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Fiscal Policy and Workouts from Debt Crises: The Case of Indonesia's Domestic Debt

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Task Force on Debt Restructuring and Sovereign Bankruptcy

FISCAL POLICY AND WORKOUTS FROM DEBT CRISES: THE CASE OF INDONESIA'S DOMESTIC DEBT

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1. INTRODUCTION

Much of the discussion of the risks of sovereign debt crises has focused on the issue of currency risk (see Dodd and Spiegel, 2005). This has led to the recommendation that countries should borrow in their local currency. Yet in the drive to develop local markets, many countries are running up domestic debt burdens. Although domestic debt has the advantage over foreign debt that it is not subject to a currency mismatch, countries are still forced to use scarce budget resources to repay the debt, and if the debt gets overly large, a country can run the risk of a debt crisis. There are many reasons that some countries have begun to accumulate large domestic debt burdens including financing external debt buybacks, sterilizing capital inflows, or financing domestic programs. In Indonesia's case, a costly bailout of the banking system following the 1997 crisis left Indonesia saddled with a domestic debt burden.

Although Indonesia had a major sovereign debt crisis in the 1960s, it overcame it by the 1970s and did not have another sovereign debt problem until the East Asian financial crisis erupted in 1997. That regional economic crisis, on top of years of unusually severe El Niño drought, was too much and sovereign debt, first external and then domestic, again became too great a burden. In part, the debt problem was a familiar one of a sudden inability to continue servicing external obligations, reflecting the withdrawal of private financial inflows, capital flight and the disproportionate collapse of the rupiah. Yet, Indonesia soon also had reason to be concerned about an exploding level of government domestic debt. The major aim of this paper is to describe the sequence of events that brought about this latter situation and assess the crisis workout policy that was followed relative to alternatives that are deemed superior. The latter are analyzed by simulations under alternative sets of policies using a comprehensive model of the Indonesian economy.

As discussed in the next section, the Indonesian government had in general managed its sovereign debt quite well after the 1960s crisis. The trend and management of external debt, in particular, remained an unlikely source of serious risk to fiscal or balance-of-payments sustainability under what were then foreseeable circumstances. But while external sovereign debt remained under control, private external debt increased substantially during the 1990s. The collapse in 1997-1998 was in a large part due to the build-up in private short-term external debt, and external debt renegotiations were necessary to give the country financial breathing room. Also at that time, the government took on a large amount of private obligations, causing a surge in domestic debt associated in particular with the policy to rescue the banking sector initiated in 1998. This put the country's fiscal sustainability into question. While intending to restore the banking sector's intermediation function, the recapitalization program used up an enormous amount of resources, equivalent to roughly half of the gross domestic product (GDP). To the extent that the problem occurred at the same time that the country failed to generate a robust recovery, one wonders whether the two are related. This paper argues that they are.

The paper is organized as follows. Following the discussions in the next two sections on

the evolution of external and domestic debt, results of counterfactual simulations on alternative debt management policies are analyzed. On this basis, conclusions are drawn.

2. ECONOMIC MANAGEMENT FROM THE 1960S TO THE 1990S

Chaotic economic conditions in Indonesia in the 1960s, including a severe foreign debt crisis[2] and a myriad of structural problems, ended with a change in the political regime and, beginning in 1966, a stabilization and rehabilitation program. The new government implemented an orthodox economic policy, which succeeded at bringing down the inflation rate from a three-digit level to less than 5 percent in 1971. The balance-of-payments deficit improved, as the ratio of exports to GDP rose from 9 to 15 percent during this period, while the import ratio remained stable despite the abolishment of quantitative restrictions on imports. The fiscal deficit fell from 6 to 3 percent of GDP, and government saving increased. Remarkably, the fall in inflation was accompanied by an accelerated GDP growth rate, from negative to a positive 7 percent in 1971.
One of the main reasons for the improved growth was the inflow of foreign capital in the form of loans and foreign investment (mostly in the extractive sector). As early as 1970, controls on capital movements were eliminated. This marked the beginning of Indonesia's new policy on foreign capital. Capital inflows were necessary, but due to the inflows a huge amount of debt was accumulated.

One reason that new loans were forthcoming, aside from the growing confidence in policy management, was the financial breathing room accorded first by debt rescheduling and then by the final debt restructuring in 1970. The country was heavily indebted when the New Order government came to power in 1966. With the help of other countries (particularly Japan), the Indonesian government managed to reschedule its foreign debts through the Paris Club in December 1966. At the initiative of the Netherlands, the first meeting of a donor consortium (consisting of a group of donor countries, the World Bank, and the Asian Development Bank), called the *Inter-Governmental Group on Indonesia* (IGGI), was organized immediately following the debt rescheduling, in February 1967. The debt crisis was settled later, however, on the basis of a proposal by Dr. Herman Abs, a famous German banker, and approved by the aid consortium.[3] The debt workout embodied a grant element of 59.9%, a 30-year amortization and no interest payments for 15 years (data of the World Bank, as cited by Klein, 1973, p. 20).
Following the settlement, the IGGI continued to hold annual meetings that determined the size and utilization of foreign loans. These IGGI meetings basically shaped Indonesia's policy on external debt. All loans in that era were concessional.

The 1970s would turn out to be a volatile decade, albeit one the country largely steered through successfully. One difficult situation was created when oil prices quadrupled in 1973/74. The state-owned oil company, Pertamina, actively expanded its operations by financing investments by borrowing aggressively in international credit markets. Many of the operations were unrelated to oil businesses, and economically unjustified. When the company finally defaulted in 1975, the central bank took over the debt, resulting in a drawdown of foreign reserves. The country's ability to repay foreign debt was

[2] Debt payments due, including arrears, exceeded export earnings.

[3] More precisely, Indonesia rescheduled its Paris Club obligations on December 20, 1966, October 22, 1967 and October 17, 1968, before its final workout arrangement, agreed on April 24, 1970.

consequently put into question. In this context, the advantage of having an Indonesian-focused policy forum with a friendly approach such as the IGGI became apparent.

Learning from the Pertamina debacle, and in order to reduce external indebtedness, the government imposed strict controls on public enterprise borrowing and on the use of windfall revenues. This helped improve the country's overall debt position and reduce the debt service ratio.

The oil boom in 1973/74 also led to a real appreciation of the rupiah and a quick reversal of the current account balance from surplus to deficit in 1975.[4] But as the economy and exports continued to grow, the deficit disappeared in 1977. With such a background, many were caught by surprise when in late 1978 the government decided to devalue the currency by 33.6% against the US dollar, to which it had been pegged in a multiple exchange rate system and adopt a managed floating system, in which an effective unified rate was established on a controlled basis (floating within 1% either side of the middle rate based on a basket of currencies). As a side effect, the policy caused the fiscal burden of the debt to rise, as more local currency was needed to repay the debt.

This fiscal effect was contained, however, as the government continued to enforce its so-called "balanced" budget approach, which had been introduced in 1967. Under this principle, there could be a gap between expenditures and revenues, but it had to be covered with *foreign* loans.[5] Such borrowing did not create a significant monetary disturbance, since the central bank sterilized the inflows. Along with credit controls, this played a major role in bringing down the inflation rate. With improved macroeconomic conditions and high oil prices, Indonesia's debt repayment capacity was not in peril.

In addition, Indonesia benefited from the second oil-boom in 1979-1980. The current account improved dramatically and the economy grew steadily, until the world recession hit in 1982, which caused prices of many commodities to collapse. The country's terms of trade deteriorated, the current account deficit widened, and economic growth became negative for the first time since 1966. This led the government to devalue the currency again in 1983.[6] Unlike the 1978 devaluation, however, this time the fear of a balance-of-payments crisis was credible. The government began to emphasize efforts to boost non-oil exports. At the same time, a number of public investments were either delayed or postponed, and a tight monetary policy was imposed.

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[4] The oil 'boom' in 1974 caused a 'Dutch disease' appreciation in which prices of non-tradables rose relative to tradables. However, the government's agricultural price policy helped to restrain the increase of the prices of non-tradable goods. Later, with the improved price of tradables following the devaluation in 1978, non-oil exports received a strong boost, causing the current account to register a surplus. All these factors ameliorated the extent and duration of the 'Dutch disease' effect caused during the oil-boom period.

[5] As may be seen from the definition employed, the concept of "balanced" budget was not widely understood. The borrowing undertaken, however, played a significant role particularly in the rehabilitation and development of infrastructure needed to relieve the existing supply bottlenecks. The balanced budget concept had been established through Presidential Decree No. 13/1969.

[6] It was dropped 27.6% against the dollar, with the central bank pledging to continue the managed float, albeit against a wider basket of currencies.

The episode was part of a major shift in Indonesian economic policy, as the country headed towards a more liberalized economy. The most dramatic policy change was in the financial sector. In June of 1983 a major financial deregulation was announced, aimed at dismantling the old system of direct monetary control to be replaced by a more indirect approach based on reserve management through open market operations (OMO).[7] Optimistic about economic prospects, there was a strong desire to spend on large (mega) projects, as a consequence of which more external borrowing was needed. Since state-owned or state-related enterprises and Japanese private counterparts jointly conducted many of the projects, a large portion of the borrowing was in yen and made on a more commercial basis. This raised a concern about the country's capacity to repay the debt.

Pandemonium set in when the economy was hit by double blows in 1986: a plunge in oil prices, and a sharp appreciation of the Japanese yen against the US dollar. The first reduced the amount of foreign exchange; the latter increased the amount of local currency needed to service the yen-denominated debt. At the same time, the current account deficit widened. This forced the government to devalue the currency another 31 percent, requiring an even larger amount of local currency to service foreign debt.[8] The coordination of monetary, fiscal and exchange rate policy became more difficult. The government was eventually forced to postpone the implementation of some mega-projects, although some large public sector investments proceeded.

Another dramatic policy change took place in the banking sector in 1988. The government promulgated a policy aimed at increasing bank competition by allowing easy entry of new private banks, including foreign bank branches, outside the capital city, Jakarta. Along with the effects of the June 1983 reform, the 1988 package brought an increased competitiveness to the financial system. As theory warns, however, when interest rates surged, it altered the lenders' incentives and prompted imprudent behaviors of the banking sector (Hellman, Murdock and Stiglitz, 2000). Investment credits going to risky sectors rose (adverse selection), the incidence of bailouts in the absence of an effective bankruptcy regime increased (moral hazard), and the subsequent banks' franchise values (expected returns) declined. All this occurred in an environment of weak bank supervision and weak prudential regulation. However, continued strong economic growth suppressed recognition of the urgency of enforcing stronger supervision and

[7] An early sign of the government's intention to reform the financial sector had actually emerged in mid-1982, when the central bank, *Bank Indonesia*, cut back on the provision of credits that, for several years, had been directed toward activities with low priority. But it was the June-1983 package that produced a considerable impact on the financial sector. Practically all credit ceilings were eliminated, resulting in an increased degree of flexibility in pricing (interest rate) and quantity (credit). At that point, however, no provision was made to ease the entry of competition. The dominance of the state-owned banks, an important sign of the country's financial repression, remained overwhelming.

[8] A relatively extensive trade deregulation was also announced in the same year. Since then, a series of reforms in trade and investment were undertaken. As a result, non-oil exports grew at an impressive rate, almost tripling from US$5 billion in 1983 to US$14.4 billion in 1990, and their share in total exports increased dramatically from 25 percent to 56 percent. Economic growth was strong, reaching more-than 7 percent, without any serious inflationary pressure (during the reform period, the average growth rate was more than 6 percent, and the inflation rate remained at a one-digit rate).

regulation.

It took less than a year from the start of the 1988 reform for the economy to overheat. By 1989, GDP growth accelerated to 7.5 percent, non-oil exports grew rapidly, and private investment surged (investment boom). In its train, inflation reached 9.4 percent in 1991. This adversely affected export competitiveness under the managed exchange rate.[9] Another pressure on the balance of payments came from a greater demand for imports to support the boom in investment (non-oil imports grew at an unprecedented rate, i.e., more than 31 percent), while the growth of non-oil exports dipped to a one-digit rate. Consequently, the current account deficit widened, raising the expectation of devaluation. This led to the subsequent series of capital outflows.[10]

To counter the outflows, the government promulgated a series of trade and investment reforms, which worked fairly well. To cool down the economy, a tight money policy was implemented, but this did not work well because efforts to control net foreign assets, particularly export credits, were in vain (see Azis, 1999).

Meanwhile, an episode of mainly political importance affecting Indonesia's access and terms of aid and official credit arrangements occurred in 1991. The shootings of demonstrators in Dili, East Timor, led to a wave of international protests. Initiated by the Netherlands, three countries suspended their loans through IGGI. Angered by this move, the Indonesian government announced in March 1992 that it would decline all future loans from the Netherlands as part of a blanket refusal to link foreign assistance to human rights issues. The government also requested that the IGGI be disbanded and that the World Bank replace it with a new consortium, the Consultative Group on Indonesia (CGI). Japan, the World Bank, and the Asian Development Bank, whose combined contribution was around 80 percent of the total IGGI-coordinated assistance, continued to pledge their support through the new setting. In the end, no major aid or debt policy change occurred following the incident.

The economy continued to boom through the first half of the 1990s, fuelled by large capital inflows. This time, however, it was dominated by private flows, i.e., foreign direct investment and portfolio investment, including corporate sector borrowing (mainly from banks). The government and public sector external debt remained stable, and the government also continued its conservative approach to managing the external debt. The story of capital flows during the 1990s is more a story of private flows and less of official flows, the discussion of which goes beyond the scope of this paper.

All in all, it may be said that in the 30 years since the initial sovereign debt crisis, the country faced numerous economic shocks, which policymakers handled without sinking

[9] This was addressed in part in September 1989, when the managed float was restricted only to certain transactions undertaken at certain times of the day and an inter-bank free rate was allowed to govern all other transactions.

[10] Actually, the phenomenon of capital outflow was already detected in late 1989, but it became more substantial in 1990.

back into sovereign debt crises. In the period, the economy was gradually liberalized and foreign investors played an increasing role, both in domestic financial institutions and as a source of external funds for private sector borrowing. The 1997 Asian financial crisis, however, exposed how fragile the financial sector had become. As we shall see, the government stepped in to help minimize the private sector crisis, with unfortunate consequences for its own debt situation.

3. THE GOVERNMENT TAKES ON A NEW DEBT BURDEN

Although Indonesia initially appeared to be in a strong position as the Asian financial crisis unfolded, the exodus of foreign finance from South-East Asia soon affected it too. The currency fell precipitously during the summer of 1997.[11] By October 1997 the government was unable to defend the managed-floating system, and asked the International Monetary Fund (IMF) for help. While a substantial financial assistance package was ultimately mobilized and Paris Club relief was arranged in a series of agreements,[12] a number of inopportune policy measures were first undertaken at the IMF's urging.

For example, one early policy response advocated by the IMF was the liquidation of 16 weak private banks. With no deposit insurance system in place, the bank closure in November 1997 caused widespread panic. Depositors shifted their assets to state and foreign banks.[13] At the same time, panic and fears over the fluctuating value of the currency caused a substantial currency substitution. As people withdrew their domestic deposits and converted them into foreign currency or placed them in safer banks, many domestic private banks suffered from a liquidity crunch, resulting in skyrocketing inter-bank rates.[14]

Meanwhile, as the 'lender of last resort,' the central bank injected liquidity funds known as *Bantuan Likuiditas Bank Indonesia* (BLBI) to a number of private banks. By the end of 1997 the injected amount swelled to 7 percent of GDP, while the exchange rate weakened further. Worse, recipient banks did not properly use most of the funds. Some were gambled away in the foreign exchange or securities markets; some were used by banks to increase operations, staff, branches, and services; and some funds were simply transferred into bank owners' accounts abroad or lent recklessly to businesses in the banks' own group and would become non-performing loans (NPL).[15] While conceptually, BLBI represents a standard form of liquidity support to illiquid but not insolvent banks, the actual implementation was seriously flawed. In some cases the

[11] The managed float was maintained in the 1990s up to that point, with the rupiah depreciating 3-5% per year during 1989-95, albeit with increasing ranges allowed around the central rate. This ended in August 1997, when the currency began to float freely. The widening of the band had been a response to difficulties in managing the monetary consequences of capital flows, while the moving peg policy sought to maintain a stable real effective exchange rate for trade purposes (see Azis, 2006, pp. 184-8).

[12] Paris Club agreements were signed on September 23, 1998, April 13, 2000 and April 12, 2002, the latter applying "Houston terms." Following the massive tsunami, debt payments were also deferred in 2005 (for details, see the website of the Paris Club at www.clubdeparis.org).

[13] By January 1998, the state banks regained their earlier dominance in terms of total deposit share in the country, which they had lost following the late 1980s policy liberalization.

[14] The market segmentation that characterized Indonesia's financial sector is evident from the following: among small and medium sized banks, the average inter-bank rates for overnight funds increased from 35 to 57 percent in November 1997, while the rates among the prime banks decreased from 30 to 18 percent (Enoch, Baldwin, Frecaut and Kovanen, 2001).

[15] According to a report by the Supreme Audit Agency (BPK), as much as 96 percent of the extended BLBI were potential government losses (non-repaid borrowing).

central bank even extended credit in amounts exceeding the recipient banks' total assets.[16]

The IMF's prescription also included tightening the fiscal budget and raising interest rates to very high levels. These policies, however, failed to restore market confidence. On the contrary, social uprisings flared and company bankruptcies rose. The latter damaged the balance sheets of many banks, causing them to suffer a negative net-worth. Indeed, much of the country's financial sector and large corporate businesses at the time either collapsed or were on the brink of collapse. The negative equity capital of the banking sector worsened quickly. By March 1999, the figure reached minus Rp 245 trillion, or over US$31 billion. The external financial crisis had become a domestic banking crisis.

Upon the recommendations of the World Bank and the IMF, the government sought to rescue the banking system through a blanket guarantee program. The government directly covered the deposits in closed banks and indirectly those in the banks that were judged able to remain open by recapitalizing those banks. In the latter case, the government took over a huge volume of problem loans of the banks in exchange for "recap bonds" (estimated at Rp 405 trillion). The bonds were given to the troubled banks according to certain criteria, such as the bank's initial capital adequacy ratio (CAR). The program was managed by the Indonesian Bank Restructuring Agency (IBRA), created in 1998 to last 5 years, which immediately put 50 private and 4 state banks under its surveillance. The intention was to reform, restructure and privatize those that could be salvaged, recouping as much as possible of the government money put into the institutions, and to close down the rest.[17]

Moreover, the BLBI loans were transferred from the central bank to the government, in exchange for which the government issued bonds to the central bank (they amounted to Rp 220 trillion).[18] The net effect was to raise the government's debt by the amount of bonds issued to the banks and the central bank in exchange for the non-performing loans and BLBI loans, respectively, as well as by that part of the government's other borrowing that was required to compensate the depositors of the closed banks (roughly another Rp 74 trillion).[19]

In addition to the recap and other bonds discussed above, the government issued T-bonds

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[16] Instead of applying the government's bank guarantee mechanism introduced in January 1998, Bank Indonesia continued to allow banks to obtain BLBI funds through a "clearing" mechanism. From the recipient bank's point of view this was a much more convenient way since the borrowing process could be done with much less paper work, more lenient conditions and little scrutiny.

[17] See Pangestu (2003) for a detailed discussion.

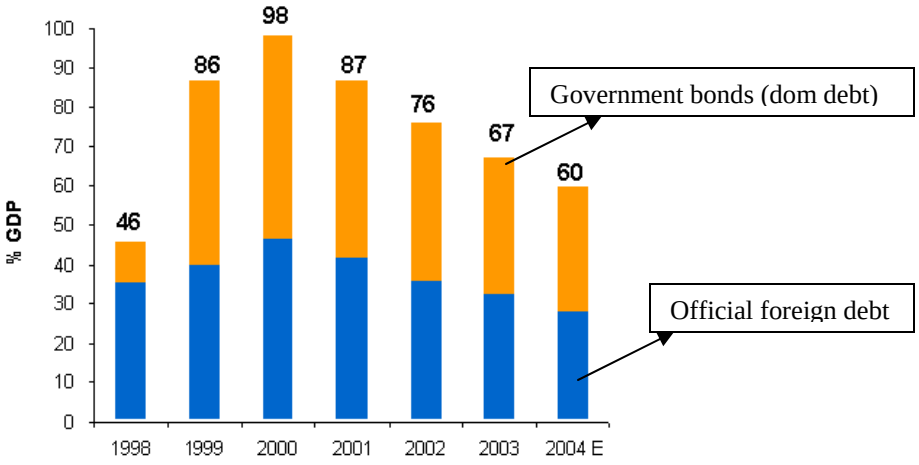
[18] The shift of BLBI burden from the central bank to government was far from easy, especially because the precise amount had not been agreed upon by the two parties. It took long and arduous negotiations that lasted until late 2003 for the government and the central bank to finally reach an agreement regarding the BLBI settlement and the financial relations between them.

[19] The government also took contingent responsibility — in the sense of issuing guarantees — for external inter-bank loans under a London Club arrangement in June 1998 that established a framework to deal with Indonesian bank and corporate foreign debt (data of World Bank).

to cover the fiscal budget deficit, with maturities that ranged from 7 to 10 years and with fixed interest rates at around 10 to 14.5 percent. By the end of 2002, Rp 28 trillion of these bonds were outstanding. Dollar-denominated bonds were also issued (US$1 billion) to help finance the budget deficit. Meanwhile, official foreign lending to Indonesia also increased since the 1997 crisis. It comprised loans made through the Consultative Group on Indonesia, by the IMF and other international financial institutions, and loans made through bilateral arrangements.[20]

Overall, from 1998 to 2000, total government debt, foreign and domestic, rose from 46 to 98 percent of GDP (figure 1). Total debt servicing (interest plus principal) peaked at over 7.3 percent of GDP in 2001. Figure 2 shows the sudden and dramatic increase in interest payments on domestic government debt. This component was virtually zero prior to 2000. The interest payment peaked at more than 4% of GDP in 2001. Meanwhile, the government began to repay the principal of some of these debts in 2002.

Figure 1. Sovereign Debt to GDP Ratio

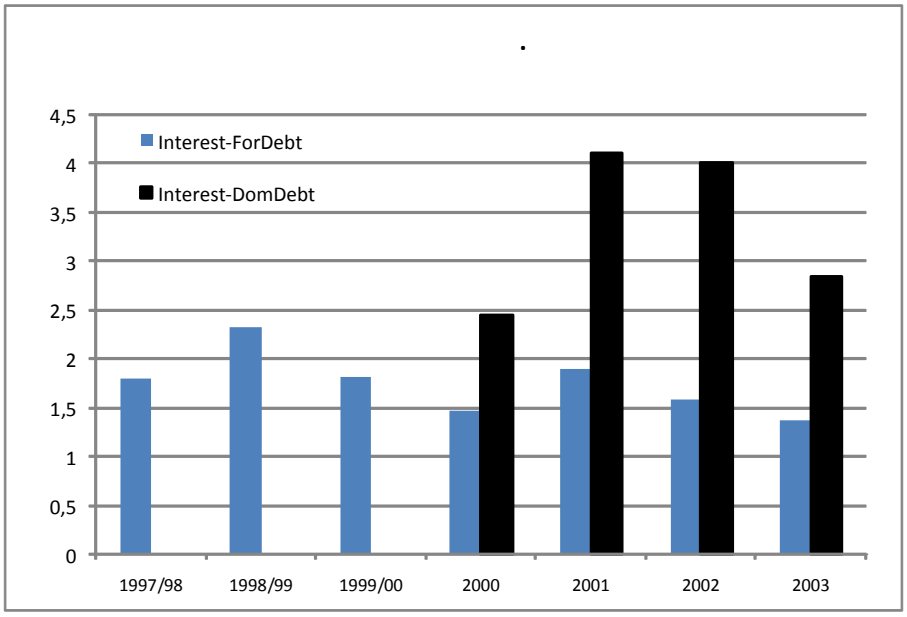


Source: Processed from the Government of Indonesia, Ministry of Finance

The whole premise of the recap policy was that the banks would resume their normal intermediation function and lend to the economy. In practice, this did not happen. Banks preferred to hold government bonds and central bank securities (SBIs or Sertifikat Bank Indonesia), which gave them no-risk income, while also securing them a higher CAR than had they extended more loans. Thus, the intended outcome of the policy did not materialize, while the costs were enormous. The recap program put substantial pressure on the government budget and the volume of bonds issued in conjunction with the blanket guarantee program was very large.

[20] The Paris Club arrangements noted earlier did not reduce the stock of debt, but postponed repayments.

Figure 2. Interest Payments on Foreign and Domestic Debts

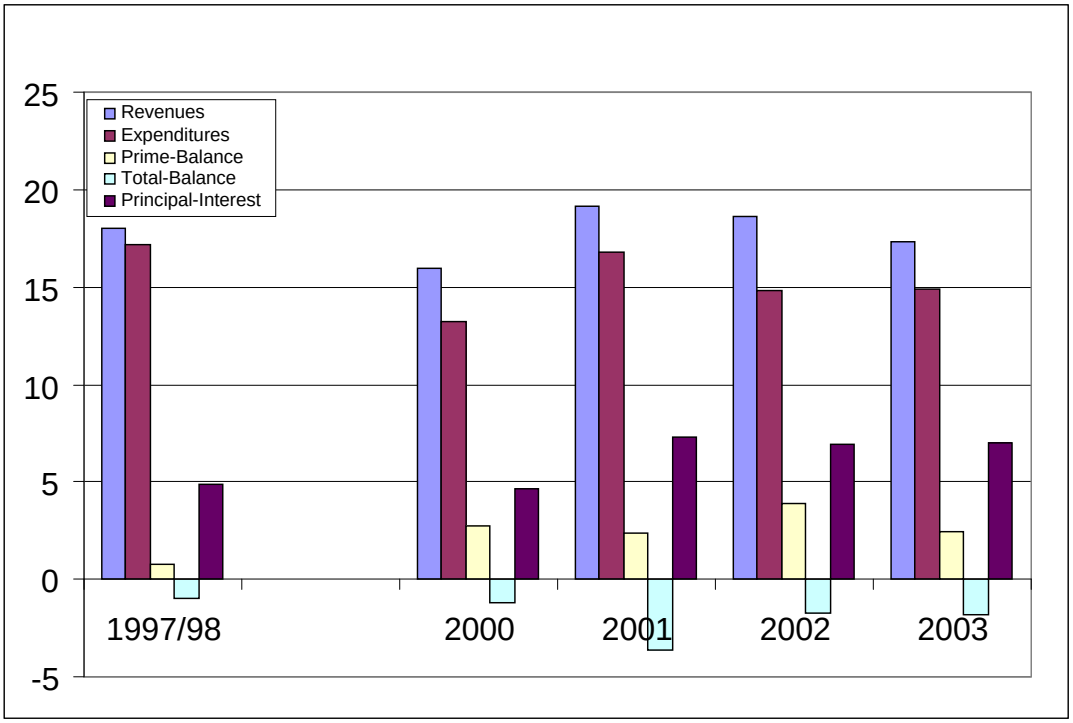


Source: Indonesian Government budget, various years

By 2002, 45 percent of government total revenue was spent on debt servicing (Figure 3). To put this in perspective, while in 1997/98 total debt servicing was still below the total amount of development expenditures, since 2000 debt repayment has been always higher than development expenditures; and this gap has persistently widened.[21] By 2004 the size of development expenditures was only half of the amount of debt servicing.

[21] Up to 2004, the government expenditure recorded in the official budget had been classified into routine (current), development, and regional balance funds. Beginning in 2005 no distinction is made between routine and development expenditure.

Figure 3. Primary and Total Balance and Debt Repayments (% GDP)



Realizing the mounting fiscal burden and that it emanated largely from the bank bailout policy, the government took a number of steps to ease it, including the following:

(1) *Buy-back program*, as planned, in which the government used the proceeds from privatization and asset sales by IBRA to re-purchase some of the non-matured bonds. This redemption scheme was exercised in 2003, when banks and securities companies that held recap bonds sold back some of them at higher than the original prices;

(2) *Re-profiling debt* in line with the policy goal of adding longer term issues to the secondary market and the limited capacity of government to create a surplus in the short run in the primary balance. The way this was carried out was to first determine each bank's liquidity requirement, and then the government exchanged the bank's holdings of bonds above that level for new bonds that had a longer maturity. However, this scheme applied only to banks that were still in the public sector, prior to divestment;

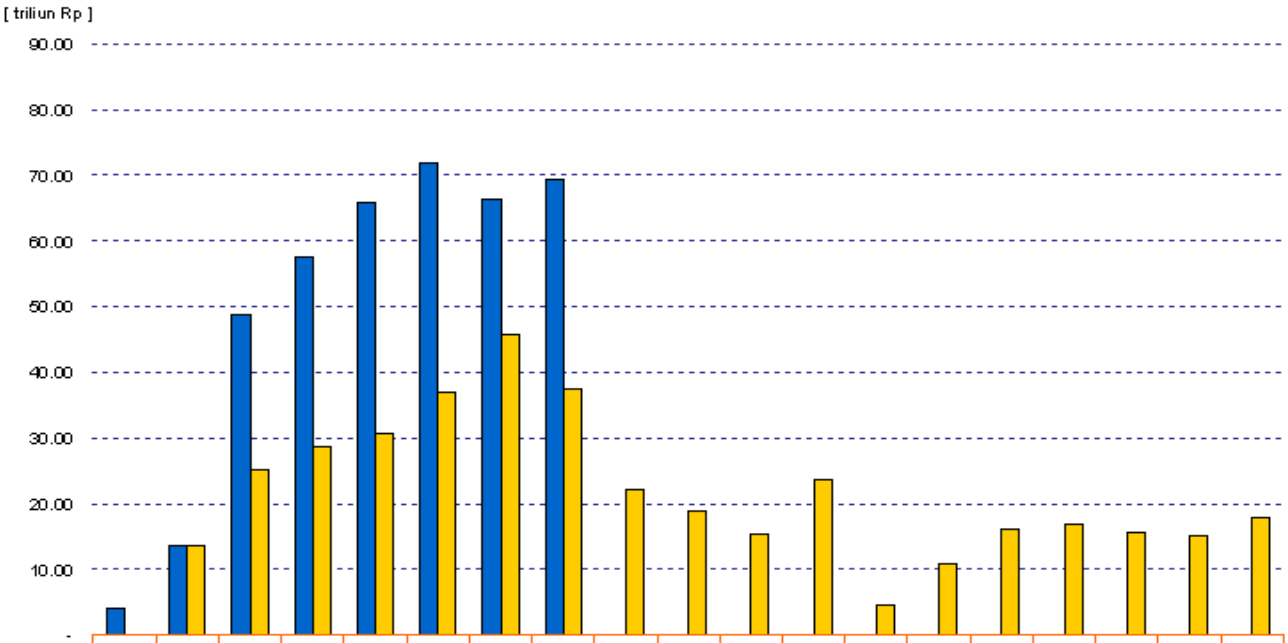
(3) *Debt-switching* which was intended to lengthen the maturity profile of the debt. The main difference between this approach and the re-profiling scheme is that the terms of the bond exchanges were determined by the market, not unilaterally set by the government;

(4) *Refinancing matured bonds* by issuing new bonds; and

(5) *Reducing government's contingent liabilities* by phasing-out the blanket guarantee program and in other ways. This was to accompany an improving health of the banking sector and strengthened macroeconomic stability that would enable interest rates to decline.

With the above schemes, it was expected that the cost of refinancing would become more manageable without putting too much pressure on the government budget. As regards the relative size of the different schemes, re-profiling has been the most significant (for example, at the early stage of the program the value of bonds held by one state-bank alone, Bank Mandiri, amounted to Rp 130 trillion). Figure 4 shows how the burden of domestic debt repayment has been spread out (re-profiled) by these policies.

Figure 4. Scheduled Amortization of Tradable Government Bonds (before and after 2003 re-profiling)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
before	3.93	13.54	48.80	57.60	65.86	72.00	66.45	69.48	-	-	-	-	-	-	-	-	-	-	-
after	-	13.54	25.30	28.77	30.80	36.86	45.80	37.56	22.10	19.01	15.48	23.71	4.68	10.77	16.20	16.82	15.55	15.17	17.85

Source: Government of Indonesia, Ministry of Finance

These delayed-payment policies, while importantly buying time, imposed costs that potentially affected fiscal sustainability in later years. Not only did they prolong the period of repayment of both interest and principal, but as investors had perceived the government's inability to repay they demanded higher risk premiums on the debt-switching and rolled over bonds that were sold to the public. In all, this policy would raise the net supply of government securities outstanding in outer years, raising the debt-

servicing burden in those years.

While the reprofiling exercise thus ameliorated a looming repayment difficulty, the country still had to live with the high opportunity cost of the initial bank bailout policy. It had captured the fiscal space that might have been used otherwise to stimulate economic recovery. Indeed, the government ran a tight fiscal position. The government managed to secure fiscal sustainability by maintaining a positive primary balance. As shown in Figure 3, since 2000 the primary balance has been in surplus between 2 and 4 percent of GDP. Furthermore, the total budget deficit has been reduced from 3.6 percent of GDP in 2001 to 1.8 percent in 2003.

Another adverse consequence of the bank bailout policy could be seen in the financial sector. The misuse of funds by the banks was not the only drawback of extending a huge amount of BLBI. Such direct cash transfers also instantly raised the money supply, contributing to higher inflation and further weakening the exchange rate. This development worsened investors' confidence, thus dampening the effects of any efforts to recover the economy from the crisis.[22]Although no immediate cash transfers were involved in the case of the recap bond, the possibility of recipient banks becoming excessively risk-averse was high, as many episodes of post-banking crises around the world has taught us. As noted earlier, banks preferred to hold non-risky government bonds rather than to issue credits to the private sector, hurting the intermediation function. As a result, investment did not pick up, slowing the recovery process.

[22] Moreover, the high interest rate policy imposed by the IMF at the beginning of the crisis also had failed to restore confidence. It further dampened the economy and caused more problems to the banking sector as the bankruptcy rate rose.

4. COUNTERFACTUAL POLICY SCENARIOS FOR INDONESIA'S CRISIS WORKOUT

The fiscal consequences outlined above and the banks' failure to fully resume commercial bank intermediation suggests that the bank recapitalization program in Indonesia has not worked well.[23] The country built up a debt burden, but the extra borrowing did not generate growth necessary to give the country the ability to repay the debt in the future.

Thus, it is of interest to ask whether there was an alternative and whether the whole bail out and recovery program was poorly structured. More specifically, one may ask whether there was an excessive bail-out in terms of both BLBI (given the potential misuse and macroeconomic consequences of it) and recap bonds (given the costly terms of the bonds). Also, it is necessary to evaluate the outcome in a broader context than narrow debt sustainability indicators. In addition to the question of securing fiscal sustainability, one has to ask what happened to the exchange rate, GDP growth, unemployment and poverty.

In other words, what would have happened if some of the enormous amount of resources used for the program was instead allocated to other uses that were more growth stimulating? In this section, some alternative policies are discussed by using a fairly comprehensive model capable of capturing the general equilibrium effects of those policies. That is, counterfactual scenarios are explored in which fewer resources are used for the bail-out program and other government expenditures are assumed increased instead. Concerns about growth and poverty helped shape the specification of the alternative uses of government funds. Also, given the fact that many donors pledged a relatively large amount of concessional loans following the crisis, it is reasonable to assume that additional budget expenditures could have been easily financed through such external loans. The problem during the time was not a lack of (official) loans, but the pressure from the IMF to avoid any fiscal expansion.[24] In other words, the scenarios entail less domestic debt for the bank bailout and more foreign official (and concessional) debt for the fiscal stimulus.

Two developments motivated the counterfactual analysis: (1) Failures of the bank recapitalization program to adequately restore financial intermediation by banks and negative repercussions of BLBI; (2) Indonesia's disappointing growth performance during the post-crisis years. The proposed counterfactual policies are specifically designed to stimulate more economic growth by shifting some of the resources used for BLBI or recap bonds to alternative uses. The question the model seeks to answer is how

[23] Since the implementation of the program, the loan/deposit ratio has continued to be far below the pre-crisis level.

[24] As an illustration, by July 1998 the total donor pledge was US$7.9 billion (US$3 billion from the World Bank). This was outside the bilateral loans pledged by numerous countries. It was the foreign private money that quickly dried up during the time. It is also important to re-emphasize what has been argued in the text earlier, i.e., that in general Indonesia had done well in managing its official loans.

much more growth might have been obtained and with what indirect consequences.

The financial general equilibrium model (FCGE) employed in the analysis captures the intricate links between financial and real sectors. Each agent, including banks, the central bank, government and households, has its own balance sheet and each can enter into international as well as domestic transactions. The use of a detailed classification of economic agents, including different categories of households, and the endogenous price features of the model allow one to extend the analysis to include the impact on the distribution of income, and to some extent also the poverty impact of different policies (see Azis, 2001, 2002 and 2006a and Azis et al., 2004, for detailed descriptions of the model).

The baseline scenario is meant to capture the essence of what actually transpired, against which simulated alternatives are compared. The baseline thus includes a dramatic increase of BLBI, which is captured as augmented liabilities in the consolidated commercial banks' balance sheet. However, this is not matched by an increase in banks' credit. Instead, SBI holding rose (see the earlier discussions). When credit actually increased, it was lent recklessly to businesses in the banks' own group, potentially raises the non-performing loans (NPL).[25] On recap bonds in the baseline scenario, the amount increased gradually to reach Rp600 trillion by the end of 1998. By carefully specifying the trend of these developments, the model is capable of generating a baseline run that comes close to the true values. This baseline run covers the years 1998-2002, the primary years for post-crisis recovery. The baseline is then compared with the following counterfactual scenarios: (1) Targeted budget stimulus with a smaller amount of BLBI liquidity support to the banks; and (2) Targeted budget stimulus with a smaller amount of recap bonds.[26]

4.1. Targeted Expenditure Stimulus with Less BLBI

In this simulation, the government is to provide a budget expenditure stimulus of Rp 40 trillion in 1998, targeted to five sectors.[27] Particular attention is given to the agricultural sector, which receives the largest stimulus. This sector is affected directly through investment in infrastructure, and indirectly through an improvement in the sector's productivity. In the model, such public investment would attract (crowd-in) private investment, causing an increase in the demand for bank loans. At the same time, it is assumed that the amount of BLBI extended to the banking sector in 1998 would have been Rp 40 trillion less (around 27 percent of the actual amount). Interestingly enough, although the commercial banks' total liabilities are reduced by the reduced amount of BLBI, total bank loans and thus total credit increase owing to the greater demand for

[25] According to the report by the Supreme Audit Agency (BPK), as much as 96 percent of the extended BLBI could potentially become a government loss (unpaid borrowing). In the model, bank credit is broken down into two categories: performing and non-performing loans (NPL).

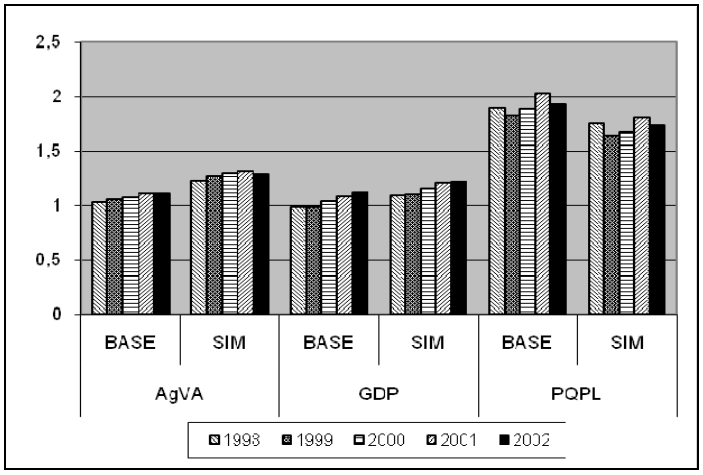
[26] Full details of the scenario runs are available from the author.

[27] Food (Rp20 trillion), Non-food Agriculture (Rp10 trillion), Transport (Rp8 trillion), Construction (Rp1 trillion), and Trade (Rp1 trillion).

credit as noted. The ratio of non-performing loans to total credit is assumed fixed, which then implies that the magnitude of NPL increases.[28] The increased bank lending is in lieu of reduced SBI holdings. As a result, the ratio of credit to SBI increases by more than in the baseline up to 2002, the last year of the scenario run.

Under this scenario, GDP and investment would have been higher than in the baseline, and the value added of the agricultural sector is also higher in each year in the scenario (Figure 5). This is particularly important to note since the policy stimulus occurred only in 1998 (a one time impulse) and yet the favorable impact seems to last for several years. The resulting agriculture/GDP ratio is generally higher throughout the simulation period (figure 6). Most importantly, the unemployment rate would have been lower than in the baseline all the way up 2002. Employment creation occurs not only in agricultural activities but also in the off-farm sector.

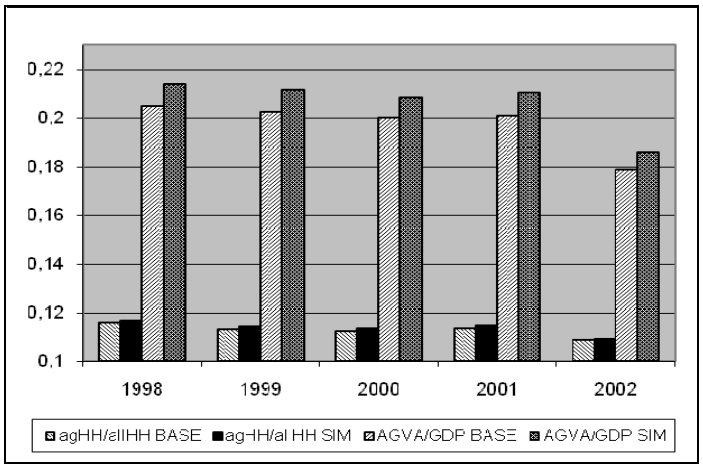
Figure 5. Agricultural Value Added, GDP and Price of Poverty Line: Budget Stimulus with Less BLBI



Notes: *1.Vertical axis shows the index for each variable, where the pre-crisis year (1995) = 1.0.*
2. AgVA = agricultural value added; PQPL = price of poverty line (price index for basic goods).
3. BASE = baseline scenario; SIM = policy scenario result

[28] This is possibly an extreme assumption as the ratio of nonperforming loans to total credit could fall when BLBI is reduced, since most of the BLBI ended up as NPL.

Figure 6. Relative Income of Poor Agricultural Households and Agricultural Share of GDP: Budget Stimulus with Less BLBI



Notes: *1. Vertical axis shows the ratio for each variable.*
2. "agHH" and "allHH" refer to incomes of agricultural and total households, respectively; AGVA is the agricultural sector value added.
3. BASE = baseline scenario; SIM = policy scenario result

The equity of the banks in the initial year (1998) is lower under this scenario, as it receives less BLBI funding, which increases the risk premium on interest and loan rates. But lower-than-baseline bank wealth occurs only in the policy stimulus year, owing to the greater economic growth, and the risk premium is higher only in the short run. Yet, the loan rate is higher all the way until 2002, implying that factors other than risk tend to influence the rate. Obviously, a higher loan rate could reduce investment in some sectors. But as indicated above, the overall GDP is higher. Given the fact that private investment is specified as a function of not only the loan rate but also the level of economic activity, overall private investment remains higher than in the baseline. In general, therefore, there is a crowding-in process. Higher bank wealth after 1998 puts banks in a better position to extend credit. This is the reason why despite the decrease in the liability item associated with BLBI, bank credit tends to rise, lowering the SBI/credit ratio. On the monetary side, reserve money will surge.

What is the cost of this counterfactual policy? In the short-run, government deficits would rise because there is a time lag before tax revenues catch up with the fiscal stimulus. The simulation results indicate that, after starting out larger than the baseline, the scenario deficit reaches 2.5 percent of GDP, which is slightly lower than in the baseline (2.6 percent). Hence, the expansionary budget would have raised the deficit/GDP ratio only in the initial year. The incremental deficit would mostly financed by foreign borrowing from official sources. Since the risk premium in the model depends in part on foreign borrowing, this premium is higher than in the baseline scenario in 1998 owing to the added foreign exchange risk, but falls back in the rest of the simulation period.

In the stimulus year, prices tend to be higher compared to the baseline and lower thereafter. Increased demand for intermediate inputs due to increased public investment leads to higher prices of intermediate inputs in almost all sectors compared to the baseline. The only exceptions are prices in the non-food agricultural sector. These higher prices of inputs prompt higher output prices in most sectors except in the agricultural-related activities, i.e., food, non-food and the food processing industries. The average price level measured by the weighted price of output or the consumer price index or GDP deflator is higher only in 1998. This is consistent with the trend of base money. However, since the share of food and non-food agricultural goods in the "price of poverty" line is relatively large, the declining price of output in these sectors contributes to a lower-than-baseline "price of poverty" line (Figure 5).[29]

Incomes of all poor households declined in 1999 (as in the baseline) and then increased towards 2002. The poverty line price fluctuates in a similar manner. However, the price of poverty line is lower in each year in the simulation than in the baseline, suggesting that there would be less poverty.[30] The income disparity is in general more favorable than in the baseline.

Further evidence is that the ratio of the total income of the four poorest household groups to the total income of all household groups is higher in the scenario up to 2001. Moreover, the ratio of total income of the agricultural poor households (small farmers and agricultural employees; hereafter the "poor-2") to total income of all the poor households (poor-2 plus the urban and rural non-agricultural poor) is also higher all the way up to 2002. This suggests that the counterfactual policy to switch from BLBI to government expenditure would help agricultural households relatively more than other household groups both in real terms and as a share of GDP. This is confirmed in Figure 6, which shows the rising share of agricultural value added to GDP and also the improved relative position of agricultural households (the poor-2) under the current scenario as compared to the baseline.

4.2. Targeted Expenditure Stimulus and Fewer Recap Bonds

In this second simulation, government increases its 1998 budget spending to the same five sectors exactly as described above. At the same time, however, it issues an equivalent smaller amount of recap bonds (thus the recap bonds are reduced by Rp 40 trillion). This policy has mixed effects on the risk premiums. The reduction in bank wealth due to the fall in recap bonds increases risk and loan rates in the subsequent year. On the other hand, since risk is also affected by public and private borrowing from abroad, the decline of the latter tends to reduce risk. On balance, except in 1998, the risk premium turns out always lower than in the baseline, as in the first scenario.

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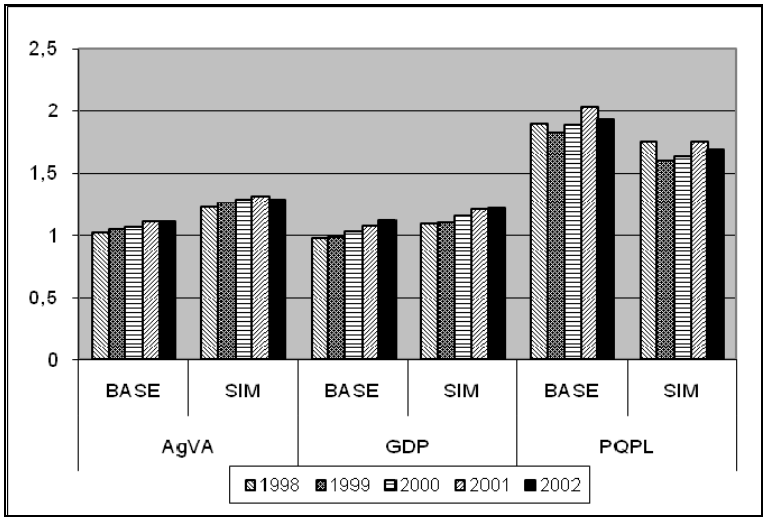
[29] Poverty line income is defined as the required quantity of basic consumption goods times the price of those basic goods. The "price of poverty" line refers to an index of the latter.

[30] Until one has the data on the intra-group distribution of income it is not possible to be certain about the precise trend of poverty.

The composition of banks' balance sheets also changes. On the asset side they hold less SBI and recap bonds and issue more loans. On the liability side they have less capital and less foreign borrowing. The deviations of the loan/SBI ratio from the baseline are smaller, meaning that the growth of lending would not have been as high as under the preceding scenario. Indeed, the direct effect on bank balance sheets of reducing recap bonds is more severe than in the case of cutting BLBI. In contrast to the latter, assuming a lower level of recap bonds also leaves more NPL on the banks' books, which causes bank wealth to be persistently lower than in the baseline, affecting bank capacity to lend (for the details of the model's transmission of mechanism see Azis et.al., 2004). Hence, although lending increases and SBI holdings decline, the lending/SBI ratio would not have been higher than in the preceding scenario. This also explains why the resulting reserve money and price level are not as high.

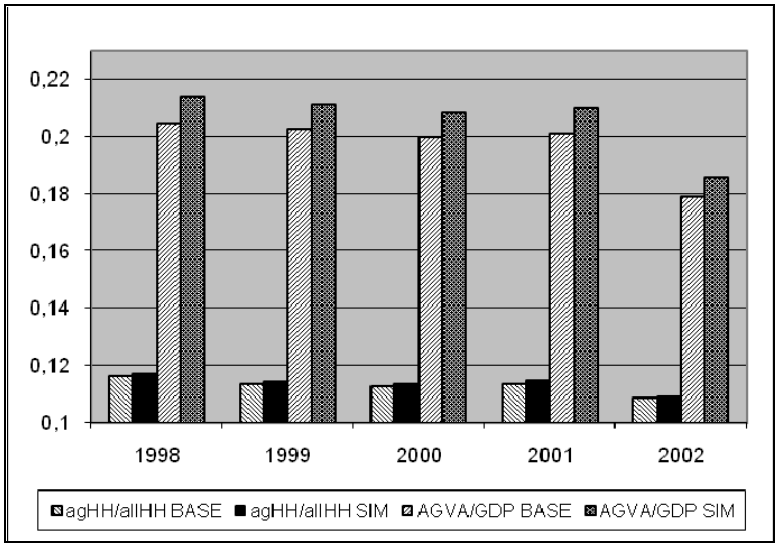
GDP, investment, and agricultural value added are higher than in the baseline. The unemployment rate is lower, and the share of agricultural value added in total GDP is higher. The price level is higher in the stimulus year, lower thereafter. The price of poverty line is lower throughout the period (Figure 7) and for much the same reason discussed in the earlier scenario. Also, the price of poverty line ends up 3.6 percent lower in 2002 than in 1998 (compared to a fall of only 1.1 percent in this time period in the first scenario). However, the total incomes of the four poorest socioeconomic groups fall 4.1 percent between 1998 and 2002 and so the trend in poverty incidence during the scenario cannot be conclusively determined (nor could it in the first scenario). Nevertheless, the income distribution throughout the scenario is less unequal than in the baseline. As in the preceding scenario, poor agricultural households seem to benefit relatively more than non-agricultural households. This is seen by the higher-than-baseline ratio of incomes of the two poorest groups over incomes of all households (Figure 8).

Figure 7. Agricultural Value Added, GDP and Price of Poverty Line: Budget Stimulus and Fewer Recap Bonds



Notes: *1.Vertical axis shows the index for each variable, where the pre-crisis year (1995) = 1.0.*
2. AgVA = agricultural value added; PQPL = price of poverty line (price index for basic goods).
3. BASE = baseline scenario; SIM = policy scenario result

Figure 8. Relative Position of Poor Agricultural Households and Agricultural Share of GDP: Budget Stimulus and Fewer Recap Bonds



Notes: *1. Vertical axis shows the ratio for each variable.*
2. "agHH" and "allHH" refer to incomes of agricultural and total households, respectively; AGVA is the agricultural sector value added.
3. BASE = baseline scenario; SIM = policy scenario result

The fluctuations in the government deficit are similar to those in the preceding scenario. Again much of the increase is financed by government borrowing from abroad. The deficit/GDP ratio increases from less than 1 percent in 1997, the last pre-scenario year, to 4.8 percent in 1998, then decreases to 2.7 percent and 1.6 percent in 1999 and 2000, and increases again to 2.6 percent in 2001 and 2002. This suggests that expanding budgetary expenditures, providing it is targeted to the right sectors, combined with equivalently reducing the amount of recap bonds would have been effective in stimulating the economy without causing a large budget deficit.

Increased government borrowing from abroad would tend to raise the risk premium, causing private capital inflows to decline and the exchange rate to depreciate, both of which would raise inflation. But as discussed earlier, banks end up borrowing less from abroad, more than offsetting the effect of government borrowing on risk. Consequently, the net effect is that the exchange rate tends to appreciate.

In sum, the counterfactual policy simulations reveal that the alternative policies of smaller 1998 issues of BLBI or recap bonds (the two items that make up the bulk of Indonesia's sovereign debt) in exchange for larger spending on specific economic sectors would have yielded better socio-economic outcomes than the policy actually followed, as modeled in the baseline run. More importantly, these alternatives could have been achieved without putting fiscal and macroeconomic stability at risk. Moreover, given the fact that most BLBI funds were misused, and the distribution of recap bonds was subjectively decided by the government, there is no reason to believe that the condition of

the banking sector would have been worse under the counterfactual scenarios. Even if more banks had been closed down as a consequence, the banking sector's health would have been better with a stricter screening out process.

5. CONCLUSIONS

The policy of providing liquidity supports and issuing a massive amount of government bonds through the bank recapitalization program during the 1997-98 crisis dramatically changed the structure and dynamics of Indonesia's sovereign debt. Virtually none prior to the crisis, domestic debt escalated since 1999 such that it became more than half of total debt. The adverse repercussions of the policy turned out to be more than just putting pressures on the government's fiscal position. When the rescued banks found themselves freed of non-performing loans and instead holding non-risky government bonds, they declined to extend as much new credit to the private sector as they might have, making Indonesia's economic recovery the slowest among the Asian crisis countries. While the costs of the program are enormous, the intended benefits are hardly seen.

Considering the institutional constraints that should have been foreseen, and putting the issue of getting to debt and fiscal sustainability in a broader context by looking at what happens with other socio-economic indicators (e.g., GDP growth, exchange rate, unemployment, poverty, etc), the bank rescue operations in Indonesia were over financed, poorly structured, and went overboard for the banks at the expense of the economy. Promoting growth via fiscal stimulus should have been part of the debt management program because the higher income that would have resulted would have itself helped improve the future debt position and the government's repayment capacity.

Given the difficulty of rescuing the banking sector in a financial crisis, and the serious repercussions of policy mistakes, one important policy lesson is that a greater emphasis ought to be given to the crisis prevention policies. A proper oversight of the banking sector is important, but so is the policy to insulate the public sector from problems in the private banks. The government must be always wary of how large an issue of recap bonds is needed when confronted with a banking crisis. If the crisis inevitably occurs, a counter-cyclical fiscal policy should be part of the overall debt management. Finally, as well as the level of foreign currency obligations, it is also clear from this case that the volume of domestic debt matters, both in terms of fiscal sustainability and macroeconomic consequences of domestic debt-servicing obligations.

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