CHAPTER 5: RESULTS OF INDICATORS OF FISCAL SUSTAINABILITY TEST

5.1   Introduction

The second part of our assessment of fiscal sustainability is to look at various indicators and to evaluate the sustainability of the fiscal policy in Malaysia by comparing these indicators and the threshold set by the IMF and World Bank. This includes analyzing the Debt-to-GDP ratio, the primary gap analysis and financial sector stability indicators.

5.2   Results Of Indicators Of Fiscal Sustainability Test

5.2.1   Debt-to-GDP Ratio

In assessing the Debt-to-GDP ratio, the trend of the Total Debt-to-GDP, the External Debt-to-GDP (including and excluding the NFPE's external debts) are analyze. The changes in the make-up of the debts and source of funding are also observed. This includes the assessment of whether the increasing use of domestic debts as a source of funding the deficit has resulted in seigniorage and whether there will be impact on inflation in the long run.

A simulation is also performed to evaluate the underlying risk that the External Debt-to-GDP ratio will breach the all critical 40% threshold as set by the IMF. In this analysis, the simulation is performed on both the External Debt-to-GDP with

and without the inclusion of the NFPE's debts. In the subsequent section, the growth rate needed to stabilize the Debt-to-GDP ratio is ascertained and compared with the past growth rate.
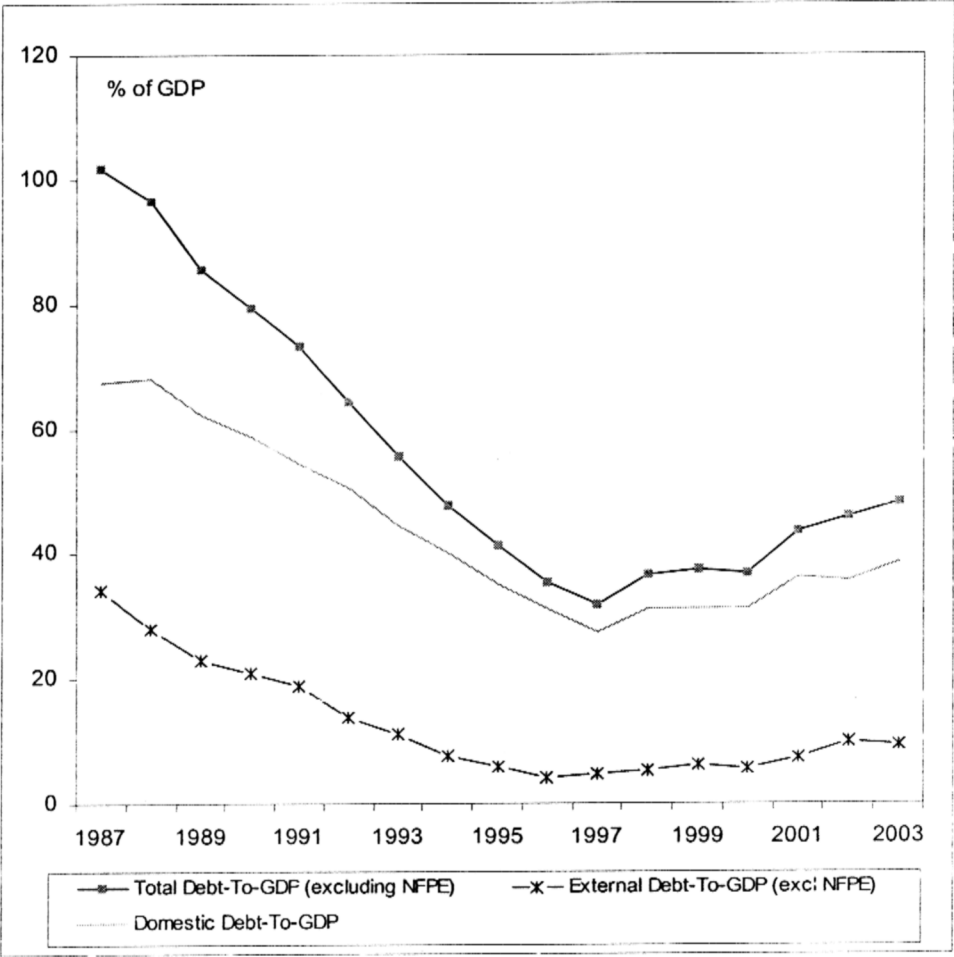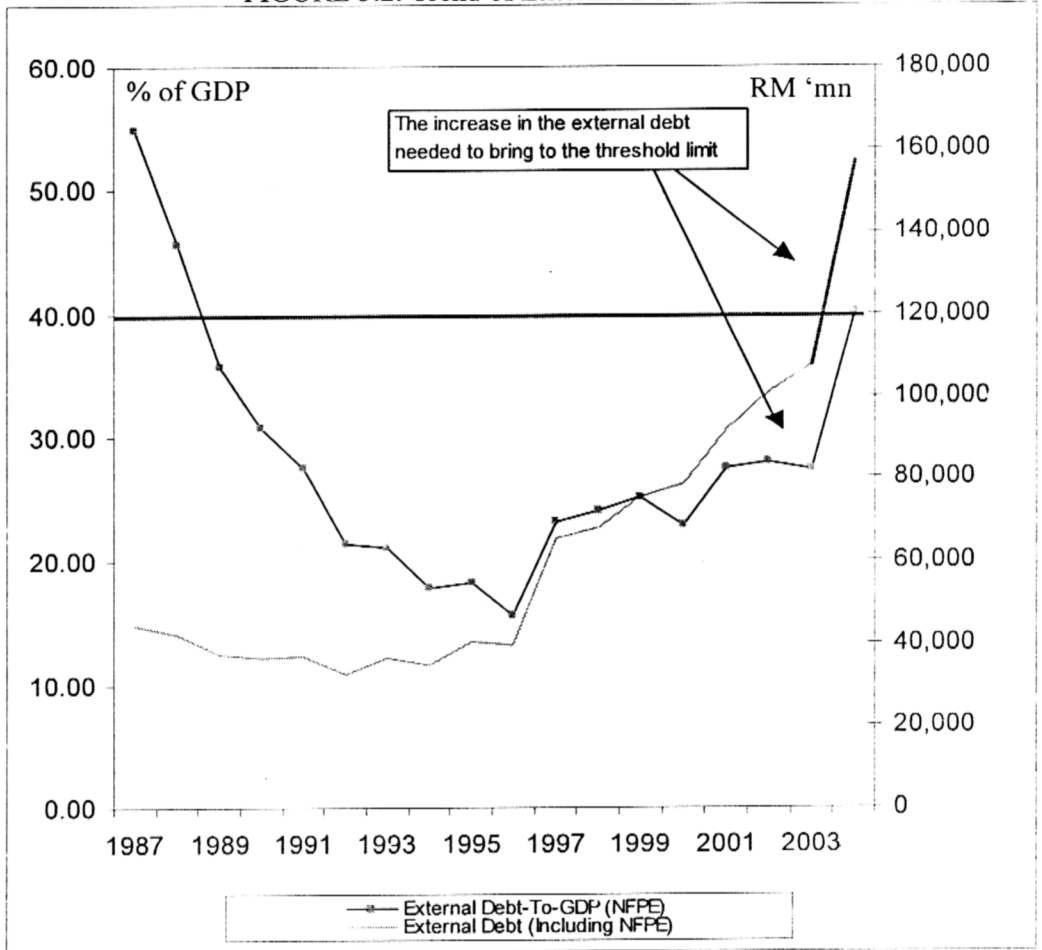
FIGURE 5.1: Trend of Debt-to-GDP Ratio

Figure 4 depicts the trend of Malaysian Debt-to-GDP ratio. The ratio of total Debt-to-GDP gradually declined from 1987 to 1997 as the economy expanded at a rate faster then the rate of growth of the debt. Subsequent to the Asian Financial crisis, the ratio begins to climb back.

FIGURE 5.2: Trend of External Debt

In recent time, domestic debts have been growing faster than the external debt but immediately after 1997, the external debts expanded faster then the domestic debts. Two probable explanations to this, firstly the depreciating domestic currency against other major currencies (USD, EURO, YEN) has resulted in the ballooning of the foreign debt in Ringgit term in 1997 and 1998. The subsequent increase after 1997-1998 was the result of the government rising external borrowings to fund its consecutive budget deficits and fiscal stimulus due to

adverse external development. In the recent years, there has also been increase interest in resorting to domestic borrowing as a funding option for the government. This shift in borrowing pattern is because, as domestic rate is low relative to the interest rate that the government needs to pay for the external funding, due to the fact that Malaysia's government need to pay a premium on foreign borrowing following the downgrade of Malaysia's sovereign rating after crisis. Secondly, Government intends to deepen domestic bond market and hence resorting to domestic bonds provide further instruments and further extension of the yield curve needed to deepen domestic bond market. Two concerns raised with respect to domestic borrowings are:-

1. Will the domestic borrowing have crowding out effect on private borrowings and hence impede growth.

2. Will the domestic borrowing eventually result in higher inflation, if the Government ultimately resort to expanding its monetary base to pay for its debts.

The issue of crowding out effect is that if the Government's borrowings have crowd out private sector involvement in economic activities, then fiscal policy cannot be deemed to be sustainable in the long term as Government cannot raise debts continuously without impairing long-term economic prospects arising from the crowded out private sector.

We ruled out the first concern as evidence suggests that the increased public borrowings do not crowd out private sector borrowing. This is because as it stands, the adverse development in the economy post crisis have not seen the strong private sector borrowing and the higher government demand of funds hence do not compete with the private sector for the pool of money in the financial system.

FIGURE 5.3: Excess Liquidity In The Banking System and Interest Rate Level
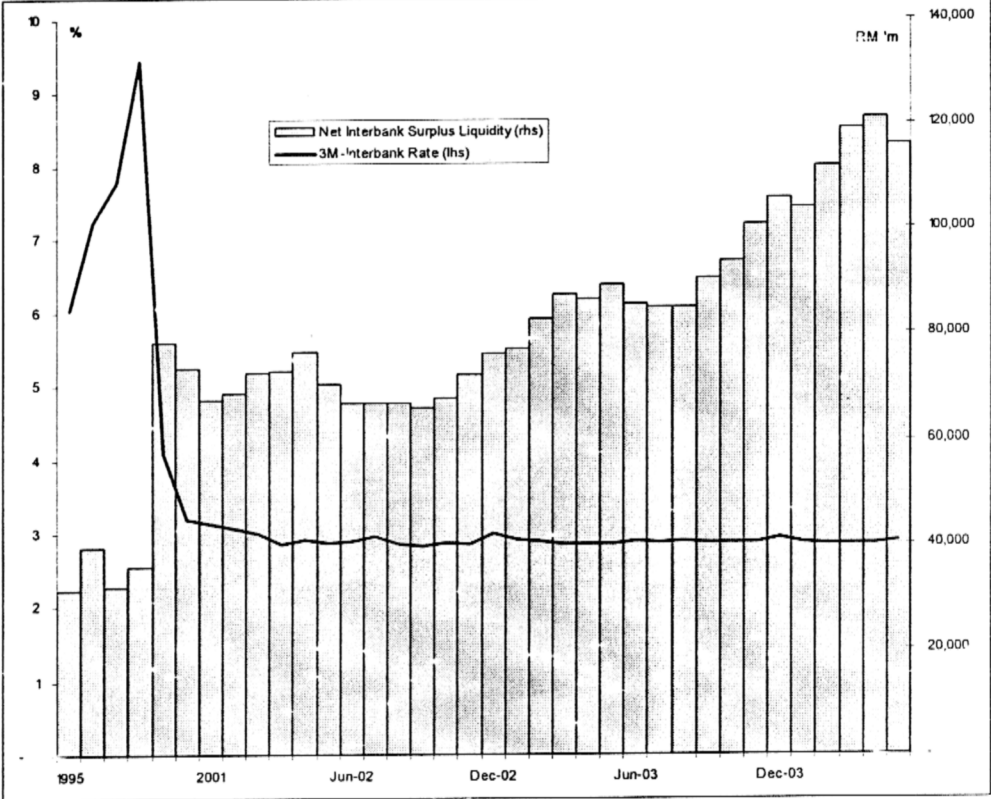

Source: BNM

This is clearly reflected by the underlying strong excess liquidity in the banking system (Figure 6) despite higher public sector borrowing from the domestic financial market. If both the public and the private sector are competing for the same pool of fund as in the case of crowding out effect, then excess liquidity would have been narrowed and interbank interest rate would have been on the rise. However, this is not the case now – excess liquidity has clearly hit record high and interbank interest rate at record low.

As discussed in the Literature Review section, Burnside (2004) suggested that the choice of fiscal authority on the path of its fiscal position determines the direction of money supply and inflation in the long run but in the short run, it is the coordination of the two authorities that decide the two variables. If the fiscal authority is too preoccupied with expanding output, then the monetary authority is left to ensure that the money supply growth is not excessive to the extent that it stokes inflation.

That is, a sustainable fiscal policy is one that has a coordinated effort of both fiscal and monetary authorities. Here, if the fiscal authority is running a fiscal deficit, a coordinated effort would mean that monetary authority will ensure that the money supply growth is consistent with the growth rate of the economy. An expansionary monetary policy at the time when the fiscal authority is running a fiscal deficit is an indication of non-coordinating effort with respect to addressing inflation. Such policy, according to Burnside (2004), will only stoke inflation in

the future and result is either the reversal of fiscal policy or an aggressive monetary tightening. By tracking the money supply growth rate during the period when the fiscal authority is running fiscal deficit, we found that monetary authority stance has been quite restrictive during the recent period when fiscal authority is expansive (Figure 7).

FIGURE 5.4: Monetary and Fiscal Policy Coordination
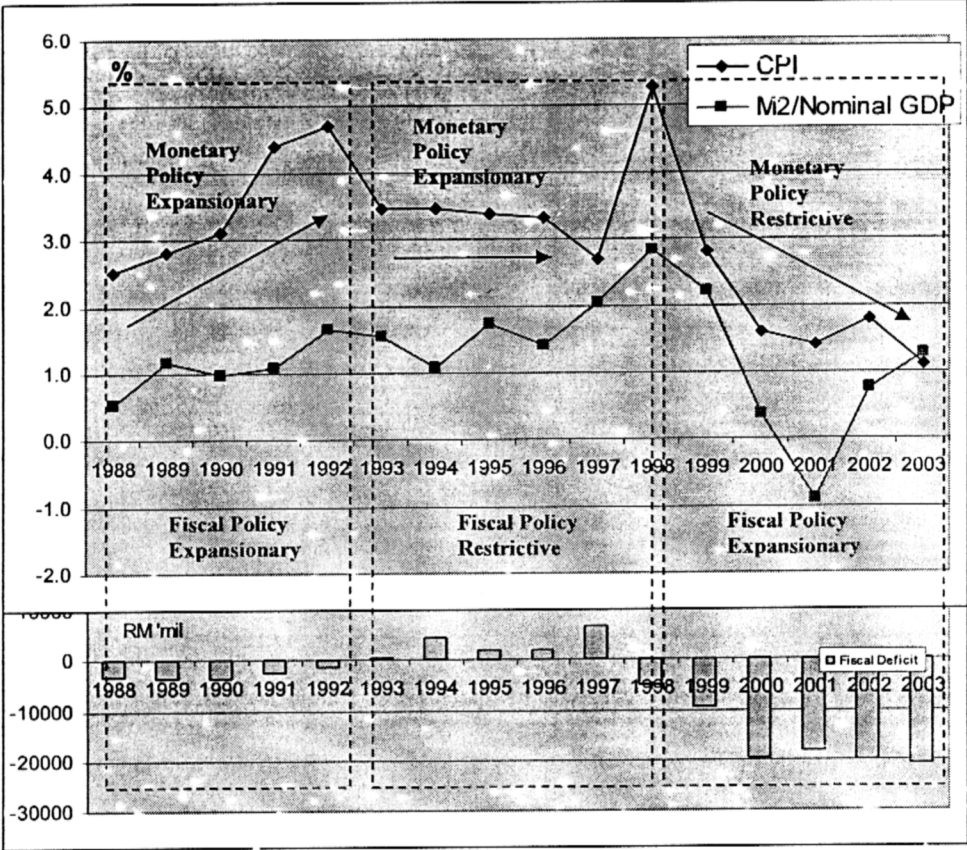
M2/Nominal GDP reflects the monetary authority policy stance
Fiscal position reflects the fiscal authority policy stance

During the period prior to 1992, fiscal authority was on an expansionary drive with fiscal position in deficit for a long period of time. Monetary authority policy was also loose with the M2/Nominal GDP on a gradual rise, suggesting more

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money was injected in the system then the economic activities warranted. The period of non-coordination between the fiscal and monetary authority resulted in the inflation rate pick-up in the early period of 1989 to 1992. Inflation rose from 2.5% in 1988 to a high of 4.7% in 1992. Clearly, the period was in line with the theory.

However, the second period of fiscal expansion with high fiscal deficit do not correspond with rising inflation. This is because this period followed after the peak of inflation in 1998 and the monetary authority appears to be on the watch and the authority stance has been quite restrictive in the initial period between 1998-2001, and slightly loose in 2002-2003. This coordinated effort has kept the inflation in check. Therefore, domestic borrowings at this juncture do not cause disruption to inflation and has not resulted in the monetary authority resorting to expanding its monetary base to pay its debts.

The case of coordination is important because if authorities are non-coordinating, and resulting in inflation rising, there is no reason to expect that such policy can be sustainable. A clear case in point is the currency crisis in Latin America, which often caused by non-coordinating authorities with the result of rising inflation.

The second trend of Malaysian government debts is the increasing use of Non Financial Public Enterprises ("NFPE") as a source for borrowings, most notably in the external debts.

FIGURE 5.5: Trend of External Debt of Non Financial Public Enterprises
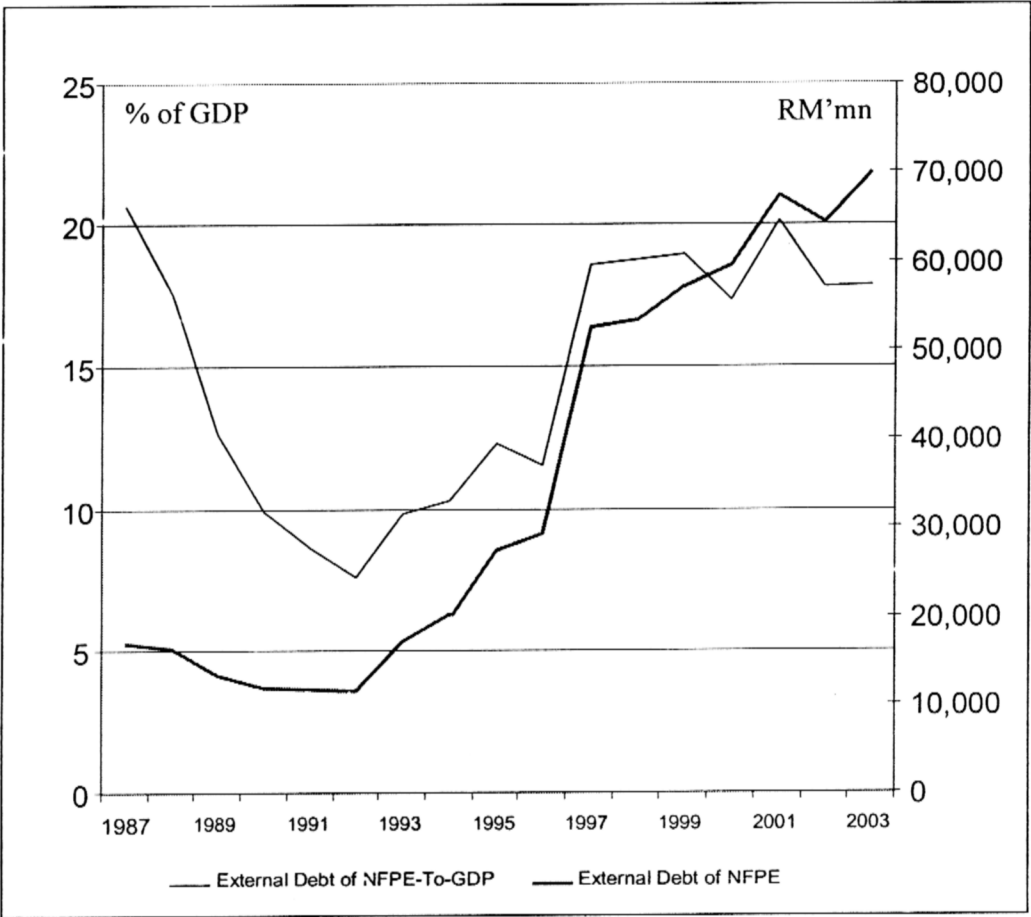
This trend is clearly reflected in the above chart as the external debt of NFPE has risen over the years. The trend in the external debt of NFPE is quite persistent as even during the period between 1996 and 1997 where the total debts fell marginally, the external debt of NFPE continued to trend up. More telling is that

there seems to be no structural break in the trend even during the Asian Financial Crisis in 1998.

The issue of external debt of NFPE has been highlighted previously in our Methodology section where we said that the fact that the implied obligations of the Federal government over these debts in the event of default warrants the inclusion of this into analysis. Our PVBC empirical test has failed to include this into analysis given the fact that only the total debts of the federal government (excluding the NFPE) is taken into consideration when running the test. One key factor for this is the lack of data for the NFPE debts over a longer period that corresponds with the series time horizon. Nonetheless, even the exclusion of these debts into the PVBC test already indicates that the debt level is unsustainable. Which means that the inclusion of these debts into the federal government debts will only draw the same conclusion with the exception of perhaps the higher degree of seriousness.

5.2.1.1 Simulation Results of External Debt-to-GDP Ratio

In doing our analysis, we adopt a dynamic approach where we see how the threshold limit could be breached under various assump

Under the scenario where the external debt excludes external debt of NFPE, the Debt-to-GDP ratio for Malaysia appears relatively healthy. In a more optimistic assumption, the ratio will be able to remain below the threshold level at least up to 2030. So long as the external debt grows at a rate at and below 5%, the threshold

will only be breached many years after 2030, provided the economic growth stays positive. Table 4 simulation results clearly shows that even in the worse case scenario where the economy grows a sub-par rate of 1% and the external debts grow at an explosive rate of 15%, it will take another 11 years before the threshold is breached.

TABLE 5.1: Simulation Results For External Debt (Excluding External Debts of NFPE)

Assumptions		External debt Growth Rate Assumption						
		1%	2.5%	5%	7.5%	10%	11.5%	15%
GDP Growth Rate Assumption	1%	>2030	>2030	>2030	2027	2020	2018	2015
	2%	>2030	>2030	>2030	>2030	2023	2020	2015
	3%	>2030	>2030	>2030	>2030	2025	2022	2017
	4%	>2030	>2030	>2030	>2030	2029	2024	2018
	5%	>2030	>2030	>2030	>2030	>2030	2027	2019
	6%	>2030	>2030	>2030	>2030	>2030	>2030	2021
	7%	>2030	>2030	>2030	>2030	>2030	>2030	2023
	8%	>2030	>2030	>2030	>2030	>2030	>2030	2026
	9%	>2030	>2030	>2030	>2030	>2030	>2030	2030
	10%	>2030	>2030	>2030	>2030	>2030	>2030	>2030

Shaded Area indicates threshold will only be breached after 2030

This suggests that there is room for further external borrowing without having to concern about breaching the threshold limit. However, in an assessment where external debts of NFPE are included, the outcome does not seem as optimistic as the above.

TABLE 5.2: Simulation Results For External Debt (Including External Debts of NFPE)

Assumptions		External debt Growth Rate Assumption						
		1%	2.5%	5%	7.5%	10%	11.5%	15%
GDP Growth Rate Assumption	1%	>2030	2029	2013	2010	2008	2007	2006
	2%	>2030	>2030	2017	2011	2009	2008	2007
	3%	>2030	>2030	2023	2012	2009	2008	2007
	4%	>2030	>2030	>2030	2015	2010	2009	2007
	5%	>2030	>2030	>2030	2020	2012	2010	2008
	6%	>2030	>2030	>2030	>2030	2014	2011 (Base Case)	2008
	7%	>2030	>2030	>2030	>2030	2017	2013	2009
	8%	>2030	>2030	>2030	>2030	2024	2015	2010
	9%	>2030	>2030	>2030	>2030	>2030	2020	2011
	10%	>2030	>2030	>2030	>2030	>2030	>2030	2012

Shaded Area indicates threshold will only be breached after 2030

If the government is able to keep its external debt rate of growth below the GDP growth, then it is obvious that the threshold limit will not be breached in the foreseeable future. Even if external debts are growing but at a rate of or less than 5%, then it will likely to take beyond 2030 to breach the threshold so long as the economy is growing at an average rate of 4% over this period.

On the other hand, it will not take long for the external Debt-to-GDP to reach 40% if the external debt is growing at 10% level even if the economy is expanding at a commendable rate. Our base case, which we have taken as the averages of the growth of external debt and GDP over the past 5 years, shows that the threshold will be breached in 7 years' time in 2011 if nothing is done to

correct the current trend. (this is based on the average growth rate for the external

debt 11.5% and GDP growth of 6% over the past 5 years from 1999-2003).

The trend is quite a reverse before the crisis, where average GDP growth in the

10-year period between 1988 and 1997 the economy expanded at 11.9% whereas

the debts were growing by an average of 5.7%. Bear in mind that the debt would

have been much lower had it not for the devaluation of Ringgit in 1997 which

gave rise to a substantial increased in the external debts by 54.7% in 1997.

Excluding this, the debt would have been declining by 1% over the 9-year period.

As the rate of growth far exceeding the expansion in the external debt during this

period, it is hence unlikely that the threshold level would be breached in the

foreseeable future.

If the IMF study is to be adopted and base on our base case, Malaysia's external

Debt-to-GDP would have breached the threshold period in 2011. This would

raise the likelihood of debt crisis correction for the country from just under 2-5%

to between 15-20%. The increased likelihood has a very significant impact on the

country for two reasons; Firstly, the rise in the probability will mean that risk

premium will increase and future borrowing will become more expensive

relatively to the country's international rating. When risk premium for the

borrowing increases, it put further pressure on the debt dynamics as higher

borrowing cost will mean larger fiscal deficit position ceteris paribus. This has the

effect of delaying fiscal consolidation process. Secondly, when fiscal position is

deteriorating and debt rising, it tends to put pressure on the Ringgit peg. Capital outflow will intensify as foreign investors will turn cautious on the expectations that the currency peg may have to be adjusted for correcting the fiscal imbalances while residents will be more willing to keep their money outside of the country for fear of the potential devaluation. Unfortunately, both effects tend to have a self-fulfilling impact and hence it is utmost important that such self-fulfilling expectations are not usher into picture.

5.2.1.2 Stabilization of Total Debt-to-GDP Ratio

This assessment is to answer the question: At what level of growth necessary to stabilize the Debt-to-GDP ratio? As derived under the methodology section, the growth rate required to stabilize the Debt-to-GDP under the necessary condition of a balanced budget is given by:

$$dg = \lambda m$$
$$g = \frac{\lambda m}{d}$$

where

d = Total Debt-to-GDP ratio = D/Y

m = Monetary base-To-GDP ratio = M/Y

λ = Monetary base growth = $\Delta M / M$

g = Necessary growth rate required to stabilize d

On the assumption that the total Debt-to-GDP is the ratio to stabilize for pre-crisis and post crisis:

TABLE 5.3: Assumption and Analysis for the Stabilisation of Debt-to-GDP

	d (Debt-to-GDP)	m (Monetary Base-To-GDP)	λ (Monetary Base Growth)	g (Necessary Growth Rate)
Pre-crisis	42.1%	0.160	0.151	0.057
Post-Crisis	48.2%	0.126	0.062	0.016

d – see note 1 for details   m – see note 2 for details
λ – see note 3 for details

1) Total Debt-to-GDP ("d")

For pre-crisis, the stable debt-to-GDP ratio is derived based on the past 5 years average on and before 1997. This is to show how the evolution of the debt-to-GDP took place in the 5-year period. The average growth rate needed to stabilize the ratio is 5.7%, but the actual growth rate during those periods far exceeded the requirement leading to the fall in the debt-to-GDP ratio over that same period from 55.7% to 31.9%. For the post-crisis period, it is assumed that the intention is to stabilize the most recent debt-to-GDP ratio, which is 48.2%.

2) Monetary Base-to-GDP ("m")

Here, we used a longer period of 10 years for pre-crisis and 6 years post-crisis. This is to give a more stable long-term steady state ratio for

analysis. However, the volatile periods of 1994, 1996,1997 and 1998 are removed to better reflect the steady state ratio.

3) Monetary Base Growth ("λ")

The same is used as in 2). As an indication of the volatility of the monetary base growth rate during the period of 1994,1996 and 1997, it can be shown that the rate of growth of M during these periods were 20.1%, 25.4% and 29.4% respectively in those years and more than twice the growth rate of post crisis or substantially higher than the pre-crisis period excluding these years.

Bear in mind that the results are based on the balanced budget scenario. In the case of pre-crisis period, for the 5 year period from 1993-1997, there is little doubt that even maintaining such rate would have resulted in the decline of the debt-to-GDP ratio simply because the Government was running a fiscal surplus.

This is clearly reflected in Figure 9. However, post crisis for the debt-to-GDP to converge, it requires growth rate not only of 1.6% but rather at 6.9% simply because there is a 5.3% budget gap that is required to be closed. Unfortunately, the actual growth rates over the past 4 years have been below that level forcing the debt-to-GDP ratio to climb up.

FIGURE 5.6: Summary of Growth Deviation And The Trend Of Debt-to-GDP
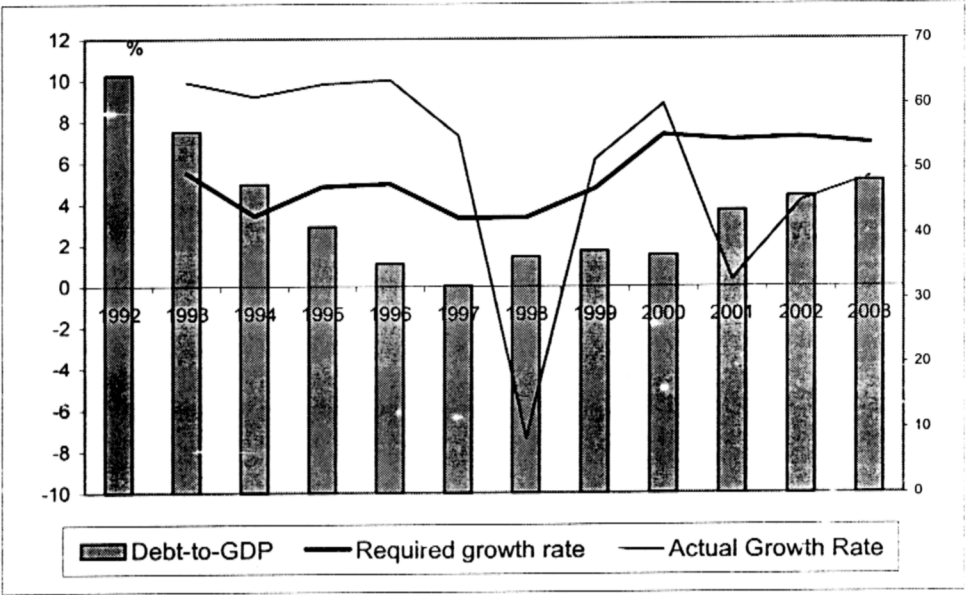
In brief, for the debt-to-GDP to stabilize, the fiscal authority must either be able to ensure that economic growth rate are able to sustain at 6.9%, or alternatively must strive to cut its fiscal deficit to a lower level. Since GDP growth is exogenous and dependent on the external development, the prudence policy will be to cut fiscal deficit to a more manageable level. On the assumption that the economy grows at a growth rate of 4.3% (See Methodology section), then the budget deficit/GDP must be lowered to 1.6% for the debt-to-GDP to stabilize at the current level. Hence, the current budget deficit level will only result in a climbing debt-to-GDP ratio unless some measures are taken to cut it to a level that would be able to stabilize the ratio - in this case to 1.6% of GDP.

5.2.1.3 Seigniorage

The purpose here is to assess when total debt is considered whether there is an element of printing money to finance the government spending. When the rate of growth of seigniorage is expanding faster than the rate of growth of debt, it is certain that debts are being finance through the printing of money. On the other hand, if the rate of seigniorage is higher than the normal rate of growth, then it is assumed that the possibility of seigniorage cannot be ruled out. In Chapter 3 of the Methodology section, seigniorage is given by

$$\delta = \frac{\pi + g + \pi g}{(1+\pi)(1+g)} m$$

Where

δ = seigniorage
π = inflation rate
g = GDP growth rate
m = based money as % of GDP

Tabulating this into various years:-

TABLE 5.4: Trend of Seigniorage and Domestic Debt Growth Rate

Year	π (Inflation rate)	g (GDP Growth Rate)	$\overline{m}$ (Base Money-To-GDP)	δ Seigniorage (%)	d Growth rate of domestic debt (%)
1988	0.025	9.9	0.126	1.4	15.1
1989	0.028	9.1	0.142	1.5	4.2
1990	0.031	9.0	0.155	1.7	6.4
1991	0.044	9.5	0.163	2.0	5.2
1992	0.047	8.9	0.164	2.0	3.3
1993	0.035	9.9	0.160	1.9	6.0
1994	0.035	9.2	0.202	2.3	2.3
1995	0.034	9.8	0.213	2.5	-0.3
1996	0.033	10.0	0.254	3.1	1.5
1997	0.027	7.3	0.294	2.7	-2.8
Pre-Crisis AVG	0.034	9.3	0.182	2.1	3.6
1998	0.053	(7.4)	0.128	-0.3	14.6
1999	0.028	6.1	0.152	1.3	6.3
2000	0.016	8.9	0.121	1.2	13.9
2001	0.014	0.3	0.120	0.2	13.7
2002	0.018	4.1	0.118	0.7	6.0
2003	0.011	5.3	0.116	0.7	17.7
Post-Crisis AVG	0.023	2.9	0.126	0.6	12.0

There is no evidence to support the fact that seigniorage is used to finance debt borrowing. Reserve money-to-GDP is only one tenth of the Debt-to-GDP. At the peak of the seigniorage used in 1996, it was 3.1% of GDP and that although surpassed the domestic debt growth rate of 1.5%, was on the back of strong

economic growth of 10%, indicating that the expansion in money was mainly to meet the expanding economic need rather than financing the debt. Post crisis, seigniorage was only 0.6% of GDP despite stronger growth in the domestic debt of average 12%.

5.2.2 Primary Gap Ratio

Here, the analysis is focus on how to arrive at the level of primary gap that will allow Malaysia to maintain the current level of debt-to-GDP ratio. The primary gap is defined as

$$z = s - \tilde{s}$$

where

s = actual primary surplus

$\tilde{s}$ = required primary surplus

Also, we look at the dynamic of the present primary surplus and see how the adjustment process need be to bring it to achieve the stable debt-to-GDP ratio under the various ideal parameters.

The above analysis is rest with the solution to the equation (for derivation, refers to the Literature Review Section)

$$\tilde{s} = \frac{(r-g)}{(1+g)} d_0 - \sigma_0$$

Where $\tilde{s}$ is the primary surplus, r the real interest rate, g the steady state growth rate, d the debt-to-GDP ratio, σ the seigniorage.

Table 10 below shows the historical rate for $\tilde{s}$, r, d, g and σ for the period from 1988-2003. The period is also divided between pre-crisis level and post crisis level, which is taken to mean the period prior to 1998 as pre-crisis while period after 1998 as post crisis.

TABLE 5.5: Computation and Trend of Required Primary Surplus/Deficit

Year	$\tilde{s}$ (Primary Surplus/Deficit - % of GDP)	r (Real Interest Rate - %)	d (Total Debt-to-GDP ratio - %)	σ (Seigniorage - %)
1988	-6.0	4.6	96.4	1.4
1989	-5.0	4.6	85.5	1.5
1990	-5.0	4.2	79.5	1.7
1991	-7.0	2.8	73.3	2.0
1992	-6.0	2.6	64.4	2.0
1993	-5.0	3.8	55.7	1.9
1994	-5.0	3.6	47.6	2.3
1995	-5.0	3.6	41.1	2.5
1996	-5.0	4.0	35.3	3.1
1997	-4.0	4.3	31.9	2.7
Pre-Crisis Average	-5.0	3.8	61.07	2.1
1998	4.0	1.8	36.4	-0.3
1999	-2.0	4.5	37.3	1.3
2000	-2.0	5.9	36.7	1.2
2001	2.0	5.6	43.6	0.2
2002	-1.0	4.3	45.7	0.7
2003	-1.0	4.8	48.2	0.7
Post-Crisis Average	0.0	4.5	41.3	0.6

-ve denotes required primary deficit
+ve denotes required primary surplus

The above analysis shows that the government can afford to run a primary deficit of 5% of GDP for the pre-crisis period between 1988 and 1997 on average. This is because of the relatively higher economic growth rate during the period as compared with the post crisis period. However, post-crisis, it is shown that there should not be any wide primary gap if the debt-to-GDP ratio is to be stabilized. The primary gap allowed has been deteriorating over the years with recent years showing an almost zero tolerance for the deficit gap level. As has been highlighted earlier, one reason is that the growth rates were lower after crisis then before crisis giving rise to a relatively weaker primary position. The other reason is the higher real interest rate after crisis as compared with the level before crisis. The reason for this is that the inflation rates were much lower for the post crisis period as compared with the pre-crisis level.

TABLE 5.6: Comparison of Past Trend of Budgeted And Actual Deficit Level

	1998	1999	2000	2001	2002	2003	2004 Original	Revised*
Budgeted (% of GDP)								
Primary Deficit	5.0	-2.5	-1.1	-1.7	-2.5	-1.6	-0.8	-
Overal Deficit	3.0	-5.7	-4.1	-4.6	-5.0	-3.9	-3.3	-4.5
Overall Deficit (RM bn)	9.0	-16.1	-13.0	-16.1	-18.6	-14.9	-13.4	-18.8
Debt Servicing (RM bn)	6.2	9.0	9.6	10.2	9.4	8.9	9.9	
Actual (% of GDP)								
Primary Deficit	0.7	-0.5	-3.1	-2.6	-2.9	-2.6	-	-
Overall Deficit	-1.8	-3.2	-5.8	-5.5	-5.6	-5.3	-	-
Overall Deficit (RM bn)	-5.0	-9.5	-19.7	-18.4	-20.3	-20.9	-	-
Debt Servicing (RM bn)	6.9	7.9	9.1	9.6	9.7	10.5	-	-

* BNM Annual Report/excluding the new allocation of RM10bn

Based on post crisis average where it has been shown that the required primary gap should be balanced. The recent primary deficit of 1.6% of GDP would mean that the required level of reduction in primary deficits required to stabilize the average debt-to-GDP ratio would be the same level of 1.6%. Even if we based on the more optimistic assumptions of growth rate, monetary base, interest rate and debt-to-GDP for 2003, the level of primary deficit is still almost 0.6% higher than what is required to stabilize the debt ratio in that year.

FIGURE 5.7: The Trend of The Deviation Of Required And Actual Primary Surplus/Deficit

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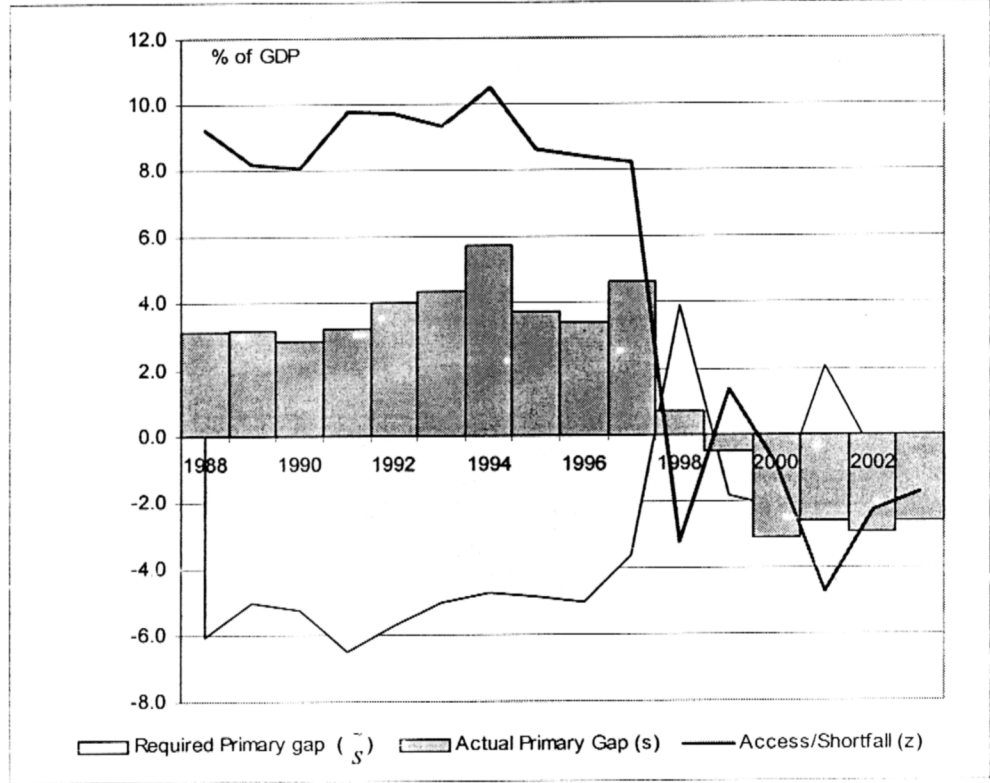
In our steady state scenario where we assumed growth rate of 4.3% (see methodology section for detail), interest rate of 7.3% and inflation of 2.1%, a stable debt-to GDP would still require the improvement of the primary gap from the current 1.6% to 0.3%, some 1.3%. Such an improvement would require either an increase of RM5 billion in revenue or a reduction of the same amount in expenditure on top of what would have been the required expansion under the economic grow during the year.

5.2.3 Financial Sector Stability Indicators

While the public sector finances have clearly deteriorated since the Asian Financial Crisis of 1997-1998, the reforms undertaken in the banking system has made significant progress in strengthening the domestic financial institutions. Banks merger have clearly strengthened the capitalization of banks and returns. It is also expected that the cost-to-income will continue to improve in the coming years as banks strive to reduce duplications and streamlining its operations after the merger.

Table below shows the key financial sectors indicators before and after the crisis, allowing comparison across the two periods.

TABLE 5.7: Summary of Key Financial Sector Indicators

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Capital Adequacy										
Tier 1 Capital (%)	83.6	83.1	80.5	78.6	69.7	75.4	77.5	78.6	77.7	75.8
RWCR (%)	n/a	10.6	10.6	10.6	11.8	12.5	12.5	13.0	13.3	13.4
Earnings and Profitability										
Return on Equity (%)	17.5	18.8	17.2	17.5	(12.3)	9.8	19.5	13.4	16.3	17.1
Return on Asset (%)	1.1	1.2	1.2	1.3	(0.9)	0.7	1.5	1.0	1.3	1.4
Interest Profit/Interest Income	38.4	40.3	38.1	33.0	22.6	33.0	43.0	42.2	43.2	44.5
Cost to Income (%)	57.8	51.6	50.8	38.7	44.1	37.4	36.7	47.4	47.6	47.3 ^
Vulnerability										
NPL to Total Loans (%)	n/a	n/a	3 7	5.9	12.6	11.9	11.8	14.3	13.0	11.6
NPL Less Provision To Total Loans (%)	7.8	5.5	3.7	4.1	8.1	6.4	6.3	8.1	7.5	6.9
Liquid Asset Ratio	n/a	n/a	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Liquid Asset to Short Term Liabilities	n/a	n/a	1.5	2.0	1.5	1.5	1.5	1.1	1.1	1.4

Source: Calculated based on information from Bank Negara Report, Monthly Statistical Bulletin, Economic Report

Simply put, domestic banks are better capitalized with the RWCR strengthened to a level not seen before. The prospects of earnings are better despite the rising cost to income. Banks are also more prudence with stronger provision while at the same time net NPL is gradually trending down. Although this trend was not all smooth with a clear hick-up in 2001, however, it is clear that the event in 2001 was not confined to Malaysia but was a worldwide phenomenon as the bust of tech bubble and the terrorist attack in the U.S. raised the downside risk of global meltdown at that point. Nonetheless, the aberration during the period was quickly dispelled and the financial indicators are again showing strength in the subsequent years.

5.3 Concluding Remarks

Chapter 4's statistical test suggested that the past fiscal policy cannot be sustained but Chapter 5's indicator test pointed out that Malaysia's fiscal position is not in danger of an imminent adjustment. The external debt-to-GDP ratio will only hit the critical 40% threshold level the earliest 2015 in a worse case scenario where growth is assumed at a minimal level of 1% and external debt grows at an explosive rate of 15%. But the tolerance level is greatly reduced when the external debt of NFPE is included. In our base case scenario, taking into consideration NFPE's external debt, 6% GDP growth and 15% external debt growth rates respectively, the threshold will be breached in 2011.

There is no evidence that Seigniorage is being used to fund the government fiscal deficit and the conduct of the monetary policy appears to be independent of the fiscal authority. For Malaysia to stabilize its current total debt-to-GDP ratio of 48.2%, a growth rate of 6.9% is required. Alternatively it must reduce its budget gap by the difference between the actual growth rate and the required growth rate.

The primary gap analysis shows that government's ability to run primary deficit has been substantially reduced after the crisis. Pre-crisis, the level of primary deficit that the government can afford to run without exerting upward pressure on the debt-to-GDP ratio is 5% and this has been reduced to zero after the crisis. Under the steady state assumptions where potential GDP is estimated at 4.3%, interest rate at 7.3% and inflation rate at 2.1%, the government still needs to

improve the current primary gap from 1.6% deficit to 0.3% for the debt-to-GDP ratio to stabilize.

There are also evidences to indicate that domestic financial sector is in better shape with banks having stronger capitalization. The strong financial system has been equiped to support the weakness of the federal government finance in the past several years.