

TRANSFER OF PRIVATE ~~EXTERNAL~~ CAPITAL TO DEVELOPING COUNTRIES:
WITH
WITH SPECIAL REFERENCE TO INDIA IN COMPARISON ~~TO~~ BRAZIL

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ABSTRACT

In the 1980s the pattern of external capital flows to India has changed substantially, concessional lending from international agencies giving way to private external sources of funds. The literature on Indian development and finance is vast, but there has been no study of these newly-important private capital flows.

This shift in sources coincided with both a change in development policy on the part of the Government of India (GOI) and changes in external circumstances. The GOI relaxed the policy of self-reliance in 1982, deciding consciously to embark on a growth strategy that could require resources beyond what was available from domestic sources. In 1985, at the beginning of the Seventh Five Year Plan, it was decided to borrow from private external sources in order to fulfil a more ambitious plan of growth and technical upgrading. This strategy of growth-cum-debt was just confirmed in the Eighth Five Year Plan. Also in 1982, mainland China was admitted to the United Nations and thus became a contender for World Bank funds, on which India's earlier development strategy had heavily relied.

The GOI and its agents have negotiated loans from private external sources in much the same way as they negotiated concessional loans, and they guarantee loans which are onlent to private firms in India. Thus from the lenders' point of view these loans have the same character as sovereign loans.

So far, at least, India has been very successful in attracting private capital. In order to determine why this has been the case and whether the flows are likely to continue, the factors affecting each source have been examined in detail. These factors include GOI policy, market forces in the competition for funds and the location of industry, and the overall performance of the Indian economy.

An important aspect of GOI policy is to restrict foreign borrowing to financing the foreign exchange component of projects. Despite this prudent approach, however, there is some evidence that India is heading towards a debt trap. A comparison with Brazil's debt position has been made in order to develop likely scenarios, based on Minsky's threefold classification of indebtedness. India's debt position is likely to develop along the same lines as Brazil's, though on a much-reduced scale.

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CHAPTER 1

INTRODUCTION

In the 1980s the pattern of external capital flows to India has changed substantially, concessional lending from international agencies giving way to private external sources of funds. The literature on Indian development and finance is vast, but there has been no study of these newly-important private capital flows. This shift in sources coincided with both a change in development policy on the part of the Government of India (GOI) and changes in external circumstances. The GOI relaxed the policy of self-reliance in 1982, deciding consciously to embark on a growth strategy that could require resources beyond what was available from domestic sources. In 1985, at the beginning of the Seventh Five Year Plan, it was decided to borrow from private external sources in order to fulfil a more ambitious plan of growth and technical upgrading. This strategy of growth-cum-debt was just confirmed in the Eighth Five Year Plan. Also in 1982, mainland China was admitted to the United Nations and thus became a contender for World Bank Funds, on which India's earlier development strategy had heavily relied.

The GOI and its agents have negotiated loans from private external sources in much the same way as they negotiated concessional loans, and they guarantee loans which are onlent

to private firms in India. Thus from the lenders' point of view these loans have the same character as sovereign loans. A sovereign borrower must be necessarily different from other borrowers. First of all sovereign borrowers must be regarded as solvent almost by definition. In effect, the market treated all governments as triple-A borrowers until things started going wrong i.e. the country showed a shortage of foreign exchange to service its debts. Theoretically governments can repudiate loans (and they have in the past), yet they can be regarded as better risks than private companies or agents in the third world. Thus it would appear that the terms obtainable by the governments of third world countries must necessarily be better than those obtained by individual agents in these countries. In keeping with this argument the Government of India (GOI) played a special role in devising a strategy for borrowing in the external commercial markets.

So far, at least, India has been very successful in attracting private capital. In order to determine why this has been the case and whether the flows are likely to continue, the factors affecting each source have been examined in detail. These factors include GOI policy, market forces in the competition for funds and the location of industry, and the overall performance of the Indian economy.

An important aspect of GOI policy is to restrict foreign borrowing to financing the foreign exchange component of projects. Despite this prudent approach, however, there is

some evidence that India is heading towards a debt trap. A comparison with Brazil's debt position has been made in order to develop likely scenarios, based on Minsky's threefold classification of indebtedness. India's debt position is likely to develop along the same lines as Brazil's, though on a much-reduced scale.

In this thesis private external capital inflows to India has been decomposed into three component forms, bank loans, direct foreign investment (DFI), and deposits from non-resident Indians (NRI). The conditions determining every form of component inflows has been studied. Besides bank transfers, it was found necessary to study the other forms of private capital inflows listed above, because these other forms will help to counteract the resource requirements which could be filled by commercial loans. Thus NRI transfers have provided balance of payments support in the absence of which more resources would have to be raised by commercial external loans. DFI too has helped to fill the resource gap though there is an associated outflow of foreign exchange. Thus to avoid a debt trap and to promote growth it is necessary to encourage all forms of capital inflows.

The thesis thus briefly examines the features which affected DFI in the Indian context. The levels of DFI are very low by international standards in India; some of the reasons for this are studied in chapter 2. DFI which grew in the 80s more than it had in the previous decades can mainly be

attributed to:

- 1) The liberalisation policies which started in the early 80s.
- 2) The healthy growth rates of industrial activity and of agricultural activity shown during this decade.
- 3) The increase in the level of 'consumerism' in India in the 80s.

The last form of capital transfers were NRI deposits. The dominant feature of this is that the GOI does not expect them to be withdrawn. This is shown by the fact that the GOI does not even include them in its calculation of external debt. Thus this form of transfer is not subject to the same costing principle as bank loans. In the GOI's reckoning most of these deposits probably will not need to be serviced in foreign exchange.

After analysing these forms and aspects of capital transfers - and these have not been studied before - the thesis then concentrates on the implications of only one form of capital transfer namely external commercial loans. Commercial bank loans have increased at an enormous rate in the last decade (by about four times) and it is possible that India is heading towards a debt crisis which may be similar to that of Brazil.

The literature on Indian development and finance is vast, but in the context of external private capital inflows to India nothing much has been said. Hence in this thesis there is no chapter on a survey of literature as is customary.

However, references have been made to the literature on private capital inflows to LDCs in general wherever this could explain the rationale of the Indian situation. This dearth of literature can perhaps be explained by the fact that external private capital infows to India have been significant only recently i.e. during the 80s. The small sample of information on private external capital inflows also makes it difficult to conduct econometric exercises or any such sophisticated treatment. Thus in this thesis the analysis is of a rather rudimentary nature and relies on a frame of reference both theoretical and empirical to arrive at any suggestions. The theoretical frame of reference has been provided by a relatively simple extension of Minsky's theory which states the conditions which can lead borrowing to service the historically accumulated debt. This situation is unstable and implies that the borrower is heading towards a crisis. The empirical frame of reference is first of all provided by looking at the LDCs in general and thus setting India in this context of the total private capital inflows. To examine the debt situation of India a comparison has been made with a heavily indebted country namely Brazil. Such a comparison is relevant because the development of Indian debt into a problem can be hypothesized only in a contextual framework. One important difference however that can be observed at the outset is that there is a difference in the scale of the potential crisis. The scale is likely to be much smaller than

that of Brazil because the Brazilian private debt was much higher than that of India. For setting out the parameters of a debt crisis in India, the comparison with Brazil has been conducted on the following lines:

1) The differences in the openness of the two economies and hence the differences in the scale of private external capital transfers.

2) The link between external and internal debt in both the economies.

3) The fact that special circumstances enabled both to borrow and they were both considered as good risks.

4) The differences in the forms of borrowing in the two countries. In both countries the public sector was the major borrower, but in Brazil local costs were also financed by external loans whereas this was not the case in India. This had important implications on the volume of external debt in the two countries.

5) The different degree of development of domestic capital markets in the two countries. In India they are fairly sophisticated, whereas in Brazil that is not so. This meant that external borrowing in some sense substituted for the lack of domestic intermediation facilities in Brazil, whereas in India they did not do so.

6) The different strategies and structure of borrowing in the two countries. In Brazil's case the government encouraged borrowing, whereas in the Indian case the government

restrained borrowing as far as possible.

From this context a debt model has been developed. This is not a sophisticated model in the sense that such models exist today, because, as was pointed out earlier, India is a very new debtor and the data available for India are for too short a period permit econometric investigation. Certain macroeconomic variables have been used to lay down the basic possible scenarios of debt. The basic postulates of this model when applied to India are;

1) India's repayment and servicing obligations are becoming onerous as they cover about a third of the total export earnings.

2) The situation could develop to one of a debt trap, if the interest rates were to rise or the export earnings were to fall. This implies that exogenous changes could affect the knife-edge balance between solvency and insolvency.

2a) Increases in international interest rates are inevitable in the present climate; they would take India closer to the debt trap.

2b) The export basket shows that the price elasticities are not very high whereas the import elasticities for India are low. Thus excessive dependence on the growth of export earnings for the repayment of debt may not be prudent.

3) The bunching of repayment obligations on concessional debt particularly the IMF loan may further cut into the funds available for the servicing of external commercial loans.

Having stated the basic propositions that will be examined in this thesis, we will briefly state what each chapter sets out to examine. Chapter 2 sets Indian private capital inflows in the context of LDCs. It is impossible to evaluate how and why Indian private capital inflows grew. It is indeed easier to discern general trends in India in the context of LDCs, as an overall decline or change in the geographical composition of external capital flows to LDCs will lead to changes in the Indian context too. The interesting question which emerges in this chapter is why in a climate of generally shrinking commercial loans, India emerged as a major borrower. In setting out the different forms of external private capital transfers, this chapter also examines the two way link between bank loans and DFI and states how this particular link was important in the case of Brazil. The absence of DFI as an important buffer may have adverse implications for the Indian debt situation.

Chapter 3 carries out a detailed analysis of the change in the Indian borrowing scenario, namely from multilateral sources generally to private commercial banks. It begins by postulating the need for external capital and then goes on to examine the Indian savings investment and banking framework. It basically sets the background by briefly examining the financial framework of the Indian economy. The special characteristics of external capital inflows that are examined in this chapter relate to the role of the government both in

bank intermediation and in negotiating external bank loans at fine terms. The determinants and trends of bank transfers are examined in detail and the prospects for the continued inflow of this form of transfer has been examined in this chapter.

Chapter 4 examines the factors affecting DFI and NRI deposits. The supporting role both to the balance of payments and to India's growth aspirations, particularly by the NRI transfers has been examined in this chapter. The distinction between bank loans and NRI deposits in terms of repayment obligations has also been examined in this chapter.

Chapter 5 compares the development of the Indian debt situation with the existing Brazilian one. The focus of this chapter is however the development of the Brazilian crisis and cross references have been made to India. The main aspects of this comparison has already been stated above.

Chapter 6 develops a theoretical framework for analysing the Indian debt situation. In this context a brief examination of a few debt models has also been conducted. The final section of this chapter compares the Brazilian and Indian macroeconomic variables to examine India's relative position in the context of the theoretical model set out earlier.

Finally the conclusions reflect upon some of the propositions arrived at in this thesis. It also examines the potential debt situation should there be an exogenous change in some variables such as interest rates or export earnings or expenditure on imports in the Indian context.

CHAPTER 2

PRIVATE CAPITAL TRANSFERS TO DEVELOPING COUNTRIES2.1 Introduction

Private capital flows to India have only recently reached significant proportions, and they fluctuate quite widely from year to year. However, the apparently erratic behaviour of private capital flows to India can partly be explained by changes affecting these flows to developing countries as a whole. Thus in this chapter we discuss the experience of developing countries in order to place the Indian data in perspective.

Private lending to developing countries began in earnest in the 1970s, when oil surpluses were looking for lending outlets. In this period, most private capital transfers went to the rapidly industrialising developing countries: Brazil, Mexico, South Korea, Taiwan. These countries are now known as Newly Industrialised Countries - NICs. At the other extreme, the share of the least developed countries in total long-term transfers fluctuated between 5 and 10% to developing countries and that of private transfers between 1 and 3.5% between 1970 and 1984. Though India does not qualify as a NIC, it cannot be classified as a least developed country either. The World Bank treats India in a class between these categories: as a less developed country, along with, notably, China.

Since private capital inflows into India have fluctuated over time it is impossible to evaluate the trends without a reference to the developing countries in general. Indeed the context makes the trends in India easier to discern. Thus though the frame of reference for Indian private capital transfers is not the least developed countries, a comparison with the capital transfers to Asia or with that of Latin America and most importantly with the general trend in LDCs is called for.

One important characteristic which distinguishes LDC borrowing from borrowing by firms is that LDC borrowing is mostly sovereign borrowing. Thus although individual firms in LDCs may not be treated on par with their developed country counterparts, because LDC borrowing is mostly sovereign borrowing, most LDC loans are accorded a special position, as sovereign borrowers are regarded almost by definition as solvent - at least until things start going wrong.

Of course, there is a difference in the treatment between Africa and Latin America, or for that matter between India and Afghanistan. But these differences have to do with the macroeconomic characteristics as well as the relative political stability of the concerned LDC economies. Thus whereas in the case of a private firm the monitoring of a loan is limited to the monitoring of the firm, in the case of sovereign borrowers the economy as a whole has to be monitored. And while balance sheet problems in the case of a

firm are reflected at once in the value of the shares, no such measure exists for the monitoring of sovereign borrowers. Moreover, problems in the economy are only reflected after a lag or after they may become chronic.

The problem of legal jurisdiction over a sovereign borrower may also act as a deterrent to the lender. Given this context of sovereign borrowing, this chapter sets out to examine the trends, the forms and the rationale for capital transfers to developing countries. Cross references are made to the Indian situation either to highlight the differences or to point at a particular similarity. Two main forms of private capital transfers have been identified in this chapter. The first consists of bank loans either through syndication or through the issue of bonds. The second is direct foreign investment, henceforth referred to as DFI.

The determinants and flows of each form is discussed in the case of LDCs because India offers a contrast. In this context, the special position of India as an emerging borrower has been laid out in this chapter. Two types of factors - push and pull - can be identified in the case of India. The push factors were the change in Indian policy with respect to international private borrowing and the entry of China into competition for concessional loans.¹ The pull factor was the rise in exposure of the other developing countries

¹ Discussion of this latter factor is postponed to Chapter 3.

particularly the Latin American ones, which made India appear as a better risk by comparison.

In the case of DFI, the low levels in India compared to the rest of the LDCs, particularly comparable developing countries, provides the basis for an investigation into the determinants of DFI in general and to that in India in particular.

The last section of this chapter discusses the links among these various kinds of private capital transfers. The theoretical rationale for these links is examined with reference to the literature. In the case of Brazil the link between DFI and private lending may account for the relative ease of entry of Brazil into the international capital market. The absence of such a link in the India may explain some of the features of Indian private capital transfers.

2.2 Determinants and flows of private capital transfers

As was mentioned earlier, private capital transfers took the form of bank loans, bond issues, or DFI. Of these three categories, bond issues deserve special treatment in the case of LDCs. Bonds can neither be classified as bank loans or a straight issue in the stock market, because sovereign LDC borrowers float bonds in the international capital markets and these are bought by international banks or consortiums in much the same way as bank loans are negotiated.

Another important distinction needs to be made between

financial and real transfers to the LDCs. Real capital transfers consist of DFI, technology transfer contracts and the like whereas financial transfers consist of bank loans and portfolio investments. These two kinds of transfers have very different impacts in the LDCs and are discussed in greater detail below. Over time there has been a shift in the relative importance of one form of capital transfer over another.

For instance, the 1970s and early 1980s were characterised by large inflows of foreign bank capital into developing countries. A key feature of the 1980s is that Japan has displaced the OPEC countries as the main source of surplus. Japanese companies tend to favour DFI, while OPEC transfers were chiefly financial. This difference in the attitudes of these two major capital exporters of the past two decades can be attributed to their differences in the levels of development, information and technological base, and surveillance capacities. The fact that the average yields of DFI have been higher in the LDCs than in developed countries² may have contributed to Japanese interests in LDCs.

As far as the LDC is concerned, exogenous factors can explain the prevalence of one form of capital transfer vis-a-vis another. For instance, the low and sometimes negative real interest rates prevailing in the 1970s were a strong incentive to increase the debt component in the liability portfolios of

² 'New Finance For LDCs: The Importance of Direct Investment', AMEX Bank Review, Volume 13, Number 7.

firms and governments of LDCs. Increasing access to funds at rates presumably below their domestic marginal return on capital stimulated the opening-up and deregulation of LDCs' trade and financial systems.³ Thus foreign debt in Asia and Latin America grew faster than the rate of growth of GDP in the two regions, and in Latin America also faster than the growth of exports. The domestic policies of the borrowing countries were geared to create the balance of payments deficits necessary to absorb the inflow of foreign capital. Market-related interest rates which reflect expected inflation and/or policies to combat it as well as terms of trade deterioration put an end to the inflationary erosion of the stock of debt. By contrast, the high real rates of interest during the 1980s, the reluctance of the commercial banks to lend to LDCs, and lastly the emergence of the United States as the major borrower in the international capital markets, have led to a decline in bank lending to LDCs in the 1980s. India is an important exception: bank loans have increased during the 1980s. A detailed discussion of the factors which led to the emergence of India as a borrower in the 1980s is left to chapter 3.

The different kinds of private capital transfers need to be examined separately because their trends are determined by different exogenous and endogenous factors. This of course does

³ Massad, C., 1985, 'Debt: An Overview', Journal of Development Planning, Number 16.

not imply that the different kinds of private capital transfers are not interrelated or move in an integrated fashion. It is only for ease of analysis that these have been classified separately below.

Table 2.1 shows a few interesting features of long-term lending to the developing countries. First of all, almost all categories of long-term transfers to developing countries grew at a much faster rate during the 1970s in comparison with the 1980s. The aggregate long-term transfers in 1980 were approximately six times that in 1970, whereas between 1980 and 1984 the aggregate long-term transfers actually declined. Moreover, the increase in capital transfers after the first oil price rise in 1973, was much greater in magnitude than that after the second oil price rise in 1979. The reasons for this are analysed in detail below. It would be sufficient to point out here that the major lenders, i.e. the oil surplus countries, by 1979 had adjusted their absorption capacities to their high levels of income.

The only category of long term capital transfers which increased consistently during the 1980s was multilateral official transfers. This category, too, however, showed a much slower rate of growth in the 1980s than during the 70s. The reasons for this can be traced to the onset of the debt crisis in 1982 in which the multilateral agencies played an important role, by setting up funds in conjunction with the commercial banks to defuse the debt crisis. Thus funds from multilateral

Table 2.1.

Long term capital transfers to developing countries and territories, excluding major petroleum exporters

(Billion US dollars)

	Total	Bilateral	Multilateral	From Socialist Countries
1970	9.69	8.41	1.12	0.17
...				
1973	17.81	15.18	2.19	0.44
...				
1975	33.74	29.01	4.30	0.44
...				
1980	57.41	47.38	9.18	0.86
1981	67.71	57.66	9.31	0.75
1982	60.62	49.46	10.40	0.77
1983	52.79	40.64	11.27	0.88
1984	50.89	39.02	11.42	0.45
1985	38.01	26.33	11.14	0.55
1986	48.18	36.30	11.39	0.50

Notes: The figures have been rounded up to two decimal points

Source: UNCTAD, data files

agencies often substituted for funds from commercial banks. For almost all flows 1981 was the peak period after which the flows dropped sharply, indicating the onset of both the debt crisis and the recession in the industrial countries. In this context Table 2.2 shows that private flows fell more rapidly than the other categories - it had increased by nearly 100% after the 1973 oil price rise but decreased by nearly 40% between 1981 and 1984. Of the total volume of private flows, the fall was sharpest for portfolio investment (about 50%). In addition short-term capital transfers became negative after 1981, after increasing sharply in 1980.⁴ This implied an even faster decline in the capital availability to the developing countries. Bond issues also declined upto 1983, implying that the developing countries were unable to sell their equities and securities in the international capital markets, against a general background of a shortage of liquidity.

As indicated in the Appendix, data from various sources differ in terms of coverage, methodology, and time period. Thus the aggregate data as indicated above provides only an estimate of the general trends. It is necessary to study each individual category of transfers and to confine the analysis as far as possible to a single source of transfer for each such category. The same source of data may also change its methodology over time, but such changes would be insignificant

⁴ The World Bank, 1985, World Development Report, Oxford University Press.

Table 2.2

Components of Bilateral Long-Term Lending To Developing
Countries And Territories.
Excluding Major Petroleum Exporters
 (Billion US dollars)

Official Development Assistance		Private Flows From DAC* Countries				
		Total Lending	Overseas Direct Investment	Export Credits	Portfolio Investment	Bond Issues
1970	3.16	4.69	2.42	1.67	0.48	0.12
1973	4.55	8.76	5.60	0.78	1.96	0.42
1975	9.43	17.01	8.18	1.81	7.05	0.03
1980	17.50	26.21	6.77	7.71	11.14	0.60
1981	17.21	37.22	11.55	6.01	19.95	0.28
1982	14.91	31.25	11.54	4.72	14.69	0.29
1983	14.01	23.33	9.38	1.20	9.92	2.83
1984	13.91	20.70	9.89	1.93	6.46	2.41
1985	14.87	7.61	6.39	0.25	3.45	4.42
1986	18.35	15.16	11.19	0.68	2.73	1.91

* Development Assistance Committee countries. For the list, see Appendix to Chapter 2.

- Notes: 1) Direct investment data is based on the reports from the DAC countries making the investment.
- 2) Bilateral portfolio investment covers the transactions of the private monetary sector including international bank lending (often known as 'Eurocurrency credits'). Private export credits and bond lending are reported under the corresponding headings and not included in Eurocurrency credits.
- 3) Figures have been rounded up to two decimal points.

Source: UNCTAD Data files.

in comparison with the errors that arise from aggregations across different sources. Detailed examination of the data begins with bank transfers, as this item showed the highest growth rate during the 70s and in fact changed the entire dimension of private lending to developing countries.

2.2.1 Trends and factors affecting bank transfers

The basic premise leading LDCs to seek transfers of capital from abroad is that the LDCs cannot generate sufficient finance domestically, if development is to proceed. The transfers are assumed to be beneficial as long as the debt burden is sustainable. The question of sustainable debt examined in chapters 5 and 6. The interplay of foreign debt and growth has been variously described in the literature. Here we will briefly examine only some of the theories which link growth with debt. In this category we distinguish two sub-categories: bank loans and bond issues, which we discuss in turn, first from the perspective of borrowers and then from the lenders' side.

2.2.1.a. Determinants of demand for loans

The prime determinant of the demand for loans is the desire for growth. However, the interplay of foreign debt and economic growth in developing economies has been extremely complicated in this decade. Export expansion in the short run may require component imports and investment. Thus the

economy's evolution over the medium term would depend on export growth. However, export growth depends, among other things, on investment, which may have to be reduced in order to achieve the cuts in imports required to repay the debt. Consequently, whether or not the economy is capable of growth depends on two counteracting dynamics, namely debt dynamics, which tightens the balance of payment constraint, and the investment-export dynamics, which improves it.⁵ Since the analysis is concerned with the short and medium term, the assumption in this case is that output growth is not determined by the additional capacity created by investment (financed mainly by the foreign debt) but by the change in capacity utilization which is determined by the shifts in the balance of payments constraint through debt, investment and export growth.

The story of the dynamic evolution of a typical developing country begins from an initial disequilibrium state with a large stock of external debt. The debt position, according to the 'transition theory' is part of a transitory phase in development,⁶ nations borrow in the early phases of their development in order to build their infrastructure and repay these loans in the latter stages of development. In the

⁵ See Akyuz, Y., 1985, 'A Model of Debt and Growth in a Developing Economy', UNCTAD, Geneva.

⁶ See for example Beenstock, M., 1984, The World Economy in Transition, London, George Allen & Unwin.

initial stage the economy is obliged to make a net financial outflow, as the interest on its outstanding debt exceeds the rate of growth of new capital inflow, both of which are determined exogenously. In this condition, an economy may switch from a negative to a positive trade balance due to a sharp decline in lending and a rise in the debt servicing.

The positive and negative effects of per capita income have been captured by the development cycle theory,⁷ which states that in the initial phase when the ratio of GNP to population is low, debt is also low. However, as per capita GNP begins to rise, the demand for debt grows strongly. After a point of time when the rate of growth is relatively lower, old debts may be paid off more rapidly, and finally in the fourth phase a country may actually become a creditor country.

Another theory of borrowing, which one could call the 'profligacy',⁸ suggests that countries are basically profligate borrowers and borrow during periods of international monetary surpluses. According to the profligacy hypothesis, debts reflect excessive consumption and dependence on imports. Empirical evidence, however, appears to support the development cycle theory rather than the profligacy theory.

It is important to get an adequate indicator of

⁷ Ibid.

⁸ Lewis, W.A., 1978, Growth and Fluctuations 1870-1913, London, Allen and Unwin.

development or growth because most theories link these with the debt profile of a country. Chenery and Syrquin⁹ have used the GNP per capita as an indicator of the stage of economic development. Rostow¹⁰ used the share of investment in GDP (investment-ratio or IR) as a measure of the intensity of economic development. Lewis¹¹ argues that urbanisation is an integral and very expensive part of the development process: for this reason, urban population growth (UPG) has been used as an explanatory variable. Thus demand for debt (Dd) as a proportion of GNP is

$$Dd/GNP = F[\overset{+}{\text{GNP/POP}}, \overset{-}{(\text{GNP/POP})}, \overset{+}{\text{IR}}, \overset{+}{\text{UPG}}, \overset{-}{r}]$$

Thus the determinants of the demand for credit are related to the growth aspirations of an LDC. From the lenders perspective the supply of credit would depend on other factors besides the growth prospects of the LDCs. The next section examines some of these considerations.

2.2.1.b Determinants of supply of loans

The main determinant of the supply of credit can be said to be the understanding of the borrower's incentives to repay. With sovereign borrowers, lenders can conceptually assign to

⁹ See Chenery, H., and Syrquin, M., 1975, Patterns of Development 1950-1970, London, Oxford University Press.

¹⁰ Rostow, W.W., 1960, The Stages of Economic Growth, Cambridge, Cambridge University Press.

¹¹ Lewis, W.A., 1978, op. cit.

the country a maximum level of debt such that the total benefits of default to the borrower just equals the cost of default to it.¹² This credit ceiling will rise with an increase in income. Thus the theory where repayment is ensured by the penalty of future exclusion suggests a situation of potential credit rationing. Default is most likely in periods when income is low relative to trend and hence the marginal utility of income is high.

Empirical findings¹³ confirm that indicators of creditworthiness (reflecting the probability of repayments) constrain the supply of funds and impose quantitative limits on the 'acceptable' levels of arrears. The threat to repudiate governs the willingness of bankers to accommodate moderate levels of obligations in arrears. However, high levels of debt obligations may force the bankers to maintain a flow of funds to such customers.

Loans to LDCs came from three channels. The earliest lenders such as the large U.S. banks increased their loans and their levels of exposure very quickly. These were followed by smaller banks and banks from other industrialised countries.

¹² See Eaton, J. and Gersovitz, 1981, 'Poor Country Borrowing in Private Financial Markets and the Repudiation Issue', Princeton Studies in International Finance, Number 47. For further discussion of sovereign lending, see part II of this Chapter.

¹³ Hajivasillou, 1987, 'The External Debt Repayments Problems of the LDCs: An Econometric Model Based on Panel Data', Journal of Econometrics, Number 36, 205-230.

The variable that played a decisive role after 1982, the degree of exposure, was only of secondary importance during the 1970s. While a high degree of exposure tends to make banks refrain from additional lending, it is also a factor that keeps them longest in the market, as they become subject to the pressures of involuntary lending. A low exposure level, on the other hand, allows banks to stay away.

The risks of international lending, which include those of sovereign lending, may deter lenders from giving loans to the LDCs. These risks include those which are specific to LDCs and those that apply to borrowers in general. Thus we classify risks of international lending into three broad categories. The first consists of risks of normal financial intermediation, the second consists of those that are specific to international intermediation and the third consists of those which are more relevant for sovereign LDC borrowers. The enumeration of these forms the text of the next section.

2.2.1.c Risks faced by international lenders

The risks of normal financial intermediation can be classified in the two broad categories, default risks and balance sheet risks.

(1) Default risks: credit risk and moral hazard.

(a) Credit risk is the possibility that the borrower may be unable to repay its debts. Banks attempt to minimise this risk by diversifying their loan portfolios and, in the case

of international loans, by syndicating loans.

(b) Moral hazard is distinguished from credit risk by the difference between ability and willingness. Thus a borrower may be able but unwilling to repay a debt because the advantages of loan repudiation outweigh the disadvantages.

(2) Balance sheet risks: interest rate risk and liquidity risk.

(a) Interest rate risk is incurred by banks in the event of interest rate changes because the rollover period of bank liabilities is of shorter duration than the rollover period of assets. When rates of interest increase, banks are forced to fund their lower yielding assets at the new higher rates, cutting into their profit margins.

(b) Liquidity risk arises from the fact that banks while still solvent may be unable to make payments as they come due.

In addition to these risks there are some which are specific to international financial transactions.

(1) Foreign exchange risk. This refers to a net open position in a foreign currency. This may result from either foreign exchange speculation or a currency mismatching of assets and liabilities. In both cases, as the value of the foreign currency in which the bank has a net open position fluctuates, the bank can experience foreign exchange gains and losses. Foreign exchange risk is a bigger problem for non-US banks, because the dollar is the vehicle currency in most international lending. Limits may be imposed on lending on a

currency by currency basis or on the total exposure to contain this risk.

(2) Regulatory risk. This is due to the possibility that reserve requirements, capital/asset ratios, special taxes or other regulations may be imposed on banking operations in a particular location. The costs are generally passed on to the borrowers.

(3) Fund availability risk. This arises because while governments have always deposited funds in commercial banks, never has such a small group of surplus governments deposited so many funds in relatively few commercial banks over a prolonged period of time as during the oil price hike. In the 'euromarkets' if these depositors were to withdraw all funds, a fund availability problem would arise and could change the relative rates of return till the market re-establishes its equilibrium.¹⁴

(4) Country risk.¹⁵ This is associated with the uncertainties arising from political or economic developments within a country, which may influence the ability and willingness of borrowers within that country to meet their obligations. This kind of risk is specific to developing countries in particular. Country risk has the following

¹⁴ For details of these risks see Goodman, L. S., 1981, "Bank Lending to non-OPEC LDCs: Are Risks Diversifiable?", FRBNY Quarterly Review.

¹⁵ For a detailed review of country risk see the AMEX Bank Review, 1986, Volume 13, Number 9.

components:

(a) Sovereign risk. Under this the State is unwilling or unable to meet its obligations because of shortage of foreign exchange perhaps due to an overvalued exchange rate or because of a breakdown of its overall finances.

(b) Transfer risk. The private sector borrower may have the necessary local currency but cannot obtain the foreign currency necessary to service its debt.

(c) Saturation risk. A country may issue more bonds or other commercial paper than the investors are willing to hold.

(d) Bad news risk. Political events or economic policy could impinge on market confidence and thus on bond prices. This is also called political risk.

(e) Private credit risk. Devaluation or recession or any such factor which could affect the ability of the private sector to service its obligations.

The interaction of the supply and demand factors determined both the terms and volume of loans to LDCs. The pricing of the loans was reflected by both the London inter-bank borrowing rate (LIBOR) and the spread over it.¹⁶ The LIBOR is determined by factors which are exogenous to LDCs but the spreads and other markups represent the lenders perception of

¹⁶ Loans in the Euromarket start off with this rate as the benchmark.

the risk associated with a particular LDC or with a particular group of LDCs. The pricing of loans as reflected by the spreads and the factors affecting is examined in the next section.

2.2.1.d Pricing of Euroloans

Differing perceptions of country risk on the part of bankers are reflected in the differing spreads and fees charged to sovereign borrowers. Spreads refers to the markup over LIBOR that the lenders charge any borrower, sovereign or otherwise are additional costs which the borrower must incur. For example a lender may charge a loan commitment fee even if the loan is discussed over a number of years. Empirical findings¹⁷ indicate that the spreads on syndicated Eurocredits are only in part determined by economic factors. The estimates, however, did support a 'regionalisation' syndrome in which countries from a particular geographic region where the bank exposure was relatively high were charged higher spreads. A subset of variables was repeatedly significant in explaining spreads in annual cross-section samples. These include:

RESIM: the dummy variable used as a proxy for regionalisation, the reserves-to-imports ratio,

¹⁷See Dewhirst, S., 1986, Pricing of Risk on Eurocredits, Thesis for the Diploma in International Economics at the Graduate Institute of International Studies in Geneva.

XCTR: the growth rate of exports,

INFL: the inflation rates,

REXRI: the exchange rate divergence from purchasing power parity,

DS: the debt service to exports of goods and services,

DEX: the ratio of public and publicly guaranteed debt (outstanding and disbursed) to exports of the previous year.

Spreads tended to increase with a higher rate of INFL, DEX, DS and for the Latin American countries (Regionalisation Syndrome). Spreads tended to decrease the higher the RESIM, XGR, and greater the REXRI (showing increased competitiveness). Most determinants were not stable over time.

In regressions on pooled estimates (for over four years) a higher proportion viz. 1/2 to 3/4 of the variation in spreads could be explained by economic variables. In this case spreads were found to be related to RESIM, to export fluctuations (XFL), DS, INFL, regionalisation syndrome, and DEX. The level of LIBOR was also found significant, indicating that spreads tend to narrow when the levels of interest rate rose.

The analysis of the Euromarkets indicates that fees were an important part of the terms on Eurocredits. Results from estimation¹⁸ of fees indicate that the interest equivalent of fees represented an average of one-third of the total return

¹⁸ Dewhirst, S., 1986, op. cit.

to the lenders in 1980 and 1981. Though this may be an upper limit and there is reason to believe that fees have subsequently fallen, the exclusion of fees in determining a proxy for country risk is an important omission. The statistical insignificance of the empirical results indicate either that the specification of explanatory variables has been faulty, or the existence of multicollinearity between the variables.

Thus it appears that the pricing of loans to LDCs did not show a consistent correlation with economic variables. It was largely guided by the 'herd instinct' or the regionalisation syndrome. Perhaps these factors can also explain the geographical concentration of loans to certain countries in the third world. The next section thus examines the trends in bank lending to the LDCs during the 70s and 80s.

2.2.1.e Trends in bank loans to developing countries

Table 2.3 (below) shows the lending through the medium-term Eurocurrency market to the developing countries. The figures indicate that the volume of gross borrowing in the Eurocurrency market has increased sharply and that the share of oil importing developing countries in total borrowing has increased from slightly less than 50% in 1973 to over 75% in 1985. Even if we exclude 1985, it can be observed that for the remaining years the share of oil importing developing countries accounts for well over half the total volume of

gross commitments. The share and volume of credits to the least developed countries increased only marginally and was never more than 3 to 4% of the total commitments. Again the rates of increase during the 70s (about a five fold increase from 1973 to 1980) was much higher than in the 1980s. In 1985 the total commitments were only about 17.5% of the peak in 1981.

Developing countries' access to the Eurocurrency markets was encouraged by a number of factors. The large volume of funds that could be mobilised in one operation as well as the speed with which such credits could be arranged and the flexibility in their usage made these credits especially attractive to developing countries. In contrast, borrowing from the International Monetary Fund (IMF) entailed a degree of policy conditionality, while market borrowing did not. Moreover the terms of syndicated lending (i.e. spreads and maturity of loans), which were easy in 1973, tightened significantly in 1974: spreads widened and maturities shortened. These tighter conditions persisted into 1976, thereafter it eased and 1978 and 1979 saw the emergence of a 'borrowers' market' where almost all borrowers could negotiate fine terms on their loans. During the 80s the oil importing developing countries have generally had to face stiffer terms and sometimes have been forced out of the markets completely.

TABLE 2.3
Gross Commitments Of Eurocurrency Credits
To Developing Countries And Territories
 (Billion US dollars)

Year	Total	Oil Importers	Least Developed
1973	7.3	3.3	0.01
...			
1975	11.4	6.0	0.04
...			
1980	34.6	21.8	0.18
1981	43.1	29.1	0.10
1982	38.2	24.0	0.71
1983	29.9	18.4	0.02
1984	21.7	15.3	--
1985	16.3	13.5	0.01
1986	10.2	6.8	0.05
1987	19.0	9.2	0.12

Note: The figures have been rounded up to one decimal place.

Source: UNCTAD, data files.

TABLE 2.4
Net New Lending By International Banks
 (Billion US dollars)

Years	Total	Lending To Non-OPEC Developing Countries
1975	40	16.0
1976	70	18.0
1977	75	11.1
1978	110	24.7
1979	125	35.3
1980	160	38.9
1981	165	39.9
1982	95	19.8
1983	85	12.6
1984	90	9.8
1985	105	11.0
1986	195	3.1
1987	300	1.9
1988	225	-8.9

Source: Bank for International Settlements, Annual Report,
 various issues.

The data of Table 2.3 does not include short term transfers. Data on short-term transfers are shown in Table 2.4 and will now be examined. Table 2.4 shows the volume of new net lending by the reporting banks of the Bank for International Settlements¹⁹ to the oil importing developing countries. The data corroborate the trends shown by gross commitments, with one difference. Gross loans includes servicing costs on accumulated debt whereas net loans exclude such payments. The volume of net bank lending to developing countries fell to a negligible level in 1986 whereas the gross commitments were by no means negligible. To analyse this difference it would be helpful to look at the figures for deposits and loans from developing countries (see Table 2.5). Between 1975 and 1980, the volume of new loans quadrupled and that to non-OPEC developing countries increased two-and-a-half times. The share of lending to non-OPEC developing countries in the total stock of debt however fell from about 32% in 1975 to less than 25% in 1980. This decline was even more rapid between 1981 and 1986, when the share of these developing countries in total debt declined from slightly less than 25% to less than 1%. It is interesting to observe this fact as the view is that exposure of most commercial banks to developing countries is too high. The average rate of growth in new loans between 1975 and 1980 was about 34% whereas that

¹⁹ See details of this reporting in the Appendix to this Chapter.

TABLE 2.5

The Reporting Banks Business with Individual
Groups of Non-OPEC Developing Countries
(in billions of US dollars)

YEAR	LOANS				DEPOSITS			
	Latin America	Middle East	Africa	Asia	Latin America	Middle East	Africa	Asia
1976	13.9	1.1	1.1	1.8	6.0	1.2	1.2	4.3
1977	8.5	0.8	2.7	3.4	2.9	2.9	1.4	5.4
1978	14.9	0.6	4.2	6.7	8.7	3.8	0.7	2.8
1979	23.2	1.2	2.7	8.2	4.9	1.7	1.8	3.9
1980	27.4	2.1	2.0	7.4	-0.9	2.7	0.7	1.5
1981	30.5	2.3	2.0	5.1	4.7	1.5	0.5	2.8
1982	12.1	1.7	1.7	4.3	-1.9	1.8	-0.8	5.5
1983	8.3	0.3	0.6	3.4	5.8	-0.9	0.2	5.3
1984	5.3	-0.4	0.1	4.8	10.1	-1.6	1.0	9.8
1985	1.7	0.2	0.9	8.3	0.4	1.5	1.4	2.4
1986	-1.6	-0.6	-0.4	2.7	0.4	-0.5	-0.2	11.7
1987	3.9	-1.1	0.6	7.5	6.7	1.9	1.1	13.9
1988	10.8	0.7	1.6	3.7	2.3	0.1	1.5	7.0

Source: Bank for International Settlements, Annual Reports,
Various issues, Basle, Switzerland.

to non-oil developing countries was 29.4%. Moreover, between 1981 and 1986, new loans to all LDCs increased at an average rate of about 3.6% annually, but loans to non-oil developing countries decreased at an average rate of 31%. If 1986 is excluded, the rate of decrease to the latter group of countries is still about 19%.

The share of Asian countries, in the total stock of debt which was about 11.25% in 1976, increased to 27.12% by 1978. Thereafter it fluctuated between 20 and 25% until 1981, which was the peak year for most credits. From 1982 onwards, concurrent with the decrease in the share of Latin America in the total credits accruing to non-oil developing countries, the share of Asian countries increased steadily; it was the only region with a positive net accrual of bank funds in 1986. The share of Africa in the total credits improved during the 1970s but declined again in the 80s and was negative in 1986, indicating repayment of loans. The share of the Middle Eastern countries remained constant at less than 10% of the total lending to non-oil developing countries. Thus the geographical focus of lending changed from Latin America in the 1970s to Asia in the 1980s.

At the same time, the deposits from Latin America remained high, accounting for 20-60% of the total deposits received from the non-oil developing countries. An interesting feature which emerges from Table 2.5 is the fact that up to 1981, Latin America was the most important depositor and

subsequently, Asia became the most important depositor among non-oil developing countries. This trend corresponds to the trends of loans to Asia and Latin America and suggests that some proportion (perhaps large) may be capital flight. The deposit shares of Africa and the Middle East lag only slightly behind their share of loans.

Total net bank lending to Latin America increased on an average at the rate of 20% annually between 1976 and 1981, after which it declined on an average by nearly 39% annually between 1981 and 1985. Total net bank lending to Asia grew on an average at the rate of 28% annually between 1976 and 1981. After 1981, though frequently total net lending to Asia declined, the average rate of growth between 1981 and late 80s still works out to a positive 2% per annum. Total lending to Africa went up by about 14% on an average per annum between 1976 and 1981, after which it declined on an average by 12% per annum till 1985. To the Middle East too, the volume of loans increased by approximately 18% per annum between 1976 and 1981, subsequently they declined on an average at the rate of 30% per annum.

The average rate of decrease of deposits until 1981 was 5.2% annually, and the average increase in deposits between 1982 and 1986 was about 4%. The average rate of increase of deposits by Asia was approximately 8% per annum between 1976 and 1981: thereafter the deposits increased at an average rate of 22.4% per annum. Thus the rate of growth of deposits in

the second half of the period was much higher for Asia than it was for Latin America. The average rate of growth of deposits between 1976 and 1981 was about 4%, thereafter it increased by 108% on average until 1985 (there was a withdrawal of deposits in 1986). The deposits by the Middle East as well increased until 1981 by about 22% per annum and thereafter declined on an average in the 1980s, except for the Middle East where the deposits declined. This confirms the logic of the situation because as the oil incomes of the Middle Eastern countries declined, their deposits should decline too.

The ratio of deposits to loans was about 0.43 in 1976 for Latin America. By 1981, this ratio had fallen to 0.15. From being negative in 1982 it improved to well over 1.25 by 1986. For the Middle East, predictably this ratio was always over 1 in the 1970s and generally below 1 in the 1980s. For Asia the ratio of deposits to loans has remained well over 7 for most of the 1980s except for 1985 when it was about 0.29. For Africa, this ratio has generally been below 1, except in 1976, 1984 and 1985, indicating that the volume of reserves against loans have been quite low for Africa.

The skewed picture mentioned above also prevails across countries. Brazil and Mexico accounted for over 80% of the total loans made to Latin America in 1976; thus these two countries together drew more than 60% of the total loans to the non-oil developing countries in this year. Throughout the

1970s they accounted for well over half the loans given to Latin America and were thus the dominant borrowers until 1982. Argentina also became an important borrower from 1979 onwards and the three countries together borrowed over 75% of the loans given to Latin America or over 50% of the loans given to non-oil developing countries except for the last three years 1984-86. Amongst the largest Asian borrowers were South Korea and the Philippines; during the 1970s these two accounted for over 2/3 of the total loans made to Asian developing countries. In the 1980s, China emerged as the major borrower, and in recent years accounted for 25 to 50% of the total credits to developing Asia. Other important borrowers from Asia were Malaysia, Thailand and India. Mexico was the largest depositor in Latin America and in Asia the most important depositors were Taiwan and China.

For purposes of analysis this entire period can be divided into three sub-periods: (1) 1975 to 1978: the period following the first oil price rise, (2) 1979 to 1981: the period between the second oil price rise to the onset of the debt crisis, (3) 1982 onwards: after the debt crisis. During sub-periods (1) and (2) the market was dominated by the borrowers, yet paradoxically there was a split market: some borrowers were rationed out of this market or could obtain credit only at very unfavourable terms.

On the supply side there were a number of factors which kept the market very liquid. Firstly the emergence of the OPEC

surplus which found its way either directly or indirectly to the Euromarkets boosted the supply of funds in a very big way. Secondly the currency interest of the United States dollar also helped to increase the supply of funds to the Euromarkets in two ways. On the one hand it enhanced the lending potential of German and Swiss banks by improving the dollar value of their capital base on account of the appreciation of the German mark and the Swiss franc. Also there were potential gains or losses from exchange rate movements. Thus the resultant demand for dollar for speculation led to large outflows of funds through the US banking system onto the Euromarket. Finally, the deficit in the US balance of payments affected the supply of funds to the Euromarkets in the following ways:

- (a) A deficit in the US implied official foreign exchange accruals to other oil importing countries, a considerable part of which was placed in markets outside the United States, notably in the Eurocurrency markets and to a smaller extent in the international bond markets.
- (b) The US deficit eased the monetary conditions in other oil importing countries, especially those with an external payments surplus. It thus added indirectly to the flow of private funds from the surplus developing countries into the international financial markets.
- (c) Those developing countries that had been the largest borrowers of funds from the international banking sector

showed the strongest improvement in their current account balances. Thus the speed with which the debtor countries were able to improve their balance of payments and reserve positions was itself one important factor whetting the banks' appetite for further lending.

(d) Persistent weakness of investment activity in some of the main industrial countries (especially the US), and freedom of banks abroad from domestic reserve requirements, enabled banks in international markets to offer more favourable conditions than the banks in national markets.

(e) Persistent US deficits implied that the OPEC countries remained important suppliers of new funds, as they surplus.

On account of all the above factors there was no shortage of liquidity in the international markets. There was no shortage of potential borrowers too, but since most of the demand came from countries with weak balance of payments positions and high levels of foreign indebtedness, there was a shortage of first-class borrowers. Thus such borrowers could move loan conditions in their favour. This resulted in a stratification of markets where borrowers with high indebtedness were unable to obtain loans.

The third period saw the onset of the debt crisis. There were four main causes:

(1) The renewed sharp increase in oil prices, led to the slowdown of economic activity in the oil importing developing

countries.

(2) The widespread adoption of firm anti-inflationary ^{Policies} dampened both world trade and the terms of trade and through its effect on interest rate levels produced a sharp increase in the costs of servicing external indebtedness.

(3) Political disturbances heightened the banks' perception of the risks involved in international lending for example the Falklands war meant difficulties for Argentina.

(4) The outbreak of Mexico's internal payments and the debt crisis was the final blow to the morale of the international credit markets. This crisis ^{was} triggered by a massive flight of Mexican capital to the USA.

Notwithstanding a virtually complete drying up of voluntary new bank credit to Latin America and Eastern Europe, as well as substantial withdrawals of funds from the Eurocurrency market by OPEC countries and by monetary authorities of some other countries, prime borrowers continued to have easy access to international credit. There was no shortage of new funds on the supply side for countries with "reasonable" policies. The smaller circle of eligible borrowers reduced their financing requirements and moderated the growth of their credit. This led to the persistence of a 'split' lending market and the renewed risk of lending to some countries.

The surplus of loanable funds in international markets led to a decrease in the Eurocurrency rates. Thus lending

shifted from the international credit markets toward banks in the United States. In this partial vacuum, India found it relatively easy to secure loans in the international capital markets as its exposure there was very low. Contrary to other forms of borrowing bond issues showed some revival during the 1980s. The next section looks at the volume of bond issues.

2.3 Borrowing in the bond markets

The volume of borrowing through the bond markets is shown in Table 2.6 has increased greatly in the 1980s.

Bond issues by developing countries tend to be highly concentrated with eight to ten developing countries accounting for 80% of the total value of bond issues. Over 60% of these issues in the 1980s have been in the form of flexible rate notes (FRNs).

Expansion of this form of lending may in fact be even greater than the figures in Table 2.6 suggest. Those bonds which were purchased largely by banks may not be fully reported as bank lending to developing countries, or may have been part of the debt-equity swap. Purchase of swap facilities by banks may have been omitted from the reports of exposure (of some banks) to developing countries.

The expansion of bond market lending to LDCs in the 80s stands in sharp contrast to the stagnant lending in the 1970s and represents a response to lower inflation and improvements in other macroeconomic conditions, high real returns on bond

holdings, the development of new types of financial instruments and reductions in regulatory restrictions on bond issuance in certain major markets. Furthermore, borrowers found that they could attract purchasers to the bond markets only by offering high yields and by changing the maturities and risk-sharing characteristics of the instruments used in the bond markets. Thus the bond maturities shortened, with the average maturity of Eurodollar bonds declining from a range of 12-15 years in the early 1970s to 7-10 years in the late 1970s. Declining interest rates and slowing of inflation in a number of industrial countries created a situation where investors were able to obtain high real rates of return. Borrowers in turn were willing to pay these high rates in order to reduce their reliance on short-term debt and because of their ability to issue callable debt, which helped ensure that they would not be locked into permanently high borrowing costs, if future interest rates declined.

In keeping with the trend of the international capital markets, borrowing by the LDCs in the bond market increased in absolute terms as well as their share in the total markets. Only those developing countries regarded as the best credit risks have been able to gain access to these markets. The limitations on entry into the international bond markets have persisted despite the continued servicing of principal and interest on outstanding bonds by almost all LDCs.

Table 2.6
International and Foreign Issues of Bonds
(In millions of U.S. Dollars)

Year \ Items	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Iss. of Bonds	18.70	17.60	19.9	33.10	35.00	36.00	39.00	38.40	51.80	77.10	78.50	80.00	81.70	86.00	89.10	91.90	93.40
Argentina	-	-	0.16	-	0.43	2.66	4.16	1.64	1.95	5.40	7.30	8.70	8.40	8.60	-	-	-
Brazil	0.16	0.25	0.35	1.93	8.55	9.35	7.35	3.16	0.61	2.50	2.20	1.60	1.80	1.80	-	-	-
Chile	-	-	0.53	-	-	-	0.84	0.82	0.30	0.08	0.08	0.07	0.09	0.05	-	-	-
India	0.03	-	-	-	-	-	-	0.82	0.30	0.03	0.03	0.20	0.40	0.50	-	0.20	0.10
Malaysia	0.17	-	-	0.10	0.43	1.40	1.50	-	-	8.20	2.70	5.20	5.80	0.20	0.40	0.20	-
Mexico	1.80	0.50	2.90	4.29	13.60	6.90	3.70	3.54	23.44	16.03	4.50	3.90	3.60	3.60	-	-	-
Philippines†	-	1.72	-	3.67	1.30	2.20	1.76	0.67	0.68	0.30	0.90	0.80	0.80	0.70	-	-	-
S. Korea	-	0.19	-	0.74	0.72	0.56	0.44	0.48	3.28	1.42	0.30	0.80	2.40	0.80	0.30	0.10	-
Taiwan	0.24	-	-	-	-	0.20	0.30	0.25	0.80	1.45	0.20	0.10	0.10	0.10	-	-	-
Thailand	-	-	-	-	-	0.68	0.76	0.50	0.99	0.63	0.59	0.40	0.50	0.40	-	0.30	0.20
Yugoslavia*	0.30	0.52	0.19	0.72	1.29	1.27	0.96	0.37	-	0.01	0.005	-	-	-	-	-	-

† Philippines
* Yugoslavia

Source: OECD, Financial Markets Survey, Quarterly, Various Issues

This servicing record has, nonetheless, had a strong positive impact on the differential between yields on developed and developing country bonds in the secondary markets for bonds denominated in Deutsche Marks: although the differential between the yields on developed and developing country bonds had reached levels ranging from 6 to 10 percentage points in the period following the emergence of the debt crisis, they declined to less than two percentage points in the beginning of 1985. A similar pattern of yield differentials can also be observed for U.S. dollar denominated bonds.

During the 1980s a close link was forged between the Eurocurrency bank credit and the international bond markets, both in terms of instruments and participants. The example of the former is floating rate instruments, which have long dominated Eurocurrency bank lending, figured prominently in new issue activity in the international bond markets too. In addition, a number of LDC borrowers utilised interest-rate swaps to convert fixed rate obligations into floating rate liabilities and vice-versa. In terms of participants, commercial banks were active in the international bond markets both as borrowers and investors. Banks were thus adding to their capital base (by borrowing) as well as securing medium-term funding for their international lending activity; especially important for the Japanese and other non-U.S. banks. Some banks regarded the acquisition of FRNs as an

alternative to participation in syndicated bank loans. Although spreads were slightly lower on FRNs than on medium-term loans, they were highly marketable at least for some highly rated borrowers. The most important advantage for the banks lending to the LDCs however was the preferential treatment which was accorded to holders of FRNs in several debt reschedulings. In general, publicly held notes and bonds issued by the governments and agencies of countries experiencing debt problems in recent years have been excluded (by the LDCs themselves) from reschedulings and serviced on time. The borrowers likewise view the FRN as an alternative to syndicated bank credit where several issuers are able to raise large amounts on favourable terms.

In 1984, notwithstanding the unprecedentedly high levels of capital demand, the FRN market witnessed a sharp movement of issuing terms in favour of the borrowers. Spreads over LIBOR for prime borrowers fell from 25 bases points to 10 to 12 bases points. An indication of the tightness of spreads was provided by developments in the markets for medium-term floating rate cumulative deposits. Indeed some Japanese banks issued small-sized medium term cumulative deposits at rates at or below LIBOR. The narrowing of spreads was accompanied by a significant though selective lengthening of maturities. The ample availability of funds in the international markets, the generally high quality of borrowers and the lack of alternative outlets have all been factors contributing to the

rapid expansion of investment in the floating rate instruments. In addition, concerns about future interest rate trends, their more attractive liquidity features (in itself a result of the rapid growth of both primary and secondary markets in FRNs), and the greater protection against country-risk, has made the banks regard them more favourably than syndicated loans.

Lately (1985-87), the trend towards easier issuing terms appears to have come to a halt. Investors' resistance to very long-term maturities has been accentuated and a number of floating rate bonds have fallen in price in secondary market trading. Perhaps more significantly, there has been renewed opposition to the narrowing of spreads, as it is increasingly perceived that this development not only squeezes profit margins but also tends to increase the interest rate mismatching risk in the event of a sudden upturn of Euro-dollar rates. As a means of limiting the scope of this latter risk, a number of recently announced floaters contain a provision whereby the coupon is adjusted at shorter intervals than the LIBOR reference period.

This sudden turnaround in the FRN market was mainly caused by a loss in confidence on the part of the investors, who had become concerned about the protection provided by the contractual clauses which were applicable to the FRNs eligible for inclusion in the banks' capital base. This led to a collapse of secondary market prices and to the withdrawal from

the market of a number of market makers. With potential buyers standing by the sidelines and the holders of perpetual floaters trying to dispose of their holdings in a thin market, price declines have spread to other long-dated FRNs and more recently to the market as a whole. By mid-January 1987, the market had come to a standstill with new placements being confined to short-dated synthetic floaters obtained through the repackaging of fixed rate dollar bonds.

This strong rise in bond repayments (particularly for the LDC bonds) has resulted in a growing divergence between the gross and net issues with an attendant reduction in the significance of new issue figures as a proxy for actual changes in the bond investors' portfolio holdings. Taking scheduled amortizations and capital prepayments together the reflow to the market from repayments of principal was some 80% higher in 1986 than in 1985. Thus there was a spurious increase of 23% in the net volume of funds floated in the international and foreign bond markets.

The growth of prepayments was particularly impressive for straight offerings, which increased three-fold between 1985 and 1986. The substantial decline of long-term rates recorded during the year led an accentuation of the trend which had developed in the latter part of 1985 towards advance repayments of high coupon offerings floated in the late 70s and early 80s. At the same time, it has also made it profitable to call bonds with a relatively short remaining

maturity and to refinance them through new long-term issues carrying low coupons. The LDCs could benefit from this development, were it not for the loss of investor confidence.

As a result of these factors the LDC aggregate borrowing on external bond markets contracted sharply in 1986 and the subsequent years to \$4.4b. in comparison to \$7.9b. in 1985. Thus their share fell to less than 2%, the lowest in the present decade. The decline in LDC issues was almost entirely due to a sharply lower volume of 'offer ing' on the Euro-dollar markets; they decreased from \$5.4b. in 1985 to \$2b. in 1986. China, the only major borrower, raised \$1.4b. through offerings in the yen market in Tokyo rather than in the Euro-dollar markets. Borrowings by South Korea fell from \$1.7b. in the Euro-dollar market to almost negligible amounts. In addition no offerings were made in 1986 by Malaysia and Thailand, who were deemed important previously. However in contrast to the LDC borrowings there were relatively modest changes in 1986 as a whole though major short-term fluctuations were observed in the course of the year. The share of the U.S. dollar offerings dropped only fractionally below 59% (from 60% in 1985), a modest retreat in light of the uncertainty surrounding the dollar and its sharp decline against currencies such as the Deutsch Mark. In conclusion, it can be said that the unfavourable turning in the bond markets had a significantly depressing influence on the LDC offerings. Commercial bank loans to LDCs including bond issues

have declined in their relative importance among other forms of capital inflows during the 1980's. DFI has gained prominence during this decade and is examined below.

2.4 Determinants and trends of DFI

The importance of DFI in total capital transfers to LDCs has been between 10 and 15% in the 1980s. Refer back to Table 2.1, which shows the levels of DFI during this decade. Though the levels of DFI have been stable over this period there has been a change in the composition of the recipients: the relative importance of DFI in Latin America has declined whereas that of Asia, particularly low-income Asia, has increased. This change in composition is consistent with the trends in banking loans during this decade.²⁰

One of the recent theories that explains DFI is based on the internalisation hypothesis²¹ of multinational enterprises (MNEs). MNEs, which operate across national boundaries, replace market transactions with internal intra-firm transactions whenever the 'cost' of internal transactions is less than market transactions. In activities related to the use of proprietary technology, such as technology, the internalisation approach suggests that MNEs will tend to

²⁰ See OECD, 1988, Financing and External Debt of Developing Countries, 1987 Survey, Paris.

²¹ Parry, T.G., 1985, Internalisation as a General Theory of Foreign Direct Investment: A Critique, Welt-Archiv Publishers.

coordinate and use that knowhow intra-firm to control and maximise returns on that technology. LDCs are typically perceived as countries with imperfect markets and the existence of tariff or any such barrier to trade represents a form of market imperfection which leads to DFI as an internalisation response by the MNE. Trade barriers change the cost of external market transactions associated with international trade relative to the cost of intra-firm activities such as licensing and DFI. However most of the

investment by MNE's and LDC's cannot be accounted to their internalisation response. Internalisation would readily account for intra-OECD investment and for certain types of market failures. LDC's are considered as higher risks and other factors such as expansion of markets and cheap labour could more easily explain MNE operation in the LDC's.²²

Other important determinants of DFI often mentioned in literature are :

(1) Host Country Policies.

These relate to main general policies including trade, exchange rate and foreign exchange allocation, and interest rate policies. Policies for specific sectors also have important effects on foreign investment decisions in some cases. Finally, policies and institutions governing foreign investment in particular can have an impact, although that effect may be hard to identify.

²² Dunning, J. H. (1970), *Studies in International Investment* London: George Allen & Unwin.

In retrospect, the policies followed by South East Asia seem to be most conducive to DFI. These mainly comprise a decrease in tariffs, change in prices of local resources in conformity with opportunity costs, and positive real rates of interest. In addition, the incentives offered to investors and the services and infrastructure provided by the LDCs would be important. Performance requirements, including forced exports, local content requirements, and equity sharing, may be deterrents to DFI. These are often advanced by the MNEs as bottlenecks to their investment in India. It should however be noted that while incentives may not promote much additional investment, empirical evidence suggests that performance requirements if overused may discourage DFI.²³

Some policies pursued by industrial countries can have a dampening effect on DFI in LDCs, for instance restrictive trade policies and subsidies to domestic investment.

(2) It is often contended that DFI requires complementary financial flows to help create opportunities and to complete their financing. The capital investment provided by parent firms is only one source of financing for their subsidiaries. e.g. U.S. parent firms have supplied only 60% of the external

²³ See Guisinger, S. et. al., 1985, Investment Incentives and Performance Requirements, Praeger: New York.

resources of their subsidiaries in Latin America.²⁴ The remainder has come from local and foreign commercial banks and from trade credits. Other forms of international capital have also facilitated DFI by financing infrastructure essential to the profitable functioning of direct investment enterprises. Thus the existence of backup and particularly financial backup facilities may be an important determinant of DFI.

Empirical evidence on the determinants of DFI indicates a clear positive correlation exists between GNP per capita and the stock of foreign direct investment per capita.²⁵ Moreover, though the causal significance is uncertain, it is likely that the MNEs may be attracted by countries with tastes and factor prices which are similar to their home bases. It was also found that aggregate foreign investment in manufacturing showed at least a weak positive relationship to political stability and negative correlation with a hostile investment climate (e.g. specific threats to foreign investors) and ideological orientation towards socialism.²⁶ However this study did not make an important distinction between export-oriented and local market oriented DFI. Another

²⁴ See Ryrie, 1986, op. cit.

²⁵ See Reuber G.L., Crookell, H., Emerson M. and Gallais-Hammononno, G., 1973, Private Foreign Investment in Development, Oxford, Clarendon Press; and Caves, 1982, op. cit.

²⁶ Nankani, G.T., 1979, The Intercountry Distribution of Direct Foreign Investment in Manufacturing, Garland, New York.

study has shown that political economy problems pose less uncertainty for export-oriented projects²⁷

It is now necessary separately to enumerate the differences between the two sorts of DFIs as this will have an important bearing on the determinants. MNE parents hold significantly higher fractions of equity in export-oriented subsidiaries vis-a-vis local market ones.²⁸ This could be accounted for by the fact that local entrepreneurs are more useful in the latter case. Also the reliance on the local market for capital is higher in the latter case. However, no difference in profitability was observable.

There is some evidence that export-oriented industries are more responsive to policies such as tax holidays and infrastructure investments. Domestic market projects are more responsive to protection from competing imports.

Some empirical evidence suggests that the government's efficiency and predictability in dealing with MNEs may weigh quite heavily relative to specific inducements.²⁹

It appears thus that MNEs are more active in the following sectors:

²⁷ See Reuber et. al., 1973, op. cit.

²⁸ *ibid.*

²⁹ *ibid.*

- (1) Where market entry barriers would otherwise limit the export of manufactured goods from LDCs;
- (2) Those that undertake labour-intensive stages of processing.
- (3) the same sectors as their developed country counterparts.
- (4) Concentrated sectors.³⁰ However, this does not imply that they enjoy universal advantages over native entrepreneurs nor do they always command large market shares.

DFI tend to go partly into expanded consumption in the host country and only partly into enlarging the host's capital stock.³¹

From the preceding discussion it can be concluded that the the factors which have led to an increase in DFI in developing countries did not apply to India. A detailed investigation of the factors affecting DFI in India is left to chapter 4. Here it is sufficient to state that government policies have often been regarded as the major bottleneck to DFI by the foreign investors.

It was stated in the introduction to this chapter that the two categories, bank lending and DFI, cannot be treated

³⁰ Lall, S. 1980, 'Monopolistic Advantages and Foreign Involvement by U.S. Manufacturing Industry', Oxford Economic Papers, Volume 32, Number 1.

³¹ See Caves, 1982, op. cit.

as mutually exclusive categories. In the case of Brazil the presence of MNEs and the related investments facilitated the inflow of bank loans. The next section examines the link between the two kinds of capital inflows.

2.8. The link between debt (bank loans) and DFI

The first link that will be examined is that of 'Debt - equity Swaps'. The idea behind all debt swap schemes is to convert or swap external debt which is denominated in foreign currency into domestic equity which is denominated in domestic currency. The buyer, either resident or foreign, may buy a debt from the asset holder, usually a commercial bank. Thus, the original holder effectively cashes in the loan but only up to a proportion of its face value. The buyer then sells the debt back to the government of the country which had contracted the debt and receives assets denominated in domestic currency. The buyer will be unable to swap the debt at the official exchange rate but does so at a less advantageous rate. This system can successfully exist only when there is a desire to invest in a specific national economy. Thus though the rate of discount and the effective exchange rate will influence debt swaps, of much more importance would be the underlying assessment of the country's economic prospects.

The second link that we will examine is the proposition that DFI may lead to external debt or bank loans.³² The effect varies according to the sector where the DFI is made and according to whether one examines stocks or flows of DFI. Stocks are defined as the total value of the holdings of foreigners in the host 'State' and flows are defined as the value of new capital introduced into a country during a specific period of time. It was observed that DFI in export oriented industries was less likely to lead to debt than DFI oriented towards the local markets.³³ Moreover, higher flows of foreign investment were less likely to lead to debt.³⁴

The effects of DFI on debt accumulation can be direct or indirect. The direct effects are related to the impact of foreign investment on capital availability. One of the most persistent themes in the literature is that foreign investment decapitalizes underdeveloped host States. This occurs in two ways.³⁵ The first results from the repatriation of profits by

³² See Cardoso, F.H. and Faletto E., 1979, Dependency and Development in Latin America, University of California Press, Berkeley, California.

³³ *ibid.*

³⁴ Bornschier, V., Chase-Dunn C. and Robinson, R., 'Cross-National Evidence of the Effects of Foreign Investment and Aid on Economic Growth and Inequality: A Survey of Findings and a Reanalysis', American Journal of Sociology, Volume 84, 651-683.

³⁵ Mahler, V.A., 1980, Dependency Approaches to International Political Economy, Columbia University Press, New York.

foreign investors imposing a burden on the balance of payments, depleting the host country's hard currency reserves and eventually forcing it to borrow abroad.³⁶ A second impact on capital availability is related to the tendency of foreign investors to use local capital in markets in host States to obtain funds needed for expansion and for covering operating costs.³⁷ This implies that less is available for domestic investors and for the government to use, and this eventually creates the need to borrow on the international credit markets to make up for the shortfall.

The mechanism by which DFI affects debt accumulation differs from region to region. Latin American countries (including Brazil) were more affected by the above mentioned direct effects, whereas the indirect effects were more prominent in Africa. This implies that that the repatriation of profits and local borrowing led to more debt in Latin America, whereas the attempt to maintain higher growth produced by foreign investment may have been more important in the debt accumulation in Africa.

Beyond this, foreign investment can set loose forces in LDCs that create social and psychological pressures and

³⁶ Dos Santos, T., 1971, 'The Structure of Dependence', in K.T. Fann and D.C. Hodges (eds.), Readings in U.S. Imperialism, Porter Sargent Publishers, Boston.

³⁷ Kindelberger, C.P., 1979, 'The Monopolistic Theory of Direct Foreign Investment', in G. Modelski (ed.), Transnational Corporations and World Order, W.H. Freeman, San Francisco.

indirectly lead to debt accumulation. These pressures are related to the effect of foreign investment on growth. Foreign investment could have adverse effects on growth in the recipient country:

- (1) by destroying local business.
- (2) by using control over local resources to augment global profits instead of assisting local development efforts.
- (3) by introducing overly sophisticated technology that destroys jobs.
- (4) by emphasising local consumption instead of capital investment and savings needed for continued growth and development.³⁸

Thus the fear is that foreign investment may promote short term growth but long term growth may require continuous infusions of foreign capital.³⁹ This could be attributed to the fact that in the short-run higher stocks of foreign investment enhance the ability of MNEs to penetrate local markets. Once the desired level of penetration is attained, they shift their attention elsewhere, resulting in a diminished flow of capital to the host State and thus a reduction in its growth rate. The experience of Brazil shows that the presence of DFI both led to debt accumulation but

³⁸ Barnett, R., and Muller, R., 1974, Global Reach, Simon and Schuster, New York.

³⁹ Amin, S., 1976, Unequal Development, Monthly Review Press, New York; and Cordoso and Faletto, 1979, op. cit.

The dependency argument can be discredited on the grounds that the observed behavior of MNEs shows that most of their investments come from retained profits. Borrowing in the local markets is not an extensive practice of the MNEs. In some countries of Latin America notably Brazil, it was found that MNEs sought loans from international banks for their investments in Brazil and their presence may have facilitated the entry of Brazil in the international capital markets. The deleterious effect of MNEs on local businesses has also not been systematically proved. MNEs have over time adapted the technology to suit local conditions as only this would be cost effective in the long run. Moreover greater awareness on the part of LDC governments has meant that they are able to regulate the activities of the MNEs to suit their interests. This ofcourse does not imply that the MNEs are universally beneficial and in fact some examples of dependency particularly in the African countries can be observed, but that dependency can easily be averted. Thus it cannot be established that DFI can lead to debt.

also helped to ease the debt problem by providing a climate for debt swapping. The presence of MNEs provides an incentive for the banking community to solve the last problem.

2.5 Conclusions

The trends of capital transfers to LDCs indicated the prominence of bank loans over other forms of capital transfers during the 1970s. During the 1980s other forms such as DFI also became important. In India too, bank loans have been the predominant form of private external capital inflows. The trend in India has however contradicted the general trend in developing countries because bank loans to India were increasing when those to the rest of LDCs was decreasing. Moreover, DFI has increased during this decade even though in comparison to other countries (China) the volume of DFI is very low. These and other forms of external capital transfers have been examined in greater detail in Chapter 3 and 4.

Regarding our case study countries, India has become a major borrower of private funds only in the 1980s, which Brazil was a large borrower of private funds in the 1970s. Thus, it would appear from the preceding arguments, that private capital transfers to the former should be mainly real and to the latter mainly financial. In fact this not so. The pattern of international capital transfers to India bears a striking resemblance to that for Brazil. Details of this will

be discussed later in Chapter 5. Here it is important to point out this important distinction between India and other LDCs in general. The next two chapters will try to uncover some of the causes of this pattern for India.

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APPENDIX TO CHAPTER 2

A Note on All Available Information

For developing countries there is a wide coverage of long-term external debt in the World Bank's Debt Reporting System (DRS), the OECD's debt statistics (DAC/DS), the two BIS systems (BIS I and BIS II), and the two IMF publications Government Finance Statistics Yearbook (GFS) and International Financial Statistics (IFS). In addition, some information on short-term external debt is to be found on a residual maturity basis in BIS II and on an original maturity basis in the IMF publications. We will use only these sources to gauge the long-term and short-term capital transfers to developing countries. These data sources are discussed in greater detail below.

There are some problems with using certain other data for extending the data base. Thus, IMF balance of payments statistics would give only a rough idea of the size of debt, and that too only for those countries for which there is complete, detailed and reliable coverage for a considerable period of time. The data on international capital market transactions from the World Bank and the OECD relate to flows rather than stocks, and include credit lines as well as disbursed credits. The figures are in gross terms and overlap with various systems. Thus they cannot be used to indicate changes in the size of net external indebtedness of a country;

it is not possible to disentangle credits in one period from borrowings in that or other period.

World Bank's Debt Reporting System (DRS)

This system collects detailed information on the total volume and servicing of long-term external public and publicly guaranteed debt of 140 countries, which are debtors of the World Bank and the International Development Association. This information is collected at the end of each year and in addition quarterly reports are collected on new debt commitments. This system reports both stocks and flows of debt and the future debt servicing.

The information collected in this system is presented in the 'World Debt Tables' and the Annual Report of the World Bank. The World Bank also collects information on long-term external non-guaranteed private debt of its member countries which are known to have accumulated significant amounts of such indebtedness. This coverage extends to 40 countries and has recently been published as a supplement to the 'World Debt Tables'. The military credits in the latter data are seldom reported, and there is no standard format for the presentation of this data whose sources include the reports from African, Asian and Inter-American Development Banks as well as the reports from the OECD's Development Assistance Committee (DAC). Data on bond issues and Euromoney credits are taken from the World Bank's own capital markets system (CMS).

Long-term debt is defined as the debt owed to non-residents which is payable in foreign currency, goods or services, which has an original or extended maturity of over one year and which is an obligation of:

(1) a public debtor including the national government, a political sub-division, or an agency of either

(2) a private debtor publicly guaranteed for the repayment by a public debtor as defined above.

Undisbursed credits and loans are also reported according to two categories, official and private. The former category is subdivided into bilateral and multilateral (excluding the IMF), and the latter into suppliers' credits, financial credits and other obligations to private creditors excluding direct investments. The reporting countries convey information on the amount of principal and interest paid on long-term external debt to the World Bank.

OECD's DAC Statistics

The member countries of DAC are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Federal republic of Germany, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom and the United States. DAC annually publishes two kinds of statistics.

1) Data on transfers of long-term financial resources from DAC members to developing countries and territories throughout the world.

2) Data on long-term external debt and the corresponding debt services of developing countries compiled on the widest possible basis. In this context resource transfers or debt are regarded as long-term if their original or extended maturity exceeds one year.

The first category covers both official and private long-term financial flows, excluding military grants and credits. The data also includes non-debt terms like grants and grant-like contributions. In addition, the resources received by individual LDCs from DACs and certain other sources, in particular, multilateral agencies and OPEC countries are also documented here.

Coverage of the second category extends to the individual LDC's long-term external indebtedness and their debt service. The DAC draws on its creditor reporting system (CRS) and on the information from the World Bank's DRS and other sources, both national and international.

This system covers official and private flows of long-term resources from DAC members either directly or through multilateral agencies to developing countries. Four main categories are distinguished: ODA and other official flows; private flows at market terms which include private direct and portfolio investment; the officially guaranteed private export credits and transactions of the banking sector; and grants by voluntary agencies.

Types of bonds

(1) Traditional function bonds which are those issued on the market of a single country in that country's currency by borrowers who are not its nationals.

(2) International bonds (or Euro-bonds) are those placed simultaneously in the markets of at least two countries usually through international syndicates of banking institutions of several nations.

(3) Public bond offerings are bonds offered for sale to investors generally if subscribed by an issuing house or quoted on a stock exchange.

(4) Private bond placing are those for which a part or a whole issue is reserved for a subscriber other than an institution acting in the capacity of an underwriter (e.g. an insurance company), by bilateral agreement.

All bank loans of an original maturity of more than one year are considered as medium or long-term. All negotiable securities of at least a year's maturity considered in the case of bonds.

This system excludes short-term loans. For bank loans, the coverage is not exhaustive, though a majority of loans are probably covered.

With respect to bonds, all public issues of OECD countries are included. Coverage of public issues outside OECD is expected to be good. The coverage of privately placed bonds varies from one country to the other. In some cases,

borrowers may not disclose the terms or even the existence of a particular transaction, and hence by necessity these are excluded.

OECD International Capital Market Statistics

This system publishes statistics on the new publicised borrowing in the international capital markets. It covers medium and long-term international bank loans (syndicated Euro-currency credits), traditional bond issues and international issue of bonds (Euro-bonds). They are eventually reconciled with corresponding data released under the World Bank Capital Market System (CMS).

International bank loans listed in the table are defined as loans which have been granted by banks with Euro-market funds, excluding loans realised in the form of negotiable instruments such as bonds or notes. The term 'Euro-currency' market includes markets in external currencies outside Europe. Euro-currency credits listed in the tables are syndicated credits reported to have been compiled (i.e. fully subscribed). The amounts shown are the gross amounts of the commitments as they are announced. They do not necessarily correspond to the amounts actually drawn - as such drawings can be used also for repaying outstanding credits or for making new deposits. It is not possible to compare this data with that taken from bank balance sheets. Loans from international organisations such as the IBRD or the European

International Bank are not listed. Companies are considered to be located in the country of their registered office or in the country under whose laws they are incorporated. Purely financial subsidiaries are considered to be located in the same country as their parent company. Financial subsidiaries of several parent companies of different nationality are listed under the item 'unallocated'.

The BIS Statistics on Banks' International Lending

The BIS collects and publishes information on the international operations in both domestic and foreign currencies of commercial banks located in the main industrial countries as well as their offices in offshore financial centers. There are two systems of reporting information, BIS 1 and BIS 2. Under BIS 1, quarterly reports are submitted by banks of a group of ten countries.¹ These banks submit information on their external liabilities and assets in all currencies vis-a-vis all countries in the world, and some other selected groups of countries.

BIS 2 publishes details of external assets and liabilities of countries. It also includes their unused credit commitments vis-a-vis the rest of the world (i.e. all countries outside the reporting area). In addition the positions of some of the foreign affiliates of the reporting

¹ Switzerland, Austria, Denmark, Ireland, Bahamas, Cayman Islands, Panama, Hong Kong, Singapore, United States.

banks, including a maturity breakdown on the asset side, is also given.

Coverage extends to all financial institutions of reporting countries that have foreign and domestic currency positions vis-a-vis non-residents. The exceptions are Canada and Italy; in the former case only the commercial banks report to the BIS, and in the latter case the credit institutions (whose activities are confined by law to medium and long-term lending) are excluded. In addition, a number of institutions specialising in direct lending refinancing of export related credits do not report at all (e.g. Exim bank of USA or Banque Française du Commerce Exterior).

Apart from the US offshore affiliates, the offshore banking centers of all other reporting countries are also included. Data from banks whose head offices are located in Luxembourg exclude both the external claims and external liabilities of affiliates in the offshore banking centers; and the same holds true with respect to the external liabilities of banks with their head offices in Italy and the UK.

In the quarterly reporting system the coverage of foreign currency assets and liabilities vis-a-vis non-residents includes virtually all items of significance to us. However, Swiss banks do not report their trustee business in foreign currencies, which this business sizable, is probably not very important for LDCs. The coverage of domestic currency assets and liabilities vis-a-vis non-residents is much less complete,

particularly with regard to the banks' foreign trade credits and their holdings of foreign bonds. No country details are given for oil-exporting countries in the Middle East, which are grouped into 'low absorbers' and 'high absorbers', with some unclassified items appearing in the residual category for the Middle East. Country details are reported by banks in Austria, Belgium-Luxembourg, Canada, Denmark, France, Federal Republic of Germany, Italy, the Netherlands, Sweden, UK and the offshore branches of US banks in the Caribbean area and the Far East. Maturity breakdown is, however, incomplete for Italy and France.

World Bank's Capital Markets System (CMS)

This system publishes newly publicised borrowing in the international capital markets in the form of foreign and international bonds and Euro-currency credits. It also publishes 'Borrowing in International Capital Markets' four times each year.

The CMS covers long-term borrowing in international capital markets. Information is provided on the following.

- 1) Publicised foreign bond issues, i.e. those issued by a national of a country other than that of the capital market where the bond is issued. These cover: public offerings, which are offered for sale to investors generally subscribed by an issuing house or quoted on the stock exchange; private placements, which are not quoted on the stock exchange or are

entirely taken up by institutional investors.

2) Publicised international bond issues are those which are underwritten and sold in more than one market simultaneously. These, like the foreign bonds, can be offered publicly or placed privately.

3) Publicised long-term Euro-currency credits which are defined as loans, credit lines and other forms of credit granted by private banks with Euro-currency funds on deposits with them or borrowed by them in the Euro-currency market. This includes markets in external currencies outside as well as inside Europe.

4) Non-official loans from private banks, which are only those credits reported to have been completed or signed during that period (i.e. for which the data is related, for example a year). They do not reflect either the extent to which such loans have actually been drawn down or the extent to which they have been redeposited or used for other purposes.

Loans and credits guaranteed by official institutions do not qualify for inclusion even if they are granted by private banks with funds provided from offshore sources. In financial packages which contain both Eurocurrency and other types of credit, the two are entered separately.

The date of offering bonds is generally provided in reporting data. For Swiss issues, the first day of subscription, or the date of publication, is quoted. For credits, the date of completion or signature or the press

notification date is used in reporting data. Bonds and credits of over a year's maturity are considered as long-term.

The coverage of the OECD publicly issued bonds is more or less complete. Outside the OECD too, the coverage of public issues is fairly comprehensive. With respect to privately placed bonds and Euro-currency credits, the coverage varies from one country to another. The coverage of privately placed bonds and Euro-currency credits is incomplete as Euro-currency loans of less than ten million US dollars or those granted by a single bank are not usually found in the statistics. In general Euro-currency loans to private enterprises are less likely to be disclosed than loans to official entities. Hence its coverage is not as comprehensive as would be desirable.

GFS and IFS Systems of the IMF

The IMF collects data on external indebtedness of the government of different countries (GFS) and on assets and liabilities of their financial institutions, both public and private. In addition it collects data on the external capital flows of these countries, i.e. on changes in the external assets and liabilities of their economies, disaggregated by major economic sectors and types of capital transactions (IFS). It provides data on stock of external assets and liabilities of financial institutions across countries and on external indebtedness of their governments, and flow data on

their capital accounts of the balance of payments. The coverage varies between countries according to the extent to which they are able to provide comprehensive information.

Gaps In Information

These are mainly of two types, namely those which apply to all countries and those which apply to only particular countries. Regarding the first type, none of the systems reported above collect information on short-term indebtedness to foreign non-bank lenders. In some cases the IMF's Government Financial Statistics may show short-term financing abroad by a country's consolidated central government which may include loans granted by non-banking foreign holders of short-term debt instruments. Of these the most important missing item is short-term trade credit, both that granted by foreign industrial and commercial suppliers of goods, and that extended by foreign governments and other public-sector bodies. However, some short-term trade credits originally granted by non-bank institutions may subsequently be taken into the portfolios of commercial banks outside the borrowing countries and hence may be covered by the BIS. In addition, a large proportion of the short-term credit that finances international trade is granted in the first place by commercial banks and generally from banks in the BIS reporting area. Also the proportion of international trade financed or refinanced by bank credits rather than suppliers' credits, has

been increasing in the recent years. These credits too are often covered by the BIS.

Regarding the second type of gap, almost all categories of debt of developing countries are covered to some extent in one or other of the systems discussed above. The main shortcoming of this type of gap pertains to long-term external debt of developing countries. Two systems, namely the OECD and the World Bank's DRS report long-term debt statistics. The gaps in the former, which are more comprehensive, are their non-reporting private long-term debt.

The BIS is the only system that covers the short-term external indebtedness of developing countries on a comprehensive basis. Moreover, there may be some overlap between the BIS reporting system and other systems on account of the maturity breakdown by the BIS. The BIS uses a residual maturity basis whilst all other systems define long-term debt on the basis of original or extended maturities. Thus bank credits with original or extended maturities of over a year may have a residual maturity of a year or less. Hence some of these credits may be reported as short-term in the BIS and as long-term in other systems. The extent of the overlap between short-term debt of the BIS and the long-term debt of other systems is however difficult to evaluate.

As no single reporting system gives an overall picture of any country's external debt, it is necessary to examine the possibilities of comparing and aggregating the data from

various systems. The differences in the various systems reflect their varying objectives and it is necessary to outline them in order to make any meaningful comparison. One difference is the presence in some of the data of non-debt items. A second is the overlap between different systems, and a third is the method and timing of data collection.

Regarding the first, official and private grants and grant like contributions may be difficult to isolate from foreign direct investment, especially the statistics on DAC flows of financial resources to developing countries. This is a serious limitation and may prevent the aggregation of different systems. The BIS system limits itself to the bank claims on developing countries and although this includes private direct investment, it does not include grants and other non-debt items. The OECD's debt statistics also refer only to transactions which give rise to foreign debt in developing countries.

Regarding the second, for most part the overlaps concern long-term indebtedness especially in the DAC/DS and DRS figures. Thus no simple aggregation of the published figures from these systems is possible. Moreover the maturity aspect discussed earlier implies that there is an overlap between the IBRD and OECD data classified as short term. However this overlap may not be important if it is assumed that a substantial part of the claims registered as short term by the BIS had original maturities of one year or less. In that case

some aggregation may be possible.

Regarding the third, the IMF's balance of payments statistics and the OECD's and the World Bank's capital market system exclusively cover flow data, whereas the DAC, the GFS and the DRS cover both flow and stock data, the BIS and IFS concentrate exclusively on stock data. In addition, there are differences in the methods used for currency conversion, there are differences in timing and there are differences between reporting under creditor and debtor systems. For instance the World Bank's CMS uses the monthly average market rates for converting all loans to dollar loans whereas, in the DAC statistics, the main exchange rate applicable to the relevant year is used. The differences in timing between the various data systems makes aggregation very difficult. Most importantly the same transaction may be recorded differently in a debtor reporting system vis-a-vis a creditor reporting system. For instance, a borrower who takes up a loan from a branch of a bank whose head office is situated in a third country may classify the loan as being owed to the country in which the bank is located, while the same loan may appear in a creditor reporting system as having been extended by the country in which the head office of the lending bank is located.

To sum up, this thesis will use different sources for the various forms of capital transfer to developing countries. For bank lending, this thesis will mainly rely on the BIS for

four important reasons. (1) it is the only comprehensive source of long-term and short-term lending. (2) it nets out inter-bank transfers and loan repayments to give the net bank lending. (3) it uses yearly rather than monthly average exchange rates to give the dollar denominations of loans. (4) it also reports on the offshore deposits and lending of the US banks. Wherever possible comparisons will also be made with other data sources. However, the BIS data suffers from one serious limitation, namely it excludes bank claims by non-reporting banks. In this context the banks from the oil surplus countries are important and will thus be dealt with separately. . . . Aggregation is difficult, but ignoring the recycling to developing countries through the Arab banks should be avoided.

The World Bank and IMF data will be used for official transfers and private direct investment. The OECD publishes comprehensive information on bond lending, and hence these will be used to study the security markets in developing countries. Some aggregated data reported by the UNCTAD (and compiled from the various sources mentioned above) will also be used. However, bearing in mind the limitations of aggregation, this data will only be used to highlight general trends.

CHAPTER 3

EXTERNAL COMMERCIAL LOANS TO INDIA

3.1 Introduction

In Chapter 2 it was shown that external commercial loans to India were expanding when loans to other LDCs were shrinking, though the volume of overall commercial lending to India does not suggest that loans to India could compensate for the decline in loans to other developing countries. The large increase in the loans to India can be explained by three basic factors. Firstly, overexposure of the lenders to other LDCs made India seem like a reasonable borrower. Secondly, external capital inflows are necessary for the development of India as her growth and social development aspirations go beyond that which is sustainable by her domestic savings. In view of the extreme poverty which exists in India the demands made by the non-growth sectors such as the social infrastructure must be met without a reduction in domestic demand. Thus foreign borrowing becomes a natural alternative. Thirdly, the decade of the 80s saw a decline in the volume of concessional loans and other such forms of transfers because of the entry of China in the United Nations. Thus China became a competitive contender for concessional loans and the share of India in the concessional loans declined. In a climate of generally shrinking concessional loans this implied an

absolute decline in the volume of concessional loans.

In this chapter first of all an estimate is made of the overall requirements of the total external capital requirements in the context of a two-gap method of analysis.¹ The resource gap analysis of the two-gap model however assumes a certain level of underdevelopment of the banking system in the creation of credit. Thus the system of banking and particularly the role of the GOI is discussed here. The role of the GOI also extends to external private borrowing and helps to explain the trends and terms of external commercial borrowing. Lastly the macroeconomic effects of external commercial loans have been examined here.

3.2 The finance gap in the Indian economy

The extent of external capital inflows required annually is reflected in an ex-post sense by the deficit in the current account in the balance of payments. In an ex-ante sense the savings gap, namely the planned investment minus the anticipated savings represents the requirement for foreign savings. In other words the postulated fiscal deficit in terms of the targeted rate of growth represents the foreign saving requirement. In terms of the two-gap model presented in Chapter 2 the fiscal deficit represents the ex-ante savings

¹ See Bhagwati, J.N., Jones, Mundell, R.A., and Vanek, J. (eds.), 1971, Trade, Balance of Payments and Growth: Papers in International in Honour of Charles P.Kindleberger, Amesterdam: North-Holland.

and the foreign exchange gap and the ex-post gaps are given by the deficit in the current account of the balance of payments. Both these figures for India are shown in Table 3.1. An examination of the figures reveals that the ex-ante resource gap (the saving and the foreign exchange gap) was consistently overestimated during the second half of the 70s and consistently underestimated during the 80s. This could be attributed to the fact that unanticipated remittances from the Middle East lent balance of payments support during the 70s. The 80s saw a decline in these remittances as the fall in the oil price signalled the end of the oil boom.

The divergence between the anticipated and actual resource gap in the 80s can be mainly attributed to two factors. First of all, the levels of investment (especially those involving the import of plant and machinery) was higher than anticipated. Secondly, the levels of domestic savings were lower than anticipated. In addition, to get a more reasonable idea of the foreign exchange requirements it is necessary to add the amortisation of loans to the current account deficit.

As stated in Chapter 2 postulating the resource gap in terms of the two-gap model assumes that resources directly translate to growth. Productivity gains will decrease the resource requirement and leakages will increase it. Saving as a precondition to investment underplays the role of banking in the provision of resources. Bank credit may be generated

Table 3.1

India's current account surplus and the ex-ante savings gap

(Million U.S. dollars)

Year	Current account surplus	Planned investment minus planned savings
1975	-288	-523.9
1976	786	-541.4
1977	932	-560.8
1978	659	-798.3
1979	48	-1068.3
1980	-1758	-1477.9
1981	-2698	-959
1982	-2254	-1115
1983	-1953	-1270
1984	-2343	-1412
1985	-4178	-1830
1986	-4597	-2031
1987	-5192	-2031

Note: The average exchange rate has been used to calculate the U.S. dollar value of planned investment minus planned savings.

Sources: IMF, International Financial Statistics, various issues; Government of India, Economic Survey, various issues.

independently of the saving level in the economy. For instance the increase in the capital productivity (the incremental capital/output ratio changed from 4.6 in the early 80s to 4.4 in the late 80s)² would also contribute to the growth potential of the Indian economy. Moreover, the argument set forth by the two-gap model that saving is the primary determinant of investment negates the role of banking in the process of credit creation; depending on the stage of banking the volume of credit creation can be quite independent of the volume of deposits initially held by the banks. Thus the premise that saving is the primary determinant of investment and growth must be examined in the Indian context.

First of all the change in the capital/output ratio shows that greater improvements in this ratio can reduce the desired volume of savings associated with any growth path. A simple example will illustrate this point. The Eighth Five Year Plan postulates a target growth rate of 6%. At this targeted growth rate the desired volume of domestic and foreign saving must increase at the rate of 8.5% per annum assuming that the existing capital/output ratio, i.e. 4.4 prevails. However, if the capital/output ratio were to decrease to 4, then the targeted rate of growth of saving need be only 6% per annum.

² See The World Bank, 1989, India: Poverty, employment and social services, Volume 1: Executive summary and Main Report, Report No.7617-IN.

Apart from the incremental capital output ratio the trade regime may contribute to decreasing or increasing the capital requirement of India. Higher tariffs may influence and indeed limit the import of certain necessary inputs and thus have a depressing effect on the incremental capital output ratio. Many other causes of inefficiency such as the size of the public sector and barriers to competition which are almost endemic in the Indian economy may imply that funds are neither allocated nor used in concurrence with their opportunity costs. Removing these inefficiencies will reduce the saving investment gap and also have a more favorable effect on the incremental capital output ratio.^{2a}

.....

^{2a} See World Bank, 1987, India: an Industrialising Economy in transition, Country Report.

Improving the rate of capital productivity may itself require the import of certain capital goods. This may in turn involve deregulation of imports which may increase the foreign exchange gap and hence the total saving requirement. Thus, though on the one hand an improvement in the capital/output ratio will lead to a decline in the saving requirement, this very decline may necessitate a further increase in imports and hence an increase in the foreign exchange gap. The net decline in the savings requirement will depend on the size of the two opposing movements. Moreover, the 7th Five Year Plan (the last plan) resulted in high government deficits and a decline in public sector savings. If this trend were to continue, the beneficial effects of overall improvements in productivity could easily be offset by crowding out, inflation and balance of payments pressures. The next section looks at the other aspect of the finance requirement viz the state of banking in the Indian economy.

3.3. Saving, investment and banking

Postulating the resource requirement in terms of the savings and the foreign exchange gap is valid for the Indian economy only if one makes certain assumptions about the state of banking and credit creation in the Indian economy. Saving as a determinant of growth is only consistent with direct lending. This may include a banking system which merely

onlends deposits. Call this stage 1.³ In this stage of banking the two-gap theory would be appropriate. The presumption in this stage is that the LDCs find it difficult to attract reserves and deposits, so that the resource constraint is binding. In stage 2 of banking development however, the banks' ability to expand credit depends both on the size of the deposit multiplier and the multiplicand or the reserves held by the banks. The multiplier is higher, the lower is the reserve/deposit ratio and the cash/deposit ratio, the lower is the propensity to import, and the lower is capital flight in the case of LDCs. In stage 3 interbank lending mechanisms develop and these contribute to the efficient use of such reserves as are available. In this stage the bank multiplier acts even more rapidly than in stage 2.

The state of banking in India corresponds to stage two and three as set outlined above.⁴ The reserve/deposit ratio in India is 38% and the cash/deposit ratio is 15%.⁵ These ratings are very high by international standards. Moreover, the propensity to import has been very high in this decade.⁶

³ See Chick, V., 1986, 'The Evolution of the Banking System and the Theory of Saving, Investment and Interest', Economies et Societes, Cahiers de I'ISMEA, Serie Monnaie et production, No.3.

⁴ Ibid.

⁵ See Bhagat, M., and Sarkar, K., 1989, 'New rules of the money game', Business India, April 17-30.

⁶ See Reserve Bank of India, 1989, Annual Report

There are no reliable estimates for potential or desired capital flight, but the differential between the black market and the official rate of exchange indicates that the volume of desired capital flight has increased during the 80s. These factors indicate that the deposit multiplier is not very high in India and is unlikely to improve significantly in the near future. The multiplicand is determined chiefly by exports. Though the level and the growth of exports are high, the import content of both exports and investment is also high and has been increasing over this decade. If the import content of investment expenditure is high than the income multiplier will be low as will the rate of growth of saving. This would in any case necessitate foreign capital inflows in the manner postulated by the two gap model.

Households are the primary savers. Public sector savings has fallen from 4.5%-5% of the GDP in the late 70s to 2-3% of the GDP in the late 80s. This fall can primarily be attributed to the worsening deficit of the central government. Private saving has remained consistent at around 20%. About 2/3 of the total private saving comes from households. Thus households account for between 2/3 and 4/5 of the total saving. Most of the rise in private saving represents increased financial saving. Important financial instruments include deposits, shares, government debt, pensions and insurance; these accounted for about 55% of the total saving in the late 80s in comparison to 45% in the late 70s. The

improvement in the financial savings can largely be attributed to the spread of branch banking and the postal saving system, the development of the capital market, and the favorable tax treatment given to savers especially for the purchase of public debt. The stagnation in India's rate of saving at around 20-23% reflects the fall in the public saving rate, as the household saving rate has improved from around 20% in the late 70s to 23% in the 80s.

However public investment has been much higher than private investment. Public investment has risen as a proportion of GDP during the 1980s while private investment has stagnated or even fallen. In both bank lending and in the capital markets the share of government has risen since the early 80s. It is conceivable that this larger public investment has crowded out private investment, by raising the cost of borrowing to the private sector and reducing the availability of funds to the private sector. In fact the increasing financialisation of private saving has made it easier for public sector to tap private saving directly by issuing claims to households and indirectly through financial intermediaries that acquire government debt, voluntarily or involuntarily, to meet portfolio requirements. At the same time the attractive rates of interest and the tax concessions on public sector's market borrowing has encouraged the financing of public versus private debt.

Two items of government debt must be distinguished from

each other: the so-called 'primary deficit' i.e. the expenditure gap exclusive of interest payments, and interest payments which may be termed the 'secondary deficit'. An increase in the primary deficit results in an increase in the secondary deficit too. The primary deficit has risen from 3.6% of the GDP in the late 70s to 5.6% of the GDP in the late 80s.

Between the early and the late 80s about 80% of the Indian central government's increase in interest payments was on account of its rising debt, and only about 20% of it was on account of an increase in the average interest rate on the outstanding debt. In addition reducing government deficit drastically may imply a reduction in capital expenditures and this may not be in the long run developmental interest of India. Thus *to move* to higher growth paths ^{India} may require extensive inflows of foreign capital.

Moreover confidence in the banking system will also determine the size of the reserves held by the banks. Though technically speaking banking in India is advanced and can be considered to be in stage 3 or stage 4, the requirements of priority lending may automatically restrict lending to the private sector. Banking in India is nationalized and the banks are required to lend about 40% or more of their deposits to the priority sectors at rates of interest which are below the levels obtained for private lending. This priority lending also includes other lending to the public sector. Over 60% of

the banks' lending goes to the public sector in one way or the other. Moreover recovery of these loans has been very haphazard: the loan recovery rate in India has been as low as 40% of most loans. This implies that the RBI may be called upon to bail out the commercial banks from time to time.

However, the non-bank capital markets developed rapidly during the 80s. Informal arrangements developed to tap the surplus of big corporations which had emerged during the 80s. The inter-corporate deposit market in which companies informally lent to each other came into existence. Alternatively banks too invested the surplus funds of their corporate clients at attractive rates in units, debentures, and public sector bonds.

Back to back deals became commonplace. In these deals, government and other securities are sold and bought back at an informally agreed upon discount which raises the yield above the administered rate of return. Conventional instruments like government securities are no longer considered very liquid. In 1988, the call money rate was freed. A ceiling on the call money rate was earlier in existence. The monetary reforms of 1988 did away with the ceiling and merely imposed a lower limit below which interests are not allowed to fall. Moreover corporate borrowers have been allowed to issue commercial paper up to 20% of the total bank borrowings. The issue of commercial paper gives the banks an opportunity to lower their cost of borrowing and reduce

their dependence on banks. The RBI also made the rating of companies compulsory and has laid down strict eligibility criteria for the issue of commercial paper.

By contrast with the private money market, the 'official' Indian money market is extremely narrow with a very limited number of players. Inter-bank call money and government securities are the major instruments and the players are mainly the banks and some financial institutions. The major instruments are:

(1) approved securities which include central and state government securities, bonds/debentures of state electricity boards and housing boards, municipal corporations and financial institutions. However, as pointed out earlier these securities have become unattractive on account of government profligacy. Only banks are required to hold 38% of their approved securities as the statutory liquidity ratio (SLR) and these form the major players in this market.

(2) Treasury bills. These are promissory notes sold on tap by the RBI on behalf of the government, for a fixed period of up to one year. The discount rate for these was also frozen till 1986 after which they were auctioned to the highest bidder. The normal yield has been around 9%.

(3) Call money. This is the most active segment in the market where banks lend and borrow for short periods extending to 14 days. The Life Insurance Corporation and the Unit Trust of India also lend to banks, but they are not allowed to

borrow. Till recently, the call market was subject to an interest ceiling of 10%. Now this ceiling has been lifted for all players.

(4) Trade bills (commercial bills). To encourage their use the bill discount rate was brought down from 16.5% to 15.5% in April 1987. Also, the RBI had stipulated that at least 25% of credit sales and credit purchases should be in the form of bill acceptances by April 1988 and 50% by 1990. To increase the flow of funds into the discount market, the rediscount rate ceiling was raised from 11.5% to 12.5% in April 1987. The changes in the credit policy in April has completely freed this rate.

(5) Inter-bank participation (IBPs). These were introduced in 1988 to enable a bank to share its advances with other banks. Non-risk-bearing IBPs have a maturity of up to 91 days, attract reserve requirements and were subject to a maximum interest rate of 12.5%. This ceiling was also done away with in the April policy. Risk bearing IBPs have a maturity of 91 to 180 days, so not attract reserve requirements, and are subject to a floor rate of 14%.

(6) Units, public sector bonds, and non-convertible debentures. These are essentially capital market instruments. However, on account of the high liquidity of the banks and also private sector companies, they became actively traded money market instruments, yielding high returns under the so-called portfolio management scheme (PMS) operated by the

banks.

(7) Commercial paper (CP) and certificates of deposit (CD). For India these are new instruments, introduced in 1989. Banks can now legitimately raise a part of their funds, even from non-financial institutions, at market determined rates. They can issue CDs of a minimum size of \$0.6m. and a maturity period of 91 days to a year at rates of interest to be determined by the money market. The amount of CDs a bank can issue, however, is restricted to 1% of its total demand and time deposits. In order to enable highly rated corporate borrowers to diversify their short-term borrowing, the RBI has now allowed companies with a net worth of \$0.6m. and minimum permissible bank finance of \$2m. to issue commercial paper (CP) at discount rates to be determined by market forces and a maturity of 91 days to six months.

Apart from the money market, the private capital market in India is also well developed. Shares of private corporations are traded in the Bombay stock exchange which compares in depth and width with the stock exchanges in the Far Eastern countries. Recently, the Delhi stock exchange has also gathered prominence. Multinational companies are also known to rely on these private capital markets for raising their secondary capital.

Thus in conclusion two major points can be made about the money and capital markets in India. While on the one hand, the instruments and the depth of the market indicate the existence

of a fairly active capital market, the restrictions on entry may prevent its effectiveness particularly for the small borrowers. As far as bank lending is concerned the requirements of priority lending may ration out many private sector borrowers. In general, the funding requirements of the central government and the public sector may restrict the volume of funds available to the private sector and this may necessitate external capital inflows. Having established the need for external capital transfers the next section justifies why the Indian economy which had hitherto relied on concessional capital transfer has had to recourse to the private capital markets in this decade.

3.4. Concessional and non-concessional capital inflows

Until 1980 India's policy has been to rely largely on its own saving to finance the bulk of its investment. However, rising foreign capital inflows have complemented national saving in the 1980s, financing much of the rise in India's investment ratio. Net foreign capital inflow, which by definition equals current account deficit, has averaged 1.9% of the GDP in the 1980s, reaching 2% of GDP or more since the mid 1980s. However, by historical standards capital inflows remain small. International capital inflows are much smaller in India today than they were in Korea's takeoff period and the average flows to India have been similar to other

developing countries in the latter half of the 1980s.⁷ India's gross national saving has financed over 90% of its investment in the 1980s; net foreign capital inflows have only financed less than 10% of the total investment.

To obtain an estimate of the total resource requirement from both concessional and non-concessional sources, as a starting point we refer to the Seventh Five Year Plan. This plan called for a total investment of US \$270b., of which it anticipated that only US \$16.7b. would be needed from abroad.⁸

The total debt servicing requirement, namely interest and amortisation, was estimated at US \$15b. for the period 1985

to 1990. However, the World Bank estimated that in order to

achieve a growth rate of 5% per annum (i.e. the same as targeted for the Seventh Plan), India would need a gross capital inflow of US \$34.5b.⁹ Assuming that the World Bank provides an upper limit, this implies an estimate of the required average yearly inflow ranging from US \$6.4b. to US \$7.5b. for 1985 to 1990. Of this total, a part was supplied by concessional sources. However, the major proportion of the increase in capital inflows was met by non-concessional sources in the 1980s.

Tables 3.2 and 3.3 show the debt profile of India. The

⁷ See The World Bank, 1989, op.cit

⁸ See Euromoney, Special India Supplement, December 1985

⁹ IBRD, 1988, India - Medium Term Issues, A Country Study.

rate of increase of the total stock of debt rose significantly in the 80s, and there was a major shift towards non-concessional debt and away from concessional debt. The volume of non-concessional external flows was higher than concessional flows in every year during the 1980s except 1986. (In 1986, there was a severe drought in India.) The gap is somewhat narrower if we include the IMF credit under the category of concessional capital flows. Concessional capital inflows including IMF credits contributed about 87% of total foreign capital inflows during 1975 to 1980 and accounted for only 42% during the 80s, if IMF credits are excluded.

... The decline in concessional lending can be attributed to ... several factors: the budgetary pressures in the donor countries, an ideological hardening of attitudes towards giving foreign aid, and diversion of concessional loans to Africa, and perhaps most important, the entry of China as a major new claimant for development assistance. The fact that India now has to share its slot at the World Bank with China implies that concessional resource transfers are unlikely to increase significantly in future and may even fall.

Table 3.2 shows that India's external debt has grown on an average by 10.5% per annum during the 1980s, while its non-concessional debt has grown by 30% per annum during the same period. This would imply a substantial increase in her debt service obligations, as well as a hardening of the terms.

Table 3.2

Stock of India's external debt by different categories

(Million U.S. dollars)

Year	Total	<u>Long term debt, of which:</u>			IMF credits	Short term debt
		Total	Concessional	Other		
1975	12471	12471	11356	1114	--	--
1980	18183	18183	16332	1851	--	--
1981	18874	18874	16428	2446	--	--
1982	25705	20605	16946	3659	2279	2399
1983	29266	23084	17504	5580	3699	2036
1984	32645	22775	17265	8510	3921	2480
1985	38292	29951	20061	9890	4202	3516
1986	43405	34404	22317	12086	4273	3902
1987	50376	40748	25359	15388	4052	4308

 Note: All short-term debt was non-concessionalary.

Source: OECD, External Capital Flows to Developing Countries,
 1985, 1986, 1987.

Table 3.3

Net flow of external resources to India, by category

(Million U.S. dollars)

Year	Total	<u>Concessional</u>		<u>Non concessional</u>	
		including IMF	excluding IMF	long term	short term
1975					
to					
1980	5712	4976	4976 (87.1)	737	0
1981	691	96	96 (13.9)	595	0
1982	6831	2797	518 (7.6)	1213	2399
1983	3561	1978	558 (15.7)	1921	-363
1984	3379	-17	-239 (-7.1)	2930	444
1985	5647	3077	2796 (49.5)	1380	1036
1986	5113	2327	2256 (44.1)	2196	386
1987	6971	2821	3042 (43.6)	3302	406

Notes: The total includes small amounts not included under either concessional or non-concessional credit. The parentheses give the percentage share of concessional external resources (excluding IMF) in total.

Source: same as Table 3.1

For the 8th Five Year Plan, the World Bank estimated that given that NRI deposits and direct investment will only rise very slowly, India's total borrowing will have to rise by US\$7.5b in order to avoid a reserve loss. Concessional debts are likely to meet about half this requirement, but non-concessional debt will have to meet the rest. In fact, non-concessional lending will have to increase faster than concessional loans in keeping with the trends in the second half of the 1980s. Further the World Bank estimated that gross commercial borrowing in order to meet the 8th plan targets must increase at an annual rate of 10.5% rising somewhat more rapidly in the early part of 1990s.¹⁰ In addition commercial borrowing would have to grow more rapidly if the current account deficit worsens more than projected, (i.e. if the export targets are not met), or if the components of the capital account grow less rapidly. The scenario for the current account appears to be (a) probable improvements in non-factor services, (b) stagnating remittances and (c) rising interest payments. Thus the prospects for current account improvements will largely depend on export growth. It is estimated that non-concessional debt will account for about 35% of the total outstanding debt by the mid-1990s.¹¹

¹⁰ See World Bank, 1989, op.cit.

¹¹ Ibid.

3.4. Non-concessional transfers

Non-concessional transfers can be classified into three categories. The first consists of borrowing from the international capital markets. This comprises commercial bank loans and borrowing through the placement of bonds of other issues in the international capital markets. The second category is that of direct foreign investment (DFI). This includes portfolio as well as equity investments made in foreign exchange in either wholly owned foreign companies or joint ventures.¹² The third category comprises deposits by non-resident Indians (NRIs).

The World Bank has estimated about US \$1.25b. per year will be forthcoming in the form of NRI deposits. In addition, it is estimated by the World Bank that between US \$2.5 and US \$4b. will have to be raised from the international capital markets because DFI is unlikely to provide a substantial increase in foreign exchange, particularly once repatriations are taken into account. (According to World Bank estimates, the amount of DFI is likely to be between US \$200-300 million.) However DFI also represents equity capital, which does not raise the stock of debt and debt service levels.

Table 3.4 shows the volume of foreign resource transfers in the different categories. Foreign capital raised in

¹² The distinction between portfolio and equity investment relies on the fact that the former is made when there is no desire to participate in the working of the company, whereas the latter frequently implies control and/or active participation.

Table 3.4

Volume of non-concessional transfer of resources to India
by different categories.

(Million U.S. dollars)

	<u>Foreign direct investment</u>		<u>Non resident Indians' deposits</u>		<u>Borrowing from international capital markets</u>
	Equity	Portfolio	NRER*	FCNR£	
1975	--	--	--	--	171
1976	50	7.4	--	--	49
1977	-36.1	-29.4	--	--	168
1978	18.1	-33.0	--	25.3	95
1979	48.6	-85.5	--	11.0	112
1980	79.2	-17.1	--	- 0.7	63
1981	91.9	- 0.2	298.4	48.2	184
1982	72.1	137.6	599.5	-54.5	548
1983	5.6	159.4	673.8	220.2	1429
1984	19.2	296.4	497.0	265.6	1025
1985	106.1	234.2	1135.8	370.0	2106
1986	117.3	110.6	742.4	932.7	1098
1987	142.0	419.0	--	1820.0	3578

Notes: * NRER: Non Resident External Rupee Account.

£ FCNR: Foreign Currency Non-resident Account.

The coverage of borrowing from international capital markets is only for the Bank of International Settlements' reporting banks. This coverage improved after 1982, and hence some of the increase in 1983 may be spurious.

Sources: (1) OECD, Geographical distribution of financial flows to developing countries, various issues.

(2) Government of India, Economic Survey.

(3) Banque National de Paris.

(4) Bank of International Settlements, Quarterly Bulletin of Statistics, various issues.

To discuss the possibilities of attaining the levels of financing required, it is necessary to examine each category in detail. This chapter confines itself to an analysis of loans from the international capital markets and chapter 4 looks at the other forms of capital transfers.

3.6. Borrowing from the International Capital Markets

External borrowing from commercial banks has increased rapidly over the past fifteen years, particularly during the 1980s. The general assessment of India's borrowing during the early 1980s was that *it* borrowed much less than *it* could have, given the size of her economy, its economic potential and the debt-service ratio then prevailing. During the period 1976 to 1983, India borrowed only \$3.1 billion. In contrast, Brazil borrowed \$41.3b. during this time period. Even when India borrowed (relatively) heavily between 1982 and 1987, the amount was less than that contracted by Argentina, Brazil, Mexico, Indonesia or South Korea as a percentage of the respective GNPs. This policy of limited borrowing was consciously adopted by the government, since it was aware of the fact that *its* external reserves and export capability may not be strong enough to enable *it* to contract high levels of commercial borrowing from the international capital markets. Until 1980, the share of external commercial debt in the overall resources raised by the country was comparatively low

at 6.7% (in 1975 this was as low as 1%) but accounted for 27% in 1987.

The reasons which had prompted India to keep away from the international capital markets were

a) A very high domestic savings ratio of around 23%.

b) Ample availability of external funds from cheaper multilateral and bilateral sources. The rate of interest on bilateral and multilateral credits was lower (mostly averaged at less than 6% per annum) and the maturity period of these loans ranged between 25 to 30 years. By comparison, borrowings from the international capital markets were generally for short and medium term with a maximum length of 10 years. The

relatively higher level of commercial borrowing which came towards the end of 1970s and the first half of 1980s was forced by the second major oil price rise. The current account deficit of India has always exceeded \$3.5b. after 1980. Further the inflow of concessional assistance which had provided India with a cushion of foreign exchange reserves started declining in both nominal and real terms. Thus, to avoid a sudden deterioration in her balance of payments position, India contracted to borrow \$5b. from the IMF under its Extended Fund Facility in 1981. (In 1984, India limited the withdrawals from this loan to \$4b..) This loan had a direct impact on its borrowing from the international capital markets, as shown by the increase in commercial debt after 1982 in Table 3.4. Secondly, because of the decline in

concessional resources, the Government was left with no other option but to borrow commercially in order to meet the plan targets.

Table 3.3 shows that the annual borrowings reached their highest level in 1987, perhaps on account of the drought in 1986-87, which necessitated imports of foodgrains. A decrease in the export earnings in 1986 also necessitated a higher level of borrowing. Table 3.1 shows that both the savings and the foreign exchange gap were rising during the 80s, lending credence to the need to borrow. The foreign exchange gap would be even larger if exports to COMECON countries (which are a significant proportion of India's exports and do not involve hard currency) are excluded. Secondly, the levels of annual borrowing during the 1980s were seldom less than \$1b. in comparison to less than \$200 million during the 1970s. In fact on average, US \$1.25b. has been raised annually in the international capital markets during the 1980s. The average level of borrowing was higher during the second half of the 80s (in the Seventh Five Year Plan) than during the first half. This indicates a change in policy on the part of the Indian government. The reasons for this are examined below.

As has been pointed out earlier, the increase in commercial borrowing was necessitated by the decline in concessional lending. The fact that it was available in a climate where loans to the LDCs were shrinking can be attributed to the fact that during the 80s, the guiding

criterion for international lending was bank exposure. The level of commercial debt of India as is evident from Table 3.3 was very low. Moreover India's credit rating at that time was very good on account of her bright industrial prospects and fairly stable political set-up. Added to this was the fact that her debt-service ratio was only 12% in 1980. Apart from a few South-east Asian countries, very few developing countries have as good a loan return record as India. This coupled with India's steady growth rate over the second half of the 70s, relatively low rate of inflation, and her good management record has been responsible for the high levels of commercial bank lending which India was able to subsequently obtain. An examination of the terms and conditions that India managed to obtain on its commercial loans will help to illustrate both its creditworthiness and the prospects for the inevitable future borrowing. Before examining these in detail it is worth mentioning that the forms of commercial borrowing were of mainly three kinds.

The first consisted of syndicated loans which comprised roughly 80% of the total volume of commercial borrowing. The second consists of bond issues in the international markets and this comprised less than 5% on an average of the total commercial borrowing. The remainder was composed of trade credits. In all these three markets the GOI played a pivotal role in negotiating favourable terms and conditions. The next section thus discusses the role of the GOI in external

commercial borrowing.

3.7 GOI strategy in commercial borrowing

The government of India (GOI) does not engage in sovereign borrowing or commercial funding of its balance of payments deficits, but it holds a tight reign over on all commercial borrowing. The GOI's policy guidelines are as follows. The first resort must be soft loans. If these are inadequate, the GOI prefers to channel the commercial loans to the private sector through one of the three national financing institutions, namely, the Industrial Development Bank of India (IDBI), the Industrial Finance Corporation of India (IFCI), and ICICI mentioned above. This is done on the grounds that these institutions can obtain better terms; these institutions then on-lend to domestic borrowers at a surcharge of 2%. However, a few public sector borrowers (notably Air India) and a few private sector borrowers have been allowed to borrow in their own name.

Another stipulation of the GOI is that all borrowing must be project related, and it must result in foreign exchange generation or saving. The GOI also sets an annual limit on the total external commercial borrowings. The government also pays close attention to the terms offered by foreign banks. As a result of the competition for mandates among banks, hard bargaining by India, combined with good timing and favourable market conditions, the terms obtained by Indian borrowers have

progressively improved. The lengthening of maturities for prime Indian borrowers was partly a matter of GOI policy; in 1986 no loans with a maturity of less than eight years and a grace period of five years were approved, in order to avoid bunching of repayments along with those due to the IMF in 1987 to 1989.

The GOI also uses the three institutions to set the basic market conditions so that other borrowers may benefit. An example of this strategy is that one of these institutions pressed long and hard to bring down the cost of a tax-spared offering (successfully) so that another issuer with large borrowing needs would be able to raise funds more cheaply. . . . (which it did).¹³

In 1984, private companies were allowed to borrow under their own names in the Euromarkets. A few prime borrowers such as Reliance Textiles, Tata and Birlas, did borrow successfully in the Euromarkets, but the terms offered to them were not as good as those offered to the national financial institutions or even to the public sector companies. The argument put forward by the private sector for increased direct commercial borrowing is that though the terms obtained by the national financial institutions are better, the surcharge of 2% makes the funds expensive. Besides the delay in processing and approving an application may take up to six months during

¹³ See Euromoney, 1985, Ibid.

which time the situation could change dramatically. The government's counterargument is that borrowing through the institutions costs the nation less in terms of scarce foreign exchange, and unmonitored borrowing could become excessive and erode India's creditworthiness.

Generally the private companies borrowed abroad only to finance the foreign exchange components of a project, but since 1984 foreign currency loans were to have a local currency or a rupee component which was to be repaid in the short term. Moreover, only projects which needed more than US \$1.2 million were allowed to tap the foreign markets directly.

All these policies have resulted in better terms for India. Moreover the national financial institutions are constantly in touch with the developments in the international capital markets, so that the new instruments offered by them can always be considered by their domestic clients. They advise clients in raising finance in suitable forms, on mergers and acquisitions, on restructuring of finances and on underwriting. They also open commercial lines of credit under various foreign currency lines of credit, and for this purpose they establish correspondent banking relationships with a number of banks abroad.

Apart from the national financial institutions, the State Bank of India (SBI) also plays a role in raising capital from abroad. The SBI, a fully government-owned bank, has been associated with almost all foreign currency borrowings made

by the public sector corporations as well as a number of private sector corporations. While the foreign currency loan requirements of small to medium-sized amounts are taken care of by raising direct loans from its foreign offices, for large loans the SBI acts either as a lead manager for syndicating or as an advisor to the borrower. It works out the financing package which is ideally suited to the borrower's requirements. It then invites competitive bids, evaluates all proposals and then negotiates for improvements in the terms. Its services include underwriting and managing bond or equity issues and syndicating trade and working capital finance. Thus the government or government run institutions tried to negotiate finer terms for external borrowing. The next section examines the terms and conditions for external borrowing.

3.8 Terms and conditions of commercial borrowing

It can be argued that India should have gone to capital markets during the 1970s when the real rates of interest were low (even negative), rather than during the 1980s when the real rates of interest were high. Table 3.4 shows the real rate of interest on foreign borrowings measured as the nominal rate of interest deflated by the growth in the unit value of exports. On an average the real rates of interest in the 70s were about 2.8%, whereas they averaged 5% during the 80s. However the real rates of interest for India in the 80s would have been lower in the 70s, if 1981 and 1986 were to be

excluded. In 1981 the real rates of interest were high on account of high rates of LIBOR as well as the fact that the unit value of India's exports declined. In 1986, though the LIBOR rates were low, the increase in the unit value of exports was very small. The relatively low real rates of interest in the other years of the 80s reflects both a fall in LIBOR and a rise in the unit value of exports. Thus it can be argued that though generally speaking the real rates for international borrowing were lower for most LDCs during the 70s, the better export performance and diversification during the 80s made international borrowing feasible in the case of India.

Apart from the real rate of interest in terms of the LIBOR, the other components of the terms and conditions of borrowing are determined by several factors such as the spreads over LIBOR, the maturity, and the grace period. In this context, Table 3.5 shows that they were quite favourable. Ordinarily one could expect the terms and conditions to worsen as commercial borrowing increases. However, the data indicates that this has not been the case for India. For example, in 1977 the Indian borrowers were charged about 1% over LIBOR, and this was considered historically low. South Korea, which was better commercial risk than India, was charged 1 3/8% over LIBOR, and Brazil was charged 2% over LIBOR. After 1980, India has been paying on an average 0.82% over LIBOR for US dollar debt, 0.31% over LIBOR for yen debt, and 0.51% over LIBOR for

TABLE 3.5

TERMS AND CONDITIONS OF LOANS

YEAR	AVERAGE MARGIN OVER LIBOR	CURRENCIES DENOMINATED IN	AVERAGE GRACE PERIOD (Yrs)	AVERAGE MATURITY IN YEARS	PROPORTION OF GOVT OR GOVT GUARANTEED IN TOTAL (%)
1977	1	U.S \$	...	5	100
1978	1-2.5	U.S \$	...	7	50
...					
1980	1	U.S \$	...	8.4	32
1981	3/8-1/2	U.S \$			
		DM, Y, S	...	10.0	100
1982	3/8-3/4	U.S \$, Pounds, DM, Y, FF	5	10.0	100
1983	3/8-1.75	Pounds, U.S \$, FF, DM		9.3	90
1984	3/8	U.S \$, Pounds, DM, Y, ECU	...	7.2	9
1985	1/8-3/8	U.S \$, ECU	1-5	8.0	95
1986	1/40-3/8	U.S \$, HK\$, Y, Pounds, SF	4	8.6	95
1987	Mostly fixed rates at Libor. Max spread of 1/2%	U.S \$, Y, DM			
			5.8	11.0	95
1987	1	U.S \$	...	5	100
1988	3/16-1/2	U.S \$, Y	5	11.2	100

Source: See Appendix I

DeutschMark debt. In tax-spared deals,¹⁴ the average spread over LIBOR declined from 3/8% to 1/8%, and in one transaction the rate in 1986 was as low as 1/40% over LIBOR.

The average maturities have also increased and the grace periods have tended to become longer, thus showing easier terms. The fact that the range of currencies in which India has borrowed has increased indicates the possibility of swapping and hedging, with the potential for decreased costs of borrowing.¹⁵

Table 3.5 indicates a slight worsening in the terms and conditions of borrowing during 1983 and 1984. This can perhaps be attributed to the Latin American debt crisis beginning in 1982, which led to a hardening of terms for most developing countries.

The terms offered to India compare favourably with those offered to other developing countries such as South Korea, which is rated as a Triple A borrower. During the 1980s when

¹⁴ A tax-spared loan is one in which the withholding taxes normally payable in developing countries are waived. They are then credited as if they have been paid against the bank's tax bill. Many countries levy a withholding tax on payments of interest and dividends varying from for instance 10% in South Korea to 500% in Pakistan. When a developing country agrees to waive these withholding taxes, the commercial bank's liabilities decrease and it can afford to lower the spread, as even with a lower spread it is possible to obtain the same level of post-tax profits.

¹⁵ The proportion of dollar loans was no more than 40% in any single year in the period 1984-88. In 1984 only 5 % of loans were denominated in dollars.

India was charged a spread between 1/40 and 3/4% on an average, South Korea was charged a spread of 3/8 to 7/8% (Brazil was charged 3/4 to 1/2%). Some examples of the good terms offered to Indian companies are:

1) The Industrial Credit and Investment Corporation of India (ICICI) was able to raise funds through a private placement in Japan at 6.7% in 1986. On the day of the signing, a Triple A rated Korean borrower was offered 6.8% in the public Samurai market, which is usually cheaper than private placements.

2) The government-owned Housing Development Finance Corporation borrowed at just 50 basis points over the 13 week U.S. treasury bill rate payable semi-annually with repayment guaranteed by the U.S. government.

3) For an Air India loan in 1985, the short-listed bidders reportedly offered a tax-spared credit at between 1/16 and 1/32% over LIBOR for a US \$173 million Eurocurrency package, but was asked to submit even more favourable terms. The deal was finally struck at 1/40% over LIBOR, which is an extremely fine margin by any standard.

These terms are out with assessment of India's country-risk. While India was ranked below South Korea and often below China almost throughout the 1980s, its terms were as good, and sometimes even better. India's ranking according to country-

risk from 1980 to 1985 almost steadily deteriorated,¹⁶ whereas the terms of loans improved virtually steadily. A stark example of this paradox is that in 1985 the country's ranking fell to 46 from 33 in the previous year, whereas its minimum margin over LIBOR decreased from 3/8 to 1/8th%, and average maturity increased from seven to eight years at the same time.¹⁷ A part of this paradox can be explained by the fact that the loan market was becoming more competitive in general and the introduction of new and more sophisticated instruments made the other prime borrowers have recourse less and less to syndicated loans. The fact remains that India was able to obtain finer terms despite higher levels of borrowing, and an important distinction must be made between higher levels of borrowing in this context and overborrowing. As will be discussed in Chapter 6 India had not reached the level of overborrowing till very recently.

The procedure of obtaining international loans and the uses to which they can be put are also of interest as these may have a determining role in the terms and conditions of international borrowing. Moreover, international borrowing can also contribute to the total domestic money supply and have some macroeconomic effects. Before examining the macroeconomic effects we will briefly look into trade financing transfers

¹⁶ See Euromoney, various September issues.

¹⁷ See Dec 1985, Euromoney, Special India Supplement.

and into the role of foreign banks in obtaining commercial loans in India.

3.9. Trade Financing Capital transfers

There are two main sources of trade finance in India : foreign banks and the Export Import (EXIM) Bank of India. The latter was created in 1982 with the help of Grindlays. It finances exports of various types of products such as manufactured goods, software and consultancy services, and also extends support to overseas joint ventures and industrial/construction projects from India. EXIM Bank's merchant banking group can tailor multi-currency financial packages to suit the requirements of Indian exporters. The Bank's financial engineering skills are aimed at improving the competitiveness of Indian exporters. Also, through its access to lines of credit in major currencies from international banks and export credit agencies in other countries, EXIM Bank has developed enhanced capabilities for financing imports. Since EXIM Bank services its debt from the assets created offshore, it does not draw upon the scarce foreign exchange resources of the country.

The traditional role of foreign banks in India has been trade financing. They have been instrumental in obtaining suppliers' credits for their local customers through the bankers acceptance market. For instance, CITIBANK put together a financing programme for the import of US \$1b. worth of oil

in 1984. The importance of the multilateral institutions have in the Indian context have also boosted the role of foreign banks. For instance, the IMF loan of \$4b. in 1982 boosted the export-import trade and called for greater transactions with foreign banks. The IFC, too, which sanctioned loans amounting to \$80 million in 1981 was instrumental in arranging loans from other multinational banks. Apart from trade financing, the existence and the increase in the presence of foreign banks in India was instrumental in facilitating the transfer of external capital. The next section briefly examines the role of foreign banks in this context.

3.10. Role of foreign banks in capital transfers

An increase in capital transfers was facilitated by an expansion of foreign banking activity in India. The government does not discriminate against foreign banks; in fact, one could argue that it discriminates in their favour. They ^{have} not ^{been} nationali^{sed} and unlike their Indian counterparts, they are not obliged to devote a certain amount of their resources to the (low return) priority sectors.

Foreign banks have given loans to local markets for projects and to industrialists with longstanding accounts with them. Moreover, foreign banks have asked their parent branches to set up a consortium of lenders for a new project or for the expansion of an old one. For example, the foreign banks are helping to develop the Oil and Natural Gas Commission,

especially the offshore oil search near Bombay. In addition, it is easier for the foreign banks with branches in India to monitor loans/projects than banks abroad. The Indian customers gain because these banks have greater access to information on the techniques of borrowing and to unlimited foreign exchange.

With liberalisation of foreign investments, the opportunities for foreign banks to raise funds both abroad and in India have increased substantially. Indian and foreign companies which wish to raise funds in the international markets tend to go through the western banks which are operational in India. The foreign banks have also proved to be an important conduit for offshore funding requirements for Indian projects, e.g., the Chartered Bank (part of Standard Chartered) helped Punjab National Bank to raise US \$25 million in floating rate CDs with a 3/8% spread. In 1983 alone the Standard Chartered Merchant Bank was bidding for business in India on the international side in excess of US \$1.5b., mainly concerning infrastructural projects.

The importance of the foreign banks in raising loans from commercial sources is shown by the fact that, of the 30 banks which were involved in most of the syndicated loans and bond offerings, about 10 were those with branches in India (see Appendix 2 to this Chapter for the list of foreign banks which have branches in India and were involved in loan syndications).

The last form of borrowing from the international capital markets which has been examined in this Chapter was through the issue of bonds. The next section shows the relative insignificance of this form of borrowing in the Indian context.

3.11. Bond Issues

Another instrument used for raising external resources was the floating of bonds. The RBI sanctioned the issue of bonds by the ICICI and the other government financial institutions in the Euromarket, because the proceeds of bonds could be of general use in comparison to bank loans, which were project related. Moreover, bank loans could be stopped whereas the sales of bonds would be more difficult to limit. Lastly, fixed rate borrowing through bonds was more attractive than floating rate bank loans, though a couple of floating rate notes (FRNs) were also placed in the market. The coupon on bonds was normally lower than LIBOR. Table 3.6 shows the terms of the bonds issued by Indian borrowers.

Bond issues were fewer in number than syndicated loans and depend on different factors. They were started only in 1980 when India sought ways to diversify its external commercial borrowing. Prior to the placement of bonds in the Japanese and the American private capital markets, the borrower has to obtain a rating in these markets. As a relatively new borrower, India's focus had been on

TABLE 3.6
BOND ISSUES BY INDIAN BORROWERS

YEAR	CURRENCY	TERM	COUPON (Yrs)	ISSUE PRICE	MIDDLE MKT. PRICE
1980	U.S \$	7	1/4% above 6 month Libor	100%	97.5%
1982	U.S \$, Y	7	-do-	100%	--
1983	Pounds, Y,U.S \$	5-9	Performance bid bonds as well as fixed coupon	--	--
1985	U.S \$,Y	12	Libor 1/8%	100%	--
1986	Y	12	-do- or fixed rate 7%	--	--

SOURCE: Euromoney, various issues.

establishing its name and thus only after 1985 did the national financial institutions apply for a rating in these markets. Hence fixed rate dollar and Samurai bonds were not tapped till after 1985. As a proportion of the total placements, initially the dollar bonds were the most popular, but after 1985 yen placements have become more popular. The GOI favours greater use of ECUs for diversification and hedging purposes.

Comparing the terms obtained by India on her bond placements with those of NICs such as Korea, Brazil and some others, it appears that the volume of placements by India were much lower, and the terms obtained by NICs were on balance more favourable, specially during the early 1980s. This could be attributed to the fact that India as a new borrower had yet to establish itself and the success of the bond issues was determined by the growth of its economy, which did not compare favourably with NICs.¹⁸ The low volume of bond issues can be due to the decrease in the total number of issues made in the Eurobond market in general in comparison to the 70s. For instance Korea and Brazil were able to place a number of fixed rate issues during the middle 70s at rates which were often below the LIBOR. They were not very active in the 80s, however. In any case, the developed countries and particularly the USA emerged with major placements in the

¹⁸ See Market Commentary Section of Euromoney.

international markets. This implied an automatic rationing out of countries such as India from the market.

The recent improvement in the terms offered on bonds in the international markets is indicative of two factors. First of all, the higher rates of growth during the second half of the 80s despite the drought of 1986 has helped to generate confidence in the Indian economy. Moreover, the rapid development of the stock markets in India after 1985 has provided a secondary market for the placement and trading of Indian bonds. The increase in the efficiency and liquidity of the securities listed on the stock exchange has helped to improve India's access to the international capital markets.

All these different forms of borrowing have certain macroeconomic effects on the economy. The next section briefly sets out these in the context of the Indian economy.

3.12. Macroeconomic Effects of Borrowing

As has been mentioned earlier commercial borrowing has been monitored and used to finance the foreign exchange component of projects. To that extent it can be argued that it has not contributed to the domestic money supply. However, this argument would only be valid if there were no leakages in the system and if 100% of all the commercial loans were used for productive imports. To the extent there are leakages and these leakages enter the domestic money supply, there will be an increase in the high powered money which could possibly

be inflationary. The other two components of commercial borrowing i.e. trade finance and bond issues would have similar macroeconomic effects. The next section lists some of the important conclusions of this chapter.

3.13. Conclusions

There is little evidence of an inverse relationship between a deterioration in the terms and the volume of international commercial loans to India. However, the GOI's policy since 1988 has been to encourage DFI rather than commercial loans. This could perhaps be attributed to the fact that the commercial borrowings have increased rapidly, and loans have to be serviced irrespective of the actual returns from the projects. In addition to doubts about returns to projects, the debt-service ratio has increased, and this is a source of worry to the policy makers.

So far India has generally borrowed only to meet the foreign exchange costs of projects, but it is possible that it may borrow in the future to finance some of the local currency costs of projects. This will only be possible if a part of the loan can be serviced in rupees. The attraction of such schemes for Indian borrowers can be gauged by the fact that the Indian equivalent of LIBOR has fluctuated between 8 and 12%, but some borrowers have to pay 18%. As the rate of inflation in India has been below 10% for the 1980s, it has perhaps the highest real rate of interest in the world.

Continued or even increased commercial borrowing is only possible if India manages to sustain a high rate of economic growth and of exports. So far India has been as a successful borrower, because to managed it meet its 7th Plan target growth rate of 5% and has had an amazing growth rate of 9% in the year 1988-89. The growth rate of exports and other manufacturing activity has also been very high. Despite the export performance, however, the balance of payments has deteriorated. Whether India will emerge as a successful debtor or a problem debtor will be determined by both its repayments and its growth. This issue will be examined in detail in Chapters 5 and 6. It is sufficient to reiterate here that an increase in external capital inflows has been instrumental in moving India to a higher growth path. The external resource requirement could of course be met by both DFI and NRI transfers along with commercial loans. The former two transfers can be treated as supporting transfers in the context of a debt problem. Chapter 4 thus examines these supporting transfers in the context of the Indian economy.

APPENDIX 1 TO CHAPTER 3

Terms and Conditions of the Publicised Loans Made to India,
1977 to 1988.

Year	Category borrower	Amount borrowed (million)	Margin over LIBOR (%)	Grace period (years)	Maturity (years)
1977	Public	US\$ 50	1	-	5
1980	Public	US\$ 30	3/8 for 1 year 1/2 for 4 years	- -	5
	Private	US\$ 35	15/8 for 3 years 5/2 for 4.5 years	-	7.5
	Private	US\$ 18.5	5/4	-	8
	Private	US\$ 10	11/8	-	10
1981	Public	US\$ 200	3/8 for 2 years 1/2 for 6 years	-	8
	Public	US\$ 14	fixed rate at 7.5%	-	10
	Public	DM 30	3/8 for 5 years 1/2 for 5 years	- -	10
	Public	Y3000	3/8 for 5 years 1/2 for 5 years	- -	10
	Public	SF 30	3/8 for 5 years 1/2 for 5 years	- -	10
1982	Public	US\$ 77	Undisclosed	-	Undisclosed
	Public	US\$ 25	3/8 for 7 years 1/2 for 3 years	-	10
	Public	US\$ 68	1/4 for 4 years 3/8 for 6 years	-	10
	Public	Y 5.4	3/8 for 7 years 1/2 for 3 years	5	10
	Public	US\$ 198 equivalent*	3/8	-	10
	Public	US\$ 17.7	3/4	-	8

1983	Public	UKL 344	5/4	-	15
	Private	FF 163.4}	Fixed rate	-	7
		US\$ 5 }			
	Private	US\$ 45	11/8 for 2 years		
		US\$ 30	3/2 for 3 years	-	5
1983	Public	US\$ 25	3/8	-	7
	Public	DM 45	3/8	-	7
	Private	DM 37	5/8 for 4 years		
			3/4 for 4 years	-	8
	Public	US\$ 18	5/8	-	10
	Public	DM 50	Undisclosed fixed rate	-	Undisclosed
1984	Public	US\$ 30	3/8	-	8
	Public	US\$ 25	3/8 tax spared	-	7
	Public	US\$ 25	0	-	4
		US\$ 25	0**	-	Maximum
	Public	US\$ 46.85	1/2 for 1.5 years		
			5/8 for 3.5 years	-	5
	Public	UKL 10	3/8 tax-spared		
		US\$ 15		-	8
	Private	US\$ 5.87	5/8 for 4 years		
			3/4 for 4 years	-	8
	Public	US\$ 20	3/8 tax-spared	-	8
	Public	US\$ 100	0		
	Public	US\$ 25	Undisclosed	-	3 years revolving CD
	Private	DM 31.46	5/8	-	7
	Public	UKL 24900	9.5%, fixed rate	-	10
	Public	Y 1000	0.1% over JLIP	-	8
	Public	US\$ 25			
		ECU 30	1/4 tax-spared	-	8
	Public	US\$ 20	11.5%, fixed rate	-	8.5

	Public	US\$ 40900	0.5	-	8
1985	Public	Y 10000		5	10
	Public	US\$ 25 ECU 20	1/8 tax-spared	4	10
	Public	US\$ 40	3/16	-	7 years revolving CD
	Public	US\$ 50	3/16	-	7 years, revolving UF
1985	Private	US\$ 12	1/4	1	7 years and 4 months
	Public	US\$ 25	1/4	-	5 years revolving CD retractable to 3.5 years
	Public	Y 5300	at JLIP fixed rate	0.5	5.5
	Private	US\$ 9600	1/2 for 5 years 5/8 for 5 years	2.5	10
	Public	US\$ 25	1/8, fallback rates 3/8 for 1 to 4 years 1/2 for 5 to 8 years, tax-spared	-	8
1986	Public	HK\$ 25	0	-	5
	Public	US\$ 25	3/8	5	10
	Public	US\$ 50 in Y	50 bp below JLIP	5	10
	Public	Y 10000	6.9 at fixed rate	-	7
	Public	US\$ 173	1/40, tax-spared	4	10
	Public	US\$ 88 in FF	11.6 at fixed rate	0.5	10
		US\$ 88 in DM	7.9 at fixed rate	0.5	10
		US\$ 44 in UKL	12.05 at fixed rate	0.5	10
	Public	US\$ 20	0	-	5

	Public	US\$ 30	1/8	5	10
	Public	US\$ 8.75	1/8 for 5 years 1/2 for 5 years	3	10
	Private	US\$ 4.8	Undisclosed	-	Undisclosed
	Private	SF 48	1/2	3	9
1987	Public	Y 12000	1/4	6	10
	Public	US\$ 150	-	-	7
	Public	Y 3500	-	10	20
	Public	Y 3500	JLTP at drawdown	10	15
	Public	Y 10000	at JLTP refixed after 10 years	-	15
	Private	Y 6500	JLTP	-	7.5
. Governmt. US\$ 279000 1/4 for 6 years 3 / 8 f o r 4					
years	Private	US\$ 5000	Undisclosed	-	8
	Private	US\$ 8000	Undisclosed	1	6
	Public	Y 3440 Y 3440£	Undisclosed	-	8.5
	Public	US\$ 70	0, tax-spared	5	10
	Public	US\$ 150	0, tax-spared	6	10
	Public	DM 169.1	6.48, fixed-rate	5.75	15.5
	Public	US\$ 26.5	7.4, fixed-rate	-	12
	Public	DM 172	Term loan	-	10
	Public	US\$ 28	Term loan	1	7.5
	Public	Y 3800	Term loan at 5.3	-	7
	Public	US\$ 150	7/16 for 12 years 1/2 for 3 years	7	15
	Public	Y 10000	Term loan at 5 for 10 years and JLTP for 5 years	-	15

for 5 years

	Public	Y 15000	Term loan at 5	-	10
1988	Public	Y 6500	Euroyen term loan	1	6
	Public	Y 14000		6	12
	Public	Y 6500	Euroyen term loan	1	6
	Private	US\$ 60	1/4. Borrower may convert to yen in fourth year.	5	10
	Public	US\$ 300	3/16 for 2 years 1/4 for 7 years	7.5	10
	Public	Y 20000	Term loans at 5.7	-	10
	Public	US\$ 100	3/16 for 2 years 1/2 for 8 years	4	10
		US\$ 50 £	after 2 years borrower can redenominate in DM		
	Public	Y 7000	0.35 over JLTP	-	15
	Public	Y 7000	0.2 over JLTP	7	15
		Y 6000	JLTP	7	15
		Y 10000	1/4 for 8 years 3/8 for 7 years	8	15
1989	Govt. guaranteed	Y 50	0, tax-spared	5	10
	- do -	Y 50	1/4, term-loan	5	10
	- do -	US\$ 115	Japanese, tax-spared	-	12
	- do -	US\$ 40	Fixed or floating to be determined by		7

APPENDIX 2 TO CHAPTER 3

Banks Which Lead Managed or Underwrote Indian Loans and whose Branches Exist in India.

- 1) Banque National de Paris
- 2) Citibank - arranged many loans and was sometimes the sole provider.
- 3) BT Asia
- 4) Standard Chartered Bank
- 5) Grindlays Bank
- 6) Credit Lyonnais
- 7) BOT International (Hong Kong)
- 8) American Express
- 9) Lloyds' Bank
- 10) S.G. Warburg, which is a wholly owned subsidiary of Standard Chartered Bank.
- 11) Chase Manhattan

CHAPTER 4

SUPPORTING PRIVATE CAPITAL TRANSFERS TO INDIA

4.1. Introduction

The last chapter showed the increasing importance of external private capital flows in the total capital resources of the Indian economy. Commercial bank loans showed the highest rates of growth, but the repayment obligations incurred in this form of capital inflow are more onerous than that associated with the other two forms of capital inflows. Thus in the development strategy of India the role played by these two supporting transfers go far beyond that which is suggested by their insignificant volumes. This chapter examines the trends of these flows and identifies again the importance of government policy in promoting them. This chapter also looks into the question of treating the repayment obligations incurred by these transfers in a way which is very different from that of bank loans. In this context, the role of NRI transfers in providing balance of payments support has been more important than DFI both in terms of their volume and in terms of easy repayment conditions. In this chapter we thus look into the factors affecting NRI transfers first.

4.2. Non-Resident Indian Capital Inflows

The importance of NRI transfers in total foreign capital

transfers to India increased from about 2% in 1975 to 25% in 1987/88¹ of total foreign capital inflow. Also, while earlier these transfers were mainly in the form of remittances (i.e. in the current account), now a substantial proportion enters as deposits (i.e. in the capital account). It has been estimated that more than ten million NRIs reside in the developed countries.² To tap this source of foreign capital, the government of India has set up several incentive schemes, especially after 1980 in response to the increased difficulty of obtaining external funds, particularly concessional loans.

Details of different types of investments by the NRIs are not published by the GOI. The only data available on a consistent basis is the deposits made in the Foreign Currency Non-Resident (FCNR) and Non-Resident External Rupee (NRE) accounts; these deposits have generally accounted for 10-25% of the inflow of foreign private capital into India.

The regulations and incentives provided by the GOI can be classified under five broad headings:

- 1) Definition of an NRI.
- 2) Types of investment.
- 3) Ownership rights.
- 4) Rights of repatriation.
- 5) Tax exemptions.

¹ See Economic Survey, 1976. Also see The World Bank, 1988, India: Medium and Long-term Economic Prospects.

² Euromoney, Special India Supplement, December 1985.

6) Interest incentives.

4.2.1. Definition of an NRI

Prior to 1982, only individual NRIs could invest in these accounts. Now corporations or groups of NRIs can also hold deposit accounts. Also before 1982 an Indian citizen was regarded as a resident if he/she stayed in India for 30 days or more, or maintained a dwelling house for 182 days or more in a year. Now the NRIs could stay (or own a dwelling) in India for more than 30 (182) days, and still not lose the status of an NRI. In this way, he/she would still be entitled to the benefits available to NRIs in deposit schemes. This would qualify more people as NRIs and thus could promote an increase in the capital inflows.

4.2.2. Ownership

Currently, facilities for investments in NRI external accounts is also extended to companies, partnerships, trusts, societies and other corporate bodies which are owned to the extent of at least 60% by NRIs. The implications of this scheme is that large sums can be transferred through corporations and trusts under the NRI deposit schemes. Prior to 1982, only individuals classified as NRIs could invest in these accounts.

4.2.3. Rights of Repatriation

As in the case of any foreign investment, the NRI investment would also be sensitive to the rules for repatriation. A likely concern for the NRI is the possibility of converting his/her returns to a hard currency. Two kinds of schemes for NRI deposits are currently in existence. One is the FCNR in which the liabilities of repayment of interest and principle are incurred in the currency in which the deposits are made. The second is the NRER scheme, under which the interest and the principal are paid to the deposit holder in Indian rupees on maturity. Free repatriation under the first scheme is allowed to the deposit-holder. The provisions for free repatriation of the sales proceeds of investments in deposit accounts has encouraged the low income NRIs who hold accounts of US\$5,000 or less to invest in such schemes.

4.2.4. Tax Incentives

All investments made by the NRIs in the national savings certificates are exempt from income tax. NRIs are also exempt from gift and wealth tax accruing from the 12% National Savings Certificate. Gifts made out of deposits in both NRER and FCNR accounts are also free of gift tax.

4.2.5. Interest Incentives

The interest rates on new deposits by NRIs of maturities of one year and above was two% above the rate permissible on

local deposits of comparable maturities. Moreover the rates on the FCNR and NRER accounts had to be higher than the corresponding rates in the international markets. Thus to maintain a high rate of NRI inflows, the RBI has had to maintain a differential with the corresponding LIBOR or the U.S. prime rate, especially since 1985. The rates of interest on the NRI deposit accounts have had to be 1.9% to 4% higher than the corresponding rates in the international capital markets.

4.3. Trends in NRI Deposits

From the preceding discussion it is evident that the NRI deposits were very important in the overall framework of inflows into India. Comprehensive data exists only for transfers on NRI deposit schemes.

To counterbalance the advantages outlined here there are some deterrents to NRI transfers: the cumbersome procedures on transfer of any form of foreign capital, the difference between the rates of interest offered by various Indian banks, and the delays in processing the request for transferring capital.

Most of the deposits are either held in the NRER or the FCNR accounts. These deposits schemes were initiated in September 1975. It is important to make a distinction between these two schemes, as the NRER is held in rupees against deposits of foreign exchange, and is less vulnerable to sudden

withdrawals on account of interest rate fluctuations in the world markets. Firstly, in addition to the interest accruing in NRER accounts, the deposit holder gets the benefits of appreciation of other currencies. Secondly, the accounts are often held by NRIs to ensure financial security in the event of their being forced to return to India.

Table 3.3 shows the growth in the NRER and FCNR accounts. Two main trends emerge from the data. The first is that NRI deposits as a whole have grown very rapidly over the 1980s. Second, the growth in the FCNR account has been much faster than the NRER account. If we consider the fact that the NRER account also includes accrued interest, the differential in the rates of growth would be even higher. As was stated above, the NRER account is more stable, and sudden large withdrawals are less likely. Inflows to the FCNR accounts are maintained by paying a rate of interest which is over and above the nominal international borrowing rates. Thus at any point of time, if the GOI diminishes this differential, there may be withdrawals. Hence it is argued that India is becoming increasingly dependent on the NRIs for maintaining its balance of payments position, and this dependence is weighted in favour of the less reliable NRI deposits, namely the FCNR.

Their compound rate of growth of these accounts has been a phenomenal 106% per annum since 1983, as against an increase of 19.5% in all deposits during this period. The RBI has had to maintain a differential of 1.9 to 4.5% over LIBOR or the

US prime rate since 1985. In fact there is evidence of interest rate arbitrage where an NRI can borrow at a lower rate and invest the same US dollar in India to earn higher rates at almost no risk.

The rates of interest paid on the NRI deposits average at about 12% (since these accounts were started), but the real cost to the banks is 16 or 17%. This is because out of their total deposits, the banks have to leave 44% in government securities at low rates of interest.

The role of NRI deposits in the domestic money supply needs a mention here. NRER deposits should be treated as a remittance, and thus it does increase the domestic capital base like any other domestic deposit. To the extent that these deposits are withdrawn it diminishes the capital base. However, the proportion of funds withdrawn from these accounts is not very high, and thus these deposits enter the domestic money supply as high powered money and they also lend support to the balance of payments. As far as the FCNR is concerned, they also increase the high powered money base in so far as they are not withdrawn and lend support to the balance of payments deficits. The only difference between the NRER and the FCNR accounts is that the liability in the former case is incurred in the local currency, whereas in the latter case it is incurred in a hard currency and will require the generation of exports for repayment. Thus from the point of view of repayment commitments, the FCNR deposits can be treated as

commercial loans, with one major difference. Only a small proportion of commercial loans enter the domestic money supply, whereas the entire deposits in the FCNR accounts constitute high powered money.

It is often argued that NRI deposits are attracted by a premium over interest rates in the international capital markets. This premium is justified by the fact that, unlike commercial loan, NRI deposits do not necessarily entail repayment. Three possibilities can be considered in the case of NRI transfers.

First, they are likely to be renewed every time they mature, and thus the effective rate of interest will be lower. For instance assuming a margin of two% over international interest rates, the discounted rate of interest works out to:³

$$\frac{1}{1 - \frac{1}{1 + (r+2)}}$$

Thus with $r+2 = 12\%$, the discounted rate under this scenario works out at about 8.33%, which is lower than LIBOR rates and the terms on which loans can be obtained in the

³ The discounted present value of one rupee worth of deposits which are reinvested on maturity indefinitely can be expressed as follows

$$A = 1 + [1/(1+(r+2))] + [1/\{1+(r+2)\}^2] + [1/\{1+(r+2)\}^3] + \dots$$

$$= \frac{1}{1 - \frac{1}{1+(r+2)}}$$

international markets.

Second, is that a part of the amounts deposited in NRI accounts, whether NRER or FCNR will be converted into Indian rupees and used in India. In this case, they can be treated as remittance on which the interest payment is made in rupees, or like a local deposit in which no foreign exchange liability is incurred by the banking sector. The NRER accounts can certainly be treated in this manner as their servicing does not involve any outflow of foreign exchange.

The third possibility applies to the proportion of the deposits withdrawn on maturity (or otherwise): to treat them as foreign exchange loans incurred at a certain cost over LIBOR. Looked at in this way, it is likely that the costs of attracting these funds is lower than that of borrowing in the international capital markets, when costs of flotation (underwriting, commitment, syndication fees) are taken in account. The extent of fees etc. will depend on the market situation, but past experience has shown that one can usually add about 2%⁴ to the actual rate, namely LIBOR plus spread paid on these loans.

On the whole therefore, NRI deposits may be cheaper than commercial loans or bonds especially if a good proportion of these deposits need not be serviced in foreign exchange. However, their rate of growth has slowed down after 1988, and

⁴ See Dewhurst, S., 1987, op.cit.

some other schemes to attract NRI funds such as NRI bonds were under-subscribed.⁵ This indicates that these funds have reached a plateau and cannot be expected to provide as much balance of payment support as they have done in the past. The reasons for this may be linked to the balance of payments deficit which has been high in this decade, particularly after 1985, and the resulting loss of confidence of the NRI investors in the government's foreign exchange repayment capabilities. It could also be linked to the fact that the government responds with a lag to the increase in international interest rates in maintaining the differential between FCNR and international rates. Thus though the international rates have increased, the FCNR differential is yet to be restored in 1989.

Small savers contribute the majority of the funds to FCNR accounts. Almost 90% of the sterling accounts have amounts below £ 3000, and 80% of the dollar accounts have amounts below \$5000. More than a third of these accounts were generally kept for three years or longer. In 1978, when the maximum period of deposit was reduced to five years with a scaling down of the rate of interest, there was a clear slump, in terms of both the number and the amount deposited, in the relative importance of deposits with a maturity of three years or more. With the removal of the restrictions on the period

⁵ See World Bank, 1989, op.cit.

of maturity in June 1979, deposits of more than five years maturity were again popular, accounting for around one-third of the volume of new deposits opened during July-September 1979.

The preference for longer maturity suggests that these are savings deposits ^{not} to be withdrawn unless terms change significantly. It is perhaps this long maturity profile, coupled with an expectation that both principal and interest will be reinvested, which has encouraged the GOI to exclude these deposits from the reckoning of its foreign debt.

This may be unrealistically optimistic: at least a part of the liability will have to be repaid in the currency in which the deposit is made if depositors lose confidence in India's external financial situation. Since it is established that NRI deposits are mainly composed of small savers, one would expect the FCNR accounts to be particularly sensitive to the rates of return accruing to them. To establish a causal relationship between deposits and the rates of return on them, we have run a regression on the FCNR dollar and sterling accounts and the rates of interest, and the exchange rates.⁶ Interestingly, the FCNR accounts were found to be more sensitive to exchange rate variations than to the interest rates. *With balance of payments problems, depreciation*

⁶ In a regression carried out on the FCNR deposits, the differential rates of interest and the exchange rates, it was found that R^2 was very high though standard error was high too, giving low t-ratios.

becomes imminent, the inflows to these accounts will diminish, or even the reverse.

Apart from deposits NRIs are also potential sources of portfolio and equity investments. The GOI permits NRIs to hold portfolio investments, a facility which is not permitted to other foreigners. However, it has also been estimated that no more than \$1b. has come in as investment from the NRIs. On an average, \$1.25b. comes in as deposits per annum. Though many of these deposits are routed through Indian banks, foreign banks are also involved. Many professionals in the U.K. or Europe prefer to remit their money through foreign banks. Foreign banks such as Grindlays have put together stock exchange portfolio investments for NRIs. This is said to be one of the most lucrative activities of foreign banks in India today. All deposits and investments by NRIs constitute roughly a quarter of the total private capital transfers to India. NRI investments are likely to be sensitive to the levels of other forms of capital transfers to India, particularly commercial loans and DFI as a higher rate of transfer indicates a higher level of confidence in the Indian economy by the international community. Thus to that extent there is a certain degree of interdependence of all the three categories of private transfers. The next section examines the determinants and the volume of DFI in India.

4.4. Direct foreign investment (DFI)

The decade of the 80s saw the widening in the geographic spread of direct foreign investment (DFI) in the developing countries. Concomitant with a decline in the direct investment in Latin America, especially Brazil and Mexico, was a rise in investment in Asia. The major beneficiaries of this increase have been India and China. Though the U.K. owns the largest share of the total stock of capital in India, since 1980, the largest flow of new direct foreign investment has been from the United States. However, West Germany accounted for the largest proportion of the DFI in 1989 and the share of Japan has also increased. A large proportion of the foreign investment is also accounted for by the Socialist Countries (CMEA). However, the CMEA investments have largely been those accompanying joint ventures, and have involved little equity. Hence, capital flow data cannot adequately help us to gauge the importance of these investments, because they were also frequently accompanied by technological links, equipment leasing, management services or purchasing arrangements for raw materials. Since this thesis deals largely with foreign private capital inflows to India, a study of these aspects lies beyond its scope. However, some reference to technological collaborations will be made later as some of them also involve equity participation.

Before launching into a discussion of the determinants of DFI it is necessary to clarify the meaning of DFI in the

Indian context. Apart from the NRIs foreigners are not technically speaking allowed to hold shares in Indian companies. However informally speaking, this is a possibility as they could go through their partners in joint collaborations. Foreign companies or individuals are allowed to hold equity up to 40% of the total stock of capital in joint ventures. Besides, they can also participate in technical collaboration contracts with or without equity participation. For this they may be paid a fee which is either an annual fee or a one-time payment. Technical collaboration contracts and equity participation ventures constitute what

... was termed in Chapter 2 as real investment, whereas portfolio ...

investment which is quite low in any case must be treated as financial investment. The balance of payments effects of DFI are examined in detail in Chapter 7. Here it will suffice to say that DFI plays a negligible role in alleviating the foreign exchange constraint in India. Moreover as is evident from Table 4.3 the volume of DFI is very low both in comparison to other forms of capital transfers and in comparison to other comparable developing countries. For instance, China gets *several times the DFI flows to* India. Since this form of external capital inflow does not involve strenuous repayment obligations irrespective of the profits obtained from it (unlike bank loans) there is a case for encouraging it. Thus the next section examines the factors which influence DFI.

4.4.1. Factors influencing DFI

The determinants of DFI in general relate to the macroeconomic factors, sectoral factors, and the regulatory aspects of home and host countries. As long as the policies of the host country are not extreme and remain relatively stable, the long term economic prospect of the host country, and the cost considerations, are among the most important determinants of the volume and location of international direct investment. In today's world the physical and institutional infrastructural support as well as harmonious industrial and labour relations have also been emphasized by the foreign investors. Generally there is a strong correlation between the economic growth in a developing country, and its success in attracting DFI. To that extent the increase in the volume of DFI particularly in the second half of the 80s can be explained by the better growth performance of India.

The relative importance of local demand oriented or export oriented investment varies according to the size and income. Countries where consumer tastes tend to become similar to those of the developed countries, attract investment for local markets more than others. Generally investment for local markets is more sensitive to local demand considerations while investment for non-local markets, namely exports, is more sensitive to local cost considerations. India's *desire* is to encourage DFI for export rather than local markets and hence the second category of factors is important for India.

As far as the sectoral composition is concerned, DFI in the primary sector has declined in importance largely because of the government policies towards self-reliance in this area. Though pure equity investment is still not permitted in the primary sector, lately the government has sought technical collaboration in the exploration of offshore oil; this is the only primary sector where the government has encouraged DFI, though with some restrictions. In fact the investment from the United States, which was mainly concerned with the exploitation of natural resources in developing countries (particularly in Latin America) was deterred by the Indian investment laws in this respect. It has been suggested that this is one of the main reasons why the U.S. investment in India was very low till 1980.⁷

Considering DFI in the services sector, the main motivation in several cases was to follow the manufacturing or primary industry multinational clients. This tendency to follow their multinational clients is reflected by Germany's desire to bring in German banks along with German DFI in India.⁸ Further, the liberalisation policies of the government meant an increase in foreign manufacturing activity in India. This automatically meant that a lot of the transactions for this activity were either conducted directly through foreign

⁷ See 'U.S. Investments low in India', Financial Express, 4 April 1981.

⁸ Economic Times, 15 March 1988.

banks, or the foreign banks opened branches in India. (For example, in the case of the aluminium complex set up with French collaboration, commercial credits of over \$500 million were obtained from the French banks in 1984. Also the growing Japanese investment in India meant that Japanese banks became interested in expanding their business in India.) An added incentive to foreign banks in India was provided by the large amounts of foreign deposits made by NRI. To tap this source of money, some foreign banks either expanded their presence or started afresh in India. The RBI also changed its policy and became more sympathetic towards branches, by relaxing its demands for reciprocal branches abroad in the case of some banks from major capital exporting countries. Moreover, foreign banks established branches to promote ventures which were already government guaranteed, e.g., the exploration of off-shore petroleum projects, steel plants, alumina. These guarantees, and the availability of a number of such projects acted as a major incentive for the foreign banks.

In 1984, foreign banks were also permitted to enter leasing business by an amendment of the Banking Regulation Act of 1949. This was encouraged by the GOI because it was felt that while private leasing companies could only provide equipment, banks could take an integrated view of the overall financial requirements. Banks in countries such as the U.K. and the U.S.A. had already found leasing very profitable. So this change in policy attracted some foreign banks either to

enter into partnership with Indian leasing companies or enter into leasing themselves. The government allowed leasing companies to raise deposits up to a limit of ten times their paid-up capital and reserves. Thus the foreign banks could establish themselves with a very small capital base.

The regulatory aspects of foreign investment in India require a more detailed study as it is contended by foreign investors to be the most important deterrent to DFI. The next section studies the effects of the regulations though a detailed discussion of these has been relegated to Appendix 3.

4.4.2. Specific Regulations affecting DFI

These policies can be classified under four categories.

(1) Authorisation for new investments and the attached conditions.

(2) Investment incentives.

(3) Ownership.

(4) Transfer of funds.

4.4.2.1. Authorisations

Authorisation for all foreign investment is required from the government. The conditions cover many aspects such as subsidisation, pricing, export promotion, licensing (conformity with the objectives of the development policies is also required). There are restrictions on the extent of

local content, imports, exports, technology transfer, use of appropriate technology, training, use of local manpower and management, as well as more traditional concerns such as health and safety or protection of the environment. These conditions are similar to those laid down by a number of LDCs. The outstanding differences are the terms of the ownership or equity structure stipulated by Foreign Exchange and Regulation Act (FERA), 1973, and the interpretation of the laws governing DFI.

The interpretation of the authorisation laws can be liberal or strict. It is contended by the Japanese investors in India that other Asian countries tend to be more liberal in their interpretation of the DFI laws compared to India.⁹ (The requirements for equity investment are indicated in the discussion on ownership given below.) Approval is normally restricted to "productive" investments or "investments contributing to economic development".

4.4.2.2. Investment incentives

Official encouragement of investment takes many forms: tax incentives, aids and subsidies, government purchase, access to local capital markets. In a study of fiscal incentives offered by developing countries,¹⁰ India was found

⁹ See Business Standard, 24 April 1988.

¹⁰ 'Indian incentives more attractive', Business Standard, 14 August 1983.

to be relatively attractive. Comparing the incentives offered by two major contenders for DFI in Asia, India and China, while in India 100% export oriented investment could be totally foreign owned, in China a minimum local participation of 25% was stipulated over and above which such participation would be contract specific. Furthermore India granted a tax holiday of 8 years to the extent of 25% of investment, and China provided a tax holiday for only two years. Investment in free trade zones in India is completely exempt from income tax for the first five years and special concessions are offered to investment in backward areas. For similar circumstances, China in contrast offers a tax reduction of 20% to 40% for 10 to 15 years. Duty free imports of capital goods, components and raw materials are allowed for 100% export oriented units in India, whereas China followed a policy of granting tariff concessions instead of complete exemptions. Even South Korea, which is considered a great success case in Asia, granted such exemptions for only nine months initially. However the tax on non-productive investments, viz. the services sector, are very high in India, reaching 80% in the case of some foreign banks.¹¹

Apart from taxes and duties, fiscal incentives also include tax-free interest on loans, depreciation allowances, advantageous rules for reevaluation of assets and repatriation

¹¹ See Euromoney, Special Supplement on India, December 1985.

clauses. However India restricts transfers from enterprises which have not been given an approved status. FERA 1973 amended these rules so that investments up to 40% were allowed in any industry and profits could be freely repatriated. The repatriation clause has changed in one important respect since 1973 in 1985; expenses are no longer allowed to be repatriated.¹²

The tax differentials on dividends and profits between Indian and foreign companies have narrowed during the period under study. (See Appendix to this Chapter for a complete discussion of rules on tax differentials.) The tax rates for dividends from priority industries are virtually the same for Indian and foreign companies. The tax differential on profits has narrowed down from 15% in 1975 to 5% in 1987-88. Moreover, the definitions of Indian and foreign companies are so imprecise that the foreign companies have often been able to take advantage of this and reap the benefits of lower tax rates applicable to Indian companies.¹³ Also, India has successfully concluded bilateral agreements with several countries (e.g., West Germany, U.K., U.S.A.) to avoid double taxation. Whenever the GOI has resorted to nationalisation, there has been no discrimination against foreign investors, and fair compensation was paid to them.

¹² See Appendix to 4.

¹³ See Desai, A., Foreign Investment in India's Industrialization, forthcoming.

Price controls have been lifted in a number of sectors. There is practically no price control in most of the manufacturing sectors. The government normally fixes the price of basic commodities such as coal, steel and metals to encourage private investment as these constitute the basic needs of manufacturing activity.

The process of granting licenses has also been simplified. Applications for licenses, which could take up to two years in the early 1980s, are now required to be cleared within 60 days. The applications have to be made simultaneously to a number of institutions, and a committee on foreign investments meets to review the applications (see Appendix 3 on regulations). The liberalised policies in 1985 sought to foster private investments in high technology and export oriented areas. Fiscal as well as external trade policies were simplified, rationalized and liberalised substantially, enhancing the prospects for the private sector activity in the country. In 1985, the government removed licenses in a small number of industries. This resulted in the entry and the expansion of foreign firms. A great many industries were added on the principle that importing a technology was more difficult than granting equity ownership.

However, evidence suggests that the domestic climate has a far more favourable effect on DFI than fiscal or other

investment incentives.¹⁴ A buoyant economy that promises further growth, political stability, law and order, harmonious industrial relations, and physical and institutional infrastructural support constitute a good investment climate. In this context the most important incentives for investing in India have been the low rates of inflation, and stable and reasonably dynamic industrial and agricultural sectors. Besides the Indian subcontinent provides a large and growing market for foreign investors. It is also a conduit to the markets in the Soviet Union and the Eastern Block countries. Despite all these positive factors foreign investment in India has been very low as was mentioned earlier. The equity stipulation has been held responsible for this by the foreign investors. The next sub-section thus examines the ownership pattern.

4.4.2.3. Ownership

A major complaint against FERA is the restriction of foreign equity ownership in most cases to 40%. This ceiling was relaxed only in export oriented or core sector industries. The core sectors comprised those listed in the Appendix I of the Industrial Licensing Policy of 1973. Also, a foreign investment of more than 40% was allowed in industries which

¹⁴ In an international symposium on FDI in the Asian Region held in Manila in January 1988, this was stated as the overwhelming consideration of investors. See Business Standard, January 1988.

used sophisticated technology. Under FERA also, foreign companies were not allowed to raise foreign currency loans in international markets. In 1980, both these policies were liberalized, to encourage petro-dollar investment and to encourage non-resident Indians (NRI) to invest in India. However, these investments were also subject to the upper limit of 40% of the total capital structure, imposed by FERA.

The number of branches of foreign companies declined substantially on account of this regulation. The maximum decline was in insurance (which the government nationalisation in 1973), followed closely by trading companies and sterling tea companies. Shipping companies, airlines, and travel offices are allowed to operate on a reciprocal basis. The Indian equity participation in these companies has to be a minimum of 26%. The maximum percentage of non-resident shareholding in India was determined by whether the branches were engaged in 'Appendix I' listed in the Industrial Licensing Policy Act. Trading companies were required to convert themselves to Indian companies, or else change their activity to manufacturing. Moreover, the RBI can ask the companies covered by FERA to reduce their foreign equity participation at 40% or 74% depends on whether,

a) the activities of the company need sophisticated technology made available to it by the parent company holding the shares.

b) the export earning potential of the Indian company is

dependent on the continuing help and assistance of the parent company holding the shares.

The RBI granted a reasonable time for the foreign companies to convert themselves to Indian ones; extension of time was also granted when the RBI deemed it necessary.

Of the 890 applications received since January 1974, 848 were processed in accordance with FERA. No dilution was considered necessary in 258 cases. In 1983, the government permitted higher equity participation in collaborations which provided sophisticated technology. (In fact, in Japanese collaborations, the Japanese were urged to invest more equity.) The trend among multinationals is towards technical collaboration rather than equity participation. Thus though the Indian government has liberalised equity participation in areas which require sophisticated technology, there seem to be few takers.¹⁵

The two important reasons for FERA 1973 were: to achieve the gradual transition of foreign control to Indian hands and to save the outflow of much-valued foreign exchange. However no penalties were laid down for non-compliance. In theory, a shut-down could be ordered but in India where all where all employment is sacrosanct, such directives were difficult to

¹⁵ The technology transfer terms leave much to be desired because of the asymmetrical bargaining positions of India and the investors. Frequently the bargaining power of investors is better. See 'Japanese Equity Stake in Collaborations ...' Financial Express, 5 November 1985.

carry out. So by and large the government sought voluntary compliance. Although foreign equity was diluted, this did not necessarily imply a dilution of foreign control.¹⁶ A majority of FERA companies have been able to retain effective control as the Indian shareholding is widely dispersed. Moreover, a number of foreign companies made agreements with their subsidiaries that transfer of technology, etc. would automatically lapse. They also tried to increase the book value of their subsidiaries to levels nearer their market value by issuing shares to the old shareholders, raising dividends and capitalising the value of assets.

Thus foreign control has not been reduced and the inflow of equity up to 40% has normally been to high profit, consumer oriented industries, i.e. not those which government wished to encourage.

4.4.2.4. Remittances

FERA regulations have not fulfilled the aim of conserving foreign exchange through decreased remittances: foreign equity was usually diluted by issuing additional shares rather than by disinvestment. Despite the dilution, the size of the foreign investment, turnover, profits and remittances grew over the second part of the 1970s.¹⁷

¹⁶ See Patwardhan, M.S., 1982, 'Exchange Regulation Act', Economic Times, 26 May.

¹⁷ See Patwardhan, M.S., 1982, op. cit.

For conserving remittances, the foreign companies were broadly divided into three categories:

1) Branches of foreign companies which were under the full control of their parent organisation. Earlier the entire profits and a certain amount for the maintenance of their head office could be remitted. After the formation of the Indian companies, the only remittance allowed are the dividends less Indian taxes. Head office expenses are no longer allowed.

2) Fully owned subsidiaries of foreign companies. In this case also, head office expenses are no longer allowed. Only profits less Indian taxes are allowed to be remitted.

3) Indian companies in which foreign shareholding is not more than 40%. Such companies are also allowed to remit only their dividends after payment of Indian taxes.

FERA 1973 also restricts the transfer of shares to persons resident outside India, and permission from the RBI is required for this purpose. The declaration of dividends by a foreign company can be regulated by the Indian government or by the RBI. Investment by NRI was allowed under FERA provided no repatriation of capital or the income derived from it was desired in foreign exchange. However, the NRIs can subscribe to shares issued by new companies for setting up industrial projects for which repatriation benefits are permitted, provided such repatriation does not exceed 20% of equity capital. (This scheme does not cover partnership and proprietary concerns.) Investment in core sectors and in

export-oriented industries is guided by the same repatriation clauses as for foreigners.

The GOI sought to control other means of remitting profits such as transfer pricing through strict auditing of the export and import bills. Another measure to avoid taxes, namely "upstream loans" from the subsidiary to the parent companies - which are another form of providing dividends - are also restricted by FERA 1973. Despite the several controls on remittances, they have been steadily rising. The remittances cover profits, dividends, royalties and patents, and since 1970, interest on loans. While profits remitted showed a decline till 1980, remittances under all other categories have increased substantially; the maximum increase was registered in the case of royalties.¹⁸ However, royalties do not constitute an important part of the total remittances made by foreign companies.

4.4.3. Volume of DFI - Reasons and Trends

Net DFI inflows during the 1970's were negative. However due to the liberalisation measures it showed some rise in the 1980s (see Table 3.3). This time period is also marked by a substantial rise in the foreign investment approved within the proposals of the import of technology. It could be argued that the restrictions imposed by FERA 1973 were neutralized

¹⁸ See 'Foreign Companies Remittances Rise', Financial Express, 25 May, 1981.

by the liberalisation policies which were set in motion in the early 1980s and given a further strong impetus in 1985. The effect of these policies was enhanced by the steady growth rate and stable political and economic environment of India, including the growth of the private sector in India. The rates of profit on the DFI in India were also generally comparable with those elsewhere. The profitability studies conducted periodically by the Indo-American Chamber of Commerce on the Indo-U.S. joint ventures showed that the annual compound rate of return on assets between 1976-80 was 16%, whereas that between 1980 and 1984 was 16.3%. With respect to gross fixed assets the average annual compound rate of growth was 13.4% in 1976-80 and 18.6% between 1980 and 1984. The payment of dividends increased from Rs. 150 million to Rs. 290 million in the same period. Royalty payments increased from Rs. 24 million to Rs. 44 million, and technical royalties and patents increased from Rs. 17 million to Rs. 327 million. These payments were even higher in 1985.¹⁹ These figures compare very favourably with U.S. investment elsewhere; in fact the rates of return were higher than those available on U.S. investments in Canada. However, profitability studies of Indo-German joint ventures have shown that returns on German DFI were "satisfactory but not excellent". The profit rates for Indo-German joint ventures were below those of the parent companies

¹⁹ 'Foreign investment returns competitive', Financial Express, 3 February 1988.

and also below the international average.²⁰ No comparative study of Indo-Japanese joint ventures has been made, but available estimates suggest that these would be comparable to other DFI in similar industries.

Some foreign companies have also considered India to be a conduit to the Soviet market. The democratic set-up in India, with redress to law, and the growing perception that there is little likelihood of nationalisation,²¹ have also contributed towards attracting foreign capital. Such a feeling is also enhanced by the fact that India has itself collaborated with some MNCs to set up joint ventures in other developing countries.

However, as a proportion of total capital inflows to India, DFI accounts for less than 5%. (It accounts for a slightly higher proportion of private capital inflows, but even this share would not exceed 10%.) Given this small share of DFI, an important question is whether it can rise rapidly enough to meet the gaps in India's requirements.

It is often argued by multilateral institutions such as the World Bank that direct investment brings new technology and management and justifies the foreign exchange costs. Remittances in the case of DFI are made out of profits,

²⁰ 'Eastern region lacks infrastructure for FRG investments', Financial Express, 28 February 1988.

²¹ Though domestic banks were nationalised in the early 1970s, foreign banks were exempt from this move.

whereas the bank loans have to be serviced whether the project turns out to be profitable or not. Hence the massive increase in bank loans instead of DFI during the 70s in most LDCs, and during the 80s especially in India, would appear to be relatively less cost-effective. However a closer look reveals the reasons behind the changed composition of capital flows.

During the 70s, the global recession produced a liquidity crisis for the multinationals. In India alone several companies such as James Finlay, British Corporation, Firestone, Kaiser, actually sold their Indian assets to meet the financial crunch in their domestic operations. In addition, the global recession left huge unutilised capacities in most developing countries: new projects did not look profitable. Existing DFI yielded much less than the cost of bank loans. By contrast the banks were flush with liquidity and were willing to lend to developing countries.

A similar phenomenon can be observed for India during the 1980s. Though bank credits and DFI have both risen significantly, the former has been much more dynamic in terms of both the absolute amount and the rate of growth. This can partly be attributed to a general decline in the investment by MNCs from the U.S. in response to the worsening position of the dollar. Another reason is that MNCs now tend to favour payments over technical collaborations with secure royalties. Moreover, though the policies of the GOI have changed to attract more DFI, the stipulations on the composition and

terms as outlined above may still deter foreign investment. The GOI on the other hand has often had to compromise its rigid stand on equity ownership, indiginisation, etc. to attract foreign capital. The size, composition and terms of DFI are frequently different from those stipulated, as a result of bargaining by the foreign investors.²²

4.4.4. Change in GOI's stance with respect to DFI

Keeping in mind that the benefits derived from additional economic resources obtainable from DFI, the stance of the GOI has changed with respect to DFI. It is now evident²³ that the GOI appears to favour DFI over commercial loans as the latter have to be repaid whether they are used productively or not. On the other hand, the very nature of DFI would seem to ensure that capital is used productively to yield commensurate returns on the investments made. Besides, unlike amortisation of bank loans, capital is generally not repatriated and profits are also often reinvested. Dividend repayments average about 10% of the capital employed, which is much cheaper than a bank loan.

Moreover, there is a change of policy, favouring export

²² This is shown by the fact that many definitions and redefinitions of the core sector have been attempted to evolve a policy to welcome and augment foreign capital inflows and to make it conform to a certain scheme of priorities.

²³ 'P.M. favours streamlining of foreign investment norms' in Financial Express, 20 April 1988.

promotion instead of import substitution. The earlier policy of import substitution discouraged DFI. It is felt that this policy may have encouraged inefficiency and thus it is important to restrict import substitution to the competitive sectors only. India could later enter the export markets in these industries.

DFI is now also encouraged for its dynamic effect on the economy, as it is felt that the broad industrial base of India is now ready to face foreign competition.²⁴ Though indigenisation of technology was encouraged, more recently efficiency and competitiveness have also been stressed. Thus

DFI is seen to have an important role to play in the next phase of industrialisation.

If we compare the levels of DFI in China and the ASEAN countries with India, the levels obtained by India are extremely low. China gets on an average an annual inflow of DFI of around Rs. 15b., and the ASEAN countries get around Rs. 80b. These differences cannot be attributed only to India's policies; they are at least as favourable. However, various studies conducted in this context by the GOI have shown that the interpretation of the rules are more liberal in China and ASEAN countries. And in India there is undue frustration and delay. Moreover, China and the ASEAN countries permit DFI in the consumer goods industries, which the GOI explicitly

²⁴ Ibid.

prohibits (except for exports). However, in cases where nearly 100% Indian raw materials are used, the GOI takes a more flexible approach, reckoning that the foreign firms can export on India's behalf. Though no legislation or concrete policy has been formulated in this respect, this debate itself is a big departure from the erstwhile import substitution policies.

As has been pointed out earlier, the current investment incentives are not a sufficient means of attracting DFI, though disincentives may deter it. The volume of DFI transfers are determined by the overall investment climate and in this respect India's conditions are quite favourable. India's GNP was approximately Rs. 3000b. in 1988, and it was felt that at least 10% of this could be spent on imports. The current level of imports are far below this, but by the end of 1995 India may reach that level if the higher level of industrial activity currently prevailing can be sustained. The infrastructure developed by India is *adequate by the standards* in the developing world.²⁵ The World Bank also appears to take a more favourable view of India's economic prospects.²⁶ The growth in agriculture postulated by the Plan will also generate a demand for industrial products. Thus given that India's growth prospects are bright and the GOI is systematically attempting to remove the disincentives to DFI,

²⁵ Euromoney, December 1985. *Note that the infrastructure in SE Asia is much better*

²⁶ IBRD, 1988, India: A Country Study, Medium Term Issues.

it is surprising that their levels are substantially below those desired. It is necessary to analyse the details of this failure in order to examine the prospects for further inflows of DFI.

The first reason is of course that the change in the GOI's attitude is relatively recent, and thus a lag of at least two years must be allowed before significant increases in DFI can be observed. The GOI estimates that it will probably take four or five years before the Japanese and the German investors (the two largest in the international arena as far as new investments are concerned) will respond.²⁷ In this context it is worth discussing the factors which investors in these two countries feel deter their investments in India.

The main impediments to German DFI²⁸ were found to be low productivity, insufficient infrastructure, bureaucratic hurdles and high inflation. Regarding low productivity, difficult industrial relations are emphasised by German investors. The factors which these investors found favourable in India were political stability, an absence of fear of arbitrary nationalisation and reasonable profitability. The GOI has taken cognisance of the impediments and is studying measures to minimise bureaucratic hurdles and for improving

²⁷ See Financial Express, 28 February 1988.

²⁸ Ibid.

productivity by enhancing congenial labour relations. The GOI is attempting to control inflation, which has emerged as a problem seriously only in 1987 and 1988 on account of factors specific to those years. Otherwise the inflation levels have been below 10% per annum.

The major disincentive to Japanese investments has been the phased manufacturing programme (PMP), commonly known as the indigenisation programme of joint ventures.²⁹ The PMP requires 95% indigenisation within five years, and this the Japanese find extremely restrictive. In many cases the strict implementation of PMP has compromised quality. This was all the more apparent in cases where the product had an international market and exports were suffering as a result. The GOI now recognises that quality should not be compromised in the process of indigenisation and is now willing to consider the PMP on a case by case basis and to adapt the programme to improve quality while promoting indigenisation as fast as possible. It is worth keeping in mind that efforts at faster indigenisation were being made in India even when the GOI was not enforcing it.³⁰

Another problem as seen by the Japanese was to obtain the appropriate raw materials;

²⁹ 'Indigenisation Policy to be Revised', Financial Express, 27 January 1988.

³⁰ 'Panel mooted to discuss flow of Japanese funds,' Business Standard, 31 January 1988.

this difficulty hindered the process of indigenisation.

Besides indigenisation, inadequate infrastructural development and bureaucratic delays which led to cost overruns were also seen as major problems by the Japanese. Though infrastructural developments in Indian cities compare very favourably with those in most other developing countries, they are not of a comparable standard to the developed countries *or that of SE Asia*. The tax incentives given to units established in backward areas (see Appendix 3) were attractive enough to compensate for the lack of infrastructural facilities. As Japanese investors take a global view, the advantages of cheap labour in India may not outweigh the other disadvantages. Also, compared to India, labour in Thailand, for example, is cheaper and the infrastructural facilities better. Thus the GOI, keeping in mind Japan's global perspective, has offered to look into some of the existing policy stipulations in this respect on a case by case basis. India also recognises the importance of cutting bureaucratic delay when trying to encourage DFI: Japanese investment proposals are to be expedited.

The Japanese also have expressed concern that India might pass on their technology to the Soviet Union and the COMECON countries. The U.S. also used to suspect this but was

persuaded by the GOI that its fears were baseless.³¹ The GOI has held discussions with the Japanese investors and officials to reassure them on this issue.

Yet another problem is the areas in which the Japanese are allowed to invest. India wishes to direct Japanese investment to the capital goods sector especially to the high-tech areas rather than the consumer goods sector. The Japanese on the other hand wish to invest in assembly units for export production. The strategy on the part of the GOI should be an attempt to blend the two or indeed to promote pure export ventures.

Regarding DFI by the U.S., the major impediments were found to be the equity restrictions and the bureaucratic delay. It was suggested that the equity-holding statutes must be so changed that of the remaining 60% equity, only 40% must be held by the Indian public and the remaining 20% by financial institutions in both the countries jointly. Since U.S. investments worldwide are declining, no special provisions have been made in India to encourage U.S. DFI. It was felt that the general provisions for improving DFI will also provide a favourable climate for U.S. investments.

Apart from the direct contributions of DFI to the savings and foreign exchange gaps, certain indirect benefits also

³¹ Evidence of this is to be observed in the delay in the U.S. sale of weapons to India. 'Japanese Investment', Financial Express, February 1988.

accrue. The most important such benefit is the perception of India as a dynamic and open economy; this image brings forth more bank loans and NRI transfers also. A brief examination of the GOI's policies towards encouraging DFI by NRIs is given in the next section.

4.4.5. DFI by NRIs

The restrictions imposed by FERA are also applicable to NRIs with one exception. DFI without repatriation rights made by NRIs would be treated on par with those of Indian nationals, as long as it is not meant for transactions in commercial property and land.³² This implies that on such investments equity and other restrictions would not apply. With repatriation rights, the NRIs are allowed to invest through the stock market in any company, subject to specified limits; shares larger than the limit can be held either on a repatriation basis or can be offered to Indian partners or the general public.

The advantage of the scheme under which NRI investment is treated on par with the resident nationals is that NRI funds can be employed in proprietary concerns, partnerships or public limited companies without any restrictions. Since many NRIs are not necessarily keen to repatriate funds, this provision should stipulate a further inflow of portfolio and

³² See Government of India, 1982, Budget Statement.

equity investment, particularly by medium sized investors. Again in this context, the response of the NRIs has been very disappointing.

The second clause for investment with repatriation rights for NRIs to invest in portfolio of any new scheme up to 40% was initially restricted to high-technology industries, and to export-oriented industries. Since the response was not satisfactory, this policy was extended to all companies quoted on the stock exchange. Subsequently a number of companies raised a part of their fresh public issue from the NRIs. The NRIs have thus facilitated and accelerated the process of raising fresh external capital, and have added to the buoyancy of the capital markets in India.

4.5. Conclusions

To conclude, an examination of the prospects for foreign capital inflows shows that the transfers made by the NRIs have reached a plateau and the prospects for DFI are uncertain at best. If commercial loans continue to increase at their present rate than the market will inevitably be saturated and their current high levels must fall. The rest of the thesis thus examines the possibility of a debt crisis in India.

APPENDIX TO CHAPTER 4

Chronology Of Policies On Foreign Direct Investment In India.

Three sets of policies on foreign investment can be identified in India. The first consists of policies which provide the overall framework for industrial development and includes the five year plans and statements of industrial policy. The second consists of specific legislation which are applicable to private capital in general, both domestic and foreign. The third relates specifically to private foreign capital coming into India.

Before discussing these three sets of policies, it is important to detail the single most important policy initiative towards foreign investment in India, namely FERA 1973. Constant reference will be made later to this policy, which is an important starting point in discussing policies towards foreign investment in India.

Foreign Exchange Regulations Act (FERA) 1973.

Under FERA 1973, for the first time the Indian Government made a formal declaration that foreign companies with up to 40 per cent equity would be treated as Indian companies, and would be allowed unlimited access to any segment of industrial activity.

1) No Indian company could have greater than 74 per cent foreign equity unless they were 100 per cent export-oriented. For 100 per cent export-oriented ventures, up to 100 per cent

foreign equity could be allowed.

2) Companies with greater than 40 per cent foreign equity should be engaged in the production of items specified in Appendix I of the Industrial Licensing Policy announced in 1973, or be engaged in predominantly export-oriented industries (those which export a minimum of 60 per cent of total production). These companies would be allowed to continue on the basis of existing proposals provided there is a minimum Indian equity participation of 26 per cent.

3) The same rules would apply to industries requiring sophisticated technology. Two kinds of companies were identified in this category. One, whose technology currently being used for manufacture of products would otherwise necessitate imports. Second, for which the discontinuation of the manufacture of products with the technology would have an adverse effect on the economy.

4) All other companies were asked to bring down their foreign equity shareholdings to 40 per cent.

5) No fresh foreign equity would be permitted in the case of companies engaged in internal trading and commercial activities, and all existing companies engaged in such activities were asked to bring down their foreign holdings to 40 per cent within a specified period. In exceptional cases where they had developed expertise, skills or facilities which were not readily available indigenously or were contributing significantly to exports, the retention of foreign holdings

of more than 40 per cent but not more than 74 per cent could be considered.

6) Manufacturing companies engaged in trading in products not manufactured by them would be permitted to do so provided the articles traded were functionally related to the companies' manufacturing activities and constituted a small portion of their overall activity. The threshold level was decided at 25 per cent of the ex-factory value of the annual production or Rs.50m., whichever was less. They would not be permitted to use their trademarks or brand names for internal trade in products not manufactured by them.

7). In cases where activities outside Appendix I of the Industrial Licencing Policy 1973 constituted a minor part of a company's total activity (i.e. not greater than 25 per cent of ex-factory value or Rs. 50 million, whichever was less) the company would be treated at par with the companies engaged in manufacturing activities covered by Appendix I.

8) Tea plantation companies were to be treated at par with companies engaged in manufacturing activities specified in Appendix I of the Industrial Licensing Policy 1973.

In 1976, there was a relaxation of FERA 1973 and some other categories of companies were allowed to retain majority ownership. Dilution could be at three levels of foreign ownership, namely 74 per cent, 51 per cent, or 40 per cent depending on the type of foreign company. Majority foreign ownership was allowed in the following cases.

1) In specific high priority areas including those not listed in Appendix I of the Industrial Licensing Policy Statement 1973.

2) Those which exported 40 per cent or more of their production.

3) Those which used sophisticated technology in production units.

If more than 75 per cent of the total turnover of a company could be classified under any or all of these three categories, or if exports were greater than 60 per cent of the turnover, the company was allowed 74 per cent foreign equity.

If the turnover from these activities was more than 60 per cent of total turnover or exports greater than 40 per cent of total turnover, the company was permitted only 40 per cent foreign equity.

The 40 per cent foreign equity level suited many companies since for a long time they were keen on decreasing the level of risk capital in india but still wanted to retain control over their joint venture. As long as the rest of the equity level was widely disbursed, 40 per cent was enough to control the company. Moreover, the objective of preserving foreign exchange was not met through the FERA companies because the foreign partners diluted their equity by issuing fresh capital to Indian shareholders instead of reducing their stake through disinvestment. This implied that the number of shares on which the dividend remittances were made after

dilution of foreign stakes remained the same as before. FERA 1973 also implied no restrictions on remittances. Prior permission for this required from the Reserve Bank of India, but no statutory minimum level is stipulated for making remittances. Dividends up to Rs. 500,000 or 25 per cent of total issued equity capital of an enterprise (whichever is less) are permitted without the permission of the Reserve Bank.

If foreign equity was less than 40 per cent, then these companies would not require permission from the Reserve Bank for: the establishment of a place of business; the sale or purchase of real estate; borrowing on loan or deposits; appointment of agents or technical or management advisers; and the use of trademarks. In short, they would be treated exactly like Indian companies.

The shortcomings of FERA 1973

1) The definition of sophisticated technology was unclear and there was no penalty for non-compliance with FERA.

2) FERA did not ensure access to technology or other assistance from the parent companies. Thus a number of parent companies made agreements with their subsidiaries that if any further dilution of equity was required, technology agreements would automatically cease.

3) FERA-induced dilution led the parent firms to cease regarding their subsidiaries as part of their permanent

corporate assets. Instead they started regarding their subsidiaries as marketable property. Thus they tried to raise the book value of their subsidiaries nearer their market value by issuing bond shares to old shareholders, raising dividends and capitalising the increase in the value of their assets. All this led to a greater outflow of foreign exchange which was certainly not the objective of FERA 1973.

4) The desire to channel FDI into industries where the supply of technology was limited has not been very successful.

5) FERA 1973 and the subsequent liberalisations have failed to substantiate the foreign exchange inflows through encouraging FDI or to decrease remittances..

A. General Policies

The policies which provided the overall framework of development, are listed below in chronological order.

1974

According to the Fifth Five Year Plan, foreign collaboration was to supplement and accelerate the development and utilisation of indigenous technologies and production capabilities to attain overall self reliance as quickly as possible. However because of the lack of specific guidelines, technology imports took place freely.

1977

The Industrial Policy Statement said that companies with non-resident investment of 40 per cent would be treated on par with Indian companies unless otherwise notified.

1980

New industrial policy in which the accent was on improving the price competitiveness of Indian industrial products. this was seen to be possible only through imported technology.

1985

Sweep of liberalisation in which the government delicensed a number of industries. The Seventh Five Year Plan (1985-90) specially emphasised the role of FDI in general industrial development.

1988

The government, which had earlier insisted on an increasing use of indigenous raw materials, adapted a more liberal attitude in this respect.

B. Legislation specific to private capital1970

Special schedule of industries for six products of mass consumption was constituted over which there were controls

regarding pricing and distribution. These were equally applicable to private domestic and private foreign investment in these industries.

1973

This list was expanded to eight products. In addition another list of "other articles" was prepared which used scarce raw materials (either imported or domestically produced) and these were subject to pricing and distribution controls.

1975

'Automatic growth scheme' was started under which engineering industries were covered and these were allowed to expand at the rate of 5 per cent per annum in the five year period between 1975 and 1980. Earlier expansions in capacity required a license.

1980

The Industrial Licensing policy set in motion some changes. for the first time the expansion of the private sector was encouraged. Expansions in a number of industries up to a certain percentage (5 or 10 per cent) did not require a license.

1982

The list formulated in 1970 and expanded in 1973 was further expanded from 13 to 66 products and merged with the special schedule of industries as a single list of 78 items. The restriction that all funds for expansion of capacity should be raised internally was lifted in 1982. Additionally an enterprise was allowed to increase its capacity continuously by one-third if it was able to increase its actual production continuously. In practice foreign companies either overutilised or underutilised small-scale sector which had no restriction on the expansion of capacity. The licensing system thus had a limited effect in regulating foreign private capital in India. The companies not only pre-empted licences for setting up units, they also installed capacities in excess of their licences. In fact, foreign companies were not curbed by the Monopoly and Restrictive Trade Practices Act (MRTPA) of 1969, unlike their Indian counterparts. Even when they came under the purview of the MRTPA, they managed to consolidate their position by joint ventures. Several companies which could have been prevented from increasing their capacity under the MRTPA have been able to do so under the joint sector projects.

1984

List further expanded to include automobiles.

1985

The boost given to private sector created a favourable climate for foreign investment in India.

C. Specific Regulations concerning FDI in India

1973

FERA (discussed above)

1976

Liberalisation of FERA (discussed above)

1980

Foreign investment without foreign technology was not allowed earlier. This policy was revised for NRIs and investors from oil exporting developing countries. Even in industries where foreign collaboration was considered unnecessary, the collaboration was permitted if the technology was not available to entrepreneurs on competitive terms or if the technology needed to be updated to meet higher demand or to become competitive in the export market or for manufacture of items for export backed by a buy-back guarantee. Proposals for foreign financial and technical collaborations were to be considered on merit. Transfer of technology and export orientation were given priority. Factors which decided whether foreign equity should be allowed included the priority nature of the industry, the nature of the technology involved

(namely whether it would promote exports), and the alternative terms available for securing the same or similar technology transfers.

1981

The Ministry of Commerce, Government of India, announced that 100 per cent export-oriented units would be allowed free. Their imports were exempted from import duties and their purchases of indigenous capital goods and raw materials from excise duties. Their finished goods were also exempted from excise and other duties.

.....

1983

Further liberalisation in order to benefit 100 per cent export-oriented units. The list of items for which no import license was required was enlarged. Export-oriented were opened up as an avenue to increase investment by foreign companies and thus these concessions can be interpreted as those provided to foreign private capital to invest in the country. The technology policy adopted in 1983 was implemented in a liberal manner. The policy stated that gaps in technology would be identified before technology imports were allowed. In practice very little of this was in evidence. A large number of projects especially in the public sector went ahead with maximum foreign assistance and that too in a situation where the public sector organisations were

competent to execute such projects.

1984

Several areas of industrial policy were opened up for foreign investment, e.g. 49 per cent foreign equity was allowed in the communications industry, in contrast to the previous reservation of this sector only for the public sector. The electronics industry was also opened up for foreign equity.

1985

Liberalisation policies for expansion, fresh investment, etc. were all designed to improve the inflow of FDI.

1988

An objective of increasing FDI from Rs. 1 billion to at least Rs. 4 to 5 billion by further liberalisation of policies on FDI, including encouragement of assembly units.

D. Policies concerning FDI in India

1. Patent laws

In most cases of foreign collaboration, unpatented know-how was provided to the Indian companies and consequently the question of infringement of patent rights did not arise. In addition, in cases where patent rights were transferred and a claim was made that its rights had been infringed, the

Indian laws have protected the foreign company. Clause 107(2) of the Patent Act of 1970 provides patent protection to the product and ignores the know-how. This is especially important for India, which has the capability of developing new processes for the same product. These laws are thus detrimental to Indian interests.

2. Taxation

Tax differentials

The definition of a foreign company is an entity incorporated outside India. The existing differential rate of income tax discriminates against a foreign company. However, it is worth noting that the actual incidence of tax is likely to be lower than would appear because companies have taken advantage of the nebulous manner in which the Income Tax Act has sought to impose its tax laws. For instance the unclear distinction between receipt on revenue account and on capital account has meant that the tax rates applicable were much lower than stipulated.

The laws concerning tax-differentials are the following:

1) A company incorporated outside India and in that sense fully owned abroad is taxed at a higher rate than an Indian company. The tax differential between a foreign company and an Indian company was about 15 to 20 per cent.

2) Among the foreign companies, the closely held companies were taxed at a higher rate than broadly held

companies. The definition of closely held companies varies with the type of company. For industrial companies, they were defined as a subsidiary in which the share of the parent firm was 60 per cent or more. For non-industrial companies, they were defined as those in which the share was 50 per cent or more. All other companies were defined as broadly held. This form of discriminatory taxation was designed to persuade foreign companies to keep their stake in subsidiaries below a certain level.

3) Among closely held companies, trading and investment companies were taxed at a higher rate than other companies.

4). In practice, discrimination against closely held companies was relatively mild. There were opportunities in closely held companies to remit profits in non-taxable forms such as transfer pricing so it is likely that the discriminatory taxation did not have much effect; for the same reason, the extent of discrimination against closely held trading and investment companies was also doubtful.

Tax incentives

1) 25 per cent of profits of a foreign company are exempt from income tax for new companies and 20 per cent for other entities for the first eight years of operation.

2) A tax deduction of 20 per cent on profits or gains are allowed in industrial undertakings newly established in backward areas for a period of ten years.

3) Profits and gains in free trade areas are tax deductible.

4) Interest on loans from abroad for the purchase of raw materials or plant and machinery is tax deductible. Similarly, interest received by a foreign investor from an industrial undertaking in india is exempt from indian income tax.

5) Investment allowance of 30 per cent of new plant and equipment installed for controlling pollution or protection of environment is tax deductible. This is subject to the condition that an amount equal to 75 per cent of the investment be credited to a reserve known as "Investment Allowance Reserve Account" and must be utilised within a period of ten years for the purpose of acquiring new machinery, plant and equipment, etc.

6) Rates of depreciation allowance vary between 5 per cent and 100 per cent. The latter is provided to energy saving devices and systems. After 31 March 1980, a sum equal to half the amount admissible as normal depreciation allowance in the year of installation of new plant and machinery was further deductible.

7) Expenditures on scientific research is deductible from taxable income for the year in which it is incurred.

8) Facilities for export-oriented units include liberal import facilities depending on the actual import content of the f.o.b. value of the product and refund of customs and

excise duties paid on raw materials used in the manufacture of the exported product. Central excise duty is not payable for the exported products, raw materials are supplied at controlled prices, export finance can be obtained from commercial banks at special concessional rates of interest, and assistance can also be obtained from the export/import guarantee corporation.

9) If a foreign company is paid royalty fees or technical service fees following from an agreement made by the foreign company with the government or the Indian concern after 31 March 1976, the tax on such income would be paid by the government or the Indian concern and not be included in the total income of the company.

10) Tax holidays (see section on FDI) are also provided on new investments. The deduction of tax depends on the sector in which the investment is made.

11) Reciprocal tax agreements have been concluded with a number of countries including West Germany, United Kingdom and the United States.

12) Arbitration in the case of taxation is normally on the basis of rules followed by the International Chamber of Commerce or commercial organisations in other countries, but such rules should not conflict with the general rules set forth in the Arbitration Act. India is also a contracting party to the U.N. Convention on Recognition and Enforcement of Foreign awards of 1958; the application of this Convention

is on the basis of reciprocity.

Guarantees

(1) Fair compensation is normally paid if an industry is nationalised. The courts may intervene if the compensation is arbitrarily determined.

(2) Foreign investors are assured of equal treatment compared to indian enterprises. Remittances of technical fees, interest, dividends, etc. are freely allowed subject to payment of Indian taxes. Repatriation of capital along with appreciation of capital stock is freely permitted subject to approval by the Reserve Bank of India and payment of Indian taxes. Transfer of shares by foreign investors as well as participation in management is normally permitted. The employment of foreign experts requires permission from the Reserve Bank.

(3) Payment for technology allowed both as a lump sum or recurring royalties. Royalty should not normally amount to more than 5 per cent of the ex-factory value of production. The royalty payment is restricted to 5 years from the commencement of production or 8 years from the date of agreement.

Procedures

(1) A licence is necessary for the manufacture of any article included in Schedule I of the Industries Development

and Regulation act. The licence is normally issued for a specific product, quantity and a particular location. Licences are also required for expanding capacity and for producing new articles. Subject to certain conditions, small-scale units, ancillary units and undertakings within specific investment limits, etc. are exempted from licensing.

(2) Under MRTPA, all companies and inter-connected undertakings with assets equal to or more than Rs. 200 million, or in the case of single companies with assets no less than Rs. 10 million, have to register themselves with the government. applicants should submit their application along with their licence or state why they did not submit applications to the MRTPA.

(3) Under FERA, any investment by a foreign company or national must be approved by the Reserve Bank. in addition, foreign companies with non-resident interests of more than 40 per cent have to obtain the Reserve bank's permission to carry on in India any activity of a trading, commercial or industrial nature and to establish a place of business to carry on such activities.

(4) Proposals for the issue of shares to non-resident collaborators for a new undertaking or for additional capital by the existing undertakings should be first submitted to the Secretariat for Industrial approvals and the Ministry of Finance, after which permission is to be sought from the Reserve Bank.

(5) All these applications can be submitted together to the Reserve Bank or the Ministry of Finance under the single window clearance system established in 1985, under which a reply will be given within 60 days.

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CHAPTER 5

A COMPARISON OF BRAZILIAN AND INDIAN DEBT CONDITIONS5.1 : Introduction

Brazil and India offer natural points of comparison because they are both late developers, large economies with sizeable domestic markets and have complex and fairly diversified industrial structures. The purpose of this comparison is to evaluate the prospects of India's developing debt problems of a similar nature to Brazil's.

~~... The political systems and hence the ideological stance ...~~
of the two countries have however been sufficiently different for them to follow different policy paths. For instance, the Brazilian terms of direct foreign investment were more favourable than those granted by the Indian government.¹ Brazil was more open to foreign investment than India, in fact, the more substantial presence of multinationals in Brazil may account for some of the confidence that the foreign bankers had in Brazil during the 70s. The MNCs also resulted in a greater integration of the Brazilian economy into the global economy; India was intentionally more self-contained.

¹ During the 70s when India wished to interest Japan and the U.S. in making foreign investments it was commonplace to hear 'give us terms like the Brazilians'. This was quoted to me by an official in the Ministry of external affairs. The officer wishes to remain anonymous.

The role of the government in raising loans also differed between the two countries. The development of the domestic capital markets in the two economies also accounted for the scale of the debt accumulation in the Brazilian economy. The focus of this chapter is the Brazilian economy and only cross references are made to India to establish its debt position.

5.2 : Differences in political ideologies

The difference between the two countries can largely be traced to the divergences in the two political systems and the ideology of the two governments with respect to dependent development. . . . From 1964 to 1980, Brazil was governed by a . . . military dictatorship, which implied that it could not limit the political demands for increased spending beyond her tax and borrowing capabilities till the mid 60s. These deficits were incurred both to promote growth and for other forms of non-productive expenditures which every government, especially a military government, would need to undertake in order to gain popularity. For financing these deficits, instead of mobilising additional domestic savings (like India did) Brazil relied on external capital. Since concessional capital was seldom sufficient to fulfil its ever-growing needs, it became necessary to turn to the commercial banks. Moreover, with no or a largely undeveloped private capital market, the burden of development financing in Brazil was largely met from foreign or government sources. This implied large scale

deficit financing and the consequent inflationary tendencies which inhibited the development of private financial markets. This in turn led to an increasing reliance on the state for finances. Thus higher tax/GDP and expenditure/GDP ratios were legitimized by the authoritarian regime. The macroeconomic influences of this policy was evident in the high rates of inflation in Brazil in the late 60s when it had just embarked on its 'growth miracle'. Ironically, government debt in India today is crowding out private investment in the same way that it did in Brazil during the 70s.²

5.2.1 : Direct foreign investment

Another important difference between India and Brazil, is that in Brazil a great proportion of the growth in industry during her 'boom' period relied on DFI. The main 'takeoff' sectors were transportation, heavy machine tools and chemicals, electronic household goods, plastics, tyre and rubber industries, all of which were dominated by multinationals. Brazil's takeoff was during the 70s whereas the highest rates of growth in the case of India were registered during the 80s. In the 1980s, India's reliance on foreign capital also increased, though on a considerably smaller scale than Brazil.³ DFI in Brazil averaged about

² See section on government debt in Chapter 3.

³ See Chapter 3.

\$10b. between 1967 and 1986, whereas that in India has always been less than \$300m. Even these high levels of DFI in Brazil were very small in relation to balance of payments needs, and between 1977-1986 DFI, though still large, accounted for only 10-15% of the foreign loans made to Brazil.

DFI was allowed to grow in a fairly unfettered way and it was only towards the end of the 70s that Brazil attempted to put some restrictions on it, whereas India was very careful not to allow an unrestricted growth of DFI. Foreign investors were reasonably sure that Brazil's military government would provide a stable and lucrative investment climate for DFI and were therefore eager to avail themselves of Brazil's natural resources and a large internal market. By contrast, Chapter 4 has shown that conditions for DFI in India were not so propitious. In fact, DFI in Brazil has often promoted foreign investment at the cost of local investment. For instance a directive issued by the monetary authority⁴ allowed foreign manufacturers exceptional exchange advantages in importing equipment and machinery.⁵ These incentives were combined with quantitative controls on imports of manufactured goods which essentially 'closed the border', once local manufacture had

⁴ SUMOC instruction no. 113, 1967.

⁵ See, Graham, D. 1984, 'Mexican and Brazilian economic development', in Hewlett, S. A. and R.S. Weinert (eds) Brazil and Mexico: Patterns in late development, Inter-American Politics Series, vol. 3, Centre for Inter-American Relations, New York.

been undertaken. Fishlow estimated that well over 30% of total industrial growth in Brazil arose from import substituting industrialisation in which foreign investment played an overwhelming role.⁶

By normal considerations a large domestic market, *adequately* highly developed infrastructure, *tolerably* skilled labour and capital markets in India should be very favourable to the inflow of DFI. The fact that high levels of DFI have not materialized is often attributed to the restrictiveness of the rules and regulations, and more generally in the inflexibility of the government in its attitude towards foreign investment. Brazil on the other hand, seems to have all the wrong factors, viz. high rates of inflation, an underdeveloped capital market, a large market but extreme inequalities, but all these negative factors have been combined with a high degree of openness. However, now India is liberalising and Brazil imposing restrictions (Brazilisation).

5.2.2: Differences in the scale of transfers

The Brazilian case supports the hypothesis put forward in chapter 2, that a high degree of DFI leads to foreign debt. However, not only DFI but the scale of other foreign capital

⁶ See Fishlow, A., 1972, 'Origins and consequences of import substitution in Brazil' in Eugenio di Marco, (ed) International Economics and Development, Academic press, New York.

transfers to Brazil also exceeded by far those made to India. This can partly be attributed to the greater integration of Brazil into the international economy, which in turn can be attributed to the political ideology as well as the influence of DFI.

In India, by contrast, till very recently the ideology of self-reliance dominated economic policy. Thus the scale of capital transfers to India was much lower than that to Brazil. It has already been mentioned that the scale of DFI in Brazil was at least 70 times that of India. The scale of commercial bank lending to Brazil was also higher, but the difference was not so dramatic. In this case Brazil was able to absorb an average of \$4 to \$5b. per annum in the decade of the 70s whereas India has been able to obtain an average of \$1-3b. per year in the decade of the 80s.⁷ The reasons for these differences are quite complex and need to be analysed in detail. If we compare the total capital inflows to India and to Brazil over the takeoff period for each country, a certain degree of similarity can be observed. They both had an inflow of approximately \$4-5b. per annum in their high growth phases. However their compositions are very different. Whereas more than 50% of Brazilian capital inflows originate from private sources more than 50% of Indian debt comes from concessional

⁷ For complete details of capital transfers to Brazil and India see the Bank for International Settlements, Annual Report and OECD, Financial Market Survey, various issues.

sources (even today IMF credits account for a little less than 20% of the total inflows and all concessional sources for more than 50% of total inflows).⁸ To that extent it would appear that the repayment and servicing burdens would rest lighter on India. The ratio of total debt/GNP is between 20-22% in Brazil and is only a little lower at 15-20% in India (for 1988-89). By contrast debt servicing amounts to 30% or a little higher of the export earnings in India, whereas the same variable ranges between 66 and 80% in Brazil. This leads us to the important question of the costs imposed on an economy by a strategy of growth with external debt. This forms the subject of discussion in the next section.

5.3 : Growth and external debt in the two economies

Brazil is an extreme case of dependent development. Its growth path can be traced as follows. In the initial phase of its growth, i.e. from 1968-1974, Brazil grew at an annual rate of 10% per annum, which was more than double the rate of growth of developed countries and much higher than its historical average. Subsequently the growth rate in Brazil has fallen, but on an average it has been about 5% throughout the 80s. India moved in the 1980s to a higher growth path: the average rate of growth in India during the second half of the 80s was about 5%; in the 1960s and 70s, 2-3% was more usual.

⁸ See Chapter 3.

In the fiscal year 1987-1988 its growth rate averaged 9% -the highest ever. Thus the rate of growth for India has so far compared unfavourably with that of Brazil. Their growth paths are graphed in Figure 5.1.

Whether a path of dependent development was the optimum one for Brazil or not can be examined only with a counterfactual. It is argued that even if the entire Brazilian external debt had been caused by the economic growth which occurred since the first oil crisis, an elementary calculation shows that stagnation would have been the more inept option. In 1973, Brazil's real GDP amounted to only 62% of the real GDP in 1981, which was a year of recession. In the same year her debt amounted to 25% of the GDP. This implies that if Brazil were forced to pay back the entire external debt in one year, it would still be in a better situation now than if it had stagnated from 1973 onwards.⁹ On the other hand, if the level of foreign debt had remained at the same level in 1981 as in 1973 and the GDP grown at a lower rate of 4% then subtracting the debt that would then cumulate from the GDP that would accrue with the lower growth rate we are left with a higher level of GDP than actually observed on the basis of the assumption that the total debt was to be repaid in one go in 1981. A simple numerical example will clarify this point. With the same rate of growth of debt between 1973-1981 as

⁹ See Baer, W., 1989, The Brazilian economy : Growth and Development, 3rd Edition, Praeger, New York.

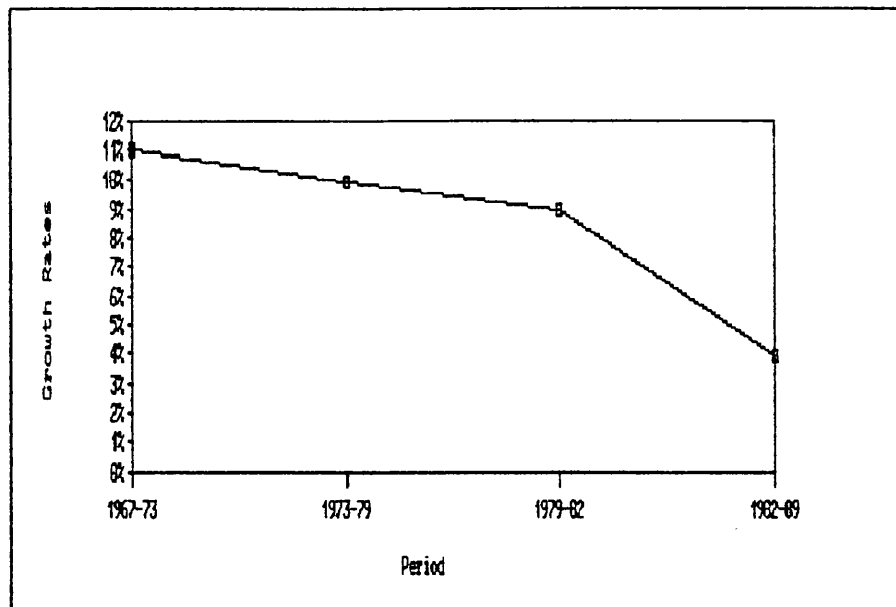
FIGURE 5.1

Figure 5.1a Brazil

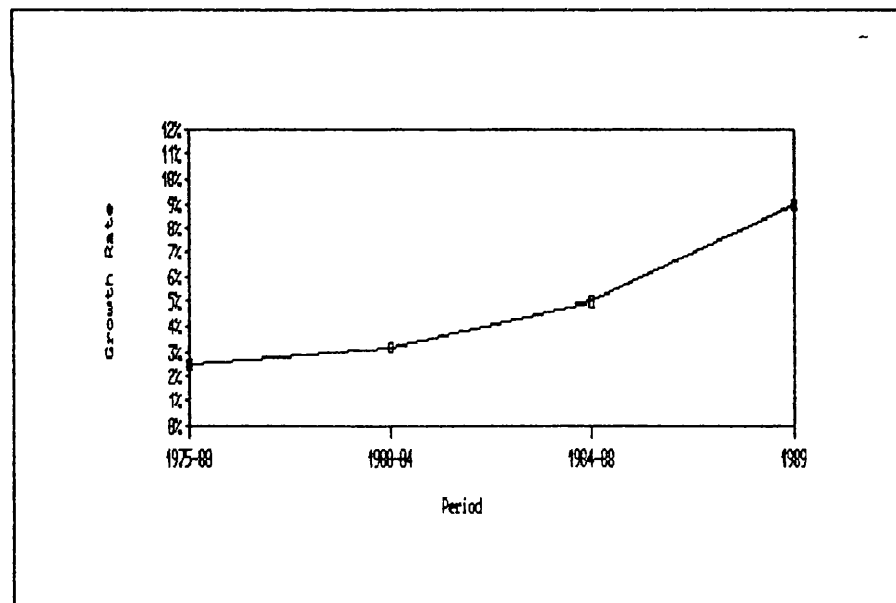


Figure 5.1b India

Source : IBRD, World Development Bank, various issues.

between 1967-1973 the GDP of Brazil would have been US\$250b. in 1981, compared to the actual GDP of US\$285b. achieved with a higher level of debt. A total repayment of this debt would have made the GDP US\$224b. under the second scheme whereas it would have been US\$233b. under the first scheme. Thus it appears that though lower growth rates would have been achieved without debt, it may have been in Brazil's interest to cut down the rate of borrowing to more manageable levels as the GDP net of debt would have then been higher.¹⁰ However, this procedure implicitly assumes that all debt will be repaid in one go and thus negates the importance of discounting future repayments in favour of higher levels of absorption now.

Apart from the growth prospects which appears to have been enhanced on the whole by foreign capital inflows into Brazil, there is the developmental aspect too. Many of the projects undertaken with external debt or with DFI had beneficial effects in expanding the country's exporting capacity and in substituting imports in new sectors. Foreign capital inflows accelerated the process of modernisation through the upgrading and diversification of the industrial structure. Economic historians¹¹ have divided Brazilian development into four distinct phases. Of these only the last

¹⁰ Ibid.

¹¹ See Graham, D., op. cit.

two are of interest in this study: the Import Substituting Industrialisation (ISI) phase and the current Export Diversification Industrialisation phase. The ISI phase lasted from 1967 to the late 1970s. Foreign capital inflows have been crucial in Brazil for both these phases, though by the end of 70s Brazil had become *largely* self-sufficient as far as capital goods were concerned. However it is also undeniable that there was a considerable amount of waste in the growth programme, for instance, investing in nuclear power despite Brazil's large reserves of hydroelectric power, and constructing steel mills in 1970s in the face of weak world demand. Since such programmes had a high import content, a more modest growth without these projects (or with these projects on a more reduced scale) might have brought the rate of growth of indebtedness down.¹²

Brazil's indebtedness implies that a large proportion, almost 60 to 80% of the export earnings, are already pledged to interest payments let alone amortization. However, the rates of growth of the Brazilian economy are still high, exceeding the growth rates of all LDCs but a few south-east Asian NICs. Whether Brazilian exports can continue to grow at their recent high rates is dependent on the technological advances that Brazil is able to make and hence on how competitive it can become in comparison to other LDCs.

¹² See 'Clumsy Giant - A survey of Brazil' in The Economist, April 25, 1987.

Moreover Brazil has been able to retire a small proportion of its debt by means of swaps for equity. The high rate of discount (between 40 and 50%) in this swap market appears to be indicative of the fact that investors regard it as a second best solution to getting their money back. On the other hand, the high volume of the swaps appear to be indicative of the fact that the foreign investors still view the prospects of Brazilian development with optimism.¹³

A comparison of the two countries' growth profiles shows the expected results. India with its lofty ideals of self-reliance and no commercial borrowing grew at an average rate of .2 to .3% up to the end of the 70s. Moreover its industrial growth also tended to stagnate after the early 60s, when it had relied on imports of technology from the West and the Soviet block. Though India managed to diversify its industrial structure, it developed what is called 'second grade technology' and second grade, uncompetitive industries. It severely discouraged DFI till recently, by imposing restrictions which would make DFI conform with national priorities. It followed a planned development path in which it grew very slowly and almost completely in isolation compared to Brazilian encouragement of DFI and exports. As a result, till this decade India's rate of growth of GNP barely kept pace with the rate of growth of its population.

¹³ See The World Bank, World Development Report, various issues.

However, India appears to be self-sufficient in the production of foodgrains, and food imports are required only in extreme cases. This contrasts with Brazil, which is consistently forced to import 10 to 20% of its food consumption. Moreover though Brazilian capital goods may be more competitive, India is a leading exporter of technology to other LDCs. Indian MNCs appear to be doing very well in other LDCs. India is able to obtain hard currency for its development programmes through these exports of technology.

It can be seen from the Brazilian case that though debt does lead to growth it also imposes repayment obligations which can be quite onerous. The central issue then is whether debt-led growth is an optimum strategy for India. To evaluate this we will draw upon the experience of Brazil.

5.3.2 : Balance between growth and debt

The optimum balance between growth and debt requires a balance between the benefits of growth and the costs of debt. This balance shifts as the dynamic pattern changes: if we look back to Chapter 2, in the transition theory of debt, high levels of capital inflows need to continue for some time before a country can start repaying and decreasing its debt. Hypothetically speaking there can be a backward bending debt curve: if capital inflows are truncated before a certain point then the debt could actually increase with decreasing levels

of GNP.¹⁴ The critical point occurs if GNP growth has not been adequate to permit both repayment and servicing. Thus arrears tend to mount and the economy gets caught in a debt trap. Brazil can be said to be caught in this kind of a debt trap. In the case of India, we have to examine whether this is a future possibility. First of all, even with the massive capital inflows that have been witnessed in this decade (average of US \$5b. per annum) the rates of economic growth have only been an average of 5%, and the industrial rate of growth about 7 to 9%. By contrast Brazil grew at 7 to 9% and its industrial rate of growth was 11 to 13%. Thus higher inflows would imply higher growth by these figures. However, Indian exports have been growing at higher rates than Brazilian exports, about 10%-15% (in US\$ terms) per annum during this decade and Indian imports show considerably more price elasticity than do Brazilian imports. The levels of Brazilian export diversification appear to be better, though when one examines the fact that more than half of Brazilian exports are intrafirm transfers by the MNCs, then this performance does not appear as impressive. Intrafirm transfers appear to offer many opportunities for transfer pricing, in which case export earnings may not reflect in true opportunity cost or the economy's general competitiveness. The elasticity of these exports cannot be treated as general elasticities

¹⁴ See Chapter 6 for a theoretical exposition of the debt trap.

because an MNC may wish to recover its fixed costs by continuing to buy from its subsidiaries even though the cost of obtaining the same goods from elsewhere may be lower. Again this comparison of the relative situation of Brazil and India with respect to the debt trap has been conducted in more extensive detail in chapter 6. Here we just contain ourselves to a comparison of their debt conditions to discuss the potentialities of the development of a debt trap in India. Thus an analysis of the factors which led to the Brazilian debt crisis is applied to India to determine the possibility of a debt crisis in India. Before analysing why debt became a problem it is necessary to set out why it was incurred by Brazil in the first place and why it is being incurred by India now.

5.4 : The debt problem

In this section we will set out the debt problem in the Brazilian context and cross references will be made to the current Indian situation. The debt problem has been discussed above in the context of why debt was incurred in the first place, how debt cumulated and became a problem, what was the composition of debt in terms of the repayment burdens, and whether exogenous variables contributed to the debt crisis. These questions will be developed in the sub-sections below.

5.4.1 : Reasons behind Brazilian and Indian borrowing

The basic reason behind borrowing by Brazil and India do not appear very different. Brazil and India both borrowed to embark on high growth paths. However, whereas GOI was able to contain its borrowing within 'reasonable limits' for a long time by either trimming down its investment program or borrowing internally or by money creation, these options do not appear to have been favoured by the Brazilian government. It is possible that the military government in Brazil was unable to trim down its expenditure programmes or perhaps unable to increase taxation or finance government deficits by money creation because these would aggravate the already high rate of inflation. Thus it could only have recourse to encouraging DFI and incurring commercial debt. The availability of loans was facilitated by the fact that the huge oil surpluses in the early 1970s flooded the international capital markets and the MNCs as well as the Brazilian government had a good credit rating. From the borrower's side, real rates of interest were very low, Brazilian exports were booming and the differential between domestic and international rates of interest was sufficiently high to make external borrowing very attractive in the late 60s and the first half of the 70s.

By contrast, the guiding criterion in lending of the 80s was exposure, and exposure to India was low. By the Brazilian experience and that of other developing countries,

India is aware that sovereign debt has to be serviced in foreign exchange and thus all borrowing for domestic expenditure should be restricted. Moreover exports must grow at a sufficiently high rate for sustained borrowing. Thus though the rates of interest in the Indian capital markets are normally higher than international markets, domestic savings finance most of the investments.

Both in Brazil and in India the heaviest external borrowing has so far been undertaken only when government deficits had reached historically high levels. This link between internal borrowing and external borrowing or rather between internal and external deficits will be examined later in a section below in the context of our two case study countries.

One important difference needs to be pointed out between the two countries. The rate of domestic savings in both countries is fairly high. In the case of India it has been possible to *mobilise* these savings through . . . a nationalised banking sector. By contrast, Brazil is characterised by an almost complete absence of a medium or a long term capital market. The government banking system does not effectively intermediate and the presence of high rates of inflation prevents the development of a private intermediation system. Fixed assets are in prime demand and a short-term capital market in which a large number of assets are constantly traded exists but

mainly provides assets to hedge against inflation. An analysis of the capital market structures is carried out in more detail below for both countries. Here it will suffice to say that an absence of a long-term capital market in Brazil indirectly led to the accumulation of external debt.

The entry of foreign resources into the Brazilian economy was as much a matter of government policy as the accumulation of foreign debt has been in India in the 1980s. Brazil's policy of mini-devaluations established in August 1968 created an informal discretionary link between changes in the value of the Brazilian currency abroad and the difference between the .US . and .the .Brazilian .inflation .rates.. Devaluations. occurred every 27 days on an average. Following a major devaluation in 1968 of 41% (and this was 19% greater than the differential in the rates of inflation) mini-devaluations generally underdevalued until 1974.¹⁵ These policies coupled with the high real rate of interest in the domestic sector proved a powerful incentive to external borrowing by the financial sector and stimulated capital inflows which played a substantial role in providing resources to the government for relending.

Measures to encourage capital inflows after 1974 included the reduction in minimum maturity from 10 to 5 years for foreign borrowing (minimum maturities have since been

¹⁵ See The World Bank, 1984, Brazil Financial Systems Review, A World Bank Country Study, Washington, D.C. USA.

increased).¹⁶ Fiscal concessions on foreign interest payments and exemptions from financial transactions tax were also granted. The Central Bank assumed a portion of the risk of foreign borrowing by assuming the exchange risks. Most important, capital inflows were stimulated by the decline in real international borrowing rates to negative levels over the 1970s.

Borrowing abroad was rendered additionally attractive by the exchange rate policy after 1975 in Brazil. The real exchange rate against both the US\$ and currencies of other major trading partners when measured on the basis of changes in the wholesale price indices depreciated over 1973-1975. It had returned to 1973 levels by mid-1977, after which the real cruzeiro continued to appreciate against the US\$ while depreciating against other major currencies on account of dollar depreciation. Thus on the one hand, exports to the major currency countries improved, and on the other the cruzeiro value of the dollar-denominated debt fell. Besides, an improvement in the terms of trade also encouraged the inflow of foreign resources. Between 1973 and 1978, the internal terms of trade shifted by 26.6% in favour of agriculture, partly because of improved export prices and partly because of improved domestic prices. This shift in the terms of trade boosted monetary correction, by increasing

¹⁶ Ibid.

domestic prices while permitting the maintenance of export competitiveness and the real exchange rate, and provided a stimulus to external capital inflows which during this period were largely used for improving reserves. It is estimated that over 1976-1978, the net expansionary effect of exchange operations averaged about 43.9% of the monetary base during this period.¹⁷

Moreover, the increase in government debt in this period had the effect of crowding out domestic borrowers from the limited unregulated domestic capital markets. It must be pointed out that the same phenomenon has been observed for the

. . . Indian economy particularly during the second half of the 80s. . . .

Because of this crowding out in Brazil, there was an increase in the foreign capital inflows. The net effect of the domestic debt issue was an increase in the official domestic liabilities paralleled by an increase in official foreign assets and non-official foreign indebtedness.

As dollar denominated external debt mounted so did the threat posed by devaluation of the cruzeiro, as this would increase the extent of the liability. This implied that the Central Bank had to provide the insurance against exchange risk. In practice, this meant that the central monetary authority bought up the dollar liabilities of the private sector and the private sector was left with the equivalent

¹⁷ Ibid.

cruzeiro liability.

After 1978, foreign savings came to play an ever increasing role in financing working capital and investment. Capital inflows in Brazil were induced by the decrease in the real credit volume from the monetary authorities and restrictions on commercial bank lending out of domestic resources. These restrictions were aimed to induce borrowers, particularly those in the public sector, to attract foreign capital to cover the trade deficit and to meet the debt service obligations incurred on the debt which had already accumulated.

... Brazil had already entered the Ponzi financing situation, ... as early as in 1978.¹⁸ Efforts to use the capital account to cover the current account deficit was a major feature of the Brazilian response to worsening terms of trade for the period after 1977.

At the same time quantitative limits on lending out of domestic resources grew progressively tighter: over 1980-81, real credit volumes covered by the limits were halved. Public enterprises were additionally constrained to absorb no more than 30% of domestic credit. These limits forced borrowers to turn abroad, with the result that net foreign liabilities increased from 17% of commercial bank lending in 1978 to 38% in 1982. However, spreads even for prime borrowers in the

¹⁸ See Chapter 5 for an explanation of Ponzi finance.

domestic capital markets ranged from 40%-100% real rates of interest. Exchange depreciation, high real LIBOR in the international markets, and growing international spreads held the domestic rates high. Part of the increase in domestic spreads went to the federal treasury through increases in the tax on financial transactions; this tax by 1981 accounted for 11.8% of federal revenues.

Thus it can be observed that government policy in Brazil was responsible for the growth in external debt. Financial policies, especially quantitative restrictions on domestic credit, were instrumental in increasing the reliance of the Brazilian economy on foreign credit and in suppressing the growth of domestic financial assets. Among the factors underlying these policies were the need to extract revenue from the system to cover the subsidies to the favoured borrowers in the form of cheap credit. Moreover, the perceived difficulty in adjusting the trade account rapidly without severe recession, and faced with an exogenous rise in debt service costs, the sole alternative seemed to be to seek foreign loans at an accelerated pace. Thus by end-1982, all domestic liabilities accounted for only 28% of commercial bank liabilities, whereas foreign loans accounted for 36% and roughly equalled the loans made to the private sector by the banking system. However, the entry of foreign loans did not permit the lending rates in the domestic sector to fall. This could be attributed to the fact that Euro-dollar rates were

still high, LIBOR averaged 16% over 1981-1982 and the spreads on loans to Brazil averaged about 2-2.5% at the same time. The rate of devaluation, which had been accelerated to match inflation (and not its differential with the US rates), and intermediation costs added a few extra points to the cost of domestic borrowing. In addition, the threat of a maxi-devaluation on account of the external payment situation came to inhibit foreign borrowing and across the board limits on credit expansion domestically decreased the competition among banks. The continued difficulty of foreign borrowing in 1983 served in effect to break the link between foreign borrowing and the quantitative restrictions on lending out of domestic resources. Thus in effect it was the onset of the debt crisis which finally delinked domestic borrowing from external borrowing.

In India too, as was pointed out in Chapter 3, external borrowing was initiated as a matter of government policy. The public sector companies such as the Oil and Natural Gas Commission, Air India and Coal India Limited were the first few companies which borrowed externally. Moreover, until 1982 the government-owned or government-managed credit institutions such as the ICICI borrowed externally and then the onlent funds to private enterprises. In 1982 the rules governing external borrowing were changed and the private enterprises could borrow in the international markets without going through the government, though they have only been allowed to

borrow the foreign exchange component of their projects. However, like Brazil the internal debt of India has been growing at an alarming rate, and given that the climate for concessional loans is not so propitious, India in a few years time may be forced into a Ponzi financing situation where it is forced to borrow to service its external debt. This prospect is examined in more detail in the next chapter.

An analysis of the role of the government in external borrowing will be incomplete without an examination of the composition of external commercial loans. Thus a greater and increasing share of public sector or government loans will increase the role of the government in the external sector.

The next section sets out to examine the comparative shares of public versus private borrowing in both the economies.

5.4.2 : Composition of foreign loans

Most of the external borrowing in Brazil was undertaken by either the public sector enterprises, or by the state governments and various other public agencies. The share of public and publicly guaranteed debt increased during the 80s as the government bought up a lot of private debt. Thus the share of public and publicly guaranteed loans increased from 51.7% in 1973 to 63.3% in 1978.¹⁹ However, this figure does not indicate the share of public in total external loans as

¹⁹ See Baer, W., 1989, op.cit.

some private loans may also be government guaranteed. It is contended by the same author that a substantial amount of borrowing in the 1970s was also conducted by the multinational enterprises so that until 1980 the multinationals were more in debt than either domestic private firms or state enterprises.²⁰ As these enterprises had no access to the official long-term credit markets they had a good justification for borrowing abroad. The decrease in the indebtedness of both domestic private and multinational firms was related to the recession and the debt crisis, while the rise in the debt of state enterprises was related to the attempt to capture more foreign exchange by having state enterprises borrow more than they needed in the international market. The socialization of private debt also contributed to the increase in the proportion of public debt.

In 1982 the Brazilian government offered the private sector the opportunity to prepay its foreign debts through the deposit of an equivalent amount of cruzeiros in a special account at the Central Bank. In this exchange the government provided the private sector a cruzeiro deposit = exchange the firm's dollar liability. This the government thought worthwhile, as the savings provided immediate access to dollars, which the government used to pay interest on other outstanding loans. The propensity of domestic firms to use

²⁰ Ibid.

these facilities increased enormously after 1982, as the real devaluation of the cruzeiro significantly increased the cost of carrying foreign debt. Thus by extending free credit to replace private foreign debt, the government lost future revenue amounting to the interest due on foreign debt thus acquired. This led to a massive increase in the budget deficit and the February 1983 maxi-devaluation.

In India, on the other hand, most of the external private debt has been held from the very beginning by either government run financial institutions or by the public sector. These together account for more than 80% of the private external debt, as can be observed from Table IV.5. In order to facilitate the payment and the service of debt India is seeking to promote its exports by devaluing its currency in the same way that Brazil did during the 70s. Though domestic loans are often more expensive than international loans in India²¹ the two are clearly not regarded as substitutable for each other as they were in Brazil. This could be attributed partly to the severe exchange controls imposed by the government of India, as well as the vetting of loan proposals for their foreign exchange component carried out by the government. However given that the total internal debt now accounts for around 50% of the GNP and the total external debt around 16% it is likely that the state may be unable to

²¹ See Chapter 3.

extract more resources domestically and be forced to borrow abroad to finance its budgetary deficits.²² This would make the onset of a debt crisis imminent especially if external borrowing was undertaken for the payment of interest on foreign loans. The next section examines the factors that led to the onset of the debt crisis in Brazil in order to examine whether similar conditions can be observed for India.

5.5 : The onset of the debt crisis

The debt crisis in Brazil really emerged in 1979, when the combined effects of the second oil price rise and the deterioration in the terms of trade led to a severe balance of trade deficit. The terms of trade had been falling since 1978 because of the weakness in the prices of other exported primary goods. In addition there was a dramatic rise in the world interest rates in reaction to the tight internal monetary policies of the US. As most of Brazil's debt had been contracted on a flexible interest rate basis, a rise of world interest rates automatically increased the cost not only of new borrowing but also of servicing the outstanding debt. Moreover, international pressures had forced the Brazilian government to remove fiscal and credit subsidies to exports. Given the need for the government to continue the rapid

²² See Buiter, W.H. and Urjit R. Patel, 1990, A macroeconomic perspective of the public finances in India, Paper presented at an International Seminar in Public Economics held at New Delhi, January 11-13, 1990.

expansion of exports, this made it necessary for the government to increase the frequency of the mini-devaluations of the cruzeiro. However greater devaluations meant higher inflation and an increase in the financial burden of firms with foreign debts.

Moreover, the drought of 1978-1979 forced Brazil to import such staple products as beans and rice. An increase in the agricultural output, which would dampen the rise in food prices and decrease the imports of food, called for short-run increases in relative food prices in order to stimulate food production. It also called for an increase in the provision of agricultural credits. These measures implied further inflationary pressures which in turn implied further devaluations the negative effects of which have already been discussed above.

The reasons for the debt crisis can be briefly summed up:

- 1) The external environment deteriorated. Oil prices and rates of interest soared. At the same time the demand for and prices of primary commodities were depressed. In this uncertain climate foreign banks were reluctant to increase their exposure to Brazil and some smaller banks withdrew from international lending.

- 2) Some ambitious public investment plans such as the nuclear power development project and the steel development projects proved difficult to curtail, even when they proved to be white elephants.

3) Brazil failed to develop greater export capacity during the period of rapid growth largely based on import substituting industrialization. Subsequently the shift of policy toward export promotion has paid off: during the second half of the 80s exports from Brazil has met the debt-service requirements.

4) The agricultural policy measures (pacote agricola) of 1979 perpetuated and exacerbated the macro-destabilising financial feedback of increased oil prices and the maxi-devaluation of December 1979 by automatically linking the growth of rising credit subsidies to inflation.

5) The 1980 experiment of prefixing monetary correction and the rate of devaluation held the adjustments to unrealistically low levels, contributing to lower savings and a progressively overvalued exchange rate in 1980. Overvaluation implied a deterioration in the export performance whereas devaluation led to an increase of the debt burden.

Although Brazil's exports continued to grow, by 1981 they had lost almost half of their unit purchasing power relative to 1977, a loss equivalent to almost 4% of GDP. To this must be added the higher debt-service payments on account of both a higher debt burden and rising interest rates. LIBOR stood at 19.5% in March 1980 compared to an average of 9.4% in 1978 and has been high and positive in real terms since then. Repressing imports was difficult because by 1980 fuel accounted for 44% of the total imports, intermediate inputs

for 25% and capital goods for 19%. Moreover, export expansion had stopped and by 1982 exports actually fell by over 13%. The actual fall in import content of export became noticeable only after 1983 when most projects initiated under the ISI started to produce results.

On the whole thus it appears that exogenous and endogenous factors contributed to the Brazilian debt crisis. Using Ballassa's²³ procedure to decompose current account changes into external shocks (including retardation of world trade growth, deterioration of the terms of trade, and rate of interest shocks), the burden of accumulated debt, and domestic policy actions, Bacha²⁴ calculated that from 1979 to 1981 domestic policy actions to control the current account were practically compensated by the intensity of external shocks and that in 1982-1983 the effects of domestic policy were completely overridden by external shocks. The export growth which followed 1983 was linked to world trade recovery and to the success and maturation of the ISI program. Thus the Brazilian experience appears to highlight the critical role of exogenous factors in aggravating and even initiating a debt crisis. Among the exogenous factors the rate of interest, the terms of trade, the elasticity of export and import demand,

²³ See Ballassa, B., 1984, 'Stabilisation policies and adjustment: the Brazilian economy in the 1980s', in Carnero, D.D., 1986, op.cit.

²⁴ See Bacha, E., 1984, 'The converted debtor: Latin America: Brazil, in Carnero, op.cit.

the composition of both these baskets, and lastly the climate of the world economy and trade would be of importance.

To examine these same factors in the Indian context, recall first from Chapter IV that in terms of India's unit value of exports the real rate of interest on commercial foreign loans has risen only marginally over the 80s and that too not uniformly. This could be attributed to the fact that the real rate of growth in exports over the second half of the 1980s has averaged about 10% per annum. Any sharp rise in the rate of interest in international lending will obviously adversely affect the debt burden. It is to be noted that . . . concomitant with the increase in exports has also been the . . . sharp increase in imports with the result that there has been a deficit in the balance of trade which has worsened in this decade. In fact currently international reserves in India only provide two months import cover which is below the stipulations of the IMF. The terms of trade has shown only a marginal improvement over the 1980s and even this improvement has not been consistent over the years.²⁵

The composition of exports and imports of India show that the share of manufactured exports has increased from 60% in the early 80s to about 75% in the late 80s.²⁶ This implies that India may be less vulnerable to sudden price or demand changes

²⁵ See The World Bank, 1989, op.cit.

²⁶ Ibid.

as it would have been if it were dependent on the export of primary commodities. Moreover, the export basket is fairly diversified and it is possible that India may be able to take advantage of this diversification should a sudden reversal in market conditions make the export of one commodity or a group of commodities difficult. The import basket on the other hand shows less flexibility. Petroleum and petroleum products account for more than 30% of the total imports and this share has remained more or less constant since the mid 1980s. The other imports are fairly diversified and food accounts for a relatively low share at 2-5% of the total imports.²⁷ However the export and the import elasticities calculated by Lucas²⁸ were close to 1. Lucas's estimates were however limited to the mid 1980s and it is possible that in the second half of the 1980s the elasticities because of export diversification may be higher. The other macroeconomic indicators have been very healthy for the 1980s as has been observed in Chapter IV. They will be compared to Brazilian macroeconomic performance at the onset of the debt crisis in Chapter 6.

It was stated earlier that the reasons behind the external borrowing of Brazil can mainly be attributed to two factors. One was the lack of a domestic market for private

²⁷ See RBI, 1988-1989, The Annual Report

²⁸ See Lucas, 1989, 'Export and import elasticities in the Indian economy in the 1980s', Journal of Development Economics.

long-term capital and the other was the massive growth in public or internal debt which necessitated external borrowing. These two features of the Brazilian economy have been examined below and compared with that of India.

5.6 : A comparison of the domestic capital markets

Since the late 1960s the financial structure of the Brazilian economy has been characterised by a heavy reliance on foreign borrowing, a falling saving rate, decreasing financial intermediation, proliferation of subsidised credit lines, increased financial segmentation, and the dispersion of domestic interest rates. From 1974-1984 financial policies, in particular selective credit programmes have performed three main functions: (1) to finance the deficit of the public enterprises and the expenditures of monetary authorities; (2) to compensate certain sectors such as agriculture and exports for the profit shortfalls effected by price controls and exchange overvaluation; this led to a segmentation of the market where interest rate varied according to the sector, purpose, region, and the nature of the borrower; (3) increasingly to attract foreign funds to support the current account deficit.

Greater segmentation (annual interest rate differentials averaged over 70%) meant considerable arbitrage and inflation, which in turn inhibited the development of private capital markets. The various reforms through the 70s resulted in a

financial system the key features of which were the following;

1) Market segmentation through the proliferation of selective credit programmes.

2) Coexistence of assets bearing monetary correction with assets denominated in nominal cruzeiros. Hence the possibility of hedging through arbitrage.

3) Administered, non-market lending rates for majority of loans.

4) Inhibited development of a private capital market, largely due to active state intermediation.

5) Increasing conglomeration of the private financial sector,

... which rationed small borrowers out of the market.

6) Centralisation of credit: funds were passed from the federal to the private financial sector; the latter generated no credit by itself.

7) Quantitative lending controls specified in an annual 'monetary budget'.

8) The assignment of resources raised through the sale of federal debt to the monetary authorities to the public sector.

9) The inclusion of interest payments in the monetary rather than in the fiscal budget.

During the economic miracle the financial deepening (effected by the state in the first stage and in the second stage by the private lenders) facilitated the efficient transfer of resources between savings surplus and deficit units. The decrease in inflation during this period

contributed to the progressive equalization of interest rates across the different segments of the financial system.

The increase in inflation in 1973-1974 led to dramatic shifts by savers toward indexed assets and away from the private financial sector. The share of public sector increased from 45% to 51% during 1973-1978 in total lending. Private financial intermediaries survived by 'retailing' funds supplied by the public sector. Real rate of interest flexibility was limited by the existence of indexed savings, so that the worldwide decrease in savings was reflected in the decrease in indexed assets. The Brazilian financial policy

after 1974 embodied four elements;

- 1) External capital inflows were encouraged by a range of policies which has been discussed in the previous section.
- 2) Credit subsidies were increased.
- 3) Federal debt was employed to recycle funds from savings surplus to deficit sectors.
- 4) Restrictive monetary policy was used to curb inflation.

One result of these policies was the restriction of the proportion of loans which domestic banks could make on their own terms ('free lending'). It also put pressure on uncontrolled interest rates through increasing the proportion of the demand deposits which were required to be held with the central bank and were not interest earning. The requirement that 12% of the deposits was to be reserved for lending to small and medium scale industry at maximum rates of 1.3% per

annum implied that the real rates of interest reached 30% per annum. Thus high reserve requirements and earmarking of loans for the priority sectors led to high rates of lending for the funds earmarked for free lending. These same factors, high reserve requirements and priority lending requirements, also led in India to an increase in the free lending rates to something like 18-20%.

In Brazil credit subsidies originating from increasingly earmarked commercial bank deposits or high cash reserve requirements increased the interest rates on unrestricted loans to cover administrative and deposit costs. This furtherwidened the gap between free and controlled rates of interest. Higher levels of inflation coupled with the contracting share of deposits in bank liabilities meant that the average cost of funds did not fall much. However, the increase in credit subsidies during the 70s implied higher free market interest rates. Thus in 1978, the capital market structure showed interest rate differentials of 60% or more and this widened considerably with the rise in inflation over 1979. This in turn induced foreign borrowing, an increase in reserve requirements and further monetary expansion. Because of the segmentation in the Brazilian capital markets, capital inflows reinforced subsidized credit creation as it was all routed through the government instead of offsetting credit subsidies as it might have done in a more unified market.

Early in the 80s, the decline in international lending

to Brazil severely depressed its investment plans and increased public borrowing and interest rates. In India too, the government controls most of the intermediation and has encouraged a system of segmentation through priority lending in the official banking sector. In the unofficial sector such as village moneylending or the bazaar, lending rates are much higher. It also appears likely that external capital inflows augment the market segmentation by earmarking an increasing proportion of the funds to the public sector or the government sector just as it did in Brazil. The only difference lies in the fact that the rate of inflation in India is much more reasonable and this has encouraged the development of a private equity market.

Interest rates in India are administered and not determined by market forces. Almost every single rate is directly fixed by one authority or another and the breadth and the depth of intervention by the authorities has grown over time. However, in 1988 the RBI liberalised certain sectors of the capital markets by lifting ceilings on interest rates. However, the RBI imposed a floor rate of interest and introduced various instruments such as commercial paper (CP), which would permit the private sector to tap private savings.²⁹ Moreover, the RBI encouraged the development of the private equity market. Thus the Bombay stock exchange is fairly well

²⁹ See Chapter 3.

developed, though the government directly or indirectly taps about 50% of the funds available from this market.

By contrast, the Brazilian equity market is relatively undeveloped. The Brazilian manufacturing sector is substantially 'closed' in the sense that its equity is not freely traded. Majority shareholders are typically dominant even in 'open' Brazilian companies. Shares of a few state-owned enterprises are responsible for the bulk of total market value and the trading volume. The same cannot be said about India, where private trading is as substantial as public and government bills are no longer regarded as good risks as they were till very recently. Individual minority shareholders invest little in the equity of private firms and the flow of information is not very comprehensive ^{in Brazil.} By contrast, the Indian equity market is much more sophisticated.

In Brazil, long-term industrial lending is the virtual monopoly of the Bank for National Economic Development (BNDE), a system which includes commercial investment and development banks. Commercial and investment banks lend at short and medium term for working capital except when acting as BNDE agents. Concurrently with the concentration of financial intermediation in the hands of the state, conglomeration and concentration of private financial sector has also been encouraged with the objective of realising scale economies. Thus intermediation costs in Brazil are very high by international standards. For instance, they were almost 5

times as high as the costs in the US during the 70s. In this context, it must be mentioned that intermediation costs are very high in India too. In fact the loan return record of the publicly owned State Bank of India has been estimated at only about 30%.³⁰ Thus to conclude it can be said that both in India as well as in Brazil most of the intermediation is carried out by the state and is thus attended by several problems notably that of market segmentation which has served to hike up the free market rates. However, while this segmentation led to external borrowing in Brazil, the existence of a formal equity market, as well as several informal lending institutions in the private sector has contained external borrowing in India. It is likely that when India chooses to borrow externally for reasons other than the financing of the foreign exchange component of projects, such borrowing will largely be undertaken by the government for meeting balance of payments deficits. The next section briefly examines the link between external and internal borrowing in the two countries.

5.7 : Link between external and internal debts

As part of its growth-cum-debt strategy the fiscal deficits of the Brazilian government were quite high to begin with. Moreover, the system of subsidies and other developmental expenditures strained the fiscal budget of the

³⁰ See The World Bank, 1989, op.cit.

Brazilian government. Despite treasury surpluses, the total federal debt increased from 7.7% in 1973 to 10.2% in 1978. This increase in internal debt was also accompanied by a substantial increase in the external debt. After the government had nationalised a substantial part of the external debt the fiscal deficits increased by even larger amounts. Budget deficits in the 1980s failed to decrease because of the higher cruzeiro/ado³¹ cost of the foreign debt following subsequent devaluations, lower taxes because of recession, and the freezing of public sector prices in an attempt to control inflation. Private sector employment went down and consequently political pressures to increase public sector employment increased. This further burdened the government budget. This deficit after 1982 could not be financed by foreign loans and thus the government had to borrow domestically, which led to a further increase in the rates of interest. The critical nature of the Brazilian budget deficit is shown by the fact that in 1985, the government paid more than half of its tax revenue as interest on domestic and external debt.

To sum up the role of government finance in the Brazilian case, it appears that initially the government had resorted to the foreign capital markets in order to bridge its budgetary deficits. These were incurred in the first instance

³¹ The cruzero became the cruzado after the monetary reform of 1986.

as part of the government's growth-cum-debt strategy. Subsequently when external loans were difficult to obtain, the government was forced to borrow internally in order to service its external debt.

In India too, internal borrowing has increased during the last decade. The increase in government deficit spending has been discussed in Chapter IV. So far the government's strategy has been to finance the fiscal and balance of payments deficits either through concessional external loans or through domestic borrowing. The most rapidly rising component of budgetary deficit has been interest payments. If this trend towards high budgetary deficits should continue then it is possible that India may be forced to go the Brazilian way.

5.8 Conclusions

This chapter has shown that the two countries had different ideologies and varying degrees of openness which led to a large difference in the scale of private capital transfers from abroad. However, the reasons behind accumulating external debt were very much the same in the two countries, as was the role of the government in financial intermediation. This role served to segment the capital markets in both countries. However, whereas Brazil is characterised by the virtual absence of a private capital market, India has a fairly well-developed one. The similarity between the two countries lies in the fact that government

securities command a substantial portion of the private credit markets in both countries. Lastly, this chapter has shown that the Brazilian debt crisis was both aggravated and to a certain extent initiated by exogenous factors. Thus to examine whether the same situation can arise in India too, the next chapter sets out to examine and compare certain macroeconomic variables, especially those related to trade with similar Brazilian variables.

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CHAPTER 6

Debt Trap Scenarios6.1 Introduction

It is accepted that a growing and profitable corporate borrower who has achieved an optimal capital structure will never repay bank debt. Instead, old debt will be rolled over or funded, while growing working-capital needs are met by further loans. One might think that the same principle should apply to sovereign borrowers. However, there is an essential difference between governments and private businesses in the sense that the firms have balance sheets and the government does not. This has at least two implications: (1) lenders can not attach physical assets as in the case of firms as security for loans, (2) firms have equity shareholders, so that the debt/equity ratio acts as a guide for the level of indebtedness of the firm. By contrast, (1) the state has relatively few tangible assets; its principal asset is the power to tax; as a result (2) the lenders have to rely on certain macroeconomic aggregates in measuring the indebtedness of a sovereign state. The latter is by no means as accurate an index of the probable repayment capacity as the debt/equity ratio is in the case of firms. Furthermore, the returns on government projects are difficult to measure and therefore, anticipate, partly because of the distinction between private

and social returns.

However, when debt cumulates over a period of time banks suddenly become aware of the fact that the volume of cumulated credit to any one country is high enough to jeopardise repayment. Then the banks become less willing to lend. Inherent in such an view of the debt problem is the postulate that there is an optimum level of indebtedness, beyond which lies the Debt Trap, in which indebtedness continues to rise, not because new credit is undertaken but because the debtor fails to meet interest payments.

6.2 Debt trap - an extension of Minsky's formulation

As was stated earlier, in terms of a theoretical framework we will rely on Minsky's¹ analysis of financial instability as applied to the domestic economy. The same analysis is going to be extended to the context of international debt and here a brief attempt at the formulation of the Minsky hypothesis has been attempted. Minsky has devised a framework for analysing the relations between cash payment commitments due to outstanding liabilities and cash receipts or returns from debts. He identifies three financial postures of the units in the economy which are differentiated by the relation between contractual payment commitments due to their liabilities and their primary cash flows. These are

¹ See Minsky, H.P., 1982, Inflation, Recession and Economic Policy, Wheatsheaf, Brighton.

hedge, speculative and 'Ponzi' financing units. The financial structure depends upon the mix of the financial postures. For any given economy, the greater the weight of hedge financing, the greater the stability and hence a smooth entry into phase III of the development cycle,² whereas an increasing weight of speculative and Ponzi financing indicates an increasing susceptibility of the economy towards a debt trap.

For hedge financing units, the cash flows from participation in income production in income production are expected to exceed the contractual payments in every period. Thus if $A_1 \dots A_n$, are the returns to a project in which investments are made, and $I_1 \dots I_n$, the interest payments and $a_1 B \dots a_n B$, the annual amortizations of the principal then hedge financing units

$$\sum_{i=1}^n A_i - I_i - a_i B > 0$$

and $A_i > I_i + a_i B$ for all i .

Moreover if the returns and payments are discounted at the current rate of interest then,

$$\sum_{i=1}^n \frac{A_i}{(1+r)^i} \geq \sum_{i=1}^n \frac{I_i + a_i B}{(1+r)^i}$$

and $\frac{A_i}{(1+r)^i} > \frac{I_i + a_i B}{(1+r)^i}$ for all i .

² See Chapter 2.

For speculative financing units, the cash flows from participation in income production exceed the total cash payments when aggregated over the foreseeable future, even though the near term cash flows exceed the cash payments.

Thus,

$$\sum_{i=1}^n A_i - I_i - a_i B > 0$$

but for some $i < T$, $A_i - I_i - a_i B < 0$

In terms of discounted variables

$$\sum_{i=1}^n \frac{A_i - I_i - a_i B}{(1+r)^i} > 0$$

and $\frac{A_i - I_i - a_i B}{(1+r)^i} < 0$ for some $i < T$.

Further for speculative financing units, the cash flows from participation in income production in the near term are by definition sufficient to cover the interest payments but not the amortization payments. Thus,

$$A_i - I_i < a_i B \text{ for some } i < T.$$

A Ponzi financier unit is a speculative finance unit for which the income component of the near term cash flow falls short of the near term interest payments on debt so that for

some time in the future the outstanding debt will grow due to interest on existing debt. Both speculative and Ponzi units can only fulfil their payment commitments on debts by borrowing (or disposing of assets). The amount that a speculative unit needs to borrow is smaller than the maturing debt, whereas a Ponzi unit must increase its outstanding debts. As a Ponzi unit's total expected cash receipts must exceed its total payment commitments for financing to be available, the viability of a representative Ponzi unit often depends upon the expectation that returns from projects will be high enough in the future to cover payments. In terms of external debt, the viability of a 'Ponzi' financing unit depends on expectations of higher and increasing levels of exports in the future. Thus in terms of our formulation for a Ponzi financing unit,

$$\sum_{i=1}^n A_i - I_i - a_i B > 0$$

but for some $i < T$, $A_i < I_i + a_i$

or in discounted terms

$$\sum_{i=1}^n \frac{A_i - I_i - a_i B}{(1+r)^i} > 0.$$

But for some $i < T$

$$\sum_{i=1}^n \frac{A_i}{(1+r)^i} < \sum_{i=1}^n \frac{I_i + a_i B}{(1+r)^i}$$

In terms of Minsky's categories, the first scenario for a debt trap, which we will call case I (Cases I-III have been further refined below) consists of unviable Ponzi financing units, case II comprises viable Ponzi financing units and speculative units with a greater weight of the former, and case III comprises Ponzi and speculative finance units but the weight of the latter is greater. Hedge financing units do not form a significant part of developing economies and certainly a higher weight of hedge financing units would reduce the chances of an economy falling into a debt trap.

Minsky's theory explains the dynamics by which a debtor's status can change from hedge to speculative Ponzi status. This can be extended to cover external debt. Units which are initially hedge financing can become speculative and even Ponzi as the returns deteriorate and initial disturbances are thus amplified. On the Minsky hypothesis a change in the rates of interest will not disturb the inequality for hedge financing units, though a change in returns will do so. Thus in the context of external debt, a fall in export earnings, either because of world recession or a fall in the price of exports, can turn hedge financing units into speculative and even Ponzi financing units, though an increase in the rate of interest on external debts would not do so.

Speculative financing units can fulfil their commitments as long as their longer term income prospects are favourable and as long as funds are forthcoming at non-punitive terms

from the markets in which they finance and refinance their positions. In terms of external debt, as long as projects with large gestation lags are completed and returns are favourable and as long as spreads or fees or both do not increase these units will be viable. However they are vulnerable to both income and financial market disturbances. Thus the world recession and rises in international interest rate rises could be said to have contributed to turning Brazilian speculative units into 'Ponzi' units. Thus export earnings did not grow at the expected rates and the rates of interest increased almost twofold, throwing the Brazilian economy into Case I of the debt trap.

The viability of the units which engage in Ponzi finance depends upon the current expectations of future prices of exports in the context of international debt. These future prices depend upon profit expectations in the more distant future. Moreover the discount rates or future cash flows and expectations of future profitability and prices will together determine their viability. In other words the macroeconomic conditions in the rest of the world as well as the financial market conditions both of which are extremely nebulous will determine the viability of the 'Ponzi' financing units. Too many Ponzi and near-Ponzi units will lead to Cases II to III of the debt trap.

6.3.1 Analysis of the debt trap in the existing literature

The existing literature on the debt trap analyses it in the context of an optimum level of borrowing. Thus the debt trap in the literature has been enunciated in terms of sustainable and unsustainable levels of debt. Models which have analysed optimum levels of borrowing range from simple theoretical exercises with a few variables to complicated empirical ones. One of the simple theoretical models³ postulates that the net debt-service ratio must not exceed the rate of growth of exports for debt to be sustainable.

The starting point in this analysis is the balance of payments identity, in which the proportionate growth in debt equals the rate of interest minus the trade surplus as a fraction of debt. Thus

$$d/D = r - (X-M)/D$$

and $Dx = (1+d/1+x),$

where

D = Total debt,

d = annual rate of increase in debt,

r = rate of interest,

X = exports of goods and services,

x = annual rate of increase in exports, and

Dx = Debt/Exports.

Define:

³ French-Davis, R. and Molina, S., 1985, op. cit.

nf = the non-financial balance as a share of total debt, or annual net outflow of resources as a share of total debt. Then $d = r - nf$.

The evolution of Dx will depend on whether $r - nf$ is greater or less than x . If the net debt servicing grows slower than the rate of growth of exports then the country is below the point of its optimum borrowing. When the debt servicing exceeds x , the country has crossed its optimum borrowing threshold, and the debt can become unsustainable. The problem with this kind of analysis is that it is very dependent on the value of the variables at a point of time and it does not allow for the endogenous dynamics of the development from optimum to crisis. On the criterion of this framework a country could be classified as a problem debtor as a result of a one-period natural disaster such as a drought or a flood, even though the rate of growth of its exports and output may on an average be high enough to sustain its debt.

Another model,⁴ which is a variant of the two-gap models, links debt to the level of net domestic product. It is assumed that an income-investment configuration is chosen to attain the domestic product equilibrium subject to the balance of payments constraint. The imports of the economy consist of intermediate goods and investment goods and only domestically produced goods are consumed. The relationship between total

⁴ Akyuz, Y., 1985, A Model of Debt and Growth in a Developing Economy, UNCTAD, Geneva.

imports (M), net domestic product (Q) and investment (I) is,

$$M(t) = aI(t) + bQ(t), \text{ where } 0 < a, b < 1.$$

The value of a is less than one because (1-a) is assumed to be produced domestically. Solving for b,

$$b = [M(t) - aI(t)] / Q(t) = (M/Q)(1-aI/M).$$

Since aI/M and M/Q are less than one, b is also less than one. Typically, a is greater than b because the import requirement per unit of output is less than import requirement per unit of investment.

In the short term, both investment and income are inversely related to debt servicing, but positively related to exports and capital inflow. Initially, with reduced capital inflow and increased payments, reduction in income and investment depends on the stock of debt and the extent to which export earnings can be increased by using the existing capacity. The fall in these would be greater if the scope for increasing exports in the short term is low. Besides this theoretical exposition, other models have tried to study the debt problem empirically.

6.3.2 Empirical models of debt traps

Empirical models of debt problem can be divided into two main categories. The first study the proximate factors that cause the LDCs to reschedule their debt and the second study the probability of default.

In the first category, two main methodologies have been

adopted. The first is discriminant analysis.⁵ This approach identifies variables such as debt-service ratios and reserves/imports ratios which best discriminate between defaulters and non-defaulters. Each country is then given a z-score on the basis of the discriminatory variables. A weakness of this approach is that the z-score is ordinal rather than cardinal.

The second methodology is based on logit analysis. If the logit score of one country is twice that of another, we may infer that probability of rescheduling in the first country is twice that of another.⁶

.....The probability of default.

$$\pi = \frac{e^z + 0.9}{1 + e^z + 0.9}$$

where $z = 0.09 + \text{ratio of disbursed debt outstanding to exports} - \text{ratio of international reserves to imports} - \text{ratio of imports to GDP} - \text{ratio of reserve position in the IMF to imports} - \text{ratio of gross fixed capital formation to GDP} + \text{percentage change in consumer price index}.$

Another empirical model⁷ states that as the probability

⁵ The proponents of this approach are Frank, C. R. and Cline, W. R., 1971, and Abassi, B. and Taffler, R. J., in M. Beenstark, op. cit.

⁶ Feder, G. and Just, R.E., 1977, and Mayo, A.L. and Barret, A. G., 1983.

⁷ Heffernan, S., 1983.

of default increases, the probability of obtaining new sovereign loans in total is reduced, while as the proportionate losses incurred by rescheduling fall, the share of sovereign loans rises.

In another study,⁸ the following variables were found to affect the probability of default:

- 1) The ratio of debt service payments to exports.
- 2) The ratio of imports to GDP. The higher this ratio the higher the probability of default.
- 3) The level of GNP per capita, as a proxy for the degree of development and the ability to service external debt. Higher per capita GNP was negatively related to the probability of default.
- 4) Longer loan maturities.

So far we have only been talking of repayment capabilities. In international loans the distinction between capability and willingness is also important in terms of the form and amount of loss that the lenders may incur if the loans are not repaid on schedule. Delays in payment need not imply financial loss, for there may be more than compensatory increases in interest rates. In addition, private lenders may ultimately be bailed out from large loans by national or international lenders or aid agencies; the large risks are or

⁸ Feder, G. and Just, R. E., 1980, Optimal International Borrowing, Capital Allocation and Credit Worthiness Control, World Bank Reprint Series, Number 159.

will be spread over society as a whole. Thus the banks will be interested in the willingness of the sovereign debtors to repay.

It has been contended that it pays to default⁹ once the expected inflows of new loans is less than the payment on the past loans with the cost of sanctions taken into account. Counterarguments to these could range from the fact that adequate debt servicing may encourage DFI leading to improvements in the current account, or adequate debt-servicing may be the best way to obtain export credits.

6.4 Solvency versus liquidity

It has recently been contended that the debt crisis is one of temporary illiquidity rather than that of long-term insolvency. An analytical approach to distinguish between illiquidity and insolvency is based on projections of the balance of payments and debt for future years. If such projections indicate a steady and substantial improvement in the debt situation, then the premise of illiquidity is supported. Insolvency will emerge if the export/debt-service ratio does not improve. Further, the distinction between solvency and liquidity used in the analysis of domestic financial firms can be usefully applied to the analysis of external debt of individual or group borrowing from developing

⁹ Hojman, D.E., 1987, 'Why the Latin American countries will never form a debtor's cartel,' Kyklos, Volume 40.

countries.

6.4.1 Solvency and liquidity in the context of a firm

Within the domestic economy, some firms go bankrupt because they are insolvent, whereas other firms go bankrupt because they are illiquid. Insolvency involves the relation between the firm's assets and the value of its liabilities. The international counterpart to insolvency is not bankruptcy, but rather the relationship between the interest rate on a particular loan and the productivity of the investment financed by or made possible by this loan. The question is whether the loan will lead to a higher or lower level of GNP in the borrowing country.

For a domestic firm, illiquidity means that payment obligations are not made on schedule, even though the value of a firm's assets may well exceed the value of its liabilities. Most firms can refinance debts as they mature; in fact the firms repay maturing debt by selling new debt and refinancing is more or less automatic. The key question then becomes, why the debts are not 'rolled over' as a matter of course. In some cases, a liquidity crisis occurs because the cash flow of the borrower is inadequate to meet its current scheduled payment obligations or the lenders predict that the borrower is likely to become bankrupt because of the magnitude of current losses. The international counterpart of the liquidity problem is an inability to make interest and

amortization payments on schedule or to repatriate dividends (in the case of direct investment) on schedule. Within the domestic economy the firms borrow as long as the returns on new projects exceed the cost of capital. At the same time firms also maintain liquid assets and unutilized credit lines even at the cost of forgoing immediate income because of the advantage of having ready cash. Hence there is a 'trade-off': the allocation of wealth to enhance liquidity has a cost in terms of forgone productive assets that might otherwise have been required, but a benefit in terms of higher market values as such firms are considered solvent.

6.4.2 Solvency and liquidity for a sovereign borrower

The whole question of solvency is problematic in the case of sovereign loans - for insolvency is defined as of having inadequate assets to cover debts - but the State has few tangible assets; its principle asset is the power to tax. In the case of developing countries the question of solvency and liquidity with respect to external debt must also be related to the State's capacity to generate sufficient foreign exchange resources through exports or other means to pay for the debt.

The implications of solvency and liquidity in international borrowing are a little different from domestic borrowing. Let us first consider the solvency issue. If the country initially begins with no external debt, then the

growth in debt can be conceptualized in three stages:

(1) During the first stage, external debt grows more rapidly than the increase in the borrower's national income, yet the increase in its national income is greater than the interest payments on the external debt.

(2) In the second stage, the interest rate on the marginal external debt is equal to the marginal product of the investment made possible by the increase in debt i.e. the external debt grows as rapidly as the country's debt servicing capacity. This stage represents a long-term equilibrium existing debts are repaid on schedule and new debts are sold, so that in effect the foreign exchange realised from the latest sales of debt is used to finance the repayment of maturing debt. The country gains because the external debt is used to acquire and hold a larger capital stock and this leads to a higher domestic income.

(3) In stage three, however, external debt increases more rapidly than debt servicing capacity and thus the national income of the country is adversely affected, because the interest costs on marginal debt are too high in relation to the productivity of the investments made possible by the external loan. In fact the country might gain more by 'rationing' access to external debt, for otherwise the marginal borrower might increase the interest rate paid by the infra-marginal borrowers.

The three conceptual stages are illustrated graphically

in Figure 6.1 on the following page. The volume of outstanding loans is measured on the vertical axis, whereas time is shown on the horizontal axis. The line SS represents optimal external debt over time. The slope of this line is equal to the country's growth rate. Two conditions are satisfied:

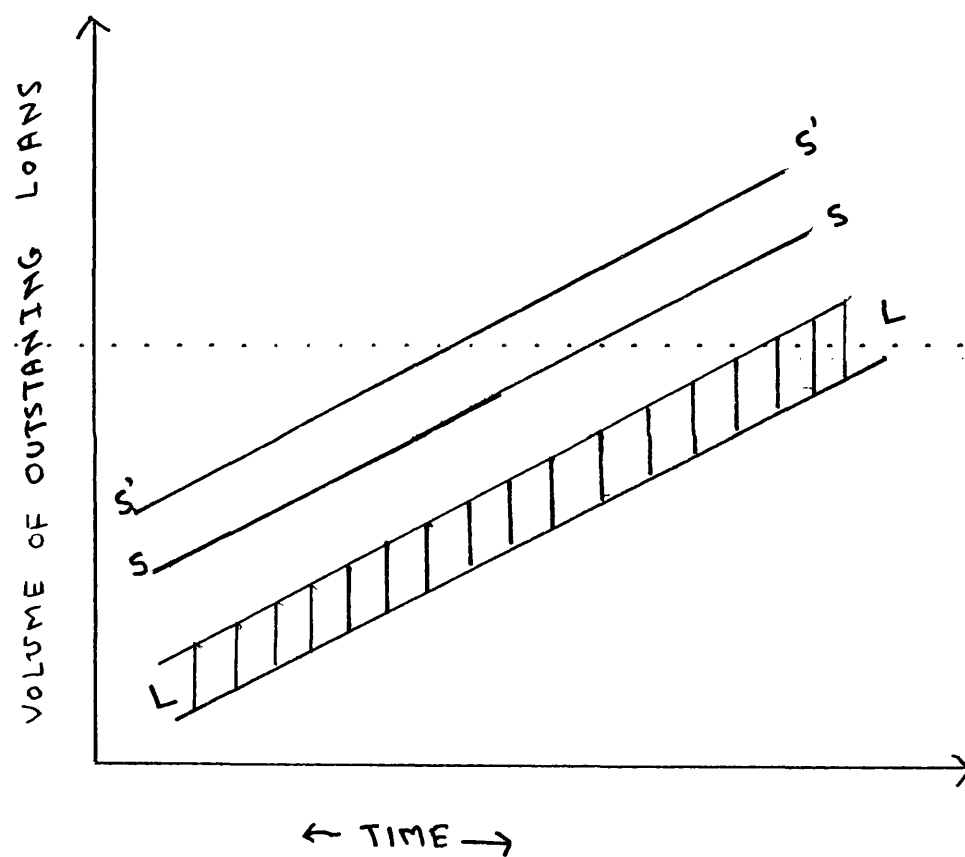
(1) that the real interest rate (nominal interest rates deflated by the unit value of exports) on the marginal external debt equals the marginal product of capital domestically and

(2) that the rate of growth of external debt in real terms (nominal debt deflated by the rate of domestic inflation) is equal to the real interest rate.

If the country's debt is below this locus, its real income would be enhanced by issuing more debt abroad and running a larger current account deficit, provided that the additional funds were appropriately invested. As the interest rate on external debt declines, the SS locus shifts to the left; this shift is represented by a vertical displacement of the solvency boundary, as with the shift to S'S'.

Let us now consider the liquidity position. In the first stage, the debt grows more rapidly than its debt servicing capacity. In effect, the country takes advantage of its previously underexploited debt servicing capability. In the

FIGURE 6.1
OPTIMAL EXTERNAL GROWTH



second stage, the country's debt and its debt servicing capacity increases at the same rate and the country is in equilibrium in terms of liquidity. In the third stage, as in the first, the external debt grows more rapidly than the debt servicing capacity, and any disturbance may trigger a crisis.

6.4.3 Optimal level of borrowing

Determining the optimal level of borrowing is easier in terms of liquidity rather than in terms of solvency. The country must optimize between having too little debt and having too much debt; if the debt is too large, any disturbance may result in a higher interest rate on the refinanced debt. If there is no uncertainty about the number, nature and severity of future disturbances, there would be no need to be concerned with liquidity and if there were no costs to a debt crisis, even though the likelihood of such crisis were uncertain there would be no need to be concerned.

In Figure, 6.1 the band labelled LL represents the locus of points at which the country's external liquidity position is optimal at different points in time. The optimal position is reflected by a band rather than by a line to show that there is no single optimal level of debt in terms of liquidity. The lower bound of this band is drawn to show a 50% chance of a liquidity crisis in the next X years, while the upper bound is drawn to represent a 75% chance of a crisis. The more rapid the growth of the country's exports,

the closer the band will be to the solvency boundary for any given set of estimates of a liquidity crisis. Similarly, the longer the average maturity of the external debt, the closer the band will be to the solvency boundary for any given set of estimates of a debt crisis.

6.4.4 Dynamics of solvency and liquidity

A country's position with respect to the solvency bound does not change much over time, since change occurs only if the real interest rate on external debt and the country's trend rate of growth changes. In contrast, a country's position with respect to the liquidity band is more volatile, with the changes dependent on such factors as changes in the terms of trade, the real exchange rate and the volume of external reserves. Besides the debt management policy involves the manipulation of several variables, so that a country may approach the solvency bound without coming close to the liquidity band. These variables include the real exchange rate, the level of foreign exchange holdings, and to a lesser extent, the maturity of external debt.

The band only shows the probability of a debt crisis and the country's preferred position depends on its estimates of the trade-off between the costs of a crisis and the costs of maintaining excessive liquidity. If the country's debt is less than optimal it can enhance its national income by selling more debts abroad and moving towards the solvency bound. If

not, the likelihood of a debt crisis increases. The major cost of a debt crisis is the change in the net interest rate on external loans: a debt crisis causes the solvency bound to pivot in a clockwise direction. The process is straightforward: rescheduling raises the interest rate on all new loans or the interest rate spread or markup over the LIBOR. Thus the interest rate paid in the remaining years on existing loans is increased. Moreover management fees are amortized over a shorter period, so that the interest rate equivalent of these fees is increased ex post.

Changes in the exchange rate or the domestic price of loans affect the position of both the solvency bound and the liquidity band. If the LDC's currency depreciates, borrowers may be able to repay on schedule in domestic currency but not in the currency in which the debt is denominated. Thus as the domestic currency becomes overvalued both the solvency bound and the liquidity band shift to the right. The shift in the solvency bound reflects that the increase in overvaluation reduces the marginal product of capital domestically, while the interest rate on external loans remains unchanged. The shift in the liquidity band reflects that foreign exchange may not be available to finance repayment because export earnings decline with overvaluation. As the real exchange rate changes over time the liquidity band is likely to shift relative to the solvency bound, in part because the liquidity problem usually occurs before insolvency becomes an issue.

6.4.5 Defining an international debt crisis

An international debt crisis can take two forms. In one, the debt places the country above the solvency boundary i.e. the country has borrowed so much abroad that its domestic income is adversely affected. In such a case the present value of external debt needs to be reduced either by the creditors discounting the value of the debt or by reducing the interest rate on the debt. Public loans on concessional terms may then be used to finance private loans on non-concessional terms. The second type is when the scheduled repayments of principal are too large relative to new loans which can be sold abroad. This is the liquidity crisis and most debt crises involve liquidity rather than solvency.

However, another point of view¹⁰ suggests that the distinction between liquidity and solvency is dubious at best. The distinction between the two rests on the premise that if new lending is available to cover debt service then liquidity problems are taken care of though not solvency problems. But even if a country is solvent - that is it could repay the full present value of its debt - the country could only attract voluntary new lending by offering a higher interest rate. This implies that the lender's perception of the

¹⁰ See Krugman, P., 1988, 'Financing vs forgiving a debt overhang', in the Journal of Development Economics, No.29.

country's ability to pay is low and the liquidity crisis has thus arisen because of doubts of solvency. However banks which are already exposed to these indebted countries will continue to lend in the hope of recovering their money eventually. This is however only in their collective interest: any individual creditor would be better off if it could opt out of the new lending and let other creditors carry the burden. This 'free rider'¹¹ problem could lead to a liquidity crisis which may not be in anyone's interest.

In a situation of defensive lending by the existing creditors, the creditors do not expect to be fully repaid; nor do debtors expect to repay fully. Thus all new lending in these circumstances contains a concessional element even though it does not say so on paper. The choice between financing and forgiveness of the existing debt does not rest upon the distinction between solvency and liquidity, but in the trade-off between the option value attached to a large nominal debt and the incentive effects of a debt which is unlikely to be repaid. Thus creditors may wish to forgive part of a country's debt to increase the likelihood that it will repay what remains.

The preceding discussion on solvency and liquidity has already taken this analysis into the realms of the dynamic

¹¹ See Cline, W., 1983, International Debt and Stability of the World Economy, Institute for International Economics, Washington, D.C.

evolution of the debt problem. The next section develops the three scenarios relevant to developing countries, based on Minsky's analysis.

6.5 The dynamics of the debt trap

The dynamics of the debt trap would depend on the macroeconomic variables that determine repayment: investment, income and export earnings. The dynamics of investment and income would depend on whether or not the level of investment is high enough to generate sufficient export expansion to offset the growing financial outflow. Otherwise, imports would have to be cut down, thereby lowering investment and the potential for further exports. This process would therefore be unstable, requiring further cuts in imports, investment and income. If this downward spiral is to be avoided, exports must not only cover capital outflows required for interest payments and amortization but also increase at an increasing rate in order to buy the imports necessary for investment. Thus while the static situation requires an export cover for debt, the dynamic situation requires a higher growth of exports, to cover in addition the import content of debt supported investment and multiplier-induced consumption imports.

Moreover, the minimum necessary rate of investment growth is the rate of growth of debt. If investment cannot grow at least at this rate, then continuous cuts in imports, investment and income cannot be avoided except through

default. In the absence of further debt accumulation, investment will grow at the rate of productivity of investment in terms of foreign exchange and the income growth will also converge to this rate. But, because of the need to use foreign exchange for debt service, the additional foreign exchange earnings generated by investment and exports cannot be translated to increased imports (the model implicitly assumes import dependence) so that the rate of investment is checked. When the rate of growth of debt is greater than the rate of growth of investment productivity, i.e. the incremental capital output ratio, investment will start declining even if it can be increased initially. In the reverse situation, investment would be increasing provided the additional foreign exchange generated by investment and export expansion covers both the required financial outflow and the imports required for the process of development.

When the rate of growth of the interest on debt is greater than the rate of growth of debt then reducing the rate of growth of debt would help. For instance, if net new borrowing is reduced to zero, then investment can grow at the rate of growth of productivity. However such growth may have to start from a very low base which is not acceptable. The levels of income and investment in the short-run adjustment period are positively related to the level of debt, thus reducing it would mean deflation. For example, if debt were to fall by 5% and if this implied a 5% reduction in

investment, then assuming an unchanged capital output ratio, this would imply a reduction in the rate of growth of output which will be determined by the value of the income multiplier. Nevertheless, to the extent that the impact of the reduction in capital inflow can be offset by means of an increase in saving and/or exports, or a fall in government expenditure, then reducing the level of debt will help in the long run: with higher debt the initial level of investment will be higher but so will the level of capital outflow. Moreover if the rate of growth of debt is above the rate of growth of productivity, the economy would never generate by means of export expansion a trade surplus sufficient to pay this interest bill. This dynamic interplay of debt, growth, investment and exports is formalised in terms of the three cases outlined above in the context of Minsky's hypothesis.

6.6 Formalising the debt trap

It will be recalled from Chapter 2, it was pointed out that one of the important theories of debt, the transition theory, explained the borrowing pattern in terms of the development cycle. In the first phase of growth, both debt and income grow rapidly. Subsequently, in the second phase repayments begin and rate of growth of GDP was greater than the rate of growth of debt. Then the transition theory postulates (phase III) that a state of maturity is reached where the domestically generated funds are adequate to finance investment and amortize debt.

In the extended Minsky framework, phase III can take less favourable forms than the scenario postulated in the transition theory. In terms of this formulation a debt trap can be defined in three ways. Please refer to Figure 6.2. Each of these constitutes some form of a debt trap. The first two phases are the same for all the three scenarios and the transition theory. It is at the end of stage 2 that the economy's debt position becomes problematic.

In the first scenario, indicated by Figure 6.2a, instead of moving on to a phase where the economy starts repaying the principal, the debt burden induces deflation in the economy so that the per capita real GNP declines. This was the situation in the early 1980s in Brazil and is the case in much of Africa today.¹² Under these circumstances, debt will continue to grow with mounting interest and amortization arrears. The macroeconomic variables will be as follows:

Phase III

Case I Deflation: Insolvency.

- a) rate of growth of interest on debt > rate of growth of debt.
- b) rate of growth of debt > rate of growth of investment productivity.

¹² See Massad, C., 1985, 'Debt: an overview', Journal of Development Planning, No. 16.

DEBT TRAPS

Figure 6.2a

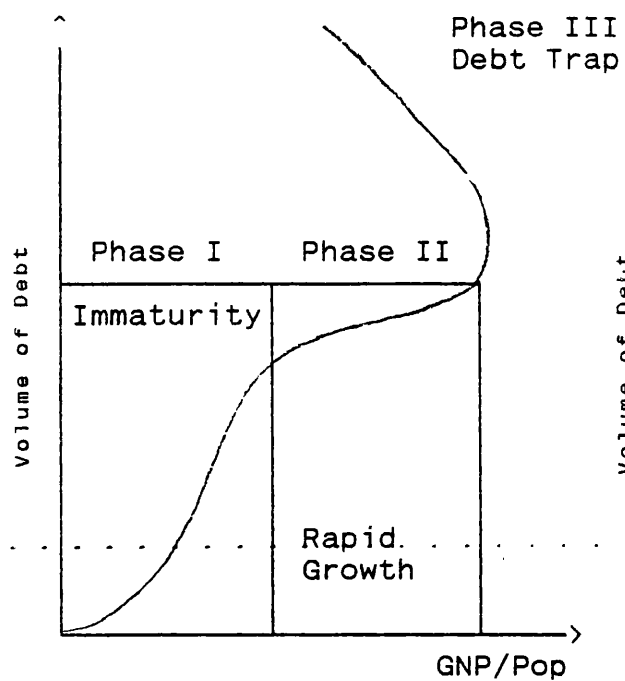


Figure 6.2b

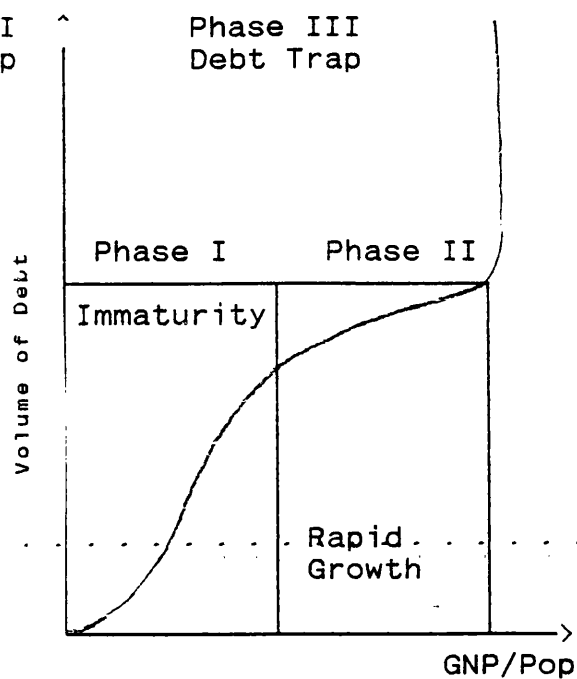
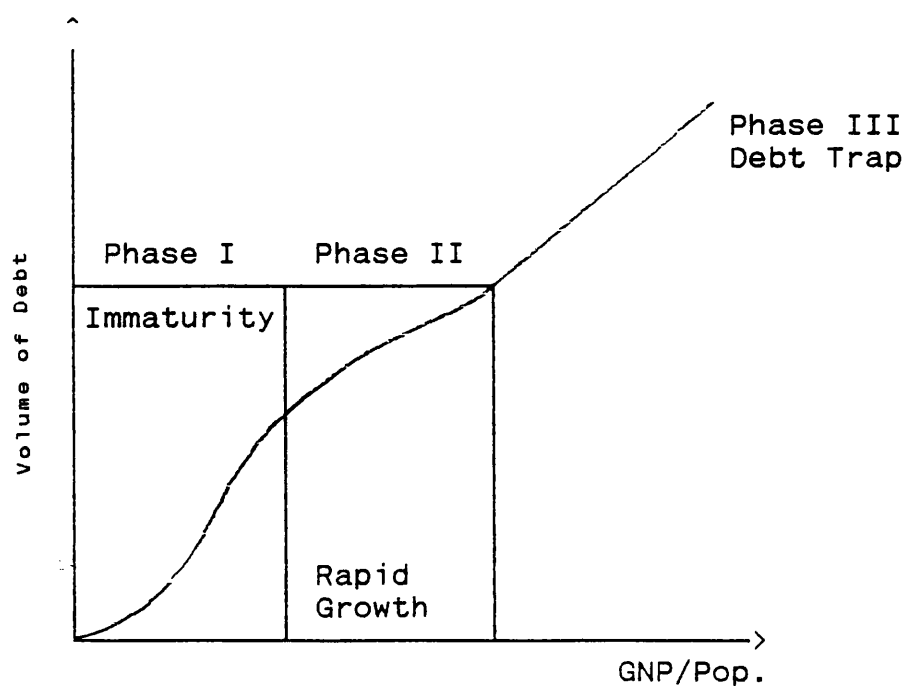


Figure 6.2c



- c) rate of growth of debt $>$ rate of growth of investment.
- d) rate of growth of debt servicing $>$ rate of growth of export earnings.

In second scenario, in Figure 6.2b, GNP grows with debt, but only just at the rate of growth of population, so that debt again assumes a momentum of its own: inherited debt multiplies because of accumulation of interest arrears and amortization. The economy is unable to increase the rate of repayments and is thus caught in a debt trap. This is the situation that can arise in India, if its rate of growth is pushed down from its current 5% to 2.3% as then repayments of present debt would be very difficult. The rate of growth of GNP will then be just sufficient to cover the rate of growth of population.

Phase III

Case II Stagnation: Insolvency.

- a) rate of growth of debt $>$ rate of growth of investment productivity.
- b) rate of growth of debt \leq rate of growth of investment
- c) rate of growth of interest on debt \leq rate of growth of debt.
- d) rate of growth of debt servicing $>$ rate of growth of export earning.

In the last scenario, in Figure 6.2c, debt grows but so

does the GNP per capita. The slope of the growth path indicates that debt grows faster than GNP per capita, so repayments of principal are difficult but not impossible. The volume of inherited debt remains more or less constant over a reasonable period of time or at least does not decrease appreciably. This scenario is similar to that of a solvent firm which never repays debt. Debt is always rolled over.

This contrasts with the transition theory which postulates that in the third phase of development the inherited volume of debt is actually repaid and eventually the country becomes a capital exporter. However what is solvency for a firm need

not be solvency for a sovereign borrower as was shown earlier.

For a sovereign borrower long-term solvency can be defined in terms of the following macroeconomic variables:

Phase III

Case III Long-term Solvency.

- a) rate of growth of interest on debt \leq rate of growth of debt
- b) rate of growth of debt $>$ rate of growth of investment productivity.
- c) rate of growth of debt \leq rate of growth export earnings.
- d) rate of growth of debt servicing $>$ rate of growth of export earnings.

Brazil is already in the third, whereas India appears to be in phase II of the development cycle, when most of the

new capital inflows go into the development needs and debt is not mounting because of the arrears on the interest payments due on the debt accumulated in the past. Whether it enters scenario 1, 2, or 3 will depend on the rate of growth of GNP per capita and of exports, and an examination of these scenarios with respect to India forms the basic purpose of this thesis. First, however these scenarios will be expounded in terms of the analysis of the relevant macroeconomic variables.

The analysis of a country's debt servicing capacity was related to various factors like the ratio of its imports to its holdings of international reserves (called the import cover), the growth of its commodity exports or its exports of goods and services in relation to the growth of debt etc. If the numerator in these ratios, (Imports/Interest, Debt/Export of commodities, Debt/Export of goods and services), increased relative to the denominator, a debt crisis seems likely. However in analysing non-concessional debt it is of material interest to analyse the real or effective cost of incremental external debt and the returns earned by the investments financed by (or made possible by) additional foreign borrowing, i.e., equating the marginal cost of debt with marginal returns. Then the marginality condition implies that,

$$\frac{d \sum_{i=1}^n A_i}{dr} \geq \frac{d \sum_{i=1}^n I_i + a_i \cdot B}{dr},$$

where r is the rate of interest on the loans incurred in the course of the project.

Alternatively, the discounted present value of the returns and the costs can be equated, as follows:

$$\frac{d \sum_{i=1}^n \frac{A_i}{(1+r)^i}}{dr} \geq \frac{d \sum_{i=1}^n \frac{I_i + a_i \cdot B}{(1+r)^i}}{dr}$$

In macroeconomic terms the returns to international debt for a developing country will depend upon the export earnings and the costs will be the same viz interest and amortization costs. The ability to service external debt depends on an income or quantity variable as well as on the price (e.g., terms of trade) variable, thus the ability to service external debt may increase even if export prices remain unchanged, if the volume of exports is growing rapidly. Hence, a debt servicing ratio based on projected values of export prices and volumes would be more important than the ratio based on current values in determining the ability of any borrower to make its payments on schedule.

Changes in the debt service ratio do not indicate whether a country has borrowed too much or too little, but that a crisis in repayments may occur at a future date, if the ratio of debt service payments continue to grow relative to exports. Conceptually though a country's debt may be

unsustainable, even if its debt service ratio is falling, if the return on domestic investment is lower than the incremental interest rate on external debt. This concept was explained earlier in terms of Akyuz's formulation by the statement that as long as the investment productivity (or the incremental output capital ratio) grows at a higher rate than the rate of growth of debt (inclusive of the interest arrears), the economy will not be caught in the debt trap. However should the reverse hold, the economy will be caught in terms of our formulation in Case III or even Case II.

In the autarkic situation the rate of growth of GNP must approximate the rate of growth of investment productivity and, thus in terms of our formulation the rate of growth of debt must be lower than the rate of growth of per capita GNP for an economy to be in a stable debt situation. Further for a developing country an additional factor apart from this rate of growth of GNP would be the rate of growth ^{of} exports. The rate of growth of exports must be greater than the rate of growth of debt servicing payments. Thus if the rate of interest on debts is 10%, then exports must grow at a rate greater than 10% for the economy to be solvent. If this condition is not met, then imports will have to be cut (in order to meet the debt servicing requirements) which would in turn lower investment (by cutting down on intermediate inputs) and growth and thus check the improvements in exports. This process would be unstable requiring continuous cuts in imports, investment

and income. Thus Case II or even Case I of the debt trap would follow. If this downward spiral is to be avoided, the rate of growth of exports will have to increase by over time.

An increase in the rate of growth of exports will necessitate a growth in the rate of investment which in turn for a developing country will require higher imports (directly and indirectly through the multiplier effects of investment or output). Thus investment and exports must rise over time by amounts that are sufficient to cover not only the increased financial outflow but also the increased import requirements. In other words a certain threshold level of investment and exports is required at any point of time and this threshold level will be rising over time. The minimum sustainable rate of investment growth is the rate of growth of debt. The upper limit to the growth of debt is imposed by the growth of investment productivity or the GNP per capita. This implies that if the growth of debt is higher than the rate of growth of investment productivity Cases I to III are inevitable. However if the rate of growth of debt is lower than the rate of growth of investment then Case I is ruled out and Cases II or III may happen. Moreover as long as the rate of interest on debt is greater than the rate of growth of debt, reducing the level of debt would be beneficial, otherwise Case I is inevitable (i.e., deflation).

6.7 Effect of exogenous changes in the debt trap

To formalise the effect of the external factors we will isolate first of all two variables, namely the rate of interest and the exchange rate to determine their effect on the net present value of export earnings (NPVE). From the above discussion it is clear that the effect on the NPVE of changes in above mentioned variables will determine both the viabilities of Ponzi and speculative units as well as the conversion of one to the other. Thus,

$$NPVE = \sum_{i=1}^n \frac{A_i - I_i - a_i B}{(1+r)^i} > 0$$

Further specifications for interest amortization payments and are required for determining the effect of changes in the interest rates and for changes in the exchange rates. First of all let us assume that the returns to a project, A_1, \dots, A_n , are specified in terms of domestic currency. Further let us assume that the amortization payments are a fixed proportion, 'a' of the principal paid annually. Then 'a' must equal $1/n$. The interest payment I_i will equal the rate of interest times the principal or 'rB' if r denotes the rate of interest and B the principal borrowed. However these commitments decline yearly if the amortization requirements are met.

Thus in period 1 $I_1 = r.B.$

In period 2 $I_2 = r (B - a B) = r (1-a).B.$

In period 3 $I_3 = r (B - 2aB) = r(1-2.a).B.$

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In period n $I_n = r\{B-(n-1)aB\} = rB\{1-(n-1)a\}.$

Thus in terms of our earlier formulation

$$NPVE = \sum_{i=1}^n \frac{A_i - a.B.[1-(i-1).a] - a.B}{(1+r)^i}$$

Differentiating this equation with respect to r

$$\begin{aligned} \frac{dNPV}{dr} &= \frac{d}{dr} \sum_{i=1}^n \frac{A_i - a.B.[1-(i-1).a] - a.B}{(1+r)^i} \\ &= \sum_{i=1}^n \frac{-(i+r)^i B\{1-(i-1)a\} - [A_i - rB\{1-(i-1)a\} - aB]i(1+r)^{i-1}}{(1+r)^{2i}} \end{aligned}$$

Now let us call the first term in the numerator X and the second term Y. X is always negative because $(1+r)^i$ is positive, B is positive and $[1 - (i-1)a]$ is always positive by definition.¹³ Thus the sign of the derivative of the NPVE with respect to r depends on the sign of the term Y. Now Y is composed of two portions. One is the net returns and the other

¹³ $a = 1/n$ and $i < \text{or} = n$, thus $(i-1)a$ is always < 1 and hence $1 - (i-1)a$ is always > 0 .

can be regarded as the weight $(i/(1+r))$. Thus Y can be considered a weighted average of the net returns over time. Now as long as the net returns are positive for every i (i.e., the hedge financing condition), then Σy will be positive and the first derivative with respect to r will be negative. Thus for hedge financing units as r increases, the NPVE declines. However by assumption, for hedge and speculative financing units the net returns are not positive for every i . Further speculative and Ponzi financing units are defined as those for which the net returns in the near term are lower than those in the future. Thus since the magnitude of the net returns and their weights increase with an increase in i , the weighted aggregate of net returns will be positive when the simple aggregate is positive. Thus for speculative and Ponzi units too, an increase in r will lead to a decrease in the NPVE. In fact this general condition is applicable for all viable units and can be regarded as a viability condition.

Moreover as r increases in the value of further period NPVs is higher than the rate of decline in near term NPVs. Thus speculative and Ponzi financing units which were viable over a period of time can now become unviable.

Now assuming the domestic currency value of the loan to be $= p$, then $p = eB$, where e is the exchange rate in units of domestic currency per unit of foreign currency. B is obviously the amount borrowed in units of foreign currency. Let the returns to the project be denoted by eA_i in terms of the

domestic currency. Thus NPVE becomes,

$$\sum_{i=1}^n \frac{[eA_i - erB\{1 - (i-1)a\} - aeB]}{(1+r)^i} = e \sum_{i=1}^n \frac{x}{(1+r)^i}$$

$$\frac{d \text{ NPV}}{d e} = \sum_{i=1}^n \frac{x}{(1+r)^i}$$

which is positive for all viable units. Thus according to this formulation, devaluation leads to an improvement of the net present value. However when the units are unviable, then devaluation leads to a deterioration in the NPVE.

In the context of international debt A_i can be formulated in terms of export earnings. Thus if $A_i = P_i X_i$, where,

P_i = Price of exports, X_i = the volume of exports, then,

$$\frac{d \text{ NPVE}}{d P_i} = \sum_{i=1}^n \frac{X_i}{(1+r)^i}, \text{ which is } > 0.$$

$$\text{and } \frac{d \text{ NPVE}}{d X_i} = \sum_{i=1}^n \frac{P_i}{(1+r)^i}, \text{ which is } > 0.$$

Thus as the price of exports or in macroeconomic terms the terms of trade improve, the NPVE increases and vice versa. Similarly as the volume of exports increases the NPVE increases and vice versa.

So far these relationships have confirmed with expected changes. We have considered the simplest form of repayment here. If we now complicate the model by taking account of

grace periods (let us assume $T < n$ years) then our formulation changes to

$$NPVE = \sum_{i=1}^T \frac{A_i - rB}{(1+r)^i} + \sum_{i=T+1}^n \frac{[A_i - rB\{1 - (i-1)a\} - aB]}{(1+r)^i}$$

According to our previous analysis the derivative of the second term is negative with respect to r . The derivative of the first term with respect to r ,

$$= \sum_{i=1}^T \frac{-(1+r)^i B - i(1+r)^{i-1}(A_i - rB)}{(1+r)^{2i}}$$

$$= - \frac{1}{(1+r)^i} \sum_{i=1}^T [B + i/(1+r) \{A_i - rB\}]$$

$$= - \sum_{i=1}^T B/(1+r)^i - \sum_{i=1}^T i \cdot (A_i - rB)/(1+r)^{i+1}$$

which is negative for speculative and hedge units. However for Ponzi financing units if;

$$\sum_{i=1}^T i/(1+r) \{A_i - rB\} < 0,$$

then its magnitude must outweigh all the other terms in order to yield a positive derivative and this is unlikely. Thus changing the form of repayment is unlikely to affect the sign of the derivatives and the expected changes in the NPVE will occur with changes in r , e , P_i and X_i .

6.8 The effect of macroeconomic variables on debt

The impact of an exogenous decline in the rate of interest is however unambiguously favourable. It will increase the level of investment corresponding to any given level of export and capital inflow and will lower the financial outflow, giving rise to greater expansion in investment and exports.

The conclusions suggested by our debt model somewhat contradicts the transition cycle of debt (see Chapter 2). The transition theory does not account for the foreign exchange constraint which is binding in the repayment of debt for a developing country. Thus though the growth over time generated by debt may lead to a rise in exports (which can pay for debt), this is by no means automatic. The growth in exports will depend on other factors such as the rate of growth in the industrial world and the time trajectory of the price and income elasticities of the developing country's exports. Thus it is necessary for a developing country to plan a strategy for export growth even before it plans to increase its debt.

The domestic policies of the debtor countries are also of crucial importance in their debt outlook.¹⁴ For instance appropriate policies must be followed to allow the trade

¹⁴ Dooley, M., Helke, W., Tyron, R. and Underwood, J., 1986, 'An Analysis of External Debt Positions of Eight Developing Countries Through 1990', Journal of Development Economics, Number 21, pp. 283-318.

surplus to materialize. Moreover sound domestic policies will prevent capital flight, which is a complicating aspect of the debt problem. It has been observed that attempts to correlate the increase in debt burdens to such variables as the rate of interest, the rate of growth, the exchange rates have been singularly unsuccessful.¹⁵ This has been attributed to multicollinearity between these variables. Exogenous factors, by affecting the export prospects or increasing imports, can lead to a deterioration of the debt position. For instance during the early 80s, over and above the direct effects of the terms of trade and interest rates on the external balance of the debtor countries, the world recession of the first years of the 1980s negatively affected the exports of primary products from LDCs. Of the three principal components of the current account, exports, imports, and interest payments, the first and the last are basically determined exogenously for LDCs. Import prices are also externally determined but the quantum of imports is closely related to domestic spending. As a consequence, short-run adjustment is necessarily based on import decreasing policies. Expenditure switching operates in the medium to long term since it requires resource reallocation. These changes can have deflationary effects.¹⁶

¹⁵ Ibid.

¹⁶ See Massad, C., 1985, op. cit.

6.9 Capital flight and debt

We shall now return to an analysis of an important factor which has been omitted from previous discussion, namely capital flight. Variables which determine capital flight are:¹⁷

(1) domestic inflation. This measures the extent to which the domestic government has resorted to taxing domestic financial assets through money creation. Through capital flight a larger share of financial assets are kept outside the control of the domestic authorities.

(2) financial repression. This measures the difference between interest rates paid on short-term dollar denominated assets and time deposits denominated in the domestic currency, adjusted for actual exchange rate changes. A positive value would suggest more pressure for capital flight;

(3) risk premium. The risk premium on external debt is interpreted as measuring non-residents' perception of the risk of being taxed by the subject country's government. As this perceived risk increases, it is expected that capital flight will be reduced since the differential faced by the resident and non-resident investors is reduced.

Regressions for seven countries for the period 1976-1983¹⁸ support these hypotheses. However, though the expected

¹⁷ See Dooley, M.P., 1986, 'Country-Specific Risk Premiums, Capital Flight and Net Investment Income Payments in Selected Developing Countries', IMF Research Department.

¹⁸ Dooley, 1986, op.cit.

correlation with financial repression was suggested by this empirical analysis, the results were not statistically significant. Finally, the coefficient on the political risk premium was statistically significant and indicates the expected negative effect on capital flight. This implies that, e.g. as the risk of freezing of foreign assets increases, the volume of capital flight will decrease. Thus it appears that the increase in this premium in recent years, and the associated reluctance of non-resident investors to 'recycle' capital flight has tended to limit the scale of such transactions.

~~It has sometimes been suggested that DFI and the return~~ of flight capital would be effective in getting around the financial squeeze experienced by the debtor countries.¹⁹ However, it is likely that a substantial portion of the flight capital is committed as collateral for bank financing so that its 'return', while reducing the bank exposure may not help the external sector of the LDCs. The outflows associated with DFI as has been shown above are very complicated and thus DFI again may not make a significant positive contribution to the balance of payments.

In summary, both domestic and international factors have contributed to the present debt crisis. The fact that some countries have avoided it altogether suggests the role of

¹⁹ Davis, R.F. and Molina, R., 1985, op.cit.

domestic policy. Nevertheless the bulk of the evidence²⁰ suggests a dominant role for external shocks in bringing on this crisis. However exogenous changes in interest rates and other considerations lie beyond the scope of this thesis. It is sufficient to mention here that these can also contribute to the intensification of the debt problem.

6.10 Conclusions

The above formulation of the debt trap incorporates most of the variables conventionally included in the analysis of sustainable and unsustainable debts. However, the basic premise of this formulation is that debt is largely incurred to foster growth i.e. to increase the present and the future consumption of developing societies. To this extent the above formulation does not incorporate the possibility that debt may be used for non-productive consumption and may have little or no effect on the GNP per capita. Implicitly, however this possibility is captured in the first and the second scenarios where the growth rate of GNP per capita is insensitive to debt or debt has a negative effect on the GNP per capita. To conclude it can be said that the above formulation of the debt trap incorporates both the possibility of productive and of non-productive usages of debt.

Applying this formulation to the context of India shows

²⁰ Ibid.

that the growth in the interest on debt during the last decade has been lower per annum than the growth in debt. However the growth in external debt in India during the last decade has been much higher than the rate of growth of investment productivity in the last decade. The rate of growth of debt in India during the last decade has equalled the rate of growth of investment. The rate of growth of debt servicing has so far been less than the rate of growth of export earnings. Thus the trend for these variables for the last decade presents us with a somewhat ambiguous picture with respect to India. Referring back to the three scenarios shows that India's debt situation has not yet achieved crisis proportions, but it could do so if the export situation were to deteriorate. At the present moment, the macroeconomic variables (domestic) viz investment productivity growths are not very healthy in relation to the debt. The export growth rates throughout this decade have been very encouraging. However, as was pointed out in chapter 5 as the foreign exchange outflows increase in the 90s a shortage of foreign exchange will be experienced and this could lead to an increasing recourse to the private capital markets and a debt crisis.

CHAPTER 7

Conclusions

The focus of this thesis is an analysis of the private external capital inflows to India during the recent years. This question is interesting to examine because firstly it has not been looked into before and secondly as the thesis has shown the dimension of the shift in the transfer of private capital to India has been unprecedented especially in the recent times. The change in the GOI stance from a policy of self-reliance to one of growth with debt is almost a shift in the paradigm of the Indian economy. In this thesis it was shown that this shift in the structure of external capital inflows to India was in a sense imposed upon the Indian economy by the decrease in the assistance hitherto provided by the multilateral institutions. In fact this was the main factor which motivated the GOI to go to the international capital markets.

Chapter two showed that India's entry to the international capital markets was paradoxically facilitated by the debt crisis. The shortage of creditworthy sovereign LDC borrowers made India's position appear in a favourable light by comparison. The macroeconomic performance of the Indian economy during this decade may have strengthened the confidence of the lenders. This was shown by the fact that

though the level of debt of the Indian economy increased at a rapid pace there was no deterioration in the terms and conditions of the loans obtained by India during the late 80s in comparison to the early 80s. Thus the debt crisis worked to India's advantage in obtaining loans.

Of the other two forms of private external capital inflows which were relevant in the Indian context the development of NRI deposits has been emphasised in this thesis. It was pointed out earlier that the GOI does not even include this inflow in its reckoning of the external debt of the Indian economy. In this thesis we have tried to rationalise this approach by detailing two methods of treating the repayment obligations of the NRI deposits. NRI deposits may either be treated as remittances on the basis of the assumption that in the limit they are converted into Indian Rupee deposits or they are constantly renewed and thus must be treated as a cumulative deposit or an annuity which is never withdrawn. This assumption is based on the fact that withdrawals from these deposit accounts constitute a very small proportion of the total deposits. Thus the foreign exchange cost of obtaining these deposits is minimal. Thus they do not comprise external debt in the same way that bank loans do. However to exclude them from the reckoning of external debt may also not be valid as a part of them however small will have to be repaid.

The last category of private external capital inflow

examined in this thesis was DFI. DFI in India was not a very important category as has been shown by the literature which exists on this topic. The higher rate of growth of DFI witnessed during this decade could be the result of a change in government policy notably that of government liberalisation. Though the significance of this inflow in India is relatively limited it should be promoted because it can support the GOIs ambitious growth plans and does not involve onerous repayment obligations like that in bank loans. It was shown in this thesis that the single most important deterrent to DFI in the Indian economy was the rigidities in government policy and attitude towards DFI. Bureaucratic delays in processing applications has also deterred DFI. Attempts to simplify these laws and liberal interpretation of the rules would go a long way in encouraging DFI.

The rate of growth of debt and its accumulation during this decade has however been staggering in view of India's limited capacity to repay it. The development of the debt scenario in India was likened to that of Brazil. It was shown in this thesis that the Brazilian debt crisis was a consequence of both external and internal factors. External factors consisted of terms of trade deterioration, higher import bills on account of the rise in oil prices, and lastly increases in the rate of interest. Internal factors which contributed to the debt crisis consisted of a rise in government deficits and the consequent need to borrow abroad,

as well as the relative underdevelopment of the domestic capital markets. Thus the private sector in Brazil was forced to turn to the international capital markets.

In India the role of the government deficits during this decade have increased at high rates and has led to the accumulation of debt. However, unlike Brazil India's borrowing has been limited to the foreign exchange component of projects. This procedure has both limited and prioritised the accumulation of debt. This procedure if extended to future loans too will help to alleviate the debt problem should it arise in the future. As far as external factors were concerned the thesis showed that a deterioration in both the terms of trade and the international rates of interest would lead to debt problems in India. It was also stated that there is a possibility of the interest rate rising during the 90s and this would aggravate India's debt situation. The terms of trade will depend both on the export and the import baskets. As both these were seen to be very low it can be concluded that though export earnings would be difficult to stimulate in the short run it is unlikely that there would be a drastic fall in them too in the short run. However import expenditure may increase at a faster rate than export earnings and that would cause repayment problems. This possibility would increase if the growth rates of India are to be maintained.

In terms of the three debt trap scenarios developed in this thesis India could either fall into scenario 2 or in

scenario 3. It would fall into scenario 2 if export earnings decline drastically or if the rates of interest shoot up suddenly or if import prices or volumes of imports rise drastically. It was shown in this thesis that the possibilities of all these three are limited. However moderate increases in all these three would lead to scenario 3 and that is a likely possibility in the Indian case.

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