

**FUTURE OF PROSPERITY**



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# **FUTURE OF PROSPERITY**

## **Analyzing three decades of the Malaysian Economy**

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**Wan M. Hasni**  
Yayasan Harapan  
Kuala Lumpur, Malaysia



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*In  
loving  
memory and  
utmost dedication  
to my late beloved father  
and to my late beloved  
mother  
Haji Wan Sulaiman bin  
Wan Yusof  
Hajjah Siti Meriam binti  
Haji Ghazali*





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# FOREWORD

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This book was started long ago and never completed....





# PREFACE

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To be filled...

*Kuala Lumpur, Malaysia  
December, 2016*

WAN M. HASNI



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W. M. H.



## ACRONYMS

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YH            Yayasan Harapan  
GDP           G  
ross Domestic Product



## GLOSSARY

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Harapan      Hope for the future.





# INTRODUCTION

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Malaysia has gone through an unprecedented economic growth for more than a decade - a decade of prosperity, economic stability, political stability, and it then seems that it will continue for years to come. Suddenly something unexpected happened, beginning with the regional currency crisis, followed by the stock market crash, massive outflow of funds, and suddenly a major liquidity crunch. An economy that seems invincible suddenly looks frail; a decade of prosperity suddenly turns into a gloomy picture of impending economic recession. Even worries about a prolonged economic depression starts to set in.

The Malaysian and the East Asian financial and economic crisis is something that is unprecedented in recent memory. The combined loss in terms of Gross Domestic Product for the economies of Malaysia, Indonesia, Thailand, Philippines and Korea, exceeds US 400 billion dollars. This is not counting the economic impact, the financial cost of solving the problems, etc, which may run into a few hundred billion dollars more; it will take more than another decade of economic growth get all these losses back.

All of us, government leaders, business leaders, economists, were stunned. A lot of questions start to race through our mind. Also there were a lot of confusion about what is happening, accusations fly left and right, some blaming it on our economic mistakes, while some blaming it on the speculators, and some claim that the whole

thing is a western powers conspiracy. All of these add more confusion than anything else.

As observers to what has happened, all of us have more questions than answers in our minds. Discussion in the coffee shops, corporate boardrooms, cabinet meetings, statements in the print and electronic media, all add very little understanding to all of us. Reading the economic reports, either by analysts of stock broking houses, or by the government authorities such as Bank Negara and the Ministry of Finance, also does not seem to help us much. A quick survey of the literature written on the subject contributes little to our understanding. Just like any inquiring mind, I have no other option except to investigate on my own, and document my findings in a book. This is all what this book is about.

The book is organized into three main areas, centered on three questions. The questions are as follows:

1) Why the crises happened? It seems that our economy was strong, and everybody was praising us with the economic miracle of Asia; and suddenly everything went down at a lightning speed. Should there be warning before the crisis, or do we miss something? Can the crisis be predicted earlier?

2) Since the crisis has happened, we want to know: what exactly has happened? Is there any way to explain the crisis that makes logical sense? Has our response to the crisis been adequate, and could we have done something to avoid them in the first place?

3) Now it is quite clear that the crisis has affected our economy to a large degree, so we want to know the exact impact of the crisis on our economy. Since a few measures have been taken to correct the situation, and it seems that we are on the road to recovery; will there be any sustainability to such recovery? What will the future look like?

The book is organized along these three lines of questioning, where chapters 1 and 2 are dedicated to the first line of questioning; chapters 3 and 4, for the second; and finally chapters 5 and 6 for the third.

In chapter 1 I will present some historical perspectives, starting by reviewing our economic growth for the last decade (1988 to 1997) prior to the crisis; followed by chapter 2 with a review of economic condition of East Asian economies on the onset of the crisis. A detailed month-to-month event of 1997 will also be presented for documenting the events during the crisis.

Whereas chapters 3 and 4 are dedicated to review the crisis in East Asia from the economic perspective, followed by a specific treatment on the similar subject on Malaysia. The two chapters are designed to answer three major views to the crisis, as outlined below:

1) East Asia and Malaysia do not deserve the crisis. Yes, there must be some correction to the economy, but the correction should be a slow correction over time, not in drastic manner that has happened. So the crisis is externally induced rather than internally driven. The external factor can be speculators, western powers, etc.

2) East Asia and Malaysia deserve the crisis. However the severity and impact of the crisis is way beyond the normal thing that would happen under normal economic assumptions. The crisis mainly was internally driven, but a combination of

internal and external factors made it worse than it was earlier thought to be. A better management of the crisis would not leave us the way we are today.

3) The crisis is fair and proper, it is part of efficient market mechanism. East Asia and Malaysias excessiveness require such corrections, and hence justifiable, even in the magnitude of what has happened.

And finally chapters 5 and 6, focus on Malaysia where a review of the current economic program is presented, followed by the view on the future. The two chapters are dedicated to answering another three sets of views on the future of economic recovery for Malaysia:

1) A sharp V shaped curve. Malaysia has fallen and will quickly rise again, even though not necessarily to the same pre-crisis level, but to a certain manageable level.

2) A U shaped recovery, whereby the recovery will be longer and flatter. It will take long time before Malaysia can recover back its lost position.

3) A W shaped recovery, whereby a short recovery followed by a slowdown, until it will take sometime before full recovery is achieved.

In summary, this book is an attempt to answer nine sets of questions or views. The beauty of economics, at least from my personal perspectives is that: We ask many sincere questions in search sincere correct answers. The problem is, we can find only few answers to so many questions. This is where economics differs from politics; in politics the reverse is true: We can find so many insincere answers to very few honest questions. Thats the reason why this book is not about politics, and I will keep away from political discussions at any rate. This is important, because in todays Malaysian politics, anything can be read or viewed as politically motivated.

As in any field of knowledge, there has to be a certain discipline that we must adhere to. Since the subject of the book is about economics, what I have done is to go back to economic sources, theories, and scientific approaches in looking at the problems, and in search for answers. I have made references to numerous numbers of studies on the subject. In fact there has been so much research and studies that has been done on the East Asian crisis by renowned scholars and academics. Numerous amounts of financial resources have been dedicated to this subject. Unfortunately, in the case of us in East Asia, very little effort has been done on the subject. It is an irony that since we are the one that suffer and face the consequences the most, yet we are the one that seems less worried about finding the solutions, than them! What I hope is that this book will encourage many others of us to start seriously looking at this subject. It will be useful for many generations to come.

Economics however is not an exact science; it is a science of approximation. Economist, in their attempts to model the world, provides a simplistic model to a much complex situation, the economy as a whole. Some people see economists as a confused bunch of people, because it seems that none of them are in agreement with each other. If economists are so smart, then why cant they predict the future, and tell us what solutions to be taken? Instead, they add a lot more confusion; some economists suggest capital control, while others recommend currency boards, and so on. Anyway, what does each one of these policies do, and what impact will they have on us? The problem is not with the economist, it is more to the failure of economist communicating their views to the public, and on the other hand, the

public, especially political leaders just like to say what seems convenient to them. In reality, what seems so complex is a lot easier to understand, if we use a more systematic way to look at it; and what seems so simple, may in fact be more complex than we thought, again if proper understanding is obtained. All in all, an exercise of this nature will make us think and understand, hopefully with much clearer mind. That's the use of economics.

What moves me to write is due to the lack of efforts among the Malaysian people to really understand the problem. The press is too busy with day-to-day and political events. There is a clear lack of discussions among Malaysians on the problem faced. Furthermore, what worries me is that there has been so little research done on our economic problems. It is very surprising to me that so much literature and studies has been developed in the United States and other parts of the world, studying and trying to explain about our economy. What are we here doing? This crisis affects us more than anybody else. Our policies will have direct and long-term implications on the present and future generations. Given the size of what we have lost, and the amount of efforts that we need to undertake, to get back to where we were, are we not concerned about it. I am not sure how much resources and efforts are now dedicated to investigating and studying our problems and possible policy solutions.

I hope this book will provide a clear explanation to the Malaysian public, at the same time excite discussions among ourselves; and move our industry and business leaders, academics, and thinkers to work together towards understanding our predicament, and searching for solutions for a better life.

**PART I**

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**THE ROARING NINETIES**

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# CHAPTER 1

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## THE ECONOMY IN THE 90S

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The ultimate goal for any nation in modern civilization is to achieve economic prosperity. Economic prosperity brings well being to the population, which is the objective of any government in this era of progress and development. Economic prosperity, as measured by economists is economic growth. If the nation experience economic growth, the population will be continuously employed, which provides them sources of income that in turns will be used to purchase whatever necessities they need in life, and lead a relatively happy life. In essence, that is what modern economics is all about.

Malaysia has indeed over the last decade become a prosperous nation where the GNP per capita (GNP per capita is a measure of relative wealth) has surpassed the US 4,500 mark in 1996. This almost qualifies us to become a candidate for the Newly Industrialized Countries in Asia. This achievement is not purely out of luck; it arises out of hard work, effort, planning, on the part of the government, entrepreneurs, business community, and the population at large. Everybody should claim credit to be part of this unprecedented economic prosperity of our nation.

In this chapter, I will provide an overview of Malaysian economy over the last decade, prior to the economic and financial crisis that has befallen the nation. In particular, I will focus on the contributing factors for this unprecedented economic

growth, its characteristics, and generally its impacts on the structure of the economy. Throughout the book, I will be using standard technique of economic analysis and measures, namely analysis on the Gross Domestic Products (GDP), major macroeconomic indicators, and reliance on statistical data.

For the sake of clarity and simplicity, throughout the chapter, I will use graphical presentation of the data, since it will be easier to graphically depict and observe various trends in the economy. The sources of the data for most of these graphs are taken from various government publications. Details are enclosed in the appendix.

## 1.1 Gross Domestic Product

One important measure of economic growth of any country is by looking at the behavior of the Gross Domestic Product or GDP. This is the standard way of economic measurement by economists worldwide, including the international bodies such as the World Bank, the International Monetary Fund, and also the same measure used by our government when looking at economic figures. GDP analysis is a good start to understand any economy.

There are two ways to look at a country's GDP, namely, by looking at what we produce, i.e. the producer side of the story, and how we use all these things that we produced, i.e. the user side. In economic terms, the producer side is called as the Aggregate Supply, and the user side is called as the Aggregate Demand. Since we assume what's being produced must all be utilized, the aggregate supply then must be equal to the aggregate demand (i.e. an economic equilibrium).

### 1.1.1 Aggregate Supply

Aggregate supply consists of three main areas of production activities in an economy namely, the primary sector, the secondary sector, and the tertiary sector (usually called services sector, which is the terminology that we will use throughout the book). The primary sector describes the production activities based on natural resources such as mining, petroleum, agriculture, logging and others. While secondary sector is where value-added are being done to these resources through two ways: manufacturing, and construction. In the case of manufacturing, value added is accomplished through conversion of raw materials into specific products, and for construction industry, value-added is being done through conversion of resources into concrete and structures. The rest of other production activities in the economy are lumped together as service sector, which includes all type of services such as financial services, government activities, tourism, restaurants, utilities and many others.

Figure 1.1 Components of Aggregate Supply  $\text{Aggregate Supply} = \text{Primary sector} + \text{Secondary sector} + \text{Services sector}$ . Primary sector constitutes agriculture, forestry and logging, and mining and quarrying. Secondary sector constitutes of manufacturing and construction. Services sector includes all type of services: utilities, transport, financial, and government services.



The year 1988 marks the end of the 1980s recession. As documented by many, the previous recession was ignited by the crash in commodity prices (i.e. the primary sector), which led to a prolonged economic downturn. The over-dependence of Malaysian economy on the primary sector was a lesson well learned, when throughout the nineties, the whole economy shifted away from the dependency and instead moves into the manufacturing and construction sector, and the services sector.

This new trend can be observed clearly (see Figure 1.1) where the secondary sector is taking over as the new engine of the economy. In 1988, the primary sector used to contribute about 31% of our GDP, and by 1997 it has been reduced to about 18% of GDP. Whereas the secondary sector started the period with 25%, and by 1997 it stands at 36% of GDP. This fact has been clearly documented in many studies that indeed Malaysia has moved out of the last recession, resulting from the growth of the secondary sector. The key for understanding the GDP growth of the last decade therefore lies with this sector.

It should be noted here that even though the services sector represent a large chunk of the GDP component, it is off less significance as the engine of economic growth because generally services are results of other activities. In fact it will always move in tandem with the growth in the primary and secondary sector, and it is considered as a resulting factor, rather than as a contributor.

Now let us look at the growth rate of these various components. The growth rate of the manufacturing and construction sector was the fastest over the decade at an average rate of 18%, followed by services at 13%, and primary sector at 7%. In fact the growth in manufacturing and construction even exceed the average GDP growth over the same period (average of 13% per annum), whereas services sector followed about the same trend as GDP growth itself, while primary sector is lagging behind. It is quite conclusive that the manufacturing and construction sector is the new engine for the economy, and has spurred the economic growth of the last decade. Even casual observation will make us to agree with such claims, by witnessing how many factories that sprung up around us like mushrooms after a heavy rain, and the seemingly continuous construction activities that are going on in the country.

Since the importance of these activities for Malaysian economic growth is undisputed, let us dissect these two sectors a little bit more to gain additional insights on them. This can be done by looking at the detail sub-sectors as presented in the figure below.

Figure 1.2 Breakdown of the Secondary sector Secondary sector = construction + electronics and electrical + metal, machinery and transport + chemical based + wood and paper + textile and garments + food based + others.

A quick look at Figure 1.2 tells us that the main contributors in the manufacturing sector are the electronics and electrical, the metal, machinery and transport sector, and the chemical based sector. This is a clear evidence of the results of Malaysia's industrialization effort over the last decade. In fact in the early 1990s, the government policy was for encouraging import substitution industrialization strategy which was meant to reduce imports of manufactured goods. Towards the latter part of the 1990s, this policy was further enhanced with export based industrialization strategy which moves Malaysia to become one of the major exporters of manufactured goods.

### 1.1.2 Aggregate Demand

Now let us turn to the aggregate demand or the user side of the economy. Aggregate demand consists of three major activities: consumption, investments, and net exports. Consumption includes the expenditure from private sector and government sector; Investments includes investments by both the private sector and the government; and net exports is defined as the total exports less total imports.

Figure 1.3 Components of Aggregate Demand  
 Aggregate demand = Consumption + Investment + Net Exports;  
 Consumption = private plus government expenditure;  
 Investment = private plus government investments;  
 Net export = Gross exports less gross imports.

As in most economies, it is natural that consumption constitutes the largest components of the aggregate demand. This should make sense, since we all eat, drink, and do many other activities to consume the fruits of our economic efforts. What is interesting in the Figure shown above is the investment component of the aggregate demand, where its prominence becomes much clearer as we move from the beginning to the end of the period. Investments, as defined, measures the level of productive use of the resources in the economy, such as purchases of capital goods, machineries, setting up of factories, and others.

In the beginning of the period (1988), investments only constitute 26% of the GDP, and by 1997 investment has grown to about 44%. Investments, as a component of GDP has been growing at an average of 20% per annum, which far surpasses the growth rate of consumption which is at 11% per annum. The average GDP growth rate over the period was 13% per annum. Similar to the role of manufacturing and construction sector on the economic growth of Malaysia, on aggregate supply side, investments play the same role, on aggregate demand side.

One area that seems as insignificant contributor to the GDP is the net exports activity; from the Figure above, we may conclude that net exports does not add much to our GDP growth. Actually this conclusion is rather misleading, because net exports measures the difference between exports and imports, whereas in terms of figures, trade volumes is about 157% of GDP in 1997 (exports plus imports is at RM 432 billion compared to the GDP of RM275 billion). So what is actually happening? The answer is that exports and imports activity has been pretty much leveled, where export volume is almost similar to import volume. That's why over the years we see that net export is marginal compared to the GDP. But that does not mean that trade is not important.

### 1.1.3 Savings and Investments

Given the importance of investments in the GDP growth, it warrants us to look further into the sources of these investments, which can be divided into two, namely the domestic source, in the form of national savings, and from external source, in the form of foreign investments. It has been a known fact that East Asia generally, and Malaysia in particular are high savings society. By saving a good portion of what's

being produced in the economy, we in turns will apply them into investments, and logically most of the times, savings and investments will always go hand in hand.

Figure 1.4 Savings and Investments Savings is computed from Gross National Savings figures. Investments is from the GDP data. The right hand axis represents the numbers and the left hand axis refers to savings and investments as a percentage of GDP.

From Figure 1.4 we can see clearly that as a nation, our savings rate over GDP is growing from about 27% in 1988 to 45% by the year 1997.

is at an average of 33% over the period. (For example in 1997 our savings/GDP ratio stood at: 44%, and the Gross National Savings was at RM 105 billion). As suggested earlier, Figure 1.4, proves that savings and investments move in tandem.

An important observation that I would like to make is about the difference between savings and investments, or the savings-investment gap. This gap actually measures the extent of investment made by the foreigners in the country. If the gap is negative (i.e. savings is larger than investments) then we as a country is a net lender to the world, and if the gap is positive, then we are a net borrower to the world. As in the case for the period, savings-investments gap have been negative throughout, therefore it implies that foreigners have been net lender to us, and this lending comes in the form of direct investments, portfolio investments, bank lending, and other.

Another important observation to be made is the cumulative value of the savings-investment gap. If we take the total amount of the gaps over the period (1988 to 1997), the amount of foreign investments in the country stood at RM 86 billion. If we look at it this way, the total amount that we owe foreign investors is quite large.

#### 1.1.4 Foreign Investments

The question that I would like to pose now: how significant is the contribution of foreign investments in relation to our economic growth? Let us have a look at the size and the mode of these investments over the last few years. Foreign investments can be classified into four general categories: Foreign Direct Investment or FDI, portfolio investments, bank lending, and inter-governmental lending. FDIs are generally for the purpose of setting up companies and purchase of assets for manufacturing activities. While portfolio investments are purchases of shares from the stock market, bonds and other financial instruments. Lending on the other hand, are accomplished through the route of bank lending to local companies either in short-term or long-term debts, and other forms of bank financing. Inter-governmental activities include grants, inter-government loans and others.

What has been the share of these activities over the years? See Table 1.1 below:

Table 1.1 Foreign Investments in Malaysia Source: Bank Negara bulletin

As shown in Table 1.1, the level of foreign investments either in form of equity or loans has been growing over the years. Equity investments (which is in the form of FDI) has been steady over the period, whereas, foreign loans has been on a rising trend. In fact by 1997, foreign loans has reached the size of RM 30 billion from an amount of only RM3.4 billion in 1991. This trend has been put to question due to growing indebtedness of the country to the foreigners.

If we compare the total investments by the foreigners (i.e. equity plus loans) and the savings-investments gap (i.e. the portion of investments by foreigners in our GDP calculations), we can see that the savings-investments gap is pretty much explained by these investments. In other words, shortfall in the investments by domestic population (i.e. domestic savings) is being filled by foreign investors.

The last row of Table 1.1 shows the flow of portfolio investments in the country. One clear trend that we can observe: portfolio investments is fluctuating from year to year. When the stock market is on the rise (for example, 1993 super-bull run of KLSE), the portfolio investments increased to RM 25.7 billion, and when the stock market crash in 1997, a total amount of RM 28.4 billion flow out of the country. This fact shows the volatility of portfolio fund flows in our country, which in turns can affect the level of our stock markets.

### 1.1.5 Trade

As we have said before, Malaysia in the 1990s has become a trading nation. This is evident from the fact that the total volume of exports and imports combined is at 150% of our GDP. Even though net export does not contribute in a significant manner to our GDP growth, it is important that we look deeper into the components of exports and imports so that we understand how do exports and imports behave, and how this behavior may affect the overall economy.

Figure 1.5 Components of Gross Exports  
 Gross exports = Exports of electronics and electrical items + other manufactured items + non-manufactured items. Electronics and electrical include includes TV sets, radio, semi-conductors, integrated circuits and others; other manufactured items includes metal products, plastic and rubber products, and alike; non-manufactured goods includes crude petroleum, agricultural commodities, and others

Figure 1.5 demonstrates one important fact: the electronic and electrical products dominate our export. In fact in 1997 electronics and electrical represent about 56% of the total gross exports. Whereas other manufactured goods and non-manufactured goods represents 28% and 16% of exports, respectively. It is obvious that our exports are not well diversified, and too much independent on a single sector.

Figure 1.6 Components of Gross Imports  
 Gross imports = goods in transit + consumption goods + investment goods + intermediate goods. Consumption goods includes food and similar items; investment goods includes machineries, vehicles, and others; intermediate goods are goods imported for purpose of manufacturing of finished goods.

On the other hand, if we observe Figure 1.6, trend in gross import is less alarming, where most of the imported goods are for productive purposes namely for investment and re-manufacturing (i.e. intermediate goods). For example, in 1997, both items combined forms about 85% of total imports (valued at RM 188 billion); consumption goods on the other hand represent only 15% of total imports (valued at RM 32 billion).

A point that I would like to make here is regarding the size of intermediate goods in our imports. It shows clearly that to a large degree, our manufacturing depends on

raw inputs from outside the country. This makes sense since as a country we are just moderately rich in terms of natural resources, and hence to some degree we have to depend on imports for our manufacturing industry.

Before we move on to other subject, I would like to present some facts about the direction of trade i.e. the major destinations of our goods. This issue will be relevant for discussion in later chapters.

Figure 1.7 Direction of Trade as of 1997 (As percentage of total)

Figure 1.7 summarizes the position of trade between Malaysia and major trading nations (or areas). Our largest export is to Singapore (about 20% of total) followed by North America (19%), and European Union and other European countries (15%). Our imports largely come from Japan (22%), North America (18%), and followed by Europe (17%).

If we look very carefully, Malaysia in reality trades with three major areas, namely: North America, Europe, and Japan. We have to exclude Singapore, since it is only an entreport, whereby most of the goods imported by Singapore from Malaysia is being shipped out eventually to the same destinations as Malaysias exports. Therefore if we combined these three trade areas together with our exports to Singapore, the total would be 67% of our exports. It is also important to note here that generally our trade has been quite balanced (i.e. no major surplus or deficit), except with Japan and Singapore. The trade deficit with Japan in 1997 stands at RM21 billion, and trade surplus with Singapore stood at RM 15 billion. These two numbers does not cause any need for concern.

## 1.2 Macroeconomic Indicators

### 1.2.1 Money Supply

In modern economy, money serves as the medium of exchange; it allows people to exchange goods and services, and other economic activities to function. Therefore, the higher the level of economic activity requires a lot more money to change hands. Logically therefore, higher GDP growth then would require the money supply to grow in tandem. With GDP growth averaging 13%, what is happening to the money supply during the period?

The graph below shows the money supply trend for 1988 to 1997 period. I used all three measures of money to track the money supply behavior, namely M1 (which measures the currency in circulation), M2 and M3 (which measures the deposits created within the banking system).

Figure 1.8 Money Supply Trend M1 = by definitions currency in circulation plus demand deposits and other short-term deposits; M2 = M1 plus savings and fixed deposits in commercial banks; M3 = M2 plus all other savings and fixed deposits in the financial institutions.

Figure 1.8 clearly shows that all measures of money in the economy are on the rise over the years. In fact the rise is pretty much confirms the story that as our economy is growing, so does the overall money in the system. Furthermore, as we can see in

the graph below, not only does money supply grows as GDP grows, the growth rate also goes hand-in-hand with the GDP growth rate year-to-year.

Figure 1.9 Growth rate for the Gross Domestic Product (GDP) vs. Money Supply Figures in annual percentage. Money supply is being measured by M3.

Why does money supply grow, in tandem with GDP growth (i.e. is it the case that money supply must always increase with GDP growth)? The answer lies in the interest rates and exchange rate policy by Bank Negara. As the monetary authority, Bank Negara has been entrusted with the role to maintain that interest rate and inflation will not be a problem for the economy. As more money being demanded (i.e. more economic activities), there will be a likely scenario that interest rates will start to rise. A rise in interest rate in turns cause the economy to move into inflationary territory. So in order to keep inflation low, Bank Negara takes the policy of allowing monetary expansion in order to keep interest rates from rising. Similarly, as more and more foreign capital flowing into the country, Bank Negara has create more money in the system to meet this external demand. This policy has to be undertaken in order to keep Ringgit exchange rate from rising. Both of these issues combined, has been the key reason why money supply is on rising trend over the period.

Money supply does not tells much about the economy except it is used an indicator of the movements of the economy. The more important question is how does this money in the system being used? That is the subject of next sub-section.

### 1.2.2 Lending Growth

As we have identified earlier, a major source of domestic investments has been from the savings that we have generated in the economy. This savings then in turn end up in the banking sector which then were loaned out to the business community and population at large. In this sub-section we will look at the lending trends within the banking sector.

Figure 1.10 Deposit and Loans Annual Growth Rates The data covers all deposits and loans within commercial banks, finance companies, and merchant banks.

Figure 1.10 shows us that generally loan growth trends follow the deposit growth, except for a period in 1992 to 1994. Possible explanation for this deviation is the KLSE bull run during those years. Stock market profits create a lot of money in the system, which cause deposits to grow faster, and in 1994 deposit growth slowed down considerably due to plunging stock market. Otherwise, as a general conclusion, over the whole period loan growth has been rather strong, especially during the last two years prior to the crash of 1997, with an average of 19% per annum.

Table 1.2 Loans by sector for 1996 and 1997 Source: Bank Negara bulletin. The data covers all loans from commercial banks, finance companies, and merchant banks. Figures in RM million.

Table 1.2 presents the distribution of the loans within the economy in the years 1996 and 1997. The purpose of this table is to give us some indications about the direction of lending by the banking system. We can see that residential and real estate has the highest share of 23% of total loans, followed by manufacturing (15%),

consumption credit (13.7%), and others. We can see that generally the loans are well distributed across various sectors.

### 1.2.3 Inflation and Interest Rates

With a high level of monetary growth, as I have said earlier, might cause pressure on the prices of goods in the economy, or in other words inflation. Because while money is needed as lubricants for the economy, too much money feeds other problems; it will have to end up somewhere, and with limited supply of goods, prices of goods will be pushed up. With the knowledge that money supply has been growing at frenetic pace over the years, has there been an inflationary pressure in the country during the growth years? Let us see the measure of interest rates and inflation rates as measured by the Consumer Price Index or the CPI.

Figure 1.11 Interest rate and inflation rate (Figures using annual rates) BLR = base lending rate used by commercial banks, as a measure of interest rates. Inflation = Consumer Price Index (CPI).

The good news for us has been inflation has always been low, thanks largely to the policy of Bank Negara on keeping interest rates from rising too much. We can see over the years, when a tight monetary policy is implemented (for example during 1992) through the rise of interest rate, the inflation rate follow suit as well, except for 1996 and 1997 period. The same thing applies if loose monetary policy is being implemented (i.e. lower interest rates); the inflation rate is lower as well.

### 1.2.4 Prices of Assets, Goods, and Services

Unfortunately, Consumer Price Index or the CPI is not a perfect measure of prices for all goods and services. CPI, by definition only covers a basket of consumer goods and services that are relevant to the day-to-day activity of the population, such as food prices, utility and transport costs, and others. It does not cover such as price of the real estate or properties, or price of other assets such as the stock markets. So in this section, some facts will be presented to see the trend of the general price of assets, goods, and services during the period.

Table 1.3 Annual Increase in Prices (Annual percentage change) CPI: Consumer Price Index; HPI: Housing Price Indicators for the country; KLCI: KLSE Composite Index; WM: Manufacturing wage increase.

Table 1.3 confirms my earlier point that by looking at CPI alone, we may not see the impact of other prices in the economy. As we can see the differential in terms of annual increase in house price is very far from the increase in consumer goods as measured by the CPI. So over the years, while prices of consumer goods remain checked, prices of other goods as represented by housing price here, has been on the rise at an alarming rate. Similarly we see that stock prices as a measure of price of assets has been on the rise, except notably for some correction in 1994 and 1997. The wage rate, as shown by the wage increase in the manufacturing sector has been also at a fast rate. (I use wage rate as a representative of prices of services). Overall,

Table 1.3 shows that the general price of goods, assets, and services were in fact on a clear rising trend.

### **1.3 Liberalization and Restructuring of the Economy**

Malaysia has achieved the economic growth out of two important policies on the economy: the liberalization of the economy and the restructuring of the economy. These two policies actually works hand in hand where liberalization means we are opening up the economy, less regulation, allow more competition, foreign investors, market friendly, reduction of tariffs and trade barriers, and others. While economic restructuring is to shift the economy to be less dependent on certain sectors and be more wide based, less government more private sector driven growth, strengthening the financial system and the legal system.

These policies were the driving factor for the economic prosperity of the last decade. So let us look further into this subject.

#### **1.3.1 Openness of the economy**

Over the last decade, Malaysia has indeed became an open economy. One quick measure to see is the level of trade activities compared to the GDP. As we have informed earlier, Malaysias trade activities over GDP stood at 157%, compared to Thailand (92% of GDP), Indonesia (60% of GDP), Korea (77% of GDP) and the United States (less than 30% of the GDP); which shows the level of openness of our economy. On the other front, Malaysia has been a favorite destination for foreign investors, whereby the steady streams of FDI show that the trend is on the rise. Over the last few years, the Government has been reducing corporate tax rates for companies, which in a way attract more companies to be established here, this combined with many other incentives such as tax breaks, pioneer status and many other promotions have made Malaysia a haven for investors.

#### **1.3.2 Strengthening the economy**

At the same time, the domestic industries has been strengthen further through a rigorous development of the banking and financial sector. Malaysian banks has been upgraded in terms of quality through various efforts by Bank Negara in order to ensure larger capital base, proper adherence to banking practice, and at the same be the intermediating factor for the economic growth. Specific regulations were passed for this purpose, namely the Banking and Financial Institutions Act (BAFIA) of 1989, and Islamic Banking Act (IBA) of 1983.

Beside the banks and financial institutions, the government also has been promoting the capital markets. The Kuala Lumpur Stock Exchange has been viewed as a very reputable exchange, where it becomes the objective of many companies to attain KLSE listing status. The Securities Industry Act of 1983, and Securities Commission Act of 1993 were passed in order to regulate and supervise the industry.



On the other hand the legal framework of the country has been on continuous improvements through a much more comprehensive efforts within the business community on adherence to legal practice, corporate governance, and corporate transparency, and other virtues of the market. The legal profession has also developed into a very respectable status. The country also has well defined bankruptcy and foreclosure procedures, as well as sufficient protection for foreign investors. The combination of all of these factors, make Malaysia a much more stronger economy.

### **1.3.3 Role of the Government**

Finally, beside the above two factors, the size of the government (measured in terms of percentage of total economic activity) is on the downward trend. The government has been consistently backing away from performing most of the major tasks in the economy and has promoted the private sector to take its place instead. This is evident from the number of privatization program, which has been carried out, in a massive scale within the country. The first and most notable one was the North-South Highway project, which was then followed by so many other highways, power producers, telecommunications, and so on. Not only does this privatization reduces the burden on the government, but also it suppose to add efficiency to the economy. Because of these reduced burden, the fiscal program of the government has been rather sound, and has been source of praised by many other nations, including agencies like the IMF and the World Bank.

## **1.4 Summary**

In conclusion, what we have shown so far, the Malaysian economic growth over the decade is something that is real. All figures and indicators were saying that the growth is remarkable and may not necessarily be a myth as some people would say. The government was implementing correct policies, the market place is buzzing with activities, new entrepreneurs were born by the day, the stock market was strong, new development and real estate grew like mushrooms, and so on. It is perfect picture of a growing economy; at least that what appears on the surface, until suddenly something happened in 1997.

## Appendix: National Accounts

### A.1 National Accounts

#### A.1.1 Gross Domestic Product

There are two ways to measure the size of an economy, namely the Gross Domestic Product and the Gross National Product.

GDP = Total size of economic productive activity within the country.

GNP = GDP less the size of economic productive activities by non-resident in the country.

We can see that GNP is a much stricter measure than GDP. In our analysis (and most other analysis on economy), GDP is the standard measurement. Analysis using GNP generally would lead to almost similar conclusions, however, the problem here is more of a practical nature: there are numerous complications in calculating the economic activities by non-residents.

Most economic models assume that the economy is in equilibrium, which means supply equals demand. In a macro-economy, that implies:

Aggregate Supply = Aggregate Demand

Aggregate Supply: is the total production in the economy. Aggregate Demand: is the total use of what we produce.

Since the total economic production is the same as GDP, we have:

GDP = Aggregate Supply = Aggregate Demand

Or we can re-arrange:

Aggregate Supply = GDP = Aggregate Demand

In another words, we can measure GDP by Aggregate Supply, or by Aggregate Demand.

#### A.1.2 GDP by Aggregate Supply

Aggregate Supply, is the measure for total production activities in the economy. So what are the components of these productions:

Aggregate Supply = Primary activity + Secondary activity + Tertiary activity.

Primary activity is all the production based on natural resources. Examples include agriculture, mining, quarrying, crude oil, logging, fisheries, and others. While secondary activities cover two major areas: manufacturing and construction. The secondary activities is also called added value activities, since we add-value to resources using either raw inputs or some semi-finished goods to be converted into finished goods. In the case of manufacturing, the finished goods are TV sets, radio, cars, etc; and in construction, finished goods are like buildings, houses, roads, bridges, etc. And finally the tertiary activities covers all other activities like financial services, insurance, restaurants, hotels, tourism, government services, professional services, and others. Since the bulk majority of the activities are in services, that's why I use a simpler term to name these activities as Services activities.

### A.1.3 GDP by Aggregate Demand

Aggregate Demand measures the uses of all the things that are being produced in the economy, its components are:

Aggregate Demand = Private consumption + Government consumption + Private investment + Government investment + Gross exports - gross imports.

Private consumption is all the spending by the individuals, corporations and other non-governmental bodies either in purchasing goods, or services. While the government consumption is the same as above, except it is done by the government or government agencies and bodies. The government here includes all level of governments, federal, and the state. Private investments is all type of investments (sometimes called capital formation) by the individuals, corporations, and other non-governmental bodies, and government investments is in the same meaning as above. Gross exports is the value of total goods and services that we sell to outside the country, and gross imports is what we purchase. To make things easier usually we just use the following:

Aggregate Demand = Consumption + Investment + Net Exports.

Where Consumption and Investments are for both: private and government. Net exports is gross exports less gross imports.

Why we have exports and imports in the formula: since not all goods that we consume are produced locally, and not all goods that we produce are consumed locally.

## A.2 Current Account

A measure of the country's Current Account is the Net Exports that we have in the previous section.

Current Account = Net Exports

So if the Current Account is negative, it implies that we are importing more than exporting. It also has the same meaning that we are borrowing from the rest of the world. How that can happen?

Aggregate Supply = Total production (TP) = Aggregate Demand = Consumption (C) + Investments (I) + Current Account (CA) (i.e. Net exports).

Negative Current Account (i.e. deficits) means that we are not producing enough, and to supplement the shortfall in our production to support our consumption and investment activity, we must then borrow from out of the country to fund them. (Since mathematically speaking we have  $C + I$  greater than TP, and  $C + I + CA = TP$ ).

The question is then whether what we borrow is being used (or to support) our Consumption or Investments. If it is to support consumption, then it may be problematic if the deficits are persistent, since as any borrowing, we have to pay it later. But if it is for Investments, then theoretically we can pay back the borrowing from the returns on investments.

Another way to look at the Current Account is by looking at Savings-Investment Gap (S-I gap). What is S-I gap?

Savings-Investments gap = Gross National Savings - Investments

Gross National Savings is what we as a country in total save from our income (income is measured by our Gross National Income). Gross National Income in turns is taken from all our income from production less the income of non-residents.

Theoretically, what we say is that:

Net Exports = Current Account = Savings-Investments gap

In reality, if you check the numbers (say in Bank Negara Reports) these two numbers might not be exactly the same. The problem here is measurement, the same problem as measuring the Gross National Product. Anyway, both measures can be used in economic analysis. To differentiate the two, I label them as follows:

Net Exports = Current Account based on Balance of Payments or BOP definitions.

Savings-Investments gap = Current Account based on National Income Accounts or NIA definitions.

Let me stop at that in order not to confuse the readers with more terminology.

### A.3 Nominal vs. Real Gross Domestic Product

I have to explain another item on National Accounts, that is the difference between Nominal GDP and Real GDP. The definition is as follows:

Real GDP = Nominal GDP/Price deflator

The normal price deflator used is the Consumer Price Index (CPI). Since the deflator is usually greater than 1, Real GDP is usually smaller in absolute value than Nominal GDP.

Why do people refer to Real GDP instead of nominal GDP? Because in order for us to compare over time (i.e. say from year 1988 to 1997), the prices may differ, so we are not exactly comparing apple to apple. By having a common price, Real GDP comparisons will be more proper. (In fact most announcements by the government is using Real GDP rather than Nominal GDP).

Throughout the book, the term GDP as used, is the Nominal GDP, except when Real GDP is mentioned. I purposely use Nominal GDP in my analysis, in order to help easier understanding for the readers. Especially so, when I go back and forth between certain numbers that in current terms rather in Real terms, which may be confusing to some. Maybe some will criticize me for using the Nominal GDP and may argue that the analysis may not be as correct. I accept that criticism for the benefit of the readers. Anyway, if we use Real GDP, the findings of this book dont change. So why torture the readers, you have enough of headache already!

## Appendix: A Rice Story

For readers who still need some more help, the following example may be of use.

Assume that the whole world only produces only one thing: rice. Since rice is the only production, it will be the only consumption as well. Let us further assume that there are only two countries in the world: Malaysia and USA, and rice are planted and harvested only once a year in both countries.

Let us assume that Malaysia produces 100 ton of rice this year and out of that the Malaysian needs to consume 60 tons, and an amount of 50 tons is needed as seeds for planting rice so that it can be harvested in the next year. Since consumption needs plus the seeds required is more than what we produce: we have to import 10 tons of rice.

USA on the other hand produces 110 tons of rice per year; they consume 60 tons and need 40 tons as seed for next season. (Note that I assume USA is more productive than Malaysia, may be because of they have better technology of rice planting). With a surplus of 10 tons, USA can then export them to Malaysia the amount, which is exactly what Malaysia needs.

Now let us put the whole thing into economic terms: (assume all units in tons of rice)

Malaysia USA GDP (Aggregate Supply) 100 110 Consumption 60 60 Investment 50 50 Net exports -10 10

We can see that what each country produce is the Aggregate Supply (here we have only one type of production, but the same thing can be extended to two goods, three goods and so on). Total production = Aggregate Supply = Aggregate Demand = Consumption + Investment + Net exports (100 = 60+50-10 in case of Malaysia). Malaysia has Current Account deficit while USA has a surplus.

We can see that current account deficits is just like borrowing from USA, and the purpose of borrowing is to support consumption and investments alike (this is because I assume that both countries plant the same type of rice). Since USA gave us 10 tons –it is off course not free–it has to be paid later and we can do that say next year by any of the following: 1. Say that our production is better next year (may be due to better weather); or 2. By consuming less next year (say we only eat 50 tons); or 3. We can reduce our seeds (i.e. investments) to 40 tons (which then is dangerous because we may have less production the year after). We can see now why persistent Current Account deficit can be dangerous: because we have to pay them back in the future, because there are risks involved if we cannot produce more, we have to cut down what we eat or our seeds (investments).

Now let us see what is Malaysias Savings-Investments gap:

Malaysias Gross National Income = 100, because our income is exactly out of what we produce.

Gross National Savings = Gross National Income - Consumption = 100 - 60 = 40  
Savings-Investment gap = Savings - Investments = 40 - 50 = -10

We can see that S-I gap = Net Exports = Current Account = -10. In another way, we can say that what we import from USA is to supplement shortfall in investments since our savings is insufficient.

Hopefully, the rice story above clarifies the National Accounts concepts and definitions. I can add a little bit more completeness to the model by assuming say two type of rice planted, type A and type B, each with different yield and the consumption preference over type A and B also differs. Under such scenario, Malaysia may be exporting type A to USA and importing type B, vice versa and so on; so that we may have both exports and imports elements at the same time. You can try it yourself to fiddle around with this, and even can add elements of money as a medium of exchange and elements of price. With money and price, Real GDP concepts can then be explained.

As you can see the math so far is simple: only plus and minus involved. The point is, economics is not that hard, the logical part of it requires just a little bit more thought.

## CHAPTER 2

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# TIGERS FALLING: THE EAST ASIAN ECONOMIC AND FINANCIAL CRISIS

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All seems well at least until the month of July 1997. Suddenly, the news about the Thai Baht devaluation caught everyone by surprise. The Economies that were seen as strong and invincible suddenly tumble down one by one, like domino chips stacked together in a row. It is rather ironical that in the 70s and early 80s, after the fall of Vietnam into communists hand, the whole South East Asia was worried about the domino theory, whereby the communist will start taking over Thailand (after Vietnam), and then rest of South East Asia will fall one by one like a domino. The threat never came true and was marginalized because of two reasons: the communist lose their steam after Vietnam in particular due to domestic problems in Soviet Union and China; and secondly, South East Asia experience a major push into unprecedented economic growth, that makes communism looks like an outdated ideology. But funny enough, the so-called domino effects becomes a reality, not because of communism, but through the crash the currencies!

This domino effect becomes much more wide spread, moving at a speed that we never imagine. Prof. Paul Krugman, use the label, Asian Flu to describe these events. Like a normal flu, it spread through the air (in our case news), and it catches everybody, sick or healthy alike, except that those who have immunized themselves, beforehand.

The Asian tigers, or the troubled tigers suddenly become helpless, it seems like nothing can be done to prevent or stop the crisis. Events lead to other events, that is much worse; bad news lead to other occurrence of more bad news; certain remedies taken, seems like having no effects, lead to further loss of confidence; government seems helpless; business community seems not to know what to do; and the public at large was totally confused at what was happening.

In this chapter, I relate the sequence of events that has happened. It is important that we see how events unfold, how one event leads to another, and point out significant events that have taken place. This way, we can see better, with the benefit of hindsight, exactly what matters. The discussion here provides background for the next chapter, where I will present economic explanations on what has happen; and subsequently in Chapter 4, discussions will be focused on actions and policies undertaken by Malaysia, in the face of the crisis.

Finally, I would like to caution that a full and detail descriptions of events is beyond the scope of this book, because so many events took place simultaneously and so much has occurred during the period. What I did is to pick up major events or issues so that a certain coherency can be developed, with a view to refresh our memories of happenings in the recent past. This is important because we tend to be infected with memory lapses, whereby it will not take many years, before economic events of recent occurrence are totally forgotten. Especially, if people begin to see new trends developing, they want to quickly erase the pains of the past, so that hopes for the future can be fostered. But that is exactly the cause and seeds of many disasters: we fail to learn from history. And history can only be learned if we understand them.

## 2.1 Onset of the East Asian economic and financial crisis

What was the economic condition of the East Asian economies before the crisis? Were these economies in a very strong condition or already in a weak position, waiting for something to happen? Careful look into the economic data reveals that by 1996, a number of signs that East Asian economies has started to show indication of slowing down after years of frenetic growth. The most highlighted issue that was raised during 1995 and 1996 was the significant deterioration of the current account in these countries. During consultation meetings with IMF and World Bank, there have been similar warnings given to the government of these countries. Was this the beginning of signs that East Asias growth is already slowing down? Is the current account deficit is only the tip of an iceberg? Were there more fundamental problems that are creeping into these economies, and they are bound to go into crisis situation? In this section, I will make an overview of East Asian economies, and in particular I will focus on the elements of imbalance that put these economies into a precarious position at the onset of the crisis. I will start with the current account deficits as the lead.



### 2.1.1 Current Account

Current account, as used in economics is to measure the net flow of economic activities between a country and the rest of the world. Negative current account (i.e. deficit) means that the country is borrowing from the rest of the world, either in form of investments, inflow of funds of any sort. So what were the levels of current account deficit in the five troubled tigers on the onset of the crisis? Let us see table below for details.

Table 2.1 Current Account of East Asian Countries Source: International Financial Statistics (International Monetary Fund)

In the table above, it is clear that all the troubled tigers face a mounting current account deficit deteriorating towards the years 1995 and 1996, prior to the crisis. A number of analysts and economists did provide some warnings in 1995 that these are signs of weakness and East Asian economic growth was unsustainable. The response of many countries then, including Malaysia, that it is normal for the countries to maintain a current account deficit, especially so for a growing economy. It is part and parcel of the economic growth.

Learning from the Mexican and Latin America currency crisis, economist has developed a general rule that current account deficits of 5% percent and above is un-sustainable for any economy. We can see that many of these economies started to hit the 5% mark, or at least quite close to it. Let us have some sense of the numbers; what does 5% current account deficit means. Take for example Malaysia, 5% of GDP means the amount of deficit is about RM12.5 billion (5% times GDP of about RM250 billion). Does this number look dangerous? The answer is no, if we look at it in isolation. The more important issue is not the number per se, but the trends of the current account from year to year, whether the trend is improving or deteriorating.

One thing that many fail to appreciate was that the deficit in fact has been persistent since 1991 in most of these economies (as evident from the table). Theoretically speaking the deficit should be diminishing and not widening, and furthermore should be manageable on a cumulative basis. Unfortunately that was not the case, most countries has a deteriorating current account, and has been accumulating it over the years. For example, Malaysia has a total accumulation of about RM 80 billion, by the end of 1997. [Note that the cumulative savings-investments gap by 1997 was at RM 86 billion, as documented in Chapter 1]. The question of un-sustainability was quite serious and shouldnt be then, brushed aside.

The question is, do these deficits arise out capital accumulation, or is it because of deterioration of the exports, since by definition, current account is exports less Imports. Theoretically the deficit can occur because of any of the following: exports are decreasing; imports are rising; or both happen simultaneously. The explanation put forth by the governments for these deficits is to attribute them to the massive importation of capital goods. Capital goods is necessary and important for the future growth of the economy, and therefore should not be a source of worry. Unfortunately, the capital good story does not hold that well when we look at the data, and the truth is export growth has in fact slowed down, affected mainly by the slowdown of the manufacturing sector, which were the export engine of these countries. (Malaysia

for example depended about 84% of its exports on manufactured goods as discussed in Chapter 1). And that's why current account deficit is not sustainable.

Table 2.2 Malaysian Export Growth Rate (The percentage is computed from Ringgit Value of gross exports)

Many other studies documented that by mid 1990s export growth in the East Asian economies were in fact slowing down. Table 2.2 above shows the data for the Malaysian exports growth, which demonstrates this fact that by 1996, the export growth began to slow down. The same trend is also true for Thailand and Korea. One of the key reasons for the slowdown in Thailand and Malaysia was the slackening of demand for semi-conductors worldwide during 1996.

### 2.1.2 Capital Flows

East Asia was indeed a major destination of the fund managers and investors worldwide. The region was praised as the darling of emerging market, and regional stocks were included in the widely followed Morgan Stanley Emerging Market Indices. After the bull run of the regional stock markets in 1993, there was a sudden rush of funds coming into East Asia, and surprisingly the fund managers were not alone, the international banks also do not want to miss the boat. Up to a stage, the appetite for East Asian markets was so high that it consumes about 60% of the total fund flows to the Emerging Markets.

Table 2.3 External financing to troubled tiger economies Source: Institute of International Finance, Inc. Capital Flows to Emerging Market Economies The data is an aggregate for Indonesia, Korea, Malaysia, Philippines, and Thailand; all figures in USD billions.

By any standard, the total capital flow over the years 1994 to 1996 as evidenced by Table 2.3 above was massive, a cumulative amount of about US\$220 billion dollars. Furthermore, out of the amount, about US\$180 billion is in short term funds, in particular in forms of loans and portfolio investments. If we compare these figures to the current account deficits, we can see that they move pretty much in tandem with each other.

### 2.1.3 Mounting Short Term Foreign Debts

Given a large amount of inflow of funds in forms of credits from foreign financial institutions, it is important to see their maturities, since generally credits of longer maturities shows the level of confidence on the part of the lenders, and vice versa.

Table 2.4 Claims by Foreign Banks Source: Bank For International Settlements (All figures in USD billions). ST Debt refers to short-term debts (i.e. debts with maturities of 12 months or less); ST/Total: percentage of short-term debt over total debt.

It is obvious that a good percentage of the borrowings by these countries are of very short term nature (of one year or less). Every country was in fact in a very vulnerable position, with Thailand, Korea and Indonesia at the higher end of the scale. Malaysia and Philippines were in a relatively better position, even though

there is actually very little room for comfort. Herein lies the fundamental problem: do these countries have sufficient foreign exchange reserve to pay for these claims when they become due in a sudden or being called back simultaneously?

#### 2.1.4 Money Supply

When external funds enter into a country, it will end up doing two things: it will cause the central bank's reserve to increase, and/or it will generate liquidity in the system by expanding the money supply. If we look at the bottom of Table 2.3, it is evident that the increase in reserve has been rather small for these years, so it is only logical to hypothesize that the natural place where these monies ended up is in the money supply system of the country.

Table 2.5 Money Supply Growth (M2) Source: Taken from the paper by Radelet and Sachs, *The Onset of the East Asian Financial Crisis*.

The data in the Table 2.5 above shows that the money supply (as measured by M2) for all the countries were growing in the range of 12% to 27% per year. Similar figure for developed countries like the United States (where the GDP growth averages about 2.5% to 3% per annum) stood at about 6% per year. In another word, the growth rates were at somewhere between double or triple that of a developed nation. While some may argue that the money supply growth is a natural result out of the economic growth and hence should not cause any alarm, the issue that I am trying to highlight here is that, it is very much possible a good sum of this growth arises out of influx of imported capital which then renders the money supply growth rather inflated and less sustainable for the economy.

#### 2.1.5 Excessive Lending and Short-term debts

An increase in money supply equates to the increase in the size of deposits in the banking system. This increase means that banks have additional money to be disposed off in forms of lending to the market. Anyway, additional money cannot just remain idle in the bank because it will be of negative carry for the bank. This pressure naturally gives rise to another phenomenon: loan growth. So let us see what happened to loan growth in these countries.

Table 2.6 Lending to private sector (% growth) Source: Taken from the paper by Corsetti, Pesenti and Roubini, *What Caused the Asian Currency and Financial Crisis*.

As suspected, the loan growths are also at the same frenetic pace as the money supply, and again the numbers as shown in Table 2.6 above, are high according to most standards. A more alarming issue is whether these loans were extended into productive use (which is good), or instead went into what economists called non-productive sector of the economy: namely the real estate and share financings in the stock markets.

The danger here is that if there is a large chunk of liquidity arises from foreign funds, and at it is used for financing non-productive sectors, then what we have is major imbalance in the economy between the source and use of funds. Theoretically, if the funds are used to finance the tradable, i.e. manufacturing, or other export

based sectors, then the foreign money can be repaid back using the proceeds from the exports of such production. But if the lending is geared towards non-tradable, then we have to effectively disposed of those assets to repay back these borrowings.

Well maybe on balance it should be okay to have short-term foreign debt, if local companies are liquid, and having enough money to pay their foreign creditors. This would be the case if the overall debt structure in the country is somewhat balanced. So let us see what are the levels of total short-term debts for these countries.

Table 2.7 Short-term debt (% of total debt) Source: World Bank Data Numbers in the table represent short-term debt divided by the total loan in the system at the end of each year.

Generally the numbers (in Table 2.7) are quite decent for Malaysia, Indonesia and Philippines where percentage of short-term debts to total debts are in a reasonable range of between 20% to 30% for the years. The position of Korea and Thailand, on the other hand are quite serious: not only that the countries have large percentage of its foreign debts in short-term category (as described before), the domestic banks also has the same habit of lending a large percentage of the loans on short-term nature. This naturally precipitates liquidity crisis should all, the domestic and external loans being called simultaneously.

Sometimes percentage may not reveal the extent of liquidity requirement, should these loans be recalled. So let us try to equate these figures with some actual numbers: take the case of Malaysia, what does say 27% of short-term debt over total debt ratio meant? In 1996, the total loan outstanding was at RM333 billion, so 27% implies that about RM 90 billion was in the short-term nature. If such amount is demanded on a very short notice, it is by no mean a small feat.

### 2.1.6 Stock Market and Property Prices

Let us go back to the issue of where the money (from the expansion of money supply and the increased in lending) end up in? The claim is that a good sum of them does ended up in the two un-productive sectors that were mentioned above, namely the stock market and the real estate. There are two ways the new money showed up in stock market and real estate: in terms of volume (i.e. more supply of new shares available through new listing and various capital calls via rights issues; and supply of properties available in the markets); and by the price indicators (i.e. stock market indices and real estate prices, especially in the urban areas). If we combine both, then only we can see the total magnitude.

So many observations has been made that in fact over the years of 1993 to 1997, the prices of the stock markets in the region has been on the record high for many-many years; the real estate prices has also been on a continuous boom. What we have is a clear situation of changing trends: the traditional engine of growth is slowing down, yet there has been large increase in capital flows; most of these new capital are in form of short-term nature; and furthermore, most of these new money were dumped into speculative investments, namely in the stock markets and the real estate markets. The tip of the balance has been changed, traditional growth has in fact

changed into what some may termed as speculative growth. Then things started to go wrong.

### 2.1.7 Position of foreign exchange reserve relative to short-term debt

Everything should be okay theoretically, if every country has sufficient foreign exchange reserve to back all these external funding, regardless of their nature. Therefore, let us have a further look into the ratio between short-term debt and the foreign exchange reserve of the countries just prior to 1997.

Table 2.8 Short-term debt (plus debt service) as % of foreign exchange reserve  
Source: World Bank Data Res. foreign exchange reserve of central banks in billion US dollar, D/Res. short-term debts over reserve ratio, D&S/Res. short-term debts plus debt service costs over reserve ratio. These ratios show how much reserve is available to pay for these debts and its services. Ratio above 1 means that reserve is less than the amount needed.

The data in Table 2.8 above, without any doubt shows that all countries, except for Malaysia, won't be able to service their short-term foreign (i.e. ratios more than 1). In another word, these countries are in fact technically insolvent, particularly in the case of Indonesia and Korea, where their reserve satisfy only one-third of the total requirement. Later testimonies by bankers reveals that during the years of 1995 and 1996, most of these short-term debts in Indonesia, Korea and Thailand, has been continuing on an automatic rollover program, and keep on ballooning over the years. Everybody has been living on the edge of liquidity crisis.

As it is already known today that the currency crisis started in Thailand when there were rumors that Thai central bank is depleted of its foreign exchange reserve due to various series of swaps and forward transactions. The news was that the foreign exchange reserve reported of US\$38.7 billion, was in actuality less than half of that (i.e. about US\$18 billion), which triggers massive sell-off of the Baht, and subsequently lead to the beginning of the crisis. (Note that with reserve of US\$18 billion, the short-term debt plus services to reserve ratio is more than 2.4, which signal insolvency of the Thai central bank).

## 2.2 1997: The Meltdown Year

The year 1997, marks the meltdown of the Asian currencies, whereby the previously stable currencies, fell down one by one. In this section and next, what I will do is to relay the events that took place in Asia and the world during the year 1997 and 1998, in some form of chronological order. The purpose of this exposition is to highlight the events and to appreciate what went on throughout these two tumultuous years.

### 2.2.1 Early 1997

The signs of economic slowdown have started to show up in the Thailand economy. Due to high level of property lending in Thailand, signs of real estate market dete-

rioration started to show up. Many up market real estate in Bangkok has no more takers, new sales has virtually reached to zero. Signs of property market overheating began.

At the beginning of 1997 signs of corporate failure under massive debts started to emerge in Thailand and Korea. In particular, companies that are laden with property related debts. Thai government announces US\$3.9 billion in saving of bad debts in property by its financial institutions. This effort eventually failed. At about the same time, Somprasong, a Thailand company misses its foreign debt payment, and in Korea, Hanbo Steel, one of the large conglomerate or Chaebols collapse under US\$6 billion debts.

A rumor of the Bank of Thailand has depleted its foreign exchange reserves went abound. At the same time, Thailand has a change of government, with General (Retired) Chavalit taking over as Prime Minister, and a new person, Amnuay Viravan, being appointed as a Finance Minister. Some hope that these changes will address the seemingly mounting economic problems.

### **2.2.2 March & April 1997**

Malaysia also starts to feel the pressure of property and share market credit expansion, and the government begun to put a break on the property lending. Bank Negara Malaysia started to tightened up lending policies to reduce loan growth in both sectors by limiting banks not to exceed 20% of total outstanding loans for property market (with some exemptions); and 15% in the case of share financing (30% for merchant banks). This is an attempt to slowdown the growth in both areas. Similar measures were not clearly present in the case of Thailand, Indonesia and other Asian economies.

Asian wide economies started to show some signs of pressure, whereby news of corporate failures began to dominate the headlines. In particular the failures are most notable in Korea and Thailand. One of the significant failures was Sammi Steel of Korea, which is the beginning of the series of downfall of other conglomerates.

### **2.2.3 May & June 1997**

Thailand start to impose exchange curbs, which coincides with warnings on speculative attack on Thai Baht if things are not corrected. Amnuay Viravan, the new Thailand Finance Minister resigns over his stand not to devalue Thai Baht; Finance One, a Thai finance company failed, and need to be rescued. The rescue fails to take place and subsequently, Thailand suspended operations of 16 finance companies, and ask them to merge, in the light of mounting bad property financing and corporate debts. Under massive speculative attack on Thai Baht, Thailand Prime Minister, Chavalit, make firm commitment that Thai Baht wont be devalued. To save the situation, a joint effort by Thailand and Singapore to support the Thai Baht was announced, to shore up the market confidence.

At the same time, shortage of liquidity started to show up in Malaysia, which resulted in the short interest rates to rise; for example, the three month inter-bank rate

rose all the way to 8.62%. Bank Negara is rumored to order to stop swap transactions in Ringgit to reduce the heavy selling pressure on Ringgit on the offshore market. Eventually Bank Negara decided to intervene to support Ringgit and cause about RM1.5 billion in foreign exchange to be spent. The effect of the intervention was to bring back the three month inter-bank rate to 7.8

#### **2.2.4 July 1997**

In July 1997, after six months of nerve wrecking efforts of containment by all governments, suddenly all hell break lose. This started with the announcement on July 2nd by Thailand that they will no longer support the Thai Baht, and let it float (or fall) freely. The government decided to contain the situation and called the International Monetary Fund (IMF) for technical assistance. Immediately, the Thai Baht was devalued by about 20% to Baht 28.80 to the dollar.

As a result of the Baht devaluation, the Malaysian Ringgit was immediately subjected to heavy selling pressure. Bank Negara decided that they need to take the action of supporting the Ringgit. The selling pressure was so immense and causing Bank Negaras reserve to drop by 12% to RM61.9 billion in the first two weeks of July. Succumbing to the market pressure, Bank Negara finally decided that they will not intervene to support the Ringgit (even though not publicly announced), and the Ringgit took a dive, which brings it to a 33 month low of RM2.60 to the dollar.

Upset with all the events and speculative attack on Ringgit, Dato Seri Dr. Mahathir Mohamad started to make accusations against the West and named that George Soros is behind all these speculation. This started a war of words between Soros and Dato Seri Dr. Mahathir Mohamad.

The Philippines, among the weaker economies of the region, was also under a heavy attack and desperately in need to defend the Peso. They started intervening heavily on the foreign exchange market, realizing that their effort were futile, the Philippines Central Bank decided to let go the strict band into a wider range of Peso movement against the dollar; and immediately requested the IMF for Extended Fund Facility (EFF), of which an amount of US1.1 billion was offered. To stamp the outflow of funds, the Central Bank raises the overnight lending rate from 15% to 24%.

Under similar pressures, Indonesia lets the trading range for Rupiah to widen range from 8% to 12% band, against the dollar; and finally, the strongest currency in the region, the Singapore dollar also starts to be shaken in similar manner.

The month of July 1997 marks the end of managed currency float for all the South East Asian economies. The stable level of the currencies has been broken, and it is the beginning of a wild period of currency swings and things will never be the same again.

#### **2.2.5 August 1997**

After almost a month of work, the IMF started it programs for Thailand, by suggesting an austerity drive, and recommended for suspension of 48 finance companies.

IMF unveil a package of rescue for Thailand amounting to US\$16 billion. US\$3.9 billion was subsequently approved, with addition from Brunei the total package for Thailand stood at US\$17.2 billion.

However, the IMF announcement on the rescue package for Thailand didn't stop the currency attacks, when suddenly the threat of speculation spread to the Hong Kong dollar. Hong Kong, being among the strongest economy of the region, with backing of China, and its currency board system, would never be seen as a suitable candidate for such speculative attack. With such threat mounting, China announced that they will not hesitate from using US\$50 billion to support the Hong Kong dollar. With the announcement, the attacks seem to be abated, at least temporarily.

Indonesia, the biggest economy of the region, however are not as strong and stable as Hong Kong, faces the biggest pressure to defend its Rupiah. Without much reserve to back, Indonesia allows Rupiah to eventually float (and fall), by abolishing the managed float, and Rupiah plunge to historic loss of Rupiah 2,755 to the dollar. Similarly the Philippine peso also plunge to a record low of 32.43 per US dollar, and the Thai Baht take a further plunge to about 34 per US dollar, Ringgit fell more than 6% to hit the RM3.00 to the dollar mark.

In the midst of the confusion, the international rating agency, Standard and Poors announced that it downgraded Malaysia's sovereign rating from positive to stable, citing the Current Account deficit as the reason. Malaysian Deputy Prime Minister and Finance Minister, Dato Seri Anwar Ibrahim make several announcements in delaying some large infrastructure projects to signal to the market that Malaysia is serious in tackling its domestic economic problem. This remark, however, were later contradicted by Dato Seri Dr. Mahathir Mohamad by announcing that some projects such the Bakun Hydroelectric and Multimedia Super Corridor (MSC) projects should not be affected.

Realizing that the KLSE shares (through its CLOB counterpart) as one of the source of speculation on Ringgit, Malaysia introduce a ban on short-selling of shares on KLSE, and in order to shore up falling demand on the property, levy on purchases of properties by foreigners were lifted. All these measures however didn't stop the slide on the KLSE share, which brings the KLCI index to the 800 level, and the KLSE second board shares dropped even worse, with as much as 45% loss of value from the level in March 1997. The slide in Ringgit also has not been abated.

### 2.2.6 September, 1997

In the month of September, the focus of the attack changed to the Indonesian Rupiah, which cause it to fall to its all time low of Rupiah 3,845 per US dollar. As it is became apparent that the Bank Indonesia reserve is unsustainable, and the actual economic condition is far worse that it imagine, the Indonesian government decided to call for the IMF assistance.

Dr. Mahathir made further announcements for delaying large infrastructure projects like Bakun, Multimedia Super Corridor, Putrajaya, and others. He also announces the setting up of RM60 billion fund to support the plunging stock market, and continue to lash at foreign speculators. This fund will be funded by EPF and other



public agencies. The stock market gained by 12% with the announcements to 821.59 (KLCI). The verbal exchanges between Dr. Mahathir and Soros escalated as both became speakers at the World Bank and IMF meeting in Hong Kong.

However, banks in Malaysia started to get a pinch, when an attempt at a run on MBF Finance was initiated due to rumors that Tan Sri Loy Hean Heong, MBF Group Chairman has died or seriously ill. However, BNM steps in immediately to calm and assured depositors and thwart the run.

By the end of the month (exchange rate per us dollar) for Ringgit Malaysia falls to 3.480 mark; Indonesian Rupiah to 3500; and the Thai Baht to 36.60 mark.

### **2.2.7 October, 1997**

A new budget presented by Dato Seri Anwar Ibrahim, on October 17, with measures to cool off the economy and to ensure the continued economic growth of the country. Growth is projected at 7% for 1998, and a slight increase in government spending and reduction in corporate taxes from 30% to 28%. No reaction was from stock market and RM. The Ministry of Finance also announced that it expected an amount of about RM13.9 billion of short term capital that may leave the country. The budget however fails to increase any further expectation from the share market and the Ringgit continued to languish.

The Asian flu however, started to reach the shores of the develop countries, where by October 27th, the US market started to take a big hit. The event started with the drop in the Hong Kong market, whereby Hang Seng index loses more than 23% value, and overnight, the loses was transmitted to the United States, and causes the Dow Jones Industrial Average took a massive blow of 7.18% drop on a single day, a drop of 554.26 points. The events in New York reverberate to the rest of the world, and in particular the Latin American economies, where all markets tumble. Suddenly, within a short span of time, a total of US1.2 trillion (or 6% of its value) evaporates from the stock markets around the world! Rumor of currency devaluation of Brazilian currency and Taiwanese currency starts to circulate among the market players, and as if the currency debacle starts almost a new beginning.

The month ended up with some good news for Indonesia, whereby the IMF announces a rescue package of US 23 billion for the beleaguered Indonesian economy. This news and others however, didnt stop the slide of the Malaysian Ringgit, which again fall to a new low of RM 3.437 per US dollar and the Malaysian stock market took a further dive, in tandem with the rest of the world market to 664 level of KLCI. October somehow has always been a bad month for the equity market, and for this year, it is a little bit more than a mere drop in share prices.

### **2.2.8 November, 1997**

In the beginning of November, the Asian stock markets started to recover slightly, as a correction to the massive losses of October. The recovery was lead by the US markets and other markets worldwide. This brings some cheer to otherwise a very gloomy situation.

Suddenly, the Korean economy, which escapes the attention of the last six months of debacle, became the center of the action beginning with the intensifying attack on the Korean Won. Bank of Korea started massive intervention in foreign exchange market to support the Won. The IMF trying to shore up market confidence, quickly send a team to Korea, and announced that it predicted that Korea wont face similar situation as in Thailand, and emphatically says that Korea and Thailand are not the same.

Thailand on the other hand, just finished its new election, which resulted in the loss of Chavalits government, and a new party lead by Chuan Leekpai, forms a new coalition government. Thailand incumbent government became the first political casualty of the crisis.

Starting with the Korean problems, and plunge of the Korean stock market, the Hong Kong stock market again came under pressure and start to unravel, immediately followed by the rest of Asian markets. Suddenly, the events of October repeat itself again, which resulted in the plunge of Latin American shares and shake up the Russian markets. The Korea Composite Index fell by about 4%, and under selling pressure. This is simultaneously happening with the plunge in the Won, which slide by 14% and reach all time low of 979.90 against the US dollar.

The IMF however, announce that it is still of the opinion of need not intervening with the Won, but would be ready if needed, as if to signal to the market that the situation is not as bad, and things are under control. However, such announcement became irrelevant, when suddenly news of ballooning debt of more than US100 billion owed by the Chaebols hit the market, and most of these debts are in short-term maturity. The rating agency also adds to the lists of bad news by announcing their downgrading of Koreas debt rating. Later in the month, the news became a reality, when a number of Chaebol announce their inability to made debt obligations.

Situation in Korea puts pressure on Taiwan and Hong Kong markets and on the regional currencies: Thai Baht (down by about 4%), Philippine Peso (down by 3%), the Indonesian Rupiah (down by 1%), and the Malaysian Ringgit (down by 2.8%). Similarly regional markets went down, KLSE lost by more than 6% down to 545 levels, Hang Seng lost by 2%, and the list continues. By the end of the month Korea decided that they need to call IMF in.

### **2.2.9 December, 1997**

In the month of December 1997, every affected country is busy with their own problems, as well as the IMF and its staffs were shuttling from one country to another. Korea was in the midst of the discussion with Michel Camdessus and Hubert Niess, the IMF Chief and its head of Asia, respectively, while Thailand was busy sorting out the implementation of the IMF program that was handed down to them earlier; Indonesia on the other hand got shaken with the news of sudden illness of its ageing President Suharto, who has to cut short his overseas trip due to the illness.

Malaysia, on the other hand saw the moves by Dr. Mahathir to take charge of the economic situation by announcing the formation of National Economic Action Council that will review all economic maters. He compared this council to the Na-

tional Operations Council (Majlis Gerakan Negara), which suspended the Malaysian constitution in 1969 following the country's race riots. This action along with a ban on senior government officials from taking vacation, and postponement of major projects, are all seen as methods to prevent the IMF from intervening. Despite these actions, Dr. Mahathir still somewhat upbeat, announce that Malaysia will proceed with a RM 10 billion Trans-Asia project for roads, rail, and pipeline linking Malaysia, Thailand, until the Indochina. Meanwhile, the KLSE started to clamp down on five brokerage houses that seem to be facing cash-flow problems.

All in all the year ended on a very somber mood for the Asian region: Ringgit reach the lowest point for the year at RM3.8883 per US dollar, with KLCI rebounded a little bit to 594 from a low of 545; Indonesian Rupiah at 6000 Rupiah per US dollar; Thai Baht at 47 Baht per US dollar; The only currency that was spared from devaluation is the Hong Kong dollar (even though its stock market takes a fair amount of beating instead).

It seems clear that the crisis that started in July with the Thai Baht is no longer containable. It goes into full scale crisis, whereby one country after another fall prey to the Flu or plague that started a domino effects on each country. The flu is far and wide, starting to get one country after another and has far reaching effects all the way to the Latin America and Russia.

## 2.3 1998: The Recession Year

Given the frenzy of 1997, it should be of no surprise that 1998 was even worse, where so many things happens simultaneously everywhere throughout the region, at a very fast pace. It would be such a humongous task to cover all the events and to summarize them here. In order to keep the issues focused, what I will do in this section is to relay only on the events in Malaysia, with some notes of whats happening elsewhere, as reference.

### 2.3.1 January, 1998

The year of 1998 started out with the Ringgit recorded its worst performance in the modern history of Malaysia, whereby at on stage, it bottomed out at RM4.85 to the dollar (as of 8th of January); talks went abound that it may get even worse and Ringgit will slide all the way to the post world war II levels. Similar trends can also be observed for other regional currencies during the first half of the month.

In an attempt to restore confidence in the banking system, Malaysias central bank proposed merging finance companies and commercial banks to create healthier institutions. While no explicit plans were announced, Bank Negara said that 70% of business was concentrated in 5 or 6 finance companies and that by the end of the first quarter it would be 90%. On the stock market front, the news about Renong bailout via UEM purchase of shares hit the market and causes some concerns among public investors.

Throughout the month of January 1998, Malaysia was caught in the quagmire of events in the region, whereby the battering was heaviest on the Rupiah and Korean won, which drag down the Ringgit along with it. The stock market also behave in the same manner, whereby the Hong Kong market was battered the most, and other markets in the region face the same fate. By end of January, the Ringgit was at RM 4.545 per US dollar, and the KLCI index was at 569. In fact these figures were among the lowest levels that have been observed over the years.

### **2.3.2 February, 1998**

By February, the common sentiment among the market players was that the worse is probably almost over. This is shown by slight recovery on the stock market followed by the currency market. However, this recovery was doubted to be of any sustainable nature.

The Finance ministrys announces a consolidation plan for the banking sector, starting with the 39 finance companies to be merged into 6 groups by March 31. Each group will be centered on an anchor firm. Bank Negara Malaysia is reducing the statutory reserve requirements (SRR) of banking institutions, in what economists say is an attempt to ease the liquidity constraints of the smaller institutions and more importantly, to lay the groundwork for a series of mergers. The reserve requirement would be cut from 13.5% to 10% of their eligible liabilities. BNM claims that this would effectively release about RM14 billion to the banking institutions, to ease the much needed liquidity by the banks. On another front, Tun Daim Zainuddin, the head of NEAC announced that most of the Malaysian corporations are in trouble, and in need of some form of assistance. By the end of the month Ringgit has recovered slightly to RM 3.675 per dollar, and the KLCI index moved up to 745 from its previous low of 500s in January.

On the regional front, it is important to note Indonesia was among the tumultuous economy with continuous battering of its currency. President Suharto, initially announced that he might consider the idea of a currency board to solve the on going currency crisis as proposed by Prof. Steven Hanke of John Hopkins University. However, this idea was strongly opposed by the IMF and other international bodies, and finally the issue was put to rest. Given the turmoil, Soedradjad Djiwandono, the Governor for Bank Indonesia was terminated and he was replaced by Sjahril Sabirin. President Suharto at the end concedes that there is no other choice for Indonesia except to rely on the IMF.

### **2.3.3 March, 1998**

The news of problems in the Malaysian banking system broke out when Bank Negara announces that Sime Bank Bhd., are in trouble with RM1.57 billion loss for the second half of 1997. BNM also announces that Bank Bumiputra and two other finance companies also require quite a sizeable capital injection in order to be solvent. To stem the bad news, Ministry of Finance announce that Rashid Hussain Bhd., has received the approval in principle for it to look into takeover of Sime Bank. This is to

counter the signs of loss of confidence with local banking system, where depositors start a slow withdrawal from local banks and flock to locally incorporated foreign banks.

As part of the confidence building measure, Bank Negara, has set a March 31 deadline for the country's 39 finance companies to make provisional agreements for their eventual consolidation into five main groups, as announced earlier.

Dato Seri Dr. Mohamad Mahathir said that he is concerned that policies ordered by the International Monetary Fund may accelerate bankruptcies, but said Malaysia is trying to keep in step with the general guidelines the IMF has laid down for troubled East Asian economies. He also said he sees slower economic growth and continued currency vulnerability for his country. Dato Seri Anwar Ibrahim is expected to offer a relatively realistic assessment of where Malaysia stands and what needs to be done to counter the effects of the currency and economic turmoil when he speaks in parliament. Most observers expect Anwar, who is also deputy prime minister, to cut the official growth forecast for 1998 to around 3%, down from earlier calls for 4% to 5% growth made in December and 7% before that. Most private economists predict Malaysia's economy will grow at most 2.5% this year. It is commented that the policy has overtones of IMF program in Thailand and others. Anwar said that interest rates would be allowed to rise temporarily to stabilize the exchange rate.

Malaysia's central bank announced that it will keep monetary policy tight in 1998 to contain inflation, while still ensuring that banks can lend to productive sectors within existing limits for credit growth and monetary expansion. This move was welcomed by IMF Managing Director Michel Camdessus and said that these measures are "strong package of measures" that takes a "comprehensive approach" to the country's economic and financial situation.

Deputy Prime Minister and Finance Minister Anwar Ibrahim told Malaysia's Parliament that it is wrong to say the government's move to merge banks and financial institutions was to bail out ailing institutions. Anwar said the government had encouraged banking institutions to merge since the late 1980s. It is an ongoing move to boost the competitive edge and enhance the position of the country's banking system, he said.

BNM announces that six anchor finance companies to lead merger of finance companies : Mayban Finance Bhd., Public Finance Bhd., Hong Leong Finance Bhd., Arab-Malaysian Finance Bhd., EON Finance Bhd. and Credit Corp Malaysia Bhd., and United Merchant Finance Bhd .

Generally, the Ringgit market and the KLSE remain somewhat stable during the month, with Ringgit at 3.643 per dollar and KLCI remains hovering at 720.

#### **2.3.4 April and May 1998**

In April, Malaysia announce trade surplus of RM2.51 billion, which is a piece of good news in the wake of so many negative events surrounding. Stanley Fischer, Deputy Managing Director of IMF made some comments that Malaysias latest 1998 economic growth forecast is in line with IMF estimates. However IMF sees that Malaysia still need to raise interest rate much higher than what it is.

Japanese Foreign Minister Keizo Obuchi is visiting Thailand, Malaysia and Singapore to explain Japan's policy on the crisis and to ask leaders what steps they want the Group of Seven top industrial powers, plus Russia, to adopt at the May 15-17 summit in Birmingham, England. During his visit to Malaysia, he announced Malaysia's acceptance of development assistance from Japan, the details of which will be worked out in three to four months time.

The Securities Commission announce the suspension of the licenses of two stock brokerages, MBF Northern Securities Sdn. Bhd. and Labuan Securities Sdn. Bhd. It said that the suspension was to ensure that investor assets are not further undermined and that any potential systemic risk is contained. Trading by the two brokerage houses has been restricted since Dec. 1. In addition, 11 other brokerages are under trading restrictions for failing to meet liquidity requirements.

Malaysia announces that it has loaned Indonesia \$250 million while Jakarta awaits the next installment of its International Monetary Fund bailout. Indonesia plans to repay the loan once the IMF releases the balance of its rescue package

After several months of relative silence, Mahathir has stormed back and seems to have once again seized control of the economy. Just before Anwar left for a trip in April to reassure jittery fund managers in New York and Washington, the outspoken prime minister resumed his attacks on the global financial community. Dato Seri Dr. Mahathir defended a controversial plan to restructure Malaysia Airlines that essentially would help controlling shareholder Tajudin Ramli settle his personal debts.

Malaysian Airline System Bhd.(MAS), announced that foreign-exchange losses resulted in a net loss of RM259.9 million (USD67.2 million) in the year ended March 31. The key factor was a loss of RM3.49 billion caused by the Malaysian currency losing a third of its value against the dollar as a result of Asia's financial crisis. The regional malaise also played another part, with declining air traffic and rising costs both contributing to MAS's loss.

Malaysia also announced that it will set up a National Asset Management company to relieve the bad-debt burden in the banking sector. By end of May, the Ringgit and KLSE took another plunge bringing them to RM3.8785 and 538 levels respectively.

During the month, Indonesia went through its worst domestic violence and finally has caused President Suharto to step down and replaced by his deputy Prof. B.J. Habibie. Rupiah tumbled to a new low territory of exceeding Rupiah 12,000 to the dollar. At the same time rumors of the default of the Russian government bonds (the GKO's) started to filter into the market, which brings the crisis unto the European front and the threat of devaluation of the Russian currency.

### 2.3.5 June, 1998

Malaysian Finance Minister Anwar Ibrahim announced the formation of the Asset Management Company, named Danaharta, a new agency to buy up banks' bad loans. The government will provide an initial RM50 million to get the bad the asset management company running. Ultimately, Anwar said, Danaharta will need an estimated RM25 billion to buy up the loans, and it will be financed by a mix of bond

issues and funds from the private sector. The agency is designed to buy up the non-performing loans of commercial banks at written-down values and will then sell them off once the debts are recovered. Danaharta also announce UBS Finanzholding AG of Switzerland and J.P. Morgan & Co. have been appointed joint lead managers for an upcoming \$2 billion bond issue. The bonds will be fully guaranteed by the government of Malaysia.

Malaysia decided to stimulate its economy with some RM7 billion worth of public works and other spending. Dato Seri Dr. Mahathir Mohamad railed at the country's commercial banks, accusing them of needlessly seeking to tighten credit conditions when extending new loans. The banks have now decided to tighten the screws that people can't do business," Mahathir said. "I don't know what the banks want to do, imposing this petition. The government didn't ask them to do it. Apparently they are more interested in themselves than supporting business. If they don't believe in the economy of this country, they might as well close their banks.

Tun Daim Zainuddin was named to a cabinet post as a Special Functions Minister title, with responsibility to jump-start Malaysia's struggling economy. The US Treasury Secretary, Robert Rubin visited Malaysia and calls for higher interest rates. Anwar, who had long argued that high interest rates were required to curb inflation and defend the Ringgit, however, reversed himself and declared that Malaysia's rates were prohibitively high which causes the Ringgit to fell further against the U.S dollar. By the end of June, both Ringgit and KLSE took it worst ever beating bringing the Ringgit to RM4.1750 per dollar level and the KLCI reaches the lowest ever level of 455, which were never before seen in the modern history of Malaysia.

### 2.3.6 July & August 1998

Malaysia approved additional stimulus measures involving the establishment of a fund of about RM 5 billion to develop infrastructure as a part of its effort to bolster the economic condition of the country due to the currency crisis. Thomson BankWatch president Philippe Delhaise criticizes Malaysia by saying that it is in a denial state, whereas its banking system is in near collapse.

Given the level of the crisis, Malaysia announced that it won't seek financial assistance from the International Monetary Fund because it doesn't want to implement required IMF austerity measures. Kuala Lumpur instead reportedly plans to ask the World Bank and the Asian Development Bank for support. Officially, Malaysia isn't in a recession yet because authorities have released economic figures for only the first quarter of 1998. Malaysia's economy contracted 1.8% in the first quarter. Finance Minister Anwar Ibrahim said second-quarter growth data will be released soon.

Malaysian Prime Minister Mahathir Mohamad said that the government will provide 600 million Ringgit (about \$144 million) toward financing the development of the Multimedia Super Corridor, which the country hopes to make Asia's Silicon Valley. Mahathir said Malaysia's continuing economic problems wouldn't have any impact on the development of the MSC, which the government has maintained would be financed mostly by the private sector.

The Ringgit for the month of July and August was hovering in the range of RM4.15 to RM4.20 to the dollar. The real disaster was the KLSE whereby it keeps on sliding from the level of 455 in the month of June to 402 by the end of July and finally reaching a level of 302 by the end of August. In market capitalization terms, the KLSE has lost at least an amount of RM60 billion in over a period of one year! The stock prices seems to have no energy at all and what we see is a total market breakdown on the KLSE.

### **2.3.7 September 1998**

By the 1st of September 1998, Dr. Mahathir Mohamad, the Malaysian Prime Minister announces that Malaysia has abandoned its floating currency policy and imposes a capital control with an immediate effect. The capital control effectively eliminates Ringgit as an offshore currency and hence kills off the offshore Ringgit market. The details of capital control implementation will be discussed in later chapters.

Subsequently, the Governor of Bank Negara and his Deputy was terminated, and later on through a massive political crisis and overtone, Dato Seri Anwar Ibrahim, who was the Deputy Prime Minister and Finance Minister was sacked by Dr. Mahathir, and he also was expelled from the ruling party, UMNO.

### **2.3.8 October 1998**

### **2.3.9 November & December 1998**

## **2.4 Summary**



## CHAPTER 3

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# VIEWS FROM THE DISMAL SCIENCE: ECONOMIC PERSPECTIVES ON THE CRISIS

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There are three ways to look at economic events: one, popular version that is discussions in the coffee shops; two, journalistic version that is to interpret economic events by quoting what others say; and three, proper version, that is discussions based on proper and correct economic thinking. Unfortunately most of us end up having discussion on the recent economic crisis falls into the first two categories. Very few indeed take an effort to look seriously at the events from clear and correct economic perspectives. Since this book is about economic events, and especially so about something devastating that just happened, it is imperative therefore we search for economic answers to the issues at hand.

This Chapter is dedicated for searching explanations from the economic perspectives. In fact there has been a number of academic studies and literature on the East Asian economic and financial crisis that has been developed and published after two years since the triggering event of the crisis, the devaluation of Thai Baht in July 1997. I would like to summarize the various alternative explanations that have been put forth by economists and organize them into simplified approach for the sake of easier grasps by every reader. For more serious reader, the lists of references are provided at the end of the book for further readings.

Since the crisis is an East Asian crisis, the discussion on economic theories applies on the East Asia as a whole. The fact that most of the troubled economies: Thailand, Korea, Malaysia, Indonesia and Philippines, all share almost similar characteristics, no distinctions are given for any specific economy. Of course there are some significant differences, but that will not necessarily nullify the points raised. Overall understanding on the subject will be useful when we go to Chapter 4, where a specialized treatment on Malaysia is made.

### 3.1 What's the benefit of discussion using economic theories?

Before going further into detailed discussion, let us first understand what the use of economic theories in general. Economics as a body of knowledge are actually tools for analysis. It gives us a more simplified and concise view of the world. Through this tools we can see better to separate the facts from the myths, the realities from the imaginations, and to check whether our assumptions are correct or merely heresy.

A good understanding of economics will help us in looking for solutions. Solving problem without knowing the cause, is just like a doctor prescribing medicine to a patient that he do not know what the diagnosis are. If by chance he prescribed the right medicine, the patient will be improving, whereas if he is wrong, the patient may die. The same analogy applies to economic problems of a nation. We must understand (diagnose) the problem first before the solutions can be provided with more surety. The prescription in economics is through what we call generally as economic policies. Once we understand the problems, the correct and proper policies should be implemented and exercised.

Like in the case of a sick patient, there are critical medications and there are supporting medications that need to be administered; we need to know in an economy similar things applies: there are fundamental policies and supporting policies that need to be implemented. So what are the fundamental policies of an economy? There are actually three major goals of economic policies of a nation: continuous productivity growth, full employment of the workforce, and sustainable income for the population. This is what we call as the three tenets of economic policy. If an economy is able to maintain a very good and continuous productivity growth, then the people will continue to be employed (i.e. low unemployment rate), and with employment, the population will earn their income, and hence live rather happily.

Of course there are other elements that we have to be worried in an economy, for examples issues like inflation, level of interest rates, monetary policies, and many others (especially if you read in newspaper articles, it looks like everything is of importance to the economy). The truth is many of these issues are secondary to three major tenets; they are the supporting policies. They are used as tools to ensure that three tenets can be accomplished. So we better not get confused between what are the fundamental policies and the supporting policies.

In the policy implementation, a government must ensure proper order is being maintained (in the same way proper procedures on medication works) for the policies to achieve the intended results. There are three elements that forms the foundation

of economic policies: i. Setting the right priorities ii. Ensure that the policies are consistent and coherent iii. The policies have to be sustainable. Without the right priorities we may miss the target; without consistency and coherency, policies can be offsetting against each other; and if they are unsustainable, we will be heading for trouble.

One final point that I would like to make is about choice: Economic policy is actually about making specific choice (or choices) among limited options; for each choice we take today, the set of choices available tomorrow will be somewhat lesser than what we have before. And for each choice we made, there will be a certain set of costs and benefits that we will gain or lose. Because none of the economic choices are free, as widely used rule in economics, no free lunch, implies that each choices carry the consequences of potential economic costs as well economic benefits. Policy makers then have to weigh both the costs and benefits of certain policy choices before decisions can be made. For that they need economic tools as their guide.

## 3.2 Theoretical Foundations

Before moving to the next stage, I have to bore the readers with a little bit of theoretical framework on economic theories. This is necessary to provide a framework for understanding many other issues discussed in the next few sections, as well as in the next few chapters. So allow me to provide a quick and short lesson on economic theory, in as simple manner as possible. Specific focus will be given on the theory of the markets, and on exchange rate, because these subjects are at the core of the matter in the East Asian crisis; a sound understanding on it will give the readers much better feel of what has been going on.

### 3.2.1 Economic Assumptions about the Markets

The cornerstone of economics is its modeling of human behavior and its economic activity. In order for us to understand the economic events, models have been developed as a simplified and stylized manner of the economy. Since economic takes its function through the marketplace, the central theory of economics lies around the proper and functioning order of the markets.

So what are the assumptions that economists made for a marketplace to function in a proper and orderly manner?

1. Economic agents are rational. Rationality here means that economic agents make decisions and choices based on maximizing their utility benefits. In another words, they will make choices that will be of utmost benefit for them.

2. Markets are efficient. Efficiency in economic sense implies market prices always reflect the true economic fundamental of the assets. In another words, markets assume that information is well disseminated and understood by all economic agents and this information is reflected in the prices. (This is what is sometimes called as informational efficiency).

3. The markets are in the state of equilibrium; i.e. all goods and assets are transacted, quantity demanded will always equal quantity supplied for a given price.

4. No market distortions; i.e. there are no regulations that prohibits economic agents to transact among themselves. The costs of transacting are not too prohibitive, and there are no barriers to transactions.

Of course all of these are too much to assume, because it is impossible for everybody to know everything and to behave exactly as the information tells them. Demand may not necessarily equals supply, and there are market distortions such trade barriers, tax, transaction cost, etc. However, as I said earlier, economics is not an exact science, it is a science of approximation. So in reality, as long as we are not too far off in our assumptions, then the model should work just fine. In fact many studies have shown that these assumptions generally holds true, and in fact are not far from the reality.

Furthermore, the first two assumptions: Market rationality and efficiency are the most critical compared to the last two. (i.e. market not necessarily be in equilibrium at all times especially in the short-term, and in fact there exists small market distortions such as taxes, trade barriers, etc., in real life). Out of the first two assumptions, the stronger one is the rationality assumption, because market can sometimes be inefficient (e.g. information may not be equally distributed), but it goes against common sense to assume that people are irrational. Again, we may also relaxed the rationality assumption to a degree, where agents are temporarily irrational, for example there can be cases of overreaction to events, but eventually everything will revert back to its true fundamental (i.e. rationality should eventually prevails).

Some people get confused between these assumptions and the reality they saw. How come we see economic indicators, for example are not in tandem with what economic model predicts? There are two factors that actually needed to be explain as well:

i. There exists noise in the market place. Noises are in fact are not necessarily bad. In fact they help the market to function smoothly, just like motor oil in our cars. It helps the engine to run because it provides lubrication to the metal parts in order for them to move against each other. A good example of noise is the day-to-day ups and downs of stock prices, which tell us very little of whats going on. Only over longer period, certain trends can be ascertained.

ii. Beside noise, economic models does not look at just an individual, rather it predicts the behavior of all individuals collectively. In another words it looks at the aggregate impact of all these individual agents collectively. So we should not confuse between what we see people do, but we should be more interested, how does on aggregate, our behavior will affect the economy.

Understanding of these basic assumptions for the markets will help us later, when we analyze the collapse of the currency markets and the financial markets in East Asia.

### 3.2.2 States of Economies

Now let us put these assumptions to a simplified framework in the context of East Asian crisis. Let assume that there are three true state of the economic fundamental in these economies: the fundamentals are Good; the fundamentals are Bad; and the fundamentals are Very Bad. Out of these three true situation, there are three possible scenario that can happen: the currency (or economy) will face No Correction, Moderate Correction, and Severe Correction.

Let us see how does the assumptions fare in the light of these scenario in the Table 3.1 below:

Table 3.1 State of the Economy and Market Reaction Matrix Each box explains about market rationality and efficiency.

Market Reaction	True State of the Economy Good	True State of the Economy Bad	True State of the Economy Very Bad	No Correction
Market is rational and efficient	Market is rational and efficient	Market is rational but inefficient	Market maybe irrational and severely inefficient	Moderate Correction
Moderate Correction	Market is rational but inefficient	Market is rational and efficient	Market is rational but inefficient	Severe Correction
Severe Correction	Market maybe irrational and severely inefficient	Market is rational but inefficient	Market is rational and efficient	

Now in the case of East Asia, all of the economies face Severe Correction of its currencies. But we do not know what is the true state of the economies (for the sake of discussion), so what choice of explanations do we have?

**3.2.2.1 Case I.** If we assume the true state of the economy is Good, then what we are saying is that the crisis happens because of market irrationality and severely inefficient. Well that is a very strong assumption. (i.e. we are saying that people are wrong and the market is not properly working).

Under Case I, there is only one possible explanation: there is nothing wrong with our economies, it is the work of currency speculators who want to destroy our economy, and it may be due to some form of conspiracy by certain quarters who want to see us down. While the rhetoric sounds familiar in the popular press, without knowing, we are making a very strong assumption about the market place. Anyway our stock markets, financial markets, and the rest of the markets are all using the same assumptions, of which we seems to be happy about, except for the currency market. The logic is very hard to accept since the same economic agents are present inmost of these other markets, it cant be they are rational in one and irrational in another.

**3.2.2.2 Case II.** If we assume that the true state of the economy is just Bad but not Very Bad (i.e. the severity of the crisis is unjustified), then we are saying that market is inefficient.

Case II presents a more meaningful explanation, that is the market is somewhat inefficient, maybe due to overreaction, whereby there exists an oversell position and cause the currency to drop more than what it should. After a while (since it is again hard to assume that market will be inefficient over long period of time), the true value of the currency will emerge and stabilized. In another word, overtime the economy should be moving towards the center box (i.e. true state of the economy is Bad

and the market reaction is Moderate Correction (and hence, market is rational and efficient).

**3.2.2.3 Case III.** If we assume that the true state is in fact Very Bad, then the Severe Correction is justified.

In Case III, it is very straightforward, that is the Severe Correction is justified by the true state of the economic fundamental. However, we are making very strong assumptions: that the economies were really in a Very Bad shape prior to the crisis. As we have said in above paragraph, this subject is a matter of debate.

All in all, we cannot conclude on any of these cases without the actual knowledge of one thing: The true economic conditions of our economies prior to the crisis. What I have demonstrated here is the importance of proper economic analysis and hard look at the economic indicators, which is the subject of the next few chapters.

### 3.3 Economic Theories on the Foreign Exchange

Now we can turn our attention to a more specific application of economic theory: the foreign exchange market. Of course like in any market, the economic assumptions about the markets will hold true in the foreign exchange market as well. Let say that the foreign exchange market is rational, efficient, and in state of equilibrium; what would be the factors that affect the exchange rate of a country?

i. The growth rate of the country relative to other nations. The stronger the growth rate, the stronger usually its currency would be, all other things remains the same.

ii. The monetary policy of the country. A country that expands its monetary base by increasing its money supply (e.g. M3), generally will weaken its currency, all other things remains the same.

iii. The fiscal policy. That is the level of government spending compared to its income. If the government spends more than its income (i.e. fiscal deficit), then it generally weakened the currency, all other things remains the same.

iv. The general price level (i.e. inflation). If a country's inflation is higher compared to other nations, then the currency will also be weaker.

v. The terms of trade. Terms of trade refers to how competitive we are compared to other nations. For example the more productive we are, the better our terms of trade will be. Theory predicts that, a better term of trade a country has, the stronger its currency will be.

In standard economic models of foreign exchange, predicts that these five items that are the most important determinant of exchange rates. In real life there of course other elements that may carry some weights, for example the existence of speculators, day-to-day market demand and supplies, and others.

#### 3.3.1 Choice of Currency Regimes

Given that we know what generally determines the exchange rate, what choices of exchange rate regime (or system) that we may want to use? Actually, the subject

is not a new one, many models has been applied in the past, starting from the Gold standard during the post world war period until 1973, with the emergence of Bretton Woods agreements, and so on. Throughout the years, many economies have experimented (some with success, some with failures) with various choices of currency regimes.

In this section, I would like to provide a summary on various options of currency regime, from the most rigid system to most liberal one. One thing that readers will see, the choice of currency regime is in fact not a trivial issue. Table 3.2 provides this summary. [Note: The best reference that is available: Jeffrey A. Frankel, No single Currency Regime is Right for all Countries or at all Times, NBER wp7338, September 1999].

Table 3.2 Currency Regimes

### 3.3.2 Currency Regime Descriptions

1. Currency union Where currency in circulation is the same as its immediate (and bigger) neighbor or partner. Example: The Caribbean islands and the US dollar.

2. Fixed exchange rate Strict fix to a major currency, usually with capital control in place. Example: Some small African countries to their previous European ruler. (Malaysia has now opted for this regime after September 1st, 1998, with the capital control in place).

3. Currency board Where currencies issued is pegged at a certain major currency, and every local currency issued are backed exactly by that major currency, at the fixed exchange rate. Under currency board, the central banks functions on monetary issue cease to exist. Currency boards are established by virtue of an act or law. Example: Hong Kong.

4. Adjustable peg This regime is more attuned to the previously used gold standard mechanism under the Bretton Woods system, where currency values are peg to a set target that rarely moves. (i.e. price of Gold at US35 per ounce, in case of gold standard system). Example: very few countries still use this system today.

5. Crawling peg The local currency is pegged to some major currencies, and adjusted on a periodic basis, say every six months. Usually the adjustment is made due to a very high level of inflation in the country. Example: Chile and Indonesia

6. Basket peg The local currency is pegged to a basket of major currencies. Adjustments are made according to changes of not a specific currency, but how do the currencies in the baskets moves together. This system is used in IMF subscribers, where they can choose to set their currency against SDR. Example: Saudi Arabia.

7. Target zone or band The local currency is set to allow to moves freely (i.e. due to market forces) within a certain zone or band. If the currency falls below or rise above these limits, then the central bank will intervene to ensure the currency to remain within. Example: Exchange Rate Mechanism (ERM) of the European Union before the establishment of the Euro currency. 8. Managed float The local currency is set to be at a certain target by the central government, based on certain objectives. This target is not announced publicly, and the central bank will intervene to ensure that the internal target that has been set to be met. Malaysia is following this regime.

9. Free float The central banks never intervene in the foreign exchange market, and allow the market to decide the level of the local currency. The United States is the only country in the world that seems to follow this regime.

These various currency regimes are a continuum from the most rigid system of currency union, right all the way to full free float. Of course a specific policy choice does not have to fall into exactly any one of the above example, but definitely any policies must fall somewhere in the range provided.

Now let us see how a government can make decision regarding which choice of currency regime that it want to adopt. The decision involves consecutive steps that finally determine the consequences to the economy at large. Recall that in our discussion on economic policy making in previous section, once a choice is made today, the options that we have tomorrow is rather limited, and finally we have weigh the costs and benefits of such policies and choices. Let us see Table 3.3.

Table 3.3 Decision Tree Table

Insert Table

In each case, once we have decided the type of economy, open, semi-open, or closed economy, then there will be a limited set of currency regime that we can choose from. Say we choose a semi-open economy (which is the case for most of East Asian economies), then the choice of currency regime will be limited to: adjustable peg, crawling peg, basket peg, target zone or band, or managed float. (Indonesia and Philippines use crawling peg; Korea, Malaysia, and Thailand use managed float system)

Once decision has been made on type of currency regime thats available (from the menu), the next decisions that we have to made are:

1. Whether to defend or not to defend our currency (when an attack occur). Defending the currency would require a strong foreign exchange reserve and frequent intervention in the foreign exchange market by the central bank.

2. Under any of the regime that we choose, the monetary policy will have a direct impact on the currency. Namely an expansionary trend of the monetary base (i.e. money supply as measured by say M2 or M3) will cause the currency to depreciate (recall previous discussion). So careful choice of monetary policy is needed to balance the currency level.

3. Since we choose a Semi-Open economy, capital is allowed to flow in and out. So a careful management on the capital flows is a necessity.

4. The fiscal policy issue will be the same as in (ii) above, fiscal deficits will cause the currency to depreciate.

So until now, we have completed the discussion on basic economic theory and its implication in the case of foreign exchange market. Before moving to the next subject, I would to show an interesting way (slightly different approach compared to our discussions so far) in looking at foreign exchange regimes called: the tri-lemma of an open economy.



### 3.4 Tri-lemma of an open economy

To show this tri-lemma, we need to start with the tri-lemma diagram as shown below:

Figure 3.1 Tri-lemma Diagram

Insert Figure

We can see that if we choose free floating exchange rate (bottom of the triangle), then we will forego exchange rate stability (at the opposite corner), but we gain on freedom of capital movement and we can determine our policy on monetary matters. And if we choose currency board; then we will lose our autonomy on the monetary policy (i.e. central banks monetary function is given up, at the other corner), but we will gain on exchange rate stability and capital is free to move in or out. Finally, if we choose capital control; then we will lose freedom of capital movement, but we gain on having fixed exchange rate, and manage our own monetary matters.

This tri-lemma tells us clearly that we can never have all the three combined; we can only gain two and lose one, for each choice that we make. This is the beauty of economic theory, it clarify to us clearly what is possible and what will not be possible.

Our economic policy in Malaysia, has been to allow an open economy to be gradually implemented. In fact we have moved away from a closed economy since in 1980s, and has been moving towards a fully open economy. The reason has been that we were not prepared to face the consequences of a fully open economy in a drastic manner, except through a gradual move into the direction. In fact we have been quite successful in doing so. The same policy is also true for most East Asian economies.

### 3.5 Models of Currency Crisis

This subsection, is dedicated to discussions about economic models of currency crisis. This is needed for us to be able to understand fully what has happened in East Asia, and will be useful tools for the next subject, that is the various economic theories of the East Asian economic and financial crisis. (The best reference on this subject is a paper by Prof. Krugman, titled: Currency Crisis, out of which most of the material here is being obtained).

The question that economists raised: why does fixed currency regime (like what most East Asian countries have) is un-sustainable, and may be subjected to crisis? There are two existing models that describe the possibility of crisis, one is called the Canonical (or standard) model, and the other one is called the Second generation (or newer) model. The canonical model was originally developed by Professors Salant and Henderson, and subsequently being made famous by Prof. Krugman. The variation of it, was developed later by Prof. Obstfeld. Let us study what are the predictions of these models.

### 3.5.1 Model I: Canonical Model of Currency Crisis.

The currency crisis is assumed to be a result of the inconsistency between domestic policies and maintaining a stable exchange rate. The inconsistency may not lead to currency crisis if the central bank has sufficient reserve. However, when the market sees that the gap is quite large between the domestic policy and stabilization policy, and the cost of maintaining stable exchange rate is prohibitive to the central bank, and at the same time reserve is insufficient, then sooner or later the exchange rate will fall. The role of speculators in such case is just to make happen sooner rather than later.

A good example of this type of crisis is the devaluation of Pound Sterling in 1992. The British government is maintaining a tight money policy in order to maintain a high level of exchange rate. This was part of the European Union requirement for Exchange Rate Mechanism (ERM) prior to establishment of the common European currency, the Euro. This policy cause massive unemployment in the country, which cost the country so much financially and politically. The only way for them to solve the problem is to increase money supply, and hence let the Pound Sterling to devalue. Maintaining both policies of high exchange rate and tight money is un-sustainable. Eventually, the British government has to let go the Pound Sterling and prioritize clearly on the domestic needs. What George Soros did then was to speculate on Pound Sterling (devaluation), which then cause the currency to stumble down faster than expected. Off course Soros made a killing, but the fact remains that it is not what Soros do that is important, the conditions precedent (i.e. the policy inconsistencies) were the real cause of the crisis.

### 3.5.2 Model II: Second Generation Model of Currency Crisis.

Under this model, a different condition exists: it is the conflict between the motives of the government to allow the currency to depreciate and the motives of the government to continue defending the currency. This conflict may remain in existence for sometime, without causing a crisis, until to such time when the cost of defending the currency becomes too prohibitive. When that condition exists, the announcement by the government to defend the currency is no longer credible and add more reason for the speculators to attack the currency, and precipitate the fall of the currency. At the center of the issue under this model is the motives of the government are inconsistent with the long run maintenance of fixed exchange rate. Again, the role of speculator here is to make the devaluation happen sooner rather than later.

For a common reader the difference between the two models might not seems that obvious: both involve inconsistencies of the government policy, so whats the catch? The answer is that, the second model assumes that reason for the crisis is because of differences in motives which are in conflict, whereas the first model does not assume any motives, it just assume that policies are inconsistent.

Recent example of this type of crisis is the Mexican Peso crisis in 1994. The Mexican government has strong motives to maintain an inflow of funds into the country for its development and growth (hence provide jobs and economic prosperity in the

country). These situation however, cause massive economic problems in terms of large amount of foreign debts overhang on the economy, deteriorating current account deficit, inflation and others. At the same time the government also has strong motives to continue maintaining the peg on Peso. The motives here include to maintain the stable country status by the international community (hence confidence of investors), and also for the internal politics since the general election is coming due. The economic deterioration becomes very prohibitive that makes it impossible to contain, and finally the government has to surrender the policy of defending the peg on Peso, and finally the Peso tumbles down in a very quick manner. Again, market arbitrageurs just make the crash happen sooner rather than later.

As a summary, currency crisis happen because of inconsistency or imbalance between policies or motives of the government. The conflicts then finally cause the policy of maintaining the exchange rate to be disposed off, and hence cause the devaluation. Many times, however, the crisis was deepened due to continuous failure of the government to stop the cyclical nature of the process (i.e. to signal and act clearly so as to show the market that the inconsistencies no longer exists) in quick enough time. And finally, the role of the speculators, if any, is only to hasten the eventuality rather than as the cause of the event themselves.

### 3.6 Economic Theories on the East Asian Economic and Financial Crisis

In the last two years, since from the onset of the East Asian currency crisis, there has been a proliferation of writings by economists and academics on the subject. Unfortunately, many of these studies are suited for people who are trained in economics and not easily understood by common people. In this section, we will attempt to summarize these various studies in an organized manner, and in the simplest language that we can understand. Full list of reference is provided at the end of the book for anybody who is interested to have a direct look at the source.

Please note that I will use the theoretical foundation that we have developed in the previous section to be applied. So it would be useful sometimes for the readers to go back and forth between these two sections. For the sake of efficiency, we will use economic terms directly without resorting to detail explanation, as we assume that those terms has been somewhat defined before.

So what are the major themes of economic explanations on the East Asian economic and financial crisis. They can be largely grouped into three major themes:

**Theme I: Market is rational and efficient.** The crisis is due to serious fundamental flaws in East Asian economies. These flaws have been creeping in to these economies, and finally with the inconsistencies of the foreign exchange regime policy and other domestic policies, the currency crash happens. The crash eventually exposes the economic realities of East Asia, and hence causes the economies to enter into recession mode. This crash is an eventuality that happens to reflect the true state of the economy. (Market reaction is Severe Correction and the true state of the economy is Very Bad, bottom left of the matrix in Table 3.1).

**Theme II: Market is rational but somewhat inefficient.** How does market become inefficient? One, is due to lack of informational efficiency like incompleteness of information on the part of economic agents (for example true knowledge of the state of the economy is not clearly known to all market participants); Two, due to structural inefficiencies, like the exchange rate regime itself; Three, due to the behaviors of market participants. These inefficiencies caused the currency to eventually crash and started the economic recession. (Market reaction is Severe Correction and the true state of the economy is Bad, bottom middle of the matrix in Table 3.1).

**Theme III: Market breakdown.** There are two types of market breakdown. The first one is caused by the speculators, whose actions caused the currency to crash without economic justifications. (Market is then assumed to be irrational and inefficient). The second type of market breakdown is somewhat different than the speculators type of crisis, that is due to the failures of the international monetary system, which includes the IMF (who regulates the system). Under this type, market is assumed to be rational, but broke down because of a systemic failure (which then says that market is inefficient). (Market breakdown of the first type refers to: Market reaction is Severe Correction and the true state of the economy is a Good state bottom right of the matrix in Table 3.1. The second type refers to a variation where the true state of the economy is just Bad).

I would like to pre-warn the readers that actually there does not exist a clear-cut difference between these themes (except for Theme III, the First type). However, these themes were presented in such a manner for the easiness of understanding and clarity, when we go down to details. Another purpose is for us to divide the discussion clearly into three separate section so as to differentiate these various explanations. Let us now go into the details.

### 3.6.1 Theme I: East Asian Economies have Fundamental Problems

In the world where market is rational and efficient, the true fundamental of the economy will be revealed, and hence the market will eventually follow suit. Over the years of fast economic growth, East Asia has economies have developed a number of weaknesses that cause these growths to be un-sustainable. The law of diminishing returns is applicable, where as we increase our input for production, it will come a stage where the marginal increase of output for a similar amount of input started to be smaller and smaller until it may even reach a stage where the marginal increase can be even zero. Series of policy mistakes developed and accumulated over the years, large inflows of money into these economies aggravate the problem further, with structural flaws in the local banking system, and inefficient allocation of resources, and a large imbalance of short-term liabilities compared to liquid assets, provides a strong impetus for crisis to happen.

One may have his political view about the subject, but the fact remains that these structural weaknesses issue cannot be just easily dismissed. If in fact they are true, then correcting these weaknesses will be among the key factors that will bring our economies back up, and avoid future repetitions of the same mistakes. In fact, if we do make the necessary corrections, we will not only come out faster from the current

slump, but we may regain our previous footing, albeit a more stronger and full of resistance economy.

### **3.6.1.1 The pace of economic liberalization is faster than the internal reforms**

This argument start by saying that East Asia, in its pursuit of economic growth over the past decade or so, has pursued a policy of rapid liberalization of its economy with insufficient preparation of the domestic economy. In fact most of the East Asian countries has adopted the Article VIII of the International Monetary Fund charter, to allow convertibility of their capital account. This help East Asian countries by allowing and attracting large amount of capital flows to our countries. These capital flows in turns help our economy to grow. In fact East Asia has become a major destination for investments, particularly from the United States, Japan, and the European Community.

Liberalization helps the economy because it encourages trade and investments. At the same time however, liberalization has to come along with the need of good and sound management of the economy. It also has to be combined with the strengthening and upgrading of our own local financial institutions. Similarly, the corporate sector, companies, entrepreneurs must also be equipped to deal with liberalization.

The problem with East Asia has been: the countries are not only lacking good and sound management at the governmental level, but also the private sector that are too bullish in their actions which led to all kind of structural flaws within the economy.

**3.6.1.2 Large Capital Inflows** With the liberalization, East Asia starts to receive large capital inflows into the economy. A quick look at the surveys clearly shows that most Asian countries receive massive flow of funds from three major sources: the United States, Japan, and European Community.

The funds that flows into East Asia in the beginning came mostly in the form of Foreign Direct Investment (FDI) and some forms of multilateral financing (i.e. inter-government loans or funding), and a smaller portion is in the form of equity financing (i.e. the stock market), and private sector financing. In 1990 for example, East Asia is taking about 60% of total funds flowed to the Emerging Markets which totaling about US 19 billion. By 1996, this amount increased five folds to US 110 billion, which constitute 40% of total funds flow to these markets.

While the FDI portion has been growing steadily over time, larger and larger percentage of equity investment flow and private sector financing becomes a clear trend. The super bull runs of East Asian stock markets attract the investors world wide that East Asia is the place to go. Bankers, who miss the run, felt that they indeed have missed the boat and decided to join the fray. By 1995 and 1996, massive increase of bank financing and more so in terms of short-term loans flowed into East Asia.

As we have shown in Chapter 2, a large portion of these funds are in short-term debt, whereby by the end of 1996 (see Table 2.4), the total claims by foreign banks into East Asian economies stood at US 261 billion where out of the total amount, US 166 billion (or 64%) is in form debts with maturity of one year or less. If this is compared to available foreign reserve, should this money being demanded on maturity, East Asia has no capacity to fulfill the requirements. (Recall from Chapter 2 that

the short-term debt to reserve ratio is more than 1.5 on average). In essence, these countries were on the verge of bankruptcies, with the exception of Malaysia (who may still service the debt since the ratio is less than 1).

**3.6.1.3 Macroeconomic Imbalances** These large inflows of funds push the countries into serious and major macroeconomic imbalances. The first one that we can see is large increase in the money supply. (See Table 2.5) where money supply growth ranging between 15% to 25% are the norms for East Asian economies. This is far fetched compared to money supply growth in mature economies where 5% to 6% growth is the norm. Many argued that these growths is a part and parcel of the overall economic growth and hence are justified.

Money supply, by itself is not the source of any harm if they are justified by fundamentals; however, the problem is that it leads to massive growth in bank lending. Because when money supply increases, what it meant is that there is a surge in the money deposited into the banking system. And this money cannot stay there for long, because banks, under pressure to perform, must lend it out in order to avoid negative earnings on the money.

The average loan growth in East Asia during the years prior to 1997 has been at about 22% for Indonesia, 20% for Korea, 25% for Malaysia, 40% for Philippines, and 22% for Thailand. While the average growth of money supply mirrored the loan growth, which confirms the hypothesis, that money supply growth fueled the lending growth.

It is clear that most of the economies are lending at a very fast rate. In fact just prior to the crash, the loan growth rate in all countries except Thailand, are above 20% per annum. That is very high according to any standards. Moreover, most of these loan went into what economists called as non-productive sector of the economy, namely into the real estate and for financing the stock markets. The danger here is that if there is a large chunk of liquidity arises from foreign funds, and at it is used for financing non-productive sectors, then we are up for trouble. Because theoretically, if the financing is used to finance the tradable, i.e. manufacturing, or other export based sectors, then the foreign money can be repaid back using the proceeds from the exports of such production.

The much more dangerous thing is that not only does the lending growth is on the fast track, but also most of these debts are having maturities of one year or less. As we can see from Table 2.7 that in 1996, the short-term debt as a percentage of total debts is at 25% for Indonesia, 50% for Korea, 28% for Malaysia, 19% for Philippines, and 41% for Thailand.

The danger of short-term debt is that it poses massive problem to many borrowers, should the loan is due for repayment. In fact it is known that most of the banks in some of these countries has been rolling over the debts, so that though they are effectively short-term, it is understood by both the borrower and lender that it will automatically be extended, and hence looks like a longer term debt.

**3.6.1.4 Weakness of financial sector** If the banking sector is equipped, then large flow of money, and increase in deposits should not matter. Because, the effects of large money supply increase is to lower down interest rate. At low interest

rate, will push banks not lend too much. It is better for banks to invest in say government papers, bonds and other liquid instruments, but the problem is, we don't have a large bond market and any other liquid instruments to absorb this liquidity. The banks therefore have not much choice except to continue lending into the traditional sectors, namely: the property and real estate, the stock markets, and consumer financing sectors. These lending into the so-called non-productive sectors creates another problem: moral hazard lending.

Moral Hazard is a term used by economists to describe a situation where a certain existing condition leads some parties to take unnecessarily risky ventures due to some guarantees provided to them. It is the game, as Krugman puts it, head I win, tail you lose. In our situation, it is clear that banks are guaranteed implicitly, they will be bailed out by the government should a failure occur. The existence of such a guarantee then led banks to lend excessively into the market, and undertake to finance risky projects by the market participants.

That's why banks continue to lend, because they know that eventually they will not fail because they believe that the central bank will save them should they fail (not explicitly, but in their mind set). Furthermore, there is another pressure at work: profit growth. Since a number of banks are listed on the stock exchange, they are under pressure to maintain their price earnings ratio. With the stock prices on a very strong level, earnings must be maintained so that the P/E will not be diluted. In another word, better earnings results in better price, and keep the stock market players happy. So the only way to keep high earnings is continue to lend, especially so if the local interest rate scenario is encouraging. All of these factors induced the banks into deeper territory of moral hazard lending.

**3.6.1.5 East Asian economic growth is slowing down** All these macroeconomic imbalances, would be manageable should the economy continue its past growth trend; because, growing economies would be able to pay off the debts through its generation of activities, and eventually becomes very much more balanced. At least that's how most of our government argues against these problems. The problem actually is not with the logic of the argument, rather the assumption of the continuing trend of economic growth. A decade of growth to be extended to another decade is actually a dream for most economies. But the reality is that the dream is far from true, because in fact by 1995 and 1996, these economies already in the state of slowing down.

So how can we measure the economic productivity rate of an economy? The way to measure this is through what economists called as the measure of the total factor productivity, or TFP. TFP assumes that there are two main inputs that can help economic growth, namely: capital and labor. So growth can go on indefinitely should these factors continue to increase, and the rate of productivity of these factors remain positive. In fact, the rate of productivity can be zero (i.e. flat) and the economy can still grow if the factor input is on an increasing trend. This can be accomplished by continuously increasing the capital or labor supply, and the economy should grow just because of that.

The critics of East Asian growth use this argument to say that what happened in East Asia has been growth fueled by increments of factor input rather than factor

productivity. In another word we have not improve in terms of the quality of growth but only in quantitative terms. For example an economy can show indications of fast growth by increasing its population say 20% in a year, which will result in GDP growth of a few percentage point higher just because of this factor without an increase in terms of quality. (This is increase in population is theoretically possible, say through an immigration policy). That is what's going on in East Asia, where massive factor inputs in forms of capital and major mobilization of previously idle labor force becomes the main source of economic growth.

Furthermore, the arguments says that East Asia is not only very poor in translating capital into productivity, but it badly misallocate these resources into speculative fever that fuel the rise of assets which produce asset bubbles. Towards 1997, as East Asia is starting to slowdown in its traditional source of growth: the export oriented growth; the economy moves into another direction: growth in non-tradable, the property and real estate sector. Money flows into non-tradable has one major pitfalls, it does not generate other economic activities to support future growth and it cannot be liquidated on a short-term basis. The banks will be stuck with it for a good number of years into the future.

Massive inflow of funds, combined with the export slowdown and major push into non-tradable growth start to show up in one key indicator: the current account. As discussed earlier, current account measures the position of the balance sheet between a country and the rest of the world. Persistent current account deficits imply that the balance sheet is not sustainable, which leads to what I will call as balance sheet crisis.

**3.6.1.6 "Balance Sheet" crisis** Balance sheet as normally used in accounting profession, refers to the assets and liabilities position of a company at a certain time. The same concept however applies to the economy as well, where the total position of assets and liabilities have an impact on the country, namely through its foreign exchange. With a large overhang of foreign debts, and a weakening domestic economy, and imbalance growth, the East Asian economies are facing what can be termed as balance sheet problems.

The way the problem works is rather complex in the sense that first, the central bank faces an imbalance on its balance sheet with a large amount of short-term foreign debt coming due. The situation precipitate an attack on the currency (due to the un-sustainability of the balance sheet to meet the demand), which cause a massive outflow of capital due to the crash of the currency; then the companies that has foreign denominated debts has to begin liquidation of its assets to pay for debts that are being recalled or due for payment (again due to the drop in currency), which in turns push down the prices of these assets. Falling prices cause the collateral value to drop and hence cause more banks to recall the loans or request the borrowers to top up with more collateral. Everything went into a spiral process that eventually leaves the banks and borrowers with very little to work with, whereby the actions of each other causes the balance sheet to deteriorate to a very meager level. In short, balance sheet crisis in the economy (i.e. the central bank), cause problems for the businesses and banks, which in turns reduce the worth of both entities due the crash of their respective balance sheet, that is a crisis in one transmit into the other, and so



on. What we have at the end, everybody end up with a large amount liabilities with very little assets to support them.

**3.6.1.7 Non-sustainability of currency regime** Large capital inflows should in fact be self-adjusting in a free market environment. Theoretically speaking, if the foreign exchange is set to be free (no intervention by central banks), the local currency should appreciate with such inflows and the central bank reserve should be on an increasing trend. The increase in local currency off course will bring another problem: slow down the exports, which in turns may slow down the whole economy and in turns reduce the inflow of funds.

However, that was not the case in East Asia, large inflows of funds was generally sterilized by the central banks in order to maintain a stable currency. This sterilization increases the domestic money supply and at the same time reduces the increment in foreign exchange reserve. These actions are the direct results of fixed exchange rate policy of the central banks.

One of the objectives of fixed exchange rate policy is to keep local currency from appreciating in order to maintain competitiveness by keeping the price of our goods and services cheaper. Therefore other countries will source from us for our goods, factories will be built here; our labor cost, land cost, and other setup cost in will continue to be competitive. However, we miss one major factor: undervalued local currency attracts short-term money (or hot money as some people call them) to flow in, especially when the interest rates differential is so large. [Which was the case during the years, where Japanese and US interest rates differential with most of these countries can go as far as 6%]. This is exactly what we saw in East Asia, as shown earlier in Chapter 2, over the years, the flow in forms of debts and portfolio investments is on the rise, compared to long-term investments such as the FDI.

During mid 1997, what East Asian economies have are all the necessary conditions of the currency crisis as predicted in our models earlier. East Asian governments have motives that are in conflict that are no longer sustainable: to keep capital to continue flowing in; and to keep the currency to be stable; one of them has to go. When come to the end of it, only one thing can happen, the currency stability has to go, as in the case of Mexican Peso crisis and many other currency crisis of the past. Unfortunately its repeat of the past, a de ja vu! [Note that the crisis is more attuned to the second generation models of currency crisis, as presented earlier].

**3.6.1.8 Can we avoid the crisis in the first place?** Before I answer that question, let us summarize the arguments that I have brought so far under the perspective of the theme:

First, East Asian liberalize its markets, which causes massive inflow of capital; the inflow in turns produce quick expansion of money and credits in the economy; with local banks weakness in managing such expansion, it leads into misdirected use of money and severe imbalance in the economy. The central bank policy of maintaining stable exchange rate, cause the self-adjustments mechanism to be non-functional, and in fact aggravate the matter further. At the end, massive build up of all of the above cause the balance sheet of the country to be un-sustainable, which led to currency crisis, and then the full scale economic downturn begins.

So the question that I would like to pose: can we avoid all of these things to happen in the first place. The answer is yes if we truly adopt and accept a truly free market programs. If believe that market is rational and efficient, everything should work as economic theories predicted. The problem is most governments believe in some form of free market, which justifies policies that are not in full conformity with market principles. Unfortunately, we cannot take half and leave the other half; it just doesn't work. Free flow of capital and yet maintain a fixed currency regime is just unsustainable, just like what the tri-lemma of open economy predicts: free flow of capital must come along free floating of the currency.

### 3.6.2 Theme II: Market Inefficiencies

There are two distinct ways market can be inefficient: market overvaluation and market under-valuation. In the case of market overvaluation, the prices of assets are being pushed up beyond its true fundamental, which causes prices to experience what economist termed as bubbles. Since we assume that economic agents are rational, over-time these bubbles will eventually crash down to its true fundamentals. Market under-valuation on the other hand says that sometimes when a correction happen, market may push down the asset prices to a level that are no longer justified by the fundamentals; eventually, as the market realizes the situation, reversals will take place until the price come back to its true level. In both cases we assume that the market is rational (that's why the correction happen) but temporarily inefficient.

In the case of East Asian crisis, the currency crash is argued as the crash of bubbles that has been growing over the years (i.e. market overvaluation). At the same time, since the crash happens beyond imagination, it is assumed that the second type of market inefficiency also applies (i.e. market overreaction). That's the reason why (at least under this stream of arguments) the East Asian crisis is much severe than what is warranted by the economic fundamentals.

This line of arguments makes a lot of sense, since if we look at say Indonesia, where the Rupiah depreciates by more than 500% over a period within less than a year! Can that be attributed as crash to fundamentals? The KLSE share prices went down even far below their respective Net Tangible Assets, is that justified economically? It is obvious that if we assume market to be efficient, then we all must be missing something, therefore the only logical explanation that we have is to do away with the efficiency assumption. This is at the center of the arguments that I will present here.

**3.6.2.1 Crash of East Asian market bubbles.** In economic history, there have been many examples of financial bubbles, whereby price of assets goes up to an unsustainable level due to speculation and bidding up. The real economic value of the assets may be very well below the price level. A good example of this is Tulip mania in 18th century Europe. After the speculative fever for Tulip ended, the price of Tulips crashes down, and cause severe loss to whoever bought the Tulip prior to the crash.

As we have shown earlier, over the years leading to the crisis, East Asia is the destination of massive inflow of funds into the economies. These massive inflows eventually start to create asset bubbles in the economy. By the fact that inflation has been low in these countries, the massive expansion of liquidity makes money available to the markets that eventually push up the prices of two types of commodities: the real estate and the stock markets.

There are two effects that are working at the same time, the price effect, and the quantity effect. Not only does the price is on the rise, but also the quantity also has multiplied a few times. This is evident from physical observations, where skyscrapers, and property developments rise up like mushrooms on the field after a day of heavy rain. In the stock markets, the number of companies applying for listing increased multifold over the years, whereby listing is being viewed as the zenith of the corporate status. Not only does the price of these assets on the rise, their quantities is also on the rise; what we have at the end is not only bubbles, but bubbles of a sizeable magnitude.

Well these bubbles may continue of there is enough demand for these assets. However when demand starts to dry up, these bubbles will no longer be sustainable. The problem in East Asia is that demands are created through massive consumer credit expansion (recall that loan growth has been at an average of 25% per annum in most countries). When liquidity dries up, so does the demand and cause the market to crash. At the same time, supply of these assets were created out of surplus liquidity, and the demand being created out of the same thing; when liquidity is gone, since supply cannot retract as fast as demand, the only thing that can happen is for prices to plunge to the level where demand and supply should determine. (This is a simple demand and supply curve analysis, if recall our economics 101 courses)

Thats on the asset side, but how about the currencies: are they overvalued (and hence crashed), and how are they related to asset bubbles? This is interesting in the sense that we have to make a little bit of tracing to understand how it works. First, the East Asian currencies were undervalued, due to our strategy of keeping low level of currency in order to keep our exports competitive. These under-valuation, combined with high interest rate differentials between local interest rates and interest rates on Yen or US dollar, cause large amount of short-term money to flow in. The large money caused massive credit expansion, which then creates internal bubbles within these economies. When these bubbles are no longer sustainable, (e.g. real estate in Thailand is the starting point), and are bound to crash, the outflow of money begins. With the knowledge that there isnt enough central bank reserve to support all these outflows, then the currency is viewed as overvalued, and hence crash started to happen. The crash cause massive drain on liquidity, which in turns cause the rest of the problems.

In short severe market inefficiencies exist in East Asian economies. These inefficiencies are due to market distortion on the part our central banks by keeping the currencies not to appreciate as the inflow of funds were coming. The policy of maintaining stable currency actually subsidized the inflows of funds, which in turn form bubbles in the asset market. What we have at the end, the conflict of motives by the government, that is to still maintain low levels of currency, and the same time allow

massive inflow of funds, which eventually lead to the currency crisis of the second generation type.

**3.6.2.2 Run and panics on the system.** The crash can also be explained as a run on the East Asian economies. A run means that suddenly all people start to withdraw their monies from the system in a sudden manner. This is like depositors in a bank, when they perceive (rightly or wrongly) that the bank is insolvent, then they will all line up to withdraw their deposits. The same thing is also true in the case of the economy. When the economy is perceived to be weak, then suddenly everybody is rushing out the door. There won't be enough reserve to support the demand, the currency then crash.

Run and panics work hand in hand. When there is a run, everybody began to panic. Depositors, who don't even need to take the cash out also decides to join the bandwagon. Panics add more injury to the whole process. For example, it may be true that foreign investors need to take their money out, since their base currency is not in the local currency, but that is true for them, how about the local people, why should they be rushing at the exit door as well? In some cases there is no real need, except for the case of Korea or Indonesia, whereby many private sector borrowers are having their loans to be denominated in foreign currencies. When the local currency crash down, they are suddenly exposed to large amount of borrowing in local currency terms, where all their operations are earning from to service the debts.

Financial panic is also by and large, caused by what economist called as informational inefficiency. During the crisis, information is not something that everybody has a privileged to. Lack of sincere and open communications on the parts of governments and corporate sector caused the market to perceive that the problems are much worse than they think. This lack of information caused many to flee to safety, which in many cases is not necessarily justified by the true fundamentals, which in the end unnecessarily destroy real economic activities.

**3.6.2.3 Herding** Another important element that is at work as well is what can be called as herding. The following descriptions from Lester Thurow fits well what herding meant: Capitalist are a coward bunch of people, they are just like a herd of antelope, when they saw other antelopes running, they will run as well, without trying to know why one was running. When others saw these two running, they run as well. They will not take time to look whether there is a lion chasing behind, because if they stop running and see what's behind it is too late, and the one that stop and look back will be the victim. The only reasonable thing would be to run until reach a safe ground and look back. If there are no lions or danger, they can always come back and graze on the land. [Note: Lester Thurow, *Wealth Creation*].

In the crisis, when say a local investor say foreign investors selling, they joined the bandwagon as well. Why should I stay, even though the reasons for foreign investors may be different (because their investments are valued in say US dollars), but the same reasoning does not apply to local investors, so why are they selling as well? Herding.

**3.6.2.4 “Self Fulfilling Prophecies”.** Finally, the crash of the East Asian bubbles, combined with run on the system and financial panic cause another problem: self fulfilling prophecies. Self fulfilling prophecies means that if all economic agents believe (again, for right or for wrong reasons) a certain event to happen, and act according to that believe, eventually what everybody believes in becomes a reality as a result of their combined action.

When the crisis started, it becomes everybody believe that the East Asian economies were vulnerable, and eventually will go into a contraction mode. Since everybody believe in the same thing, they all started to withdraw their money from these countries, the sudden withdrawal cause massive liquidity squeeze, through which cause the economy to actually goes into recession. If one banker or fund manager saw other bankers or fund managers withdraw, they see no reason of staying because these other withdrawal may cause liquidity squeeze, so they might as well withdraw and join the act. They do so because they believe that withdrawal will cause economic contraction, and since everybody believe that if everybody withdraws the economy will contract, everybody then take the same action. By that aggregate action, then liquidity squeeze does becomes a reality. Thus a self fulfilling prophecies of the crisis becomes a reality.

The same thing happens in the case of our currencies, when everybody believe that central banks will not be able to withhold the devaluation, they all start to convert local currencies into hard currencies, which then further aggravates the downfall of the exchange rate. They do so because they all believe that exchange rate is not sustainable, and act on that. Out of their combined action, the exchange rate then fall as they believe, due to their action.

These whole thing works in a circular process, just like a microphone that has a feedback. A small noise in the background is fed into the system by the amplifier, and finally it will reach a point that it is unbearable to hear the screeching sound. That will continue until somebody turn down the amplifier or turn it off. In the same manner, a small economic event can turn into a run on the system and financial panic, which in turns cause the self fulfilling prophecies to take place, and a full scale crisis develops.

Let us see how this works in the case of Thailand on July 2, 1997. An event is amplified and feedback into the system, by the corporate failure of Thai real estate companies and the finance companies that bankrolled them. This turns into a crisis of Thai Baht when banks are calling of their loans in US dollar or Yen denominations. The call suddenly requires more reserve outflow of Bank of Thailand, and puts them under pressure. Improper management by Bank of Thailand in turns cause loss of confidence by the investor community, which leads into threat on the Thai Baht devaluation. Suddenly when it is eminent that Thai Baht can no longer be defended, money started to flow out. When everybody saw that, everybody start to take money out from the system and cause a run on the system. A run started by a few cause others to join the move, which then turns the whole event into a financial panic. The panic feeds into itself to cause more panic and run, (just like the amplifier). When everybody sees that then they all believe everything will fall down, and all join the run

and panic in full steam, and finally everything becomes self-fulfilling. And finally all goes down until there's nothing more that is left!

**3.6.2.5 Contagion effects of the “Asian flu”.** If Thailand was facing some problems, why should Malaysia be facing the same thing? The answer is contagion. In the case of contagion effect, it is not what differences Malaysia has with Thailand that people looks at; it is about what similarities that both have. When Malaysia is perceived as having enough similarities, then contagion happens. What happens in Thailand, happens in Malaysia as well, begins with small crash of the currency, then followed by the stock market, money started to flow out, and so on. The full menu of financial fragility (i.e. crash of asset bubbles, run on the system, financial panic, self-fulfilling prophecies) as economist calls them happens.

Then everything happens to Indonesia, Philippines, and Singapore. Even Hong Kong and Taiwan receive their own share of the contagion. Finally Korea gets the flu as well. Korea has a lot less in common, compared to South East Asia, relatively speaking. But since the crisis in South East Asia reveals so much about these economies, when the market saw enough similarities in Korea, then it was not spared from the crisis; the Asian flu has another victim. A few months after Korea, we saw the attack on the Russian Rouble and convert Roubles into rubbles, after that Brazil Real was attacked and converted it to become Un-real. And so on everything goes.

**3.6.2.6 “Amplifier Effects”.** I would like to bring a new terminology here for the sake of simplicity of discussion, which will be of use in later chapters. What we have seen, run, panics, herding, self-fulfilling prophecies, contagion, are all what I would like to label as amplifier effects. The meaning of amplifier is in the same manner I described how small noise can feed an amplifier system with a feedback that can cause a screeching sound. These amplifier effects accomplish the same thing: it feeds into each other like an amplifier. These effects are summarized in the Table 3.4 below:

Table 3.4 Amplifier Effects  
Insert Table

**3.6.2.7 Could “financial fragility” be avoided?** The problem with all of the points that we have discussed so far is that severe crashes unjustified by fundamentals, combined with run on the system and financial panic, cause the crisis to be deeper than what is warranted, at least based on fundamentals. That is the really sad part of the crisis. East Asia may not have to suffer as much as it did if the inefficient part of the market has not been so severe. The impact of the crisis causes sufferings to many people that are unjustified by many reasons. That's why some of East Asian leaders are so bitter about what has happened because it wipes out the wealth of so many nations and people (at least in some cases on paper) by not less than US 200 billion. That's a lot of effort, labor and toil to get where we were, and years of struggle, that suddenly evaporates in just a matter of few months. It seems that the world is not fair, and the market is so unfair. Why does the market want to punish a small crime like a theft of automobiles with capital punishment?

It has been clear to many economist today that this financial fragility is somewhat a disease that's becoming much more dangerous than it used to be. We have seen crashes of stock exchanges, commodity prices, and other items of the past, but the world has not seen crashes of many economies happen at one time in a very severe manner. That's why there are calls now for such regulations to ensure that such fragility will never happen again. So the question is can we avoid such financial fragility in the first place? Will additional regulations help?

It is quite conclusive to many economists that in fact financial fragility can be avoided to a large degree. The ways to avoid however, are in two separate directions: either to adopt full free market policy, or to impose capital control of some sort. So let us discuss this issue in a bit more details.

**Free market policy:** One way for economies to avoid financial fragility is to adopt a full and free market system. Financial fragility is the result of market distortions, which in turn provide the impetus of crisis to happen. In another word, using the analogy of loudspeaker and amplifier, do not allow such amplifier to exist in the first place. What are the market distortions that are damaging? In particular fixed exchange rate policy. An exchange rate acts like a lever, when one side is heavy it will tilt to this side, and vice versa. When large inflows of capital come in it will push the currency up, and hence cause the economy to slow down, which then reduces the flow of funds. Such act will naturally create a balance. However, East Asian economies would like to achieve both, flow of funds and yet low exchange rate, which is incompatible.

**Capital control:** The argument for capital control is first being suggested by Prof. Krugman in an article in Fortune magazine (which coincides somewhat with the timing of Malaysian capital control). The argument for capital control however is two sided: one, control on inflow in the first place, and two, control of outflow as well. The two will make it work, because it provides orderly flow of funds, and hence reduce the possibility of financial fragility.

The lesson for us in East Asia is that we have to learn to live with the vagaries of the marketplace. The risks involved in the market are rather enormous, especially so with large capital mobility that becomes a phenomenon these days. Since we do not think that financial flows will be on a downward trend, with the advancement of technology and communications, borderless world as argued by Kenichi Ohmae. It is the fact of the future. So how do we handle that? Should East Asia move backward towards a more closed system, or move to a truly open system? This in my view is at the heart of the matter for the future.

The answer as many economists put forth is for East Asia to truly adopt free market reforms. While these calls for free market may be viewed as politically motivated by some leaders, we believe that economically speaking, there is a lot more truth in it than politics. In fact we may be using politics to hide our weaknesses, and as a way to justify our own programs. Free market does not necessarily mean surrender of our nations to the Western powers, it is about removing inconsistencies and market distortions by adopting and observing the rules of the marketplace. Corruption, cronyism, and nepotism, for example should not be the main determinants in the economic program of a nation, because these cause market distortions. Market

distortions eventually create economic imbalance, and hence precipitate some crisis. Free market is the way to the future, as we all believe with the advancement, it seems to be irreversible.

The other solution that is important is about credibility. As we can see, market inefficiencies arise largely out of asymmetric information. When information is not fully available and not well disseminated, or policy announcement are not credibly supported by actions, or actions that are not with full force, cause large imbalance between perception and reality. Corporate disclosure, monitoring system by the government and central banks, and others is at the heart of the issue. Should companies are more forthcoming about their financial positions, market will make early assessment on it, and give treatment to it. For example the large amount of foreign debt in many Indonesian companies are not known till the crisis has happened. Should the market has the full knowledge of it earlier, then the lending growth should have slowed down, and hence proper correction, which are gradual would have taken place rather than an outburst.

Similarly, action by government got to be credible, because government announcements that are not credible make matters worse. For example, announcement by Bank of Thailand to defend the Baht has no credibility given that the market begin to know that they have large forward position renders their reserve locked and cannot be used. Malaysia makes announcements on cancellation or delay of several large projects, which decision was reversed just a few weeks afterwards. President Suharto make some attempts at forming currency boards in the midst of crisis, just accentuates their problems on Rupiah, and so on. Credibility in taking proper appropriate action during a crisis is such a premium that is rare to find. That is the case that we see in Hong Kong, where Hong Kong Monetary Authority in their defend of Hong Kong dollar, did communicate and act clearly on their intent that finally cause speculators to back off.

### 3.6.3 Theme III: Market Breakdowns

So far we have been dealing with situation that markets are efficient (Theme I), and markets are inefficient (Theme II), but in both cases market is assumed to be rational. Now let us drop the assumption of market rationality, and see what happens. When market is assumed to be irrational, there is one possible way to explain the crisis: that the crisis is a result of market manipulation by certain quarters to see that the East Asian economy goes down. Is there is any truth in such argument? Let us discuss a bit more about it.

There is only one major group of people who can make things happen in the manner described: the currency speculators, in particular the hedge funds. In Table 3.5 below, I provide a summary a few major hedge funds and the size of the their capital.

Table 3.5 Currency Funds and Capitalization Source: TASS Advisory Service and Paradigm Asset Management, as provided in a paper by Profs. Brown, Goetzman, and Park, Hedge Funds and the Asian Currency Crisis of 1997. All figures are in millions of US dollar.



Insert Table

We can see that out of the few large currency hedge funds in the world, the resources at their hand stood at US 21 billion (1996) and US 29 billion (1997). This is rather small compared to trillion of dollars of volume of daily volume of foreign exchange transactions worldwide. However, since typically hedge fund will take leveraged position, the capital can be thought of as their margin account, which then allows them to borrow somewhere between 5 to 10 times of that. Which means funds at their disposal would range in between US 150 to US 300 billion. That is a sizeable amount especially so if we compare to say the volume of transaction of currency say in Ringgit, or Baht, or Rupiah. Furthermore, as you can see most of these hedge funds are incorporated offshore, while the management company is incorporated onshore. There is largely very loose regulation covering their activities. Given the size what they can do, and unregulated environment, combined with the ambiguous position in the market, it is natural that the hedge funds being accused as the culprit. But is that the case?

**3.6.3.1 Speculators' Ball?** In actuality, hedge funds as speculators cannot thrive in the currency game if they are the only player in the game. Speculators play what we call a zero sum game: that is your loss is my profit and vice versa. The game can only be played if there are potential players on both side of the game. For example, if they know that we are going to defend our currency, then they will join the game, because according to them, the currency is defenseless. If the central banks attempt to support the currency by committing its reserve, then the speculators will see that potential money can be made (i.e. the game is on). However, should Central Bank decided not to enter the game, they will not enter as well. They may take position in the currency with the anticipation that eventually the central bank will enter. But that wait is very costly for them since most of them works with leveraged position. Therefore, they cant be waiting for too long; a good guess of how long they can stay would be between 9 to 12 months, at the most.

The same argument is true in most cases of speculative bouts in the past. The history is littered with cases of speculators being brought down by market forces: Sumitomos collapse was because of its traders effort to corner the copper market; Barings collapse was due to Nick Leasons effort to corner the Yen; recently Tiger funds announced losses was due to cornering of the Yen. The only successful story of speculators so far is George Soros on the Bristish Pound Sterling in 1992, and that was because he was at the right position at the right time.

Anyway, should we decide that we want to go head-to-head with the speculators, will that be possible? The answer is yes, we can! Let us see how this can be done by the following example: First, the speculators have to borrow Ringgit based assets, and sell it immediately to get cash in Ringgit; They then use the Ringgit to buy US dollar and wait until Ringgit goes down to a certain level; at that point they will use their US dollar holding to convert back into Ringgit and use the cash to buy back the borrowed assets at a cheaper value (in US dollars terms), and deliver it back to the lender. They can go on doing so until there are fewer assets left to be taken, which

in turn drive the borrowing cost of those assets higher. And since the assets market is cornered (i.e. since by then we effectively hold most of the assets), when they try to buy back those assets, the value (in Ringgit terms) will be driven up. Hence, they will have to come up with more Ringgit and in the end, the so-called anticipated profits by doing this activity starts to be diminishing. If the corner is so severe, the whole situation can even to push them into losing position. This example tells us that speculators can be thwart off if concerted effort is taken on our part nobody is invincible.

**3.6.3.2 Conspiracy theory?** Finally let us address the other possibility, that is the attack on East Asian currencies are malice and bad intent in nature by certain groups. In particular the western powers to undermine the East Asian economy. The theory says that they are bringing our economy down so that we will not become a threat to them, and may be, they can start to buy our assets cheaply, and dominate our economic policies through institutions like the IMF.

This sounds more like a popular story to be told to the unknowing public. The truth of the matter is: nobody is large enough to affect the market. It is impossible for people to start gang up and agree to attack certain economy because of hidden agenda. Economically speaking, the theory is at best left to the coffee shops, because, no economic theory can confirm such accusations.

In fact, globally speaking, all countries would like to achieve stability and growth. East Asian presents a large market for their goods and products. Trade theory tells us that the more prosperous we become, the more prosperous they become, too. By virtue of trade, we are all better off, not worse off. Since East Asia presents more than 30% of exports from North America and Europe, they would never want to see this market to evaporate, because at the end of the day, all the goods that they produced must be consumed somewhere, and East Asia has been a market place that they started to depend on.

In my opinion, the conspiracy theory is nothing more like the childhood scare that we all used to experience. When our mothers want to scare us from going out at night, they say that there are some ghosts out there lurking at us at every corner and every tree; so better stay home and sleep early. Off course when we grow up, we know such ghosts never exist, but the whole things serve a purpose during the time: to keep us asleep!

### 3.6.4 Characteristics of East Asian Economic and Financial Crisis

So far I have discussed crisis in general without being more specific. The idea is to provide a broad understanding. Now I would like to go some specifics characteristics of the crisis, and how it evolves, which will be useful for the discussions in the next few chapters.

Let me start with few definitions:

**Economic crisis** - is crisis for the economy at large, usually in terms of non-functionality of major components of the economy, which will lead to negative

growth (i.e. contraction) of the economy.

**Financial crisis** - is crisis related to the financial system, either it is exchange rate mechanism, banking crisis, and other part of the financial system in an economy.

What I have argued so far is that East Asia starts with a financial crisis that eventually leads to an economic crisis. In order for us to understand how the various arguments that I have laid down earlier (weak fundamentals, runs, panics, etc), let us refine the discussion a little bit to look at what I would like to call as sub-crisis. Then we see how these sub-crisis works together to form a total financial crisis and lead to economic crisis.

Again, let us start with some definitions. There are six major type of sub-crisis in a financial crisis, they are:

1. Currency crisis crash of the foreign exchange rate.
2. Foreign debt crisis when debts repayments cannot be make by the borrower.
3. Asset market crisis crashes of asset markets, such as stock markets, real estate, and others.
4. Domestic debt crisis when domestic borrowers become insolvent to pay local banks.
5. Banking crisis insolvency of banks.
6. Corporate crisis when companies become insolvent.

Who are the players in the crisis: Central Bank, foreign banks, foreign investors, domestic corporations, domestic investors, domestic banks, and speculators. There are three markets where these agents interact: currency market, debt market, and asset market. The interactions are executed through the following instruments: currency (C), central banks foreign exchange reserve (FX), foreign debt (FD), foreign portfolio (FP), assets (A), cash available in the domestic banks and corporations or domestic liquidity (DL) which can be further divided into two parts: bank liquidity (BL) and corporate liquidity (CL), domestic portfolio (DP), and domestic debt (DD). Now I would like to put all these elements into a diagram to show how they interrelates to each other, in Figure 3.2 below:

Figure 3.2 The Market

insert figure 3.2

Notes: Above the horizontal line are the foreign players, where their concerns are pretty much on the currency, and the markets that they are involved in; and the domestic players are in the lower of half of the box. The central bank is right in the center (as their names implies), and they are overlooking all aspects: currency market, debt market, and asset market; they also supervise local banks, and in charge of the foreign exchange reserve as well as setting the local interest rates.

Foreign banks provided loans to the domestic players through the debt market, either they loaned their money directly to corporation, or being inter-mediated through the local banks (i.e. they are effectively lending to local banks, which in turn lend

to the corporations. Foreign investors go directly to the asset market. Local banks participate in the asset market through domestic investors.

Now with that framework in mind, we are ready to discuss about the financial crisis, and how each sub-crisis contributed to the whole financial crisis.

**3.6.4.1 Question 1: How a crisis can start in the individual sub-sector?** Currency crisis: Crisis occurs when the foreign exchange reserve is depleting, or assumed to be insufficient to meet any demand of funds outflow from the country; the origin of the demand can come from either because of debt market, or asset market or both. i.e.  $FD \downarrow FX$ , or  $FP \downarrow FX$ , or  $FD + FP \downarrow FX$

Foreign debt crisis: Crisis happens when the borrowers (either the companies or domestic banks or both) are assumed to be insolvent. The insolvency may happen because the borrowers cannot meet the demand by lenders because of lack of domestic liquidity; the lack liquidity in turns may be because of ballooning of the debt due to currency devaluation. i.e.  $FD \downarrow FX$  or  $FD \downarrow DL$

Asset market crisis: Crisis happens when the asset market crashes due to perceived over-valuation of the assets or because of lack of liquidity in the market (i.e. more sellers than takers). i.e.  $MV \downarrow AV$

Local debt crisis: Crisis happens when domestic corporations are no longer able to meet their borrowing obligations. i.e.  $DD \downarrow DL$

Banking crisis: when the banking liquidity is depleted. i.e.  $BL \downarrow 0$

Corporate crisis: when corporate liquidity is depleted. i.e.  $CL \downarrow 0$

**3.6.4.2 Question 2: How the sub-crisis interrelates to each other?** In theory the crisis can start in any sub-crisis without depending on the other sectors, when there exists severe imbalance that warrants a correction. But in the case of East Asian crisis, it starts with the currency crisis, so let us see and trace what will happen.

Figure 3.3 The Financial Crisis Diagram

Insert figure

Once a crisis started in one sector, it transmit in a very drastic manner into other sectors, and cause more sub-crisis to happen, until a full-scale financial crisis completes its sequence. The crisis then feed itself all over again and again: just like the amplifier example I have brought before. Financial crisis then caused the economy to slowdown, which then brings another set of problems: domestic liquidity, corporate insolvency, banking insolvency, and so on, which than feedback into the financial system, which may cause further deepening of the crisis, on and on. Now I hope you can realize why the crisis is so severe.

Before moving on to the next section, I would like to point out a few important points:

a. One thing that you can see from Figure 3.3 is that it is a messy one. Well that tells you most of the story, the crisis was messy and thats the reason why there was so much confusion during the unraveling of the events: you hear news about stock market crash, local banks unable to extend loans, corporate insolvency, and the currency keep on plunging, and so on. They are all interrelated and feed to each other.

b. Theoretically, the crisis can start anywhere in the box. For example, too much foreign debt with insufficient domestic liquidity can trigger a crisis (point 2); or stock market over-valuation can trigger another type of crisis (point 3); and so on. That's the problem with today's financial world, everything is interrelated, and no wonder why some say: it is a dangerous world out there. Well, danger or not, we must understand one thing, the whole system also makes us prosper in the first place. The danger is then not with the marketplace, the lack of understanding, ignorance of it is the source of any crisis.

c. The feedback system is so powerful and being amplified each time it comes through each crisis. Each point acts like an amplifier, a small movement in point 1, are magnified in point 2,3,4, and so on. All of them are fed again say from point 5 to point 2, point 6 to point 3, and so on. Finally all of them fed back to point 1, and cause a massive drop in the currency, and so on it goes all over again. Well, by now I think the point is understood.

**3.6.4.3 Necessary and Sufficient Conditions for Crisis to Occur.** One thing that we must realize the crisis cannot happen just because of it needs to happen, the weak economic fundamentals must be there in the first place. Weak fundamentals are the necessary conditions, as economists put it for a crisis to happen, but it is not sufficient. The sufficient condition happens when the fundamentals are so weak that caused a crisis in any sector to start off. What Theme I of East Asian crisis is saying then, the fundamentals of East Asian economies were Very Bad such that both the necessary and sufficient conditions were met. On the other hand what Theme II is saying the weakness of the East Asian economies were Bad, but not sufficient to warrant the crisis; the other factors (i.e. financial fragility) is the sufficient condition.

So now, let me summarize what happened in each of the five East Asian economies that we have looked before: Indonesia, Korea, Malaysia, Philippines and Thailand. What were the conditions on the onset of the crisis:

Table 3.6 The Necessary Conditions for Crisis

insert table

Thailand has all the five ailments, and worse still where FD exceeds FX by a very large amount. That's why the crisis started in Thailand, not other countries.

When the crisis started in Thailand, we can see that the market observes these other economies and the similarities, it started to get into other markets: market contagion. Let us see how these contagions work:

Table 3.7 The Sufficient Conditions for Crisis

Insert Table

One observation that I would like to make here is that, Malaysia is slightly different than the rest of the other economies in the sense that the crisis started with the asset market rather than the currency market. But market contagion, as I said earlier does not recognize the difference, especially during a panic situation: shoot first, identify the enemy later!

In summary, what we have in East Asia is generally, what I have explained earlier as the new generation currency crisis model, where the conflict of motives becomes unsustainable: to maintain fixed currency vs. the overwhelming outflow demands of funds from the country. This conclusion however with one notable exception: Malaysia. Somehow the motives here are less obvious because the necessary conditions are not that obvious, despite most analysis by many studies put Malaysia in the same basket with rest. Here I wish to differ a little bit from these studies, and that's why a special treatment on Malaysia is necessary (subject of Chapter 4).

**3.6.4.4 Amplifier Effects took over.** When both the necessary and sufficient conditions have been met, then something else took over: the Amplifier effects. When crisis in each sub-sector starts to feed each other, and cause further crisis which feeds back again into the system. Finally the whole thing feeds into the economic system as a whole, and an economic crisis occur. The weakening of the economy in turn feeds back into the financial system and may cause further crisis, and so on. We can see that Theme II may start as sufficient conditions, but eventually turns into a monster by itself, through the amplifier effects.

Comparison with Mexico Crisis (Tequila crisis)

In this section I just would like to make a quick comparison between the Latin American currency crises of 1994, with the Asian crisis of 1997. The reason being, many people say that East Asia are different from Latin America; well the truth is we share the same characteristics of necessary conditions for crisis to happen. Probably the only difference is in the sufficient conditions.

Latin American Crisis Tequila Crisis East Asian Crisis Asian Flu Necessary conditions on the onset of the crisis  $FD_{i,t}FX$   $FP_{i,t}FX$   $MV_{i,t}AV$   $DD$  less of a problem  $FD_{i,t}FX$   $FP$  less of a problem  $MV_{i,t}AV$   $DD_{i,t}DL$  Sufficient conditions Mexican Problems Tesobonos rollover Chiapas revolution Assassination of presidential candidate Thailand Problems Debt rollover and foreign exchange reserve depletion in Thailand.

The facts are clear that both group of economies have pretty much the same necessary conditions on the onset of the crisis. The difference is on the sufficient conditions. Please bear in mind that I am not blaming the crisis solely on Thailand, they are just the sufficient condition. As we can see the sufficient condition for crisis is not necessarily directly related to any financial instruments. Political instability can be another source.

### 3.7 Remedial Actions

Now that we have seen how the crisis happening, so the main issue left is: what are the possible remedial actions that we can take to reduce the crisis (since stopping the crisis is probably beyond our capacity). I would like to pre-warn the reader however, I am not prepared (at least in this writing) to offer solid and exact methods of possible actions. The reason being: the subject itself probably would require another book, and has to be done with a lot of research works, for which the time does not permit

yet. (If not the book might not even be published on time). With that in mind let us see what we can do.

Again, let us make reference to Figure 3.3 The Crisis Diagram. Obviously there is one thing that needs a very clear method of solving: How to stop the vicious loops (i.e. feed backs after another)? Next: How can we isolate each crisis from feeding to each other? Since we may not be able to stop all crisis from happening: we should prioritize which of the crisis to be tackled with utmost priority. Once we find some solutions we must ensure the that solution in one crisis does not feed into other crisis (i.e. consistency and coherency). And finally, we have to make sure that the solutions will minimize the possibility of the crisis to start again (i.e. sustainability).

### 3.7.1 First question: Can we stop the vicious loops?

My opinion is once is started, it is almost impossible. The only thing to do is to reduce the amplifier effects of the feedbacks. How this can be done: 1. Credible signal to the market 2. Communications with the players especially significant ones, and the ones that are under the governments direction: domestic banks, large domestic corporations, business leaders, etc. 3. If we can reduce the effect in one crisis, it may signal that the crisis should not be amplified; for example if we manage to get a quick workout scheme with foreign bankers in quick manner (like Mexico bailout by the United States is a good example). What happen in East Asia waspanic, runs, herding, self-fulfilling prophecies all are amplifier effects. The role of IMF in stopping this amplifier effect was minimal and for that matter, according to some critics, they are part of the problem as well.

### 3.7.2 Second question: Can we isolate the sub-crisis from feeding each other? Can we prioritize them?

My opinion: possibly, yes depending on the exact condition of the real situation. For example, we may prioritize and solve domestic liquidity if we can find a quick fix to that.

Should East Asian country defend the currency? My opinion: It is the worst decision to be made, given the position of foreign exchange reserve vs. the foreign debts, foreign portfolio overhangs in the economy. East Asia should not have the fixed currency regime in the first place. Only choice: Either to let the currency go, or adopt capital control.

Will bank mergers (as requested by the IMF) be a possible solution: My opinion: No! It was the wrong priority while the crisis was unraveling. We are defocusing people from the actual problem. Bank crisis is only one sub-crisis. Bank mergers cannot be done while other things are slipping down. One simple practical problem: how do you value each banks while their assets are deteriorating by the day.

Bank closures: Bank closures actually makes things worse, in the sense that it cause further panic, and even cause massive run even by the domestic players. If it needs to be done (say because of massive hemorrhaging) then it need to be done with care. Malaysia has a better way of managing it through softer words: merger.

High domestic interest rates to maintain the currency: The worse thing that happens. Because high interest rates cause massive problem on the domestic banks and corporations, the damage may cause the engine of the economy to even stop dead! As you will see later: high interest rate required to maintain the parity (in order to reduce the currency drop) is exorbitantly high. One possibility is to have a tiered interest rate, one for external accounts (i.e. foreign money), which is higher in order for them not to flow out and make up for the loss in currency value; one for domestic market, which is the normal rate. This can be accomplished say by the central bank paying high interest to these accounts via specified instruments, in order not to cause problem for the domestic banks to meet these interest payments. There are few possible mechanism that can be done in order not to create unnecessary distortions and possible arbitrage positions.

Calls for transparency, improvement of corporate governance and so on (by the IMF)? Not the priority at the time. It should be part of longer-term solution, but may not reduce the ongoing crisis.

Quick workout of foreign debt solutions: probably this one of the most important element that need to be done. The government must take strong and bold initiatives.

Quick workout of local debts solutions: this is another critical element that is very much within the hand of the government.

Stock market crash: to stop it is again foolish; but efforts can be used to reduce the problem. It is a question of confidence building. So the concentration should be on that. Insult, injuries, wrong actions by market players just make it worse. Quick workouts of the margin-financing problem may be required.

Circuit breakers for the stock market: We should have one. Even in my opinion, let the market remain close not only say for a day, even a week, or a month if necessary.

Capital control: It is a possible solution, but has to be implemented while the crisis is still ongoing, so that the objective of retaining capital inside the system is maximized.

In short: so much more are possible. The problem is we are not equipped to handle the crisis while it is on going. Many of these possible solutions needs detail workout programs. The story here is like fighting a fire, small buckets of water here and there may do the job! That's why I am calling everybody that we need serious efforts to study the crisis that has happened so that these possible tools become handy in the future.

### 3.8 Summary

After going through such rigorous discussion, I guess it is important for me to summarize the whole discussions in this chapter. To make it easier, I would like to put them in point forms as lessons learned:

**Lesson 1:** Economic theories are important in understanding what's going on in the financial world today. A sound economic understanding will help us to under-



stand the economic happenings around us, which may have direct bearings on our day-to-day activities.

**Lesson 2:** To assume that market fail, is a major assumption. Market inefficiency is more appropriate. In the case of East Asian crisis, market inefficiencies contributed to the severity more than justified by the fundamentals. (i.e. our true state of the economy may just be Bad, but what we have is a Severe Correction).

**Lesson 3:** There are many possible choice of currency regimes, but a choice of currency regime, limit some of the things that the government can do. Generally, fixed exchange regime of some sort, are bound to fail, and crisis may occur. The type of crisis that occurs of late are the second generation type of currency crisis, where motives of the government are in conflict, which eventually precipitate crisis.

**Lesson 4:** A combination of Theme I and II, (i.e. combination of East Asian economic fundamental weakness and market inefficiency) largely explain the crisis that has happened. Corrective measures must ensure that both themes are addressed, if an economic recovery is to happen.

**Lesson 5:** Key solution to many problems, over the longer haul is adoption of total free market reforms. Half way measures towards free market can be unsustainable. Proper and speedier reforms should have help us to avoid or reduce the crisis in the first place. This is an important lesson for East Asia. Lesson 6: To say that East Asia does not deserve a correction is rather a strong claim. The necessary conditions for economic corrections were present on the onset of the crisis. The only problem was, the manner how the correction happens that causes more damage than necessary.

**Lesson 7:** The financial system today is much more complicated and integrated, which causes crisis from sector transmitted into other sectors in an amazing speed. Therefore, proper system setup for safety measures must be developed, and it has to deal more with market structures that are more resilient to crisis. The awareness of how the market works is critical for all economic players, so that we are all more alert to any development of an imbalance. This include monitoring system that are up-to-date, and on timely basis.

**Lesson 8:** There are many possible remedial actions that, theoretically, can be taken during the crisis; however, the level of preparedness on our part in coming up with quick way of resolving things were quite low. That's why we need more people dedicated to the subject of the study of financial market, and how we can make them to be more resilient to crisis. This has to deal with having more people with economics background to come forward and study the matter.

The list above are not exhaustive, in fact you may play around with the models that I have presented, and may come out with other lessons as well. The objective is to provide readers and the public a more systematic way to understand the crisis from proper economic point of view. Now let use the framework that we have developed here to a specific application : Malaysian economic and financial crisis.



## CHAPTER 4

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# POST MORTEM ANALYSIS ON MALAYSIA

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As in any patient that went through a traumatic accident, what is needed is a post-mortem analysis. The same can be said for Malaysian economy; the crisis was traumatic in any measure and would require a through post mortem analysis on all economic fronts. This is necessary before we move on to the next two chapters, which will discuss about the future. The analysis will only cover Malaysia, since post crisis analysis on other tiger economies is beyond the scope and interest of this book. Furthermore, Malaysia has taken a radical approach (at least it seems to many people) in that we are not under the IMF program and has implemented capital control.

One important premise that I would like to highlights for the discussion in this chapter is that I would like to assume that we can look back into the history and ask various questions about the crisis and suggest possible explanations and solutions. While it may not be fair to criticize some actions of the past, because nothing much can be done to undo events of the past. The objective here is not about the past: it is about the future. If our economy is to recover, we must understand the past and attempt to correct them, because an economic recovery may happen only if necessary corrections are made. The benefit here will be two prong: one, to review the policies in the past and see if something can be done so that we can remove any obstacles for the economy to move again; two, we dont repeat the mistake of the past so that

in future, less likelihood of a repeat and will be more alert to avert future crisis of similar nature.

The first section of the chapter section of the chapter deals with a review of our economic growth of the last decade. This is a revisit of Chapter 1, albeit a different approach, where questions on what possibly wrong with our decade of economic growth. From here we move on to analyze the conditions on the onset of the financial crisis in Malaysia. Here we will lend ourselves to the materials that have been covered in Chapter 2 (for the facts and figures), and Chapter 3, for the theoretical basis. The next section deals with the Malaysian crisis, where I will go in depth on the financial crisis, using tools and materials that have been covered at length in Chapter 3. With that in mind, I hope the readers will go back and forth between this Chapter and the previous three chapters.

Many got confuse between the economic program and capital control. The question is can we do what we are doing now with our economy without capital control? Before we can answer that we have to understand a bit more about capital control in general, and in particular, the Malaysian version of capital control that was imposed on September 1st, 1998. Then we will look into the cost and benefit of the Malaysian capital control. Then we look at the economic impact of capital control. Can we achieve the same without capital control? This will be addressed in the final section of the chapter.

## **4.1 An Introspective to Our Economic Management for the last Decade**

### **4.1.1 What's Wrong with our Decade of Economic Growth (1988-1997)?**

Actually on the surface, nothing was wrong. We have done very well, and nobody can take it away from us. It is indeed a period of superb growth and unprecedented in our economic history. Malaysians has worked hard, toiled and labor to get where we were. All economic figures show the right indication that indeed the years of economic growth were real, nothing ambiguous or false about it.

We have achieved an economic growth, surprisingly with a low level of inflation. We have managed to attract foreign capital to invest in our manufacturing and services sector at a very substantial level. Furthermore, our growth, in a large degree arises out of our habits of high savings society. This savings (at a rate of about 40% of GDP, higher than most developed nations) were indeed a major source of our investments for to spur further growth of our economy.

With liberalization of our economy, we have benefited so much from it. KLSE has been tipped as a major emerging market, destination for many fund managers around the globe. Attraction to our currencies, due to much activities, has developed, and slowly, the markets for Ringgit derivatives has been developed, and gradually Ringgit Bond market is also developed. We also have developed KLOFFE, to push for more market efficiency by having options and futures market. Our banks has been ask to satisfy the CAMEL requirements, which is considered the most stringent in the region after Singapore and Hong Kong.

Our government has been running a fiscal budget that is very disciplined, where budget surplus is more of a norm than anomaly. With privatization program on full steam, there is no way for the government budget ever to go into deficit. Corporate taxes have been on declining rate, due to large tax revenue of the government, which allows the reduction, without reducing the total revenue. These are all good signs of the country's economic health. The list can go on and on.

Unfortunately, after the crisis, we begin to see that not all that is to naked eye to see. In fact, even a cautious eye may not see everything, because everything were going at fast pace, and it is impossible to see everything in the economy unless we are privileged to have a birds eye view, and trained with sufficient tools to understand the workings of the economy.

#### 4.1.2 The Tyranny of Numbers

I used the words tyranny of numbers to describe how numbers can be misleading. Prof. Alwyn Young used the title in describing how in fact casual look at numbers can lead us to wrong conclusions. There are actually two problems with numbers (or statistical data) that people use in economic analysis: One, the problem with data accuracy; and two, the problem with the interpretation of the data. I will discuss these two subjects below.

Data collection, at best is something that is new to our region. The statistics that we produce is not an exact science by itself. Yes, there are acceptable methodologies, but most of the statistics are generated as time series. Economic numbers generation is always a science of approximation. Since it is very hard to capture exact numbers, proxies are being used. How can you measure everybody's activity in an economy? Usually it takes months before actual number can be known, after series of adjustments. We can see clearly how does the forecast change during the crisis, a number of times, because, forecast are based on past data, and current data, if they are available. (A simple check on numbers produced by the Statistics Department, reports by Ministry of Finance, and Bank Negara on a single year, and compared from year to year reveals this continuous adjustments and differences). If not, the numbers will be estimated, to the nearest that we can think of. Well, if things are changing so fast, nobody will have a grasp of what numbers to use.

While we can't capture all numbers with certainty, certain numbers much easier to get a hold of more accurately. We can see interest rates and savings deposit, money supply, and bank lending trend very well because Bank Negara Malaysia kept a very good tab on it. Similarly we can see KLSE indexes and share prices, because those information are kept electronically. However, we do not see clearly for example the supply of properties in Klang valley. I have heard once a remark that if take all the existing office space in Kuala Lumpur, combined with the ones under construction, plus all the approved development of the similar, total office space in Kuala Lumpur would reach 40 million square meters!! That is about one tenth of the size of Singapore Island!

An old adage that if you beat the suspects hard enough they will start to tell the truth. While numbers, even though provide an approximate reality of the truth; still

they are useful to give us indications. But what is required is to make sure that we understand what leads to the other, and how all of them add up at the end. That is exactly what has been done in Chapter 1, where a slightly critical way and more inquisitive approach to the available data reveal to us some indication on how our economy was growing.

As we have shown before, clearly the Malaysian economy was growing, at least for the last few years prior to the crash on borrowed money. That is an influx of short-term funds drive up liquidity, cause massive flows into unproductive sectors of the economy. But why were there not enough warnings? We do have existing economic indicators like the CPI for inflation, producers index, FDI trends, savings and investments, and so on, but did we ever attempt to do a much more inquisition into this data? So that we may capture ahead, if any trends developing, and hopefully be useful for policy making?

Let us check a few items, and see if there is a need of further look into the indicators that we have, and why they might have failed to give us some warnings.

#### 4.1.3 Growth with Low Inflation, or is it Really?

Many times we were heralded for growing fast with low inflation. Again this is something to do with the tyranny of numbers. CPI, as measure of inflation is limited. Look at our CPI, how many items are of with price control? It is true that the effect on common consumer is small, but how about consumer at higher end?

Furthermore, low level of prices, allows more income to be saved or spent. Spending on non-CPI items is quite large. Especially those money went into two things: real estate and stock markets. Remember, money will have to show up somewhere. Even money being saved is channeled to the same thing, albeit through the banks via bank loans.

In 1990 President Clinton formed a special commission, called the Boskin Commission, to look at the US CPI data collection and formation. The commission found that indeed the reported CPI figures overstate the true level of inflation by a few percentage points. While in the US case it was an overstating problem, in my opinion our CPI suffers from an understating problem. Why? Because our CPI is formed based on two things: one a list of items to be included in the basket of goods, and two a weight is given for each items to form the final CPI figure. So two ways the CPI can change, one is price of a good, and two, if their relative weight in the basket change. Each country set their own basket, according to the socio-economic behavior (i.e. consumption habit) of the population at large.

If we look carefully in the case our CPI, a bulk majority of items in the basket are what we called controlled items, where the price is strictly controlled and monitored by the Ministry of Domestic and Consumer Affairs. In fact, effectively to a large degree CPI is under the management of the Ministry. Over the years, especially so in the last five years, we have seen so many times problems of food price increase, and various row between the Ministry and the suppliers over food price hike. All of that shows the strenuous pressure inflation has been on the price of goods.

One factor that is poorly covered in the CPI is price of services, and since they are not of control item, in fact price of services has gone up pretty high. Similarly, as argued before, CPI was never meant to measure price of assets and other goods, which in fact has gone up pretty much as well. So what is our actual effective inflation for the nation? Recall that in Chapter 1, I have presented some data on housing prices where the annual increase in some years even exceeds 18% (See Table 1.3), and the wage increase has been at an average of 10% per annum. These figures are just an indicative measure; the exact measure of prices of total assets, goods and services in the country is at best ambiguous. So far it is anybody's guess since we do not have any proper tools to measure the increase. [Note: The United States has implemented a much more rigorous tracking of the prices of goods, where the track price of consumer durables and consumer non-durable goods, plus housing prices, and prices of many type of services, which allows them to track things beyond just the CPI.]

So to laud that we have high growth with low inflation as something remarkable, is probably to speak to soon before all things are taken into consideration. The beauty about economics the basic economic principle is extremely simple. One of them is no free lunch principle. Essentially it meant that nothing is free, there is a price for everything, to gain the economic growth, one of the price that we have to pay is inflation.

#### 4.1.4 Consumption in the Guise of Investments

This is also another interesting items, in our national accounts, purchase of say of office properties is considered as investments, not consumption. But in reality it is a form of consumption, albeit through the use of the space and all accommodations that come along with it. Similarly, purchase of corporate jets are considered investments, even though it is clear that it is of no great importance for corporate bottom line improvements, so obviously a consumption. Some economists have raised this issue as one major pitfall in our calculations of investments in Asia. And off course Malaysia is no different than others.

So what is the actual level of investments net of consumption in our GDP figures? Again there is no hard data for us to look at. However, one way to have a quick indication is to look at our investments in what economists terms as in tradable and non-tradable. Examples of tradable are investments in say a manufacturing plants, and investment in non-tradable are investments in property or real estate. Tradable produce goods that can be used for exports or consumption, but non-tradable do not produce other things that are of trading value. One example that we can recall is the total loan provided to the tradable sector (i.e. manufacturing sector) compared to non-tradable sector (i.e. real estate, consumer financing, purchases of shares etc.) in Table 1.2; only 15% of the total loan extended in 1997 went to manufacturing and more than 60% of the total loans were extended to non-tradable sector. This provides some indication about the level of investments in such sector: it is rather low.

#### 4.1.5 Hidden Fiscal Deficit

On another score, Malaysia also has been praised for having a very sound fiscal management. The growth of government budget has been on a declining trend, while revenue is on the rise, resulting in fiscal surplus. There are two major factor that drive this fact: growing economy provides a higher tax revenue for the government, and massive privatization program. The first factor is obvious, since tax on a higher base will directly result in higher income, but the second factor is less ambiguous; what is the net impact of privatization on government expenditure?

In the report by the Economic Planning Unit, there are no less than 300 major privatization program that has already being implemented or in the pipeline. This does not include private sector driven projects like the Putrajaya, Multimedia Super Corridor or Cyberjaya, and others. What is not clear here is the hidden guarantees that exist in many of this projects. The fact remains however, that most of this project were undertaken that government will support and help, should the need arise.

There has been a number of examples where when the revenue projections of a privatized projects fails to materialize, then the government may have to step in to save the operations. An example of recent happening is the case of PLUS highway, when toll revenue needs to be increased, government is being called again to step in, either to increase the toll, or provide some subsidy. All of these are examples of contingent liabilities on the part of the government. So, in another words, even though we have a sound fiscal management on a direct level, indirectly however, there can be massive contingent liabilities that may come due on the government. This overhang factor is definitely not a small amount, and nobody can tell the exact number, without a detail study on the subject. All that we know there has been over 300 sizeable projects that have been privatized, most of them have some form of concession agreements with the government; and we do not know what are the kind of hidden guarantees in these agreements that may cause the government to step in at a certain time in the future.

#### 4.1.6 Productivity Slowdown

This issue was first brought to attention by Prof. Alwyn Young in two separate papers, the Tyranny of Numbers, and A tale of two cities: factor accumulation and technical change in Hong Kong and Singapore. Prof. Paul Krugman further amplified it in his controversial paper in the Foreign Affairs, titled The myth of Asias miracle. What all these papers say is that Asias growth has in fact being fueled by factor input rather than growth due to productivity. (Please refer the discussions in Chapter 3 on the subject)

Unfortunately, factor productivity, as measured by incremental in output ratio due to increase in capital or/and labor, is not something that can be measured using simple data. It requires the use of sophisticated statistical tools to unravel the true state of affair. Even then, the results are not without error, and hence make it much obscure to interpret.



Without sufficient data and techniques, we are left to look at productivity by casual observation. It is known among most of us that wage has been on the rise over the last many years, especially due to tight job market, especially at executive level positions. But, we become more and more worry about whether the pay is justified by the productivity of the employees. Similarly, we begin to see that investments are not providing as much return as they used to be. A good example would be investments say in office space: gross yield in 1996 has been at about 6% in central Kuala Lumpur, compared to about 8%, in 1993. All of these are anecdotal evidence of how factor productivity has been on a declining trend in Malaysia.

#### **4.1.7 Macroeconomic Imbalances**

The subject of macroeconomic imbalances that existed in our economy prior to the crisis has been addressed at length in Chapter 2 and 3. The subject is brought again here for the sake of clarity and completeness. It is obvious now that while we have been applauded with sound economic management, the problems have been creeping in. Not only does the economic indicators fails to warn us of impending crisis, combined with the socio-economic setting that has set in, we also has a number of major imbalances in our economic conditions. So when the crisis started, all combined produced the result of a somewhat confused management of the crisis.

As explained in Chapter 2, in 1996 Malaysia has persistent current account deficit (-4.89% of GDP); and our growth rate was slowing down (at 6.3% from 20.2% previously); while our short-term foreign debt was not alarming (at 50% of total foreign debt); the lending growth also has been at frenetic pace (average of 30%); while our short-term foreign debt to reserve ratio was still manageable at 40%). While all these numbers were not as severe as other countries, its still reflect the overall weakness of the economy, especially in the face of sudden loss of market confidence.

#### **4.1.8 Socio-Economic Factors**

Not all economic policies are in fact in numbers. Economic is a social science, not a pure science. Socio economic factors in fact are key determinant to economic behavior. Economic agents sets their expectation rationally based on certain set of beliefs about the future. So the setting of such expectation is important in determining the aggregate behavior of economic agents, which then results in the aggregate growth/decline of the economy.

#### **4.1.9 The Go-Go “Malaysia Boleh” Approach**

The leadership of the country, while we appreciate their boldness and futuristic vision, is not angel and never was God. They are as human as we all are. Vision 2020 does not talk about economic slumps in between. It talks about long-term prosperity of our nation. It helps us to think positive, and plan for the future.

A number of writers and commentaries have argued that years of economic growth in Asia has brought the public population a certain level of confidence that brings fur-

ther self-esteem. In turns this confidence, make entrepreneurs in Asia with a spirit of willing to dare. While these spirit are good confidence building, however, they feed into another kind of problem: excessive risk taking.

In fact towards 1997, we can see various type of proposals that were submitted to the government that are very ambitious in nature. The exact economics of such program wasnt clear, but definitely we dont lack creativity. Among the notable one that I can think of are: the Linear city project, the longest single building in Asia, build over the Klang river, through the city center of Kuala Lumpur; a land bridge from Melaka to Sumatra, crossing the Straits of Malacca. Suddenly we talk about the tallest in the world, the longest in the world, the most unique in the world and so on. While confidence breed risk taking, it can also push us into a point of irrationality and pure speculation.

This confidence and go-go attitude were promoted at the highest-level society, started with the political leadership, business leaders, bankers, entrepreneurs, and filter down right all the way to the common people. In fact it has been used as political campaign slogan by the ruling party o the rural Malays. All in all, it creates a sense of optimism, and after a while it breeds another thing: complacency.

#### 4.1.10 Complacency Sets In

When the government expect that economy is growing, and will continue its growth trends, business leaders, bankers and others plan their businesses and actions according to that believe, similarly even the young and new entrepreneurs do the same. It becomes a common believe that the economy will continue to grow. Has it ever being raised that the economy might one day slowed down? Alas, only a small warning were given by Dato Seri Anwar Ibrahim, in his 1996 budget speech, bringing the story of Prophet Yusuf (Joseph), that in fact business cycle is a phenomena that has existed for ages. Seven good years, followed by seven lean years. This message in fact was neglected and soon forgotten, in the view of otherwise a very good budget.

Human beings always like to speak only of good things and avoid discussion or even thinking about bad things. So it is by nature that nobody want to discuss gloomy forecast. What more, if you need to voice out your opinion publicly, it better be that you say all the praises rather than being doomed, by saying all the words that people may not want to hear. Especially if it looks like you are criticizing the ruling party. So everybody accept the fact that it is better to follow the trend, and try to reap as much benefit, while you can. All in all, we become a much more complacent society. In fact we are not the only one, even the foreigners, foreign companies, bankers, and even rating agencies fall into the same prey.

## 4.2 The Onset of Malaysian Financial Crisis

One may argue that as a whole the indicators such as productivity slowdown, hidden fiscal deficits, etc. are not enough to warrant a financial crisis. Furthermore, these issues are far from being the necessary conditions for any crisis to occur, and defi-

nitely not the sufficient conditions. What these issues indicate is just some potential flaws and weaknesses in the economy.

In order for us to see the necessary conditions for the crisis, we have to review the Malaysias economic indicators just on the onset of the financial crisis:

i. Current account: Recall from Table 2.1 that our current account in 1995 stood at deficit of 8.85% of GDP (NIA definition) or deficit of 8.43% of GDP (BOP definition). The current account deficits however declined in 1996 to 3.73% and 4.89% of GDP, respectively. One may argue that the current account deficit is unsustainable, especially since we have these deficits persistent since 1990; with some years the deficit even exceeds 14% of the GDP. If we take a quick calculation of the total accumulation of deficits over the years, it may well exceed RM 80 billion (See Chapter 1), which may well surpass our foreign exchange reserve on hand (See below). On its own, however current account deficit may not warrant a crisis, it just shows the level of indirect borrowing by Malaysia.

ii. Capital flows: Malaysia does receive substantial amount of capital flows into the country, especially into the stock market. The amount of inflows was especially large during 1993 to 1996. Total foreign debts accumulated by 1996 were at US22.2 billion (RM 56 billion), and out of that US11.2 billion (RM 28 billion) is in the form of short-term debt (See Table 2.4). A rough measure of the total portfolio investments by foreigners in the country conservatively stood at about RM 70 billion (See Table 1.1). Since the market has been on the rise, the value of their portfolio may be greater than RM70 billion.

iii. Foreign exchange reserve in the Bank Negara Malaysia at the end of 1996 was at RM 70 billion. So if we look at short-term foreign debt of RM 28 billion, it is lower than our foreign exchange reserve. The ratio of foreign-short-term debt to reserve stood at 40%. (i.e.  $FD_i/FX$ ). However, if we look at the foreign portfolio in the country, the number may exceed foreign exchange reserve by some degree. (i.e. more than RM 70 billion total compared to foreign exchange reserve of RM70 billion; i.e.  $FP_i/FX$ ). If we combine both the short-term foreign debt and foreign portfolio holdings, RM 28 billion + RM 70 billion or more, we have a total of more than RM98 billion, which then exceeds reserves available (i.e.  $FD + FP_i > FX$ ). The ratio of potential outflow demand vs. foreign exchange reserve now stood at 1.40; we would be unable to meet all these demands if they come due.

iv. Excessive lending: As I have argued in Chapter 1, the lending to asset market sector (i.e. stock market and property) has been on the rise. In 1997 the percentage of loans to broad property sector and shares financing stood at RM 139 billion (33% of total loans outstanding) and RM 39 billion (9.2% of total loans outstanding) from a total loans outstanding of RM 421 billion. How serious these figures in terms of causing or igniting crisis in the property or shares market, is very hard to tell.

v. Stock market prices in 1996: The stock market indicators may show signs of over-valuation in 1996. The KLSE composite index was at 1237 mark at the end of 1996, the market capitalization of KLSE stood at RM 806 billion, and the market capitalization over GDP ratio stood at 2.5 times, and the average P/E ratio was at xx times. Obviously, from the market capitalization measure, the KLSE represents

large amount of liquidity in the country. If we compare market capitalization to total deposits in the banking system, the market capitalization is twice the size of total deposits and 2.4 times the broad money supply indicator, M3. All these ratios indicate one possible problem: market over-valuation (i.e.  $MV \gg AV$ ). Potential crisis in the stock market was high. vi. Property prices: I do not have readily available data to comment on this, but by casual looks and personal knowledge, it can be generally agreed that property prices were high. One thing for sure was the amount extended by the banks to property sector was beginning to be unsustainable.

vii. Fiscal management problem: the country does have a fiscal management problem since the government has been running pretty much a balanced budget. So we cannot see any reason for a currency crisis of the first type: canonical model.

As we can see from the above facts, we can conclude that there were two major problems hanging on Malaysian economy on the onset of the crisis:

1. Total foreign short-term foreign debt and foreign portfolio overhangs in the economy exceeds our foreign exchange reserve by a ratio of 1.40 or more (which puts us very close to Thailand, which has almost similar ratio).
2. We may have an over-valued stock market, which is vulnerable to crashes. Especially with foreign portfolio having a significant share of the market. (My estimate foreign portfolio is holding about 10 to 15% of the market).

In summary: Malaysia has some of the characteristics of Theme I (weakness of fundamental) type crisis, but the severity of the condition itself may not warrant a crisis to happen (i.e. we have some of the necessary conditions). The sufficient condition to start the crisis was not there until the Thai Baht crisis begun.

#### 4.2.1 Contagion, Panic and Herding

In my opinion, the crisis in Malaysia started more with the contagion effects. Starting with Thailand being hit, the market saw the similarities between Malaysia and Thailand. These similarities however are not as exact, in particular Malaysia does not have large short-terms foreign debt that are due for immediate repayment. In fact, on record, there was not a single notable case of Malaysian companies went into default due to incapability of foreign debt repayments. But the market viewed other factors especially the stock markets and property markets are vulnerable. Furthermore, when Baht devalue, Ringgit parity with Baht should be maintained since Thailand and Malaysia are neighbors and have similar export structure with Malaysia. To guide our discussion in the next few paragraphs, the following chart on KLSE, US dollar vs. Ringgit, and M3, and a table presenting the balance of payments and other indicators on the funds flow in 1997, will be helpful.

Figure 4.1

KLSE Composite Index, KLSE market capitalization, M3, and US/RM exchange rate from December 1996 to December 1997

insert figure

Table 4.1

Balance of Payments for 1997 and other indicators

Source: Bank Negara Malaysia reports and bulletins

insert table

Up to June 1997, the contagion issue was not serious until the pressure on Ringgit devaluation mounting in the month of July 1997; with the fears of Ringgit devaluation starts to creep in among foreign investors, the KLSE was seen as overvalued (at least in US dollar terms), and since it is the most liquid investments, sell-off of shares on KLSE by foreigners begun. Thus far, I would call these sell-offs as moderate, resulting in a drop of the KLCI by the end of July 1997 from 1077 to 1012, and Ringgit drops to 2.63 per US dollar. By then Thai Baht has gone into a full spin and get devalued by 20% to 28.80 per US dollar. Seeing the calamity in Thailand, foreign portfolio managers and local investors alike start to flee the market: in another words, panic and herding. So, the next thing that happens KLSE drop in August by a larger amount, where KLCI sheds off 208 points from 1012 to 804. The total loss in terms of value by end of August was at RM162 billion within a month. (Refer to Figure4.1)

The foreigners start to convert Ringgit into foreign currency, which then cause a massive drain on our foreign exchange: Ringgit drops further to RM2.96 per US dollar. Were there any speculators on Ringgit or how much short selling on KLSE shares were done during the period? So far with the data available, it is very hard to tell. But one thing that I know during the time: the offshore Ringgit market was very active, and rumors about KLSE shares short selling were numerous. We will come to this subject later. With the loss of RM162 billion in the share market (at least in value), it began to pressure the domestic liquidity situation, money becomes tight and interest rates start to rise from 9.20% at the beginning of the year to 9.61%. While the rise is not that worrying, it shows some signs of strain.

When the market is falling, the collateral value of most share financing is dropping. To meet the requirements of the margin financing requirements the borrower must either top up with cash or more shares. Since there is not enough money and shares available, due to dropping prices, the borrower fails to top up the margin call. The broker then executes force selling of the shares. Force selling push down the prices further, and hence more and larger margin calls be made, and so on it goes. The broker do not want to wait to force sell later because as the price is going downward, the longer they wait, the less they recover, so might as well sell now. If stock is being carried on margin by a few brokers, the race will be among the brokers, who will get the most first. At the end everybody gets lesser than what they are after, at the end the value will be lost.

So the question is, in the case of our stock market: the drop was by foreigners dumping the share or is it much by our own action? I can think of few counters that have large foreign ownership, but by and large the rest has little or none foreign

ownership. A good sample of these stocks are the Second Board counters, very few Second Board companies has foreign shareholders in their shares. So out of the total drop in the KLSE, how much was attributed to sell off by foreigners, and how much by our own domestic factors? We can have a gauge at this by looking at the total portfolio funds that flow out in 1997 (see Table 4.1), which was RM 28 billion, compared to the total market turnover in 1997 of RM 300 billion. If we use this measure (which is quite conservative anyway) our own selling amounts to more than RM 250 billion, which is far worse than the foreigners!

#### 4.2.2 End of 1997

October and November 1997: KLSE plunge, KLCI went from 814 to 664 in October, and from 664 to 545 in November; the total loss of value by November in terms market capitalization from July 1997 was at a staggering figure of RM260 billion. This cause massive negative wealth effects on the domestic economy. The Ringgit pretty much follow suit the behavior of the stock market, where it went down to RM3.50 per US dollar.

What we can see happening during the second half of 1997 is a crisis in stock market (i.e. asset market) transmitted into the Ringgit crisis. With the large negative wealth effects on the domestic financial institutions, it breeds the other crisis: namely, the domestic debt crisis, corporate liquidity crisis, and finally banking liquidity crisis as well.

#### 4.2.3 The Year 1998

We'll start with the chart and Table for 1998:

Figure 4.2

KLSE Composite Index, KLSE market capitalization, M3, and US/RM exchange rate from December 1996 to December 1998

Table 4.2 Balance of Payments for 1997 and 1998, and other indicators Source: Bank Negara Malaysia reports and bulletins 1997-1998 Changes

Insert table

When we enter the market in January 1998, the slide continues where Ringgit reaches the lowest point ever at RM4.545 per US dollar. The KLSE was pretty much leveled then. However, a sudden spike upwards happened in February, where KLCI moves upwards to 745 from the low of 569 ( a gain of 176 points) and Ringgit recovered back to RM3.675 to US dollar. This trend remains until March 1998, then suddenly another crisis start to roll in again, until the month of September 1998.

During the period from March to September 1998, we have seen the worse in the Malaysian economic history: Ringgit dropped all the way to the low of RM4.22 per US dollar, even with rumors ripe in the market that it may go even all the way to

RM5.00 per US dollar. KLCI dips to the lowest ever point of 302 in the month of August 1998. It was a major disaster.

What seems to be going on? Let us try to analyze one by one, a number of issues:

Was there a large sell off of KLSE shares by the foreign investors to cause the drop in KLSE and Ringgit? If we look at Table 4.2, it is quite surprising that in 1998, the total outflow of portfolio investments was only RM 2 billion, therefore it is quite conclusive (at least based on this fact) that they were no longer a player in the market.

What was happening to Ringgit then? There was a massive outflow of short-term capital in 1998 amounting to RM37 billion, which can be a major cause for concern. But if we look at the total balance of payments position it should not be a worrying factor since we began to show a large surplus on our merchandise (trade) balance due to Ringgit depreciation (an amount RM70 billion). All in all, these effects should cancel out. So where else is the problem? This is where I would like to hypothesize that the Ringgit drop in 1998 was mainly due to speculative bouts. Without sufficient data is rather hard to prove this point, but I'll try anyway. This subject will be dealt with in the next section.

### 4.3 The Malaysian Financial Crisis

In this section, I would like to summarize the events using the diagram that was developed in Chapter 3 (Figure 3.3, the financial crisis diagram). Let us redraw this diagram for Malaysia:

Figure 4.3 The Malaysian Financial Crisis diagram

insert figure

Just to recap the discussion in previous section (and to clarify the diagram in Figure 4.3) : the Malaysian crisis was triggered by the contagion effect from the Thai Baht devaluation in July 1997. The contagion hit both at the stock market and the Ringgit. The amplifier effect then took place: with a run by foreign investors on the KLSE, panics start to come in, local investors join the bandwagon, margin calls by the brokers and bankers starts to come in, force selling were in effects, KLSE drops further. By August till December 1997: we have all of the amplifier effects works on the KLSE. At the same time run on Ringgit went along hand in hand with the drop in KLSE (see figure 4.2 & 4.3). The same thing continues all the way into 1998 until the month of September. By then, we have the domestic debt crisis, corporate crisis, and bank crisis already well in place. (By now, I hope the readers can imagine the speed of these feedback processes: it is so fast!)

What we have then, not only Theme I type crisis (which I argue earlier, may not be that severe for Malaysia, so we should have only Bad true state of economy and Moderate Corrections as the case), but we have Theme II type of crisis working in full force. That's why the crisis is much severe than warranted. But, do we have Theme III type of crisis as well (i.e. currency speculators)? There are two candidates for speculators on Ringgit, namely the hedge funds, and offshore Ringgit market.

### 4.3.1 How Large was the Hedge Funds on Ringgit?

Hedge funds was named by Dato Seri Dr. Mahathir Mohamad as the suspect in the attack on Ringgit as the currency speculators, whom one its visible leader was specifically mentioned, George Soros. As we have presented in Chapter 3, hedge funds by virtue of their capabilities are monstrous and can affect a currency market, especially for a country of the Malaysian size. But do they cause the Ringgit to plunge during the crisis?

In a new study by Professors Brown, Goetzmann, and Park reveals a very intriguing results; hedge funds (at least for the one listed in Table 3.3) has nothing to do with the drop in Ringgit, during the second half of 1997. In fact when Ringgit was dropping during the period, these hedge funds has almost zero position on Ringgit! The truth is that they have pretty much closed their position in June 1997, that was prior to the crisis and came back into the market in August to October 1997, only to buy Ringgit (rather than selling them). In fact they have been a factor to slow the fall rather hasten it. The study also shows that during the period, most of the hedge funds were losing money rather than profiting, which implies that if they make so much money from East Asian currencies, it would appear on their bottom line! In short, the story of hedge funds as villains is nothing more than just likes the childhood scare that I have explained in Chapter 3.

Since they are not the culprits, who else is then?

### 4.3.2 The Offshore Ringgit Market

The center for the offshore Ringgit market is in Singapore, and they have at their disposal three types of instruments: Ringgit deposit in Singapore banks; holding of Ringgit bonds and other financial instruments; and the Malaysian shares via CLOB system. It is estimated that in during January to August 1997, there was an average of about RM115 billion transactions in the Ringgit spot and swap market in Singapore. There are about 172,000 investors in 112 Malaysian companies in CLOB, with the shares worth more than RM10 billion. This was large enough to make an impact since speculative activities are done with leverage in place, where say shares worth RM1 billion can be leveraged 5 to 10 times, depending on lender to create a transaction of RM 5 to 10 billion size.

Let say if we assume that the total Ringgit assets in Singapore in 1998 were worth say in the range of RM 20 billion, and out of that half were at the disposal of speculators, then we may have an activity of RM 50 to RM 100 billion. That is sizeable and can affect the Ringgit in a very significant manner. But the truth is, do they have that much? My guess is the real figure is much lesser than that, probably the total assets were slightly lesser than RM20 billion range, and out of that only a small portion is available to the speculators; unless the assets were made available from onshore (i.e. from Malaysia), which is again something that I do not have any facts or figures to support.

So let us not put the blame on the Ringgit offshore market, unless the claim can be justified. Anyway, whats the problem with the existence of Ringgit offshore market



in normal conditions? In general, this offshore Ringgit market adds to the depth of our financial system. In fact over the years we have been enjoying the facilities provided by Singapore. CLOB provide a much bigger participation in our stock markets by Singaporean and other investors invested via Singapore. Ringgit financial instruments provided us with more active market for our bonds, create demand for offshore overnight Ringgit deposit, and all of these helps develop hedging and other derivative instruments for Ringgit.

But of course, as any efficient market would expect, offshore Ringgit market provide rooms for arbitrage trading. If there exist major differential, say in the overnight interest rate between offshore and onshore markets, you can bet that somebody would take advantage of that by arbitraging. Arbitrageurs as an operator, under normal circumstances, make market to be efficient in the sense that they will force the market differentials to be leveled. (And hence no chance of making arbitrage profit). In short existence of offshore Ringgit market was not bad after all, for all these years except when the crisis happen. Due to massive imbalances, Malaysia want to implement certain policy on interest rates, the market expected otherwise, and hence cause major differential between rates onshore and rates offshore. This allows arbitrageurs to come in and profit from it. This cause major headaches to our policy makers, since in no way we can control the offshore Ringgit market.

#### **4.3.3 Bank Negara Intervention to Protect the Ringgit**

As its duty to protect the economic system of the country, this job of protecting Ringgit is in the hand of Bank Negara Malaysia. So with severe downward pressure on Ringgit, after the fall of Thai Baht, the natural thing to do was to defend the Ringgit. This effort however was short-lived, because it became obvious that the problems are bigger than what it seems. This is not a daily program of Bank Negara in Ringgit stabilization. We are lucky that Bank Negara only spent about RM1.1 billion of its reserve to protect Ringgit. After the painful 1994 experience of forex losses at Bank Negara, it has been learnt that forex market is not something that Bank Negara should be in the business of.

During July to September 1997 period, in fact we have enough reserve to make all the foreign fund (i.e. external accounts as defined by our system) outflow requirements. The reserve also suffices to cover 6 months of imports, and of course our exports are not dead and thus contribute to our reserve as well. So on the balance, we shouldn't be concern too much.

In my opinion, it was indeed the right policy not to defend Ringgit, because that is exactly what speculators want. If we announce say, we will use certain amount of our reserve to protect Ringgit, and then it will not deter the speculators much. Because the size of our reserve will not be sufficient to fight the resource at the hands of hedge funds combined. Furthermore, this game played by the hedge funds, is a zero sum game, somebody's gain is somebody else's loss, except that if nobody take the other side of the game. By declaring that BNM is not in the game, will just throw the speculators away, since not much they can gain without a player with sufficient resources on the other side.

Thailand in fact did try to protect Thai Baht, and indeed they lose all of what they spent. There is no way they can play the game, when the cards are all stacked against them. Only a fool will enter such game.

#### 4.3.4 High Level of Interest Rate to Manage Ringgit

Since we cannot defend the Ringgit in the foreign exchange market, then what policy do we have to stem the outflow of Ringgit? The only policy (beside other drastic measures like capital control) was the local interest rate policy. In standard economic model, exchange rate parity can be achieved if the return on a currency (i.e. measured by interest rate) is high enough to offset any drop in that currency (this is what is called as interest rate parity). Under such case, then foreign money will have less incentive to flow out since the loss in value is compensated with returns in local interest rate.

The question is how much should the rise in interest rate be? In case of Malaysia, we have raised interest rate only a little bit compared to the required interest rate rise. Look at the interest rate in Malaysia (prepare a Table) compared to say US dollar in the Table below.

Table 4.3 Interest rate and Ringgit/US dollar exchange rate

insert table

Using a simple calculation of interest rate parity, as shown in Table 4.1, require us to raise our short term interest rate up to 40% level in order for us to maintain say RM 2.55 per dollar exchange rate. This is a back of envelope type calculation, off course in reality it would not be the same. However this simple exercise shows what is required for us to maintain the same level of exchange rate of say RM2.55, we need to increase the interest rate substantially. Instead, as we can see we have been maintaining a very low interest rate.

Again we fall in the same trap as Mexico, not doing enough to convince the market. Why? Because interest rate policy has two sides to it: While it may help to stem outflow of money, it is prohibitively expensive for the local business. Given that the level of corporate debt in Malaysia is pretty high, high level interest rates will force many companies to coffer up large amount of cash to make interest payments and force many companies into bankruptcies.

But was it bad for having high interest rate after all? Maybe we can find some other solutions, like temporary or standstill arrangements with the banks not to foreclose companies or have some tier of interest rates. Government may in fact help by offering higher rates on some government papers to meet the requirements of banks to payout these high rates, or some other stopgap measures. Anyway, the policy will be of a temporary measure until some level of calmness and stability of Ringgit achieved. In fact the measure was temporary as announced by Dato Seri Anwar Ibrahim.

In fact, again from hindsight, the high interest rate policy should last only for about six to twelve months as in the case of Indonesia and Korea. It is undoubtedly still costly affair, but would the cost be as much compared to the loss in Ringgit?

Or may be we should let the Ringgit go to a certain level, and choose an interest rate that sufficiently met that objectives. Anyway, devaluation is not bad at all, if we know how to use them.

#### 4.3.5 What's Wrong with Devaluation, Anyway?

In fact economic theories suggest that devaluation is not a bad thing after all, if things are all right. Devaluation will make our exports more competitive, and will reduce our urge to import. It undoubtedly makes some goods that we cannot find local substitute for, becomes more expensive. But our export will translate into higher Ringgit earnings. So all in all things could balance out.

Actually devaluation helps us in the sense that it bring down our current account deficit and turn it into surplus, our trade balance should improve, and also since other currencies devalued, it will bring Ringgit to be at parity with the rest of other currencies in order not to lose our competitiveness. In another word, devaluation is not all evil, there are some virtues in it.

#### 4.3.6 Could the KLSE Collapse be Prevented?

Dato Seri Dr. Mahathir announces setting up of RM60 billion fund to support the stock market. Should it continue, is it wise, especially using public funds? Whereas similar efforts by Hong Kong Monetary Authority to support Hong Kong stock market did reasonably well. The difference with Hong Kong is they have a currency board regime for Hong Kong dollar. One thing that we have to understand, in their case, they have only tow things to contend with: local assets and banking system, but not in their currency.( They have, at least theoretically, dollar for dollar reserve for every Hong Kong dollar that was issued).

Can we prevent our stock market from collapsing? The answer is we cannot stop the drop, but we can reduce the damage by causing the drop to be much lesser than what has happened. (Recall that our KLCI dropped all the way from 1200 level to 550!) When the foreigners are selling, then the market will drop. But it wont be as bad if we ourselves dont sell. Again, the issue here is about panic. We panic and force sell, especially the bankers and stockbrokers. Let say if we all hold on and let the foreigners sell, and let it go down, let them loose much on their shares since no takers until it goes down to sufficiently low level, then only we start buying. The turnover during the second half of 1997 ranges between RM 150 billion to RM 180 billion, out which cause so much damage to many investors.

There were some suggestions to implement a system of circuit breaker similar to the one in the New York Stock Exchange. It is probably a wise idea, but was never pursued rigorously. In actuality, there are few types of circuit breakers that can be implemented, one is what is called as trading limit, which can be implemented on individual stocks when the up or down movement exceeds a certain percentage. This

is a very narrow type of circuit breaker. The exchange wide circuit breaker is in the form of trading halt, whereby the trading is suspended for a few hours or a few days, which will automatically be implemented should the market wide movements are so wide (which usually applicable when a crash occur). The third type is a much more radical one: market suspension, that is the whole market is suspended for a few weeks, or even months. There is no history of this type of rule in the recent economic history, we have to go back to the 1929 crash of the New York Stock Exchange, when the exchange was closed for more than two months. What we have in KLSE is only a variation of limit up circuit breaker, but not the other types.

Given the market volatility of today's financial world, probably it is wise to have the other rule also being put in place. Should we have these rules beforehand, it would be handy during the crash of 1997 and 1998. During that time, I even suggested verbally to, then the Finance Minister, Dato Seri Anwar Ibrahim, for closing the KLSE for a few months, during the midst of the 1997 crash. His answer to me then, it would cause market confidence. In hindsight, I think we should have gone ahead do something drastic like that, for two reasons: One, we need to stop the damage, and quickly assemble all the brokers and bankers to avoid the panic of forced selling and margin calls. Two: as it is quite evident now that the fall of Ringgit and KLSE was very much related, closing KLSE will allow us to focus on Ringgit. In another word, we stop one type of crisis (as shown in Figure 4.3) in the stock, in order to give us time to sort out others.

#### **4.3.7 Could the Money Supply be Increased without Hurting Ringgit?**

On the onset of the crisis, the Malaysian banking system, has an amount of statutory reserve of about RM 60 billion. The reserve was accumulated over the years when the economy was expanding by the Bank Negara Policy of increasing the statutory reserve ratio (SRR) from 4% in 1989 to 13.5% in 1997. In February 1998, Bank Negara reduces the SRR to 10%, which releases about RM 14 billion Ringgit into the system. The impact of such move however was minimal, it only helps in the immediate liquidity needs of the banks. What is needed if any measures to be implemented is a much more drastic pumping of money supply into the system, which can be done by a variety of other methods through creation of other instruments such as issuing sovereign bonds to foreigners and non-residents. However, during the crisis, these options were pretty much limited.

Theoretically speaking, the depreciation in Ringgit should allow us to increase the monetary base significantly without affecting the Ringgit any much more. The level of money supply increase in our case can be justified given that the Ringgit has depreciate by more than 50%. Increase in money supply may help us to improve our liquidity and provide the needed boost to bring back the center of the economic system to function: the banking system.

#### 4.3.8 Policies to Gain Market Confidence

Often in economic policy announcements, it is more about communicating to the market your intent rather than the actual actions that eventually are taken. Furthermore, as in the case of Mexico and currency crisis of the past, the problem is not with the signal to the market that you are seriously addressing the problem; but usually the message is not enough.

In the case of Mexico, the Government announces the devaluation of the Mexican Peso at 15%. The problem is that the market perceives that is not enough, so eventually the Peso tumbles by more than 30%. Similarly, not that we don't make announcements of some policy to gain market confidence, but our somewhat lack of seriousness brings more lack of confidence.

In the case of our situation, Dato Seri Anwar did announce cancellation and deferment of mega projects on a number of occasions (for example during the parliamentary hearing in November 1997) however, this was reversed by Dato Seri Dr. Mahathir later on. Eventually, Dr. Mahathir conceded that in fact they have to be cancelled. Again, if we just make the announcements of deferment or cancellation, in a massive way, does it hurt us? In fact in hindsight, those announcements show our resolve and determination. And later on, as we sort out all issues we can resurrect the project back.

In fact, announcement then would bring more confidence, and should we resurrect back later, after we sort out our problems, will as well bring more confidence. A halfhearted measure and announcements will not bring half the results, it just shows our lack of seriousness.

#### 4.3.9 Conspiracy of the West?

Is the whole crisis a conspiracy by the West? This is one item that is very popular in our local press sometime ago. This is what I called as the popular version of explanation of economic events. The truth is conspiracy theory is their easiest way to scare the common people, because you can never prove it (and not expect to anyway), and it is easily believed. Furthermore, you have the picture of Michel Camdessus, Managing Director of IMF, standing with crossed hand overlooking bowed down and humiliated President Suharto, the President of a proud nation. What more to tell, other than to repeat stories of how colonization was done to our region by the European powers. It strikes well among the public, that the economic crisis indeed is grand scheme by the Western powers to take over our nation, albeit, through economic deprivation. And the IMF is the agent for these powers.

The truth to the matter is the whole thing is nothing more like the childhood scare that I said before. Anyhow, let us ask the question should we get the IMF involved?

#### 4.3.10 Should the IMF be Called?

Finally, after all the events has taken place, Ringgit drop to the level of RM4.20 per US dollar, and the KLCI has dropped to 550 level, apparently, as some people say it,

we have two school of thought that sees how to save the Malaysian economy. One is lead by Dato Seri Anwar through the Ministry of Finance and Bank Negara (until his dismissal and resignation of Bank Negara Governor, Tan Sri Ahmad Mohd Don), and the other one is headed by Dato Seri Dr. Mahathir Mohamad and Tun Daim Zainuddin, Special Functions Minister, who was in charge of National Economic Action Executive Council (NEAEC).

The question is are the so-called approaches were radically different? Again we use our hindsight to look at both and the answer is: there is not much differences exist. In fact the eventual prescriptions are the same, the only thing that I can conclude: it is more of a political move rather than any economic substance; at least until the imposition of capital control. Even after imposition of the capital control, what has been done in reality is radically different compared to the other countries under IMF supervision, with the only difference that Ringgit has no longer value except in Malaysia.

In my view, it is wrong to accuse Dato Seri Anwar as an agent of the IMF, since what he was proposing in reality was to avoid IMF rescue scheme. In fact, realizing the foreign debt position in the country is not as much and well covered by our reserve, Dato Seri Anwar didnt see the need of us to call IMF for help. What we engage in at that time was consultation with the IMF on technical assistance.

The high interest rate policy was a market-oriented policy, not necessarily IMF imposed policy (in fact the interest rate increase was meager compared to other countries), and other policies that was initiated by Dato Seri Anwar such as bank mergers is in fact being pursued until today. Perhaps the only policy that was a little bit of timing by Dato Seri Anwar was to classify Non-Performing loans from six months to a three months period. This policy undoubtedly escalates the panic as I was suggesting earlier. While the intent was correct, that is to get deeper into the banking system, to ensure earlier warning of asset deterioration, it was implemented when the crisis has already emerged.

Beside the political rhetoric by some quarters, very few economists see that in fact what Dato Seri Anwar did was far different from what is needed in our economy. The question of Dato Seri Anwar as carrying the IMF banner is irrelevant. In fact, Dato Seri Anwar (and Dr. Mahathir, as well) should be criticized for not making strong enough and bold enough measures during the crisis to reduce the damage done.

Well all of this is relevant, until Dato Seri Anwar was dismissed, Dato Seri Dr. Mahathir appointed himself as the Finance Minister, and capital control was imposed on September 1st, 1998. It is the a different ballgame altogether. This is the discussion in the next section.

#### **4.4 Capital Control**

Before we can go deeper to discuss on capital control, we need to pause here first to understand the Malaysian capital control as it was implemented, since not all capital control are the same. So lets understand the basic first.

#### 4.4.1 Before Capital Control

Malaysia has adopted to Article VIII of the IMF agreement in November 1968. Ringgit was floated in 1973, and gradual rounds of foreign exchange liberalization throughout the years. In 1994, due to massive inflow of short-term funds, Malaysia introduce temporary controls of inflow by establishing vostro accounts, and impose limitations of purchase by non-residents instruments of one year or less maturity. The purpose was to stem inflow of short-term money. These measures lasted from January to August 1994.

Under the liberalized system, cross-border transaction in Ringgit has developed, and in fact as explained before, an active offshore market in Ringgit also developed. All type of portfolio capital inflow and outflow by non-residents were unrestricted, and inward FDI were encouraged. There was no limitation imposed on repatriation of profits and dividends by non-residents. Outward FDI flows were not restricted as well.

One major policy which really help was the limitation imposed on borrowing by residents in non-Ringgit (i.e. offshore borrowing), which are allowed case-by-case basis, and require foreign exchange income generation to support such borrowings. That is the reason why Malaysia didnt has as large as foreign debt, compared to other countries like Thailand, Korea and Indonesia. These other countries have indeed open up this sector as well, and cause massive build up of foreign debt prior to the crisis. The Malaysian objective fits well into the policy of building up the Ringgit bond or debt market, which will then reduce the need of foreign currency denominated debts.

At the same time, foreign exchange liberalization was accompanied by further efforts to strengthening the local banking system, through the introduction of CAMEL requirements, more stringent banking supervision, and stronger legal framework, through the enactment of BAFIA (Banking and Financial Institutions Act) in 1989. The Securities Commission was also established in 1993, to supervise the development of the capital market.

That was before the crash of 1997. As the crisis were unraveling, pressure from offshore Ringgit market, as described in previous section, was mounting, and a series of control measures were introduced even prior to the full capital control in September 1998. In August 1997, two control measures were imposed, one is to limits swap transactions, and the other one, to put a ban on short selling of KLSE listed securities. However, the pressure is much more than can be contained by this small measures, so the call for wide ranging capital control was made.

#### 4.4.2 Capital Control on September 1st, 1998

So on September 1st, 1998, the Government announces that a full measure capital control covering mainly two areas: i. Offshore Ringgit Market transactions: by requiring all Ringgit offshore to be repatriated (including currencies and deposits offshore); restricting all movements of Ringgit in and out of the country; prohibition from granting/obtaining facilities in Ringgit to/from non-residents; settlement of all

imports/exports must be in foreign currency; and limit purchases of Ringgit assets (i.e. bond and shares etc.) only through authorized depository institutions.

ii. Portfolio Investments: restrict conversion of Ringgit held in external accounts into foreign currency; imposed a 12 month waiting period for conversion of Ringgit proceeds from sale of assets, excluding FDI flows; and require residents to obtain approval for investments abroad.

Both dimension of capital control effectively accomplish the following: i. Elimination of offshore Ringgit market (in Singapore), estimated market size during the period is about RM78 billion. ii. Elimination of Central Limit Order Book (CLOB) for trading of Malaysian shares in Singapore. iii. Freeze all activities in external accounts, which effectively stop all flow funds abroad. iv. Abolish the Ringgit from offshore existence in forms of currency v. And lastly, the capital control allows only Bank Negara Malaysia to perform any foreign exchange transaction, and fixed the exchange rate of Ringgit to Rm3.80 per US dollar. Effectively, dollarize the Ringgit exchange.

The Capital Control of September 1st, was subsequently modified by February 4th, 1999, to allow portfolio capital outflow by:

i. Establishing a system of graduated exit levy on repatriation of the principal of capital investments (i.e. in shares, bonds, etc, except for property investments), made prior to February 15th, 1999. (The levy rate ranges from 30%, 20%, 10%, and 0%)  
 ii. Establishing a system of graduated exit levy on repatriation of the profits from investment made after February 15th, 1999. (The levy rate is set at 30% and 10%)

The purpose of these changes is to relax the imposition on portfolio investments, but allowing principal and profit to be repatriated, but discouraged, through the levy. The levy is somewhat like a heavy penalty fee to be paid for early portfolio repatriation, because you need to gain at least 30% just to break even (for say a six month investment).

A distinction has to be made here that the Malaysian capital control is not the same as other capital control, say like the one in China. In fact there are many ways of imposing capital control, like in the case of Chile, etc. Our capital control is labeled as selective capital control.

#### 4.4.3 Critics For and Against the Capital Control

In fact in the face of the crisis, there has been a number of arguments for selective capital control as a stopgap measure, to contain an impending currency crisis. The first one to point this out is Paul Krugman in an article in Fortune magazine, which was incidentally published just before the September 1st, 1998. Malaysia was not the only one flirting with ideas of alternative currency regimes, for example Indonesia did make some attempt at establishing a currency board similar to Hong Kong, through the advise of Prof. Steven Hanke, of John Hopkins University (who published an article on currency board as a solution for Asia in the Cato Journal). Paul Krugman, though distance himself from Malaysia afterwards, through his Open letter to Prime Minister, Dr. Mahathir Mohamad, to qualify what he meant by the use of capital control.



IMF on the other hand take the stand that capital control is Malaysia's choice that does not violate the Article VIII of IMF agreements. So their stand is neutral. Other economists though take a more critical stand on capital control, for example, Prof. Rudiger Dornbusch of MIT, even to the extent use the word Capital controls: an idea whose time is gone.

While some people view that Malaysia's use of capital control as innovative and new invention, the reality is that capital control has always been there. Prior to opening up of our economy, Malaysia was in fact under a capital control regime. The levy imposed is what is called as Tobin's tax in economic circles. The argument that Prof. Dornbusch takes is that capital control is on both side, inflow and outflow. To stem an outflow after the crisis, is a much bad idea than a control to stem an inflow in the first place. The reason being, an imposition of control on outflow, creates an unnecessary risk premium on the country concern. The country will be viewed as more risky (other things equal), and hence discouraged any new inflows into the country.

The other argument against capital control is that it creates market distortion, if not managed well. The distortion comes in form evasion, existence of alternative black markets, and others. However, in the case of Malaysia, this has been largely avoided mainly because of two reasons: there is no incentive for such distortions since the level of Ringgit set by BNM at RM3.80 per dollar is within the parity with the rest of regional currencies, and proper management by BNM on the local front.

While the capital control has been lauded as pretty successful, the issue that I would like to ask: does the capital control manage to reduce the currency crisis? The answer is not obvious though, because the control was imposed at the time when the Ringgit and regional currency markets were pretty much leveled since then. In fact most other regional currencies has significantly appreciated during the rest of 1998, and throughout 1999. Whereas Ringgit has been fixed at RM3.80 per US dollar. There are some views now that in fact Ringgit is undervalued. I have the opinion that in fact the capital control was a little bit too late, more like braking the car after the crash has happened, to stop the Ringgit from sliding, and massive capital outflow of the country. In fact most of the capital outflow happened during 1997, where during the second and third quarter of 1997, an amount of RM24 billion has already left the country.

So the capital control effectively stop outflow, or stop future inflows? For example it has been announced that (see papers) an amount of RM11 billion to flow back in from offshore Ringgit market (anyway Singapore CLOB is valued at RM 10 billion at the time of imposition of control).

#### **4.4.4 The Immediate Objective of Capital Control**

As being conceded by the authorities, the capital control was a stopgap measure to stop the crisis from continuing. Without doubt the authorities never had in their mind when making the decision for capital control to remain forever. The longer-term position of capital control will be discussed in the next chapter. Here I would like to address what have we succeed using capital control in the immediate term upon its imposition. Let me then address relevant issues one by one.

1. The first achievement is undoubtedly to get currency stabilization, which through the imposition, the only body that has effective control over Ringgit is Bank Negara Malaysia. This was achieved through elimination of all type of conversion external account by other parties except Bank Negara and authorized institutions. The only critic to this was, Ringgit and other regional currencies were already at the bottom by the period. In fact other regional currencies, with the exception of Indonesian Rupiah was already on the recovery trend.

2. Capital control managed to stop the bleeding of outflow of foreign exchange reserve and other forms of outflow of money. However, looking at the figures, there was very little left of money outflow in the system; those who want out have gone out before September 1998. Furthermore, any further outflow by that period was well supported by the surpluses that we gain out of Ringgit devaluation, through our exports. If we look at Table 4.2, the balance of payment has turned positive (RM 40 billion) from a deficit of RM 10 billion in 1997. That was a turnaround of RM 50 billion. In that sense, the capital control was a little bit too late.

3. One resounding achievement of capital control was to totally eliminate the existence of offshore Ringgit market, which stops any activities in Ringgit beyond the control of Bank Negara Malaysia. This includes any arbitrage trading taking advantage of the interest rates differences, and speculation on the level of Ringgit. What we lose however the broadness of the market for Ringgit. As I have argued earlier, the offshore Ringgit market helps during the good times in providing a more liquid and wider market for Ringgit which encourage trading activities on the currency, provide avenues for real hedging activities especially for traders and investors, and make Ringgit a more internationalized currency. Since we have lost that, it may take years before it can be rebuilt again.

4. Another direct target of capital control was CLOB (Central Limit Order Book) that exists in Singapore, for trading of KLSE listed shares. Elimination of CLOB helps in the sense that we may gain the revenues from broking fees from such trade, which is estimated at about RM 4 billion a year, revenues that are much needed by our stock broking industry. What we lose is the broadness of the market in the similar manner as offshore Ringgit market. CLOB provides more rooms for Malaysian companies to get their shares purchased by much wider investor based, which allows deeper participation in the KLSE shares. Since that is gone now, to rebuild that again may take years.

5. However, the question whether the capital control being able to bring back money from outside the country into Malaysia in terms of currency, and Ringgit deposits outside, is a bit unclear. The government did make an announcement that an amount of RM 11 billion of money that was being brought back after the deadline of one month given from September 1st 1998. It is rather doubtful whether the amount is correct or not, because if we look at the money supply increments in October and November 1998 were pretty small. One of the key reason for this small increment was the action by Singaporean banks to automatically convert all Ringgit deposit account into either Singapore or US dollar accounts.

6. The capital control also was able to stop to freefall of the KLSE, at which time the KLCI has already reached 302, the lowest ever during the crisis. After

the imposition of the control, KLSE immediately start on a rising trend (see figure 4.2). This may indicate that the non-existence of short sellers in the market from that period onward, the reason of which was due to closure of CLOB. If that is true, then we may postulate that CLOB was a major source of short-selling activity of KLSE after August 1997 period (when short-selling was banned in Malaysia). I have no direct evidence to prove this.

7. The capital control has no direct impact on the foreign direct investment (FDI) since the measures were never meant to limit them. However, the level of FDI did drop in 1998, due to the slowdown of the economy.

8. If we look at Figure 4.1, the Malaysian crisis diagram, we can see that one of the major factor for the crisis was contagion effect from the regional economies. What capital control has achieved was to stop this contagion, and turn off the amplifier effects that I have suggested earlier as one of the major cause of the slide.

So in general, on the immediate term, the capital control was very successful. That's why some economists and practitioners praised Malaysia for taking such action. My only comment is: if capital control was the only choice, then it was a little bit too late in the sense that the crisis has already caused severe damages to the economy. It was more like breaking a car only a few meters before the impact. It should have been done a lot earlier. In fact, in my opinion, there were some other very selective control measures that are available as early as when the crisis started in 1997. But probably we all didn't see at that time the potential magnitude of the crisis, and to some degree our defiance attitude then, make us think that we were somewhat invincible, until eventually it was a little bit too late to do anything, except capital control.

If the objective of capital control was about the past, that is stopping the crisis, then we were successful, but whether it is useful for the future recovery, is totally another question. I will address this issue at length in the next chapter.

## **4.5 The Effects of the Financial Crisis on the Malaysian Economy**

The economic crisis, as I have shown in the last section, caused major damages to our economy. Before we can discuss about the program for economic revival, it is important that we dedicate effort to get better insights about the extent of the damage, so that it will be useful for us to understand what improvement is needed.

### **4.5.1 Financial Crisis turns to an Economic Crisis**

First, I need to explain how a financial crisis may result in an economic crisis, because not all financial crises will automatically bring an economic crisis; for example, the crash of New York Stock Exchange in 1989 didn't result in an economic downturn of the US economy. And on the contrary, the devaluation of Pound Sterling in 1994 resulted in an economic growth in The UK. In the case of Malaysian financial crisis, it is clear from the economic figures and indicators have resulted in an economic downturn that may even last for a decade. What has happened is that

the magnitude of the financial crisis was so large that the impact on the real economy is so severe and far-reaching.

As we know, there are two major side of an economy, the real sector which is the activities like manufacturing, trade, real estate, services, and others; and the financial sector, which covers financial activities, such as banking, stock market, currency and so on. A crisis will become an economic crisis when it affects the real economy. In todays world, the financial sector is so closely related to the real economy, therefore any events in the financial market quickly translated into direct impact on the other side. Thats why to some common people got confused and ask: why Ringgit devaluation causes slowdown on their day-to-day activities? The answer is, as we have discussed before, Ringgit crisis, was translated into a full scale financial crisis, and hence cause a severe downturn on the real economy which then will affect the life of everybody.

In the case of Malaysia, the severity of the impact of financial crisis on the economy was dramatic for the fact that the size of our financial sector in relation to the whole economy was quite substantial. For example, the size of the KLSE, measured by market capitalization was more than 300% of our GDP, the size of the outstanding loans in the banking system was about 150% of our GDP, similarly (as documented earlier) the total size of our trade (import plus export) was about 150% of our GDP. These ratios far exceed similar measures in other developed countries. The vulnerability of our economy to the vagaries of the financial sector is beyond any doubt, and it will continue to be a major factor in the future as well.

What does these ratios mean? It meant that as a country, our dependency on these activities are critical and have significant contribution to our economic developments. It also implies how much of the wealth of our nation being dedicated into such areas. When the KLSE dropped by more than 60%, it represent a sudden loss of wealth more than RM 500 billion, a magnitude that is twice of our GDP; in a crude sense, it wipe out two years of full economic activity of the country! Thats why any major impact on the financial sector translates into the whole economy in similar or even bigger magnitude. How this can happen? I would like to explain this using a simple economic model, which is presented below.

#### **4.5.2 A Model of the Economy with a Stock Market**

I would like to take a short digression here to describe a simple economic model, which will be very useful for understanding of how a crisis in the stock market relates to the economic crisis. The model also will be useful for discussions in the next few sections. I name it A model of an economy with a stock market.

I assume that the economy consists of three players, named: Block investors (Block), Retail investors (Retail), and Foreign investors (Foreign). Which in a way represent large shareholders, retail investors, and foreign investors in our economy. The economy has two major area of activities, namely: real sector, which can be assumed as the real business out there such as manufacturing, trading, construction, real estate and others; and financial sector, which is represented by two institutions: a bank, and a stock market. Both function as direct intermediary for the players to

transact in terms of cash deposits, taking out loans, and transacting in the stock market. I assume that both institutions are passive players, in the sense that they don't influence any activity. (I modeled it this way so that it is easier to see the impact of the stock market on the economy).

The stock market has only one type of share, and I call it KLSE, which the namesake implies the Malaysian stock market. To describe the events, I assume that the economy only has four periods, namely: 1996, 1997, 1998 and 1999, which corresponds to the years before, during, and after the crisis; and finally I also assume that the share price is determined not by the market players, but as a given price (i.e. not because of supply and demand). The reason here is because we want to focus on the effect of the stock market on the players, rather than the players on the stock market.

The detail of the model is in the appendix at the end of this chapter. What I would like to do is to draw the conclusion from this simple model that I developed. The reason for explaining this model is for the benefit of understanding the economy, in a much more concise manner. As I have said earlier, economics is about explaining the more complex world through a simplified and stylized version of the reality. Even using this simple model (of which I encourage the readers to spend some time on, and play around with it on your own), a lot of understanding can be gained from it. So let me then just go right to the lessons from the model, rather than going through the details of it (for those who do not want to go through the model, they can just take these conclusions as given):

**4.5.2.1 Lesson 1: The rising stock market and money supply.** An economy with a rising stock market, will cause massive expansionary of the money supply due to the unlocking of wealth value from the shares by existing owners. This will make more money available in the system. (Recall that the market capitalization of KLSE has risen from 1992 of RM 245 billion to RM806 billion in 1996).

The increase in money supply (total money available) is even magnified if the lending is done to the players in the stock market (recall that about 10% of our lending is to the stock market, through margin financing, unit trust financing, and stock brokers financing).

The presence of foreign funds in the stock market even amplified the money supply in the economy even bigger, since most of their purchases are paid in form of cash payment. The resulting increase is more dramatic if they enter the market at a high level.

Higher growth of money supply in turn, makes more money available to be lent out, which then feeds the growth of the money supply again. The whole thing goes into a circular process.

**4.5.2.2 Lesson 2: Stock market crash.** When the stock market suddenly crashes down, say by 50% (in the model from 2 to 1), massive amounts of liquidity are sucked into the declining shares. This sudden drain on the liquidity will have an impact on the real business, in the sense that very little money is left in the system, that can be used to finance real sector economic activities. This is how a crisis in the stock market (i.e. a financial crisis) can affect the economy. (Recall that the KLSE dropped from 1200 level to 500 levels from 1997 to 1998).

The drain on liquidity is further amplified when the foreigners sell their shares and take out the money from the system. (Recall that RM30 billion amount was taken out in 1997 and 1998).

With declining shares, and other asset values, banks become illiquid and cannot lend out any more money.

Finally, the declining shares and asset values cause major wealth effects on the economy as a whole.

These lessons are elucidated clearly in the simple model that I developed, and from there we can see what is happening. I will be referring to this model again in later part of this chapter, in the case when stock market rise again from the decline and see what effects are there. Anyhow, let us now turn back to our economy and see what we can deduce from the lessons that we have learnt.

#### 4.6 What the Model Tells us about the Economic Crisis

The same conclusions that we gain from the model now can be applied to our stock market and economic crisis. For this purpose, I would like to present the data for the discussion, in Table 4.4 below:

Table 4.4 Year-to-Year Changes in the money supply, and the banking system  
The data only covers commercial banks, finance companies, and merchant banks.  
Source: BNM Bulletin  
insert table

Loan figures for 1999 include loans sold to Danaharta. Share loans data for 1992 to 1994 is not readily available.

Let us make our observations:

In the run up of the KLSE in 1993, we saw massive jump in money supply, which coincides with deposit growth, and followed by loan growth. The market capitalization of KLSE follows the same trend, which is expected. The foreign fund flows explain on a direct measure (i.e. total foreign fund net flow divided by total money supply increments) about 30% of the total money supply created from the years 1992 to 1996.

We can see how leveraged is the stock market price can be: For example, in 1996, the cash infusion of about RM30 billion (from the banking system of RM 11.37 billion, investments by foreigners of another RM10.91 billion, and local investors by another say another RM 8 billion) resulted in an increase in the market of RM225 billion. That is seven times leverage (i.e. 225 divided by 30). In another words, during those years, a one Ringgit infusion into the market may translates into a seven Ringgit gains in the total value.

The same multiplier however applies not only on the upside, but the downside as well. When there is a large liquidation of the market in 1997, the market drops by RM430 billion. If we use the same multiplier, the amount of cash liquidation on the market should be about RM60 billion. The only figures that we can easily measure, is the amount of money the foreigners pull out from the market in 1997,

that is RM28.43 billion. If our multiplier is correct, then the local players pull out almost equivalent sum of RM33 billion. At the end there is very little liquidity left in our economy, and precipitate the economic crisis. That's why in 1998, money supply growth was stalled (only an increment of RM 10.65 billion in M3), and the total deposit shrinks by RM2.13 billion. The liquidity position of the banking system is severely affected.

When that happens, the banks can no longer extend any credit for the real sector like consumer credit loans (e.g. car loans), housing loans, and loans to businesses: because of lack of liquidity. This is quite clear in the economic model that I developed, that liquidity squeeze out of dropping stock market, will result in shortage of liquidity to be supplied to the real sector. What we saw as well, the total money supply was not affected by great deal, only a small decline of RM2.13 billion in 1998; in another words there was no drain on the deposits by the customers in the banking system, which is a good sign; but despite the deposit remain intact, the problem is with liquidity; bank has no additional money to loan out, all existing money is already tied to existing loans. All of these conclusions pretty much confirm the prediction in the simple economic model of the last section.

#### 4.6.1 Negative Wealth Effects

Now let us turn to another issue, that is wealth effects of the KLSE crash: we can see from Table 4.4 that the total loss in terms of value of the KLSE stood at RM430 billion in 1997. The effect was a lot lesser in 1998, mainly due to a slight recovery of the KLSE in the last quarter of 1998. If we take into account the drop in the first three quarters of 1998, the market capitalization reach as low as RM200 billion, which represents a total loss from end 1996 period of RM approximately RM 600 billion. By any measure, the magnitude of the loss was so large that effectively took as all the way to 1991 to see such levels of market value.

The wealth effect is not only applicable to the stock market, but also other sector of the economy as well, such as the real estate and property market. The value loss also is recorded for the real estate and property market for 1997 and 1998 combined is in the range of 15% to 20%. Given the total volume of real estate and properties in the economy (of which I don't have an exact measure of), it can run into hundreds of billions as well.

What do these negative wealth effects of the financial crisis do to our economy? Wealth effects means nothing if it is only on paper; however, as I have shown in the model, wealth effect, especially so in the magnitude that has happened, has a far and deep reaching impact on the economy. The biggest impact is off course on the liquidity within the economic system.

#### 4.6.2 Liquidity Crunch

There are two ways, the negative wealth effects from the stock market impacted the available liquidity in the economy: one, in terms of money being used to cover losses in the stock market, either through margin calls, payment for purchase of shares, and

others; and two, by the foreigners selling out their shares (which has to be purchased by local players somehow), which adds further to the drain. We can see that in 1997, foreigners pulled out an amount of RM 28 billion from the stock market, and I believe that our own people poured in at least double that amount in 1997 and 1998 with another RM 60 billion. The total amount combined will bring us an amount of RM 80 billion being poured into the stock market during the period. That money is stuck within the stock market, and loss of potential use in other sectors of the economy.

That's why in 1998 the liquidity was very tight, and the loan expansion was on the negative side (Negative RM3.89 billion). What this shows is that during 1998, banks were no more lending money to the market, what we have is only inflow of payment of principal and interest.

#### 4.6.3 Damage to the Real Sector (Aggregate Supply)

We can see that during the years prior to the crisis the loan growth has been growing fast, and quite a large sum of money being funneled from the banking system into the real sector. If we recall back the figures from Table 1.2, the additional loan extended to the manufacturing sector was growing at about 15% a year, into the construction activities at 10% a year, into residential and real estate at 23% a year, and for consumption purposes at 12

When there is a sudden drop in additional liquidity within the system, all these loan growths basically halted to zero, or even on negative growth. The sectors that particularly depend on the credits are the real estate and construction, and that's why we saw a large drop of 20% in the construction activities (Table 5.2).

Table 4.5 Changes in the Loan Extended to Selected Real Sector by the banking System: 1992 to 1998 Source: BNM Bulletins and BNM Reports  
All numbers in RM billion.

insert table

It is obvious from Table 4.5 that the loans extended took an impact in 1998 (recall that the growth used to be in the range of 15 to 20% in the years before), where the loan growth has slowed down dramatically to almost zero (only RM9.4 billion extended compared to between 35 billion to 50 billion a year in the previous years). The more serious part is in 1999, where loan growth for all sectors except for broad property, were negative (total loan taken back from these four sectors is at RM 3.55 billion). This is surprising that, after capital control of 1998, the liquidity, which has been argued as improving, does not translate into loan growth.

The result of the liquidity squeeze in these various sectors, caused major economic slowdown in its activities: construction sector is the hardest hit with a drop of RM3.8 billion in its activities (minus 20% in nominal terms), manufacturing only gained RM1.4 billion (in nominal terms) we can go on and on to each sector, all of these facts support my testimony earlier that the financial crisis, which caused massive liquidity crunch, has affected the real sector, through non-expansion or even negative trend



in the lending activity. Slowdown in these activities will bring slowdown to our economy.

This is also evident if look at the price earnings ratio of the KLCI, in early 1997 the P/E ratio was at 26.34 (and KLCI was at 1,216), by end of 1998 P/E ratio was at 60.01 despite the KLCI was at 586, and by end of 1999 the P/E ratio stood at 578 and KLCI was at 812. By right, the P/E ratio should drop in tandem with the KLCI (because price is dropping, and assume that earnings remain the same), but what we can see here is the corporate earnings are dropping at a much faster rate than the price in 1998. In 1999, however, the stock price went up, but the earnings seem to continue to deteriorate further and the P/E numbers are no longer becoming a usable indicator.

#### 4.6.4 Damage to the Demand side of the economy (Aggregate Demand)

As we have done in chapter 1, there are two sides to the economy, supply and demand. We have seen the supply side shrinks due to massive liquidity crunch, the phenomena is true for the demand side as well. To a large degree, the demand side of our economy also depends on the credit expansion. For example, car sales depend on availability of hire purchase financing, and so on. The slowdown in demand may not only be caused by credit slowdown, but also the consumer confidence. In other words, not only people who need to borrow cannot spend because of lack of lending available, but also those who have money may not want to spend either.

Let us see the table for loan growth, just like for real sector.

Table 4.6 Loan Extended to Selected Real Sector: 1992 to 1998 Source: BNM Bulletin

All numbers in RM billion.

insert table

The predicament in the demand sector looks even worse than the real sector. In 1998, the drop was dramatic, by an amount close to RM 15 billion, and the trend still continue in 1999, except a smaller amount is seen, only RM 3.43 billion drop. We can see that both effects here at work, liquidity crunch and consumer confidence. If we look at the GDP figures in 1998, we can see that private consumption took a 7.7% dive (drop of RM5.8 billion), and more so in private investment, which took a dramatic, cut off 53% (RM76 billion). All of these can be explained by the drop in credit extended to the consumer and users in the economy, as identified above. The figures for 1999 improves a bit, especially so for consumption (an increase of RM 12 billion), and we can see that consumption credit has been relaxed and increase in 1999 of about RM1.2 billion.

The other sector on the demand side is trade. Let us see how trade was affected. If we refer to Table X.X, in the beginning of the chapter, export has not been affected by so much. In terms of value, export has gained a lot due to Ringgit depreciation (gain of 24%). However in terms of volume, the exports dropped slightly by about 4%. Imports on the other hand dropped in terms of volume by 17%. So generally, exporters have not been affected, and in fact may have gained from the situation,

but the importers may be affected severely. The same is true for 1999, and in fact exports even surged due to high demand, and this shows that domestic credit plays lesser role for the exporters, and probably most of the exports were based on external credit given by the purchasers.

#### 4.7 Summary

Well it seems so easy to see what maybe reasonable today, since we have one benefit that policy makers dont have during the crisis: the hindsight. It is in fact not fair to criticize policies in this manner, since nobody has perfect foresight to see what happened. As I have mentioned earlier, this exercise is not intended to say who is wrong and who is right. It is for the purpose of learning from the past, so that can learn for the future.

The fact of the matter is, we are not equipped to face such crisis, with clear resolve and concerted policies. In fact very little discussion was made among us, Malaysians on what policies are the right policies. We manage crisis, as if the crisis belongs to only to certain people. Economic policy making in our country is done under a very close purview of very few people. Well, while I dont doubt the capabilities of such people, but I believe a larger and wider discussions on our economic issues are necessary. If not for the benefit of allowing different opinion, at least it allows more people to understand our economic policies and planning.

The danger that we develop here is apathy. As a society, we become more used to policies that are designed for us. Unfortunately, an economy, as one very senior executive from Germany once said to me over a lunch that I had with him in mid 1998: we as a company, has learnt over decades that nobody is big enough to face the free market. In fact Germany is not big enough to face the free market, and the European Union is not big enough either. So my friend, Malaysia can never be big enough to face the free market. Thats we over the years have develop our company to face the free market. We never assume that any market is too small, neither too big. We setup our organization to fit the market, not the market to fit us. It only works one way, that is in the way of the free market. That remarks left a very strong mark on me, because the company, indeed has survived many recessions, came out of Germany after World War II, and emerges today as one of the strongest company in the world, with branches in more than 50 countries, with turnover as large as GDP of many developing countries.

The fact here is that, in order for Malaysia to continue, we have to pursue free market reforms. Even as we sincerely feel some imperfections of the free market, we still need them. In order for us to pursue free market, the society and especially the entrepreneurs and business leaders need to be involved in discussions about our economy, as freely as we can. Whats wrong with sincere discussion anyway? The most that we lose is time, but what we may gain is a better understanding of the economy, of which we all be part of the engine of the growth. No group of people alone can determine the fate of everybody else.

Some of the flaws of the past policies clearly tells us now that a more open and transparent society is needed. Policies need to be discussed more openly. Sometimes we are abashed with sudden decisions, for example bank mergers. Why six banks, and only selected banks are chosen? It raises more questions than answers. In fact, one village men once said to my friend, how come a small snake (ular lidi) eat a dragon (ular naga), apparently referring to some smaller banks taking over a bigger bank. If thats the way that messages reach the common people, we will stand to lose more credibility than anything else.

## Appendix: A Simple Model of An Economy with A Stock Market

### A.1 Assumptions

Let us make some assumptions for the model: Assume that the economy consists of three players, named: Block investors (Block), Retail investors (Retail), and Foreign investors (Foreign). There is two part of the economy, called: The real sector, which is represented by only one activity, I call it Real, and the financial sector, which consists of a bank and a stock market. The banks function is only to take deposit and give out loans, and nothing else (i.e. passive player), and the stock market has only one type of share called KLSE, and the share price assumed as a given price (i.e. not because of supply and demand). There are four period to the economy, 1996,1997, 1998 and 1999.

We assume that foreign money is not within our banking system, and the bank has only local players depositing money with them. Bank also provides loans only to domestic players.

I assume that the economy starts at 1996, and at that period the players have the following resources:

Block Retail Foreign Cash deposit 100 200 50 Shares 100 0 0 Real asset 100 100  
Real asset loans 100 100

Note: I also assume that both block and Retail borrowed from the Bank for their Real activity, with a borrowing margin of 1 to 1.

Let us summarize the money supply position and liquidity position of the bank in 1996.

Period Total Deposit Total loans Balance available for loans (Liquidity) Money supply position 1996 300 200 100 300 Note: Balance available for loans is defined as total deposit, minus loans outstanding. Money supply is defined as total deposit and cash available in the economy.

Now let us assume that in 1997, the following happens: 1. Block sell 25% of KLSE shares to Retail (just like an IPO) at RM2 per share. (i.e. 25 shares for a total of 50). Retail pay for these shares by paying 50% in cash and 50% on margin (i.e. from loans). 2. The real asset generates a return on investment of 20% for the year, and this will be used to pay interest to bank at 10%. The payment will be made to the bank in cash, and interest payments from the bank will be automatically deposited in the respective accounts. 3. After the above transaction are done; the foreigners come in and buy 25 shares from Block (just like a direct sale in the market). The purchase is paid in full with cash.

Let us now see what happens (note: I assume that KLSE price = 2):

Step I: 1 & 2 take place.

Block Retail Foreigner Cash deposit 160 185 50 Shares 75 25 0 Real asset 100  
100 Shares loan 0 25 Real asset loans 100 100

Step 2: After that 3 take place.

Block Retail Foreigner Cash deposit 210 185 0 Shares 50 25 25 Real asset 100  
100 Shares loan 0 25 Real asset loans 100 100

Let us see to the indicators:

Period Total Deposit Total loans Balance available for loans (Liquidity) Money supply position 1996 300 200 100 300 1997(after step 2) 395 225 190 (\*) 415 (\*)

Deposits are affected as follows: an increase by 50 due to sale of shares by Block to Retail; a decrease by 25, since Retail use some cash to pay for the shares; an increase by 50 for the funds paid by Foreign; and an increase by 20 for interest on the deposit. Liquidity: Total deposit less total loan outstanding (395 less 225) plus interest income on the loan (20). Money supply: Total deposit plus interest income (20).

1. Sale of shares, at a high price, will cause money supply to increase. The increase comes from increase in deposits due to proceeds of sale, which comes from two sources: money from loans (Retail) and fresh cash (Foreign). 2. With increase in deposits (and money supply), more money available for lending.

Step 3 (in 1997):

Now let us assume that KLSE makes a rights issue of 50 shares, which was subscribed by Block only, at 2 per share. Block pays 50

Block Retail Foreign Cash deposit 160 185 Shares 100 25 25 Real asset 100 100 Shares loan 50 25 Real asset loans 100 100 Margin 1 1

Note: Margin is defined as Value of assets divided by total loan.

The effect on liquidity and money supply as follows:

Period Total Deposit Total loans Balance available for loans (Liquidity) Money supply position 1996 300 200 100 300 1997(after step 2) 395 225 190 415 1997(after step 3) 345 275 90 365

We can see that the impact on liquidity is quite drastic: drop by 100, because of 50 drop in deposit, combined with 50 increases in loan. Impact on money supply goes along with impact on deposit (Drop of 50).

Now let us go to 1998, where I assume that KLSE drop from 2 to 1, and see what's the impact. I also assume that in 1998 returns on real sector is zero (economic slowdown), and interest payment are not made on the loans.

Impact of margin call:

Block Retail Foreign Cash deposit 115 165 0 Shares 100 25 25 Real asset 80 80 Shares loan 50 25 Real asset loans 100 100 Margin before top up 0.7 0.84 Cash top up (as deposit) 45 20 Margin after top up 1 1

The margin calls, which is assumed here to be topped up with cash deposit as collateral. What happens to liquidity and money supply?

Period Total Deposit Total loans Balance available for loans (Liquidity) Money supply position 1997(after step 3) 345 275 90 365 1998 (after margin call) 345 275 25 365 1998(if foreigner sell all shares) 320 275 0 340

We can see that money supply is not affected, but the liquidity position is dwindling down, and hence Bank can no longer loan any money out. If we assume that foreigner sell all their shares for 25 to Block and retail, which are paid by cash, we can see that liquidity will be zero, and money supply also will go down as well.

The above simplistic model of the economy tells us a number of things:

1. A rising stock market generates a lot of liquidity within the system, and more so if the foreigners are purchasing our shares. 2. A declining stock market, cause a

similar result in the reverse order, it will absorb so much liquidity from the system, until bank cannot lend out anymore due to lack of liquidity.

How does stock market crash causes an economic crisis?

Assume that there are three agents in the world, Player 1 (P1) and Player 2 (P2). A bank serves as an intermediary to channel deposits and loans to the players. The financial market consists of only a stock market, with only one type of listed share called KLSE. The other activity in the economy is called Real, which represents the real economy.

There are three periods in the economy, we call it period 1995, 1996, and 1997.

Assume real sector: growth and loan growth equaled. Debt equity ratio of 1:1, generally to keep it growing, hence the effect is netted out (just to neutralize real sector, so that we can see the effect of stock market, can make it more realistic, but complicated the matter, without any additional advantage. The conclusion here remains the same even if we change the above assumptions).

In period 1995:

P1 P2 B EL 1995 KLSE= 1 Deposit 100 200 300 100 Real 100 100 Real sector loans 100 100 200 Shares 100 0 Share loan Net Value of shares 100 0 Net Wealth 200 200 Total Net Wealth 400 1996 KLSE= 2 Deposit 200 150 350 50 Real 125 125 Real sector loans 125 125 250 Shares 50 50 Share loan 50 50 Net Value of shares 100 50 Net Wealth 300 200 Total Net Wealth 500 1997 KLSE= 1 P1 P2 B EL Case I 1 Case II 1 Deposit 200 150 350 0 200 100 300 0 Real 150 150 150 150 Real sector loans 150 150 300 150 150 300 Shares 50 50 50 50 Share loan 50 50 0 0 Net Value of shares 50 0 50 50 Net Wealth 250 150 250 150 Total Net Wealth 400 400 Case III 1 Case IV 1 Deposit 200 150 350 0 200 100 300 0 Real 125 125 125 125 Real sector loans 150 150 300 150 150 300 Shares 50 50 50 50 Share loan 50 50 0 0 Net Value of shares 50 0 50 50 Net Wealth 225 125 225 125 Total Net Wealth 350 350

Make separate table for MS, TL, Loan required for Real, and Excess Liquidity (EL).

## A.2 Observations

1995 KLSE = 1 Total wealth: 400 M = 300 Loans = 200 EL = 100

1996 KLSE rise from 1 to 2

Additional wealth for P1 of 100, for 50 shares sold to P2, he got 100 which he deposited in the bank. M increases to 350. EL increase to 150, from that 50 is loan extended to real sector, and another 50 extended to P2 for share purchase.

Wealth : 500, P1 = 300 (increase of 100), and P2 = 200 (remains the same).

1997 KLSE drop from 2 to 1

Case I: Only KLSE drop, but real sector remains growing to 150, and still require 50 loan. Share loan is not called back.

Result: EL = 50, will be absorbed fully by real sector. M remains the same at 350.

Wealth effects: drop by 100 from 500, only due to share price drop.

Case II: Same as Case I, except for share loan being recalled.

Result:  $EL = 50$ , will be absorbed fully by real sector. The share loan being repaid out of deposit, cause  $M$  to drop to 300 from 350. And wealth effect is still negative 100.

We can see that repaying loans from cash holding of P2 cause money supply even to decrease.

Case III & IV: If the real sector value also drop by 20%, from 150 to 125, then negative wealth effects is worsen from 500 to 350 (loss of 150). And if 50 is used to pay share loan, money supply also dropped by 50 to 300.

Summary:

1. Rise in share prices creates new wealth the economy. 2. Credit extended to share market creates fast way of getting money supply to increase dramatically. 3. A sudden stop in share price increase, will cause the money supply growth to stop as well (Case I). With that stoppage, the real sector need will be curbed. (Real sector loans growth was curbed from 25% a year to 20% a year, due to insufficient liquidity). 4. If share loans being paid in cash, a drop in money supply will occur. 5. If real sector value is affected as well, the negative wealth effect is bigger. 6. In any situation we can see that  $EL = 0$ , in 1997.

We can see that loss of wealth in stock market resulted in excess liquidity in the system to be drained; and furthermore may even cause money supply to go down; and tight liquidity curb growth in the real sector, which then as we go further, cause even the real economy to really go down.

Thats how, stock market crash can cause an economic crisis.

## Appendix: A Two Country Economic Model

This notes explains what will happen if a currency is devalued. To do so, I need to develop a simple economic model. I call it a Two Country Economic Model.

### B.1 Assumptions

There are only two countries in the world, Malaysia and USA. Only two type of goods, brown rice and white rice. The world market is in equilibrium (i.e. all rice produced are consumed or invested). Production technology in Malaysia for White rice is 5 to 10 and Brown rice is 7:10 (i.e. X to Y, means X tons seed produce Y tons rice); The US production technology are: 5 to 10 for both White and Brown rice. (We can see that US is more productive in Brown rice than Malaysia). All units will be tons of rice. Currency : RM and US. Price of rice: assume that price of rice is always determined in US dollar for purposes of trade. White rice = US 1.00 per ton; Brown rice = US 1.25 per ton. All these assumptions remain the same for the period: 1997 to 1999.

Year	1997	Malaysia	USA	White rice	Brown rice	White rice	Brown rice	Production	
Consumption	200	100	200	200	90	50	110	80	
Investments need	100	70	100	100	Exports (Imports) in quantity	10	(20)	(10)	20
Export (Imports) in US dollar	US10	(US25)	(US10)	US25	Net Exports (at ER =RM2.50/US)	(US15)	=	(RM37.50)	
US15	Net Exports (at ER=RM3.80/US)	(US15)	=	(RM57)	US15				

### B.2 Analysis

We can see that at an exchange rate of RM3.80 per US dollar the net export is deteriorating in RM terms. So what will happen generally when RM is devalued from RM2.50 to RM3.80 per US is that Malaysia will cut down on its consumption and investment due to this increase in cost (in local currency terms). Since US only deals in US dollar, they devaluation does not affect them in anyway. Let us assume that on January 1st 1998, Ringgit is devalued to RM3.80 per US dollar, and see what happen:

Year	1998	Malaysia	USA	White rice	Brown rice	White rice	Brown rice	Production	
Consumption	200	100	200	200	90	40	110	100	
Investments need	100	60	100	100	Exports (Imports) in quantity	10	0	(10)	0
Export (Imports) in US dollar	US10	0	(US10)	0	Net Exports (at ER=RM3.80/US)	US10	=	RM38 (US10)	

We can see that after devaluation, by slight cutting down our investment and consumption by a total of 20 ton of Brown rice, we have a trade surplus of RM38 from previously trade deficit in 1997 of RM57 (This represents a total turnaround of RM95). This sudden advantage is what economists call as improvement in the terms of trade. We can see that our GDP has not changed at all due to the valuation (i.e. we still produce a total of 300 tons of rice), since we have invested of sufficiently



in 1997. But this will not be true when we go to 1999, due to lesser investments in Brown rice in 1998, our production of Brown rice will be affected.

Let us see what happens in 1999:

Year	1999	Malaysia	USA	White rice	Brown rice	White rice	Brown rice	Production
	200	85	200	200	Consumption	preference	90	40
	110	85	Investments	need	100	60	100	100
	Exports (Imports)	in quantity	10	(15)	(10)	15	Export (Imports)	in US
	dollar	US10	(US18.75)	(US10)	US18.75	Net Exports	(at ER=RM3.80/US)	(US8.75)
	= (RM33.25)	US8.75						

Now we are back in deficit. The reason being because we are producing less than before. You can try to play around with the table by changing consumption, but let investment remain the same; the result would be for our trade surplus to continue even in 1999. The lesson here: if devaluation caused us to reduce our investments, then it will have long-term impact on our economy, but not in the case of cutting down consumption.

### B.3 Summary

Lesson 1: Devaluation in a currency, without adjustments to the internal consumption and investment pattern in the country, will cause massive trade deficits.

Lesson 2: However, if slight adjustment (i.e. sacrifice) in the country's consumption and investment may help to erase deficit, and even turn into a surplus situation.

Lesson 3: Adjustments on investment is problematic, since it may cause our GDP to go down in the future, and hence we have less to consume then. If the country maintain same level of consumption, then it will go back into deficit again.

Lesson 4: Generally, what we will have after devaluation is a sharp change in trade balance into a surplus. Then gradually the surplus advantage is diminished.

Lesson 5: Overtime market prices will also adjust, and even cause the advantage of ER diminished as well.

A simple Two Country World model above tells us a lot of Again economics is not very hard, just a simple model explains a lot. So while you eat your rice, just run through the logic in your head. You will get it! So dont get confused if trade figures for Malaysia in 1998 and 1999 were good.



## CHAPTER 5

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### MIX BAG OF ECONOMIC REMEDIES

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Discussions on the Policies and Solutions for the Malaysian Financial and Economic Crisis Year 1998 to 2001

Financial crisis causes a lot of havoc, distress and extensive damages to an economy. The question is what are the remedies that can be taken to bring the economy back onto a strong footing, and hopefully on a clear path of recovery. These issues are not as straight-forward since the problem that we face was a severe one, the regional and global economy affects and limits the choices that we may take. One major steps that was taken by the Malaysian authority was to implement restricted capital control, with the intent of insulating our economy from global and regional turmoil, and allow Malaysia to take its own course of action independently . With capital control in place, the Government initiates a number of steps for remedying the economic problems and trying to get Malaysia on a faster track for recovery.

These remedies however are not as simple since economic forces and factors are interacting with each other and the effects of a certain policy may or may not bring the desired results as expected. In this chapter, I use my own approach of understanding what are required in terms of major issues to be tackled, and discusses the various policies undertaken by the Government and evaluate the effectiveness of those policies. I have to admit that I have my own biases when making the assess-

ments, however, as argued before, I work with numbers and let the numbers speak for itself. Equipped with the facts and figures, I hope the readers may draw their own conclusions and ideas. The point is, despite all the hype and announcements by the political leaders and the coverage by the media, we, the eventual economic agents, must make our own mind about what is the true state of the matter.

### 5.1 Performance of the Malaysian Economy: 1998 to 2001

Before moving on to the subject of the remedies of our economic ailments, let us quickly go through an analysis of the performance of the Malaysian economy during the years after the currency crisis, the years 1998 to 2001.

Table 5.1 Macroeconomic Data for The Malaysian Economy: 1998-2001 Nominal GDP figures. Source: BNM Bulletin  
insert table

The currency crisis of 1997 has clearly impacted the Malaysian economy as we can see that the real GDP shrank in 1998, and only in 1999 and 2000 the economy go back to positive growth. By 2001, the economic growth however starts to show a slowing sign

We can see that in 1998, the economy was badly hit by the crisis, where for the first time since mid-1980s the economy shrank by a significant amount. It was the worst year in our recent economic history. The main contributor for the slump was the private sector, where private sector consumption and investment of RM45 billion and RM10 billion, respectively. What helped us in 1998 was the net exports, where we record a massive surplus of RM60 billion. However I need to point out here that the increase in net exports is not necessarily resulted out of increase in the volume of exports, but rather because we import less than what it used to be. This will be evident if we observe the exports-imports in US Dollar terms, where our exports actually decrease in USD terms by US3.8 billion, while our imports decrease by a large quantum of US17.8 billion. The net effect is we have a surplus of about US16 billion, which if we translate into US dollar will be RM60 billion, roughly the surplus that was recorded for 1998. This is important to point out because, this is a clear evidence of what I termed as the conversion effects, where the gains that we observe is improvement due to conversion of foreign currency to Ringgit at an advantageous rate. In another word, what helps us in 1998 was a devalued Ringgit!

Now let us spend a little bit more effort to understand why there was a large drop in private investments (RM45 billion drop) in 1998? If we refer back to Table 4.4 from previous chapter, we will understand the reason. As I have pointed out earlier (Chapter 3 and 4) our investments were driven by two sources: domestic investments and foreign investments. In fact, for 1998 foreign investments in terms of equity and loans remains stable and hence they were not the source of reduction in private investment; the one that cause it is the drop in our loan growth no new loans were extended, in fact loans outstanding contracted by about RM7.7 billion. This is far fetched from the previous years where new loans extended to the market stood at

about RM70 to 80 billion a year (for 1995 to 1997). That is a clear testimony to the following fact: our investments are credit driven (and probably very little from free cash flows) throughout the growth years. This, in my view proves the point that our economic growth, while fueled by investments, largely driven by expansion of credit, and that's where the danger lies. This fact will tell us that unless banks start to lend again (i.e. loans extended to grow back), it is very hard to imagine that investments, as component of GDP to be at the same rate as the years prior to 1998.

The good news is what we saw in 1998 did not persist and a quick reversal of trend was observed in 1999 onwards. The main booster for the years 1999 to 2001 are mainly private sector consumption: which has increased significantly almost to the same level before the crisis, which in a way reflected the total consumer confidence which has come back; and the continuing strength of the export sector, which continues to record surpluses and in terms of volume exports are growing year by year, which is a healthy sign (observe the USD terms of exports and imports).

On the other hand the slack in the private sector investments has been filled by the government sector, as a program of fiscal push implemented by the government as a policy to boost up the economy.

Wait for 2001 data!!!

One major change that we see in 2000 compared to 1998 and 1999, is that the net exports start to change direction, whereby increase in imports exceeded increase in exports by RM7 billion. While the issue may not be that serious, in the long-term, if the trend persists, it may be a factor that should be a major concern.

Beside this factor, all other indicators are showing good signs of slight recovery. Even though we should be reminded that this recovery is very much what I termed as selective recovery since only two sectors that show strong recovery trend, that is the manufacturing and services sector. Other sectors still remain weak, in particular the construction sector, which continues to remain flat.

The picture for 2001 is a stark contrast in comparison to 2000, where the economic indicators show a reversing trend, from an impending recovery to a slow slide downward. This is an issue that needs a careful look, because the issue is: are we observing a double-dip situation? That is after the crash in 1997 and 1998, there was a quick recovery, and then followed by a long and slow recessionary trend? Let us analyze this issue more closely.

## 5.2 Economic Programs to Jump Start the Economy

Now let us turn our discussion to the economic issues and programs during the 1998 to 2001 period. My objective is to analyze and make some observations about the Malaysian economy using the data that is available for these four years with the hope that it would provide some indications about the overall effectiveness of the economic policies and programs that have been undertaken. While the period is too short for me to make any conclusive argument, I believe that what can be observed may be useful in understanding of what may happen in the future. With that note in mind, let us move on with the subject.

I am going to divide the discussion on economic programs into two major sections: One: Removing liquidity squeeze on the economy Two: Pushing the engine of the economy Let me describe the logical reason why I choose to work in these order:

The subject of liquidity is important since one of the most important elements of the financial crisis is massive liquidity drain on the economy: therefore it is natural that the starting point to look at how to revive our economy then must begin on the subject. Furthermore, in my view liquidity should be a good indicator of where we are heading. An easy way to explain about the role of liquidity in an economic system, is to use the example of the role of blood to a human body. An economy needs liquidity to function, in the same way a human body needs blood to be alive. When there was so much loss of blood, a human body will suffer various complications. The same thing happen to an economy, when there was so much drain on liquidity (as what happen during the crisis) the economic growth comes to almost a standstill, or worse starts to gets into a recession. The vital organs of an economy may start to fails, and eventually the effect will be a severe economic condition. Off course an economy may not die, because it has a perpetual life. But the sufferings out of an economic hardship may just be unbearable for the society.

Using the same analogy, for an economy to recover, the first step to do is to stop the bleeding and to work out ways to inject or infuse liquidity back into the system. With liquidity issue addressed, then other subjects of the economy may be understood in a much better fashion. Furthermore, as we go along, liquidity itself is a good indicator of where we are heading. Therefore, it is the first subject that we need to deliberate.

After addressing the liquidity of the economy, then we can start to deliberate about the various of sectors of the economy. I will divide the discussions in the following order: One: On the role of government sector (or the fiscal activity) Two: The financial sector Three: The non-financial sector. The role of the government or the fiscal activity is an important starting point, because as we can recall from earlier discussions, our government represents about 23% of the countrys GDP, and it is the one that we can observe clearly through the presentation of budgets and various reports.

Next I will turn to the financial sector, where the recovery of financial sector is a very important indicator of the overall economic recovery, by the fact that the financial activities are at the heart of the economy, and represents the overall health of the economy. And finally, a detail discussion on other real sectors of the economy will be presented.

### 5.2.1 Program One: Removing Liquidity Squeeze

The liquidity within an economic system comes from a few sources, namely the domestic source and external source. The domestic source of liquidity arises out of the policies of the government and from the domestic players itself. While the external sources are from the gains of trade and inflow of funds into the economy. Table 5.2 below list out these factors:

Table 5.2 Factors That Affects Domestic Liquidity

## A. Government Policies

This includes policies by the government, Bank Negara, and other government agencies. B. The Domestic Market

The main factor of domestic liquidity is the banking system, which can be measured by the increase in the deposits, new loans extended by the banking system. C. The External Sector

The main factors from the external sectors are, the gains (or loss) from external trade, and foreign funds inflow (or outflows).

Throughout 1998 (after the imposition of capital control) until 2001, there are a number of developments that has taken place in the three factors that has been mentioned. The government, through Bank Negara Malaysia has implemented a few solutions to drive the liquidity of the economy, as well as we have observed quite a wild swing in terms of funds flow, and we have gained extensively from the external trade. All these factors have their own interactions, and the net results on the liquidity by each factor may not be that obvious.

What can be observed from the data is that liquidity was under severe constraints in 1998, and then started to improve significantly in 1999 and 2000. Beginning from 2000, however, we can see some signs that may cause for concerns, where, while liquidity is increasing, there were massive outflow of funds, and the gains from trade start to show diminishing signs. In fact by 2001, the trend continues and the net effects wipe out the advantage that we have gained from the trade surplus that has been achieved. If this trend is to continue into 2002 and beyond, it will be major concern as far as the total liquidity position of the economy. These results are clearly observed in Table 5.3 below.

Before presenting the data, I would us to recall from previous discussions that the best measure available for liquidity in economy is the M3 figures. As explained before, M3 basically covers all aspects of the deposits within the banking system as well as other deposits that are external of the banking system. The factors that affects M3, are the government sector, private sector, and the external sector. This is presented in Table 5.3 below:

Table 5.3: Changes in M3, and the factors contributing to the changes in M3. Year: 1996-2001 Source: BNM Bulletin All numbers in RM billion.

**Part I: Changes in M1, M2, and M3, and factors that affects changes in M3.**

Year Change in M1

(1) Change in Quasi-Money

(2) Other deposits

(3) Change in M3

Note: left hand side, (1), (2), and (3) represent changes in the deposits, i.e. M1, M2, and others. The right hand side represent changes that affects M3, namely the government sector (A), private sector (B), external sector (C), and others (D).

**Part II: Changes in Claims on Private sector.**

Year Changes in net claims on private sector (B) = (b1) + (b2) Change in loans outstanding (b1) Changes in Securities outstanding (b2) 1996 +86.03 +72.85 +13.18 1997 +96.05 +87.76 +8.29 1998 +3.89 -9.89 +13.78 1999 -9.25 -19.84 +10.59 2000 +25.43 +21.03 +4.40 2001 +20.37 +16.97 +3.40 Note: Changes in net claims on private sector is defined as the sum of changes in loans outstanding and changes in securities outstanding.

### Part III: Changes in Claims on External Sector.

Year Balance on Merchandise and Services Trade (X) Net Transfers

(T) Net Capital flows: Long-term (LT) Net Capital flows: Short-term (ST) Errors and omissions (E) Change to BNM Reserves (C1) = (X)+(T)+ (LT)+(ST)+(E) Changes on external claims on banks (C2) Total changes on external sector (C) = (C1)+ (C2) Notes: (\*) Data for 2001, left hand side are only up to 3rd quarter; Right hand side are as of December 2001. 1. The reporting format for 1999, 2000, and 2001 has been changed from the figures reported for earlier dates. This is particularly reflected in the item Net Transfers. Nevertheless the total sum should be the same. 2. Change to BNM Reserves = Balance on Merchandise and Services Trade + Net Transfers + Net Capital flows: Long-term + Net Capital flows: Short-term + Errors and omissions 3. Total changes = Change to BNM Reserves + Changes on external claims on banks 4. Net capital flows: short-term consists of portfolio investments, bank short-term loans and others. Net capital flows: long-term consists of FDI and government borrowings.

Let us interpret what can be observed from the data presented above:

1. We can see an obvious liquidity squeeze happened in 1998, where money supply grows only by about RM10.65 billion compared to the previous years of about RM60 billion a year. The main boost of money supply (amazingly) comes from the external sector we record the most significant increase of RM51 billion. This happens mainly because of the surplus of the external trade by about RM47 billion. After taking account the net outflow of funds and other factors, the resulting figure of RM10.65 billion was achieved. Note that the figures in 1998 (for all parts of Table 5.3) varies significantly compared to 1996 and 1997, the trend of which continues all the way to 2001. This is interesting in the sense that the currency crisis, has brought a new regime of liquidity patterns to the economy.

2. As we move on to 1999, we can see that money supply increases by RM33 billion, again being largely helped by large trade surplus of RM 75.35 billion. However, the gains from trade is being negated by large sums of net outflow of funds of about RM52 billion. The same trend continues to 2000 where gains of trade of RM68 billion is negated by net outflow of funds of RM60 billion! This is a very alarming trend, because if continues, gains from trade will then eroded, and may even becomes reversed!

3. In 2001,.

Despite of what has been said in the print media about our trade surplus, and economic recovery because of export competitiveness, what we saw is somewhat strange: why there were so much outflow of funds happening? My arguments here



is somewhat simple: gains from trade are temporal in nature. Once economic equilibrium is achieved, the economic agents will take actions that will even out any un-natural advantage from trade. It seems that those exporters that has realized the gains from the trades, are exporting their gains as well!

Let us now, work through the various issues carefully, and dissect the subject of liquidity in greater details.

### 5.3 Government Policies

As mentioned earlier, one of the possible factor that affect liquidity are the government policies. If we go back in history, the most famous policy was the imposition of capital control in September 1998. The government claims that by the imposition of capital control we have insulated the economy from the vagaries of the currency markets, and allow Malaysia to set its own domestic policy without hindrance or unintended effects from the external factors.

With capital control in place, the government then pursues a relaxed or loosening monetary policies in order to reduce the liquidity squeeze on the banking system and the overall economy. The major policies were to: ease the interest rates of the banking system, from as high as 10.65% (one month inter-bank rates), before September 1998, until the rates were brought down to about 2.8% by mid-1999, and the rates was maintained at that level all the way till the end of 2001.

Among the major action taken by the government was to reduce the Statutory Reserve Requirements (SRR) of the banking system. Statutory Reserve Requirement ratio or called SRR ratio is basically the percentage of money being deposited with Bank Negara for purposes of ensuring banking liquidity. The SRR is also used as monetary policy tools for Bank Negara in tightening or loosening money supply in the country. Since 1990 Bank Negara has been slowly increasing the SRR ratio up to 13.5% of which by 1997 the total amount kept with Bank Negara amounting to RM 60 billion. In a series of move in 1998 Bank Negara has reduced the SRR ratio from 13.5% to 8%, before September 1998, and during September 1998, the SRR ratio was further reduced from 8% to 4%. The same level of SRR has been kept until the end of 2000. What the policy does is basically to induce infusion of cash into the banking system to enable banks to have more cash within their system. This in turns should allow banks to extend more loans or maintain their liquidity without having the shareholders to inject more cash or capital into the bank. This will also improve the cost of funds for the banking system and hence helps the banks profitability.

#### 5.3.1 Effects of the Policies on Liquidity

In my opinion, the policies above are meant more as a measure to stabilize the banking system in the country. At one stage during the crisis, bank runs and liquidity squeeze on the banking system were quite severe (coupled with bank runs in Thailand and Indonesia), it was pertinent that the Malaysian banking system be spared from such occurrences. All in all the policies were very effective and quickly restore

the public confidence on the banks, and furthermore allows the banks to address their problems in a rather efficient manner. Even though the overall policies does not cause a major increase in the liquidity, it does one thing for sure: stop the bleeding of the banking system.

Now let us try to summarize these policies and their effects:

a. Gains from capital control: After September 1998, Bank Negara requires that all offshore Ringgit to be deposited back into Malaysia (by virtue of Ringgit has no value outside the country). How much gains do we have from such move? From the data, and the claims by the government, there has been a gain of about RM12 billion infusion back into the system. This figure is captured (in some way) in Table 5.5 item (E) for 1998. The immediate gain from capital control in terms of new money from offshore is not as large as some people might expect.

b. Was capital control instrumental in increasing liquidity? : It is very hard to measure as I indicated earlier because there is no hard evidence to support that a big amount of money did flow in due to capital control. If the intended policy was to stop liquidity outflow, the argument is rather weak. As I have argued earlier, very little money that wants to go out left in the system when capital control was imposed. The largest amount was in portfolio investments by foreigners, which the bulk of it left already in 1997. In fact in 1998 onwards we see massive outflow of short-term funds (see Table 5.3 Par III, column (ST)) amounting to RM20 to RM30 billion a year! Despite having capital control, still such amount of money flowing out in large sums.

c. SRR ratio reduction of 4% releases about RM 18 billion of new money available to be utilized by the banking system. Not all of these monies ended up in increasing the overall liquidity, since the real effect on liquidity would be on the increase in the total deposits in the banking system. The net increase in deposits in 1998 is only about RM10 billion. New loans extended in 1999 is still on negative trend (minus RM20 billion), only in 2000 then the situation improves when new loans increased by RM20 billion. This may confirm my hypothesis that the main effects of the SRR reduction policy is on the banks itself first, then only overtime, the effects is being spilled into the private sector.

d. Does the policy of low interest rate helpful for improving liquidity? : Generally low interest rate is being practiced when money supply is ample. In another words too much money around, hence the price of money is low (i.e. interest rate). In our case, we have low interest rate within a tight money situation, which is the reverse of normal conditions. So, the question is: is it helpful for improving liquidity? The answer is no! Because low interest rates means banks are giving out low interest to deposits in the banks, which then cause deposits to grow slower (since for automatic rollover deposits, will receive less interest to be rolled), and furthermore, for loans extended, they will have to pay less interest, which means less money flowed back to the banks, and hence less liquidity. The policy of low interest rate is not for liquidity improvement, it is for something else: to reduce non-performing loans within the banking system. Because high interest rates will make more companies to be unable to pay interest and may stop paying altogether. So low interest rates ensures that many companies can continue in the real sector activity, which in the long run will

be helpful for the economy. In summary, low interest rates hurts the short-term liquidity improvements, but help long-term liquidity requirements. However, low interest rates cause another problem, bank reluctant to continue lending.

In summary, by and large, the real effect of government policies in my opinion, is on stabilizing the banking system, and putting an immediate stop to the bleeding of the economy. Otherwise, the impact on total liquidity cannot be seen directly, and in hindsight, we cannot say that these policies are in effective, because the extent of the damage, should these policies are not taken is very hard to measure. However, to credit the success of stopping liquidity drain on capital control as the most effective policy, in my opinion is giving too much credit on something that is not as obvious. This is more so, if we look at the figures where, in the years after 1998, where the real help was from the gains of external trade. In another word, liquidity was helped, by a large degree from external factor rather than pure domestic factor.

### 5.3.2 Domestic Market Situation

In any economy, the most significant source of liquidity should come from the domestic economy. Any dependence on external sources generally tends to be short-lived, because theoretically, an economic equilibrium will force any gains from external trade to dissipate over-time. In the case of our economy, we can see that the most significant source of liquidity, at least until 1997, has been the domestic market, in particular the private sector loan growth (see Table 5.3 Part I, column B) of about RM80 to 90 billion per year. Therefore, the real indicator of long-term liquidity trend, in my opinion would the growth of this sector.

Growth of domestic liquidity, in actual fact is the result of inter-relations between two effects: growth of the total deposits in the banking system, and growth the loans extended by the banking system. The two factors are inter-related for the simple fact that loans can only grow in tandem with the deposits. In the years prior to the crisis in 1997, we can see that these two effects are working concurrently, whereby massive increase in deposits were followed by increase in loans extended to the market, whereby creating massive liquidity to the financial system. (See Table 1.10, Chapter 1).

Let us see what happens to these factors in 1998 till 2001, as presented in Table 5.4 below.

Table 5.4 Increments in deposits and loans: Commercial banks, Finance companies and Merchant banks. Year 1998 to 2001. Source: BNM Bulletin (All numbers in RM billion)

insert table

We can see that in 1998, the total deposits decreases slightly as the economic crisis was on-going, but the trend reversed significantly in 1999, with an increase of RM24.4 billion. In a way this shows that the confidence of the public on the banking system has been restored, and the overall liquidity of the business environment has somewhat improved. However, starting 2000, we can see a downward trend, whereby increments in deposits started to shrink, and by 2001, the total increment reduces

to only RM8.64 billion. This shows that the overall domestic liquidity growth is slowing down by a great deal.

Whereas on the loans side, we can see significant drop in 1998 and 1999, mainly due to the overall NPL situation, whereby bulk of the loans from the banking system has been transferred to Danaharta. As banks has somewhat arrest the NPL problem, we can see that in 2000 and 2001, banks are starting to lend again as evidenced by the loan growth. The loan trend is especially strong in 2001, whereby a significant increment of RM35.48 billion is recorded. As we can see later, the bulk of this increment is due to increment in new housing loans and vehicle financing, extended by the commercial banks and finance companies. (I will come back to this subject in later part of the chapter).

In summary, the overall domestic liquidity as I defined it before, is somewhat improved in 1999 and 2000. However, in 2001 downward trend in deposit increments should give us some alarm about what may happen in 2002 onwards. All in all, what we have achieved is to arrest the drain on domestic liquidity, and set the domestic source of liquidity on improving trend, however, the worry is such improvement may turn out to be short-lived, as the 2001 figures indicates. The loan growth trend may also take a downward turns in 2002, because generally, loan growth tends to lag deposit growth by a period of one to two years (see Figure 1.10, loan growth vs. deposit growth).

### 5.3.3 Liquidity Resulting from the External Sector

As a trading nation, we have depended by a large degree on the external sector all the years since mid 1980s, where large scale of FDI has been flowing in consistently into the country, and significant amount of equity fund flows flowing in during the early 1990s, and during those years, our imports and exports has been a major sector of the economy . The inter-play among these factors will results in positive or negative effects on the overall liquidity system in our economy. While the years before the crisis, these factors has been somewhat balanced, in the sense that the net result on liquidity is small (e.g. only RM1.52 billion in 1996, Table 5.3 Part I, column C). The data is presented in Table 5.5 below in slightly different format than Table 5.3 for purposes of exposition:

Table 5.5 Net capital flows: Foreign Direct Investments, Short-term fund flows, and Net transfers of capital. Source: BNM Bulletin. (All numbers in RM billion).

insert table

(a) Data for 1996 to 1999, follows a different format, where all portfolio investments and others are lumped together as a single figure. Only in 1999 onwards, the new format where the two items are segregated. (b) Others generally present private sector borrowing from the foreigners. (c) Data for 2001 is only up to the 3rd quarter only.

We can see that for the years prior to the crisis, we have been enjoying positive net capital flows into the country, and they were mostly being spread out between FDI,

portfolio investments and foreign borrowings. The situation starts to reverse in 1997, when short-term capital start to flow out of the country and the trend even increases further after 1998, even after imposition of capital control. The total net capital outflows are so large by 2000 the gains from trade surplus diminished to about only RM8.10 billion, and by 2001, the gains is almost wiped out (RMxx billion only).

These figures tell us one thing that I have said before: liquidity gains from external sources is short-lived. From another angle we can say that the trade surplus was our savior, in the sense that without such surpluses, our country would not been able to meet the outflows of funds, in particular, the massive withdrawal of loans that has been extended by foreigners (as represented by column: Others).

It is important to realize that the figures for 2000 and 2001 should ring some alarm bells, the net capital flows does not turns to negative after the crisis, the sheer size of it by the years 2000 and 2001 is alarming. If the same figure persists into 2002 and beyond, the total net flow may turn to negative, and hence will start to drain on the overall liquidity of the economy. If such situation exists, then we all should brace for harder times ahead, unless the domestic source of liquidity starts to pick up and fill the slack by the external sector.

#### 5.3.4 Summary on Liquidity

In my opinion, while the government policies, especially in 1998 and 1999 has managed to stop the drain on liquidity by some degree, especially by saving the banking system from total collapse, the liquidity push is somewhat limited by the market forces at play. In the early years after the crisis, we were helped by the external gains to support our liquidity, this helps is a temporary one, and starts to diminish after a few years. The real long-term indicator would definitely be the growth of domestic source of liquidity which is supplied by the domestic banking system. The signs of which is still small (an increase in deposits and loans of only in 2000 and 2001). The long-term view on liquidity for the years 2002 onwards is still somewhat uncertain. I will come back to this subject in the next chapter.

One lesson that I want to point out: claims that the government is the most important factor in saving the economy is giving too much credit to the facts that are not so obvious. It is true timely government policies do help and can be effective, but over longer haul, when economic forces settles down, the net result are pretty much driven by the market players, that consists of domestic players and external players. What we saw for Malaysia is in fact not too far from other countries in the region, where, most economies (including South Korea) were buoyed initially by the gains from trade surpluses. Most countries also has been able to bring down the domestic interest rates to lower levels compared to 1997 period, and domestic liquidity has started to improve. The results that we have achieved in Malaysia (as some argued, due to capital control) in fact is not that far better compared to others. All of these, should tell us that, what at play are far more stronger than we think: the market forces. Therefore, the real measure of long-term success, in my opinion, is not so much on liquidity per se, but rather on the overall economic recovery it self, the subject of which we now turn to.

## 5.4 Program Two: Pushing the Engine of the Economy

In this section, I will divide our discussions into the following subsections: First: The government fiscal activity; that is discussions about government budget (i.e. revenues and expenditures) during the years 1998 to 2001. Second: The financial sector, which I divide into two main areas: the banking system and the stock market; and finally third: The non-financial sector, which covers the other sectors such as the manufacturing sector, properties, construction, and others.

### 5.4.1 First: The Government Fiscal Program (“Fiscal Push”)

The government represent about one fifth of our economy, with yearly revenue and expenditure of about RM60 billion. Therefore, we think of the government as the single largest conglomerate in the country, and hence the role of the government sector in economic recovery is indeed very important. There are two divergent views among economists, about the role of government expenditure during a recession period, whether the government should follow a certain policy of expansionary (i.e. increase the spending) or just take a normal course of action and let the market forces dictates the eventual outcome.

The tool at the governments hand is the government expenditure, because logically it is clear that the government revenue is not something that can be increased over a short time. What can be done by the government is to push for additional fiscal spending to help economic growth by filling the slacks in consumption and investments by the private sector due to the downturn. This is exactly what we saw in Table 5.1, where in 1998 till 2001, the government consumption and investments has been consistently on the rise and on increasing trend. In fact, the fiscal spending by the government plays pivotal role on the direction of the GDP growth over these years, because by varying the government spending by a certain amount, it will have a direct impact on the percentage of growth that can be attained.

As I have said earlier, over a short period of time, the government may alter its spending pattern but not the revenue. At the same time, during economic crisis, we would expect that the revenue also shrinks by some amount due to the economic crisis, and hence we would expect a bigger mismatch between revenue and expenditure. This is what we called as fiscal deficit. In the years 1998 to 2001, we can see that the government fiscal position is consistently on deficit (See Table 5.7 below: RM5 billion in 1998, RM9.5 billion in 1999, RM19.7 billion in 2000, and RM $\infty$  billion in 2001). The cumulative figures for the deficit by 2001 stood at RMZZ billion! The question is then, how long can this pattern lasts?

Table 5.7 The Federal Government Fiscal Position 1997-2001 Source: BNM Bulletin (All numbers in RM billion).

Insert Table

Part I: Revenue and Expenditures

## Part II: Source of Financing

We can see that in 1998 and 1999, the government did make an attempt to increase the spending as part of the effort to boost the economy. As we can see the limits of the fiscal deficit is quite clear in the sense that the deficit must be financed from somewhere, and in the case of 1998 and 1999, the deficit funding mainly comes from domestic borrowing, and only a small amount from foreign borrowing. In another words, deficit must be funded using the existing liquidity in our system. The danger here is then, absorption of liquidity from the local economy by the government may cause liquidity squeeze on the local market.

### 5.4.2 Second: the Financial Sector

**5.4.2.1 Bank Restructuring** How bank works: banks take deposits from customers and lend them out as loans into the markets, they function as intermediary between depositors and borrowers. Banks gross profit will be from the interest differential between the interest rate they pay depositors and the interest rate charge the borrowers, usually the difference is about 3% to 4%. The net profit then will be gross profit less overhead costs and other incidental costs incurred in running the operations of the banks. Another important point that may drag their profit is loan-loss provisions; banks are required to make provision for loans that are non-performing, which usually has to be written off over two years period.

In order to be in business, bank owners are required to put in their capital as a backing to the deposits, as well as certain amount of money must be kept with Bank Negara in forms of statutory reserve requirement (SRR). The banks are required to keep a minimum of shareholders fund to the assets ratio or called capital ratio of at least 8%. This is in conformity with the international standard, which is called the Basle Accord. An 8% capital means that a bank with shareholders fund of RM 1 billion can support an asset of 1/0.08 or RM 12.5 billion.

During the crisis there were few problems that causes problem for our banking system. The first problem was the liquidity within the system, which I have addressed it earlier; the second problem was banks capital base was deteriorating very fast due to the increase in the size of non-performing loans. Non-performing loans, as said earlier, need to be written off against banks profit and capital. In another words, for each say RM100 of non-performing loans bank has to write off, the amount will be applied first to the net profit of the banks, and if that is not enough (say profit is less than RM100), then the amount will applied against the banks shareholders funds. When that happens, the capital ratio will decline, and hence may cause instability to the banking system.

**5.4.2.2 Non-Performing Loans within the Banking System** So let us start by looking at the size of non-performing loans within our banking system in 1997-1999.

Table 5.6

Non-Performing Loans and the Capital of the Banking System: 1997 to 2001 All

numbers in RM billions (except numbers in percentage). Source: Bank Negara Bulletin

insert table

From Table 5.6 we can see that the non-performing loans (NPLs) is on the rise from 1997 to 1998, by RM 52.93 billion in 1998; and decline slightly in 1999 due to block loans sold to Danaharta by the banks. Based on the NPLs, if we have to make full provisions, as we can see for example by 1998, the whole capital base of the banks will in jeopardy. (NPLs = RM 77.98 billion or RM 52.07 billion vs. capital base of RM 55.57 billion). Under such scenario, the capital ratio will be way below the 8% standard.

But as we can see in 1998 and 1999, the base capital ratio of the banks were not severely affected by the provisions, and even in the ratio were improving, so whats going on here? Actually there are a few reasons why the capital base was not as bad as it may be and they are outlined below:

1. An injection of capital by Danamodal in 1998 amounting to RM4.55 billion into a few banks which translated into RM 1.21 billion increase in capital base. The increase is less than the amount injected due to negative effect of losses caused by the write offs of non-performing loans. This is a small amount compared to the whole problem, but it did help few individual banks.
2. The amount of write off is also reduced by the take over of non-performing loans by Danaharta, which is replaced by Danaharta bonds as described earlier. If banks has to do write offs on their own, it may cause massive write offs against their capital (since profit is already on the low side), which may threaten the banking system in terms capital ratio requirement. (Danaharta did take over an amount of RM17.78 billion from the total non-performing loans, which left the total NPLs to be about RM28 billion in the banking system).
3. The banks are also allowed to use either three months or six months period for classification of non-performing loans, which helps to reduce the amount of non-performing loans, which then reduce the amount of loan-loss provisions to be made. Three months measure make the total amount even worse, where an additional RM 18 billion will be added to the total NPLs. (i.e. adding RM 18 billion to RM59 billion in 1998, which makes the total to be RM77 billion).
4. Banks are also allowed to write offs loan-losses over a period of five years, which then reduce the impact on immediate years. This measure probably would be the most effective in reducing the write offs against banks capital.
5. Finally, the write offs should be make against the banks profit, so the provision will not be applied against the capital directly at first until all the profits are exhausted. Since the economy is slightly better, the banks started to get some profits rolling in which will be helpful on its bottom line, reduce the need of writing off against capital base.



We can see that the policies by the government and Bank Negara are rather commendable in avoiding a full-scale crisis of our banking system. In fact the efforts, in my opinion should be credited fully to the policy makers in making such moves, which were necessary in order to save our banking system. However, I would like to make a few caution here that, the whole thing does not tell the whole story, there are still a number of catch that we need to pay particular attention to the future:

1. NPLs is still in on the rise, even though slowed down a little bit. For example, in 1999 the total NPL within the banking system (based on 3 months classification) was reduced by RM9.01 billion, that is after an amount of RM17.78 billion was taken out to Danaharta. In another words the total increase in NPL in 1999 was about RM 8.7 billion.

2. Eventually the provisions for loan-losses will have to be amortized by the banks, even though on a five-year basis. These amortizations will put severe strains on banks profitability, and may affect the capital base of the banks. So the need of further capitalization of the banking system remains. In fact we can see that in 1999 a reduction of RM 720 million has already took place. Five years amortization may imply that at least RM3 billion a year is needed for re-capitalization .

3. On the other hand, low interest rate policy may lowered down banks profit, which will cause another problem; because low profits means less buffer from income side to cushion the provisions to be made. And the same thing also applies if the banks loan portfolio is shrinking, because banks will be working with a lower base to support the loan-losses, and may cause the capital ratio also deteriorate.

Anyhow, all these issues are yet to be seen, so for now I just would like to point it out to the readers so that you may see what may be of importance. In another word, what I am trying to say here is that: we have stopped our banks from hemorrhaging, but we still have not solve all problems yet and as some people say: We are not out of the woods yet.

#### **5.4.3 Why there was a Rush for Bank Mergers?**

The answer to the above question lies with the fact that the banking system, as I said, we are not out of the woods yet, that is the strains on the banking system may continue for years to come. Let us analyze whats the advantage of bank mergers through combining the banks into a few large grouped entities:

1. Bigger capital base: this argument is not the strongest (at least within the current context) since combining banks does not take away all the NPLs and capital base problems away from the total banking system; it just remove the problems faced by smaller banks, because if we look at the figures the finance companies and merchant banks had a larger percentage of NPL, with a smaller capital base, compared to the commercial banks. So what we have is a net effect of transfer within the banking system itself, not taking NPLs away from the banking system; Danaharta is the only one doing the function of taking it away from the banking system. If any

real help of combining the banks would be to allow further capitalization of the banks, and with lesser number of banks, the focus will be much easier.

2. Efficiency: This argument probably makes more sense since bank mergers as done in other countries provide evidence of efficiency gains, for example there will be lesser number of total branches due to elimination of overlapping branches; less number of total staffs; and others. All of these may help banks bottom line, which is quite useful within the current context.

In general, my view of bank merger is as positive and should be welcomed. The only problem that I foresee in bank mergers is that banks are constrained by the merger process from their operations, until the merger is completed. One of the constraints is that banks will not be lending out aggressively while waiting for the merger outcome. Because if they continue to lend, it may cause the bank more losses in terms of potential new NPLs from these newly created loans, which will cause diminution in value; hence affecting the final valuation which may cause bank owners to let go their shares at a much depressed price or value.

### 5.5 Why Banks are not Rushing to Start Lending?

Finally, before moving on to the next subject, I would like to address the issue of why banks are not lending as fast as they can, which may cause some problems. If banks don't continue to lend, then the whole purpose of liquidity creation, as well as bank restructuring is defeated. As I have shown earlier, banks should have much better liquidity position compared to the crisis period; their capital position is somewhat better, as I have shown above; but why aren't the banks lending the money out (i.e. negative loan growth)? In fact, Bank Negara has put a target of loan growth of 8%, and as we seen from the figures; the target is far away from being achieved. This may presents some serious problem.

In my opinion, there are two reasons why banks are not lending as fast what is needed: one, the business situation has not sufficiently improve; two, companies that borrowed before generally cannot or would not borrow anymore, at least for the time being; and three, low interest rates. The first and second reasons are understandable, but why three (i.e. low interest rates) to be a problem?

Low interest rates, while help the companies, present another problem: banks have less incentive to lend out. Bankers know that the risk of lending in the current situation to be high (i.e. probability of default is high), and the reward for such risk (i.e. the returns in forms interest earned) is not sufficient and hence the risk premium is very small. Low interest rate, beside having small risk premium, at the same does not helps banks bottom line, combined with high level of NPL with substantial loan loss provisions; all combined provide enough incentive for banks not to seek for more trouble, might as well focus on something that has direct implication on banks profitability: loan collection. If bank stop lending, and yet recalling back loans (through collection), then we will have a shrinking loan outstanding, and that is counter to what the objective of we start with: for banks to pump the blood into

the economic system. What we are facing now is something what economist call: liquidity trap.

Liquidity trap has a few different versions, but the one that I would like to describe here is a simpler one relating to the interest rate and liquidity. What we have here is a situation where a country that has a high savings rate (which is the case of Malaysia), with sufficient level of liquidity (which we also have now, albeit a smaller degree), and still the economy does not grow. How can these happen? In order for the economy to grow, the private sector needs money to help its business activities; but banks, as I have said earlier, will not be willing to lend at low interest rates; which cause a breakdown between demand and supply. At the same time, if we raise interest rates, the private sector borrowers may suffer because of high interest rate hurt their business (especially so in current environment), which may cause them not to borrow; and banks with high interest rate may want to lend, but given high interest levels may cause the NPLs to be on the rise, which then may cause their capital again due to write offs. In another words: either way, we are trapped. At the end, the banking system can be highly liquid, and yet nothing is moving in helping the economy to move forward again!

What I saw is a dangerous trend toward this direction: liquidity is increasing, loan growth is curtailed, and the companies still does not receive the necessary capital they badly need: the final result economic growth will not be as fast as we want it to be, which then may cause a slow and steady decline of the economy, and even may cause a deflationary trend in the economy. Another observation that I would like to make with low interest rate: since money does not go into real activities, it went somewhere else: the stock market. With low interest earned on deposits, many people with cash start to pump them into the stock market, especially with the rising trend of the KLSE. This may present yet another potential problem. I will address this issue later on in the Chapter.

## 5.6 The Stock Market

I will start with the recovery of KLSE for two reasons: one, as I have argued earlier, the Malaysian financial crisis largely emanates from the crash of KLSE. In fact, the outflow of Ringgit also relates to KLSE crash, and subsequently precipitates the attack on Ringgit that cause the Ringgit to plunge down. Two, because recently in 1999 and early 2000, KLSE has risen significantly from 500 levels in 1998 to 800 levels in late 1999 and even reach 1000 levels in February 2000. Many people start to get busy with the stock market activity, and even words of economic recovery starts to get around, using the KLSE as the indicator.

What contributes to the KLSE rise; what does the rise in KLSE shares do to our economy? What kind of positive input does the KLSE contribute to our economic recovery? And will the recovery be sustainable? These are three types of questions that I pose and will try to answer in this section.

### 5.6.1 What Causes the Rise in KLSE?

There are few reasons why the KLSE does rise in the year 1999 and 2000: one, without much selling pressure from the outside, KLSE may rise truly by domestic demand; two, there is ample liquidity in the market to support the KLSE; three, I observe that some major local funds did participate to help the rise in KLSE; and finally, which I believe as the most significant factor, is because of low interest rates level in the country. While some people say that there were some foreign funds coming in, particularly from Hong Kong, I have found no evidence to support such claims.

### 5.6.2 What KLSE Rise Does to the Economy?

It helps, because as we recall earlier, the negative wealth effects caused by the crash of KLSE was enormous. The rise will cancel out these negative wealth effects, which then may free some of the liquidity that were trapped into the system during the crash. I estimated that an amount of a few billions may be freed, for example from margin facilities that were extended, as well as for some owners of the shares that may want to liquidate their positions to use their funds for other purposes. All in all, if any help it has to be to improve liquidity of the economy. The exact amount is hard to estimate.

The other help is in terms of confidence; it brings confidence to the population, which will be helpful in generating other economic activities.

Beyond these two, I cant see any other benefits.

My only concerns with KLSE rise are the following: what I would like to call as net wealth transfer. As I have shown in the A simple model of an economy with a stock market, rising share prices will cause the original owner of shares (i.e. block shareholders) to transfer their shares to the other investors (which I called in the model as retail investors). While the transfer is good in providing liquidity to the original owner, it absorbs the liquidity from the retail investors. So in total, the net liquidity position of the economy may not necessarily improved (as the model predicts). So what do we have here? KLSE rise may just facilitate these transfer to take place, this what I called as net wealth transfer from one group to another. The only way for this wealth transfer to be of direct benefit of the economy would be, if the transfer were to investors outside the economy, i.e. foreign investors, because that means fresh liquidity and cash into the system. However, as I said earlier, there is no evidence of such transfer took place. My conclusion is then: the KLSE rise has limited contribution to the improvement of our economic conditions, and should the KLSE drop again, we will back into the same problem all over again. The only way to go is: get foreign investors to come in, until that happen, the shares of KLSE will only serve as a mean of transfer between us.

### 5.6.3 Was the rise of KLSE Sustainable?

This is a very hard question to answer, because if we look at the fundamentals it is quite clear for example that the P/E ratio of KLSE companies are in dizzying heights, about a third of KLSE listed companies has some form of debt problems which are unresolved yet, and the total liquidity within the economic system is barely sufficient. All these three issues combined tell me that the rise would be limited to a certain level, and may remain stable at a certain point. It also depends on investor sentiment, which may cause an overreaction by pushing the share prices into a higher ground. Anyway, a more detailed analysis is needed for any conclusions to be made.

My worry is more on what will happen if the KLSE crash again? The effect this time around will be quite significant in the sense that we should use our available resources to correct the real sector of the economy (assuming that the banking sector is taken care off, differently), because the real sector is the true engine of the economy. If another crash happens, then another rounds of liquidity squeeze may happen, and may even suck the new liquidity that has been created over the last few months. That is something that we all have to be concerned with. However, as in any optimism, it always breed complacency, and complacency breed unnecessary risk taking. At this point I would leave it up to the readers to make their own conclusion on what you see. My opinion is KLSE is not the utmost priority for economic recovery, it is necessary, but far from sufficient; the more important thing is recovery of the companies and businesses, which constitute the real sector of the economy.

## 5.7 Non-Financial Sector

### 5.7.1 Companies and Business Restructuring

Companies and businesses are the major economic block of our economy. As the government has been driving the concept of private sector driven growth over the last decade, we can see that companies and businesses has been the main contributor for our GDP growth. So if we want the economy to grow again (i.e. in terms of GDP), the private sector recovery would be the most important subject to address.

Now let us have some indication about the private sector business and companies situation: As we know from previous discussion, as of end 1999, the amount of loans extended to the private sector stood at RM 431 billion, out of which about RM 70 billion (or 15%) has been classified as Non-performing loans, and out of that about RM39 billion is under Danahartas management. Out of the RM39 billion under Danaharta, RM17 billion is by acquisition, which covers loans of RM5 million and above for 667 accounts, while the rest are under management by virtue of loan portfolios from Sime Bank Bhd., and Bank Bumiputra Bhd.

In a study by Claessens, Djanko and Klingebiel, sponsored by the World Bank, they estimated that in 1998, about 34.3% of all firms in Malaysia were unable to meet their current debt repayments; the percentage dropped to 26.3%. The biggest sectors that fall under these categories are companies in the real estate and properties

sector. They also estimates that more than 25% (one fourth) of the KLSE listed firms cannot service their debt repayments.

If these numbers tells us anything, it says that there is still a lot of work to be done. Furthermore, since only 667 large accounts being taken over by Danaharta, we can guess that still a large number of businesses and companies that are directly under the banks NPL portfolio, which numbers may easily runs into a few thousands. I do not question the logic of addressing large accounts, since many smaller companies do rely on bigger companies in their activities; so helping the bigger players may in turn help the smaller players, plus the logistic of handling so many companies under Danaharta is un imaginable. But sooner or later this issue has to be addressed, if not we are at the risk of wiping out a lot of small and medium scale businesses and companies from our economy. That is something that can be disastrous.

My worry is the process of resolving corporate debt has been extremely slow Up to date, is not known how many cases that has been resolved and has come to a full conclusions. Table 5.8 below as provided by the World Bank Global Economic Prospect 2000, indicates the level of completion up to August 1999.

Table 5.8 Corporate Debt Restructuring Progress (As of August 1999)

	Out-of-Court Restructurings	In-court restructurings	Number of registered cases
53	52	Number of cases started	27 34
		Number of restructured cases	10 12
		Percentage of restructured debt in total debt	32 Not Available

We can see that only about 20% of the registered cases that has been resolved.

As we move along, there can be more and more debts coming into the NPL status, especially if we large amount of maturities coming due in the next five years, because most of our corporate and business loans in the country is with maturity five years or less and the bulk majority of them are collateralized to some form of assets, in particular properties. In another words, the amount of work on debt restructuring is on the rise over the next few years. Unless we can get some of them out of the way quickly, the backlog will be something that can be problematic.

A number of economists argued that the Asian corporate distress can persist and may even breed some danger into the future. Because while under distress, companies can afford to wait; anyway, the worst has already happen, and what more worse it could be. So it becomes a waiting game, with the hope that some thing will happen, either the economy improves, or a bailer will come. The fact is this waiting game may even cause the costs to increase, because the interest rates keep on compounding, and eventually the total costs may be more than just trying to achieve a quick and fast resolution. The fact is most of our companies need to restructured, even among the healthier ones. The capital structure of the past, due to quick and fast growth, will not be suitable for the future. A number of companies need to be re-capitalized as well, in order for them to survive the next few years. All these issues have to be addressed somehow.

On the other hand, the debt restructuring also may affect the capital market in some way: as more and more companies seeking solutions through issuance of papers in place debts. The favorite instruments used in the market now carry some for convertible loan stocks, which are listed on the KLSE. The numbers of loan stocks and similar instruments will flood KLSE in the next few years, which may bring a to-

tal of exceeding 22 billion units. This is not counting the bonds issued by Danaharta, and government securities to funds its deficit. All in all these numbers may be in the range of 22 billions. The effect of such sudden amount of supplies, with limited amount of demand will be to dampen the whole capital market. While these papers help to resolve immediate problems, they may in the future absorb large amount of funds from the domestic market, unless we can attract foreign investors to come in and take these instruments.

Another issue that is important also is what has been termed as capital reduction and haircuts. The standard rate in the market now, for debts resolutions is for the companies to take a capital reduction ranging from 50% to 90%, and for creditors (usually unsecured creditors) to take a haircut ranging from 0% to 50%. If we take this measure, then say out of RM17 billion under Danaharta, will result in amount of RM 5 billion taken away; and from others can be RM 10 billion for a total of RM 15 billion. This amount while on paper translates into a real loss of that much for the economy. This is the cost of restructuring. The cost of course will be borne by the companies and businesses, the government, and of course the public. The extents of the numbers are not yet clearly known, but eventually will come out. It is something that again I don't have sufficient data to support but something that we all should look for as indicators.

Finally, I would like to touch again the issues of small and medium scale businesses and companies. Unless something is drastically done, I think the problem may be beyond repair after sometimes, where a whole class of businesses and companies will be wiped out. This will erase efforts over the last ten years to get to where we are today, and may require many more years of rebuilding in the future. It may also affect the New Economic Policy of getting the Bumiputras into the business, of which the extent of the damage is unknown to all today.

### 5.7.2 Export Engine

Another engine for the economy is exports. As I have shown earlier, our exports represent more than 80% of our GDP in terms of size. With the Ringgit at low rate compared to US dollars and other major currencies, we have gained what economists called as terms of trade advantage. What it really meant is that, they can buy our goods at much cheaper price (say in US dollar terms) and hence may cause demands of our goods to be increased.

If we look at Table 5.1, we can see clearly that in 1998 and 1999, despite the export volume growth to be somewhat leveled, the gains that we have in Ringgit terms were very significant. This is major advantage to our economy since we can export our self out of the economic crisis by exporting our goods, taking advantage of the low currency. Furthermore, as it being confirmed by a number of studies, Ringgit at RM3.80 per US dollar is in fact much lower in real terms compared to other currencies of crisis-ridden economies in the region with the exception of Indonesia. Korea and Thailand for example are struggling to keep their currencies from rising in order not to lose this advantage to Malaysia.

Unfortunately, the problem with the gains from the terms of trade is not a permanent thing. Generally, economists predicts that such advantage may last for a few years, and after a while the economies will go back into equilibrium position, and the terms of trade will start to level again . How this can happen? In the case of Malaysia, it can happen in two ways: one, the price of goods that we exports, in say US dollar terms will adjust downwards to reflect the new cost structure (i.e. lower dollar costs of manufacturing or production due to lower Ringgit); and two, since our exports are in the form of added value to the intermediate goods that we import, the advantage occurs, because we purchase intermediate goods during the period before the crisis, and now the inventory of these goods may be depleted, and new orders will be paid in higher Ringgit terms, which then eliminates the differential that use to exists. Let me show how this generally works through two examples:

Example 1: Crude Palm Oil prices. CPO used to be at US 450 per ton before the crisis, which translates to about RM 1,100 per ton. When Ringgit was devalued to RM3.80 per US dollar, the CPO price in Ringgit terms was in the range of RM1800 to 1900 per ton. The reason is not because CPO has become expensive, but more because of exchange rate. (The price in US dollar has a slight increase to about US500 per ton, because of shortage of supplies due the crisis, where Indonesia at the time totally stops from supplying their CPO). However a check today for CPO price, tells us that it is back into the range of RM 1200 per ton. Why? Because of adjustments in the terms of trade to be leveled off as I explained earlier.

Example 2: Electronics. Our electronic industry represents a large chunk of our exports, totaling not less than 20% of our total exports. During the year 1999, the electronics sector shows large improvements in terms of value of trade and helps the country to generate trade surplus. But there is one major problem: the electronic sector is among the one that consumes a lot of intermediate goods as its source of input. I have some indirect evidence that most of the manufacturers have long term supplies contract for their inputs from outside, so in the beginning there was no problem for them since they are using their inventories of inputs, but as we reach the year 2000, these contracts already expired, and new orders need to be made. The new orders must be made in the current prices and hence current exchange rate, which then may cause the price of inputs to be higher than before and may wipe out the advantage that they use to enjoy. In another words, the surplus that they have will be diminishing.

Both examples clarifies one point: export driven engine is a very short term advantage that we may have, probably for two to three years, after that adjustments will happen in the market, and a new level will be established, where the obvious advantages will be diminished. So if you want to bet on trade as a long terms source of recovery, the better forget it. These conclusions can be understood easily from the economic model that I developed *Whats Wrong with Devaluation anyway?* In the appendix of Chapter 4.



### 5.7.3 Manufacturing Sector

The manufacturing sector will be the most vibrant sector for the economy, over a good number of years ahead. The main advantage that the sector has gain are two: For export based manufacturers, they can sell their products to a much wider market because of competitive terms of trade that Malaysia has gained through the Ringgit devaluation, and furtherance of advantage by keeping Ringgit at RM3.80 per dollar, while other regional currencies has improved, on real terms, much better than Ringgit. For other manufacturers that are producing for the home market, their advantage is that foreign goods are more expensive due to the devalued Ringgit, and hence, the demand for their goods are on the rise, especially if they are of perfect substitutes for imported products. So what we see here import substitution at work as well.

Thats why from the 1998 and 1999 figures, we can see that manufacturing sector has been the most vibrant sector, and I predict that it will remain to be vibrant for at least a few more years ahead, especially so for the import substitute manufacturers, unless the Ringgit 3.80 pegged is removed, or raised to a lower level (i.e. Ringgit improves). It would be reasonable to assume that this trend would continue for a few years, since, as I have argued before, the exporters will have a few years advantage before the real currency issue catches up, and similarly for import substitute manufacturers for their competitors from outside to catch up with them.

### 5.7.4 Recovery of the Real Estate and Property Market

As I have documented earlier, the real estate and property sector suffer a total drop of about 20% from the peak in early 1997. The total volume of real estate and property market is something that is not captured by any hard data. The only thing that we know for certain is the amount of lending that went into the broad property sector as identified by Bank Negara. The total amount of loans extended into the broad property sector has been growing at a rate above 20% in 1995 and 1996, and stood at approximately RM140 billion as of end of 1997. The amount of credit expanded into this sector in 1998 and 1999, has been almost leveled. In fact the help for 1998 and 1999 came mainly from the governments effort to help the sector through reduction of loan margin for houses of RM250,000 and below, and shop houses of RM350,000 and below, where the margin is reduced to 75% in 1998. Similarly, as of late 1998, the government initiated the house ownership campaign, which were quite successful in getting the backlog of properties that are somewhat completed or has already been completed. All these measures provide a push for the property sector and buffer a bit the downward pressure of the property market overall.

The longer-term recovery however, is something that is very hard to predict. The key criterion for the real estate and property sector will be: one, the level of liquidity in the market place; two, demand and supply conditions. The level of liquidity will depend a lot on the amount of credit expanded into the real estate and property sector, because generally transactions in real estate and properties are large in size, and a certain level of gearing say 60% margin would normally be required. Since only houses and shop houses of certain value are allowed to have lower margins, more

transactions in that area would be observed; however, for more expensive and higher valued properties, transactions are very unlikely.

Furthermore, the amount of loans extended to the broad property sector has been the largest in terms of percentage of loans that are non-performing. Out of the total NPL in the banking system as of at the end of 1999, the broad property sector assumes about 40% of total NPL.

Due to these various overhangs, I do not foresee the real estate and property market to grow any faster, and may even be on a long slide, until eventually either liquidity has come back in a big way, or demand match up with supplies. My guess would be, if any immediate transaction to happen, it would be through the elements of the listed shares swap with properties or instruments out of restructured loans. Because these are the two routes of exit for property developers and owners as well as creditors. More and more of these instruments will come to the market place, and their values may well be a good indicator for the overall price level of properties in the future.

### **5.7.5 Construction Sector**

The recovery of construction sector in my opinion would depend solely on the government effort. The reason being, as I have said earlier, there wont be much hope for the real estate and property sector to recover in a short time, so that would mean and end to the construction boom contributed from the real estate and property sector. However, as there have been a lot of projects that has been privatized by the government over recent years, which is about to start or has not completed; they would be the main contributor for the construction industry over the next few years. The same thing also applies to government-funded project that are under turnkey or tendered out contracts.

Due to the slowdown, I would expect also the costs for construction related materials will be on downward trend by approximately 20%, following the lead of reduction in the property prices. Given the competition among contractors, which according to some estimates about 6000 companies that are registered with CIDB in the whole country, I would also expect that the profit margin for most contractors will dwindle down due to stiff competition, and this would lead naturally to a major consolidation in the industry. The fact is, as a country, we have too many contractors to support such an industry.

### **5.7.6 Related Issues**

Now that we have reviewed all these three programs as outlined above, the other issue left is about the role of our government in the economic recovery. As known to everybody, the government is taking a number of efforts in getting the economy back on track, namely the formation of National Economic Action Council (NEAC), the government budget, as other initiatives. This section will address such issues and comments on how it helps the economic recovery; this is followed by a discussion on funding the economic recovery and the need to open our markets; and finally

a discussion on the role of the government and the private sector in the economic recovery is provided.

## 5.8 National Economic Recovery Program

As an effort to overcome the economic crisis, the Malaysian government has established the National Economic Action Council, or NEAC in early 1998, which was headed by Tun Daim Zainuddin. The NEAC has developed as part of its strategy to get the Malaysian economy on the recovery track, a program called National Economic Recovery Program of NERP. Though, it is less publicized to the public, the NEAC has been a very busy and functioning body, with meetings running almost on a biweekly basis among major bodies and organizations in the country. The members of NEAC constitutes members from the government, authorities such as Bank Negara and Securities Commission, bodies such as KLSE and others, bankers, experts, and business leaders.

The NERP outlined major programs as follows:

1. Stabilizing the Ringgit
2. Restoring market confidence
3. Maintaining financial market stability
4. Strengthening economic fundamentals
5. Continuing the equity and socio-economic agenda
6. Restoring adversely affected sectors of the economy

These major programs is explained by various action plans and recommendations which then forwarded to relevant ministries and agencies involved. These programs were followed by various discussion at the relevant level and the progress are reported to the NEAC submitted on a biweekly basis to the full committee.

Generally the role and function of the NEAC is commendable in the sense that the information and co-ordination is centralized, therefore and overall birds eye view for the economic recovery program can be accomplished. There were a lot of hopes and high expectations were being given to the NEAC in the beginning of its formation, however these hopes and expectations begins to mellowed down as time passes by. The reason being, the NEAC is only a coordinating body, it is not an implementation body. That is the misperception that the public has.

The clearest achievement of NEAC is the stabilizing Ringgit program through the capital control on September 1998. Even though it is not clear whether the program was initiated by NEAC, but it definitely fulfills the first objective of the NERP. All the programs of the NEAC as outlined in the NERP are pretty much of advisory role towards various agencies and ministries. In my view, as evident from the various progress reports published by NEAC, the role of NEAC will slowly diminish and probably at one stage will be converted into other forms of function, most likely as advisory body to the government on economic matters in the years to come. This role can and should be played rather effectively by NEAC for the future, especially as a central agency that collects, analyze, and study various economic indicators and figures that are central to the functioning and monitoring of the economic activities. A good example of this is to have a central data bank of all properties and real estate assets, under development, and under planning because the lack of such information has been rather damaging in terms advising and controlling the approval process of

new supplies of real estate coming into the market. A major and serious over supply may cause the real estate market to severely affected the overall price level and may cause banks to be overloaded with property financing.

Another good example of the role of NEAC is towards providing awareness and garnering the business community towards a certain direction in terms of economic activity and focus, for example to give directions such that the level of competition is sufficient, and the same time not overcrowded with too many players, a good example of this is the telecommunications industry, where too many players with large infrastructure overhead and setup costs make the players to suffer from over competition.

My view is that NEAC as a body, does not have much impact in terms of solving the immediate economic problems of the country, but more suited towards long term, in particular in the area of economic research and advisory for the government and the business community as well as to educate the public at large. In fact the indirect achievement of NEAC and its program, in my opinion is more in terms providing confidence to the public and the market that the government is serious in looking at the economic crisis, and making bold attempts at solving the problem and getting the economy on the right footing again.

## 5.9 Funding the Economic Recovery

This is the issue that is in my opinion is the most crucial and relevant subject that deserves the attention of everybody. The NEAC in its report says that the funding issue for the economic recovery is pretty much a manageable thing. The Tables below was adopted from the White paper published by the NEAC summarizing the funding requirement and sources of funds for the economic recovery.

Table 5.9

Funding requirement and source of funding for economic recovery 1998-2000

Reference: NEAC white paper, Table 7 & 9

insert table

Based on the above data, the NEAC claimed that the funding requirements pretty much can be met domestically, and the need for fundraising from foreign sources is pretty much minimal since we can manage our own funding internally. The figures also indirectly tell us that we dont need funding from the IMF.

The list of all funding needs however goes higher than has been listed in Table 5.9 above, since what has been listed is only from the government point of view, the private sector needs is however much larger than the RM62 billion as presented. Let us try to have some rough estimate some of the private sector needs (please be aware that there are no hard data available to back up these figures, since there are no thorough study that has been done on this subject):

Table 5.10

An Estimate of Private Sector Funding Needs for years 2000 to 2002

insert table

If we compare the private sector funding needs (of RM180 to 235 billion) with the government funding needs (of about RM 60 billion), it should make some sense since the size of private sector is about four times the size of the government, as represented by percentage of GDP contribution. In another word, the required funding should multiply by similar rule as well.

If we take the estimates as somewhat correct, then we can see that domestic source of funding is insufficient, and hence there is a real need of having foreign source of capital to come in some big way. The situation is obvious that the demand by the government and large corporate sector will crowd out the whole market, and if we combine this existing debt instruments, the market will be flooded with funding demand with far less amount of cash supply available to meet the requirement. If there is no foreign funds coming in, then we may have a situation where due to oversupply of papers, combined with limited liquidity, may cause the price of these papers to be far below its par value, which may then cause another rounds of problems for the banks and institutions that are the holders of these papers.

Another critical issue that needs to be addressed is the use of public funds, such as EPF as the main source of funding for the government to dip into. My opinion is EPF fund should never be use for such purpose, and the investments by EPF should always be free from pressures from the government. This fund belongs to the public at large and in no way belongs to the government. EPF should be totally free to choose whatever investments they need and should not be called in to do a national duty if we have a way to get funds from outside. EPF fund should only be used as the last resort.

## 5.10 Do We Need to Open Our Markets?

This will lead us to another question, whether we should let our market be open and encourage foreign funds to come in as much as possible? The answer is obviously yes. In fact this is the right time for us to receive such funds, because we need them now more than ever before. The problem is however, there are very few funders that are willing to come in at this stage. Many investors got bitten in the last time around, and in fact are themselves trying to recover from their losses. Despite these problems, however, there are enough funds worldwide that can flow into our country, at this time, but many are still playing a waiting game and would rather wait and see until the clouds are clearer.

The issue then do we want such funds to come in? In my opinion, we really dont have much choice if we want recover much faster. Therefore the real need is to prepare the economy such that it will become more conducive for these funds to come at a much more earlier date.

This is where I think the government is rather slow. The reason for such inaction or slower approach is not clear: is it because of our fear of the foreigners to come and dominating our economy, or is it because we are not ready to open our market

yet, or what? The reality is we have to decide fast whether we want these funds to come in or not because at the end we are competing with other regional countries such as Thailand, Korea, and Indonesia for similar funds.

However, recent events are very much becomes a source of discouragement to foreign investors, such as the impasse of the CLOB issue, and its eventual settlement. Recent rejection by the FIC of the Citibank purchase of building from the Lion Group can be rather discouraging, even though after appeal it was passed by the FIC. The fact is that, the total environment can still be viewed as unfriendly or not conducive enough for investors to come in a big way. Furthermore, the recent western bashing and accusations by the leadership, may still lingers in the mind of many western investors. (for which we have only hope for since Japan is quite well known is knee deep in their own financial problems and woes).

So the major questions that we should ask: should we let the foreigners to participate in a bigger way in say our strategic sectors of the economy such as banking, telecommunications, infrastructure, and so on? Can we allow foreign controlled companies to be present and dominate certain sectors of the economy? In the case of Korea and Thailand, the effort of having foreign investors coming into the major sectors of the economy has been accepted by the public and business community. Recently, Indonesia has also accept bids from joint efforts by local investors and foreign investors in taking over Astra, which is the biggest automobile company in the country. While the other countries are buzzing with such activity, the situation in Malaysia is still rather cold. Are we missing something?

### **5.11 The Role of the Government and the Market in Economic Recovery**

One subject that is rather sensitive and may be a little bit controversial is about how much of the economic recovery can be done by the government or because of government policies and how much of it is really out of the market and market conditions. In reality it is very hard to segregate between what government policies and actions do, and what the market does, and at the end which one is the more dominant in terms providing economic recovery.

What generally happens is that the market looks to the government, in terms of statements, policies, actions as to set a certain expectation and act rationally based on that expectations. And most of the times, at least in the case of our economy, little that the market realizes that in reality what the government can do is rather limited and the direct implications on the market is also rather limited. This is directly out of the years where as a growing and smaller economy, we use to rely a lot on governments and governments planning. However, little that we realize that we may have outgrown those stages of economic development, and more and more of our economy depends on other factors that are not necessarily controlled by the governments. Such market forces are the one that determines the true and real direction of the economy.

I believe gradually the markets will start to change that perception, because too much hope and too high of an expectation will not be good for our economy. We can see that in most developing nations, the direct role of the government in determining the market performance is getting smaller and smaller. A good example is in the United States, whereby the only part of the government that has impact on the market is the Federal Reserve Board, and this board is also independent from the administration. So in essence the market does not tie itself to whoever is President of the country and what their policies are.

In my opinion, that is where Malaysian economy should be heading, because if the market forces are free from interference and changing policy directions, the market can be more predictable, and will adjust and correct itself accordingly. However, if the market is based on certain perception, belief and expectations, that the government will and will always do something, there will be a time that when such things no longer exists, the market may not be able to stand on its own.

In the case of economic recovery, we can see that the most important and significant contribution by government policy has been in the area of stabilizing the Ringgit by imposing capital control, even though as I argued earlier, the imposition was probably a little bit too late in terms of stopping outflow of capital and inflicting damages to our stock markets. What has supported us in 1998 from having a much worse recession, as well helping us to recover slightly in 1999, was from exports and not from our internal economy, and in fact the same thing happens in Thailand and Korea as well. So if we say that our government policies help us in terms of economic recovery, how come other countries that follow different policy approach has the same recovery as well. The advantage that we gain from exports, as I have argued, is not from our policy, but it was from the source of the crisis itself: a devalued currency, which is an issue resulting out of the market place; and the exports were growing because the rest of the world economy is somewhat resilient and didnt follow suit with recession as we were hit by the crisis.

In many cases we can see that efforts such as to improve liquidity, having a much more loose monetary policy, debt restructuring efforts, and others are pretty much limited in terms of what government can do, and to a large degree depends on the private sector in terms the final effect will be. Nevertheless we say and be grateful to our government for what the efforts that has been undertaken, and to a large degree the policies, efforts and others organized by the government has done its intended effect to some degree. The bigger issue what are we in the private sector are doing to see that the economic recovery is going to be real and going to happen in a significant manner.

If we all sit back and hope that the government will come and something on our behalf, then we will invite the moral hazard all over again, where hopes of government bailout and help, will make us to take risk that may cause problems in the future. We have experience that in the past, we cannot have it happening again in the future.

Table 5.1

Macroeconomic Data for The Malaysian Economy: 1998-2001

insert table

## 5.12 Summary



## CHAPTER 6

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# WHAT COULD BE LEARNED FROM THE NINETIES

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## **PART II**

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## **THE EVOLVING PERIOD**

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## CHAPTER 7

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### THE ECONOMY: 2000-2010

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## CHAPTER 8

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# BLUE OCEAN STRATEGIES

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## CHAPTER 9

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# DECREASING ROLE OF CONSTRUCTION & MANUFACTURING SECTORS

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## CHAPTER 10

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# MALAYSIA BECOMES A SERVICE BASED ECONOMY

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## CHAPTER 11

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### MALAYSIA AS A DEVELOPED NATION

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## CHAPTER 12

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# DECREASING ROLE OF THE GOVERNMENT

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## CHAPTER 13

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### SALIENT FEATURES OF THE 2000 DECADE

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## **PART III**

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# **THE MATURING PERIOD**

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## CHAPTER 14

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### THE ECONOMY 2010 - TODAY

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## CHAPTER 15

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## STANDARDS AND COSTS OF LIVING

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## CHAPTER 16

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### THE INCREASING INCOME GAP

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## CHAPTER 17

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### COMPARISONS WITH OUR NEIGHBORS

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**PART IV**

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**FUTURE OF PROSPERITY  
BEYOND 2020**

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## CHAPTER 18

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### THE VISION 2020 PROMISE

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## CHAPTER 19

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# THE FUTURE IS IN THE SERVICE ECONOMY

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## CHAPTER 20

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## THE FUTURE IS IN K-ECONOMY

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## CHAPTER 21

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# WINNING THROUGH PRODUCTIVITY AND EFFICIENCY

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## CHAPTER 22

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# IS THERE ANY ROLE LEFT FOR THE GOVERNMENT, BEYOND 2020?

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## **PART V**

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## **EPILOGUE**

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## REFERENCES

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- [Kil76] J. S. Kilby, "Invention of the Integrated Circuit," *IEEE Trans. Electron Devices*, **ED-23**, 648 (1976).
- [Ham62] R. W. Hamming, *Numerical Methods for Scientists and Engineers*, Chapter N-1, McGraw-Hill, New York, 1962.
- [Hu86] J. Lee, K. Mayaram, and C. Hu, "A Theoretical Study of Gate/Drain Offset in LDD MOSFETs" *IEEE Electron Device Lett.*, **EDL-7**(3). 152 (1986).
- [Ber87] A. Berenbaum, B. W. Colbry, D.R. Ditzel, R. D Freeman, and K.J. O'Connor, "A Pipelined 32b Microprocessor with 13 kb of Cache Memory," in *Int. Solid State Circuit Conf.*, Dig. Tech. Pap., p. 34 (1987).

