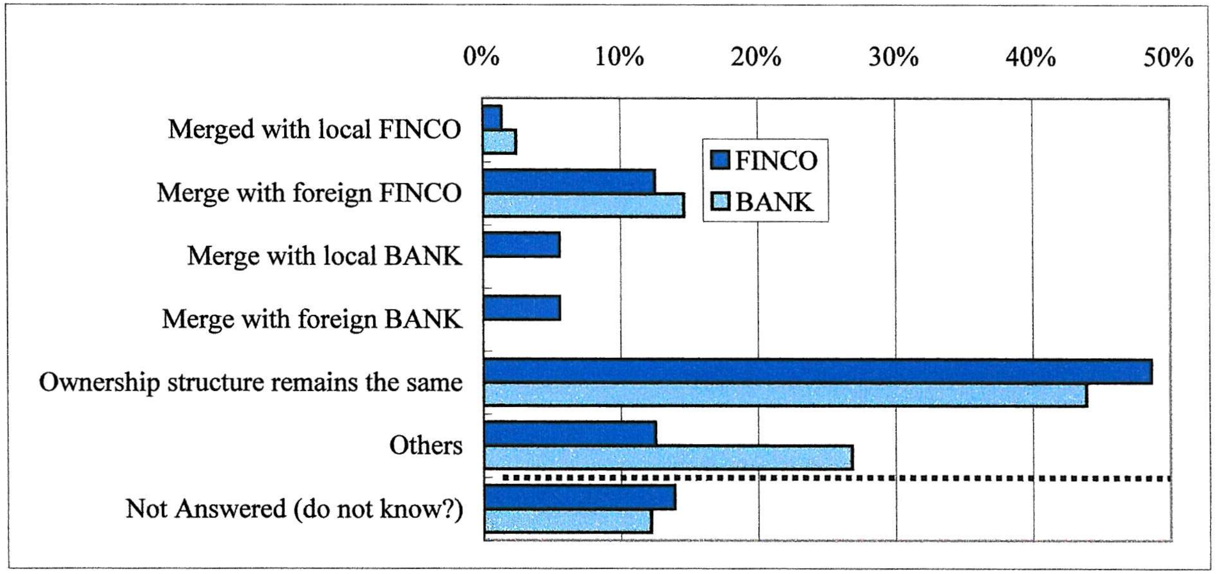
32.2 How severely have the exchange rate depreciation affected your institution?

	Very severely 4	3	2	No impact 1	average score
Finco	29	19	19	5	
% of total	40%	26%	26%	7%	3.0
Bank	11	15	11	4	
% of total	27%	37%	27%	10%	2.8
Grand total	40	34	30	9	
% of total	35%	30%	27%	8%	2.9



33. Has the ownership of your institution been altered in any way as a result of the crisis?

	Finco		Bank	
	actual	% share	actual	% share
Merged with local FINCO	1	1%	1	2%
Merge with foreign FINCO	9	13%	6	15%
Merge with local BANK	4	6%	0	0%
Merge with foreign BANK	4	6%	0	0%
Ownership structure remains the same	35	49%	18	44%
Others	9	13%	11	27%
Not Answered (do not know?)	10	14%	5	12%
Total	72	100%	41	100%



34. During the crisis in 1997, what kind of assistance did your institution need and receive from the government?

34 (a) Assistance needed ____

34 (b) Assistance received ____

BANK

Assistance needed	Assistance received
some kinds of communication to foreign investors to bring back direct investment	one way only problem solving from government side
two way communication, real problem acknowledge	full support with real / in DEEP understanding in Thai situation
some guideline, the discussed section with the reference entity (corp. and financial sector) before making any decision or issue new/ change regulations.(At least to get some feed back or to brain storm some concern which government management or office may forget or don't realise for some bit/ price in all area	Thai government capital fund
	no receive
	N/L A/ L N/A
Malaysia government capital fund	OK but the pace could have been managed by the government
no need	
N/L	
regulatory reform, banking sector reform.	
N/A	
Expedition of good - international standard bankruptcy act.	

FINCO

Assistance needed	Assistance received
increase in capital. from the ministry of finance	
	-I assistance
-I capital support	fresh capital
tax waiver for restructuring both assets and bad debt, fresh capital , lenient and friendly regulating body	the last government
less corruption/ higher moral	enter into Aug 16 package by applying tier 1 support for a finance company affiliate.
financial support through equity injection	
	sofe loans
sofe loans soft loans the concessional fund	we got the soft loans and capital injection from government as we are the development institutions which take major rules in helping industrial sectors.
	the concessional fund
capital increased and concessional fund from government	the same as we need
soft loans	soft loans
financial assistance	financial assistance
funding support	funding support
capital	inject new capital
long term source an fixed cost of fund	
	had the chance and opportunity for bidding and won the of portfolio
no red tape	
liquidity support	liquidity support
liquidity	liquidity
	NTG
	no (as a foreign bank)
no need, BOT can not suggest anything because it is the long way	Nil for foreign banks
no (as a foreign bank)	
	more option for equity funds to invest such as " flexible fund "
Thai baht funding for bank's liquidity	
no specific assistance	capital injections
	passing of bankruptcy law
capital injections to sthrengthen the BIS ratio	
	none
financial reform I.e. bankruptcy law	none
no	
none	buying local bank guaranteed by government
none	
We need government supports by providing soft loans, loans guarantee.	both loans and guarantees soft oan
recapitalization, funding cheaper source of fund	some source of loan with low interest, guarantor of bond issuing by our institution so that we can do funding easily
financial support	financial support
funding	funding

35. During the crisis in 1997, what kind of assistance did you think the government needed from the IMF in assisting the financial market recovery?
Please specify ______________________________

BANK
no need IMF assistance (letter of intent), just only money for reserve.
IMF consulting team to suggest and follow the situation, which would help them to understand the problem. And then for compromising in the commitments should be more easily. Need to help us resolved not just control.
relevant information for planning and implementing strategy and fund for reserve
IMF should be more study Asia economy
market confidence
better solution, not on the job training solution, time is crucial
financial assistance
fund, policy recommendation
technical assistance to improve and reduce NPLs
how to manage the non performing loans of and the under capitalised financial institutions without requiring foreign funds
restructuring financial sector
strategic advice but not implementation governance.
monetary support, good governance support.
Law enforcement and transparency
guarantee payment of Thai government
financial market reform model - base on condition of historical successful past incidents which are similar / dose to situation in Thailand.

FINCO
guidelines(but not instructions) Confidence from international market after joining IMF program .Capital (for liquidity)
not comment negatively but privately
boost in confident ,verbal support esp. last resort. more moderate measure
loan package from IMF to encourage loan extension or not early call for debt repayment
restrictive measure to ensure encouragement of good governance, such as implementation of bankruptcy laws and capital regulations of owners if poor financial institutions straight forwardly
fund available for foreign currency reserve
likely to you need help from others but not from yourself. For get all about the help from foreigners, please foreigners are foreigners.
relaxation in monetary policy
fund for establishing Asset Management Corporate(AMC) that help government to buy NPLs from commercial banks.
soft loans
financial assistance with fair conditions
loans, presure to reform, recommendation to solve problems.
loan with a less stringent of term and conditions
in my opinion, Thailand should do like Malaysia, an support fund from IMF
more relaxing rule
liquidity support (than 176n.). help to stop ST outflows. easing monetary policy than IMF really did
more than $ 17.2 ..,help to negotiate debt extension, less serve development policies.
Good suggestion only how can I do? No need more money to solve the problem because it is our long term loans in the future
enforcement for political reform
more reasonable condition, not every condition can be applied to every country

FINCO
a part from loans IMF should help in advising us but not through strict measures, which was used in the past, but more flexible measures which are more adaptable to our problem
It's a Thai political problems while the IMF can not help with.
more suitable policies to comply with Thailand economic situation.
a more flexible method to deal with the crisis, through analysis of the problem, causes of problem, method to solve problem and later on effect.
just the money
financial assistance with reasonable free hand at Thai government.
Needed more money to manage NPLs (establish AMC by government)
more supervision in use of funds.
more appropriate monetary policy requirement /guidelines(which should be tailor made to Thailand)
more flexible scheme to handle the crisis, taking into account the local limitation.
advisor role about pros and cons of each alternative solutions the government came up with.
grants and loans with less restriction but reasonable utilisation condition and soft interest and expenses.
as mentioned in no.19 page 2
public sector reform, corporate restructuring
strategy and financial support
stand-by falcate and technical assistance.
political recommendation , strong guarantee

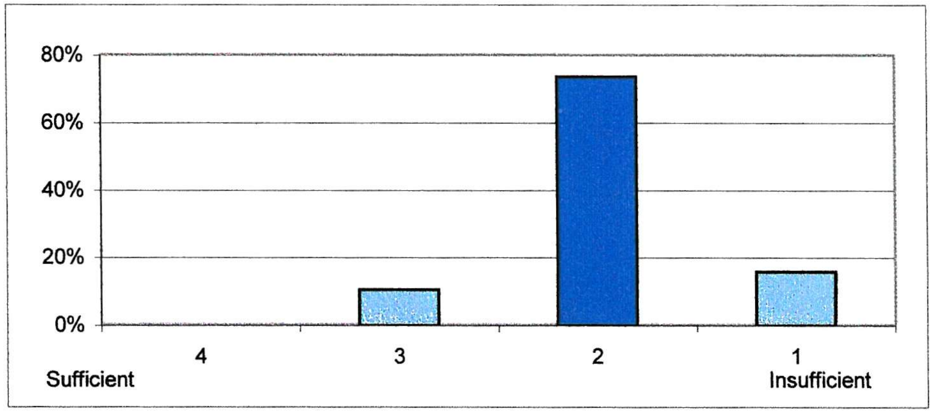
36. Was your institution asked to participate?

	Yes	No
TDRI(8)	8	0
NESDB(6)	6	0
WB(5)	5	0

37. Please indicate how sufficient are social safety nets in Thailand?

1.9*

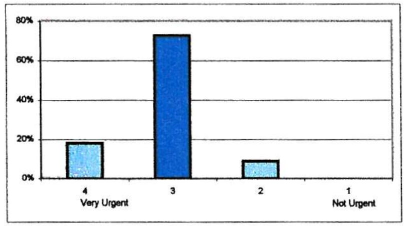
	Sufficient			**Insufficient**
	4	3	2	1
TDRI(8)	0	1	7	0
NESDB(6)	0	1	4	1
WB(5)	0	0	3	2
Total	0	2	14	3
Percentage	0%	11%	74%	16%



38. Please indicate how urgently these social problems need correcting, keeping in mind that there are not enough resources to improve all areas at once.

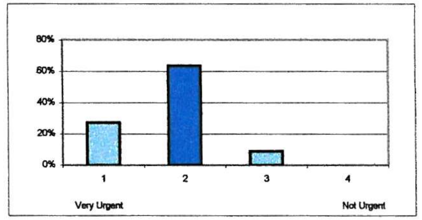
38.1 Narrowing income gap

	Very urgent		*Not urgent*	
	4	*3*	*2*	*1*
NESDB(6)	2	3	1	0
WB(5)	0	5	0	0
Total	2	8	1	0
% share	*18%*	*73%*	*9%*	*0%*



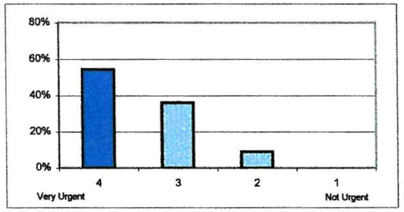
38.4 Improving health / medical care scheme

	Very urgent		*Not urgent*	
	4	*3*	*2*	*1*
NESDB(6)	2	3	1	0
WB(5)	1	4	0	0
Total	3	7	1	0
% share	*27%*	*64%*	*9%*	*0%*



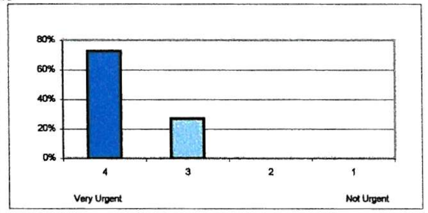
38.2 Reducing unemployment

	Very urgent		*Not urgent*	
	4	*3*	*2*	*1*
NESDB(6)	5	1	0	0
WB(5)	1	3	1	0
Total	6	4	1	0
% share	*55%*	*36%*	*9%*	*0%*



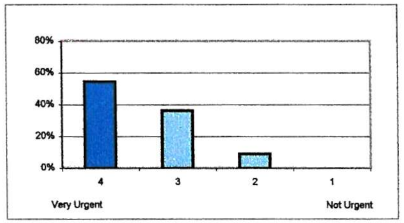
38.5 Improving education / training scheme

	Very urgent		*Not urgent*	
	4	*3*	*2*	*1*
NESDB(6)	4	2	0	0
WB(5)	4	1	0	0
Total	8	3	0	0
% share	*73%*	*27%*	*0%*	*0%*



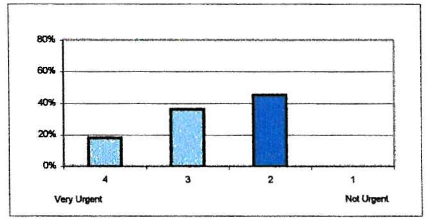
38.3 Reducing poverty

	Very urgent		*Not urgent*	
	4	*3*	*2*	*1*
NESDB(6)	4	1	1	0
WB(5)	2	3	0	0
Total	6	4	1	0
% share	*55%*	*36%*	*9%*	*0%*

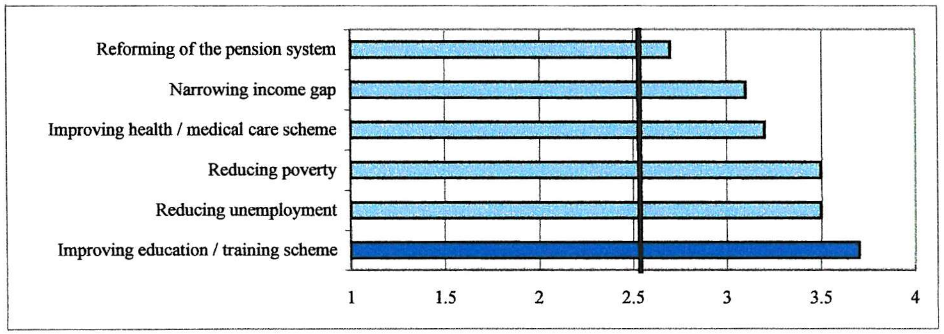


38.6 Reforming of the pension system

	Very urgent		*Not urgent*	
	4	*3*	*2*	*1*
NESDB(6)	1	1	4	0
WB(5)	1	3	1	0
Total	2	4	5	0
% share	*18%*	*36%*	*45%*	*0%*



In terms of average score, the urgency of problems can be prioritized as follow;



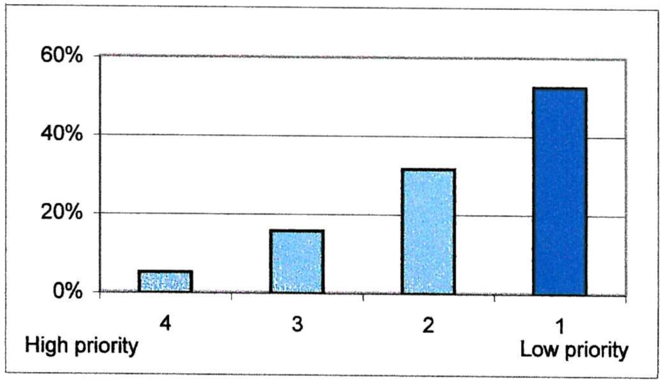
* no respondent has indicated any problem as not urgent.

39. What do you think is the problem in setting up social safety nets?
Please specify ______________________________

TDRI	government don't take social problem seriously no money
NESDB	readiness of implementing agencies to help alleviate social problem both the Ministry of education and of labour and welfare. I think there is any problem in setting up but not necessary for Thai cultural political incentive, lack of appreciation toward long term effect of social problems. we have to architect social safety net program which is coherent and fit in Thai society never to adopt the western style welfare system ; it won't work the schemes do not response directly to the poor.
WB	Co-ordinating between implementation agencies. appropriate targeting mechanisms we lacking. targeting the poor those employed in the informal sectors. Weak public inst. financing, government' s militaries. financial resources

40. How do you think the IMF has regarded the importance of social sector reform?

	High Priority			Low priority
	4	3	2	1
NESDB(6)	0	0	3	3
TDRI (8)	1	1	3	4
WB(5)	0	2	0	3
Total	1	3	6	10
Percentage	5%	16%	32%	53%



41. What kind of assistance does the social sector need from international organisations like the IMF or the World Bank?

41 (a) Assistance from the IMF ____________________

41 (b) Assistance from the WB ____________________

	(IMF)	(WB)
TDRI	fund money, soft loans	special assistant in setting up a proper programme
NESDB	relaxing certain macroeconomic policy to favour the poor and as low interest rate to induce investment, low inflation by not insisting high tax rate (VAT) Does IMF have any role in this ? From, our experience dealing with IMF regarding financial crisis I don't think IMF should put the hands ..this area. financial restructuring allowing socially responsible macroeconomic policy as conditionally technical and financial assistance	financial and technical assistance especially in preparing the project. The bank is learning to understand now to apply the social sector reform concept to Thailand in the way that fits with Thai's society. Learning attitude is acceptance. But not ' you have to do this " attitude like expressed by money of IMF' staffs technical, assistance and financial assistance social reform technical, assistance and financial assistance
WB	Macroeconomic stabilisation policies that do not increase growth at the expense of widening income inequality. none, except an understanding of social effects of policy recommendations.	technical assistance poverty targeting alleviation, skills development, community investment projects. Differentiation's required at different phases of crisis. Education/ development most caution young children

Appendix F* : Thailand Letter of Intent

Letter of intent	Date	Important content		
		monetary policy / financial sector	***fiscal policy / social scheme***	***other remarks***
1	*August 14, 1997*	Monitoring of exchange markets and financial sector reform.	Tight financial policy aimed at an orderly reduction in the external current account deficit.	Request of a 34-month Stand-by Arrangement in an amount equivalent to SDR 2,900 million or 505% of quota.
2	*November 25, 1997*	maintain tight monetary stance in order to stabilize exchange rate and restore confidence.	Maintain the objective of budget surplus of 1% (of GDP in 1997/98) Request for technical assistance from the Fund - efficient tax structure. Though duties on luxury items and small surcharges have been temporay increased, this is consistent with obligations to the WTO.	The new government headed by Prime Ministry Chuan. Key economic indicators are less favorable than originally anticipated. Persuance on privatization. Announcement of social sector reform by early 1998. Considerable effort in bringing the legal and regulatory reform in line with inter'l standards.
3	*February 24, 1998*	Maintainance of tight monetary stance. Closure of insolvent financial companies, intervention in the weakest banks and abolishing two-tier foreign exchange market.	Ensure higher social spending while maintain a sound fiscal position.	Increase in transparency in a number of ways, full publication of letters of intent and economic data.
4	*May 26, 1998*	Implementation of tighter loan classification and provisioning rules which will be gradually brought up to full observance of inter'l best practice over next 2 years.	In light of the larger c/a surplus, there is a room to adjust the fiscal target.. Thus, deficit target under the programme for 1997/98 is proposed to be changed from 2% of GDP to 3% of GDP.	Deteriorating real economy. Legal and institutional framework is being strengthened and made more supportive trhough reform of the bankrupcy act and other laws.

Letter of intent	Date	Important content		
		monetary policy / financial sector	***fiscal policy / social scheme***	***other remarks***
5	*August 25, 1998*	Money market interest rate have already declined substantially (20%) and this should improve the liquidity condition. The strategy for corporate debt restructuring includes removal of institutional obstacles and tax disincentives.	Fiscal policy will continue to aim at supporting domestic demand. Expansion of spending through the central government and the public enterprises is being carefully designed to maximize the impact of the real economy and on the social safety net.	Although export recovery is emerging, there are severe constraints from the decline in commodity prices and depressed regional demand. Unemployment is still rising.
6	*December 1, 1998*	Help increase corporate liquidity and provide carefully targeted support to key sectors. Allow money market interest rate to decline further. Regarding corporate debt restructuring, monitoring system has been introduced to balance the system of incentives, penalties, and arbitration among creditors.	Allow for higher deficit in order to ensure the maintenance of al well targeted fiscal stimulus with a focus to boost demand and improve social safety net.	Amendments to key legislation essential to financial and corporate restructuring are expected to be in place shortly.
7	*March 23, 1999*	Full implementation of financial sector reform by enhancing prudential rules and supervision through recapitalizing the banking system toward levels consistent with inter'l practice. Speed up corporate debt restructuring and revive credit to the real economy.	Adopting expenditure package in strengthening the social safely net, especially in the rural area. Boosting domestic demand through labor-intensive investment projects.	Parliament has now approved the key amendments to the Bankruptcy Law, Corporatization Law and the Condominium Act.
8	*September 21, 1999*	Maintain a supportive monetary stance, assist banks to reduce NPLs	Maintain a supportive fiscal stance including continued expenditure for the social safety net	policies are starting to bear fruit with a range of indicators showing that economy is turning upwards. Therefore, further drawings of funds will not be required at this point.

Note : See IMF (http://www.imf.org) for the complete documents of Thailand Letters of intent

* This appendix is reffered to in section 3.4 and 3.5

References

Akrasanee, Narongchai and Wattananukit, Atchana (1990), "Changing Structure and Rising Dynamism in the Thai Economy", _Southeast Asian Affairs_, P. 360-380

Al-Marhubi, Fahim and Willett, Thomas D. (1995), "The anti-inflationary influence of corporatist structure and central bank independence : the importance of the hump shaped hypothesis", _Public Choice_ (84), p. 153-162

Alam, M. Shahid (1989), "The South Korean 'Miracle': Examining the Mix of Government and Markets", _The Journal of Developing Areas_, January 1989, p. 233-258

Alesina, Alberto, and Summers, Lawrence H. (1993), Central bank independence and macroeconomic performance : some comparative evidence, Journal of Money, Credit and Banking, Vol. 25, No. 2 (May) p. 151-162

Alesina, Alberto and Perotti, Roberto (1994), "The Political Economy of Growth : A Critical Survey of the Recent Literature", _The World Bank Economic Review_, Vol. 8, No. 3, p. 351-371.

Amin, A.T.M. Nurul (1996), "An Enduring Lesson from Thailand's Economic Performance", _Philippines Review of Economics and Business_, Vol. xxxiii, No.1

Amsden, Alice H. (1989), ***Asia's Next Giant : South Korea and Late Industrialization***, Oxford University Press.

____ (1991), "Diffusion of Development : The Late-Industrialization Model and Greater East Asia", _American Economic Review_, Vol. 81, P. 282-86

____ (1995), "Like the Rest : South-East Asian's 'Late' Industrialization", _Journal of International Development_, Vol. 7, No. 5, p.791-799

Amsden, Alice H., Singh, Ajit (1994), "Growth in Developing Countries : Lessons form East Asian Countries, The Optimal degree of Competition and Dynamic Efficiency in Japan and Korea", _European Economic Review_ 38, p. 941-51.

Aziz, Ungku A. (1990), ***Strategies for Structural Adjustment : Experience of Southeast Asia***, IMF : Bank Negara Malaysia

Bade, R. and Parkin, M (1987) ***Central Bank Laws and Monetary Policy***, Mimeo, Department of Economics, University of Western Ontario, June.

Bagheri, Fatholla M. and Habibi, Nader (1998), "Political Institutions and Central Bank Independence : A Cross-Country Analysis", _Public Choice_, Vol. 96, No. 1-2, p. 187-204

Balassa, Bela, (1978) "Exports and Economic Growth, Further Evidence", _Journal of Development Economics_ (5), p. 181-189

____ (1985), "Exports, Policy Choices and Economic Growth in Developing Countries and After the 1973 Oil Shock", _Journal of Development Economics_ (18), p. 23-35

Balasubramanyam, V.N. (1991), ***International Trade & Global Development***, Routledge.

Baldwin, Robert E. (1975), "Foreign Trade Regimes and Economic Development : The Philippines", National Bureau of Economic Research, Vol. V, Columbia University Press.

Bale, Malcolm, and Dale, Tony (1998), "Public Sector Reform in New Zealand and its relevance to Developing Countries", World Bank Research Observer, Vol. 13, No.1, p. 103-21

Ball, R. (1999), "The Institutional Foundations of Monetary Commitment : A Comparative Analysis", World Development, Vol. 27, No. 10, P. 1821-42

Barro, Robert J. (1991), "Economic Growth in a Cross Section of Countries", Quarterly Journal of Economics, p. 407-443

_____ (1991), "Economic growth in a cross section of countries", Quarterly Journal of Economics, p. 407-443

Barro, Robert, Sala-I-Martin, Xavier (1995), ***Economic Growth***, McGraw-Hill Inc.

Bautista, Romeo M. (1980), ***Structural Change in the Philippines***, Economic Interaction in the Pacific Basin, Brookings Institution.

Bautista, Romeo M. and Power, John H. (1979), ***Industrial Promotion Policies in the Philippines***, The Philippines Institute for Development Studies

Bello, W. (1999), 'The Asian Financial Crisis : Causes, Dynamics, Prospects', Journal of The Asian Pacific Economy; 4(1), p. 33-55

____ (1998), 'The Asian Financial Crisis : Causes, Dynamics, and Prospects', Mimeo, Asia Europe People's Forum, Royal Commonwealth Society, London, 31 March.

Bernard, Mitchell and Ravenhill, John, (1995), "Beyond Product Cycles and Flying Geese : Regionalisation, Hierarchy, and the Industrialisation of East Asia", World Politics, January p. 171-209

Bhagwati, Jagdish N. (1988), "Export-Promoting Trade Strategy : Issues and Evidence", World Bank Research Observer, The International Bank for Reconstruction and Development, Jan, No1, Vol. 3, p. 27-57.

____ (1978), ***Anotomy and Consequences of Exchange Control Regimes***, NBER, Ballinger Publishing Co., Vol. XI

Bhongmakapat, Teerana (1998), "Managing the Thai Crisis : Asset Bubbles, Globalization and Macroeconomic Policy", Presented paper to the American Committee on Asian Economic Studies (ASAES), Chulalongkorn University, 16-18 December 1998.

Birdsall, Nancy, and Ross, David, and Sabot, Richard (1995), "Inequality and Growth Reconsidered : Lessons From East Asia", The World Bank Economic Review, Vol. 9, No. 3, p. 477-508.

Blejer, Mario I. And Schumacher, Liliana (1998), "Central bank vulnerability and the credibility of commitments : A value-at-risk Approach to currency crises", IMF working paper WP/98/65 (May)

Blinder, Alan S. (1988), ***Central Banking in Theory & Practice***, The MIT Press.

Boorman, Jack (1999), "IMF survey, IMF releases internal review of response to crisis in three affected Asian countries", IMF, Volume 28 (January 25, 1999) Number 2.

Booth, Anne (1999), "Initial Conditions and Miraculous Growth : Why is South East Asia Different From Taiwan and South Korea", World Development, Vol. 27, No. 2, p. 301-321.

Bordo, Michael, D., and Schwatz, Anna J. (1998), "Under what circumstances, past and present, have the international rescue of countries in financial distress be successful?" NBER Working Paper no. W6824, December

Bowles, Paul, and White, Gordon, December (1994), "Central Bank Independence : A Political Economy Approach", Journal of Development Studies, Vol. 31, No. 2, p. 235-264.

Boyce, James K. (1993), ***The Philippines : The Political Economy of Growth and Impoverishment in the Marcos Era***, Macmillan in association with the OECD Development Centre.

Bradford, I. Colin and Branson, William H. (1987), ***Trade and Structural Change in Pacific Asia***, the University of Chicago Press, The National Bureau of Economic Research.

Brunetti, Aymo, and Weder, Beatrice (1995), *Political Sources of Growth : A Critical Note on Measurement*, Public Choice 82, p. 125-134

Brunetti, Aymo (1997), "Political Variables in Cross-Country Growth Analysis", Journal of Economic Surveys, Vol. 11, No. 2.

Buendia, Rizal G. (1995), "Philippine Social Development Perspective : Do People Really Matter?", Philippine Journal of Public Administration, Vol. xxxix, No. 3.

Calmoiris, Charles W. (1998)," The IMF's imprudent role as lender of last resort", the CATO journal, Vol.17, no. 3. http://www.cato.org/pubs/journal/cj17n3-11.html

Camdessus, Michel (1998), the IMF and its Critics, A commentary, http://www.imf.org/external/np/vc/1998/111298.htm (15 March, 2000, 15:26)

Campos, J. Edgardo and LIEN, Donald, and PRADHAN, Sanjay (1999), "The impact of corruption on investment : Predictability Matters", World Development, Vol. 27, No. 6., p. 1059-67

Chaiken, miriam S. (1994), "Economic Strategies and Success of the Philippine Frontier", Research in Economic Anthropology, Vol. 15, p. 277-305.

Chang, Ha-joon (2000), "The Hazard of moral hazard : Untangling the Asian crisis", World Development, Vol. 28, No. 4, p. 775-788

Chernery, Hollis (1985), The structural approach to development policy, American Economic Review 65 (May), p. 310-5

Chenery, Hollis, Robinson, Sherman and Syrquin, Mosh (1986), **Industrialisation and Growth : A comparative study**, With contributions by Gershon Feder et al, New York, Oxford, Oxford University Press for the World Bank, p. X, 387

Chia Siow, Yue, (1996) The deepening and widening of ASEAN, Journal of The Asia Pacific Economy, 1(1), p. 59-78

Choe, Chongwoo and Moosa, Imad A. (1999) "Financial System and Economic Growth : the Korean Experience", *World Development,* Vol. 27, No. 6, p. 1069-82

Christensen, Scott and Dolloar, David, and Siamwalla, Ammar, and Vichyanond, Pakorn (1993), ***The lessens of East Asia, Thailand : The Institutional and Political Underpinnings of Growth***, A World Bank Publication.

Cody, John, Hughes, Helen, and Wall, David (1980), ***Policies for Industrial Progress in Developing Countries***, Published for World Bank, Oxford University Press

Collier, Paul, and Jan Willem Gunning (1999), "The IMF's role in structural adjustment", *The Economic Journal*, 109 (November), F634-F561, Royal Economic Society 1999, Blackwell Publishers

Colman, David, and Nixson, Frederick (1986), ***Economics of Change in less developed countries***, second edition, Philip Allan Publishers Limited.

Corden, W. M. (1990a), "Trade policy and the current account", Pearson, C.S.; Riedel, J Eds. The direction of trade policy; Cambridge, MA : Blackwell, p. 72-84

____ (1990b), "Macroeconomic policy and growth : Some lessons of experience", *World Bank Research Observer*, 5 : 59-84

Corsetti, Giancarlo, Pesenti, Paolo, and Roubini, Nouriel (1998), ***Paper Tigers? A model of the Asian crisis***, http://www.stern.nyu.edu/nroubini/asia/

____ (1998), What caused the Asian crisis and financial crisis?, http://www.nroubini.edu

Cukierman, Alex (1992), ***Central Bank Strategy, Credibility, and Independence : Theory and Evidence***, The MIT Press, Cambridge, Massachesetts.

____ (1994), "Central Bank Independence and Monetary Control", *The Economic Journal*, Vol. 104, No. 427, November, p. 1437-48.

____ (1995), ***Toward a Systematic Comparison Between Inflation Targets and Monetary Targets***, published in Inflation Targets, Centre for Economic Policy Research

Cukierman, Alex, Webb, Steven B., and Neyapti, Bilin, (1992), "Measuring the Independence of Central Banks and Its Effect on Policy Outcomes", *The World Bank Economic Review*, Vol. 6, No. 3, P. 353-398

Diamond, D. and Dybvig, P. (1983), Bank Runs, Liquidity and Deposit Insurance, *Journal of Political Economy*, Vol. 91, p. 401.419

De Haan, Jakob, and Hag, Gert Jan Van 'T (1995), "Variation in Central Bank Independence Across Countries : Some Provisional Empirical Evidence", *Public Choice*, 85, p. 335-351

Driscoll, David D. (1998), **"What is the IMF?"**, http://www.imf.org

Dong-man, Ha (1994), "Basic Steps to Internationalise Korea Economy", *Korea Focus*, No. 2, p. 68-74

Donghyun, Park (1997), "Macroeconomic Issues in Korea's Post-OECD Financial Liberalization", *Savings and Development*, No. 4, XXII.

Dornbusch, Rudi (1999), The IMF has failed, Camdessus should leave?, Massachusetts Institute of Technology.

Doronila, Amando (1992), ***The State, Economic Transformation, and Political Change in the Philippines, 1942-1976***, Oxford University Press, New York

Dua, Pami, and Rashid, Aneesa Ismail (1996), "Foreign Capital Inflows : The Experience of Emerging Markets in Asia", *Journal of Asian Business*, Vol. 12, No. 3, p.31-45.

Easterly, W. and Rebelo, S. (1993), Marginal Income tax rates and economic growth in developing countries, *European Economic Review*, 37:213, p. 40-58

The Economist (1997), 'The case for mild repression' Washington D.C., Financial and Economics (Http://www.stern.nyu.edu/globalmacro?IMFWBMEETECO997.html)

Edwards, Sebastian (1992), "Trade Orientation, Distortion and Growth in Developing Countries", Journal of Development Economics 39.

Eijffinger, Sylvester, Echaling, Eric, and Hoeberichts, Marco (1998), "Central Bank Independence : A Sensitivity Analysis", *European Journal of Political Economy*, Vol. 14, p. 73-88

Emery, R. (1967)"The Relation of Exports and Economic Growth", *Kyklos* (20), No. 2 p. 470-86

Engelbrecht, Hans-Jurgen and Kelsen, Brent (1999), "Economic Growth and Convergence Amongst the APEC Economies 1965-90", *Asian Economic Journal*, Vol. 13, March, No. 1.

Estanisloa, Jesus P., Manzano, George N., and Pasadilla, Gloria O. (2000), The Asian financial crisis : An East Asia perspective, *Asian Pacific Economic Literature*, Vol. 14(1) May p . 11-22

Evans, Lewis, Grimes, Arthur, Wilkinson, Bryce, and Teece, David (1996), "Economic Reform in New Zealand 1984-1995 : The Pursuit of efficiency", *Journal of Economic Literature*, Vol. XXXIV, Dec, p. 1856-1902

Feder, Gershon (1982) "On Exports and Economic Growth", *Journal of Development Economics* (12), North-Holland Publishing Co., p. 59-73

Feldstein, Martina (1998), "Refocusing the IMF : Overdoing it in East Asia", *Foreign Affairs Feature Article* (http://www.foreignaffair.org/feature.html)

Findlay, Ronald (1984), "Trade & Development : Theory and Asian Experience", _Asian Development Review_ p. 23-42

Fischer, Stanley (1991), "Growth, Macroeconomics and Development", _NBER Macroeconomics Annual_, Vol. 6, p. 329-64

_____ (1993), "the role of macroeconomic factors in growth", _Journal of Monetary Economics_ 32, p. 485-512

_____ (1995), "Central-Bank Independence Revisited", _The American Economic Review_, Vol. 85, issue 2, (May), p. 201-206

_____ (1998), The Asian Crisis : A view from the IMF, January 22, 1998 (http://www.imf.org/external/np/speeches/1998/012298.HTM)

_____ (1999), The Asian Crisis : the return of growth, June 17, 1999 (http://www.imf.org/external/np/speeches/1999/061799.HTM)

_____ (1999), The road to sustainable recovery in Asia, October 18, 1999 (http://www.imf.org/external/np/speeches/1998/101899.HTM)

Flood, Robert P., and Garber, Peter M. (1984), "Collapsing exchange-rate regimes : some linear example", _Journal of International Economics_ (17), p. 1-13

Forder, James (1998), "Central Bank Independence -- Conceptual Clarifications and Interim Assessment", _Oxford Economic Papers_ 50, p.307-334.

Fosu, Augustin Kwasi (1992), "Political Instability and Economic Growth : Evidence from Sub-Saharan Africa", _Economic Development and Cultural Change_, Vol. 40, p. 829-41

Frank, Charles R. Jr., Kim, K.S., Westphal, Larry E. (1975), "Foreign Trade Regimes & Economic Development : South Korea", _National Bureau of Economic Research_, Vol. VII, Columbia University Press, New York.

Frey, Bruno S., and Schneider, Friedrich (1981), "Central Bank Behavior : A Positive Empirical Analysis", _Journal of Monetary Economics_, p. 291-315

Friedman, Milton and Schwartz, Anna, **A monetary history of the United States**, 1867-1960

Fry, Maxwell J. (1996), "Governance at the Macro Level : Assessing Central Bank Independence in Pacific Asia and Other Developing Areas", Discussion Paper No. 96-27, University of Birmingham.

____ (1998), "Assessning Central Bank Independence in Developing Countries : Do Actions Speak Louder than words", _Oxford Economic Papers_ 50, p. 512-529

Frohnhofel, Rudi (1990), "Resource-based Industrialisation in Developing Countries : Strategic Approach and Problems of Implementation", _Economic Papers_, Vol. 24, p. 12-24.

Garnuat, Ross, and Grilli, Enzo, and Riedel, James (1995), ***Sustaining Export-Oriented Development : Ideas from East Asia***, National Centre for Development Studies, Australian National University.

Ghatak, Anita, Ghatak, Subrata (1995), "Pattern of Growth in South Korea and Thailand : A Cointegration Analysis", Scandinavian Journal Of Development Alternatives, vol. 14, September, No. 3, p. 17-31.

Ghatak, Subrata (1995), **"Introduction to Development Economics"**, Third Edition, Routledge

Ghosh, Atish, and Phillips, Steven (1999), Monetary and Exchange Rate Policies, The IMF-Supported Programs in Indonesia, Korea, and Thailand, A Preliminary Assessment, *The IMF Occasional Paper*, 178, p. 35-54

Ghosh, Pradip K. (1984), ***Industrialisation & Development : A Third World Perspective***, Greenwood Press.

Glick, Reuven, and Rose, Andrew, K (1999), "Contagion and trade, why are currency crisis regional?", *Journal of International Money and Finance* (18), p. 603-617

Goldfajn, Ilan and Baig, Taimur (1998), "Monetary policy in the aftermath of currency crises : The case of Asia", *IMF working paper*, WP/98/170

Goodhart, C.A.E. (1988), ***The Evolution of central banks,*** The MIT Press

_____ (1993), "The Role of Macroeconomic Factors in Growth", *Journal of Monetary Economics* (32) p. 485-512

_____ (1994), "What should central bank do? What should be their macroeconomic objectives and operations?", *The Economic Journal*, vol. 104, issue 427, (November) p. 1424-36

_____ (1995), ***The central bank and the financial system***, Macmillan Press Ltd.

Goodhart, Charles A.E., and Atmeida, Alvaro (1996), ***Central banking in Developing Countries : Objectives, Activities, and Independence***, Routledge

Goodman, John B., (1991), "The Politics of Central Bank Independence", *Comparative Politics*, April Issue, p. 329-49

Grabowski, Richard (1994), "The Failure of Import Substitution : Reality and Myth", *Journal of Contemporary Asia*, Vol. 24, p. 297-309

____ (1994), "Import Substitution, Export Promotion and the State in Economic Development", *The Journal of Developing Areas*, July issue, p. 535-554.

____ (1994), "The Failure of Import Substitution : Reality and Myth", *Journal of Contemporary Asia*, Vol. 24, p. 297-309.

Gray, Cheryl W. (1991), Legal Process and Economic Development : A Case Study of Indonesia, *World Development*, 19(7), p. 763-780

Greenaway, David and Milner, Chris, (1993), ***Trade and Industrial Policy in Developing Countries : A Manual of Policy Analysis***, The Macmillan Press Ltd

Grossman, Philip J. (1988), "Government and Economic Growth : A Non-linear relationship", _Public Choice_ (56), p. 193-200

Guillouet, Alain, (1996), ***Booming Economies of South East Asia : Thailand, Malaysia, Singapore, and Indonesia***, Center Frangras Du Commerce Exterieur (CFCE) Longman, Singapore Publishers Ltd.

Gujarati, D. N. (1995), **Basic Econometrics**, Third Edition, McGraw-Hill International Edition.

Gyimah-brempong, Kwabena, and Traynor, Thomas L, (1991), "Political Instability, Investment, and Economic Growth in Sub-Saharan Africa", _Journal of African Economies_, Vol. 8, No. 1, p. 52-86

Gylfason, Thorvaldur, (1999), "Exports, Inflation and Growth", _World Development_, Vol. 27, No. 6, P. 1031-57

Hamann, Javier (1999), Background to the Crisis, IMF-Supported Program in Indonesia, Korea and Thailand : A Preliminary Assessment, _The IMF Occasional Paper_, 178, p. 10-16

Hamann, Javier and Schulze-Ghattas, Marianna, (1999), Structural Reform, The IMF-Supported Programs in Indonesia, Korea, and Thailand, A Preliminary Assessment, _The IMF Occasional Paper_, 178, p. 67-77

Hamilton, James D., and MONTEAGUDO, Josefina,(1998), "The Augmented Solow Model and the Productivity Slowdown", _Journal of Monetary Economics_, 42, p. 495-509.

Hay, Jonathan R., Andrei Shleifer, and Vishny, Robert W. (1996), Privatizing in Transition Economies : Toward a Theory of Legal Reform, _European Economic Review,_ 40(315) : 559-68

Helleiner, G. K., (1986), ***Outward-Orientation, Import Instability and Africa Economic Growth : An Empirical Investigation***, In Theory and Reality in Development : Essay in Honor of Paul Streeten, Edited by Sinjaya Lall and Frances Stwart, Macmillan

Herderschee, Han (1993), "Incentives for Exports : The Case of Thailand", _ASEAN Economic Bulletin_, March, Vol. 9, No. 3.

Heung-chong, Kim (1996), "10 Problems Hindering Transformation of Korean Economy", _Korea Focus_, 1996, No. 4 P.76-85.

Hill, Hal (1988), "The Philippine Economy Under Aquino : New Hopes, Old Problems", _Asian Survey_, Vol. XXXVIII, February, No 2.

Hughes, Helen (1988), ***Achieving Industrialisation in East Asia***, Cambridge University Press.

____ (1992), ***The Danger of Export Pessimism : Developing Countries and International markets***, International enter of Economic Growth

Hughes, Helen and Singh, A. (1982), The world economic slowdown and the Asian and Latin American economies : A comparative analysis of economic structure, policy and performance, University of Cambridge, Department of Applied Economics.

_____ (1992) ***The World Economic Slowdown and the Asian and Latin American Economics***, Edited by Baanuri, T, University of Cambridge, Department of Economics

Hwa, Erh-Cheng (1988), "The Contribution of Agriculture to Economic Growth : Some Empirical Evidence", World Development, Vol. 16, No. 11, p. 1329-39

Institution of Southeast Asian Studies (1997), ***Southeast Asian Affairs 1997***, ISEAS, Singapore

Ito, Takatoshi and Krueger, Anne O. (1995), "Growth Theories in Light of the East Asian Experience", NBER-East Asian Seminar on Economics, Vol. 4, The University of Chicago Press

Jansen, Karel (1995), "The Macroeconomic Effects of Direct Foreign Investment : The case of Thailand", World Development, Vol. 23, No. 2, p. 193-210.

Jomo, K.S. (1998), "Financial Liberalization, Crises, and Malaysian Policy Responses", World Development, Vol. 26, No. 8., P. 1563-74

Jomo, K.S., and Chung, C. Y., and Folk, Brian C., and ul-Hque, Irfan, and Phongpaichit, P., and Simatupang, B., and Tateishi, M. (1997), ***Southeast Asia's Misunderstood Miracle : Industrial Policy and Economic Development in Thailand, Indonesia, Malaysia***, Westview Press.

Jones, Leroy P. (1980), ***Government, Business, and Enrepenuership in Economic Development***, Harvard University Press

Jung, Woo S., and Marshall, Peyton J. (1985), "Exports, Growth, and Causality in Developing Countries", Journal of Development Economics (18), p. 1-12

Kaminsky, Graciela, Lizondo, Saul, Reinhart, Carmen M. (1997), "Leading indicators of currency crisis", IMF working paper (July) WP/97/79

Kaminsky, Graciela L. and Schmukler, Sergio L. (1999), "What Triggers Market Jitters? A Chronicle of the Asian Crisis", Journal of International Money and Finance, 18, p. 537-560

Kapur, Devesh (1998), The IMF : A cure or a curse?, Foreign Policy, http://web.foreignpolicy.com/articles/ART6.htm

Kawai, Masahiro (2000), "The resolution of the East Asian crisis : Financial and corporate sector restructuring", Journal of Asian Economics (11), p. 133-168

Kenny, C. and Williams D., (2001) "What do we know about economic growth? Or, why don't we know very much?", World Development, Vol. 29, No. 1

Kiely, Ray (1998), ***Industrialisation & Development : A Comparative Analysis***, UCL Press Limited.

Killick, Tony (1993), "*The adaptive Economy : Adjustment Policies in Small, Low Income Countries,* Economic Development Institute", Development Studies, Over-sea Development Institute.

Kirkpatrick C. H. and Nixson F. I. (1983), ***The industrialisation of less developed countries***, Manchester University Press

Knack, Stephen, and Keefer, Philip (1995), "Institutions and Economic Performance : Cross-Country Tests Using Alternative Institutional Measures", Economics and Politics, Vol. 7, November 1995, p.207-227.

Kochhar, Kalpana; Dicks-Maireaus, Louis; Horvath, Balazs; Mecagni, Mauro; Offerdal, Erik; and Zhou Jianping (1996), "Thailand : The Road to Sustained Growth", Occasional Paper, December, No. 146, IMF, Washington DC.

Koo, Hagen (1986), "The Political Economy of Industrialization in South Korea and Taiwan", Korea and World Affairs, Vol. 10, p. 148-180.

Kormendi, Roger C. (1983), "Government Debt, Government Spending and Private Sector Behaviour", American Economic Review (73), p. 994-1010

Kormendi, Roger C., and Meguire, Philip G. (1985), "Macroeconomic determinants of growth : Cross country Evidence", Journal of Monetary Economics 16, p. 141-163

Krongkaew, M. (1995), ***Thailand's Industrialization and Its Consequences***, Macmillan.

Krueger, A. O. (1995), ***Trade Policies & Developing Nations***, Brookings Institution.

_____ (1993), ***Political Economy of Policy Reform in Developing Countries***, The MIT Press, Cambridge, Massachusetts

Krugman, Paul (1979), "A model of Balance-of-payments crisis", Journal of Money, Credit and Banking, Vol. 11, issue 3 (Aug, 1979) p. 311-325

_____ (1994), The myth of Asia's miracle, foreign affair article (November), http://web.mit.edu/krugman/www/myth.html

_____(1997), Currency crises, http://web.mit.edu/krugman/www/crises.html

_____ (1998a), The Eternal Triangle, A note on global 'architecture', http://wb.mit.edu/krugman/triangle.html

_____ (1998b), Will Asia Bounce back? (Speech for Credit Suisse First Boston, Hong Kong, March 1998), http://web.mit.edu/krugman/www/suisse.html

_____ (1998c), What happened to Asia? http://web.mit.edu/krugman/www/DISINTER.html

_____ (1998d), Saving Asia : It is time to get radical, Fortune Investor, http://www.fortune.com/fortune/investor/1998/980907/sol.html

_____ (1998e), Paradigms of Panic : Asian goes back to the future, http://web.mit.edu/krugman/www/panic.html (19 September, 2000, 13:30)

_____ (1999), Balance sheets, the transfer problem, and financial crises, (preliminary draft, prepared for the festschrift volume in honour of Robert Flood), http://web.mit.edu

Kunimune, Kozo (1999), "Exchange Rate Stabilisation and IMF interest rate policy : A critical reconsideration using a dynamic model", The Developing Economies, XXXVII, Sept., p. 337-354

Kwack, Sung Yeung (1994), ***The Korean Economy at a Cross Road : Development Prospects, Liberalisation, and South-North Economic Integration***, Praeger Publisher

Landau, Daniel (1983), "Government Expenditure and Economic Growth : A cross-country Study", Southern Economic Journal 49(3), p. 783-792

____ (1986), "Government and Economic Growth in the Less Developed Countries : An Empirical Study for 1960-1980", Economic Development and Cultural Change, p.35-75

Lane, Timothy (1999), Program Design, IMF-Supported Program in Indonesia, Korea and Thailand : A Preliminary Assessment, *The IMF Occasional Paper*, 178, p. 18-19

Lane, Timothy and Schulze-Ghattas, Marianne, (1999), Overview of the IMF-Supported Programs in Indonesia, Korea, and Thailand, A Preliminary Assessment, *The IMF Occasional Paper*, 178, p. I

____ (1999), Program Financing and Market Reactions, The IMF-Supported Programs in Indonesia, Korea, and Thailand, A Preliminary Assessment, *The IMF Occasional Paper*, 178, p. 21-22

Lane, Timothy and Phillips, Steven (1999), Macroeconomic Environment, The IMF-Supported Programs in Indonesia, Korea, and Thailand, A Preliminary Assessment, *The IMF Occasional Paper*, 178, p. 27-34

Lane, Timothy and Tsikata, Tsidi, (1999), Fiscal Policy, The IMF-Supported Programs in Indonesia, Korea, and Thailand, A Preliminary Assessment, *The IMF Occasional Paper*, 178, p. 56-66

Lal, Deepak and Rajapatirana, Sarath (1987), "Foreign Trade Regimes and Economic Growth in Developing Countries : Trade Regimes & Economic Growth in Developing Countries", No. 2, *World Bank Research Observer* 2, p. 189-217

Lall, Sanjaya and STEWART, Frances (1986) ***Theory and Reality of Development***, Macmillan

Lauridsen, Laurids S. (1998), "The Financial Crisis in Thailand : Causes and Conduct Consequences?", *World Development*, Vol. 26, No.8, p. 1575-91.

Levine, Ross and Renelt, David (1992), "A sensitivity analysis of cross-country growth regressions", *American Economic Review*, 82(4) : 942-63

Lewis, W. Arthur (1980), "The Slowing Down of the Engine of Growth", *The American Economic Review* (70), No. 4, p. 555-564

Lim, Joseph Y. (1999), "The macroeconomics of the East Asian crisis and the implications of the crisis for macroeconomic theory", *the Manchester School*, Vol. 67, No. 5, Special issue 1999

Linnemann, Hans, and Van Dijck, Pitou and Verrbruggen, Harmen (1987), ***Export-Oriented Industrialisation in Developing Countries***, Published for Council for Asian Manpower Studies, Manila, Singapore University Press.

Lloyd, P. J. (2000), "Openness and growth in East Asia after the Asian crisis", *Journal of Asian Economics* (11), p. 89-105

Luax-Meiselbach, Wolfgang (1989), "A Note on Import Substitution Versus Export Promotion as Strategies for Development", _Kyklos_, Vol. 42, p. 219-229.

Lucas, R. (1988), On the mechanics of economic development, _Journal of monetary economics_ 22, p. 3-42

Luedde-Neurath, Richard. (1986), ***Import Controls and Export-Oriented Development : A Reassessment of the South Korean Case,*** Westview Press.

Macintyre, Andrew, J., and Jayasuriya, Kanishka (1992), ***The Dynamics of Economic Policy Reform in South-east Asia and The South-west Pacific***, Oxford Uni. Press, New York

Maddison, Angus (1985), ***Two Crises : Latin America and Asia 1929-38 and 1973-83,*** Development Centre Studies, OECD

Mankiw, N. Gregory, Romer, David, and Weil, David N. (1992), "A Contribution to the Empirics of Economic Growth", _The Quarterly Journal of Economics_, May, p.407-437.

Mangahas, Mahar (1996), "The Philippine Social Climate", _Philippine Studies_, Vol. 44, p. 270-79.

Mapalad, Maria Claret M. (1998), "Foreign Capital Inflows and Domestic Savings in The Philippines", _Savings and Development_, No. 1, XXII

Marsden, Keith, Taxes and Growth, _Finance and Development_, 20(3), September, 1983, p. 40-43

Mas, Ignacio (1995), "Central Bank Independence : A Critical View from a Developing Country Perspective", _World Development_, Vol. 23. No. 10, p. 1639-1652.

Masuyama, Seiichi, Yandenbrink, Donna, and Chia Siow, Yuo (1997), ***Industrial Policies in East Asia***, Nomura Research Institute, Institute of Southeast Asian Studies.

Maxfield, Sylvia (1994), "Financial incentives and central bank authority in industrialising nations", _World Politics_, vol. 46, issue 4 (July) p. 556-588

Mc Grory, Daniel (1995), Civilizing the Russian Underground Economy : Requirements and Prospects for Establishing a Civil Economy in Russia, Transnational Law and Contemporary Problems 5(1) : 65-98

Mc Kinnon, Ronald I. (1998), "International Overborrowing : A Decomposition of Credit and Currency Risks", _World Development_, Vol. 26, No. 7, p. 1267-82

Mead, Richard, Jones Colin J., and Chansarkar, Bal (1997), The Managerial Elite in Thailand : Their Long-and Short-term career Aspirations, _International Journal of Management_. Vol. 14, September, No.3 Part 1, p. 387-394

Michaely, Michael (1977), "Exports and Growth : An Empirical Investigation", _Journal of Development Economics_ (4), p. 43-53

Miles, David, and Scott, Andrew (2002), **Macroeconomics, Understanding the Wealth of Nations**, Chapter 15, p. 369-401, John Wiley & Sons, Inc. (http://www.stern.nyu.edu/globalmacro) forthcoming.

Mingat, Alain (1998), "The Strategy Used by High-Performing Asian Economies in Education : Some Lessons for Developing Countries", _World Development_, Vol. 26, No. 4, pp. 695-715.

Mishkin, Fredric, S. (1999), "Lessons from the Asian Crisis", _Journal of International Money and Finance,_ 18, p. 709.723

_____ (1999), "Lesson from the Tequila Crisis", _Journal of Banking and Finance_, 23, p. 1521-33

Montiel, Peter and Reinhart, Carmen M. (1999), "Do Capital Controls and Macroeconomic Policies Influence the Volume and Composition of Capital Flow? Evidence from the 1990's", _Journal of International Money and Finance,_ 18, p. 619-35

Mussa, Michael (1999), "Policies to Avoid or Ameliorale Financial Crises", _Journal of Policy Modelling,_ 21(3), p. 301-310, North-Holland

Mundell R.A. (1963), Capital mobility and stabilization policy under fixed and flexible exchange rates, _Canadian Journal of Economics and Political Science_, Vol.XXIX, No.4 p. 475-485.

_____ (1965), "Growth, stability and inflationary finance", _Journal of political Economy_, 73 (2) p. 97-109

Mundle, Sudipto (1998), "Financing human Development : Some Lessons From Advanced Asian Countries", _World Development_, Vol. 26, No. 4, pp. 659-72

Mutoh, Takahiko (1995), ***East Asian Economies : Transformation and Challenges***, Edited by Kawagoe, Toshihiko and Sekiguchi, Sueo, Centre For Asian & Pacific Studies, Seikei University, Institute of Southeast Asian Studies

Nixson, Frederick I, and Walters, Bernard (1999), The Asian Crisis : Causes and Consequences, The Manchester School, Vol. 67, No. 5, Special Issue, 1463-6786, p. 405-408 and p. 496-523

Obstfeld, Maurice (1984), "Balance-of-payments crises and devaluation", _Journal of Money, Credit and Banking_, Vol. 16, issue 2 (May), p. 208-217

_____ (1986), "Rational and self-fulfilling balance-of-payments crises", _American Economic Reviews_, Vol. 76, no. 1, p. 72-81

_____ (1995), "Models of currency crises, with self-fulfilling features", _NBER Working paper_ no. 5285 (October)

O'Sullivan, Robert, A. (2000), "Asian financial reform : Progress, lessons, and challenges", _Journal of Asian Economics_ (11), p. 1-6

Ohseok, Hyun (1992), "Korean Economy in the 1990's : Making the Transition to Maturity", _East Asian Review_, p. 87-110.

Okuda, Hidenobu (1990), "Financial Factors in Economic Development : A study of the financial Liberalization Policy in the Philippines", _The Developing Economies_, XXVIII-3, September.

Ouattara, Alassane D. (1998), The IMF and developing countries : From myth to realities, http://www.imf.org/external/np/speeches/1998/11098.HTM (15 March, 2000, 15:34)

Pauly, Louis W. (1999), "Good Governance and bad policy : The perils of international organisational over-extension", *Review of International Policy Economy*, 6:4, Winter, p. 401-424

Persky, J., Devid, R., Wiewel, W. (1993), "Import Substitution and Local Economic Development", *Economic Development Quarterly*, Vol. 7, February, No. 1, p. 18-29.

Persson, Torsten, and Tabillini, Guido (1993), Designing institutions for monetary stability, Carnegie-rochester conference series on public policy 39, p. 53-84

Polak, Jacques, J. (1957), Monetary Analysis of Income Formation and Payments Problems, IMF Staff Papers. Vol. 6, November

____ (1997), The IMF Monetary Model : A Hardy Perennial, Finance and Development, December

Pomfret, Richard (1997), ***Development Economics***, Prentice Hall Europe

Pongpaichit, Pasuk, Baker, Christ (1995), ***Thailand : Economy and Politics***, Oxford University Press.

Posen, Adam S (1995), ***Declarations are not Enough : Financial Sector Sources of Central Bank Independence,*** NBER Macroeconomics Annual 1995, MIT Press, p. 235-274

_____ (1994), "Why CBI does not cause low inflation", *Finance and International Economy*, no.7, p. 51-63

Posner, Richard A. (1998), Creating a Legal Framework for Economic Development, *The World Bank Research Observer*, Volume 13, No. 1, February

Pourgerami, Abbas (1988), "The Political Economy of Development : A Cross-national Causality Test of Development-democracy-growth Hypothesis", *Public Choice*, 58, p. 123-141

Prachuabmoh, Nukul (1999), reports on Bangkok Bank of Commerce and Defending of Thai baht during 1997 (in Thai language)

Quibria, M.G., and Dowling, Malcolm, J., Edited (1996), ***Current Issue in Economic Development : An Asian Perspective***, Asian Development Bank, By Oxford University Press, Hong Kong

Radelet, Steven and Sachs, Jeffrey (1998), The onset of the East Asian financial crisis, http://www.stern.nyu

Rana, Pradumna B, and Dowling, J. Malcolm Jr. (1998), "The Impact of Foreign Capital on Growth : Evidences from Asian Developing Countries", *The Developing Economies*, XXVI-1, March.

Rao, M. Govinda. (1998), "Accommodating Public Expenditure Policies : The Case of Fast Growing Asian Economies", *World Development*, Vol. 26, No. 4, pp. 673-94

Reza, Sadrel (1994), "Policy Reform for Promoting Trade in Developing Countries", *Asian Development Review*, Asian Development Bank, Vol. 12, No. 2 p. 85-112.

Robinson, Richard, and Rosser, Andrew (1998), "Contesting reform : Indonesia's New Order and the IMF", *World Development*, Vol. 26, No. 8., P. 1598-1609

Rock, Michael T. (1995), "Thai Industrial Policy : How Irrelevant was it to Export Success?", *Journal of International Development*, Vol. 17, No. 5, p. 745-57

Rogoff, Kenneth, (1985), The optimal degree of commitment to an intermediate monetary target, *Quarterly Journal of Economics*, 100(4), November, p. 1169-90

Romer, P. (1986), Increasing returns and long run growth, *Journal of political economy* 94, p. 1002-37

_____ (1990), Endogenous technology change, *Journal of political economy* 98 : S71-102

Rosenberger, Leif Roderick (1997), "Southeast Asia's Currency Crisis : A Diagnosis and Prescription", *Contemporary Southeast Asia*, Vol. 19, September, No 3, p. 223-251

Rosebzweig, Mark R. (1988), Human Capital, Population Growth, and Economic Development : Beyond Correlations, *Journal of Policy Modelling* 10(1), p. 83-111

Roubini, Nouriel, (1998) An introduction to open economy macroeconomics, currency crises and the Asian crisis. http://www.stern.nyu.edu/~nroubini/NOTES/intro

Sachs, Jeffrey D. (1985), ***External Debt and Macroeconomic Performance in Latin America and East Asia***, Brooking Papers on Economic Activities (2), p. 523-64

_____ (1987), "Trade & Exchange Rate Policies in Growth-Oriented Adjustment Programs", *NBER Working Paper*, No. 2226

_____ (1997a), IMF is a power unto itself, (http://www.stern.nyu.edu/~nroubini/AsiaCrisisSachsViewFt1297.html) (21 March, 2000, 15:32)

_____ (1997b) The wrong medicine for Asia, (http://www.stern.nyu.edu/~nroubini/AsiaCrisisSachsOP-EdNYT1197.html (21 March, 2000, 15:32)

Saicheua, Supavud (1995), "The future sustainability of Thailand's current account deficits", Phatra Research Institute.

Sakong, Il (1993), ***Korea in The World Economy***, Institute of International Economies, Washington DC.

Sakurai, M. (1985), "Industrialisation in Developing Countries and Industrial Adjustments of Industrialised Countries", *EXIM Review*, p. 2-36.

Salgado, PV (1985), ***The Philippine Economy : History & Analysis***, RP Garcia Publishing.

Sanger, David, E., and Stevenson, Richard W. (1998), Second-Guessing the economic doctor, http://web.nytimes.com/library/financial/020198imf-loans.html

Sarker, P. C. (1996), "Structural Change in the South and East Asian Economies", *Asian Economic Review*, Vol. 38 (2), p. 187-211

Sato, Shuhei (1998), "Asian Financial Crisis", *Japan and the World economy*, 10, p. 371-5

Scalise, David G., and Guzman, Patricia J. de (1995), "Foreign Investment in the Philippines", *George Washington Journal of International Law and Economics*, Vol. 29, P. 145-195

Schaling, Eric (1995), ***Institutions and Monetary Policy : Credibility, Flexibility and CBI***, Edward Elgar Publishing Limited

Schick, Allen (1998), "Why most developing countries should not try New Zealand reforms", *World Bank Research Observer*, Vol., 13, No. 1, Feb. p. 123-31

Schuler, Kurt (1996), ***Should Developing Countries have Central Bank? : Currency Quality and Monetary Systems in 155 countries***, Institute of Economic Affairs.

Schwartz, Anna J. (1998), "Time of terminate of ESF and the IMF", *NBER*, no. 48, p. 1-12, August, 26, 1998

Sebastian, Edwards (1989), "Openness, Outward Orientation, Trade Liberalisation and Economic Performance in Developing Countries", NBER Working Paper No. 2908

Sengupta, Arjun (2000), "Financial Management of Globalisation : IMF and Developing countries", *Economic & Political Weekly*, Jan. 15

Sheng, Andrew (1997), Asia and the IMF, IMF Seminar, Section 1 : The International Monetary Fund Approach to Macroeconomic Policy

Shin, Myoung-Ho (2000), "Challenges for progressive industrialisation of Asian economies : the human resource dimension", *Journal of Asian Economics* 11, p. 7-13

Shirazi, Javad K, (1998) The East Asian crisis : origins, policy challenges, and prospects, The World Bank Group, (http://www.worldbank.org/html/extdr/offrep/eap/jkssp061098.htm)

Shultz, George P., Simon, William E., and Wriston, Walter B. (1998), "Who needs the IMF?", *Wall Street Journal*, February, 3, 1998.

Sikken, Bernd Jan and Hann, Jakob de (1998), Budget deficits, Monetization, and Central Bank Independence in Developing Countries, *Oxford Economic Papers*, 50, p. 493-511

Siklos, Pierre L. (1995), "Establishing Central Bank Independence : Recent Experience in Developing Countries", *The Journal of International Trade & Economic Development*, Vol. 4, No3. p, 351-84

Singh, Ajit and Hughes, A. (1982), The world economic slowdown and the Asian and Latin American economies : A comparative analysis of economic structure, policy and performance, University of Cambridge, Department of Applied Economics.

____ (1984), The interrupted industrial revolution of the third world : Prospects and policies for resumption, *Industry and Development*, p. 43-48

____ (1993), "Asian Economic success and Latin American Failure in the 1980s : new analyses and future policy implications", *International Review of Applied Economics*, Vol. 7, p. 267-89

Smith, Peter (1993), "Measuring Human Development", *Asian Economic Journal*, Vol. 7, No. 1, P. 89-106

Smith, Peter and Wahba, Jackline (1994), "The role of public finance in economic development : An empirical investigation", _Working Paper 9508_, Economic Research Forum for the Arab countries, Iran and Turkey (ERF)

Song, Byung Nak (1997), ***The Rise of The Korean Economy***, Oxford University Press.

Stein, Howard (1995), ***Asian Industrialization and Africa : Studies in Policy Alternatives to Structural Adjustment***, Macmillan Press.

Stiglitz, Joseph (1994), The Role of the State in Financial Markets, In proceeding of the World Bank Annual Conference on Development Economics 1993, Washington D.C. : World Bank

_____ (1997), Statement to the Meeting of Finance Ministers of ASEAN plus 6 with the IMF and the World Bank, Given in Kuala Lumpur on December 1, 1997 (http://www.worldbank.org/html/extdr/extme/jssp120197)

_____ (1998), The Role of International Financial Institutions in the Current Global Economy, Address to the Chicago Council of Foreign Relations (http://www.worldbank.org/html/extdr/extme/jssp022798)

_____ (1999), Responding to Economic Crises : Policy Alternatives for Equitable Recovery and Development, The Manchester Scholl, Vol. 67, No. 5, Special Issue 1999, 1463-6786, p. 409-427

Summers, L. H. and Thomas, V. (1993), "Recent Lessons of Development", _World Bank Research Observer_, 8 (12), p. 241-54, July

Taylor C. L., **World Handbook of Political and Social indicators**, Several issues.

Thacker, S. C. (1999), "The high politics of IMF lending", _World Politics_, 52(1) : 38-75 October

Timmer, C.P. (1992), "Agriculture and Economic Development Revisited", _Agricultural System_, 40, p. 21-58

Tyler, William G. (1981), "Growth and Export Expansion in Developing Countries", _Journal of Development Economics_ (9), p. 121-190

Tzeng, Rueyling (1997), "Foreign Direct Investment in Southeast Asia : Implications of Regional Economic Integration in the Western Society", _Asian Profile_, October, Vol. 25, No. 5.

Un-Chan, Chung (1997) "A Diagnosis of The Korean Economy", _Korea Focus_, , No. 2, p. 61-73

Vasquez, Ian (1998), Why the IMF should not intervene?, CATO speeches, http://web.cato.org/speeches/sp-iv22598.html (15 March, 2000, 16:23)

Velasco, Andres (1987), "Financial crises and balance of payments crises : A simple model of the southern cone experience", _Journal of Development Economics_ (27), p. 263-283

Vos, Rob, Yap, Josef T. (1996), ***The Philippine Economy : East Asia's Stray Cat? Structure, Finance and Adjustment***, Institute of Social Studies.

Wade, Robert (1998), "The Asian Debt-and-Development Crisis of 1997-? : Causes and Consequences", *World Development*, Vol. 26, No.8, p. 1535-53.

Walsh, Carl E. (1995a), "Recent Central-Bank Reforms and the Role of Price Stability as the Sole Objective of Monetary Policy", *NBER Macroeconomic Annual 1995*, MIT Press, p. 237-252

_____ (1995b), "Optimal contracts for central bankers", *American Economic Review*, March 85(1), p. 150-67

_____ (1993), "Central Bank Strategies, Credibility and Independence", *Journal of Monetary Economics*, 32, p. 287-302.

Warr, Peter G. (1994), "Comparative and Competitive Advantage", *Asian-Pacific Economic Literature* Vol. 8, November, No. 2.

Warr, Peter G., and Nidhiprabha, Bhanupong, (1996), ***Thailand's Macroeconomic Miracle : Stable Adjustment and Sustained Growth***, World Bank : Comparative Macroeconomic Studies

____, (1993), ***The Thai Economy in Transition***, Cambridge University Press.

Yong, Lee De (1991), "Small and Medium-Sized Enterprises in the South Korean Economy", *Far Eastern Affairs*, No. 5, p. 96-107

Yoon, Hae-Jin and Lee, Hyeo-Eun (1991), "South Korea, Taiwan and the Philippines : Trade Regimes and Performance", *The Philippines Economic Journal*, No. 71, Vol. XXX.

Yoshihara, Kunio (1994), ***The Nation and Economic Growth : The Philippines and Thailand***, Oxford University Press.

http://www.bangkokpost.com/html/archive.htm (1 and 2) 25/11/97

http://www.bangkokpost.com/html/archive.htm (3) 06/05/97

http://www.bangkokpost.com/html/archive.htm (4) 09/12/97

http://www.bangkokpost.com/html/archive.htm (5) 19/03/98

http://www.bangkokpost.com/html/archive.htm (6) 07/05/98

http://www.bangkokpost.com/html/archive.htm (7,8 and 9) 19/11/97