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5 The Conduct of Economic Policies in Indonesia and Its Impact on External Debt

Wing Thye Woo and Anwar Nasution

5.1 Introduction

Our aim is first to explain why Indonesia did not experience an external debt crisis in the 1982–84 period as did most of the Latin American countries, and then, on the basis of our analysis, make recommendations to deal with Indonesia's present debt situation. We hope that the lessons drawn will be useful as well in the design of adjustment policies for other countries experiencing debt-servicing difficulties. Our study goes beyond the normal economic analysis by giving detailed attention to the Indonesian historical and political setting within which decisions about policies are made.

We conclude that the major reason for the absence of a 1982–84 debt crisis was the satisfactory management of the exchange rate, a task that was made easier because there were neither burgeoning budget deficits nor extended periods of loss of control over monetary growth. The absence of protracted exchange rate overvaluation from 1979 onward was fundamental in maintaining a strong nonoil tradable sector. The nonoil tradable sector was able to earn enough foreign exchange to service Indonesian debts when the external shock of high interest rates increased debt-service payments and the recession in industrialized countries lowered the price of oil. We also want to emphasize that the absence of extended exchange rate overvaluation kept the external debt down by not encouraging capital flight. We ascribe this use of the exchange rate to protect the tradable sector as much to the existence of an influential political constituency consisting of (comparatively)

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neoclassical economists, Javanese peasantry and Outer Island residents, as to balance-of-payments considerations.[1]

This chapter is organized as follows: sections 5.2 and 5.3 explore the historical and political dimensions of economic policymaking, and section 5.4 verifies the veracity of our political economy approach by looking at the distributional consequences of the fiscal system. Section 5.5 reviews the conduct of monetary policy and finds that the choice of the monetary control mechanism in the 1970s was influenced by political economy considerations. Section 5.6 shows how exchange rate management since November 1978 has been sensitive to both the economic viability of the agricultural export sector and the balance-of-payments position. Section 5.7 identifies three factors—concessional loans, prudent debt management, and export orientation—responsible for the non-crisis outcome in 1982–84, and then estimates their relative contribution. Section 5.8 discusses the prospects of Indonesia avoiding a future external debt crisis, and the role for policy in ensuring such an outcome.

5.2 Political and Economic Instability, 1950–65

An understanding of the economic conditions prior to the establishment of the New Order government in 1966 is important because the economic policies of the 1950–65 period left a very strong imprint on the institutional memory of the new government, especially insofar as it resides in the person of President Soeharto. During this period, the Indonesian government was preoccupied with domestic political and military problems, with the restoration of sovereignty on West Irian, and with political recognition in world forums. Little attention and resources were devoted to economic development.

An increasingly difficult budget situation made inflation a major problem. Taxes on trade were the major source of government revenue, but the overvalued multiple exchange rate system was reducing the profitability of the tradable sector, causing it to shrink. The twin rebellions on the islands of Sumatra and Sulawesi in 1958 constituted a simultaneous supply and demand shock to the budget. The rebellions forced large increases in military expenditure at the same time that the government revenue base was reduced because both of these islands were important sources of export tax revenue. The monetization of the budget deficits raised the average 1958–61 inflation rate to 25 percent from the 1950–57 average of 17 percent.

The budgetary pressures grew steadily worse, resulting in a period of high inflation in 1962–65. Between 1962 and 1964 both money supply and the cost-of-living index roughly doubled every year, and by the end of 1965 they were doubling every few weeks. Economic growth

slowed to 0.8 percent per year in this turbulent period. The evolution of the export-to-GDP ratio tells the story of economic decline very well; it fell from 8.7 percent (1951–57) to 6.8 percent (1958–61), and then to 1.1 percent (1962–65).

The internal political struggle culminated with the abortive coup by military personnel sympathetic to the Indonesian Communist Party (PKI) on the night of 30 September 1965. The political instability aggravated the economic instability. The increasing economic difficulties speeded up the transfer of authority from President Soekarno to the anti-Communist General Soeharto in the following year.

5.3 The Political Economy Factors in Policymaking

The economic chaos of the 1958–65 period left such a deep impression that the new Soeharto government has had a "balanced" budget rule since 1968. In reality, this rule amounts to refusing to finance the deficit through money creation and to limiting the deficit to the availability of foreign loans, which is officially described as foreign "revenue".[2] Another consequence of the chaos was the recognition that the exchange rate is an extremely potent policy instrument that can effect large-scale economy-wide resource reallocation and income redistribution.

President Soeharto has been in power since October 1965 and has not faced any serious challenges to his rule since the 1974 riots. The Indonesian political system can be described as a bureaucratic-authoritarian state with implicit corporatist features. We can identify three political concerns that have significantly influenced his choice of economic policies. The first is avoiding conditions favorable to the revival of the PKI. Since the PKI was primarily a Javanese peasant-based movement, the policy implication is that conditions in the rural area must be improved. The second concern is to display equitable treatment of the Outer Islands, given their long history of secessionist movements. Since the economy of the Outer Islands depends heavily on tree crop exports, this further strengthens the case for promoting agricultural development. It must be added that Soeharto, because of his peasant origin, has consistently shown a strong personal commitment to eliminating rural poverty. Soeharto's third concern is one common to all politicians: the maintenance of his power base.

Political patronage has often taken the form of trade restrictions to benefit specific groups. It would not be correct, however, to attribute all trade restrictions to rent-seeking motivation. Ideology also plays an important role. Soeharto, like most members of the 1945 generation who fought in the bitter war for independence, is influenced by an economic nationalism which is congruous with Indonesian political

nationalism. Dutch economic policies were seen as designed to impose a plantation economy on Indonesia to serve the need of Dutch manufacturing industries for raw materials. In reaction, the generation of 1945 regards industrialization as synonymous with economic development. The policy translations of economic nationalism are establishing high trade barriers to induce the development of a manufacturing sector, and enacting foreign investment laws more strict than those of neighboring countries.

The primary reason why Indonesia sometimes pursues a contradictory mix of liberalizing and protectionist policies is because of the above political, ideological, pecuniary, and personal elements working themselves through two groups of contending presidential economic advisors, popularly referred to as the technocrats and the technicians. The technocrats are mostly economists of neoclassical persuasion who work at the Ministry of Finance and the National Planning Body (BAPPENAS). Their acceptance of the comparative advantage principle leads them to emphasize the development of the nonoil export industries, particularly agricultural commodities and labor-intensive manufactured goods. This has meant a favorable treatment of the agricultural sector because it supplies about 80 percent of nonoil exports. Exchange rate devaluations rather than the removal of trade barriers on imported inputs are used to promote exports. This is because the technocrats control the ministries that oversee macroeconomic policies, but not the Ministry of Trade and the Ministry of Industry which have authority over quantitative restrictions. Their policies find favor with the president because they address his political concerns for raising rural income and for maintaining equitable treatment toward the main islands.

The second group of economic advisors, the technicians, is an amorphous collection of technicians-turned-managers, military advisors, and economists with structuralist inclinations. The technicians are united by their common belief in the general validity of the infant industry argument, and by their common rejection of foreign capital ownership. They see state enterprises—like the oil company, Pertamina, until its downfall—as the vehicle to achieve these two objectives. This position allies the technicians with members of the intelligentsia who see the state enterprises as the way to counterbalance Chinese domination of the corporate sector.

The technicians' push for import-substitution industrialization has also won them the support of the army, the most powerful constituency in the country. Thanks to the dual function (*dwifungsi*) doctrine that legitimizes military participation in economic development, the expansion of state enterprises translates directly into more managerial positions for senior military personnel. It must be noted that since most of the import-competing industries are set up in urban Java, the higher

prices of manufactured goods represents an implicit tax on the residents in the rural sector and in the Outer Islands.

In looking at the political setting within which policies are chosen, we have identified an important political coalition of technocrats, Outer Islanders, and rural residents which favors a policy package emphasizing the maintenance of a competitive exchange rate. Since a debt crisis occurs when a government runs out of a foreign reserves—either to service its guaranteed external debts or to permit private residents to convert their domestic currency to service private external debts—such a policy package reduces the probability of a debt crisis by keeping the (foreign exchange earning) nonoil export sector healthy.

5.4 The Fiscal System

The most notable feature of the 1970s is the central government's increasing reliance on oil as its chief source of revenue. Oil revenue as a share of total federal revenue rose from 26 percent in 1969–70 to peak at 71 percent in 1981–82. Nonoil revenue normalized by GDP fell from the 1969–71 average of 8 percent to the 1980–82 average of 6 percent. The fiscal danger of such a narrow tax base was brought home dramatically in 1982 when the global recession caused oil prices to collapse. Oil revenue, expressed in 1980 rupiahs, fell from Rp 7.8 billion in 1981–82 to Rp 6.9 billion in 1982–83, causing real total revenue to fall for the first time since the Soekarno years.

It was clear that greater internal resource mobilization was necessary. A completely revised personal and corporate income tax code came into force in January 1984, a value-added tax in April 1985, and a consolidated property tax in 1986. The result was that real nonoil revenue (1980 prices) rose from Rp 3.6 billion in fiscal 1983 to Rp 4.7 billion in fiscal 1986. It is important to note that the oil revenue contributed to "undertaxation" in a subtle way which led to greater external debt accumulation. The two OPEC price increases encouraged undertaxation by giving Indonesia access to external credit on very favorable terms.

Woo's (1987a) examination of the fiscal system supports our claim that the technocrats favor an economic strategy that leads to resource transfers to the Javanese rural areas and the tree crop industries in the Outer Islands. The secular decline in trade taxes and the low taxation of land relative to income reflect Soeharto's political concerns about communism and secession, as well as the technocrats' neoclassical inclination toward the comparative advantage doctrine. This favorable tax treatment of the agricultural sector improves the rural-urban terms

of trade and hence encourages the production of tradables, the presence of which determines a country's ability to service its debts.

In examining government expenditure, Woo (1987a) surmised from fragmentary evidence that government spending was more likely to display a rural rather than an urban bias. In the absence of more detailed data, disproportionate weight was given to the budget allocations for fertilizer subsidies, irrigation projects, rural school programs, the village public works programs, and food subsidies. With better data, we were able to garner stronger evidence to support the hypothesis that budget allocations were very sensitive to interisland equity. There is in fact evidence that interisland equity takes precedence over rural-urban equity. This is consistent with our conjecture that the concern for rural development is based more on the eradication of poverty than on narrowing the rural-urban gap.

The analysis in this section sets the stage for the following discussion in which we find that political economy factors have been important in determining the debt outcome. To the extent that people are consistent in their actions, the fact that the technocrats implemented, with Soeharto's approval, a fiscal policy that favored the tradable sector means that they would also advocate a similarly-oriented exchange rate policy. Such an exchange rate policy, as we will see, yields side effects which are salutary to external debt servicing.

5.5 Monetary Policy and Financial Structure

While the balanced budget policy of the Soeharto government effectively ended the creation of money to finance budget deficits, it could not prevent monetary policy from moving in tandem with fiscal policy during the 1970s. This is because the main instrument for monetary control prior to April 1974 was the extension of central bank credits to the banking system, state enterprises, and private companies. Since these credits were extended for a contracted time period, the government was not in a position to engineer quick increases or reductions of the money stock. This meant that with the maintenance of a fixed dollar-rupiah exchange rate, the conversion of the oil revenue from dollars to rupiahs in order to finance the expanded government expenditure automatically increased the money supply. Thus, when the price of oil quadrupled at the end of 1973, encouraging the government to increase its spending, the monetary authorities lost control of the money supply. Reserve money grew 57 percent in 1974 and the inflation rate for that year was 41 percent. The Central Bank responded to this monetary anarchy by setting lending ceilings on the banking system in April 1974.

It is understandable to use lending ceilings as a shortrun, stopgap measure to control monetary growth, but Indonesia continued to rely upon them for monetary control until June 1983, despite their well-known deleterious effects. The reason is that the credit ceilings gave the government an additional instrument to consolidate its political base. Over time, Bank Indonesia was instructed to introduce detailed ceilings by type of credit for each bank through an extensive selective credit system featuring subsidized interest rates to achieve other goals. For example, banks were assigned a civic function by their restricting certain credit only to *pribumis* (indigenous people) and establishing credit for them as a priority in order to enhance *pribumis* participation in economic activities. The highest priority items were the financing of rural participation in the government's rice intensification program, and the financing of a scheme to stabilize the price of rice. Since most priority credits were handled by the state banks, the policy of ceilings with selective credit became one of the major tools protecting the state banks from competition with private banks. Since the state banks also have a wider network of branch offices than the private banks, this mechanism of monetary control preserved the dominant position of the state banks. In the absence of pressure to innovate in order to be more efficient, the Indonesian financial system remained underdeveloped.

One of the policy responses to the external shocks of the 1980s was an overhaul of the financial structure which was announced in June 1983. The financial reform package included partial deregulation of interest rates, elimination of credit ceilings, and reduction in the scope of Bank Indonesia's subsidized credits to state-owned banks. To increase the amount of central bank instruments for open market operations, Bank Indonesia began reissuing Debt Certificates (SBI) in February 1984 and introduced Money Market Instruments (SBPU) in January 1985.

It is clear that the financial instruments SBI and SBPU still do not provide sufficient control over monetary aggregates. This is evident in the way the money supply had to be contracted in response to a speculative run on the rupiah in June 1987. The minister of planning, in addition to asking Bank Indonesia to sell Rp 800 billion of open market instruments, ordered the state enterprises to withdraw Rp 1.3 trillion from state banks to be placed in central bank securities.

This action reveals that the market for both SBI and SBPU is still too shallow. It may be difficult to increase their role if the financial markets remain underdeveloped. Financial deepening is an important priority, but not only because of the need to enhance the effectiveness of the monetary instruments. Financial deepening would also better mobilize (and maybe increase) domestic savings, reduce the dependence on

external credit, and improve the overall allocation of capital within the economy. A boost to financial deepening would be the privatization of some of the state-owned enterprises, and an easing of external debt service would be achieved if foreigners were allowed to buy into these enterprises.

5.6 Exchange Rate Policy

Indonesian exchange rate policy is characterized by three distinct phases in the 1966–87 period. The first phase is from October 1966 to July 1971, in which there was a steady dismantling of the multitiered exchange rate system into a unified exchange rate. This phase revealed a readiness to have medium-sized devaluations at short intervals in order to restore competitiveness eroded by the high inflation in Indonesia.

In the second phase, from August 1971 to October 1978, there was a fixed exchange rate. The reason for this remarkable stability is straightforward: the balance of payments was very strong throughout the period. The rapid development of the oil sector together with the 1973 OPEC price increase caused Indonesian oil exports to grow as follows (in U.S. $ billion): 0.4 in 1969, 0.9 in 1972, 5.2 in 1974, and then 7.4 in 1978. The result was the swelling of the nongold reserves (measured in the number of weeks of imports they could support): 8.1 in 1969, 19.1 in 1972, 20.2 in 1974, and 20.4 in 1978. The macroeconomic conditions also did not warrant any additional stimulus which a devaluation would bring. The sustained high income growth rates of this period—7.9 percent per year—were achieved with substantial overheating of the economy. The average 1973–78 inflation rate was 22 percent compared with 8 percent in 1970–72.

The third phase involved three large devaluations in November 1978, March 1983, and September 1986, separated by moderately long periods of gradual exchange rate depreciation. There are two, mutually compatible, explanations for the 50 percent devaluation in 1978. The first explanation views the November 1978 devaluation primarily as an anticipatory action to the inevitable dropoff in oil export earnings due to resource depletion.

The second explanation emphasizes the economic difficulties and political tensions associated with the reallocation of resources being forced upon the economy by the overvalued exchange rate. The overvaluation of the rupiah was the result of maintaining the exchange rate at 415 rupiahs to the dollar despite the large domestic inflations from 1974 to 1977. This meant that Indonesian producers of tradables were experiencing a profit squeeze. The prices of their output were fixed by international competition, but the prices of their domestic

inputs were being driven up by the double-digit inflation. The result was reports of increasing unemployment in the tradables industries, particularly in the labor-intensive agricultural export sector. Indonesia was suffering from the "Dutch disease." In this view, the 1978 devaluation was as much due to political concern about worsening conditions in the countryside, as to economic concern about the desirability of the resulting composition of economic activities. After all, the level of reserves in 1978 could sustain the existing amount of imports much longer than was possible at any time during the 1969–76 period (see table 5.1, column e).

It must be stated that the deleterious effects of the Dutch disease on the nonoil export sector are not obvious. Nonoil nonLNG exports, whether measured in physical units *or* in dollars *or* in the units of imports for which they can be exchanged, show steady growth throughout 1972–78 (see table 5.1, columns a, b, and c). The production disincentive faced by the nonoil export industries is clearly seen only when one measures the amount of local purchasing power of their exports (see column d). Even though the nonoil exports were bringing in increasing amounts of foreign goods, the steady real appreciation of the exchange rate meant that the nonoil export industries were not being paid a greater number of baskets containing the mix of goods typically consumed by Indonesians. In terms of foreign purchasing power, the nonoil export industries increased their revenues by 32 percentage points between 1973 and 1978, but their revenues were unchanged if measured in terms of local purchasing power.

More direct evidence of the production disincentive is the movement of prices of tradables relative to prices of nontradables, PT/PN. The three proxies of PT/PN in table 5.1 show an average decline of 29 percent between 1973 and 1978.[3] The 50 percent nominal exchange rate devaluation caused PT/PN to increase by 29 percent, almost restoring the profitability of the tradable sector.

The speed and size of the response of nonoil nonLNG exports were impressive. Export volume went up by 36 percent in one year, raising dollar earnings by 52 percent. The 32 percent growth in foreign purchasing power in 1979 translated into a domestic purchasing power increase of 78 percent.

We interpret the quick and large response to the devaluation as proof of the Dutch disease, the mounting severity of which since 1974 caused excess capacity in the traditional export industries to increase. Small producers of tree crops were spending more and more of their time in nontradable activities. Meanwhile, the real prices of their agricultural products sank as a constant nominal exchange rate was maintained in the face of large domestic price increases.

Table 5.1 Background to the November 1978 Devaluation

Performance of Nonoil NonLNG Exports (1974 = 100) and Foreign Reserves Position

	(a)	(b)	(c)	(d)	(e)
	Nonoil nonLNG exports measured in terms of:				Nongold Reserves Measured in Number of Weeks of Current Level of Import
	Physical Volume	US$	Foreign Purchasing Power	Domestic Purchasing Power	
1969	n.a.	28.6	52.2	51.6	7.8
1970	n.a.	33.6	58.5	60.1	8.1
1971	73.9	36.0	59.4	66.9	8.7
1972	83.4	40.0	60.2	73.7	19.1
1973	96.3	73.2	91.1	103.2	15.3
1974	100.0	100.0	100.0	100.0	20.2
1975	99.6	82.6	74.2	69.5	6.4
1976	111.9	115.2	103.8	80.8	13.7
1977	121.0	159.7	133.0	100.9	20.9
1978	118.0	166.4	123.0	103.6	20.4
1979	160.0	253.7	162.4	184.6	29.3
1980	144.5	276.4	155.9	170.8	25.9

Indicators of Tradable-Nontradable Price Ratio (PT/PN), 1974 = 100

	1971	1972	1973	1974	1975	1976	1977	Jan-Oct 1978	1979	1980
Import price index[a]	75.0	82.2	91.6	100.0	87.2	74.5	66.3	65.3	73.7	70.5
Nonoil export price index[a]	63.9	65.8	91.6	100.0	66.4	65.6	71.7	70.4	93.3	93.8
Competitiveness measure[b]	114.1	127.1	120.3	100.0	87.3	74.8	74.2	79.6	111.3	101.1

Notes: Physical volume (col. a) from deflating rupiah value series by nonoil export price index. Foreign purchasing power (col. c) from deflating US$ value series by export unit value of industrial countries. Domestic purchasing power (col. d) from deflating rupiah value series by Indonesian CPI.

[a]Deflated by Jakarta CPI housing component.

[b]The competitiveness measure is from inverting the Morgan Guaranty real exchange rate.

The March 1983 and September 1986 devaluations were undertaken to boost nonoil exports in the face of large declines in oil export earnings. Manufacturing exports grew very rapidly after the March 1983 devaluation. They jumped (in US $ million) from 850 in fiscal 1982, to 1480 in fiscal 1983, and to 2166 in fiscal 1984. The strong export responses to the 1978 and 1983 devaluations indicate that export-oriented industrialization is a real possibility as long as favorable relative prices are maintained through appropriate exchange rate and trade policies.

While it is clear that negative external demand shock had a role in worsening the balance of payments from 1983 to 1986, we want to point out that there were also internal developments during this period that caused substantial movements in relative prices which were unfavorable for the tradable sector. Specifically, we are referring to the widespread use of quantitative restrictions (QRs) in the 1980s. Of the 5,229 items imported in 1985, 1,484 required import licenses and 296 were under quotas. The import licenses were usually given to only two or three traders, or to the few firms producing the competing goods domestically, and thus conferred a monopoly position to their holders. The range of activities protected by import licenses accounted for 32 percent of total domestic value added, excluding construction and services. If the petroleum sector, which requires no protection, is also excluded, then the coverage is 53 percent of total domestic value added.

The implication of this microeconomic distortion for exchange rate management is profound. The intrusion of this distortion since late 1982 and its quick metastasis across the tradable sector renders invalid trying to draw conclusions about production incentive by examining the movements of the macroeconomic proxies for PT/PN. Output prices of tradables are set by international competition, while those of nontradables (which are generally very labor-intensive) are set by the domestic cost structure, the level of which is primarily determined by domestic wages on the supply side and domestic macro conditions on the demand side. Hence, the introduction of a quota on an imported input to the tradable sector will reduce the profitability of the tradable sector without any change in PT/PN.

The point we want to emphasize is that although the Morgan Guaranty competitiveness index in predevaluation 1986 shows almost the same value as in postdevaluation 1979 (110 versus 111), it does not mean that the August 1986 exchange rate was not overvalued. In order to have the 1986 nonoil export supply schedule in the same position within the familiar Marshallian price-quantity space as in 1979, a devaluation was warranted, especially in light of the shrunken gap between output and input prices.[4] It is of course an empirical question how much the additional nonoil export earnings would have been in the absence of QRs, especially in comparison to the fall in oil export earnings. The current account deficit would still have widened in 1986, but it may not have doubled as it did.[5]

5.7 External Debt Management

The Soeharto government is no stranger to external debt management: it inherited an external public debt of $2 billion. It cut its teeth on the economic stabilization and rehabilitation program of 1966, within which the rescheduling of the Soekarno debts and arranging for new capital

inflows to support the balance of payments were key components. Given the desperate situation of Indonesia, the western countries set up the Inter-Governmental Group on Indonesia (IGGI) to ensure a long-term coordinated plan of official assistance. IGGI was generous both in the amount and the terms of assistance. In the 1967–70 period, it gave an average of $477 million a year, with a repayment period of 25 years which included 7 years of grace and an interest rate of 3 percent.

The mix of generous external assistance and corrective economic policies undertaken by the Soeharto government imparted a new dynamism to the Indonesian economy. The annual average growth rate from 1968 to 1972 was 8.2 percent compared to the average rate of 1.2 percent in the preceding five years. By 1974, the international credit markets had rescinded whatever credit restrictions they had imposed on borrowing by the Indonesian government in the aftermath of Soekarno's economic Armageddon. The reasons for this change were threefold: one, the avalanche of oil revenue increased the creditworthiness of the Indonesian government; two, the boom in commodity prices in the early 1970s; and, three, the decreased lending opportunities in the OECD countries whose medium-term economic prospects were rather bleak after the 1973 OPEC price increase.

On consumption-smoothing grounds, the readmission into the external credit market resulted in a net gain to Indonesian national welfare. This welfare gain was not without its price: Indonesia was now exposed to two kinds of new risks. The first risk is systemic in nature and is a threat to every country with external debts. The second is the possibility of imprudent borrowing by Indonesia. This danger was realized in February 1975 when the state oil company, Pertamina, could not roll over a $400 million short-term loan and defaulted.

It could be cogently argued that the Pertamina crisis was a blessing in disguise. The government, by denying all state-owned enterprises direct access to the external credit market after the Pertamina embarrassment, did not have as large a publicly-guaranteed external debt when 1982 began as it otherwise would have had.

A common explanation for an external debt crisis puts the blame on excessive budget deficits that force the government to borrow from abroad. The statistic usually cited in support of this fiscal imbalance view is the ratio of official long-term debt to GNP, DGNP.[6] The official long-term debt is taken to represent the cumulated amount of fiscal deficits financed by external borrowing, and the normalization by GNP is to indicate the extent to which the country has been made to live beyond its income by the budget deficits.

The fiscal imbalance explanation of an external debt crisis points out that DGNP for Mexico rose from 9.1 percent in 1970 to 18.7 percent in 1981, the eve of the debt crisis; and for Brazil it rose from 7.1 percent to 17 percent. It is true that the Mexican and Brazilian gov-

ernments increased their budget deficits significantly during this period, but it is not true that they had been more profligate than the Indonesian government. The 1981 DGNP for Mexico, Brazil and Indonesia is 18.7 percent, 17.0 percent, and 17.7 percent, respectively. There are just not enough differences in the 1981 DGNPs to explain why Indonesia avoided a debt crisis in the two years that followed.

It must be mentioned that DGNP is a flawed indicator of public profligacy. First, the stock of long-term official debt can understate as well as overstate borrowing for budgetary reasons. This is because the government can borrow short term to finance budget deficits and long term to finance foreign market interventions. Second, DGNP is a measure of profligacy only in the sense of living beyond income, and not in the sense of being unable to service the acquired external debt. To indicate the latter one would have to normalize the external debt by the level of exports—the foreign exchange earning capacity of the country.

As pointed out earlier, a debt crisis occurs not only when the government does not have the reserves to service the loans it has guaranteed, but also when it does not have the reserves to enable private domestic residents to convert their service payments on the nonguaranteed debts from domestic currency to foreign currency.[7] To take the second cause of a debt crisis into consideration, we define the total external debt service to be the sum of external short-term debt plus the debt service on all external long-term debt, publicly-guaranteed and private nonguaranteed. We include short-term debt in our definition because we are interested in the financial resilience of a country to sudden protracted credit squeezes in international credit markets that make short-term borrowing extremely expensive, if not occasionally impossible. After all, the 1973–74 credit crunch did precipitate the 1975 Pertamina debt crisis in Indonesia, and the 1980–81 financial squeeze precipitated the PEMEX crisis in Mexico.

Since the reserve position of the country is crucial for avoiding debt crises, it is not appropriate to assess the country's ability to pay by looking at the total external debt service with respect to its income. A more appropriate indicator is the debt-service ratio, DSO—the total external debt service normalized by the level of exports—because the official reserve position is determined primarily by the ability of the export sector to earn foreign exchange.

Table 5.2 summarizes the basis for our choice of three factors to explain why Indonesia did not experience a debt crisis in 1982–84 as did Mexico and Brazil. Again, the three factors are concessional loans, high export orientation, and prudent management of the maturity structure.

Concessional loans. A high proportion of Indonesia's external debt was borrowed at fixed concessionary rates from IGGI (see items b and

Table 5.2 **Debt and Export Characteristics of Mexico, Brazil, and Indonesia**

	1980	1981	1982	1983	1984	1985	1986
a. All Short- and Long-Term Debt Service as Ratio of Exports (%)							
Mexico	103.6	117.1	138.9	80.8	69.0	66.5	n.a.
Brazil	114.5	113.6	146.0	104.5	72.1	72.6	n.a.
Indonesia	25.1	26.1	39.0	41.7	43.3	51.6	67.6
b. Proportion of Publicly-Guaranteed Long-Term Debt that has Variable Rate (%)							
Mexico	71.5	75.4	76.7	82.7	83.6	80.1	n.a.
Brazil	61.0	67.1	69.3	70.1	73.1	71.5	n.a.
Indonesia	16.2	17.8	20.0	22.8	23.7	21.7	n.a.
c. Effective Interest Rate for All Long-Term Debt (%)							
Mexico	22.8	20.1	20.8	15.9	18.0	16.1	n.a.
Brazil	23.3	23.7	23.0	13.9	11.7	11.2	n.a.
Indonesia	15.5	16.6	16.1	14.6	15.8	16.6	14.5
d. Export to GNP Ratio (%)							
Mexico	13.7	13.2	17.9	21.5	20.1	17.8	n.a.
Brazil	9.6	10.2	8.7	12.4	15.3	14.0	n.a.
Indonesia	29.7	27.9	23.6	25.8	25.7	25.1	22.6
e. Proportion of Debt that is Short Term (%)							
Mexico	28.3	32.1	30.5	11.1	6.8	5.8	n.a.
Brazil	19.3	19.2	19.3	14.9	11.6	10.8	n.a.
Indonesia	13.3	14.4	18.1	15.6	16.8	14.8	12.2

Sources: All calculations are based on data in World Bank, *World debt tables (1986/87).* 1986 figures for Indonesia are from World Bank, Indonesia, *Strategy for economic recovery* (May 1985).

Note: Effective interest rate is calculated by (debt service/debt).

c). This "IGGI effect" explains why the effective interest rate on Indonesian long-run debt averaged 16 percent against the 20 percent paid by Mexico and Brazil. Another result was that only about one-third of Indonesian debt was denominated in dollars compared to 90 percent of Mexican and Brazilian debt. This meant that the large appreciation of the dollar from 1979 to 1982 did not raise the effective interest rate for Indonesia as much as it did for Mexico and Brazil.

High export orientation. The availability of significant amounts of other tradables prevented Indonesia's debt-servicing capacity from collapsing as did Mexico's when the price of oil dropped in early 1982. Appropriate exchange rate policies by Indonesia, exemplified by the 1978 devaluation, ensured a diversified export bundle as well as a high export orientation. The average 1980–82 export/GNP ratio was 27 percent for Indonesia, but only 14 percent for Mexico and 9.5 percent for Brazil (see item d). Indonesia's political concern to keep the agricultural sector vibrant no doubt helped to maintain the observed export orientation.

Prudent management of the maturity structure. This was evident in that only 14 percent of Indonesia's debt in 1981 was short term, compared to the 19 percent for Brazil and 32 percent for Mexico (see item e). The shock of the 1975 Pertamina crisis caused official borrowing in Indonesia to take place very cautiously with regard to exposure in the short-term credit market. We can also refer to this third factor as the Pertamina legacy.

Capital flight has often been mentioned as a cause of the debt crisis in some Latin American countries.[8] We suspect, however, that imprudent maturity structure management may have contributed more to the Mexican debt-servicing difficulties than capital flight per se. To see this, we allowed capital flight to have the maximum impact on the actual DSO by assuming that Mexico financed the capital flight entirely with short-term debt.[9] We find that DSO in 1982 would have dropped from 138 percent to 64 percent if financing were done with long-term loans instead. Without capital flight, DSO would have been 45 percent. In short, the major reason Mexico's DSO was so high was that the way in which the government financed the capital flight added 74 percentage points. Capital flight per se added only 19 percentage points.

Our conclusion of imprudence in management of maturity structure can be shown in another way. To see that much of the Mexican short-term debt consisted of borrowing by the government rather than by commercial credits to finance imports, we recall that the Indonesian government, since the 1975 Pertamina crisis, had avoided short-term external borrowing as much as possible. Assuming that the Indonesian ratio of short-term debt to imports reflects normal trade financing, we can attribute 77 percent of Mexican short-term debt in 1981 and 1982 to government borrowing. The 1981 and 1982 figures for Brazil are 68 percent and 57 percent, respectively.

There is a trade-off in external debt management between generally lower interest payments and predictability of debt-service payments. Short-term liabilities pay lower interest rates most of the time, but it is risky to rely on a strategy which rolls over a large amount of short-term debt every period. An unforeseen credit crunch would force the country to increase borrowing in order to cover its interest payments. If this credit squeeze were to persist for more than three years, and was accompanied by a prolonged fall in the country's exports, the extra borrowing would be difficult to sustain as the situation increasingly smacked of a Ponzi game.

5.8 Conclusions and Prospects

To quantify the relative importance of the three factors in explaining the absence of an Indonesia debt crisis, we calculated what the total

debt-service ratios in the 1980–82 period would have been if Indonesian debt was paying the same effective interest rates as Mexico, as well as bearing the same maturity structure, and if the Indonesian export-GNP ratio was identical to Mexico's.[10]

The average values of the six possible decompositions of the effect of each factor and the range of values achieved are reported in table 5.3.

The decomposition identifies the export orientation of Indonesia as the most decisive factor in why Indonesia's total debt-service/export ratio was so low compared with Mexico's. Export orientation explained 31 of the 54 percentage point difference, accounting for 57 percent of the gap. The Pertamina legacy was of moderate importance. It contributed 18 percentage points, accounting for almost a third of the gap. Concessional interest rates and currency composition of debt played only a minor role in reducing the debt-service ratio, less than 6 percentage points.

Our finding that the IGGI effect contributed so little toward the reduction of the 1980–82 debt service/export ratio is surprising because many of the informed observers we talked to cited foreign concessionary loans as the primary reason for the absence of an Indonesian debt crisis. Our point is that while the $1 billion saved annually in reduced debt service during 1980–82[11] is a large sum of money, this amount would have been easily swamped by a Mexico-style loss of reserves if the Indonesian government had tried to prop up an overvalued exchange rate and was then forced to finance capital flight. Similarly, if exports were 12 percent below actual value because of an overvalued exchange rate, as suggested by the 1965–68 experience, the loss in foreign reserves would also have greatly exceeded this $1 billion saving.

Our conclusion is that Indonesian exchange rate policy was the most important reason why Indonesia was able to meet its debt commitments

Table 5.3 Average Values and Range of Values Achieved

	Average Value	Range of Values for Each Factor
Hypothetical 1980–82 average total debt-service ratio when Indonesia had all 3 Mexican features	84.4	
Contribution of (in percentage points):		
IGGI	5.8	3.7 – 8.4
Maturity management	17.7	12.0 – 23.8
Export orientation	30.8	23.6 – 37.8
Actual 1980–82 average total debt-service ratio	30.1	

in the 1982–84 period. The conduct of this exchange rate policy was greatly facilitated by the existence of a political lobby that promoted exchange rate protection, and by the memory of the economy-wide negative effects of exchange rate overvaluation. The fact that neither the budget deficits nor the money growth rates departed from their historical range for extended periods also helped to make exchange rate management easier.

While the decline of oil prices in early 1982 did make debt management more difficult—the total debt-service ratio rose from 26 percent in 1981 to 39 percent in 1982—it was still far from a crisis situation. The subsequent collapse of agricultural commodity prices and the rapid descent of the price of oil in 1986 from $28/barrel in January to $10/barrel in August have produced a more ominous situation. The fall in export earnings from $21 billion in 1982 to $15 billion in 1986 has caused the total debt-service ratio to soar to 68 percent.

While our analysis would place great emphasis upon an aggressive competitive real exchange policy to reduce the probability of a debt crisis through its effects on exports and capital flight, there are a number of other policies which can also be implemented given the recent drastic jump in the debt service–export ratio. The supplementary policies can be divided into two groups: (1) those that affect the debt service directly, and (2) those that affect export earnings.

Policy measures that could ameliorate the debt service burden directly, through reduction of foreign borrowing, are:

a. Cuts in the budget deficits by controlling spending and increasing taxes. This would keep fiscal policy consistent with exchange rate policy. The tax reforms since January 1984 have raised domestic revenue considerably, but their implementation has not been wholly satisfactory. While the number of registered taxpayers has increased to 995,000 at the end of 1985 from 550,000 before the tax reform, only 50 percent of the companies and 70 percent of registered individual taxpayers actually filed tax returns in 1985.
b. Maintenance of an anti-inflationary posture in monetary policy. This would make real exchange rate management easier by keeping trade deficits down and capital flight low.
c. Amending the balanced budget rule to allow internal financing of government deficits. As long as there is no automatic monetization of budget deficits, it may make little sense not to amend the balanced budget practice in order to reduce reliance on external funds. The deepening of the domestic market in government securities would make open-market operations by the central bank easier. The addition of this monetary tool to SBI and SBPU would tend to enhance monetary control, and thus macroeconomic stabilization efforts.

d. Acceleration of the development of the domestic financial system. Besides further deregulation of the financial sector, financial deepening could be boosted by the privatization of many of the state-owned enterprises. The balance-of-payments position would be improved if the government were to allow foreigners to purchase shares in the former state enterprises. A developed financial market could lower intermediation costs, allow better monetary control, and, possibly, encourage savings.
e. Liberalization of the controls on foreign investments in the manufacturing and agricultural sector, especially in industries which produce primarily for the export markets.

A second group of supplementary external debt management policies would be those which focus on the denominator of the debt-service ratio. Our analyses indicate that the viability and expansion of the Indonesian export sector depends crucially on:

a. The elimination of the wide array of monopoly import licenses. The present efforts to replace import licenses with tariffs is a second-best solution. The growth of manufactured exports, spurred by access to cheaper inputs, would not only increase foreign exchange earnings but would also diversify the export bundle, hence reducing the sensitivity of the debt-service ratio to the prices of a few key commodity exports.
b. The expansion of the tree crop sector. Indonesia has cheaper labor than Malaysia, and with additional investments in transportation, Indonesia could potentially outproduce Malaysia in rubber and palm oil. In addition to earning more foreign exchange, the strategy of accelerating the growth of agricultural export industries would promote a more equitable, rural-urban—as well as inter-island—growth pattern, and ease population pressure on the urban areas.

A final cautionary word on external debt management from the political perspective is pertinent. The Pertamina crisis has led to close supervision by the Ministry of Finance of external borrowing by all state enterprises, making it unlikely that a debt crisis would ever again emerge from the external adventurism of an economic fiefdom. The new danger now may be the absorption of private external debts in order to save large domestic firms when they get into financial problems, as in the Indocement case. In July 1985, Indocement, the biggest cement company in Indonesia, began to experience cash flow problems because the recession-induced collapse of the construction industry led to a cement glut. The response of the Indonesian government was to inject US$325 million in cash to acquire a 35 percent share of the company, and to form a consortium of four state banks to "convert

into a rupiah liability a US$120 million syndicated loan that Indocement took out in 1981."[12]

In a few more such rescues are allowed, then the habit may well be impossible to break without the government having to put to the test the source of its political legitimacy—the cohesiveness of the bureaucratic and military elite. Given the widespread participation in large private business ventures by government officials and their family members, the selective use of financial rescue will threaten the political unity of the group. If this kind of political pressure were to be able to completely eradicate the already blurred line between public and large private enterprises, then the vulnerability of Indonesia to a debt crisis would be greatly increased. External debt management would become impossible because no one would know what the size of the sovereign debt really is, and the size of this debt could increase very quickly given the openness of the private capital account.

Notes

1. The concept of exchange rate protection is developed in detail by Corden (1982).

2. The "balanced" budget rule ceased to be a binding constraint on expenditure after the 1973 OPEC-1 price increase. The Indonesian government (perhaps until very recently) was pretty much able to get whatever amount of credit it wanted. This budget rule does not prevent the financing of nonbudgetary expenditure by money creation, e.g., central bank credits to state agencies.

3. The first two PT/PN proxies are calculated from table 3 in Warr (1986), but some of our figures differ from those in his table 4.

4. We are abstracting from natural growth considerations here to make this point within a static context.

5. Current account expressed as a percentage of GDP.

6. A textbook exposition of this fiscal cause of external debt crisis is Rivera-Batiz and Rivera-Batiz (1985, 557–61).

7. If a private borrower could not come up with the service payments in domestic currency for his private nonguaranteed external debt, we do not consider it a *national* debt crisis because the government did not cause the default (except in the broadest sense of not creating more favorable macroeconomic conditions, if it were able to do so).

8. For example, Dornbusch (1987); Lever and Huhne (1986); and Cline (1984).

9. Kahn and Haque (1987) estimate cumulated Mexican capital flight up to 1982 to be $29 billion. Actual short-term debt in 1982 is $26 billion.

10. This decomposition of DSO is from Woo (1987b).

11. This is calculated assuming that Indonesia would pay the same effective interest rate as Mexico.

12. Quote is from *Far Eastern Economic Review*, 25 July 1985. The *Asian Wall Street Journal Weekly* (12 May 1986) put the cash injection at US$360 million.

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