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MACROECONOMIC DEVELOPMENTS OF THE INDONESIAN ECONOMY WITH SPECIAL REFERENCE TO FINANCIAL CRISIS AND POLICY CONDUCT

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ABSTRAK

Tulisan ini berisi penjelasan mengenai struktur dan perkembangan makroekonomi Indonesia dengan refrensi khusus yang disediakan untuk dapat memahami alasan utama yang menyebabkan Indonesia mengalami penderitaan dalam bidang ekonomi selama krisis keuangan Asia tahun 1997-1998. Kami menemukan bahwa kelemahan pokok makroekonomi dalam perekonomian Indonesia adalah sebagai hal yang bertanggung jawab pada runtuhnya ekonomi, dan bukannya krisis keuangan Asia, sebagai pertentangan pada pandangan lain mengenai efek penularan (contagion effect). *Diskusi mengenai perubahan kebijakan moneter dan fiskal yang telah dilakukan saat ini juga akan dibahas.*

Keywords: *Indonesia, Asian financial crisis, macroeconomic, fiscal policy, monetary policy*

INTRODUCTION

This paper contains an exposition of the macroeconomic structure and developments of Indonesia with special attention devoted to certain economic variables that play key roles in promoting macroeconomic stability. Furthermore, we devote specific discussion to understand the underlying reason that caused Indonesia to suffer economically during the Asian financial crisis in 1997–1998. A special reference towards change in monetary and fiscal policy conduct will be discussed as well. This paper will begin by giving a brief overview of the Indonesian economy, and continues with a detailed discussion of stylized facts regarding the Asian financial crisis and its impact on Indonesia. The discussion has shown that the frail macroeconomic fundamental of the Indonesian economy is the one responsible for the collapse of the economy vis-à-vis the Asian financial crisis as opposed to the alternative view of the "contagion" effect. Finally we conclude by outlining a brief analysis and insights regarding key macroeconomic variables in relation with the recent conduct of monetary and fiscal policy.

The paper is organised as follows: Section 2 gives an overview of the development of the Indonesian economy from 1963 up to a period before the financial crisis set in. Section 3 discusses about the incidence of financial crisis in Indonesia. Indonesian macroeconomic condition after the financial crisis will be the main issue discussed in Section 4. Section 5 is especially devoted on the

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discussion of fiscal and monetary policy conduct along with their recent changes. Section 6 concludes.

OVERVIEW OF THE INDONESIAN ECONOMY: TRENDS AND DEVELOPMENTS

In this section, we will discuss the macroeconomic performance of Indonesia starting from the year 1970 onwards. Many economic observers and policy-makers, as well as academics, have been impressed and surprised by the remarkable and outstanding economic progress achieved by Indonesia during the 1970s and 1980s (see, for example, Booth 1981, 1986; Gillis 1984, 1988, Sundrum 1980; Warr 1986). This process of development has been studied thoroughly and intensely by economists and policy-makers in the international forum, which recognized Indonesia as one of the High Performing Asian Economies (HPAE) as coined by the World Bank. Tongzon (2002), in the second edition of his book, gives a number of important insights regarding the economies of ASEAN countries, their developments, and future challenges. In particular, we would like to draw on some crucial points and to tap into the insights in his book regarding the Indonesian economy in the following exposition.

Indonesia is basically a market-based economy, just like most of the ASEAN[1] economies, with prominent state intervention in several major sectors (e.g. provision of public roads, highways, public schools and state-funded universities, electricity services, etc). Secondly, Indonesia's trade performance is worthy of emphasis since it is highly comparable to the rest of the Asian Tigers in terms of export-led performance[2]. Her export-oriented economy has provided strong evidence for the proposition of export-led growth as shown by the high volume of trade and especially the high degree of export-import dependence[3]. For example, in the 1960s up to 1980s Indonesia experienced an average export growth of 7.6680 percent. Subsequently, the export growth rate surge up to an average of 9 percent from the middle of 1980s to the middle of 1990s. Thirdly, the economic aspirations of Indonesia are heavily centred on the importance of enhancing economic growth since Indonesia has a substantial history of poverty, under-provision in the labour market, and under-development in major social and economic sectors. Lastly, the Indonesian economy is of the dualistic type whereby more than 60 percent of the population live in the agricultural and rural areas with the rest of the population living in the major cities.

Indonesia is blessed with rich agricultural and mineral resources (i.e. oil, natural gas, sulphur, etc). Moreover, her abundant supply of human resources makes her labour costs relatively low as compared to similar economies around the region. The large domestic market and an extensive period of political stability as well as impressive economic development and expansion during the Soeharto regime have attracted foreign and domestic investments in sectors like manufacturing, services, and financial industries.

The strengths of the Indonesian economy are not without its weaknesses. The main drawback is the low level of efficiency in the bureaucracy and the quality of the rural and suburban basic infrastructures. Although it will not be discussed at all in this thesis, political stability is one vocal point worth noting as an important ingredient to ensure the sustainability of economic development. This

[1] ASEAN currently consists of Singapore, Indonesia, Malaysia, Thailand, The Philippines, Vietnam, Brunei Darussalam, Cambodia, Laos, and Myanmar.

[2] Asian Tigers refer to the Asian countries that have achieved a remarkable economic growth and performance over this last decade or so, such as Singapore, Malaysia, Hong Kong, South Korea, and Taiwan.

[3] See Feder (1983), Balassa (1985), Ram (1985), Salvatore & Hatcher (1991), Greenaway & Sapsford (1994) for discussion regarding export-led growth theory and evidence.

is especially the case after the fall of Soeharto's new order regime, whereby a number of domestic disputes and incidents remained unsolved, such as the Aceh Freedom Movement (Gerakan Aceh Merdeka (GAM)), incidents in Ambon and Maluku, fuel price hike, and the recent Bali bombings amongst others. Thus, they expose the country to some unfavourable effects in promoting economic stability and sustained growth.

From the 1970s onwards, Indonesia faced a major economic problem, namely the persistence of high inflation rates reaching their peak during the oil-induced economic boom in 1974[4]. Within this decade, major monetary and fiscal policies were directed to fight inflation and they have proven to work successfully and effectively. Some studies have also been conducted to analyze the performance of the Indonesian economy such as Aghevli (1977), Aghevli *et al* (1979), Arndt (1979), Nasution (1983), Gillis (1984), Parikh *et al* (1985), Warr (1986), and Sundrum (1986, 1988) in the areas of macroeconomic development, monetary sector, financial institutions, as well as fiscal and monetary policies.

During the time period of 1970–1981, income per capita in Indonesia has risen steadily from US$ 80.4 to a remarkable US$ 486.3, recording an excellent 505 percent growth over the period. Real GDP has been quite stable throughout 1970–1990, recording an average growth of around 6.9 percent annually, higher than average Asian real GDP growth of around 6.4 percent. Inflation was reasonably stable (although some sub-periods still recorded high figures such as 21.7 percent in 1973–1978 and 15.5 percent in 1979–1981) at around 7–9 percent and it settled down to a level of 7.4 percent at the end of 1980. The share of exports in GDP rose steadily to a record of 29.3 percent in 1979–1981 before it fell to 22.3 percent in early 1990. Correspondingly, non-oil exports have risen steadily over the decades as the contribution and significance of this "new" source of growth increased. Non-oil exports recorded a 12.2 percent share of GDP in 1990, much higher than the 7.8 percent in early 1970. Imports have been rising steadily as well but the growth rate of imports has been stable from 12.3 percent in 1970 to 16.6 percent in 1990. Current account deficits have always been a staple feature of the Indonesian economy but it reached a lower level of −2.7 percent in 1990 as compared to −4.3 percent in the previous sub periods of 1982-1985. The latter was the period where the global economic recession took the repercussion effect and Indonesia was affected as well. Reflecting these structural changes, the share of agriculture in the economy has fallen steadily from 42.0 percent to a mere 23.4 percent in early 1990 whereas the industrial and services sectors have recorded substantial increments from 21.6 percent and 36.4 percent to 36.8 percent and 39.8 percent respectively. During the time period of 1970–1990, Indonesia has witnessed a vast recovery and rapid economic growth and this time period up to the early 1990 can be viewed as the resurgence of the Indonesian economy after her independence.

The development process and progress of the Indonesian economy during the period of 1970-1995 can be divided into three major time frames. This is done to provide comprehensive descriptions of the major economic milestones of the economy. The period after 1995 will be discussed separately and can be considered as the most recent development of the Indonesia economy that involves numerous dynamic adjustments and structural changes such as the notable incident of the Asian financial crisis in 1997.

[4] During this period, the hike in oil price was more than quadrupled as can be seen from the world oil price index that rose from 5.8 to 126.4 within the time frame of 1970 – 1981. It then fell to 100 in 1982 – 1985, before it rose again slightly from 64.7 to 77.8 in 1986 – 1990. The latter figures shown more stable figure as compared to the initial oil price hike (van der Meulen Rodgers, 1994).

The resurgence of the Indonesian economy and the primary oil boom (1963-1980)

It appears that history dictated that during the first two decades after Indonesia proclaimed its independence, she was to face some major economic obstacles such as the problem of hyperinflation, extreme unemployment, and uncontrollable population growth that created major structural problems for the newborn nation. It then reached the brink of economic disaster when the inflation rate soared up to 600 percent annually i.e. hyperinflation, coupled with economic stagnation[5].

The resurgence in the economy began with the inception of the so-called “neworder” regime under Soeharto’s leadership with the well-known and successful Five Year Development Plan (REPELITA: Rencana Pembangunan Lima Tahun) which started in the year of 1968. During this period and subsequently, Indonesia has shown a remarkable improvement in economic growth, a substantial reduction in the inflation rate, and job creation in several sectors of the economy. Export-led growth was identified as the main source of this magnificent increase in the country’s economic performance along with the voluminous amount of foreign aid received from 1970 to 1972. Moreover, the first oil shock from 1973 to 1974 which was followed by the second one from 1979 to 1981 have enabled Indonesia to experience strong and improved macroeconomic performance as well as her remarkable trade activities. This was because Indonesia was a net oil exporter country and enjoyed great benefits from hikes in oil price and moreover, during that period, some concerted efforts have been made by the Organization of Petroleum Exporting Countries (OPEC) to sustain a reasonably high oil price. Consequently, this increase in the oil revenue has benefited the whole economy during that period. In addition to that, the export of Liquefied Natural Gas (LNG) starting from the year 1977 boosted the economic performance of Indonesia even further.

This improvement, however, has pushed the domestic inflation rate up but not as severely as was experienced before. Some prudent economic policies have also been implemented in order to maintain her economic performance. In 1978, a preventive measure of exchange rate devaluation also helped Indonesia to restrain the diminishing value of her relative exports price incentives to less than 5 percent (van der Meulen Rodgers 1994). This was Indonesia’s first major devaluation of the exchange rate as a response to the external shocks hitting the economy.

Table 1 shows selected key macroeconomic variables of Indonesia and we can see that after the year 1963, GDP growth has been fairly stable and it recorded an extensive period of positive growth. Most notably, in 1968 when the government started the first five-year development plan, GDP growth recorded the highest growth of 12.03 percent. On average, Indonesia recorded 6.25 percent output growth through the primary oil boom period. The GDP per capita growth averaged 3.83 percent in this 18-years period (1963–1980) with most notable achievement during the initial implementation of REPELITA that recorded a remarkable growth of 9.45 percent. After 1968, GDP per capita growth has been positive throughout the years and recorded an average rate of 5.7 percent. The inflation rate, by and large, still recorded high volatility ranging from a maximum of 1136 percent in 1966 to a minimum of 4.36 percent in 1971. The IMF-sponsored stabilization and debt restructuring program in the early 1970s has successfully resulted into a fall in the inflation rate to reach 8.11 percent in 1978. Nevertheless, inflation has been, and still is, the major enemy of the Indonesian economy as we can see from the high inflation record

[5] Altogether, this condition is referred to as “stagflation” by some economists and has been a subject of thorough discussion since the oil price shocks of the 1970s.

Table 1 Selected Key Macroeconomic Indicators of Indonesia, 1963-1980 (in %)

Year	Real GDP Growth	Inflation Rate	GDP Per Capita Growth	Nominal Exports Growth
1963	-2.25	145.91	-4.33	-6.23
1964	3.45	108	1.21	11.83
1965	0.95	306.76	-1.28	-3.60
1966	2.85	1136.25	0.54	-1.26
1967	1.13	106	-1.18	0.36
1968	12.03	128.84	9.45	9.98
1969	7.48	15.52	4.97	14.85
1970	8.15	12.35	5.61	17.10
1971	6.70	4.36	4.46	15.71
1972	7.88	6.51	5.28	21.21
1973	9.78	31.04	7.13	18.64
1974	8.26	40.60	5.67	6.56
1975	6.18	19.05	3.71	-2.42
1976	5.60	19.86	3.40	17.02
1977	8.64	11.04	6.14	9.45
1978	9.21	8.11	6.82	1
1979	7.10	16.26	4.84	2.29
1980	8.73	18.02	6.50	5.53
Average	6.25	118.64	3.83	7.67

Source: World Development Indicators CD ROM (World Bank, 2004)

and it tends to fluctuate with business cycles and changes in monetary and fiscal policies. Export growth has recorded a substantial progress from a negative range in 1963–1966 to a startling growth after the inception of the five-year development plan. It recorded a 15.77 percent growth during the first REPELITA as compared to only 7.67 percent for the whole period within this first milestone. Needless to say, export has been a new source of economic growth for Indonesia during this time period as we have mentioned above, being further fuelled by the oil boom.

Economic slowdown and global recession (1980-1986)

The fall in oil prices and increasing current account deficits ushered Indonesia into a period of economic slowdown beginning from the early 1980s. The GDP growth figure dropped considerably during this period and was falling behind other Asian countries. The global recession in the early 1980s was acknowledged as the main cause of this slow economic growth. Both domestic and foreign investments fell during this period and government expenditures on large capital intensive projects were also reduced as a response to lower oil revenues —the major source of income for the economy. Export earnings fell and the volume of debts increased in response to higher world interest rates during this tough economic period for the global economy and in particular, for Indonesian economy.

Many jobs were also lost since many firms were unable to operate due to capital withdrawal or the cancellation of some major projects that required major capital and labour expenditures, especially by government. The drop in investments figures also catalyzed the worsening trend of unemployment during that period. Auspiciously, Indonesia was still able to report a modest real GDP growth of 4 percent annually and still maintain a much lower figure for debt costs as compared to other problematic debtors and stagnant economies during that period such as Mexico and the Philippines. Indonesia's second major devaluation also occurred within this economic slowdown period in 1983. This step was supported by government efforts to control money growth with the implementation of new monetary policy instruments which was aimed specifically at realigning the exchange rate system in order to maintain Indonesia's competitiveness in the trade sectors.

Table 2 shows that GDP growth fell substantially to 1.1 percent in 1982 as the world entered into global recession. Inflation soared into double digits in 1982 and 1983 to record 11.79 percent and 10.46 percent respectively. The current account deficits widened in this time of recession and export growth shrunk considerably by 18 percent and 9 percent in the early 1980s. The second major devaluation in the exchange rate did help Indonesia to record a substantial GDP growth of 8.45 percent which is comparable to the level of sustained growth and subsequently inflation was brought down to around 4.8 percent in 1984. Export growth also showed signs of recovery near the end of this second milestone to record 15.21 percent growth.

The secondary boom: non-oil recovery period and non-oil export revival (1986-1995)

This period was marked substantially by the improvements in real income growth and the current account —through reductions in the current account deficit— fuelled by non-oil domestic exports growth. The falling trend of oil price stabilized in 1986 and most economies started to realign its major policies and expenditures programs in this period as well. Indonesia also conducted her third major devaluation in 1986 whereby the government allowed the Rupiah to depreciate far more rapidly than before and the money supply growth rate to increase. This policy, however, resulted in a lower inflation rate than the previous period which might be explained by the resurgence in the non-oil exports that was boosted by devaluated exchange rate, a relatively small decline in fiscal expenditures, and the price controls imposed by the government on several key commodities and services.

Agriculture, the sector that has always been Indonesia's favourite, was superceded by the manufacturing production sectors that recorded an excellent real growth during this period. Investments, domestically and from abroad, regained its momentum by comprising almost one third of the aggregate demand

Table 2 Selected Key Macroeconomic Indicators of Indonesia, 1981-1986 (%)

Year	Real GDP Growth	Inflation Rate	Current Account (% of GDP)	Nominal Export Growth
1981	8.15	9.48	-0.61	-18.05
1982	1.1	11.79	-5.62	-9.0
1983	8.45	10.46	-7.42	1.65
1984	7.17	4.73	-2.09	6.55
1985	3.48	5.83	-2.17	-7.80
1986	5.96	9.28	-4.67	15.21
Average	5.72	8.60	-3.76	-1.91

Source: World Development Indicators CD ROM (World Bank, 2004) elements (van der Meulen Rodgers, 1994). This fact can be seen from Table 3 whereby manufacturing value-added as a percentage of GDP has outpaced agricultural value-added most notably from 1991 onwards. The manufacturing sector recorded a quarter's share of GDP in 1996 whereas agriculture sector only recorded around 16 percent of GDP as compared to almost 23 percent in the early 1990s. Both GDP growth and inflation rates were more stable during this period although the inflation rate was still considered high. Perhaps at that point in time, the goal of the authorities was to keep inflation from recording double digits. The current account deficits have been relatively stable and fluctuate around 1–3 percent of GDP over the years. Exports growth showed double digit growth occasionally in 1987, 1991, and 1992, with the rest of the years showing a sustainable rate of export growth.

Table 3 Selected Key Macroeconomic Indicators of Indonesia, 1987-1996 (%)

Year	Real GDP Growth	Inflation Rate	Current Account (% of GDP)	Nominal Export Growth
1987	5.30	9.28	-2.66	14.62
1988	6.36	8.04	-1.57	1.05
1989	9.08	6.42	-1.09	6.74
1990	9.0	7.81	-2.61	3.36
1991	8.93	9.41	-3.32	18.78
1992	7.22	7.53	-1.10	13.71
1993	7.25	9.68	-1.33	6.11
1994	7.54	8.52	-1.58	9.94
1995	8.40	9.43	-3.18	7.72
1996	7.64	7.97	-3.37	7.56
Average	7.67	8.41	-2.27	8.96

Source: World Development Indicators CD ROM (World Bank, 2004)

Year	Agriculture Value-Added	Manufacturing Value-Added
1987	22.48	16.33
1988	22.48	19.70
1989	22.02	17.02
1990	20.42	18.30
1991	12.79	14.21
1992	17.45	19.08
1993	17.88	22.30
1994	17.29	23.35
1995	17.14	24.13
1996	16.67	25.62
Average	18.66	20

Source: World Development Indicators CD ROM (World Bank, 2004)

THE INCIDENCE OF THE ASIAN FINANCIAL CRISIS

In the discussion of the survey of recent developments published by the *Bulletin of Indonesian Economic Studies* (BIES) during late 1995 and early 1996, the issue of "overheating" in the Indonesian economy was prominent and debatable (see, for example, James 1995; Bird 1996; & Manning and Jayasuriya 1996). Soesastro (1995) pointed out that there were threats of economic overheating by the second half of 1995. Factors such as rising inflation, massive capital inflows from foreign investors that were used to finance property purchases in the face of a significant jump in residential and commercial property demand, and a widening current account deficit contribute to the fear of overheating. Massive capital inflows triggered property developers in Indonesia to borrow money from abroad and mostly denominated in US dollars which was stable at that time. Some sceptics argued that the inflation rate in Indonesia was still in reasonable (and decreasing), at 2.3 percent, which cast doubt on the overheating of the economy.

In addition to that, the widening current account deficit is not in itself a threat to economic stability and thus alleviates any possible danger of overheating that will lead to economic collapse. This is exactly the case for Indonesia since she believed that the economy was being driven by excess investment over national savings and the attraction of foreign capital to Indonesia was not used to finance the current account deficit *per se* but to accumulate foreign reserves (James 1995). Advocates of the threats of "overheating" argued that the deficits may push Indonesia into an exchange rate crisis and substantial capital outflow but Bird (1996) counter-argued this view by showing the facts that the volatile and decreasing import growth should not cause any reasonable concern. Moreover, she argued that export growth has shown signs of recovery and thus reducing the current account deficit and the accumulated foreign reserves should guard Indonesia against any possible threat of capital outflow.

Manning & Jayasuriya (1996) argued that there are two factors underpinning fears of overheating. First, private capital movements have replaced public capital utilization to play a much larger role. This means that the most likely source of any major external shocks would be from the capital account given the volatility of short-term private capital flows. Second, the source of fluctuations in the capital account is none other than the ever-changing political climate in Indonesia. Speculations and political uncertainty were very pervasive in Indonesia and thus made Indonesia very vulnerable to any destabilizing capital movements due to the loss of investors' confidence.

However, the attention which has not been paid enough by the authorities to the indications shown by the economy has rendered Indonesia into the Asian Financial Crisis that occurred in 1997 that was initiated by the depreciation of Thai Bath. The high private sector capital movements has caused many banks and firms to collapse, resulting into many non-performing loans (NPLs) since they were not able to clear most of the loans they made. This adverse condition required the Indonesian central bank (BI) to bail out banks in order to restore people's trust and investors' confidence. Consequently, it meant a depletion of Indonesia's foreign reserves and indicated that major portions of capital inflows were used to finance current account deficits and only minor parts were being accumulated as foreign reserves.

Those who argued that the fear of over-heating was "groundless" disregarded the fact that political uncertainty is likely to affect economic developments and trends in Indo-nesia. Given that, investors' confidence would be harder to sustain and it was somehow overlooked that the 1998 presidential election was a critical point for the Indonesian economy that will heighten the level of foreign investors' awareness and cautions.

Short-term fluctuations in the trade balance that have translated into widening current account deficits was argued to be based on faulty interpretation of crude trade data (Manning & Jayasuriya 1996). Yet, if that was the case, should it not be the reason and concern for an even more alarming danger of economic collapse that was heading on Indonesian way? At least, this should prompt the officials to study carefully the most credible data to avoid any misinterpretation, especially concerning high and short-term capital flows. The reason was that there might be a high possibility that projected investments as well as exports-imports flow data that are used in order to record any trade balance in the current account and this projected investments and exports-imports were sometimes overestimated. This only available information was perceived to be the *actual* scenario and given only this kind of *projected* information; it is rather straightforward for the investors to question the soundness of their investment returns and for analysts to point out that there were alarming dangers of economic downturn.

Indonesia's crisis in 1997 began with massive capital outflows from the country[6]. This massive capital outflows eventually brought about the collapse of the Indonesian rupiah. In the beginning of the crisis, July 1997, the rupiah depreciated by 7 percent. Then finally on 14 August 1997, the rupiah was floated and marked the end of a long history of fixed and managed-floating exchange rate system. We are going to discuss two fundamental reasons behind the financial crisis that led to economic downturn in Indonesia, namely the over-reliance on short-term borrowing (Pincus & Ramli 2001) and the second is the contagion effect[7]. To discuss the first reason, we will start by looking at the structure of foreign debt owed by Indonesian domestic banks and private corporations in 1995 until the period before the crisis in the middle of 1997.

Table 4 shows that there was a sharp increase in foreign borrowing with significant increases in the short-term debt borrowed by private firms and banks from the end of 1995 up to the middle of 1997. The short-term debt held by the public sector remained relatively stable. These massive capital inflows (foreign borrowing) were caused by several factors amongst which we will elaborate on three important ones[8]. First, the liberalization in the banking and financial sector adopted by the Indonesian government in the early 1990s have paved the way for firms and domestic corporations to seek access to the foreign capital. Second, the deregulation in the banking and financial sector was not accompanied by adequate supervision from the authorities, thus creating an environment conducive to high rates of short-term borrowing as it allowed banks to take on sizeable foreign currency and maturity risks. Third, low interest rates in Japan have induced outward investment from this country to Indonesia in particular and to other Southeast Asian countries in general[9].

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6 Indonesia experienced a $ 22 billion reversal of private capital flows, from an inflow of $ 10 billions in 1996/1997 to an outflow of $12 billion in 1997/1998. (World Bank 1998b)

7 Contagion is defined here as the spread of economic difficulties across countries and often manifest itself as a co-movement of, for instance, exchange rates (World Bank 2000)

8 There were other factors that contributed to the massive capital inflow into Indonesia. First was the high economic growth of Indonesia (about 7–9 percent of GDP rate) that gave foreign investors confidence to invest in the country. Second was the historically predictable exchange rate that reduced perceived risks and in turn encouraged investors (Indonesia government has been successful in maintaining its real exchange rate target ever since the last major devaluation of 31 percent in rupiah in September 1986).

9 The main factor that drove the Japanese banks into heavy lending to Indonesia and other Southeast Asian countries was the existence of relatively higher interest rate in these countries. The low interest rate in Japan

Table 4 International Claims Held by Indonesian Banks – Distribution by Sectors and Maturity (in Billions of US Dollars)

Period	Total Outstanding	Obligation by Sector			Debts and Reserves		
		Banks	Public Sector	Non-Bank Private	Short Term	Reserves	Short Term/ Reserve
End 1995	44.5	8.9	6.7	28.8	27.6	14.7	1.9
End 1996	55.5	11.7	6.9	36.8	34.2	19.3	1.8
Mid 1997	58.7	12.4	6.5	39.7	34.7	20.3	1.7

Note: the data excludes offshore issues of commercial paper and other non-bank liabilities. Source: Bank for International Settlements (1998).

The increase in short-term debt was particularly significant since it exceeded foreign reserves.[10] In fact short-term debt in excess of reserves does not necessarily cause a crisis. However, it renders a country vulnerable to a financial panic.[11] Relatively speaking, countries with large foreign exchange reserves compared to short-term debt are much less vulnerable to a panic, since each creditor can be assured that sufficient funds are available to meet his claims (Radelet and Sachs 1998b). Hence, the fact that pre-crisis Indonesia's short-term debt to foreign reserves ratio exceeded 1 as shown in Table 4 made the country vulnerable to a financial panic.

Apart from the fact that Indonesia's short-term debt exceeded its foreign reserves, the underlying problem with this massive short-term debt is that apparently most of it was used to finance speculative and unhedged investments in real estate markets (or other non-traded goods) rather than being used to increase productive capacity for manufactured exports (traded goods) as in the earlier periods.

Table 5 shows that Indonesia's GDP share on traded goods decreased from 40.2 percent in 1985 to 38.9 percent in 1995 while the share on non-traded goods increased from 59.8 percent in 1985 to 61.1 percent in 1995. Although the figures reflect a relatively small change in the GDP share on traded goods to non-traded goods, Radelet and Sachs (1998b) suggested that it probably understated the true amount as firms apparently diverted their own working capital and other loans towards real estate investments.

Table 5 Indonesia's Gross Domestic Product Share by Industrial Origin (%)

Item	Share	
	1985	1995
GDP	100.0	100.0
GDP (non petroleum)	78.7	91.3
Traded sector	40.2	38.9
Non-traded sector	59.8	61.1

Note: traded sector includes non-food crops, forestry and fishery, mining and quarrying, manufacturingindustries. Non-traded sectors includes farm food crops; livestock and products; electricity, gas and water supply; construction; trade, hotel and restaurant. Sources: Centre Bureau of Statistics, Economic Indicators (various issues).

was due to its fragile banking sector, which was affected by the burst out of the 1980's asset bubble and weakened by its stagnant economy in the 1990s.

10 Note that the actual amount of Indonesia's short-term debt borrowing would be even larger if offshore issues of commercial paper and other non-banks liabilities were included.

11 Panic is defined here as an adverse equilibrium outcome in which short-term creditors suddenly withdraw theirs loans from a solvent borrower. Under these circumstances, even sound corporations may be unable to roll over their debts (Sachs and Radelet 1998b).

Table 6 Current Accounts of the Four Southeast Asian Countries in the Region (of GDP)

Countries	1990	1991	1992	1993	1994	1995	1996	1997
Indonesia	-4.40	-4.40	-2.46	-0.82	-1.54	-4.27	-3.30	-3.62
Malaysia	-2.27	-14.01	-3.39	-10.11	-6.60	-8.85	-3.73	-3.50
Philippines	-6.30	-2.46	-3.17	-6.69	-3.74	-5.06	-4.67	-6.07
Thailand	-8.74	-8.01	-6.23	-5.68	-6.38	-8.35	-8.51	-2.35

Note: current account used here is based on NIA Definition.
Source: International Financial Statistics of the International Monetary Fund.

Table 7 Government Fiscal Balances of the Four Southeast Asian Countries in the Region (% of GDP)

Countries	1990	1991	1992	1993	1994	1995	1996	1997
Indonesia	0.43	0.45	-0.44	0.64	1.03	2.44	1.26	0.00
Malaysia	-3.10	-2.10	-0.89	0.23	2.44	0.89	0.76	2.52
Philippines	-3.47	-2.10	-1.16	-1.46	1.04	0.57	0.28	0.06
Thailand	4.59	4.79	2.90	2.13	1.89	2.94	0.97	-0.32

Sources: International Financial Statistics of the International Monetary Fund.

This analysis has also been highlighted by Nasution (1999) where he argued that the low quality of investment was funded by massive short-term capital inflows as can be seen from the widening current account deficit and mounting of external debt. This phenomenon arguably left the country prone to exchange rate risks, since rupiah revenue streams were expected to repay dollar liabilities. To make matters worse, most of this short-term debt was unhedged. This was partly due to the historical nature of predictable and low rate of the rupiah appreciation (Nasution 1999) and due to similar reasons that encouraged capital inflows into Indonesia that were mentioned earlier.

The second factor that caused the crisis was the contagion effect from the region. According to Radelet & Sachs (1998b), Indonesia appears to be the clearest case of contagion in the region. Their argument was that, though it was true that there were many problems and weakness in the Indonesia economy before the crisis, yet by most measures[12], Indonesia's imbalances were among the least severe in the region. These can be seen in Table 6 and Table 7.

From Table 6, we can see that Indonesia's current account deficits in 1996-1997, at an average of 3.5 percent, was the lowest as compared to the other three countries and from Table 7, we can see that Indonesia's budget had been in surplus by an average of over 1 percent of GDP for four years.

In analyzing Radelet and Sachs' argument, we start by looking at the contagion factors that suggested the most prominent contagion effect came from the Baht crisis and the weakening Japanese economy. The Baht crisis started on 2 July 1997 with floating of the exchange rate and spread quickly to Indonesia, Malaysia, and the Philippines (Hill 1999). The two possible transmission mechanisms for the spread of the Thailand

[12] Most measures are defined here as the usual few macroeconomic statistics which are regarded as relevant to measure the economic fundamentals of a country, such as the size and the rate of growth of current account deficits, and government fiscal balances (Radelet and Sachs 1998b).

crisis into Indonesia were, firstly, by means of trade links. The crisis in Thailand might spread into Indonesia if the declining economic activity and imports in Thailand decrease Indonesia's exports. However this possibility seems implausible since the merchandise trade connections between Indonesia and Thailand are quite weak compared with Indonesia's exports to Japan and U.S., as shown by Table 8.

Table 8 Share of Indonesian Exports to Selected countries, 1991-1997 (%)

Period	Thailand	USA	Japan
1991-1995	1	14	31
1996	2	14	26
1997	2	14	24

Source: Direction of Trade Statistics Yearbook, IMF (1998).

The second is due to sharing a common creditor—a country with large share of lending in the region. As has also been discussed by Karminsky and Reinhart (2000), besides trade links, different countries are interdependent if they borrow from the same creditors. It seems this was the case for Thailand and Indonesia as these two countries borrowed mainly from the same creditors, which was Japan. This is shown in Table 9 whereby both Indonesia and Thailand borrowed substantially from Japan with the highest share of claim amounted to 47 percent, 40 percent, and 40 percent for Indonesia and 58 percent, 60 percent, and 54 percent for Thailand during 1995, 1996, and 1997 respectively.

So it is clear that the Thai contagion effect spread to Indonesia through capital accounts and not by the mean of trade links as has also been discussed by Hill (1999).

On the two different views, we believe that there was insufficient convincing evidence that The Baht crisis was the fundamental reason behind the crisis in Indonesia. If we were to consider Hong Kong, Singapore and Taiwan, they also lie within the region but they were relatively less affected by the regional downturn. During the crisis, Hong Kong managed to maintain its currency parity against the US dollar despite strong speculative attacks[13], while Singapore[14] and Taiwan opted to float their currencies rather than lose their reserves in an attempt to stabilize the exchange rate. The depreciation rate of both the Singapore and Taiwan currencies was about 18 percent over the year. This figure was well below that in Indonesia, Malaysia and the Philippines whose depreciation rates were 151 percent, 52 percent and 52 percent respectively (Corsetti, Pesenti, & Roubini 1998a). We will not pursue further such cross-country comparisons since it is not of a particular interest of this research. However, it is worth emphasizing the fact that the Thai crisis was only a triggering factor that brought the underlying fragile macroeconomic structures of Indonesia to the surface. This fact has also been suggested by a former study done on the Indonesia crisis by Iriana & Sjoholm (2001) suggesting that contagion from Thailand served only as a trigger for the Indonesian crisis.

Now, another possible explanation related to contagion was the deepening crisis experienced by Japan in 1997. The deepening crisis experienced by Japan in 1997 caused many of its banks, which had heavily lent to Indonesia (and other Asian economies) since the eighties and nineties (due to low interest

[13] Hong Kong's ability to defend its exchange rate parity was due to the increment in the short-term interest rate by the Monetary Authority. With high nominal and real interest rate, it helps prevent an acceleration of the capital outflow and hence convince the international market about the credibility of the Hong Kong's commitment to keep its exchange rate parity fixed. However, it was misperceived as due to the presence of Currency Board System (CBS) in Hong Kong that motivated President Soeharto to practice it in order to stop the downward fall of rupiah in face of the 1997 crisis (Corsetti, Roubini, and Pesenti. 1998b).

[14] Singapore has been engaging in a managed-float exchange rate regime before the crisis.

rates in Japan as discussed previously), to suffer capital losses as they were required to re-balance their portfolio in order to meet the Capital Adequacy Ratio (CAR) standards. Since the capital adequacy requirement was higher for international than national lending, it has forced many of those banks to recall foreign loans lent to Indonesia and other Asian countries. This was an important factor, which contributed to the sudden capital flight experienced by Indonesia during the crisis, as most of the Indonesia credits (about 35 percent of its total debts) were borrowed from Japan. This can be seen from Table 10.

Again, we do not share the same belief that this is the fundamental reason behind the crisis in Indonesia. If only Indonesia managed its short-term debts prudently and used them to invest in the manufacturing sectors to boost exports by optimizing the productive capacity of the economy, then those short-term debts would be able to generate dollar revenues needed to pay the debts back. Although the revenues generated from export may not necessarily be enough to cover all the debts but at least it will buffer the country from significant exchange rate risks. We believe that if only Indonesia managed its short-term debt more prudently, the impact of the sudden capital flight, due to the Japanese weakening economy that forced its banks to call back their loans from Indonesia, would not be as severe as it has happened. So to reiterate again, the underlying problem is in the country itself. A weakening Japanese economy had the same role to play as the Thai crisis in relation to Indonesia's crisis. It only served as a triggering factor which brought the internal

Table 9 International Claims Held by Indonesian and Thailand Banks - Distribution by Country of Origin (Billion of US Dollars)

Country/ Period	Total Outstanding	Claims Held by Banks From			
		Japan	USA	Germany	All Others
Indonesia					
End 1995	44.5	21.0	2.8	3.9	16.8
End 1996	55.5	22.0	5.3	5.5	22.7
Mid 1997	58.7	23.2	4.6	5.6	25.3
Thailand					
End 1995	62.8	36.9	4.1	5.0	16.8
End 1996	70.2	37.5	5.0	6.9	20.8
End 1997	69.4	37.7	4.0	7.6	20.1

Source: Bank for International Settlements (1998).

Table 10 International Claims Held by Indonesian Banks-Distribution by Country of Origin (Billion of Dollars)

Period	Total Outstanding	Claims Held by Banks From			
		Japan	USA	Germany	All Others
End 1995	44.5	21.0	2.8	3.9	16.8
End 1996	55.5	22.0	5.3	5.5	22.7
Mid 1997	58.7	23.2	4.6	5.6	25.3

Source: Bank for International Settlements (1998).

distortions within the country to the surface.

In conclusion, we believe that the fundamental reasons behind Indonesia's crisis in 1997 were weak corporate governance and the frail macroeconomic policies of the country. Weak corporate governance has resulted in a large ratio of short-term debt to foreign reserves and thus exposed the country to a financial panic. Frail macroeconomic policies has resulted in the mismanagement of the short-term debts and left the country even more vulnerable to exchange rate risk. Contagion effects from The Baht crisis and a weakening Japanese economy contributed to blow up the distortions that were already in place. In light of this consideration, a study carried by IMF (1999) confirmed the importance of economic fundamentals and shows that several countries affected by the financial crisis shared similar weaknesses.

However, it is important to note that though these contagion effects were not the fundamental reasons behind the Indonesia's crisis, their role in initiating the Asian financial crisis is significant and should not be overlooked (as noted earlier, the economic imbalances of a country alone may not be enough to produce a crisis). This is particularly very true in the type of crisis that originates from a financial panic which is exactly the type of crisis that hit Indonesia in 1997. Under normal circumstances, short-term debts can easily be rolled over. However, the Baht crisis has alarmed international investors to re-evaluate their investments within the whole region (including Indonesia). Thailand crisis also amplified Japanese banks to further call in their loans. These revealed the distortions that took place (i.e. a relatively large short-term debt to foreign reserves) in Indonesia and translated them into financial panic. Once a crisis started, each creditor knows that there might be insufficient liquid foreign exchange reserves for each short-term creditor to be fully paid, so every involved party rushed to be the first in line to demand full repayment.

Once creditors begin to believe that the other creditors are no longer willing to roll over the debt, each of them will try to call in their loans ahead of other investors[15], so as not be the one left without repayment out of the limited supply of foreign exchange reserves (Radelet & Sachs 1998b). Here, it is clear that the Thai crisis and a weakening Japanese economy played important roles in starting the crisis. If it was not the Thai crisis that 'encouraged' investors to reassess their investment and weakening Japanese economy that forced Japanese banks to recall their loans from Indonesia, Indonesia's weaknesses would not be revealed and panic among investors could be avoided as short-term debt can be easily rolled over under normal circumstances.

Furthermore, if Indonesia had sufficient foreign reserves compared to short-term debt and strong economic fundamentals, a reassessment carried by investors might not lead to a panic (or if there it did, at least it would not be so severe), and the crisis might have been avoided or mitigated. This is to re-emphasize and justify the points made earlier that the fundamental reason behind Indonesia's crisis in 1997 lied in the country's frail economic fundamentals itself.

All in all, we should take note about the important domestic factors that caused Indonesia to suffer severely during the crisis years. As we have argued earlier, the authorities' failure to dampen the overheating pressures is the first and foremost reason. Secondly, the maintenance of pegged exchange rates or predictable rates of depreciation has encouraged inadequate hedging of external borrowing by both the financial and the corporate sectors. Failure to do this has caused tremendous debt and huge capital flow reversal that has resulted from massive

[15] A situation called creditor grab race.

depreciation of the rupiah. Next is the weak prudential regulations and financial oversight that led to a sharp deterioration in the quality of domestic bank's loan portfolios. The high figures of non-performing loans (NPLs) have caused many bank runs and collapse, which in turn destabilize the economy further. Lastly, non economic factors that include political uncertainties, lack of transparency, and loss of confidence in the government have also played a part.

INDONESIAN MACROECONOMIC CONDITION AND DEVELOPMENT POST ASIAN FINANCIAL CRISIS

Macroeconomic conditions in Indonesia still remain quite frail even after some remedies have been applied to bring back the sustained level of development in Indonesia. In short, the progress of economic recovery has been rather slow. The repercussions from the devastating financial crisis are very persistent since many key macroeconomic indicators continue to show sluggishness in recent years.

The GDP growth fell to historical low of −13.13 percent in 1998 coupled with a declining −14.30 percent per-capita growth. The economy shrunk substantially in the 19971998 peak financial crisis period mainly due to the capital flights from foreign sectors, high debt service ratio both in the public and private sectors as well as the loss of investors' confidence in the Indonesian economy.

Furthermore, many jobs have been lost in these periods thus creating even a severe recessionary pressure in the domestic economy that brought back the recurrent inherent structural difficulties such as high unemployment figures, income gap, as well as poverty incidence in Indonesia.

Inflation rate shoot up to 57.64 percent and 20.5 percent in the crisis period and effectively resulted into a negative real interest rate of −24.6 percent in 1997 and subsequently recorded a positive 11.8 percent in 1998 due to the inducement of high nominal interest rate to attract domestic savings and deposits to bail out certain banks' insolvency and to curb further inflationary pressures. Nevertheless, the speculative motives within the same period have worsened the Indonesian economy instead of helping to speed up the recovery process. This condition put another pressure on the Central Bank to expand to money base within the crisis period as shown by table 11 above that money growth amounted to 25.25 percent and 62.76 percent in 1997 and 1998 respectively. Export and import growth have shown decreasing rates within this crisis period as well due to many halted domestic productions and major reduction in the purchasing power resulted from several depreciation of rupiah as well as the breakdown of historically managed-floating exchange rate system into a market-determined (free-floating) exchange rate system during the crisis period. Years after the 1997-1998 crisis period has shown slight improvements in these key macroeconomic variables as depicted in table 11 above.

Despite progress after the Asian financial crisis, the Indonesian macroeconomic structure still suffered fragility due to certain challenges from domestic and foreign sides[16]. Domestically, a relatively slackened performance of exports and low investment ratio coupled with historically lofty incremental capital to output ratios (ICOR) indicated long-lasting repercussion effects of the financial crisis on growth prospects and economic stability of Indonesia (Nasution 2002). More than that, fiscal stimulus has been used to offset both external and domestic debts as well

[16] Apart from these economic factors, political features are worth noting as well. The pace of transition, or the so called "reformation", into democracy has been very slow and an increasing demand for local autonomy has made a coordinated decision-making process even more difficult. This problem is even magnified by the incumbent social and political stability that are to be restored in such as short period (Nasution 2002).

Table 11 Key Macroeconomic Variables of the Indonesian Economy: Crisis and Post-Crisis Periods, 1997-2001 (%)

Year	GDP Growth	GDP Per Capita Growth	Unemployment Rate	Inflation Rate
1997	4.70	3.27	4.7	6.73
1998	-13.13	-14.30	5.5	57.64
1999	0.80	-0.55	6.4	20.49
2000	4.90	3.53	6.1	3.72
2001	3.32	1.97	8.1*	11.50

Year	Real Interest Rate	Export Growth	Import Growth	Money Growth
1997	8.21	7.80	14.72	25.25
1998	-24.60	11.18	-5.30	62.76
1999	11.83	-31.81	-40.68	12.23
2000	6.59	26.50	21.09	16.62
2001	5.31	1.88	8.05	12.84

Source: World Development Indicators CD-ROM (World Bank, 2004).
* Source: Economist Intelligence Unit Country Data.

as supporting price subsidies on some state-sold products, limiting the impact of this expansionary fiscal policy in boosting economic growth. In the banking sector, deregulation, banking, and corporate restructuring have taken place, yet the banking system remained fragile and sluggish in restoring its core intermediation functions. On the other hand, the lack of commitment to sound and coherent economic policies has begun to erode the confidence of the international community and foreign investors to root their capitals in Indonesia. Not to mention the rising costs of production due to new policies designed by the government to regularly raise the minimum wages and generous severance benefits, which have dampened the willingness of foreign investors to invest in Indonesia (Nasution 2002). Furthermore, all these uncertain economic policies and lack of soundness in policy direction, plus the unfortunate global condition such as the September 11 attacks and international economic slowdown on top of the inherent domestic problems, have posed greater challenges for Indonesia to sustain macroeconomic stability and economic development.

The economy grew by 4.9 percent, 3.3 percent, and 3.5 percent in 2000, 2001, and 2002 (BI report, January 2003)[17] respectively with the per capita growth rates to record some positive figures of 3.5 percent, 2 percent, and 2.7 percent in 2000, 2001, and 2002 accordingly[18]. These figures were relatively higher than in pre-crisis period. However, these rates of economic growth are not large enough to absorb the new effective labour entering the job markets (Nasution 2002) as depicted by the open unemployment rate of 6.1 percent in 2000, 8.1 percent in 2001, and 8.3 percent in 2002 as compared to 4.9 percent in 1996[19]. Nasution (2002) affirmed that the economic recovery is mainly driven by an increase in the private consumption whereby

[17] http://www.bi.go.id/bank_indonesia2/utama/publikasi/upload/SUPLEMEN percent202003-Final_Engl.pdf

[18] The latest figure is based on the Economist Intelligence Unit (EIU) estimates.

[19] The 2002's unemployment rate is EIU's estimate.

in 2002, consumption expenditures amounted to 60 percent of GDP and of this amount 80 percent was private consumption. This makes the effective share of private consumption almost half (approximately 48 percent) of the GDP in that particular year.

Unfortunately, this economic recovery is not driven by the usual growth engines such as investments, exports, and productivity improvements. This might explain some scepticism about the development prospects in Indonesia whereby positive and reasonable growth rates were recorded but the unemployment figures remained high and an increasing portion of the people fell below the poverty line. As argued earlier, there are many factors that discouraged inflows of foreign direct investments as well as an exports resurgence such as the uncertain course of economic direction, political instability, increasing costs of domestic production, slow pace of banking and corporate restructuring, fiscal distress, and high non-performing loan ratios.

The historically high ICOR indicated that high economic growth prior the crisis was due to a high investment ratio that boosted GDP growth rather than efficiency improvements (Nasution 2002). In addition to that, most of these investments were financed by the government savings that yielded growing budget deficits over the years including those during the crisis years and subsequently. All these conditions have substantially reduced government earnings and thus put a halt to many state-funded projects, which in turn will contribute to a higher unemployment rate.

THE CONDUCT OF FISCAL AND MONETARY POLICY

This subsection discusses about the importance of the current conduct of fiscal and monetary policy in the Indonesian economy. This is particularly useful to know how the economy has responded to any unexpected shocks domestically or foreign-origins. In addition to that, the discussion of key macroeconomic variables that are important in explaining the conduct of monetary policy is particularly useful to understand the policy options for the Indonesian policymakers and to evaluate any responses from future unexpected shocks to the economy. Furthermore, it will be useful for us to determine the appropriate measures to be taken in the monetary policy elements to ensure the effectiveness of any policy actions in tackling any future shocks to the economy.

Fiscal Policy

Sustainability of the government budget is the main inherent problem in the Indonesian economy for the present time and years to come (Nasution 2002). The inflexible and inefficient tax system is a factor that responsible for the insufficiency of government taxation revenues that is used to finance state projects and state-sold products apart from the rising company bankruptcy, reduction in trade flows, and consequently decreasing personal income after the financial crisis. In addition, high subsidies on petroleum and electricity add more pressure on sustaining balanced-budget system. Furthermore, the government also has several other short- to medium-term plans such as revamping the financial system, providing social-safety nets for the low-income families, and the decentralization plans[20] that require an additional expenditure to be added on government balance sheet.

Another problem that has caused widening budget deficit is the mounting debts waiting to be repaid and the pressure is worsen by the recent financial crisis that has made the problem seemed to be larger than it seems. Soaring debt repayment has been partially due to rupiah's depreciation, interest rate increases, and inflation hike (Nasution 2002).

[20] The latest plan requires the state to disburse 25 percent of the government revenue to the contributing region.

As a response to tackle this budget deficit, the government cut non-debt expenditures by cutting subsidies on state-sold products, petroleum, and electricity services; freezing the salary of civil servants; and selling government bonds to rich regions (Nasution 2002). At the same time, the reduction in subsidies was also meant to reduce the gap in domestic and international prices as to prevent illegal exports for arbitraging activities. To avoid inflationary pressures created from government fiscal policies, authority finance the budget deficit through official development aid from foreign creditors and consultative group on Indonesia (CGI). Moreover, inflationary finance is rule out by both government policy and Bank Indonesia Act in 1999 that bans central bank from buying government bonds in the primary market except for bailing out banks.

In fiscal year 2000, the government debt outstanding reached 100.7 percent of GDP that consisted of 50.8 percent and 49.9 percent domestic and external debt respectively (Nasution 2002). During the "new order" era, the strategy adopted is to obtain long-term official development assistance with low interest rates to finance and thus relaxing the foreign exchange constraints and put less pressure on domestic market ability to settle the government debts. At this point in time, the government use the method of a rudimentary domestic financial market to finance the outstanding debt. However, the interest rates on government bonds that is very much sensitive to 1-month SBI rates, the inflation rate, and the exchange rate increases the burden on the fiscal side of the economy as these macroeconomic variables subjected to high volatility and uncertainty[21].

In summary, the fiscal policy in Indonesia has to find its way to increase the tax base revenue apart perhaps by revamping the current tax system and to boost more trade activities by creating export incentives. The relatively underdeveloped and inactive secondary market for government bonds should be another concern for the authority to rely on this method for financing budget deficits. If this could be a viable strategy, then focused attention should be put on developing effective rules and regulation about this secondary market and encourage banks to include government bonds for their liquidity purposes. The function of fiscal policy as an "automatic stabilizer" as a counter measure for recessionary pressures does not seem to be the case for Indonesia due to massive debt restructuring that has drained out most of the government resources. However, at least, the domestic political goal of creating more employment through labour-intensive public and state works should be achieved by government spending to ease the burden of the poor that has already hit by adverse impact of financial crisis. Lastly, the method of relying on foreign official development aid might work only for long-term fiscal sustainability. The government should take more proactive fiscal policies and methods to increase revenues in order to ensure the short- and medium-term fiscal goals especially in restoring the economic conditions after the structural changes took place.

Monetary Policy

In the middle of 1997, the Indonesian monetary authority abandoned the managed-floating exchange rate system[22] and subsequently switched into the floating system. Effectively, this switch in the exchange rate system means that the anchor of monetary policy has changed from exchange rate targeting to other policy targeting, most notably inflation-targeting and monetary base-

[21] Some other mechanisms adopted by the government are the sale of public assets and privatization. Refer to Nasution (2002) for other related issues regarding the external sector's influence on debt issues.

[22] To be more precise, it is a narrow-band managed-floating exchange rate system prior to this point in time.

targeting. The formulation of monetary policy, especially after the crisis, has been troubled by domestic obstacles such as the fragility in the banking system, the corporate restructuring periods, government budget deficits, and high debt outstanding in both public and private sectors.

Base Money

As mentioned earlier, the anchor of monetary policy has changed from exchange rate targeting into inflation- and monetary base-targeting whereby the monetary base target can be understood as a channel between the operational rule and the inflation target. In addition to that, it is important to note that the Central Bank has a direct control only in the domestic credit —the domestic component of monetary base— as outlined by the enforcement of new Bank Indonesia act in May 1999. The actual growth of monetary base has been consistently higher than the original target which is partly due to structural changes in the supply and demand of monetary aggregates because of administrative reforms and major adjustments in the political and social system.

Thus far, Indonesia has not adopted a fully-fledged inflation targeting as the nominal anchor of the monetary policy because of several reasons. Firstly, inflation in Indonesia does not only affected by the monetary policy directly but influenced by some other factors such as high capital flows, exchange rate movements, changes in the minimum wage rules and regulations, as well as innovations in the aggregate demand and supply of the economy. Secondly, chief components of the price index are very volatile and some of these domestic price index components are set by the authorities or subject to the standards in the international market. This will result into uncertainty and high degree of volatility in the inflationary processes in Indonesia thus creating a substantial bias within the inflation-target range that magnifies the problem in determining the sources of forecast errors. Thirdly, a great deal of information is required in the decision-making process for inflation-targeting activities such as the information of public and government finances, labour market volatilities, financial markets, and the goods and services sectors. This information is more of a luxury even for the authority since the economy is highly subjected to the shocks in both supply and demand side as well as domestic- and foreign-sourced.

Thus, monetary-base targeting has been an important element of conducting the monetary policy in Indonesia especially in ensuring the cohesiveness between the fiscal stimulus from the government spending and the policy made by the Bank Indonesia. However, it is clear from the previous sub-section that this monetary-base policy cannot be used by the Bank Indonesia to finance the government budget deficit through seigniorage that might create some inflationary pressures. The monetary-base targeting has been used to ensure the smoothness of day-to-day transaction activities conducted in cash.

Inflation rates

Post crisis, inflationary pressures has been rising steadily because of certain reasons. Firstly, the pressures that originated from government policies to raise administered prices (Nasution 2002) resulted from the reduction of subsidies on state-vended products as in the case of fuels and electricity for example. In addition to that, the pressure to regularly revise the minimum wages is also affecting a further increase in the inflation rate. Periodically, the increase in minimum wage has contributed around 9.35 percent and 12.55 percent to the inflation rate in 2000 and 2001 respectively (Nasution 2002). Secondly, the deteriorating value of rupiah under the present floating exchange rate system has contributed to a higher inflation rate by magnifying the effect from the increase in the price of imported goods.

This means that inflationary pressures also come from the exchange rate pass-through effects of the rupiah depreciation. Nasution (2002) estimated the pass-through effect to be around 0.13-0.23 in the post-crisis periods. A lot of explanations could come from this persistent and high pass-through effect due to the depreciation of rupiah. First of all, greater import penetration most notably in 2000 makes import prices to have more influencing-powers in the domestic general price level for all goods —raw, intermediate, and finished goods— and this has a persistent effect throughout the years. Next is the lack of confidence in holding the rupiah, thus rupiah-denominated assets that causes an increase in the demand of dollar-denominated assets and aggravates the pass-through effect from depreciation measure taken on rupiah. Subsequently, this has caused a “bandwagon” effect to the domestic producers as well even though they do not have any import content in their production processes in argument to protect themselves against high and volatile inflationary pressures in the goods and services market. Thirdly, during the crisis periods and after some companies can still transfer the effect of rupiah depreciation in the form of higher prices due to higher costs. Fourthly, Indonesia has been known to have a long history of high and variable inflation records and some related measures to curb this problem has always been short-lived and temporary in nature. Lastly, the slow progress of structural reform activities and the uncertainty about future economic conditions and directions has contributed to a slow recovery in regaining economic efficiency that could help to strengthen the rupiah.

Interest rates

In the middle of 1998, at the peak of the financial crisis, the domestic benchmark interest rate —1-month sertifikat bank Indonesia (SBI) rate, the equivalent of short-term interest rate measure— reached a staggering 70 percent. Subsequently, after some interventions and slight improvements of the economy, it fell to an average 11 percent in 2000 and rose again to 17.62 percent by the end of 2001. Real interest rate has been maintained to be around 5 percent annually since the year 2000. Gradual increment in the level of interest rate since the middle of year 2000 was a reflection of a tight bias monetary policy adopted by BI to mitigate the pressure on inflation and the exchange rate. In addition to that, the continual interest rates increment was due to slowness of bank restructuring effort and the narrow secondary government bond market that was reflected in small trading activities.

The authority, thus, started to put extra attention in developing the secondary market for government bonds in order to boost liquidity and to dampen the increment in the interest rate. The efforts yielded less favourable results since banks continued to rely on the inter-bank money market to ensure their liquidity instead of relying on the shallow and relatively premature the secondary market for government bonds. This condition explains the driving forces behind the persistent increase in the interest rate level in the Indonesian economy. The effect of this high interest rate is none other than the difficulty in repaying domestic debts reflected in the government budget deficits and at the same time put extra pressure on banks and their respective borrowers that relied mostly on external debt financing. Furthermore, this also explains a growing number of NPLs and widening budget deficits that caused fiscal distress. These have caused the sustainability of economic progress even more difficult.

Exchange rate

Following the crisis, rupiah has been depreciated substantially from Rp 2450 in June 1997 to a low Rp 15000 in the middle of 1998. The authority has also formally switched the exchange-rate regime from managed-floating into a fully-float system. The persistent depreciation of rupiah was mainly due to both internal and external factors. Internally, a limited supply of foreign currencies in the domestic foreign exchange market due to lack of public and private capital inflows since most exporters are less willing to repatriate major portion of export revenues because of rupiah's volatility. Externally, the disbursement of loans from the IMF and World Banks were uncertain and the debt-rescheduling activities have raised the requirement of foreign exchange, thus putting extra pressures on depreciation of rupiah[23].

Subsequently, Bank Indonesia has taken some exchange rate-related policies such as open market operations of selling SBIs and using its foreign exchange reserves to meet the demand of foreign currencies and correspondingly to guard the rupiah from depreciating further. In addition, BI also restricted rupiah transactions between banks in Indonesia and non-residents to reduce the extent of speculations in the offshore market[24].

Furman & Stiglitz (1998) found in their analysis on emerging economies including Indonesia that the level and duration of high interest rates affect the exchange rate depreciation significantly. However, Goldfajn & Baig (1999) and Basurto & Gosh (2001) found little supporting evidence that higher interest rates affecting exchange rate depreciation in their study on some Asian countries that include Indonesia. This study has provided us with an understanding that during the crisis period whereby the interest rate was high, the rupiah has depreciated tremendously. However, the link become less clear when the interest rates level have went down to a much lower region but we still witnessed a persistent depreciated value of rupiah after the crisis subsided.

The importance of exchange-rate as one of the monetary policy element is worth noting. Although the recent system of floating exchange rate system took place, Bank Indonesia still monitor closely the movement of rupiah since this is a very central issue in Indonesia's trading activities as well as the issues regarding outstanding public and private debts. It is important to know the supply and demand side of the exchange rate movement in Indonesia depend substantially on the public and investors' confidence on the economic policy course and sound macro-economic management of the country. Thus, in conducting a useful monetary policy, BI has to ensure that foreign exchange earnings will be repatriated back by guarding the stability of rupiah through some prevention in the offshore market and other speculative activities. Furthermore, BI needs to correct the negative market sentiment about rupiah that is heavily related to domestic condition and the soundness and integrity of their policy discretion. With stable exchange rate, Indonesia can further enhance the macroeconomic performance and to ensure the sustainability of non-inflationary economic growth.

CONCLUSION

Indonesia's pre-crisis condition was vulnerable to an impending crisis due to the overreliance on short-term borrowing. The over-reliance on short-term borrowing has, in turn, placed Indonesia vulnerable to financial panic and exchange rate risk. Indonesia was vulnerable to a panic, as it possessed large proportion of short-term debt to foreign reserves coupled with the country's weak corporate governance, e.g. the adoption of the banking and financial sector deregulation without adequate supervision. Second, Indonesia was vulnerable to an exchange rate risk since most of the short-term debts were

[23] Some other reasons include panic buying of dollars to repay corporate debts, increasing speculative activities in the rupiah offshore market, and unfavourable ratings from international agency such as S&P 500 regarding the country's economic and political risks.

[24] The negative consequence is that the limited supply of foreign exchange from non-residents has reduced the appeal of domestic foreign exchange market.

used to finance less productive investments that yielded rupiah revenue which were expected to repay dollar liabilities. These factors have magnified the country's weak macroeconomic policies and pointed out a need for better and more coordinated policy design and implementation.

Subsequent periods have witnessed the recovery periods which progress at a "snail pace". Indonesia is still left largely with the problem of rising unemployment and huge debts to be settled upon. These structural changes happen at the same time where the reformation era took place which gives birth to the so called "true democracy" period. These two factors have made the direction of economic course for the Indonesian economy to be rather uncertain. This is understandably so because without a stable government coupled with the hurdles of structural changes that Indonesia has to deal with, it will be very difficult to achieve the ultimate economic goals and increase the welfare of the Indonesian economy. More changes are expected to take place as the country embraced herself in a direct presidential election in July 2004 (and possibly September 2004) that will determine further whether stability could be sustained, at least geo-politically, in the short- to medium-term. The result of the coming election and consequently the new government is hoped to come up with more certain future economic policy and direction. This is highly required to provide an added force to boost slacken economic recovery and regaining momentum to reach the ultimate goal of sustained economic growth.

Most notably, the conduct of monetary policy and fiscal policy has changed. The exchange rate regime has changed from the long-history of fixed and managed floating system into a market-determined exchange rate system. Monetary policy is aimed specifically at stabilizing the domestic medium-term inflation to promote sustained economic growth to provide added momentum towards economic recovery (BI 2003, 2004). At the same time, monetary policy tries to maintain the stability of the rupiah in the face of other foreign currencies to boost the trade activities and to minimize fluctuations by prudent intervention that is necessary to absorb excess liquidity and fiscal expansion. Further cuts in interest rates are also on its way at a gradual pace that is consistent with the achievement of inflation targets (BI 2003, 2004).

Fiscal policy, by and large, is still aimed specifically at developing major infrastructures for the suburban areas and under-developed provinces as to restore the public confidence on government. In addition to that, fiscal policy is also aimed at stimulating the domestic economy as well as to settle the domestic debts. Major efforts have also been put to revamp the banking system, to ensure financial system stability, and to promote the banking sector's recovery and restoring its intermediary function to stimulate progressive economic recovery as well as enhancing the effectiveness of the payment system (BI 2003, 2004). An agency like IBRA (Indonesian Banking Restructuring Agency), for example, has been set up to deal with the debt-financing issue through the divestation of public assets and privatization of state-owned companies that is hoped to provide a better way in financing the mounting debt without the need of losing the conventional fiscal policy's function as an "automatic stabilizer" during recession time, i.e. through sustained government spending.

Issues such as the structural change in the exchange rate system from the fixed and managed-floating into a free-floating type and the change in the intermediate target from boosting trade performance and improving growth performance through external trade into stabilizing the short- and medium-term domestic inflation are examples of the importance of this paper in relation with future research devoted to the Indonesian economy.

In particular, this paper is a very useful background summary for researchers who intend to develop an economic model for Indonesia and subsequently to analyze the main features of it. At the very end, we hope that through this research, we would be able to spark more interests to researchers, and economists in particular, to study more about the Indonesian economy.

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