CHAPTER 4:

RESEARCH REVIEWS

4.0 Introduction

This section examines real cases of stimulus packages and whether it validates a government's decision to implement big spending packages in time of economic hardship. More often than not, the basic fundamental in the introduction of any stimulus package was closely related to fiscal policy. Therefore, this theory will be continually discussed throughout this study.

4.1 The Great Depression of 1930s'

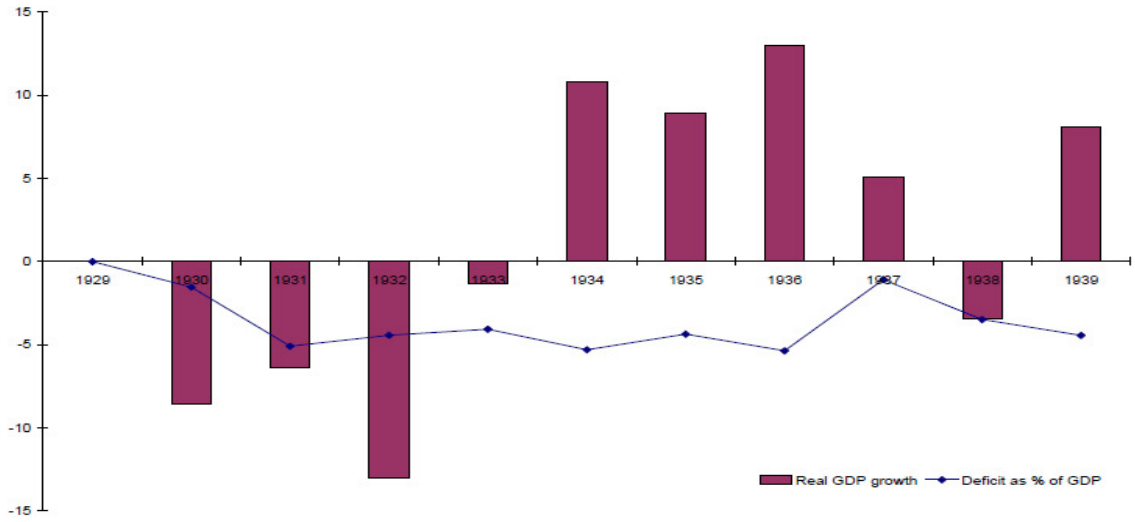
During the 1930s', there was an on-going argument, especially among the Keynesian, that the economy could be boosted if the government borrowed money and spent it. The theory went that, the money pumped in would circulate through the economy and encourage money-spending. Some scholars have even proposed that a fiscal policy could stop the recession during the Great Depression in the 1930s.

Did Roosevelt's New Deal really bring about economy recovery through additional government spending? As far as we know, the New Deal comprised of a series of economic planning and economic stimulus programs in the United States between 1933 and 1938. The New Deal was passed by the US Congress

during the administration of President Franklin Delano Roosevelt, in response to the Great Depression and lasted from 1933 through 1939. It was initiated to help relieve those affected by the crisis, bring recovery of the economy to the normal level and reform the financial system to avoid a repeat depression.

The "First New Deal" of 1933 was intended as a short-term relief programs for all groups; from banking and railroads to industry and farming- all of which demanded help for economic recovery. The Roosevelt administration implemented banking reform laws, work relief programs, agricultural programs, and industrial reform (the National Recovery Administration, NRA), and the end of the gold standard and Prohibition. A "Second New Deal" (1935–1938) included the Wagner Act to promote labor union support, the Works Progress Administration (WPA) relief program, the Social Security Act, and programs to aid the agricultural sector, including tenant farmers and migrant workers (Microsoft Online Encyclopedia, 2008). Two of the major itinerary under the New Deal legislation were the creation of the United States Housing Authority and Farm Security Administration (both in 1937), followed by the Fair Labor Standard Act of 1938 which set the maximum working hours and minimum wages for workers in various categories.

Figure 1: Government fiscal deficits and growth in the US during the 1930s



Note: Government deficits include both federal and state & local government deficits.
Source: Bureau of Economic Analysis (BEA), US Department of Commerce.

In all honesty, we have to admit that the fiscal policy or government spending during the Great Depression in the 1930s didn't achieve what it set out to. The Fiscal policy did not facilitate any significant change and hence could not contribute aggressively to the recovery of the economy (refer Figure 1).

Alvin Hansen (1963) *believes that "fiscal policy in the thirties was a failure is based primarily and it's simply not a full recovery".* The GNP had fallen from $101 billion in 1929 to $68 billion in 1933, or in real terms (1961 prices) from $210 billion to $146billion. The economy was in a state of collapse with decreasing GNP, increasing unemployment rate, mortgage defaults by property owners and bankruptcy risks in banks.

The United States economy reached its lowest point in the summer of 1932, lasting till February 1933 and only began to gradually recover during the following recession of 1937-1938 (refer Table 1)

Table 1: Statistic during the Great Depression

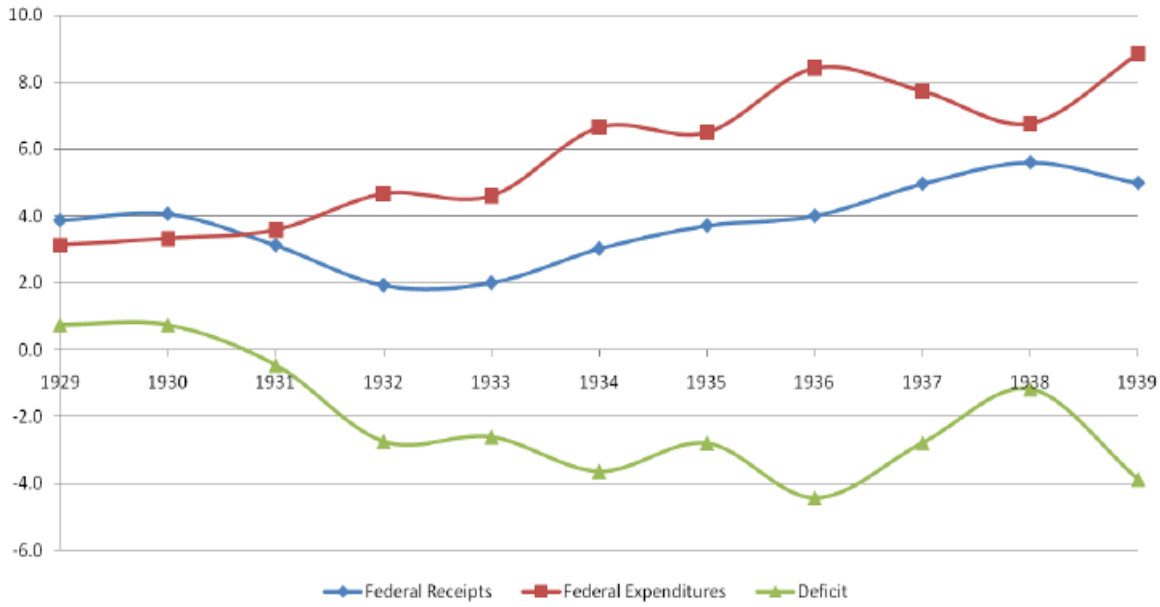
	1929	1931	**1933**	1937	1938	1940
Real Gross National Product (GNP) (1)	101.4	84.3	**68.3**	103.9	96.7	113.0
Consumer Price Index (2)	122.5	108.7	**92.4**	102.7	99.4	100.2
Index of Industrial Production (2)	109	75	**69**	112	89	126
Money Supply M2 ($ billions)	46.6	42.7	**32.2**	45.7	49.3	55.2
Exports ($ billions)	5.24	2.42	**1.67**	3.35	3.18	4.02
Unemployment (% of civilian work force)	3.1	16.1	**25.2**	13.8	16.5	13.9

(1) in 1929 dollars (2) 1935 – 39 = 100

Source: U.S. Dept of Commerce, National Income and Product Accounts Real GDP and GNP; Mitchell 446, 449, 451; Consumer Price Index AND M2 Money Supply: 1800-2003

Government spending under the Roosevelt administration was doubles that of the Hoover administration, although the latter had also increased federal spending and lending through the Reconstruction Finance Corporation. The Hoover administration and Congress increased the nominal federal expenditures by 52 % from $3.1 billion in 1929 to $4.7 billion in 1932 and $4.6 billion in 1933 (refer Figure 2).

Figure 2: Nominal Federal Government Expenditures, Revenues and Surplus/Deficit I Billions of Dollars, 1929-1939



Sources: Federal Government Expenditure, Revenues and Surplus/Deficit, Ea584, EA585 and Ea586 from John Wallis (2006, 5-80 and 5-81)

The government increases the tax rates under the Revenue Act of June 6, 1932 as an effort to balance the budget since 1933 but it burdened the people. This tax increased had created positive effect to the administration budget. The administrative budget receipts rose from $2.0 billion in 1933 to $5.0 billion in 1937 and the amount collected was to support the gradual increase in the government expenditures.

After July 1933, the new Democratic Congress under the Roosevelt administration increased government spending by $2 billion to roughly 6.5 billion in both 1934 and 1935, and subsequently reached the peak in 1936 at $8.4

billion. The spending was later reduced to $6.8 billion in 1936 and 1937 and ramped up again to $8.8 billion in 1939. Even though with the tax amount collected, this did not stop the deficit. The deficit rose from $2.6 billion (administrative budget) in fiscal 1933 to $7.5 billion in 1936. In 1934 a $5 billion dollar deficit was matched with a GNP shortfall of $49.3 billion; in 1935 the $4.5 billion dollar deficit was offsetting a $34.1 billion shortfall. In 1936, the figures appeared more significant when a 7.5 billion deficit was matched with a $10.6 billion GNP shortfall.

Even after all the measures, a fallback happened after the slight recovery. As a result, stiffer fiscal control was imposed in order to rebalance the budget from 1936 to 1938. The tax government recipient increase from $4.0 billon to $5.6 billion and the government expenditures were reduced from $8.4 billion to $6.8 billion. This worked rather well and, in fact, seemed to bring a gradual recovery, at least until WWII came into the picture.

The overall government purchases of goods and services increased every year from $13.6 billion in 1929 to $22.8 billion in 1939 (Brown, 1956). Various initiatives were started by President Roosevelt to create employment and stimulate demand such as the forming of the Civilian Conservative Corps; preservation of crops and forests by Agriculture and Interior Department; creation of Civil Works Administration (CWA) in 1934 and Public Works Administration with a budget of $3.3 billion (approximately 6% of GDP) to fund local government public projects and the setting up of the Works Progress Administration (WPA).

But the WPA received criticism for spending public money to pay for unproductive work (Rauchway, 2008).

Military expenditures during WWII were far more substantial compared to the New Deal. Vernon (1994) emphasized the importance of WWII and how the fiscal policies related to WWII played an important role in the 1941 and 1942 recovery. Alternately, Romer (1992) argued that the fiscal policies "*contributed almost nothing to the recovery before 1942*." As for the 1940s and 1950s, Smithies (1946) argued that fiscal policy helped in the recovery from the crisis, while Hansen (1941) and Brown (1956) debated that fiscal policy was not used extensively and fiscal policy was not successful *"not because it did not work, but because it was not tried"* (Brown, 1956) .

A 1995 survey conducted by economic historians asked whether *"Taken as a whole, government policy of the New Deal served to lengthen and deepen the Great Depression."* Of those in the economics departments 27% agreed, 22% agreed 'with provisos' (what provisos the survey did not state) and 51% disagreed. Of those in the history departments, only 27% agreed and 73% disagreed.

UCLA economists Harold L. Cole and Lee E. Ohanian believed that the New Deal caused the Depression to persist longer than it would otherwise have. Both concluded in a study that the *"New Deal labor and industrial policies did not lift the economy out of the Depression as President Roosevelt and his economic planners had hoped,"* but that the *"New Deal policies are an important*

contributing factor to the persistence of the Great Depression." They claimed that the New Deal “policies are a key factor behind the weak recovery." They say that the "abandonment of these policies coincided with the strong economic recovery of the 1940s (Cole, Harold and Ohanian, 2004). Cole and Ohanian claimed that FDR's policies prolonged the Depression by 7 years.

Bernanke and Parkinson (1989) argued that the *“New Deal is better characterized as having cleared the way for a natural recovery... rather than as being the engine of recovery itself.”* The economic recovery was more of a result from strong self-corrective forces.

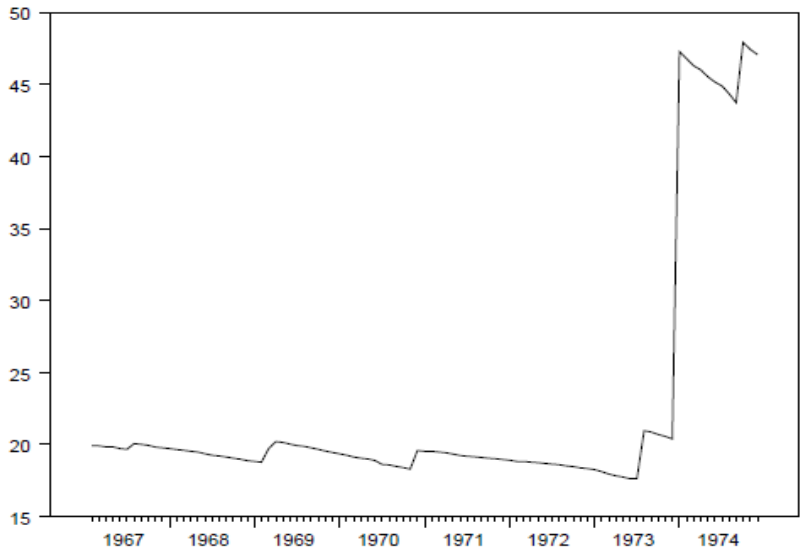
Lowell E. Gallaway and Richard K. Vedder (1997) argued that the "Great Depression was very significantly prolonged in both its duration and its magnitude by the impact of New Deal programs." They suggested that without Social Security, work relief, unemployment insurance, mandatory minimum wages, and without special government-granted privileges for labor unions, business would have hired more workers and the unemployment rate during the New Deal years would have been 6.7% instead of 17.2%.

The recent research paper by Eggertsson (2008) argued that the U.S. economy’s recovery from the Great Depression was driven by the policy actions of President Roosevelt using a stochastic general equilibrium model. The increase in the government expenditures which brought a rise in the deficit in the 1930s did play a role in changing expectations and stimulating demand.

4.2 US Oil Crisis 1970s

The United States has always been the world's biggest consumer of oil throughout the centuries. The 1947-1948 marked the end of the World War II and the beginning of the automotive era. This led to a 12% increase in demand for petroleum products between 1945 and 1947 (Williamson, et. al., 1963, p. 805). In June 1947, the Standard Oil of Indiana and Phillips Petroleum Company announced plans to ration gasoline allocations to dealers. Eventually, this highlighted the fuel shortage issue and later influenced the first postwar US recession in 1948. Oil prices have never remained stagnant and it has always been influenced by global economic and political issues. In 1967 and 1970, oil prices increased in response to the broader inflationary pressures of the late 1960s. (refer Figure 3) The oil production for the United States as a whole peaked in 1972

Figure 3: Price of oil in 2009 dollars, 1967: M2-1974:M12 Price of West Texas Intermediate deflated by CPI



Barsky and Kilian (2001) pointed to a number of other factors that would have caused an increase in the relative price of oil in the early 1970s. It might be caused by U.S. termination of the rights of foreign central banks to convert dollars to gold by ending the Bretton Woods system. The price of oil increased after the declining in production rates from US field and the implementation of price control by the President Nixon.

The US economic growth was weak in both the 1973-1975 recessions and the 1981-1982 recessions. According to Hamilton (1983a, 1985), the correlation between oil shocks and economic recessions appeared to be too strong and not just a coincidence. Even though the demand pressure may be a contributing factor, statistically one cannot predict the oil price changes prior to 1973 on the basis of prior developments in the U.S. economy (Hamilton, 1983a).

In 1970s and 1980s, the deepest recession recorded was the “double dip” recession of January-July 1980 and July 1981-November 1982. The second deepest was the recession from November 1973-March 1975 and both lasting 16 months (Refer Table 2). The 1973 to 1975 recessions were purportedly caused by the 1973 oil shock; where oil prices rose unexpectedly from $2.60/barrel in 1973 to $11/barrel in 1975. It was also significantly remembered because both the inflation rate and the unemployment rate increased simultaneously. This was an occasion totally unexpected; in fact, the rates were expected to move in the opposite directions.

Table 2: Economic Contractions in the Post-World War II Era

Period of Contraction	Months of Contraction	Contraction of GDP (%)	Maximum Unemployment Rate (%)
Nov 1948 – Oct 1949	8	1.7	7.9
July 1953 – May 1954	10	2.7	6.1
August 1957 – April 1958	8	3.7	7.5
April 1960 – February 1961	10	1.6	7.1
Dec 1969 – Nov 1970	11	0.6	6.1
Nov 1973 – March 1975	16	3.0	9.0
Jan 1980 – July 1980	6	2.2	7.8
July 1981 – Nov 1982	16	2.9	10.8
July 1990 – March 1991	9	1.5	7.8

Source:

National Bureau of Economic Research and National Income and Product Accounts

The tightening of the monetary policy had increased the federal government funds from 5% in the late 1972 to 10% in the mid 1973. But the net effect was rather minimal when adjusted for inflation. Some economists believed that regulatory attempts to suppress the oil price increases had led to shortages that were even more economically costly than if prices had been allowed to rise.

Table 3: Economic Indicators during the 1973-1975 Recession

Quarter	GDP Growth (%)	Consumption Growth (%)	Investment Growth (%)	Inflation Rate (GDP Deflator) %	Unemployment Rate (%)
1973: Q3	-1.6	1.6	0.6	7.9	4.8
1973: Q4	3.4	-1.0	-3.9	7.0	4.8
1974: Q1	-3.0	-3.5	-8.5	8.4	5.1
1974: Q2	1.1	1.4	-7.8	9.2	5.2
1974: Q3	-4.4	1.5	-8.0	12.8	5.6
1974: Q4	-2.2	-6.6	-16.1	12.7	6.6
1975: Q1	-5.0	3.1	-36.2	9.6	8.3
Cumulative	-3.0	-0.8	-15.3	High : 8.9%	

Note: Data presented in annualized form except for the cumulative total; investment growth excludes changes in inventories

Source: Bureau of Economic Analysis, National Income and Product Accounts; Bureau of Labor Statistics

During the crisis, there were two rounds of monetary fiscal easing. First, the federal funds rate was lowered from approximately 10.75% in September 1973 to 9% in February 1974. The rate was lowered from 13% in July 1974 to 5.25% in May 1975, after the recession had ended. During this period, the private corporate bond rates fell because the inflation rate rose more quickly during this recession, which contradicted with the norms.

The fiscal policy was tightened in 1974, with the budget deficit decreasing from 1.1% of GDP in 1973 to 0.4% of GDP in 1974, and the structural budget moving from a 1.6% deficit in 1973 to a 0.1% surplus in 1974. Fiscal policy became

expansionary in 1975 when the Tax Reduction Act was passed, which was estimated to lower revenues by 1.4% of GDP in 1975. Its largest provision was a tax rebate, which was sent out in the second quarter of 1975. The government expenditures were simultaneously increased and the actual budget deficit increased to 3.4% of GDP in 1975. The fiscal policy was eased further in 1976, when many elements of the 1975 Act took effect.

It is widely claimed that the US economy drive into the “Double Dip” recessions in the 1980s was due to the simulation action taken by the Federal Reserve to reduce the inflation rate to a more acceptable level. The decision to stimulate the economy by keeping the fiscal and monetary policy too easy eventually left the inflation rate uncomfortably high throughout the 1970s. What happened in the 1970s showed that when the adverse supply shocks occurred (such as the oil shock and the decline in oil production), the measures possibly taken by the government through the policy changes might be not effective to insulate the economy from worsening (Marc Labonte, Gail Makinen, 2002).

4.3 Japan Banking Crisis of 1991

A slowdown in growth since the first oil shock in 1973 has left Japan with muddled public finance and a large deficit. Since then, government spending had gradually increased but national income and tax revenue remained low. In fact, the gap between government expenditures and tax revenues began to widen rapidly in the 1990s. In his paper, Asako et al. (1991) had described the rise and fall of deficits in the 1970s and the 1980s in Japan.

Since the increase in its accumulated deficit in 1975, the Japanese government had drawn up measures to reduce the deficit. The zero growth request (zero ceiling) principle had been imposed and the tax was raised from 1986 to 1991. The increased in the tax revenue was extended until the burst of the 'bubble economy" due to the banking crisis in 1991. When the economy failed to sustain, there was more pressure for larger spending stimulate the aggregate demand.

The Japan's general government financial balance as a percentage of GDP was +2.9% in 1990, but it dropped significantly to –7.9% in 2000. In contrast, the general-government-gross debt as a percentage of GDP in the 1990s increased significantly from 61.4% in 1990 to 114.1% in 2000. Japan failed to sustain a more balanced deficit because the primary surplus had been decreasing since 1990 and the interest rate has exceeded the growth rate in Japan. Ardagna et al. (2004) showed that the government deficits may raise interest rates in the long run. Hence, it was important to reduce the government deficit in the near future. The accumulated fiscal deficit will eventually paralyze the system and could bring to hyperinflation.

Table 4: Fiscal measures for stimulus 1992-1997 (Trillion yen, percentage)

	FY 1992	FY 1993			FY 1994	FY 1995		FY 1996	FY 1997
	Aug	April	Sept	Feb		April	Sept		
Expenditure packages	10.7	13.2	6.0	9.4	-	7.0	14.2	-	-
(Percent of GDP)	2.2	2.7	1.2	2.0	-	1.4	2.8	-	-
Tax changes compared to 1993	-	-			(3.8)	(3.8)		(3.8)	0.2
(Percent of GDP)	-	-			0.8	0.8		0.7	0.0

Note: Figures in brackets show negative values

Source: Ministry of Finance of Japan

Table 5: Fiscal measures for stimulus 1999-2004 (Trillion yen, percentage)

	FY 1998		FY 1999	FY 2000	FY 2001		FY 2002	FY 2003	FY 2004
	April	Nov	June	Oct	Oct	Dec	Dec		
Expenditure packages	16+	17+	17.0	11.0	1.3	4.1	4.4	-	-
(Per cent of GDP)	3.1	3.3	3.3	2.1	0.3	0.8	0.9	-	-
Tax changes compared to 1993	(2.6)		(4.5)	(4.5)	(4.5)		(4.5)	(6.0)	(7.0)
(Per cent of GDP)	0.5		0.9	0.9	0.9		0.9	1.2	1.4

Note: Figures in brackets show negative values

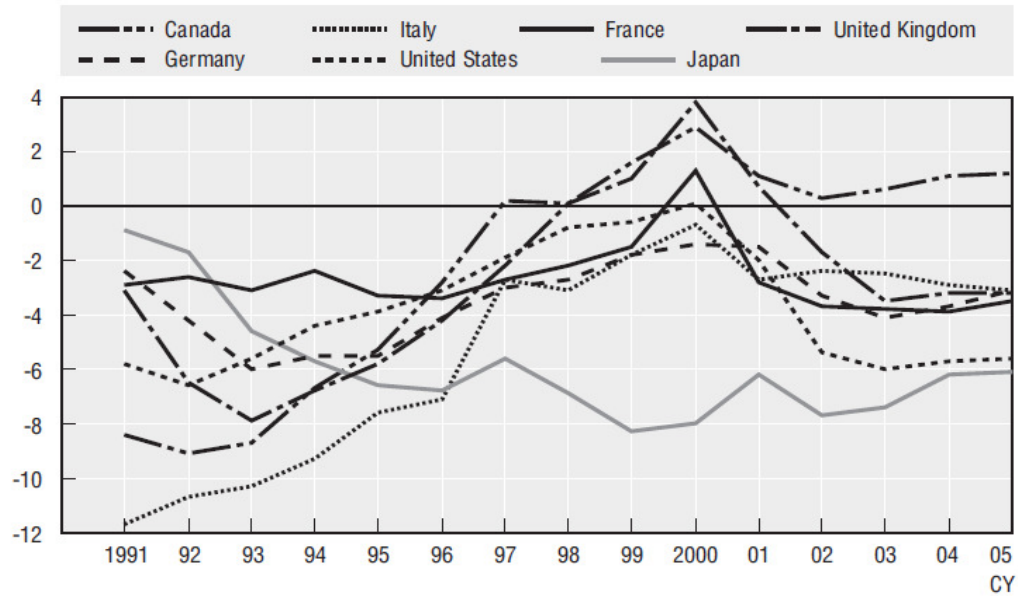
Source: Ministry of Finance of Japan

Using the VAR method, Ihori et al. (2003) showed that fiscal policies have generated limited effects on output in Japan to boost the economy to greater

recovery. The private consumption or investment could not be stimulated due to an inappropriate allocation of public works and led to huge increase in the government deficit in the 1990s. Meanwhile, Doi (1998); Yoshino and Nakajima (1999), and Ihori and Kondo (2001) empirical studies explained that the public capital in Japan grew progressively in the 1990s but declined in the recent years.

After 1993, the ruling party weakened and the fiscal deficits continued to increase especially throughout 1995 and 1996. The Finance Ministry was forced to borrow 22.0 trillion Yen to finance a deficit swollen by the large fiscal stimulus in September 1995, resulting in a bond-dependency ratio of 28.2%, its highest level since 1980. In 1996 the planned issue of 10.1 trillion Yen of special deficit bonds exceeded all previous experience.

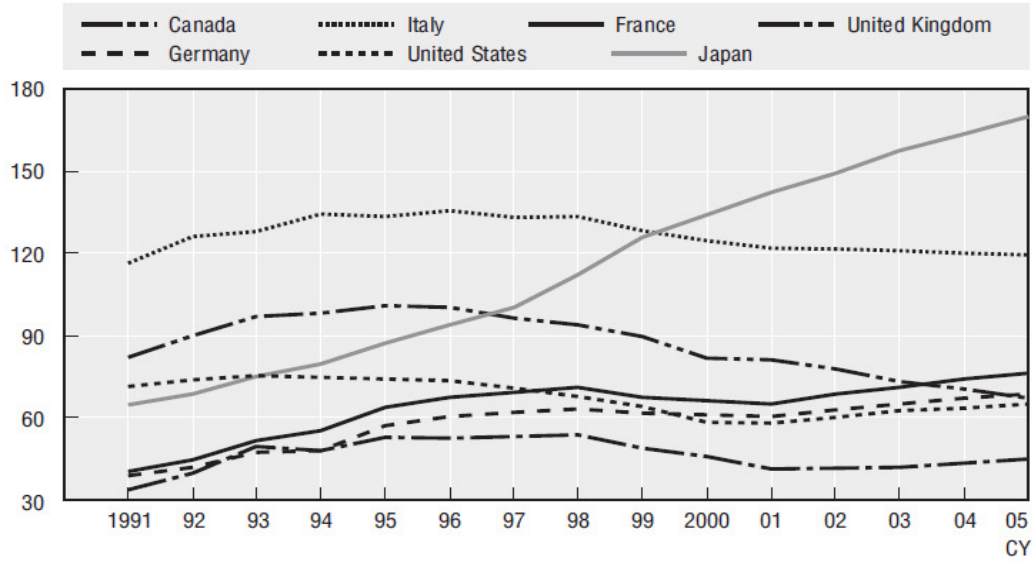
Figure 4: Japan government balances compared to other developed countries (% GDP)



Note: Figures for Japan and the United States exclude social security funds

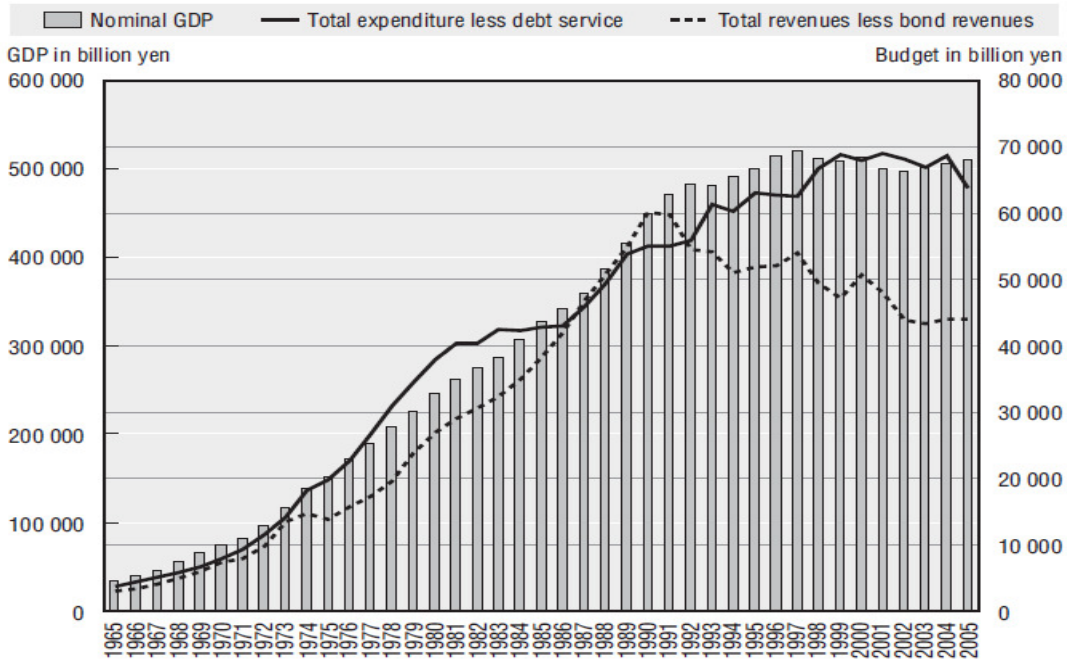
Source: OECD, Economic Outlook No. 76, December 2004

Figure 5: Japan government general government gross debt compared to other developed countries (% of GDP)



Source: OECD, Economic Outlook No. 76, December 2004

Figure 6: Japan nominal GDP, budget expenditures and revenues 1965 - 2005



Source: Japanese government.

The Japanese economy plunged back into recession after the April 1997 consumptions tax hike which forced Japanese to reduce household spending, and the cut in public investment (refer Table 6). Banks reduced domestic bank lending, while major bank and two large securities firms failed in November 1997. In response to the sharp downturn, the government announced a large fiscal stimulus package and usage of public money to support the bank restructuring of banks.

Table 6: Japan Macro-Fiscal Development from 1996 to 2000

	1996	1997	1998	1999	2000
Real GDP growth	2.75	1.57	-2.05	-0.14	2.86
Change in overall balance (in percent of GDP)	-0.41	1.09	-1.57	-1.81	-0.23
Change in structural balance	-0.94	0.85	-0.74	-1.58	-0.97
Change in structural revenue	0.34	0.10	-0.42	-0.13	0.24
Change in structural expenditure	1.28	-0.76	0.32	1.45	1.21
Inflation	0.10	1.88	0.58	-0.29	-0.78
Unemployment	3.36	3.39	4.11	4.68	
NPL			5.40	5.80	

Source: World Economic Outlook: and Fund staff estimates

In February 1998, the Japanese government channeled 30 trillion Yen in public funds to support the financial system. In the first round, however, most of the money was left unused: only 1.8 trillion Yen (0.24% of GDP) were injected into 21 large banks by the end of March 1998. The plan fell short because the restructuring could only sustain a temporary stability and no effort was put into

solving the banking issue. In October 1998, as the market deteriorated further, the government injected a total of 60 trillion Yen (12 % of GDP) - out of which 17 trillion were used for deposit insurance, 25 trillion as capital injection into solvent banks and 18 trillion for the resolution of failing banks.

These extended measures led to the nationalization of the Long-Term Credit Bank of Japan and Nippon Credit Bank in late 1998, and the additional injection of 7.5 trillion Yen into 15 major banks in March 1999. In April 1998, a 16 trillion (3 % of GDP) Yen package of public works and temporary income tax cuts was announced, which then followed by a 24 billion (5 % of GDP) package in November.

Krugman (1998) obtained Ricardian equivalence of the type Barro (1974) proposed, when he applied his model of inter-temporally optimizing rational representative agents to Japan. The Japanese believed that any fiscal spending funded by the issuance of government debt such as bonds would require a raise in taxation of the individual to facilitate a full repayment in the future. In other words, for every yen in government spending, each consumer needed to increase savings by one yen in preparation for future repayment to the government.

Milton Friedman (2001) wrote “Does fiscal stimulus stimulate? Japan’s experience in the ‘90s is dramatic evidence to the contrary. Japan resorted repeatedly to large doeses of fiscal stimulus in the form of extra government

spending. . . . The result: stagnation at best, depression at worst, for most of the past decade".

In short, the fiscal stimulus in the 1990s was not effective and resulted in deficit accumulation. Government spending through the stimulus package which was intended to encourage demand was rather short term. However, Posen (1998), Mühleisen (2000) believed that the 1995 stimulus package in Japan was relatively successful, even though it did not have a long lasting impact on economic activity.

4.4 Mexico Pesos Crisis of 1994

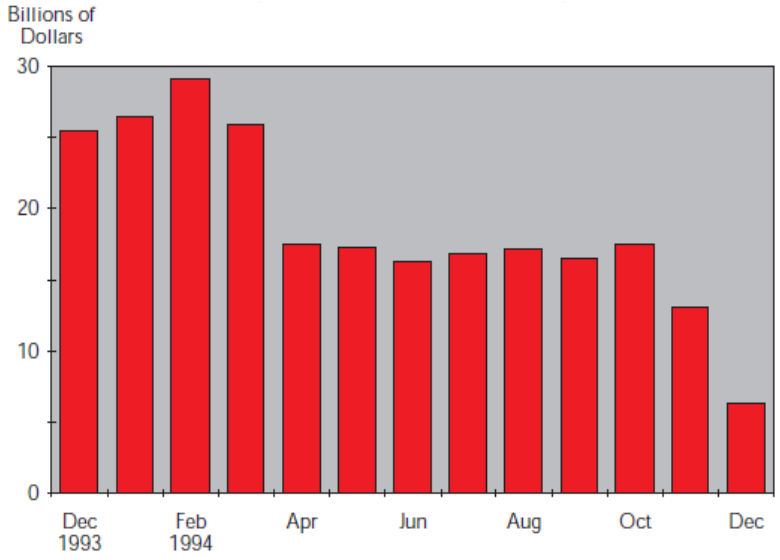
The Mexican economy was performing positively in the early 1990s after recovering from the 1982 debt crisis and the oil price collapse in 1986. The inflation rate was under control with more foreign investors injecting money into the country. But, it did not last. On December 2, 1994, the Mexican government had to devalue the peso. Mexico's central bank blamed a series of political shocks in 1994 for this devaluation that led to a financial crisis (Banco de Mexico 1995, 1-5, 35-55) where the inflation rate increased tremendously and the peso's value was cut into half.

The ruling party's presidential candidate, Luis Donaldo Colosio, was assassinated on March 23 and it brought to a severe political shock in Mexico. The sharp drop in Mexico's international reserves (refer Figure 7) from February to April 1994 reflected the loss of reserves as the government intervened heavily

to maintain the value of the peso. In about four weeks, Mexico lost nearly $11 billion in reserves and the Mexican interest rates rose sharply.

In fact, Colosio's assassination saw the interest rate on twenty-eight-day cetes averaging on 16.4 % in May, compared with only 9.5 % in February (Banco de Mexico 1995, 220). More political shocks followed, beginning with the resignation (later withdrawn) of the Minister of the Interior, Jorge Carpizo, whose agency oversaw Mexico's national election (Banco de Mexico 1995, 40-41; *New York Times (NYT)*, June 27, 1994, A2). This was followed by the kidnapping of Alfredo Harp, a prominent Mexican businessman that contributed to the already jittery market (*NYT*, June 25, 1994, 6). After Zedillo won the presidential election in early August, another prominent figure, José Francisco Ruíz Massieu (*NYT*, September 29, 1994, A1) was assassinated. This latest shock caused the stock market to drop sharply.

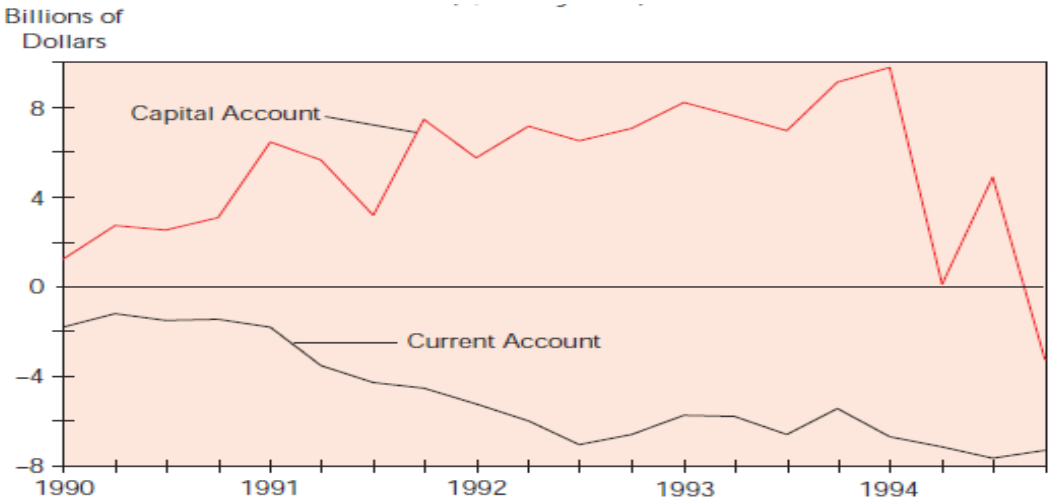
Figure 7: Mexican International Reserves (December 1993 – December 1994)



Source: International Monetary Fund (IMF), International Financial Statistics

With such home conditions, Mexico understandably faced substantial current account deficit during the early 1990s (refer Figure 8). Before the devaluation, international economists Rudiger Dornbusch (1993) and John Williamson (1993) both recommended that policy action shall be taken to reduce the real value of the peso. Williamson had estimated the overvaluation was around 10% and probably as much as 20%.

Figure 8: Mexico's Current and Capital Accounts (Quarterly Data)



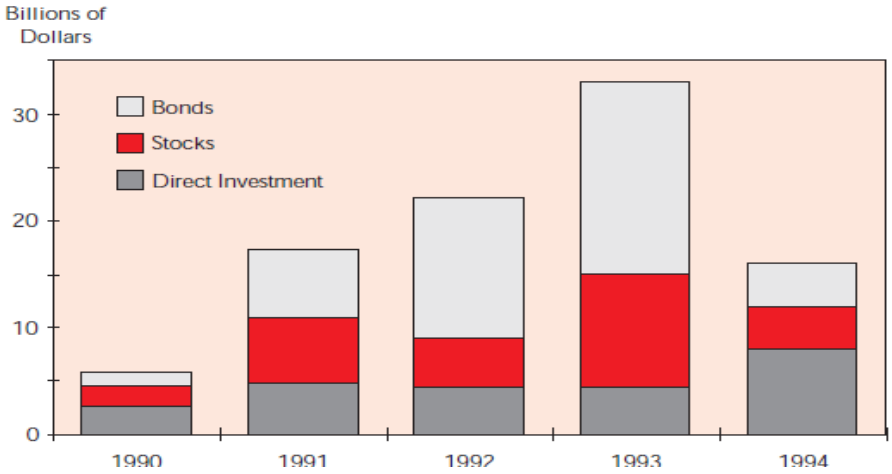
Source: IMF, International Financial Statistics

Figure 8 shows that the current and capital accounts moved together in the early 1990s, but in 1994 capital inflows dropped dramatically while the current account deficit widened modestly. Dornbusch and Alejandro Werner (1994) had argued that Mexico needed to act quickly to avoid a Chilean-style crash. They believed that the current account deficit was caused by the overvaluation of the peso.

Figure 9 shows that Mexico's private capital inflow from 1990 to 1994 totaled $95 billion and came in three main forms (Banco de Mexico 1995, 257); direct

investment by foreigners, purchases in the Mexican stock market and the purchase of bonds—in many cases, government bonds).

Figure 9: Foreign Investment Flows to Mexico



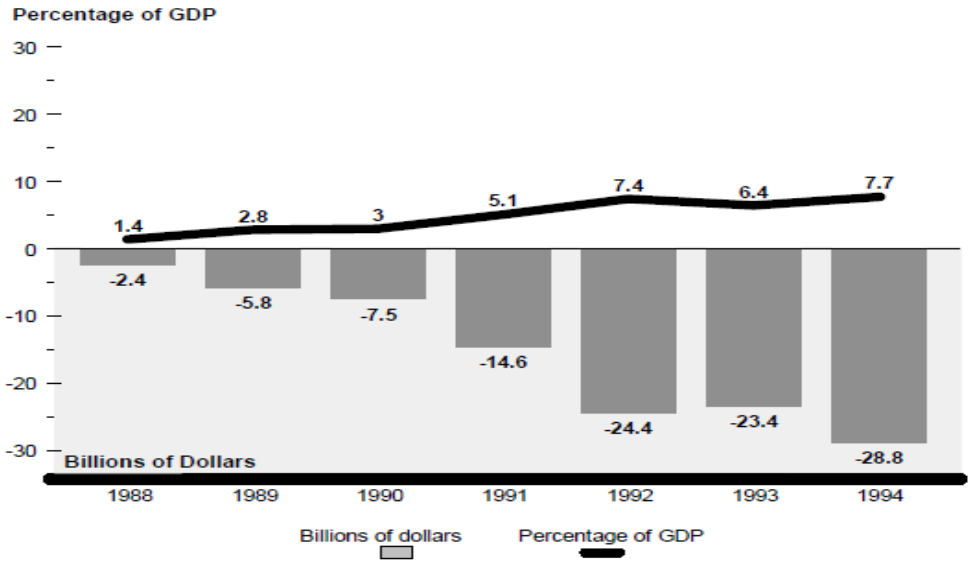
Source: Banco de Mexico

Mexico's current account deficit grew from 1.4 % of gross domestic product (GDP) in 1988 to 7.7 % of GDP by 1994 (refer Figure 10). By the beginning of December 1994, Mexico had fallen in deep crisis because its foreign exchange reserves had reached a low $12.5 billion.

Both the United States and the IMF had provided aid packages to help Mexico overcome its short-term liquidity crisis and to prevent the adverse effects of Mexico's crisis from spreading to the emerging economies and beyond. The US had pledged up to $20 billion in loans and securities guarantees, while the IMF pledged up to $17.8 billion in financial assistance to be disbursed over a period of 18 months. IMF assistance was designed to bolster gross international reserves and several conditions were imposed, including reducing Mexico's

current account deficit, inflation rate, and strengthening its fiscal policy. In return, Mexico was charged standard rates and fees on both packages.

Figure 10: Mexico's current account deficit 1988-94



Source: Bank of Mexico

Later, the United States and Mexico entered into an oil agreement that would allow the US to repay in both principal and interest from oil export revenues through a special account at the Federal Reserve Bank of New York. Since its activation on March 9, 1995 up to November 30, 1995, more than $6 billion has flowed through this special account for repayment. Unsurprisingly, some claimed that the US actually made money from the deal even though the Mexican government managed to pay off early, albeit by contracting debts elsewhere at higher rates.

The US and IMF assistance packages had brought Mexico's current account deficit to decrease from $29.4 billion in 1994 to $215 million in 1995. The trade

balance had moved to the surplus side in 1995. By the end of August 1995, the outstanding balance of short-term, dollar-indexed Mexican government debt had been reduced by about 90%. However, according to the World Bank, the Mexican banking system was still burdened by high non-performing loan level estimated at about 27% of the total loans as of September 30, 1995. The overall economic growth was still declining despite all these capital injection and the re-privatization of the Mexican banking system in 1991 and 1992.Interest rates rose significantly, the peso continued to be volatile, with a high level of non-performing loans, high unemployment rate and a significantly higher inflation rate (GAO/GCD 96-56, 1996).

In fact, several years before the crisis the Mexican government had implemented budget cutting by taking the federal budget from a deficit 9.3% of GDP in 1988 to a surplus of 0.7% of GDP in 1993 (Bank of Mexico data). The Pesos crisis had forced the Mexican government to increase spending and the overall budgeted federal expenditures grew by 11.6%. Besides the external financial assistances, the fiscal policy fiscal policy had been strengthened too; for example value added tax rate increased from 10% to 15%, taxes on gasoline and diesel fuel increased by 48.5%, electricity prices increased 0.8% per month in 1995 and the introduction of Agreement of Unity to Overcome the Economic Emergency on January 3, 1995 to reestablish investor confidence.

Peter Lindert (1990: 250–51) described the IMF role in the bailout as a *"three-party stalemate"* and Sebastian Edwards (1989: 39) referred to the IMF as

"participating in a big charade" because of the agency's continued lending to countries that had a low probability of achieving balance-of-payments viability In the case of Mexico, the lending drew attention away from a total, real economic recovery because most focus was put on working out the debt payout.

Charles Calomiris, hired by the World Bank and the Mexican government in 1995 to advise on banking reform, noted that the bailout money enabled Mexico not to take financial reform seriously. *"It is very hard to undermine the corrupt partnership between powerful industrialist-bankers and governments by giving them both money in exchange for promises to reform in the future"* (Calomiris 1998: 278). He added that *"Mexico was a very slow recoverer compared to what it could have done if the financial mess had been cleaned up faster, and that there are clear disincentives coming from IMF and U.S. Treasury protection for that process"* (IFIAC 2000a: 196).

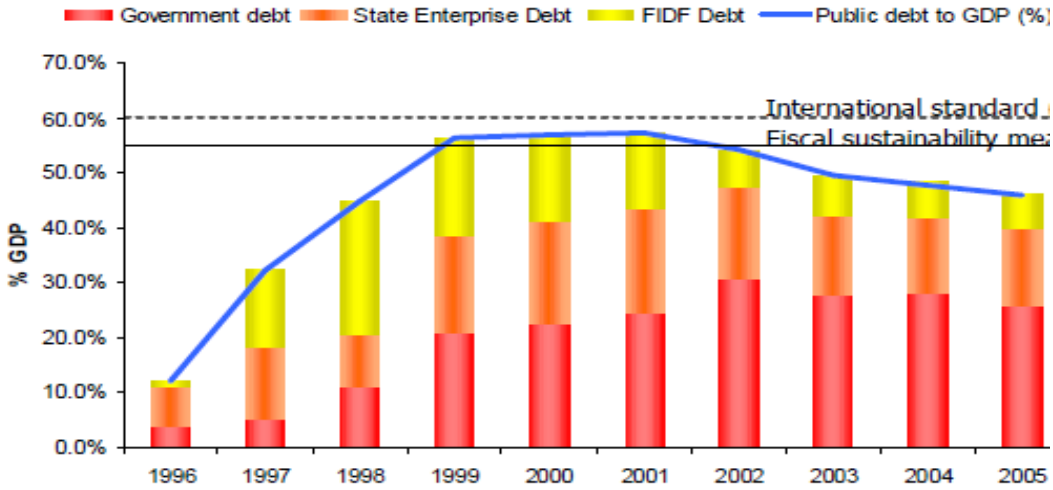
Although the Mexican economic rebound had been characterized as V-shaped, a study by Anne Krueger and Aaron Tornell (1999) showed that the recovery was not uniform across the economy. Michael Bordo and Anna Schwartz (2000) looked at crisis countries from 1973 to 1999 and compared those that received IMF assistance with those that did not. After controlling for self-selection bias and other variables, the authors concluded that *"turning to the IMF may be harmful to a country's economic performance . . . and that this effect has been amplified since the Mexican crisis"* (Bordo and Schwartz 2000: 60).

4.5 Thailand Baht Crisis of 1997

The Thailand baht crisis of 1997 is very unique in its own way. The crisis did not occur as a result of fiscal imbalances or due to any commodity price shocks like what happened in the US during the oil crisis in the 1970s. Large scale borrowing from abroad by the private sector for funding capital investment had increasingly weakened the Thai financial sector and the banking system. The economy totally collapsed and the Thai baht was forced to be devalued.

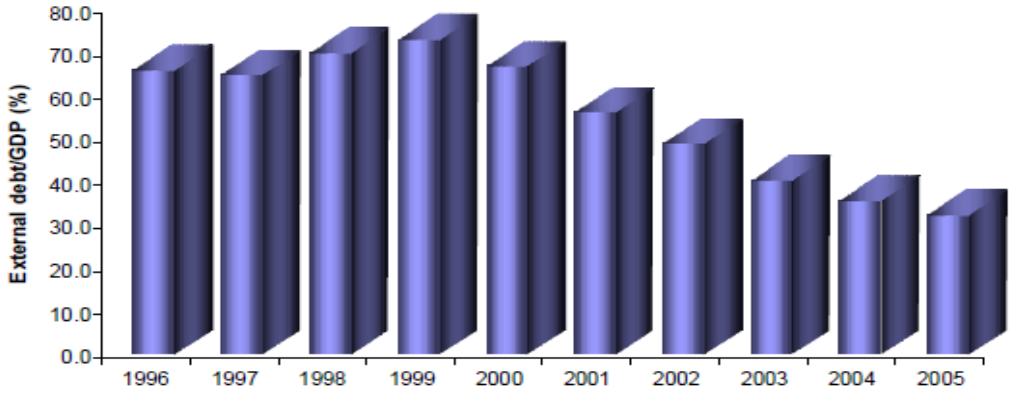
According to Jansen (2001), the collapse of the currency and the ensuing crisis were due to a combination of overvaluation of exchange rate, large current account deficit and growing external debt, the weakness of the financial system and the volatility of international financial markets.

Figure 11: Thailand's Public Debt to GDP (1996-2005)



Source: Office of Public Dept Management, Thailand (2006)

Figure 12: Thailand's External Debt to GDP (1996 – 2005)



Source: Office of Public Debt Management, Thailand (2006)

On August 20, 1997, the IMF's Executive Board approved financial support for Thailand for up to SDR 2.9 billion, or about US$4 billion, over a 34-month period. The total package of assistance to Thailand came to US$17.2 billion. The IMF contributed $4 billion, the World Bank and Asian Development Bank $2.7 billion, and individual governments the balance of $10.5 billion (including $3.5 billion from neighboring Southeast Asian countries, $4 billion from Japan).

During the crisis, Thailand had undertaken 3 recovery packages to restore the economy.

The first package on August 14, 1998 involved financial sector restructuring to secure problems confronting Thailand's financial sector and the banking system. Steps taken include injecting capital, separating viable from non-viable loans, restructuring and improving financial record keeping and supervision. The government had adjusted the fiscal policy such as new tax measures affecting refunds and payment postponement to stimulate domestic consumption

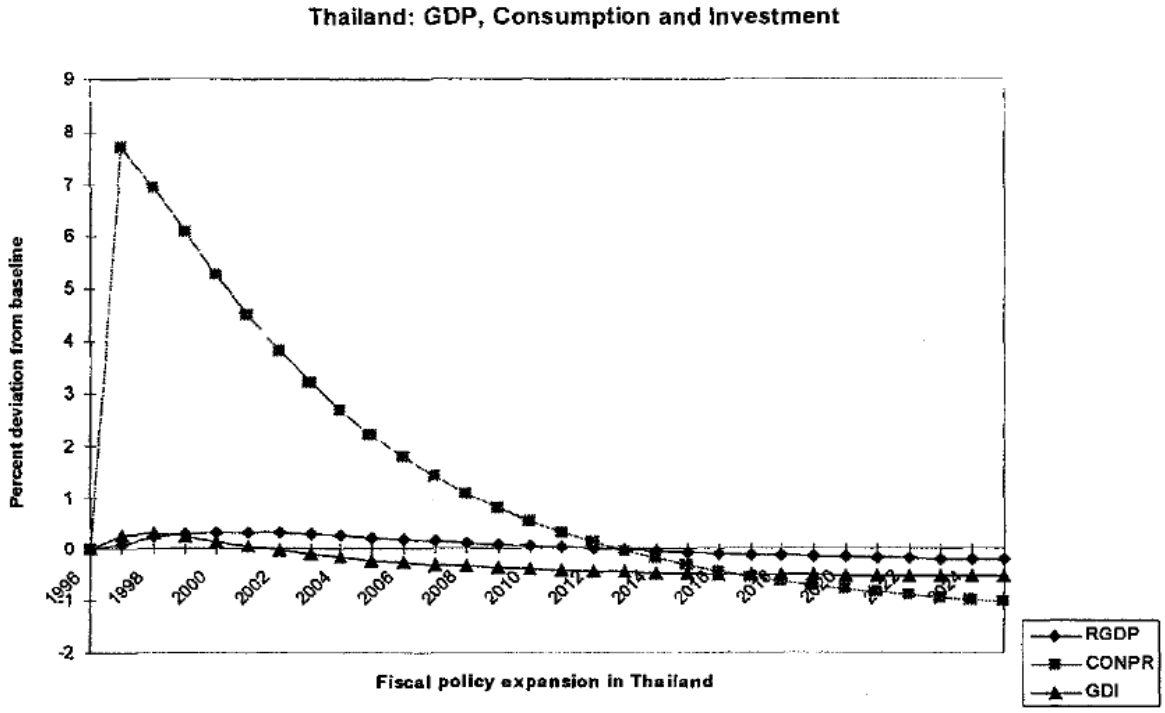
The second package was announced on March 30, 1999 and it was valued $3.4 billion. It addressed private consumption and investment stimulus that included expenditure measures, tax reductions and efforts to lower energy prices. The third package was designed to encourage private investment in order to promote economic recovery, and to enhance prospects for long-term competitiveness in the private sector.

After the 1997 currency crisis, the Thai government posted a budget-surplus target of 1% of GDP for the central government budget for fiscal 1998 (Oct 1997-Sept 1998). The projected annual expenditure of 982 billion Baht approved earlier was cut down to 800 billion Baht in November 1997. In order to balance the implication of such stringent control, the budget-surplus target was increased to 1.5 % of GDP in February 1998. In May 1998, the government extended the budget deficit to 2.4% of GDP to stabilize the economy and the annual expenditure accumulated to 830 billion until June 1998. The Thai government expected to use foreign finances to support the stimulus packages and the government active fiscal policy.

Consumptions demand increased sharply in 1998 but then declined gradually as the increase in taxes required to fund the increase in the tax cut, which is in line with the government's debt burden (refer Figure 11). The fiscal stimulus stimulated consumptions but crowded out investment demand to produce a relatively small net stimulus-to-output. The trade and current account balances deteriorated sharply in 1998, while interest rates increased by roughly 0.6%. The

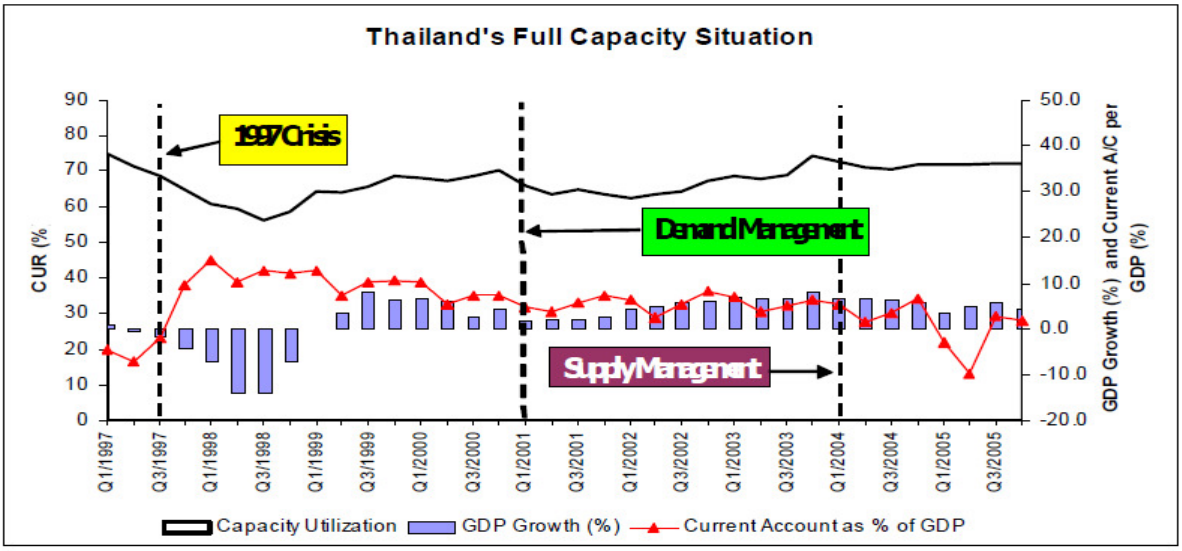
impact had placed higher pressure on heavily indebted firms and affected overall financial recovery.

Figure 13: Permanent Fiscal Stimulus in Thailand



In comparison, the current account moved from a deficit of -2.1 % of GDP in 1997 to a surplus of 4.5 % of GDP in 2004. In the same period, the real private investment reduced by 11.5% in 1997, and recorded positive growth at an average of 4.5% during 2000-2006. However, the rate of growth was far behind the 10-15 % achieved by private investment before the crisis in 1997. In general, Thailand's current account surplus was an average 4.4 % of GDP during 1999-2004.

Figure 14: Thailand's Full Capacity Situation

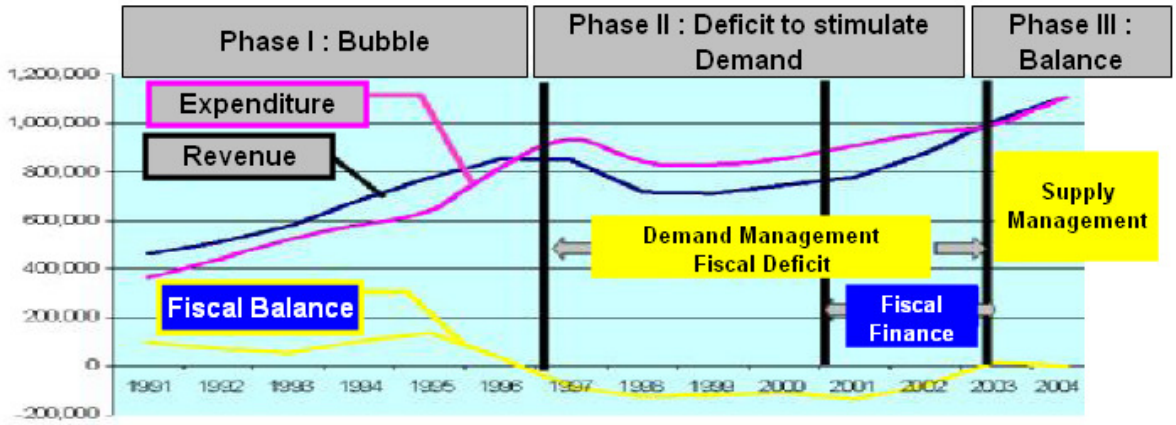


Source: FPRI (2007)

The actual deficit for 1998/99 was estimated to have been below 5 % (inclusive of interest costs of financial sector reform, amounting to almost 2 % of GDP, the deficit was about 6.5 %). The spending was focused on boosting social safety net programmes to protect Thais. The financial resources came mainly from loans under the Japanese government's Miyazawa Plan (Kanit Sangsubhan and Cholachit Vorawangso, 2007). From the mid-1998 onwards the policy shifted to a fiscal deficit policy (refer Figure 15).

The fiscal changes had transformed the Thai financial sector radically and significantly reduced the number of financial institutions (refer Table 7). The NPLs was also in the decreasing trends from 1998 to 2005.

Figure 15: Thailand's Fiscal Policy and Development Phases



Source: FPRI (2007)

Table 7: Changes in the number of financial institutions in Thailand

Financial Institutions	**Pre-crisis June-97**	**Dec-02**	**Dec-04**	**Oct - 05**	**Jan - 06**
Domestic Private Banks	14	6	6	8	10
Domestic Banks (with the majority foreign ownership and control)	0	4	3	4	4
Foreign (single branch) Banks	22	20	20	18	17
Total Commercial Bank	**37**	**33**	**32**	**33**	**34**
Finance Companies	102	19	18	13	9
Credit Foncier Companies	11	6	5	5	4
State-owned Specialized Financial Institutions	7	10	10	10	10
Total Financial Institutions	**157**	**68**	**65**	**61**	**57**
Stand-alone IBFs of Foreign Banks	15	7	4	2	0
Total	**172**	**75**	**69**	**63**	**57**

Source: World Bank (2006)

Table 8: Non-Performing Loans* (percentage of total loans)

NPLs	1997	1998	1999	2000	2001	2002	2003	2004	2005
Thailand	20.7	45.0	38.9	17.7	10.4	15.7	12.7	10.7	8.2

Source: CEIC Database (2006) & World Bank (2006)

Critics of the IMF, inside and outside of Thailand, pointed out that the Thai economy had been decelerating in 1996 and the first half of 1997; in fact, in the first two quarters of 1997 real GDP is low. Under these conditions, it is likely that the fiscal contraction reduced rather than increased the confidence of international investors and added to the recession (Pasuk and Baker 2000).

In conclusion, Thailand implemented stimulus packages had a combined monetary and proactive fiscal policies in order to support the aggregate demand and to mitigate the negative effects of the crisis.

4.6 Malaysia Crisis of 1998

The collapse of the Thai economy in 1997, shocked many foreign investors and international rating agencies. They had failed to consider the underlying risks in the Thai economy and they feared the same currency devaluation would strike other countries within the region. As a result, many withdrew their portfolios from regional markets that were perceived to have underlying weakness (Ariff et al. 1998). Their negative perceptions of the Malaysian economy eventually triggered the fall of the ringgit exchange rate. The slide reverberated throughout the region, with rippling effects in Indonesia, Korea, and the Philippines (refer to Table 9).

Table 9: East Asian Crisis Indicators

	1996	1997	1998	1999	2000
Indonesia					
GDP Changes (percent)	7.8	4.7	−13.1	0.8	4.8
Inflation	8.0	6.2	58.5	20.5	3.7
Current Account Balance (percent of GDP)	−3.4	−2.2	4.2	4.1	...
Fiscal Balance (percent of GDP)	1.2	−0.7	−2.8	−1.1	...
Korea					
GDP Changes (percent)	6.8	5.0	−6.7	10.7	...
Inflation	4.9	4.4	7.5	0.8	2.3
Current Account Balance (percent of GDP)	−4.4	−1.7	12.6	6.0	...
Fiscal Balance (percent of GDP)	0.1	−1.3	−3.8	−4.6	...
Malaysia					
GDP Changes (percent)	10.0	7.3	−7.4	5.8	8.5
Inflation	3.5	2.7	5.3	2.7	1.5
Current Account Balance (percent of GDP)	−4.6	4.7	13.0	15.5	...
Fiscal Balance (percent of GDP)	0.7	2.4	−1.8	−3.2	...
Philippines					
GDP Changes (percent)	5.8	5.2	−0.6	3.3	3.9
Inflation	9.0	5.9	9.8	6.6	4.3
Current Account Balance (percent of GDP)	−4.8	−5.3	2.4	10.3	...
Fiscal Balance (percent of GDP)	0.3	0.1	−1.9	−3.7	−4.1
Thailand					
GDP Changes (percent)	5.9	−1.7	10.3	4.2	...
Inflation	5.8	5.6	8.1	0.3	1.5
Current Account Balance (percent of GDP)	−8.1	−1.9	12.5	10.2	...
Fiscal Balance (percent ofGDP)	0.9	−0.3	−2.8	−3.3	...

Source: Asian Development Bank, Asian Recovery Information Center web site *http://aric.adb.org/indicators/all/fba_pgdp.asp* 21 March, 2001. Except for fiscal balance, the individual country pages were used. Fiscal balance is from the regional page.

Bank Negara Malaysia's (the central bank of Malaysia) immediate response was to intervene in the foreign exchange market to uphold the value of the ringgit. From March to July 1997, the ringgit-US dollar exchange rate fell from RM2.48 per US$1 to RM2.57 per US$1. By the end of 1997, the exchange rate had further fallen to RM3.77 per US$1. *Bank Negara Malaysia tried to shore up the value of the ringgit by raising short-term interest rates, but this did nothing to halt its slide, and the bank eventually gave up attempts to maintain the value of the ringgit and was forced to float the ringgit* (Ariff and Yap 2001).

In early 1998, the ringgit had hit a low of RM4.88 per US$1 and the central bank had already lost close to U.S $1.5 billion in its attempt to prop up the ringgit. Then wide fluctuations caused the exchange rate to deteriorate further and the Kuala Lumpur Composite Index (KLCI) too fell sharply. Between July and December 1997, the KLSE CI fell by 44.9% and fell to an eleven-year low of 262.70 points on September 1, 1998. Subsequently, the investor confidence was increasingly shaky after the property market slump and increasing nonperforming loans (NPLs) in the banking system. According to Bank Negara data, the NPLs rose from about a modest 2.18 % in June 1997 to 4.08 % in December 1997, and then to a high of 11.45 % in July 1998 (Malaysia, EPU 1999).

After the Asian financial crisis in 1997-1998, the Malaysian government introduced the fiscal stimulus as a counter cyclical or stabilization measure to mitigate the impact of the crisis and to avoid a deeper economic recession. The recovery measures had always been home-grown and were not shaped by the IMF under any aid package.

The first response package was announced by the Finance Minister on December 5, 1997, approximately five months after the crisis first hit the Malaysian economy. There was a called for an 18% reduction in government expenditure (including a 10 % pay cut for government ministers), as well as the postponement of several infrastructure mega-projects such as the Bakun dam, the Express Rail Link, and the land bridge to Thailand. In order to stem the outflow of domestic funds at that time, the government also imposed a freeze on

new overseas investments by Malaysian firms which had previously amounted to RM 10.5 billion in 1996 (including retained earnings overseas).

In July 1998 a fiscal stimulus package worth RM 7 billion or 2.5% of GDP was introduced, involving additional development expenditure of RM7 billion allocated to agriculture, housing, education, health and rural development; on top of a RM5 billion infrastructure development fund was set up to finance infrastructure projects.

Prior to the 1997-1998 crisis, Malaysia's GDP was growing at a compounding rate of 9.2% per year. Within the period of 1993-1997, the Government consistently maintained a relatively large surplus, ranging from 0.2% to 2.5% of gross national product (GNP) (Refer Table 10) Due to the expansionary measures, the fiscal position turned into a budget deficit of 1.8 % in 1998, which increased to 3.2 % in 1999 and 5.5 % in 2001 (Ministry of Finance 2001, Bank Negara 2002).

Later, the National Economic Recovery Plan (NERP) was launched in July 23, 1998 aimed towards economic recovery. NERP recommended the easing of fiscal and monetary policies, as well as the lowering of the cost of capital to revitalize the economy (Victor Wee, 1999). The 1999 Budget continued with the expansionary fiscal policy, with emphasis on agriculture and rural development, and protection of lower income groups suffering from the adverse effects of the financial crisis.

Table 10: Malaysia: Federal Government Finance, 1993-1997

	1993	1994	1995	1996	1997
Revenue (RM ´ mil)	41,691	49,446	50,954	58,280	65,736
Operating expenditure (RM ´ mil)	32,217	35,064	36,573	43,865	44,665
Current surplus/ deficit (RM ´ mil)	9,474	14,382	14,381	14,415	21,071
Gross development expenditure (RM ´ mil)	10,124	11,277	14,051	14,628	15,750
Net development expenditure (RM ´ mil)	9,120	9,974	12,520	12,600	14,445
Overall deficit/ surplus (RM ´ mil)	**354**	**4,408**	**1,861**	**1,815**	**6,626**
Percent of GNP (%)	**0.2**	**2.5**	**0.9**	**0.8**	**2.5**
Source of finance					
Net external borrowing (RM ´ mil)	-3,134	-4,757	-1,635	-2,177	1,681
Net domestic borrowing (RM ´ mil)	375	1,751		1291	-2,048
Change in assets (RM ´ mil)	2,405	-1,402	-225	-929	-2,897

Source: Ministry of Finance, Malaysia. Economic Report, various issues

In this first phase, stimulus efforts brought larger government expenditure and subsequently, a decline in revenue. The unfavorable outcome from this first phase of policy measures had raised call for a reversal in strategy. The second phase of the Malaysian policy measures was thus programmed to reduce interest rates and to impose selective capital controls to mitigate market forces that could contribute to the further fall of the ringgit (Athukorala 2008). The government undertook more substantial restructuring during the second phase of policy

measures by establishing Danaharta, Danamodal, and the Corporate Debt Restructuring Committee (CDRC).

Table 11: Malaysia Federal Government Finance, 1998-2002

	1998	1999	2000*	2001**	2002#
Revenue (RM ´ mil)	56,710	58,675	61,864	69,011	73,400
Operating expenditure (RM ´ mil)	44,585	46,699	56,547	61,132	65,342
Current surplus/ deficit (RM ´ mil)	12,125	11,976	5,317	7,879	8,058
Gross development expenditure (RM ´ mil)	18,103	22,615	27,941	32,058	28,382
Net development expenditure (RM ´ mil)	17,128	21,463	25,032	30,258	26,682
Overall deficit/ surplus (RM ´ mil)	**-5,003**	**-9,487**	**-19,715**	**-22,379**	**-18,624**
Percent of GNP (%)	**-1.8**	**-3.2**	**-5.8**	**-6.5**	**-5.0**
Sources of finance					
Net external borrowing (RM ´ mil)	1,784	2,923	864	4,797	3,626
Net domestic borrowing (RM ´ mil)	11,040	5,423	12,714	15,421	13,019
Change in assets (RM ´ mil)	-7,821	1,141	6,137	2,161	1,979

Notes: * Estimated actual, ** Revised estimate, # Budget estimates

Source: Ministry f Finance, Malaysia. Economic Report 2001/2002

The Asian financial crisis of 1997-1998 left a significant impact on Malaysia's GDP growth. In 1998, Malaysia's GDP contracted sharply by 7.4 % and the employment growth had reduced by 3 %. For the whole of 1998, the number of workers retrenched was 83,865, a sharp increase from the 19,000 retrenched in 1997. Inflation levels rose as well, reaching a high of 6.2 % in June 1998 before

moderating. The inflation rate was 5.3 % in 1998. The Government continued to implement a fiscal stimulus to sustain and further support domestic economic activity. In the next period of 1999-2001, the deficit gradually rose from 3.2 % of GDP in 1999 to 5.8 % in 2000 (Refer Table 11). In fact, the implementation of fiscal stimulus packages had resulted in an increased in government spending from an average of 22% of GDP in 1995-97 to 30% in 2001, or an average of nearly 25% of GDP during 1998-2001.

The stimulus packages brought minute recovery to the economy. The KLSE CI had rebounded from 262 points on 1 September 1998 to 758 points on 25 May 1999. The international reserves of Bank Negara increased from US$20.5 billion at end of June 1998 to US$29.6 billion at mid-May 1999, equivalent to 6.5 months of retained imports. However, the Malaysian economy still showed an overall -3.2% in growth but no sharp rise in the inflation rate. In 2001, two additional fiscal stimulus packages of RM 3 billion and RM4.3 billion were introduced in March and September respectively to encourage the developments of domestic economy.

During the 1997–1998 Asian financial crisis, Malaysia didn't seek assistance from either the US or the IMF for emergency credit facilities but had opted instead to execute four phases of changing policy responses (Prema-chandra Athukorala, 1998). In general, Malaysia's delayed recovery as compared to other countries may be due to the way the crisis spread and the Malaysian government's early response towards the crisis as it happened.

4.7 Korea Asian Crisis of 1997

Over the decades, Korea had transformed into an advanced industrial economy but its financial system was weak as a result of constant governmental interference in the economy. The close link among the Korean government, chaebols (conglomerates) and the banking industry had also given good cause for the inefficient use of capital and also inadequate financial supervision and regulations.

In January 1997, Korea's second largest steelmaker, Hanbo Iron and Steel was forced into bankruptcy followed by the collapse of other mid-size chaebols, such as Kia Motor, Jinro, and Haitai in early 1997. The speculative attack on the Thai baht had indirectly casted attention on the Korean bank liquidity issue, causing the market to lose confidence. Since early 1997, Korean merchant banks were having difficulty rolling over their short-term dollar loans. Korea's ratio of short-term foreign borrowing to foreign exchange reserves was 285% and it was far above the ratios of any other Asian country (Ito 1999).

The market did not really bounce back even with the commitment of a foreign debt guarantee as announced by the Korean government on August 25, 1997. The inability to roll over short term loans affected the Korean currency markets. The Korean won began to fall and depreciated 25 % (late November 1997) from its pre crisis level against the U.S. dollar. The usable foreign exchange reserve was less than $6 billion before the IMF aid came in.

On December 4, 1997 the IMF's Executive Board approved a financial support of SDR 15.5 billion or about US$21 billion to Korea, spread over three years. The strong impact of the crisis and tight policy brought the real GDP to 8.1 % in the third quarter of 1998 compared with the 1997. The real GDP growth was negative in 1998 with a high inflation rate of 7.51% (refer Table 12).

Table 12: Korea Real GDP growth from 1980s to 2000

	80-85	86-91	1992	1993	1994	1995
Real GDP growth	6.3	9.9	5.1	5.8	8.6	8.9
CPI Inflation	10.9	6.1	6.3	4.8	6.2	4.5
Corporate bond yield	19.0	15.1	16.2	12.6	12.9	13.8
Fiscal balance / GDP	-2.5	-0.2	-0.7	0.3	0.5	0.4
Current account / GDP	-3.8	3.0	-1.5	0.1	-1.2	-2.0
Foreign reserves (US$b)	7.1	12.2	17.1	20.3	25.7	32.7

Source: Bank of Korea, Ministry of Finance and Economy

	1996	1997	1998	1999	2000
Real GDP growth	7.00	4.65	-6.85	9.49	8.49
Change in overall balance (in percent of GDP)	-0.07	-1.66	-2.46	1.41	3.60
Change in structural balance	-0.37	-1.78	-0.01	0.24	2.84
• Change in structural revenue	0.81	-0.06	0.96	0.41	3.09
• Change in structural expenditure	1.17	1.73	0.97	0.17	0.25
Inflation	4.92	4.44	7.51	0.81	2.26
NPL			7.40	8.30	8.90

Source: World Economic Outlook and Fund staff estimates

The Korean government chose a recovery strategy of improving the financial and corporate sector through the nationalization of banks, bank mergers, debt-equity swaps, liquidations, full deposit guarantees and purchase of bad loans. In 1998, 5 out of 33 banks were closed, and three banks were merged. Overall, about 15 % of financial institutions operating in 1997 were closed down in 1998 (Antonio, Steve, Olivier and Carlo, 2008).

During the crisis, the Korean government provided little fiscal stimulus to support the aggregate demand due to the cost incurred by fiscal deficits. Instead, it paid more attention on the recovery of the financial sector. The financial assistance received from the IMF or from any external resource was used to stabilize the financial sector and to help the corporate sector from deteriorating. Only after the 1997 crisis was there a shift to more fiscal policy, especially under the IMF stabilization program. Table 13 shows the content of the initial agreement and the subsequent amendments between the Korean government and the IMF. The agreement was a part of the conditionality imposed by the IMF in return for a US$55billion loan package.

Table 13: Initial IMF program and amendments

	Initial program Dec., 1997	1st amendment Jan. 8, 1998	2nd amendment Feb. 17, 1998	3rd amendment May 6, 1998
Foreign reserves (billion dollars)	35.4		39.1	41.0
Reserve money growth rate (%)	9%		1 Q: 15.2% 2 Q: 15.7%	2 Q: 13.5%
Fiscal balance to GDP	balance or small surplus	A small deficit	−0.8%	−1.74%
Real GDP growth rate	3%	1–2%	1%	−1% (further contraction)
Inflation rate	Below 5%	9%	9%	one digit
Current balance (billion dollars)	4.3	3.0	8.0	21–30
Unemployment rate	3.9%	4.7%	5–6%	6.4%

Source: IMF

The IMF was criticized for implementing a general tight fiscal policy across all the countries that require the finance assistance without considering their difference. The IMF did not distinguish between the Asian financial crisis and the financial crises in Latin America. The latter were mainly a result of large, unsustainable government deficits (Radelet and Sachs, 1998; Chung, 1998).

Despite the tight fiscal policy, the actual GDP growth rate in 1998 turned out to be far worse at−6.8% and forced the IMF and the Korean government to switch to an expansionary fiscal stance in mid 1998.

In 1998 alone, Korea Deposit Insurance Corporation (KDIC) and the Korea Asset Management Corporation (KAMCO) had issued 39 trillion won in government-guaranteed bonds, which were twice the total issuance of treasury bonds in the

same year. From 1998 to 2000, the government issued 102 trillion won in bonds. The funds collected were used for financial restructuring such as deposit insurance claims and equity participation in non-performing loan purchases from ailing financial institutions. Many believed the large injection of public money for structural adjustment encouraged the expansion in consumption and investment. The GDP rebound rate rebounded sharply from -6.8% in 1998 to above 10% in 1999.

Even though the expansionary fiscal policy implemented in response to the crisis had successfully stimulated the economy and supported the recovery of the financial market, it also generated various side effects. The ratio of sovereign liabilities to GDP increased sharply from less than 6% before the crisis to 32% in 2004 and the outstanding volume of treasury bonds accounted for 23% of GDP.

During the 1998 crisis, the Korean government advocated and executed fiscal expansion aggressively. The rapid increase in government guarantees and contingent liabilities had affected the fiscal transparency and the efficiency of fiscal policy (Young Lee, Changyong Rhee and Taeyoon Sung, 2006).

4.8 HK Hedge Fund Crisis of 1998

Hong Kong was also affected by the 1998 financial turmoil despite its sound financial system and economic policy. Even though Hong Kong managed to defend its exchange rate peg against currency speculation, the high volatility had caused the stock and real estate markets to tumble. Hong Kong's growth rate

fell to a record low of -7% in the third quarter of 1998 and the unemployment rate increased to an historic high of 5.8% in December 1998.

Basically, the economic development policies of Hong Kong are governed by the two main economic philosophies of "positive non-intervention" and "prudent fiscal management with a surplus budget". These two economic philosophies have been adopted by the Hong Kong government since the end of the WWII. The principle of "positive-non-intervention" in the context of Hong Kong means a minimum of government regulations and interference in business practices and decisions. Sir Philip Haddon-Cave, the Financial Secretary during 1971-1981, provided the best explanation of the phrase by saying that *"government intervention and involvement would be minimum except under special circumstances"* in his speech addressed to the Legislative Council in 1976 (*Hansard*, 1976, pp.827-830). The government attributed the past success of the HK economy to *"the consistent economic policies of free enterprise and free trade* (Hong Kong Yearbook, 1985, p.71).

"The government considers that, except where social considerations are over-riding, the allocation of resources in the economy is best left to market forces with minimal government intervention in the private sector. This basically free enterprise, market-disciplined system has contributed to Hong Kong's economic success" (Hong Kong Yearbook, 1991, p.63).

The second principle of "prudent fiscal management with a surplus budget" means the government is determined to restrain its role and involvement in the

economy and the social sector. Government expenditure would only be made on basic and necessary areas such as law and order, administration, and infrastructure. The Basic Law (constitution for HK) stipulates that the HK Special Administrative Region shall follow the principle of keeping expenditure within the limits of revenues in drawing up its budget, avoid deficits, strive to achieve a fiscal balance and make sure the budget commensurate with the growth rate of its gross domestic product (Article 107).

The Asian financial crisis reached Hong Kong in October 1997. Until February 1998 the government had not done anything to prevent it from affecting HK or to minimize its impact. The Financial Secretary announced the 1998 Budget in February with various tax reductions including business tax, security stamp duty, rates, airport tax, and property tax to stimulate consumption, in view of a slow economic growth. The negative capital account shock of 1997-1998 had caused Hong Kong output to decline in 1998, and output in Argentina to decline in 1999-2000, but the negative capital account shock did not cause output to decline in Singapore in the 1998-2000. In May 1998 saw that the government slightly relaxing the rules for the transaction of private properties to stimulate the ailing property market. The Monetary Authority of Hong Kong had injected more money into the banking system in order to relieve the tight currency circulation.

Table 14: Comparison of Growth and Inflation under Currency Boards and adjustable Pegs

Hong Kong	1996	1997	1998	1999	2000
GDP growth %	4.5	5.0	-5.3	3.0	10.5
CPI growth %	6.4	5.7	2.8	-4.0	-3.8
Units of domestic currency per US$	7.73	7.74	7.75	7.76	7.79

CPI = Consumer price index

Sources: Data are from the relevant country reports of the Economic Intelligence Unit (EIU)

In an interview with the media, the Financial Secretary of the HKSAR revealed that according to the original estimation, HK$ 20 billion would be enough to keep the market up at a level high enough to deter speculation (*Hong Kong Economic Times*, 9/15/1998). But it turned out that HK$ 118.1 billion had to be spent which initiated a public request for a change, influenced by a possible crisis in the government.

On September 5, the HKMA suddenly issued a press release outlining seven “technical” measures to strengthen the currency board (Hong Kong Monetary Authority, (1998c)) and how to defend the Hong Kong dollar.

In June 1988, the government had announced a Mini-Budget estimated to total HK$44 billion. The budget converted the original HK$10.7 billion 1998-99 budget surplus into a HK$21.4 billion deficit. It covered new initiatives such as increasing spending, offering tax/fee reductions, freezing land sales, the home purchase scheme, cutting duty on diesel by 30 cents and others.

The 1999 and 2000 *Budgets* also did not do much in boosting the economy or restoring public confidence in the government. The government recorded a deficit of HK$22 billion and HK$11 billion in 1999 and 2000 respectively (*Budget*, 2001), the first deficit budgets for the Hong Kong government in the past 30 years. It had deviated from the principle of “Setting Positive Budget” and also violated the principle of Article 107 of the Basic Law in maintaining a fiscal balance and avoiding deficits. The major reductions of the government income came from the sharp decrease of property tax (-17.4 %) and the personal income tax (-13.8 %) in 2000. On the whole, the fiscal reserves in Hong Kong have been decreasing since 1998, from HK$4,252 billion to HK$3,887 billion in 1999 and subsequently to HK$3,831 billion in 2000.

The government is always of the view that additional public funding would distort the market and delay the recovery of the economy. The added spending commitment may lead to deficit budgets, causing a destabilizing effect on the exchange rate, and even breach the budgetary principles of the Basic Law (i.e. Article 107). Until the 1998/99 budget, the Hong Kong government had not supported the usage of counter-cyclical spending strategy to overcome economic downturns. It demonstrated a new shift in Hong Kong's economic approach and practice, though it appeared as a short-term fiscal measure (Newman Lam, 2000).

In total, the 1998/99 budget showed an 18.4% increase in public expenditure which consisted of public expenditure increases of 15.3% in education, 12.1% in

infrastructure, and 9.6% in economic services. The budget also provided HK$62.9 billion for capital projects to be funded through the Capital Works Reserve Fund.

4.9 China Crisis 2008

As one of the largest economic power in the world, the People's Republic of China (PRC) implemented a large stimulus package during the 2008 crisis.

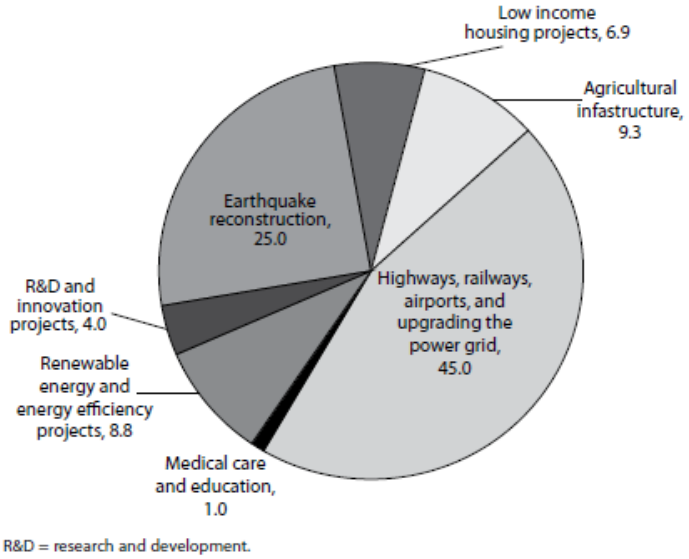
In November 2008, the government announced a CNY 4 trillion package—equivalent to 13% of GDP that would run through 2010 (refer Table 15). About 86% of the stimulus package went to infrastructure spending; out of which 45% was for road, rail, and airport infrastructure (CNY1.8 trillion), 9.5% was for improving electricity, water, and road infrastructure in rural areas (CNY370 billion), 7% was for low income housing (CNY280 billion), and 24.7% was for the reconstruction of towns devastated by the May 12, 2008 earthquake. The remaining amount went to healthcare and education (CNY40 billion or 1% of the total package), ecological and environmental protection (CNY350 billion or 8.8%), and technical innovation (CNY160 billion or 4%) (refer Figure 16).

Table 15: Major Fiscal Stimulus Measures, the PRC

Major Stimulus Measures	Total Amount (Yuan billion)
4 Trillion Renminbi Stimulus Program (November 2008)	
• Low-income housing	280
• Improving rural living standards	370
• Health care and education	40
• Ecological and environment protection	350
• Postdisaster reconstruction	1,000
• Technological innovation	160
• Infrastructure construction	1,800
Additional Expenditures (12 January 2009)	
• Expedited investment spending on scientific and technical innovation/ upgrades	600
• Health care reforms to provide basic medical security to everyone; improve the quality of medical services; and make medical services more accessible	850
Employment Creation (March 2009)	42
• Provide employment to high school graduates, farmers and agricultural workers, residents with employment difficulties, and families with no employed household members and to support establishment of independent businesses	

Source: Norton Rose Group (2009)

Figure 16: Composition of the 4 Trillion Yuan Fiscal Stimulus Package



R&D = research and development.

Source: Norton Rose Group (2009)

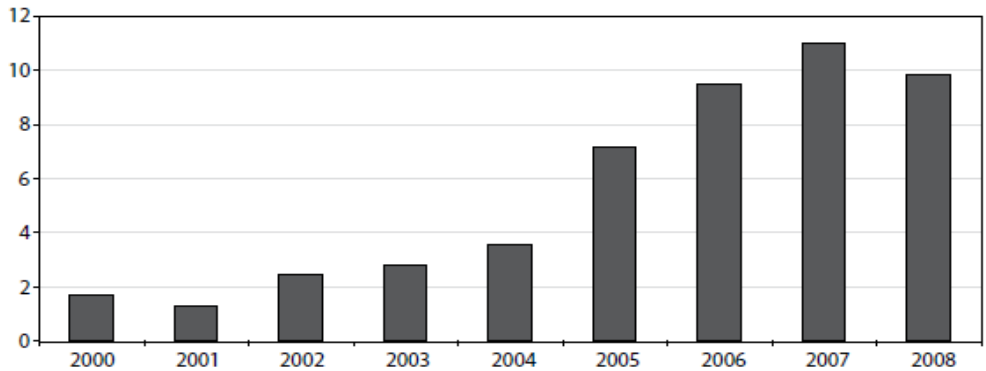
The fiscal policies provided strong support for small and medium enterprise (SMEs) and firms, which included reduction of business processing fees, trade facilitation measures, tax cuts and government support for technological

innovation and industrial restructuring (Seok-Kyun, Shikha, Donghyun and Pilipinas, 2010).

In January 2009, the Government of the PRC undertook a fiscal expenditure of CNY 1.45 trillion (US$124.3 billion) to improve healthcare. The package provided basic medical security for all citizens, improved the quality of medical services and made medical services more accessible.

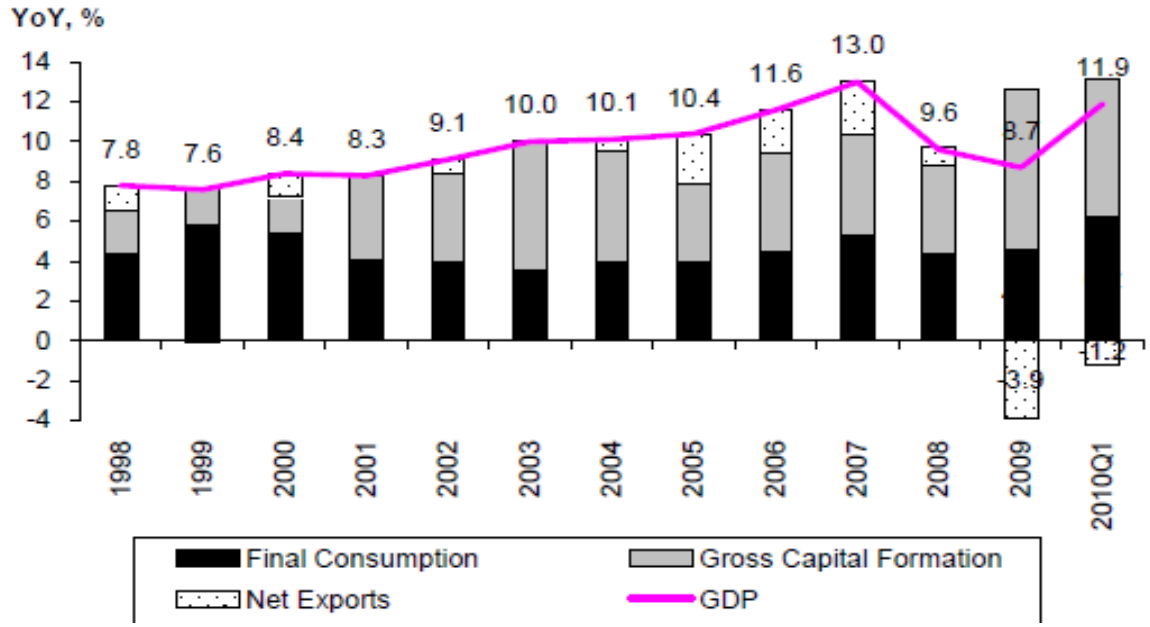
Cumulative fiscal expenditures surged by 23% on a year-on-year basis through the first 10 months of 2009 and the fiscal stimulus continued well into 2010. The fiscal revenue increased from a total of CNY 5.1 trillion (US$750 billion) in 2007 to CNY 6.13 trillion (US$900 billion) in 2008. The annual GDP growth registered an 8% in 2009, with its quarterly growth in the 4th quarter as high as 10.7%. Its GDP hit CNY33.54 trillion, up by 8.7% over 2008 at comparable prices and with its growth rate down by 0.9 % points on a year-on-year basis. China's fiscal deficit in 2009 amounted to 2.2% of the GDP (refer Figure 18) despite the surge in the spending to create a more solid economic recovery.

Figure 17: PRC's Current Account Surplus as a Percentage of GDP,2000-2008



Source: ADB's Asian Development Outlook database

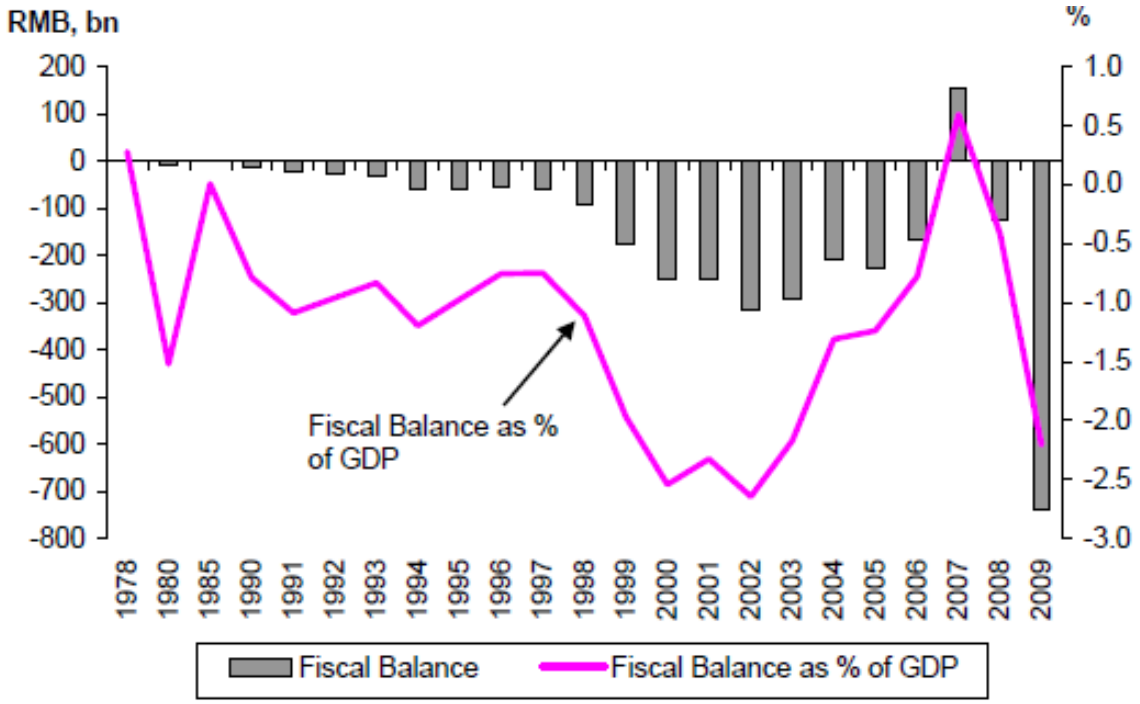
Figure 18: Composition of China's GDP Growth, 1998-2009



Source: National Bureau of Statistic, CICC

A stimulus package could quickly reverse the sliding trend of economic growth and temporarily sustain the national economy. At a certain degree, the PRC government's investment had successfully stimulated the growth of its economy. Domestic consumption had increased with total retail sales of consumer goods amounting to CNY 12.53 trillion in 2009, up by 15.5% over 2008. In 2009, the per capita disposable income of urban residents increased by 8.8% compared with 2008, while the per capita net income of rural residents was up by 8.2%, with its real growth rate at 8.5% after deducting the price factors (Jia Kang and Liu Wei, 2010).

Figure 19: China's Fiscal Position



Source: Ministry of Finance and National Bureau of Statistics

Bottom-line, PRC had to follow the footsteps of other economic powers in announcing the stimulus packages to restore market confidence and to boost the economies. The implementation of the stimulus packages by PRC is particularly effective in supporting economic activity but it is rather "limited and incomplete". Such plans could quickly reverse the sliding economic trend and were merely intended as a short term last resort for authorities to prevent the economy from worsening too quickly and are often at the risk of incurring long term costs.

4.10 Korea Financial Crisis of 2008

The Republic of Korea announced three stimulus packages in November 2008, January 2009, and March 2009 to counter the global financial crisis.

As the earliest response to the crisis, the first stimulus package was announced by the government in November 2008 valued at US$26 billion. This stimulus implemented in December 2008 was called the “2009 Budget and Public Fund Operations Plan to Overcome Economic Difficulties” and was focused on infrastructure. It consisted of about 14 trillion won of public expenditures (equivalent to about 1.4% of GDP) and 3 trillion won of tax reductions (refer Table 16). This 35.6 trillion won (equivalent to 3.5% of GDP) promoted the use of fiscal policy through expenditure expansion and tax cuts.

The second stimulus package was called the “Green New Deal Job Creation Plan” and it involved infrastructure spending on green transportation networks and clean water supplies, carbon reduction and stable supply of water resources, and new industrial and information infrastructure and technology development.

The third stimulus package involved amending the tax laws by including incentives for the restructuring of financially distressed companies, establishing a bank recapitalization fund and providing investment incentives for Korean expatriates. The stimulus measured a total of 28.9 trillion won or 2.8% of GDP; of which 17.7 trillion won was injected in March 2009 and tax incentives introduced in August 2009. The subsequent plan for the next 4 years was to invest 50 trillion won from 2009–2012 in order to create 960,000 jobs.

Table 16: Major Fiscal Stimulus Measures, the Republic of Korea

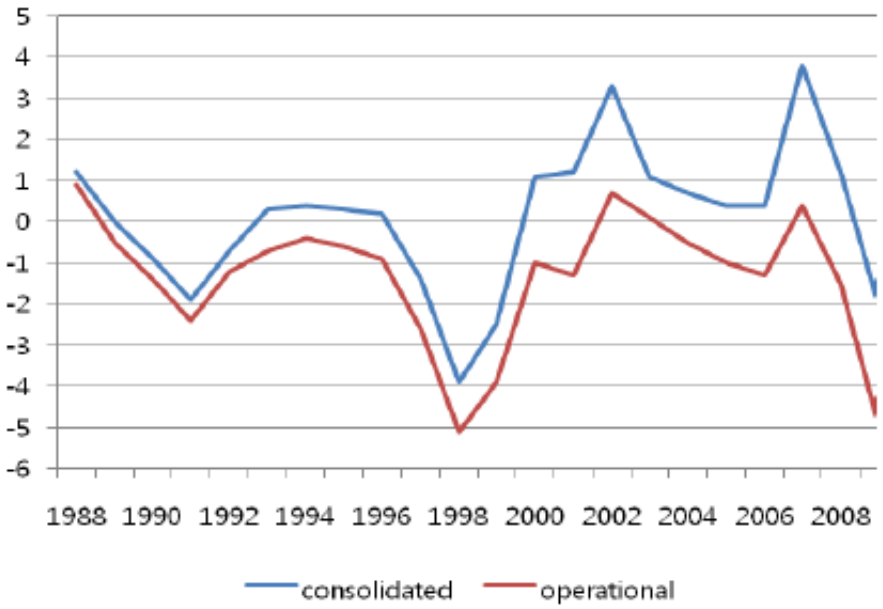
Major Stimulus Measures	Allocation (Won trillion)
3 November 2008	
• Spending on infrastructure and other government projects	4.6
• Assistance to small businesses	3.4
• Social transfers to low-income households	1.0
• Local government expenditures	1.1
• Tackle unemployment problems and support small business start-ups	0.3
• Tax cuts	3.0
3 December 2008	
• Expansion of internship system and increasing job positions for underprivileged	4.9
• Increase of Social Overhead Capital projects	24.7
• Stabilization of SMEs	3.9
• Support in regional finances	1.9
January 2009	
• Invest in projects pertaining to energy conservation, recycling, carbon reduction, and waste management	
• Improved information and energy infrastructure	
• Prevent floods, secure water resources, create green spaces, and develop areas around the four rivers	
• Increase investment in low carbon transportation	
• Investment in environment-friendly light-emitting diode lights	
March 2009	
• Job creation and maintenance	3.5
• Assist SMEs and self-employed through expanded credit guarantees and increased government financing	4.5
• Revitalize provincial economies	3.0
• Nurture future growth engines	2.5
• Assistance to low income households	4.2
August 2009	
• Tax incentives for self-employed business owners and SMEs	
• Tax incentives to be granted on money used for microcredit loans, educational, art, cultural, and social welfare purposes	
• Tax deduction on R&D investment will be expanded to 20%–25% for large enterprises and 30%–35% for SMEs.	
• Tax deduction and exemption to be given to green industry-related financial products	

SME = small and medium enterprise, R&D = research and development.

Source: Ministry of Strategy and Finance (2008a and 2008b); Ministry of Strategy and Finance, various press releases

Figures 20 and 21 showed the time series of the Korean government budget balance and government debt as percentages of gross domestic product (GDP).

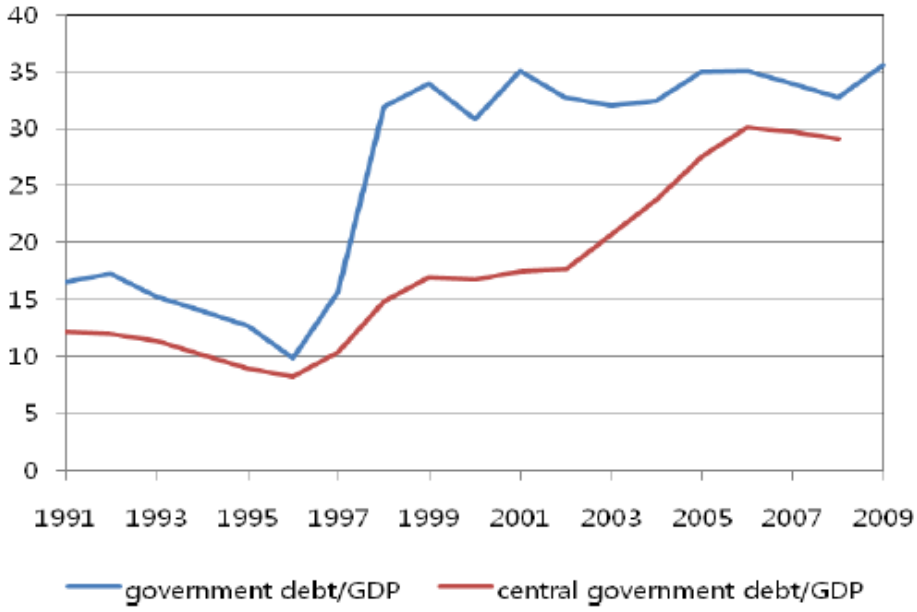
Figure 20: The Fiscal Balance to GDP Ratio in Korea *



*Central government

Source: Ministry of Strategy and Finance

Figure 21: The Fiscal Debt to GDP Ratio in Korea



Source: Ministry of Strategy and Finance

* Operational budget balance = Consolidated budget balance - Social security balance + Redemption of public funds

The 1998 and 1999 were exceptional years in terms of government budget deficit; the consolidated budget balance as a percentage of GDP was -4% in 1998 and -2.5% in 1999. The fiscal debt to GDP ratio had been increasing quite rapidly since 1998. Public funds rose during the 1997 financial crisis through the issuance of bonds by the Korea Asset Management Corporation. The Korea Deposit Insurance Corporation was gradually turned into government debt beginning 2003 (Kim, J.Y, 2003). When the deficit reached W20.4 trillion or 5 % GDP in 1999, the Korean government had turned to IMF for bailout.

When the Korean government ran into major deficits again in 2009, this time it was due to the effects of the global financial crisis. Government expenditure increased sharply while tax revenues remained almost unchanged compared to 2008. It had prompted an increase in the debt-to-GDP ratio of 33.8% in 2009, up 3.7 points from 2008. The government tax revenues totaled W261.3 trillion in 2009, up W29.2 trillion (12.6 %) from 2008.

Korea's fiscal deficit soared to a record W43.2 trillion in 2009. This was equivalent to 4.1% of Korea's entire 2009 GDP, which amounted to W1,064.1 trillion. With the increased fiscal deficit, the total national debt including liabilities borne by the central and regional governments was tallied at W359.6 trillion, up W50.6 trillion from 2008. The government had to issue bonds to finance its economic stimulus measures to overcome the global financial crisis (US $ 1 = W 1, 123).

According to the OECD Economic Outlook (2009), the spending multiplier for Korea was estimated to be 0.8; smaller than 1 like most of the OECD countries. Existing studies in Korea also indicated that the fiscal multiplier was positive but less than 1. Hyun (2009), for example, estimated that a 1 unit increase in fiscal expenditure in Korea led to a 0.4 unit increase in GDP in the same year and a 0.17 unit increase in the year after. Huh (2007) and Kim (2007) each used a structural vector auto regression model and found that the fiscal multiplier was not significantly different from zero or even negative. Moon (2010) reported larger estimates: 0.9 for the expenditure multiplier and 0.6 for the tax multiplier.

Leif Lybecker Eskesen (2009) analysis showed that fiscal policy could be an effective stabilization tool for Korea, despite the openness of the economy. The impact of the fiscal stimulus was relatively short-lived and an expansionary fiscal stance needed to be maintained.

4.11 Malaysia Financial Crisis 2008

Like the East Asian governments, Malaysia also introduced large stimulus packages in 2008 (refer Table 17 for the details of the individual stimulus measures). Results have shown that those stimulus packages implemented in East Asian had transformed governmental budget surpluses into deficits of between 2% and 8% (Mahani Zainal Abidin, 2010).

Table 17: Fiscal Stimulus Packages in East Asian Countries

Country	Amount in US$ (billions)	As a Percentage of 2008 GDP
PRC	585.0	13.3
Indonesia	6.1	1.2
Japan	568.0[a]	11.5
Republic of Korea	84.0	8.9
Malaysia	18.1	8.1
Philippines	6.5	3.9
Singapore	13.8	7.6
Thailand	3.3	1.2
Viet Nam	1.0	1.1

GDP = Gross Domestic Product.

[a]The figure quoted here for Japan's stimulus package takes into account all four stimulus packages, but includes only the US$51 billion of new spending from the second stimulus package.

Sources: The stimulus package amounts are taken from the Economic & Social Commission for Asia and the Pacific and other official government websites. 2008 GDPs are from the International Monetary Fund country database.

Malaysia's first stimulus package (US$1.9 billion or RM7 billion) was introduced in November 2008, followed by another (US$16.2 billion or RM60 billion) in March 2009. Nearly 43% of the first package was for infrastructure, to provide for the upgrade, repair, and maintenance of public amenities (such as schools, hospitals, roads, quarters for police and armed forces, and police stations), the building of more low-cost houses, improvements in public transport, and the implementation of broadband Internet access.

Malaysia's second stimulus package was 8.5 times larger than the first and equivalent to 7.3% of its GDP. Nearly half (48%, RM25 billion) was to assist the private sector. 17% of the spending from the second stimulus was targeted at food, toll, and fuel subsidies, and support for low-cost housing and for retrenched workers; while the remaining 3% was directed towards reducing unemployment and increasing job and training opportunities. Furthermore, Bank Negara Malaysia, the central bank of Malaysia had cut the interest rate to protect the

economy against declining aggregate demand and to ensure that domestic spending did not recede. The ultimate objective of the packages is to stimulate the economy and to bring relief to the public.

Table 18: Malaysia stimulus package initiatives during 2008/2009 crisis

Country	Measures Taken	Date Announced
Malaysia	First package: US$1.9 billion • Upgrade and repair of public amenities, rural roads, and quarters for police and armed forces (RM1.5 million) • Build low- and medium-cost houses (RM1.4 million) • Upgrade and maintain public transport (RM0.5 million) • Implement broadband Internet access (RM0.5 million) • Set up investment funds to attract private investments (RM1.6 million) • Skills training and youth program (RM0.6 million) • Pre-school education & grants to schools (RM0.4 million) Second package: USD16.2 billion • Reduce unemployment and increase employment opportunities (RM2 billion) • Ease the financial burden of vulnerable groups (RM10 billion) • Assist the private sector in facing the crisis (RM29 billion) • Build capacity for the future (RM19 billion)	4 November 2008 10 March 2009

There were questions raised as to whether the increased spending measures announced by the government were really effective in stimulating the sluggish economy. The federal government had been running a deficit in its fiscal balance since the last 1997/98 crisis and implementation of large stimulus packages would only widen the fiscal deficits. In fact, the fiscal deficit in 2008 amounted to 7.6% of GDP, but it translated into a mere 1% increase in growth (Shankaran Nambiar, 2009).

By the end of 2008, 11 out of 13 reporting East Asian economies had incurred fiscal deficits except Singapore and the Republic of Korea (refer Table 19). Malaysia had the highest deficit of at 4.8% of its GDP.

Table 19: Government Budget Surpluses/Deficits (Percentage of GDP), 1990-2009

Year	Brunei Darussalam	Cambodia	PRC	Hong Kong, China	Indonesia	Japan	Republic of Korea	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Taipei,China	Viet Nam
1990	(0.3)	(4.5)	(2.8)	0.7	(0.8)	(0.5)	(0.6)	(9.7)	(2.9)	(2.8)	(3.5)	10.8	4.8	1.8	(7.2)
1991	(1.6)	(3.4)	(3.0)	3.3	(0.7)	(0.4)	(1.5)	(6.1)	(2.0)	(3.7)	(2.1)	—	4.3	(2.2)	(0.7)
1992	(3.9)	(3.6)	—	2.7	(1.1)	(2.4)	(0.5)	(5.2)	(0.8)	(2.1)	(1.2)	—	2.6	(5.3)	(0.8)
1993	(0.7)	(4.7)	—	2.1	(0.5)	(3.6)	0.6	(2.7)	0.2	(1.4)	(1.5)	—	1.9	(3.8)	(3.4)
1994	15.5	(5.7)	—	1.0	1.0	(4.3)	0.3	(11.1)	2.3	(2.5)	1.0	—	2.7	(1.7)	(2.2)
1995	15.1	(7.2)	—	(0.3)	2.2	(4.4)	0.3	(12.9)	0.8	(3.3)	0.6	14.5	3.0	(1.1)	(1.3)
1996	0.5	(6.2)	(1.8)	2.1	1.0	(4.0)	0.2	(5.7)	0.7	(2.2)	0.3	—	0.9	(1.4)	(0.9)
1997	1.7	(0.9)	(1.9)	6.4	0.5	(3.5)	(1.4)	(5.2)	2.4	(0.1)	0.1	—	(1.5)	(1.6)	(3.9)
1998	5.4	(2.4)	(2.4)	(1.8)	(1.7)	(10.7)	(3.9)	(6.6)	(1.8)	0.8	(1.9)	—	(2.8)	0.1	(1.6)
1999	(1.4)	(1.2)	(3.0)	0.8	(2.5)	(7.3)	(2.5)	(2.5)	(3.2)	(0.3)	(3.8)	—	(3.3)	(1.2)	(3.3)
2000	10.9	(2.1)	(2.8)	(0.6)	(1.1)	(6.4)	1.1	(4.3)	(5.5)	0.7	(4.0)	10.0	(2.2)	(4.6)	(4.3)
2001	0.4	(3.1)	(2.5)	(4.9)	(2.4)	(6.0)	1.2	(4.2)	(5.2)	—	(4.0)	—	(2.4)	(6.4)	(3.5)
2002	(9.9)	(3.4)	(2.6)	(4.8)	(1.5)	(6.8)	3.3	(3.2)	(5.3)	—	(5.3)	—	(1.4)	(2.9)	(2.3)
2003	(1.7)	(4.0)	(2.2)	(3.2)	(1.7)	(6.6)	1.1	(5.4)	(5.0)	—	(4.6)	3.1	0.4	(2.3)	(2.2)
2004	13.5	(2.0)	(1.3)	1.7	(1.0)	(5.2)	0.7	(2.4)	(4.1)	—	(3.8)	4.1	0.1	(2.5)	0.2
2005	25.2	(0.5)	(1.2)	1.0	(0.5)	(6.1)	0.4	(4.3)	(3.6)	—	(2.7)	6.8	(0.6)	(0.3)	(1.1)
2006	12.8	(0.8)	(0.8)	4.0	(0.9)	(1.1)	0.4	(3.2)	(3.3)	—	(1.1)	6.7	1.1	(0.2)	(1.8)
2007	—	(1.2)	0.7	7.2	(1.2)	—	3.8	(2.7)	(3.2)	—	(0.2)	—	(1.7)	—	(5.4)
2008	—	(2.2)	(0.4)	(0.3)	(0.1)	(1.4)	0.3	(1.8)	(4.8)	—	(0.9)	1.5	(1.1)	(1.3)	(1.6)
2009 (est.)	—	(4.8)	(3.2)	(4.1)	(2.1)	(6.8)	(6.5)	(5.4)	(7.6)	—	(2.3)	(4.1)	(6.0)	(5.0)	(4.0)

Est. = Estimated, PRC = People's Republic of China, Lao PDR = Lao People's Democratic Republic.

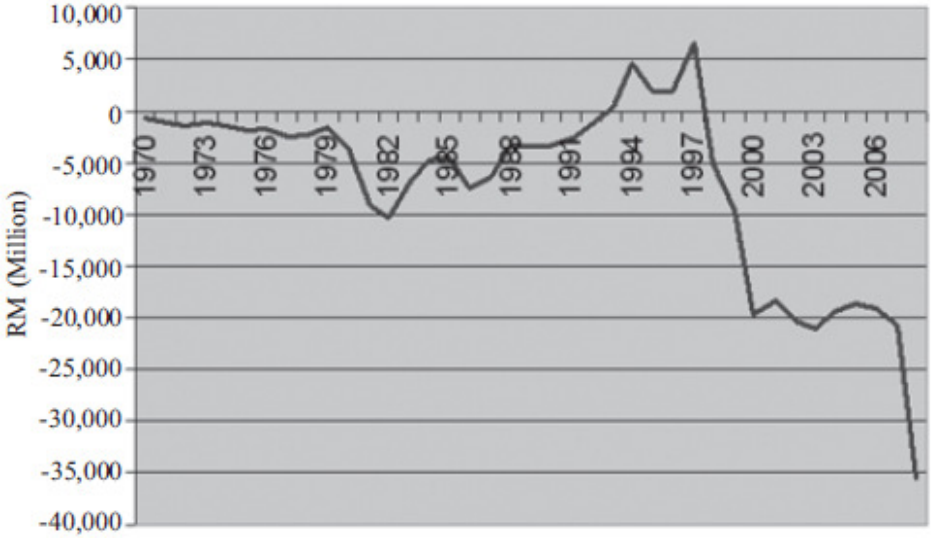
Source:

Asian Development Bank Key Indicators 2008 and the Economics' Country Profiles

In Malaysia's case, a major part of the financing support came from internally-generated funds without sourcing from external borrowings. The government ensure that that there was no excessive build-up of short-term debts and tried very hard to attract and increase foreign direct investment instead.

Since independence in 1957, Malaysia has always recorded a fiscal deficit (refer Figure 20). In 1982, the budget deficit was 16% of GDP and since then, the fiscal deficit had been progressively reduced. From 1993 to 1997, the rapid economic growth even brought fiscal surplus (Ariff, 2009). Unfortunately, the surplus condition failed to sustain long enough and a deficit reappeared and continued to widen again in 2008 due to the global financial crisis.

Figure 22: Malaysia's Fiscal Position (1970 – 2008)



Source: Bank Negara Malaysia, Monthly Statistical Bulletin

In fact, the fiscal deficit has remained in the negative because the Malaysian government emphasized more on fiscal policy than monetary policy to stimulate the domestic economy. Hence, the government expenditure had risen sharply and higher than accumulated tax revenue since 2000. The situation could be worse with the steady depletion in oil reserves, which make up roughly 40% of the government tax revenue.