Nunnenkamp, Peter; Funke, Norbert; Schweickert, Rainer

Working Paper

International capital flows : recent developments, major determinants, and the position of Brazil in worldwide competition for foreign capital

Kiel Working Papers, No. 509

Provided in cooperation with:
Institut für Weltwirtschaft (IfW)

Kieler Arbeitspapiere
Kiel Working Papers

Kiel Working Paper No. 509

INTERNATIONAL CAPITAL FLOWS

Recent Developments, Major Determinants, and the Position of Brazil in Worldwide Competition for Foreign Capital

by

Peter Nunnenkamp
Norbert Funke
Rainer Schweickert

Institut für Weltwirtschaft an der Universität Kiel

The Kiel Institute of World Economics

ISSN 0342-0787

Kiel Institute of World Economics
Düsternbrooker Weg 120, D-2300 Kiel
Department IV

Kiel Working Paper No. 509

INTERNATIONAL CAPITAL FLOWS

Recent Developments, Major Determinants, and the Position of Brazil in Worldwide Competition for Foreign Capital

by

Peter Nunnenkamp
Norbert Funke
Rainer Schweickert

April 1992

Table of Contents

Introduction*

Foreign debt problems of developing countries are no longer in the headlines and of top priority on the agenda of international bankers and politicians. But the debt crisis is not over even ten years after its outbreak in 1982. Many Third World economies are still struggling with a "continued limited availability of external finance" [World Bank, b, 1990-91, Vol. 1, p. 3]. New private lending (net of amortization) remains limited and much below interest payment obligations. Foreign investors have shifted away from developing countries and concentrated their engagement on industrialized countries. Official flows are increasingly linked to workouts of existing debt, rather than to financing inflows of goods and services. Arrears constituted the primary source of international financing in many severely indebted countries; during 1986-1990, the stock of arrears soared from US$ 40 billion to more than US$ 110 billion [World Bank, b, 1991-1992, Vol. 1, p. 15].

However, this overall picture conceals vastly different experiences of different Third World regions and individual debtor countries. Most economies in Sub-Saharan Africa have never been an attractive location for internationally mobile risk capital. They can be expected to remain highly dependant on foreign aid from official sources as long as essential institutional and politico-economic weaknesses persist. By contrast, the advanced developing countries of Asia have established strong competitive advantages which enabled them to prevent major financing problems in the 1980s. In all probability, they will remain priority locations for foreign investors and lenders [Hiemenz, 1991; Nunnenkamp, 1991].

* The authors would like to thank the Instituto de Pesquisa Economica Aplicada (IPEA) and especially the Chief of its Macroeconomic Division, Dr. Eduardo Felipe Ohana, for initiating this study and for the most fruitful and stimulating discussions held in Brasilia on the topics to be addressed in the subsequent analysis. Thanks are also due to the Programa das Naçōes Unidas para o Desenvolvimento for providing financial support to carry out the study.

The situation is less straightforward in Latin America, on which the subsequent analysis if focused. Until the early 1980s, foreign investors and creditors were eager to engage in countries such as Brazil offering favourable profit opportunities because of large though untapped domestic markets, vast natural resources, and semi-skilled labour. The picture has changed fundamentally in the 1980s. Competitive advantages were seriously eroded by external shocks and misguided economic policies so that foreign investors and creditors became increasingly reluctant to transfer further capital to Latin American countries. With fiercer worldwide competition for foreign capital, economic policy failures will become even more telling in the future and result in even higher economic costs than was the case in the past. The heavily indebted countries of Latin America will therefore rejoin the world economic development and attract foreign capital only through the successful stabilization and structural reform of their economies. Some countries in this region have responded to this challenge recently. Others, however, are still lagging behind major competitors in implementing credible and consistent reform programs. This refers to Brazil in the first place.

Against this background, the overall aim of this study is to provide a policy-oriented analysis of international capital flows to developing countries. The major thrust is on the question how Latin America, and particularly Brazil, could regain access to internationally mobile risk capital. The purpose of the study is threefold: (i) to portray the recent developments in international capital flows, (ii) to analyse their major determinants, and (iii) to provide a detailed evaluation of Brazil's position in worldwide competition for foreign capital as compared to its major competitors.

Chapter I of the study presents an overview on international capital flows during the 1980s and discusses the recent trends. Prior attention is paid to the access to capital markets of Latin American countries in general and Brazil in particular. The major types of foreign capital flows are analysed separately, i.e. commercial bank lending, foreign direct investment, and capital

flows from official sources. The discussion in Chapter I is mainly based on the statistical data set presented in Appendix I of the study.

A summary of empirical analyses on major determinants of the different types of capital flows to developing countries is given in Chapter II. Here, the principal aim is to evaluate in a cross-country perspective the role of domestic economic policies of recipient countries with respect to their attractiveness for foreign capital. This assessment is largely based on recent econometric studies by the Kiel Institute of World Economics and related work by other researchers. The topical question is whether there is room for domestic economic policy to (1) improve the chances to regain access to the international credit market, (2) enhance the attractiveness for foreign direct investment, and (3) achieve better economic performance by restructuring the composition of external financing. The specific problems which countries such as Brazil might have in achieving these goals figure prominently in the evaluation of these questions.

In addition, it is discussed in Chapter II in which way the developing countries' attractiveness for foreign capital is likely to be affected by recent changes in the international economic environment. In this context, the possible consequences of Western European integration (EC 1992) and the economic transformation of Central and Eastern Europe are evaluated. Both developments have raised considerable concern that foreign capital may be diverted from developing countries and concentrated on Europe. Again, particular attention is paid to the consequences for Latin American countries.

In Chapter III, Brazil's current position in the international competition for investment funds is critically evaluated. Given Brazil's impaired attractiveness for foreign capital, the pros and cons of different options to deal with the foreign debt issue are discussed. It is argued that debt policies may trigger far-reaching effects on other types of capital inflows as well as domestic investment. Subsequently, major bottlenecks to an im-

proved competitiveness of Brazil are identified. Critical policy areas are analysed in some more detail in order to derive conclusions on economic policy measures which may help to improve the country's position in the worldwide competition for foreign capital. The focus is on macroeconomic stability, goods- and factor-market policies, as well as the attitudes towards foreign direct investment. In discussing these policy issues, Brazil's position is portrayed relative to its major competitors.

The final chapter of the study summarizes the major policy conclusions.

I. International Capital Flows to Developing Countries: Recent Trends

In the 1980s, developing countries were bypassed by international lenders and investors, mainly as a consequence of high external debt and deteriorating economic as well as political conditions. International capital flowed mainly among industrialized countries. Very recently, however, the situation has ameliorated somewhat. The debt crisis appears to be less severe than three years ago. Debt indicators have slightly improved, and total net resource flows to developing countries have recovered since 1987. Despite these positive developments, which can partly be attributed to diverse programs of debt relief and restructuring, as well as improved export performance of some countries, the debt crisis is not over. Many developing countries still have to undertake credible adjustment policies and structural reforms that seem to be a precondition to restore capital flows and economic growth.

1. Broad Trends in Net Resource Flows[1]

After the 1981 peak, total net resource flows to developing countries declined gradually until 1986. Measured at 1989 prices and

[1] This section mainly refers to Tables I.1 and I.2 (Appendix I) and the corresponding references.

exchange rates the decline even continued until 1987 [OECD, 1991a, p. 24]. This downward trend since the beginning of the 1980s was dominated by sharp cuts in private capital flows (including export credits), which were mainly a result of the international debt crisis and the loss of creditworthiness of debtor countries. Despite inherent differences between foreign direct investment (FDI), international bank loans and export credits, these various types of flows followed in the first instance a similar trend. The parallel movement was supported by the fact that different types of financing were often combined in the same project.[1] Isolated from the overall trend, however, official development finance (ODF) gradually increased in the 1980s (except in 1982-1983).

After years of decreasing total net resource flows to developing countries, a slight recovery started in 1987. The general increase was backed by rising ODF and private flows, while net export credits did not increase before 1989. Preliminary data confirm the maintenance of this trend in 1990. Total flows increased by 16.1 per cent to US$ 142.4 billion. This impressive rise, however, largely reflects valuation effects, which were high in 1990 as the dollar fell against other major currencies, except the yen (on an annual average basis). At 1989 prices and exchange rates, total net resource flows increased by only 3.8 per cent from US$ 122.7 billion to US$ 127.3 billion [OECD, 1991a, p 24]. Despite the recent increase, neither total private flows nor export credits had yet reached their pre-debt crisis level in 1990.

In general, net resource flows to the Western Hemisphere (Latin America and the Caribbean) followed a similar trend. Total net resource flows declined nearly continuously until 1986, before a gradual recovery started. However, the decline until the mid-1980s was much more pronounced in the Western Hemisphere than for other regions. Hence, the share of net resource flows to the

---

[1] For a disaggregated analysis of FDI in manufacturing and non-manufacturing industries, see LANGHAMMER [1991].

Western Hemisphere dropped significantly in the beginning of the last decade, and thereafter oscillated around this lower level (Table 1). On the contrary, the share of net resource flows to Asia increased significantly in the early 1980s and remained relatively stable thereafter.

Table 1 - Share of Asia and Latin America in Total Net Resource Flows to Developing Countries (per cent)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Asia	19.4	22.4	24.0	33.7	31.9	34.8	33.1	32.7	37.6	33.3	33.7
Latin America and the Caribb.	44.2	46.1	42.6	29.2	34.9	27.2	22.5	23.6	22.1	24.3	28.2

Source: OECD [1989; 1991a]; own calculations.

The sharp decline of total net resource flows to the Western Hemisphere was also dominated by the fall in private flows. Compared to US$ 45.2 billion in the beginning of the last decade, private flows fell by 86.3 per cent until 1986 to US$ 6.2 billion. International bank lending virtually dried up in 1986. Despite the long-awaited increase of private flows and total resource flows (in absolute and relative terms) in 1989-1990, the pre-debt crisis level has by far not yet been reached. Preliminary data show that total resource flows still accounted only for 72.1 per cent, and private flows only for 54.1 per cent of the 1980-level. Moreover, the rise in private flows in 1989-1990 deserves further comment [OECD, 1991a, p. 21]:

- The financial situation among the countries of the Western Hemisphere is highly diverse. Only a small number of countries (essentially Mexico, Chile, Colombia, and Venezuela) benefited from the recent increase of private flows. The majority of Latin American countries has remained unattractive for foreign capital so far, although most recent trends suggest that an increasing number of them may succeed to reattract foreign investors and lenders.

- Excluding interest arrears (principally in Argentina, Brazil and Peru), total net bank lending in 1988 -1989 was slightly negative, but became positive in 1990.
- A substantial part of the newly issued securities was taken up by holders of Mexican flight capital abroad. The recent experiences of Mexico and Chile suggest that flight capital offers a potential that could be used to help financing Latin American countries in the future.

2. Commercial Bank Lending and Capital Markets[1]

The modest increase of commercial bank claims on developing countries since the mid-1980s was accompanied by a significant regional redistribution of claims. In particular, the share of claims on Latin America dropped from 42.6 per cent in 1986 to 32.6 per cent in 1990, whereas the share of claims on Asia increased from 19.9 per cent to 26.5 per cent during the same period. The drop in the Latin American share was mostly a consequence of the decrease of short-term and unguaranteed long-term flows.

To deal with the specific Latin American problems since the beginning of the debt crisis, four different phases of commercial bank lending can be identified [SECCHI, 1991, pp. 175 ff]. Initially, the involved banks agreed to rescheduling arrangements, thereby accepting a different timing of principal and interest payments. In this period, German, French and Swiss banks seemed to be more aware of the problems inherited from previous generous lending. They undertook precautionary measures to face possible future payment difficulties of debtor countries. On the contrary, US and UK banks still seemed to be less concerned of possible future losses.

The second phase can be characterized by the Baker plan, which aimed at new lending and stimulating future growth in the debtor

---

[1] This section mainly refers to Tables II.1-II.5 as well as Tables V.1 and V.2 (Appendix I) and the corresponding references.

countries. But commercial banks were reluctant to lend fresh money to already highly indebted countries. It became obvious that most of these debtors were not able or willing to service their debt. The market value of the debt and the value of shares of the main creditor banks dropped. Also US and UK banks became more and more aware of the difficulties associated with the international debt situation. From summer 1987 on, they have also started to increase their reserves in order to reduce their financial vulnerability.

During the third phase, banks generally tried to reduce their commitments to and exposure in highly indebted developing countries. More market-oriented techniques were used to deal with the debt problem, including the development of and more active trading in the secondary debt market. This strategy clearly improved the creditor banks' financial position, but, in general, did not improve the debtor countries' access to foreign capital.

The latest phase started with the implementation of the Brady plan in 1989.The current approach can be characterized by a case-by-case treatment of debt problems, including the possibility of concerted debt and debt-service reductions (e.g. in the case of Mexico, the Philippines, Costa Rica, and Venezuela).

These four phases are reflected in the lending patterns of banks from the major creditor countries:

- In 1985, US commercial banks were still the main creditors to all developing countries, as well as to Latin America and Brazil, although French, UK and German banks also held substantial claims. During the last years, US banks have significantly reduced their claims. Between 1985 and 1990, they cut their exposure in all developing countries by 46.4 per cent to US$ 69.4 billion. They also reduced their claims on Latin America and Brazil substantially. Nevertheless, US banks remained the main creditors of Brazil in 1990 in absolute terms (recent data for Japanese banks are not available).
- Similarly, UK banks have curtailed their engagement in all

developing countries; in the second half of the 1980s, their claims fell by 31.9 per cent to US$ 44 billion. Moreover, UK banks reduced their claims on Latin America and Brazil more than proportionally.

- On the contrary, French and German banks increased their claims on developing countries as a whole, but reduced the share of Latin America and Brazil. In absolute terms, however, German banks still increased their claims on Brazil to US$ 9.5 billion in 1990 (1985: US$ 6.1 billion).

Table II.4 reveals most obviously the fundamental problem Latin American countries were facing: Negative net transfers fluctuated between US$ 14-21 billion annually in the second half of the 1980s. Negative net transfers can mainly be attributed to the fact that total credit disbursements of commercial banks have diminished considerably. In 1980, disbursements reached US$ 33.2 billion, while debt-service payments (interest and principal payments) amounted to US$ 30.3 billion. In 1989, disbursements were down to US$ 5.1 billion, while debt-service payments were reduced to US$ 19 billion. The Latin American situation influenced - nearly determined - the overall trend. Disbursements to all developing countries were reduced by US$ 28.6 billion between 1980 and 1989. The similar absolute reduction to the Western Hemisphere (US$ 28.1 billion) shows that, on average, disbursements to the remaining developing countries were approximately constant. Furthermore, half of the net financial resource flows to foreign commercial banks was transfered by the Western Hemisphere. Within Latin America, the situation in all major debtor countries (Argentina, Brazil, Chile, Mexico) was similar.

The general downward trend in international lending to developing countries in the 1980s is also reflected in Table V.1, which portrays the development of funds raised on international capital markets. Compared with the mid-1980s, all developing countries together raised 22 per cent less funds on international capital markets in 1990. Most Latin American countries lost access to these markets towards the end of the 1980s. After US$ 16 billion in 1984, the region as a whole raised only US$ 1.6 billion in 1990. The share of new Latin American bonds and loans dropped from 46.3 to 6.2 per cent.

The above analysis suggests that all private lenders have been well aware of the serious debt problems in Latin America and reacted similarly, though at a different speed, by curtailing their engagement in this region. Most recent (preliminary) data indicate, however, a slight improvement in the financial relations of developing countries with Western commercial banks (Table 1a):

- For all developing countries and also for Latin America, a modest increase of credit disbursements is estimated for the early 1990s as compared to 1989. For the time being, net transfers continue to be negative. But negative net transfers of Latin America are estimated to be reduced to about US$ 7 billion per annum in 1990-1992, i.e. to about half the amount reported in 1989.

- The picture is fairly favourable for Mexico. Negative net transfers are expected to be down from US$ 7 billion in 1989 to around US$ 1 billion in the early 1990s. This is mainly because of drastically reduced debt-service obligations.

- By contrast, high debt-service obligations are projected for Brazil in 1991-1992. Notwithstanding an increase of loan disbursements, net transfers are likely to remain significantly negative unless Brazil and its creditor banks reach an agreement on debt-service reductions.

Several Latin American countries, including Mexico, Brazil and Venezuela, made some progress in regaining access to international capital markets [WORLD BANK, 1991]. Particularly the case of Mexico demonstrates that, based on credible economic reforms, "innovative" Euro-market issues are not out of reach for Latin American countries. In the second quarter of 1991, Mexico launched a first Euro-convertible issue. This type of issue, which had already been used by various Asian developing countries, could remain an interesting alternative, in particular for Latin American countries undertaking successful privatization

programs. After the absence of Japanese issues, Euro-convertibles still seem to be attractive for investors.

Although Brazil's debt negotiations did not deem to make significant progress until mid-1991, several deals with Brazilian borrowers have started. Recently, Petrobrás, Brazil's state oil company, entered into Euro-markets and issued the first Brazilian Euro-bond since the outbreak of the debt crisis. Further Brazilian issues followed, including a US$ 200 million deal of Telebras, the state-owned telecommunications company. Furthermore, the first interest-rate swap for a Brazilian company was arranged by Chase Manhattan. However, it is open to question whether the slight progress which has been made in approaching international capital markets is sustainable and could be extended, unless the fundamental problems underlying Brazil's impaired attractiveness for foreign capital are tackled (see Chapter III).

3. Foreign Direct Investment[1]

Worldwide FDI flows increased considerably in recent years. They nearly tripled from US$ 63.3 billion in 1981 to US$ 181.8 billion in 1989. The impressive overall trend in FDI flows was accompanied by significant shifts between industrialized and developing countries on the one hand, and among developing countries on the other hand [LANGHAMMER, 1991]. As in the case of international bank lending, FDI flows have become more concentrated on developed countries. France, Germany, Japan, the UK and the US were the major source and host countries of FDI. In 1987, these countries were the target of approximately 60 per cent of all FDI inflows and the source of roughly 80 per cent of all FDI outflows [UNIDO, 1990, p.4].

Developing countries as a whole lost their attractiveness as hosts of FDI relative to industrialized countries. In 1989, FDI flows to developing countries had not yet reached their pre-debt

[1] This section mainly refers to Tables III.1-III.4 (Appendix I) and the corresponding references.

Table 1a - Commercial Bank Lending to Developing Countries - Disbursements, Debt Service and Net Transfers: 1985-1992 (US$ billion)

	1985	1989	1990[e]	1991[p]	1992[p]
All developing countries					
Disbursements	31.2	27.9	30.8	28.6	30.3
Debt service	61.4	49.7	43.2	45.3	47.7
Net transfers	-30.2	-21.8	-12.4	-16.7	-17.4
Latin America and the Caribbean					
Disbursements	8.7	5.1	5.7	5.2	7.2
Debt service	29.8	19.0	12.6	13.4	14.0
Net transfers	-21.1	-13.9	-6.9	-8.2	-6.8
Argentina					
Disbursements	3.0	0.1	0.0	0.0	0.0
Debt service	4.7	0.3	0.8	1.2	1.2
Net transfers	-1.7	-0.2	-0.8	-1.2	-1.2
Brazil[a]					
Disbursements	0.3	1.5	0.2	1.8	3.9
Debt service	6.9	4.4	2.0	4.7	5.9
Net transfers	-6.6	-2.9	-1.8	-2.9	-2.0
Chile					
Disbursements	0.8	0.9	1.5	0.7	0.8
Debt service	1.6	1.3	1.2	1.2	1.2
Net transfers	-0.8	-0.4	0.3	-0.5	-0.4
Mexico					
Disbursements	3.0	1.1	2.1	1.6	1.6
Debt service	10.8	8.0	3.0	3.1	2.5
Net transfers	-7.8	-6.9	-0.9	-1.5	-0.9

e = estimated; p = projected.

[a]Data for 1985 and 1989 are slightly revised figures as given in the Supplement to the World Debt Tables, and are not fully comparable to Table II.4.

Source: WORLD BANK, World Debt Tables 1990-91; and Supplement to World Debt Tables 1990-91, August 1991.

crisis level; FDI inflows amounted to US$ 18.5 billion, compared to US$ 25.2 billion in 1982. The share of developing countries in total FDI inflows amounted to roughly 40 per cent during the 1960s and one third during the 1970s. A sharp decline occurred in the 1980s; their share was down to 10.2 per cent in 1989. The reorientation of FDI towards developed countries is also reflected by the respective growth rates: In the 1983-1989 period, FDI flows to developing countries increased only by 18.9 per cent, as compared to 271.6 per cent in the case of industrialized countries.

Furthermore, FDI took only place in relatively few - mostly fairly advanced - developing countries. In the late 1980s, just 18 countries accounted for approximately 86 per cent of the flows of FDI to all developing countries [UNIDO, 1990, p. 7].[1] The debt crisis and the depressed economic conditions had a significant impact on FDI flows to Latin America. FDI inflows dropped from US$ 7.7 billion in 1981 to US$ 3.2 billion in 1986; despite the subsequent increase, the 1981-level has not yet been reached. Besides the general negative impact of the debt crisis, the relative importance of different source countries for FDI flows to Latin America changed substantially. In the beginning of the 1980s, the share of the US reached 56.3 per cent, whereas Japan provided 13.9 per cent and Europe 27.9 per cent. Towards the end of the 1980s, Japan's share increased to 32.8 per cent and Europe's share to 46.8 per cent. On the contrary, the share of the US dropped to 19.3 per cent. Within Latin America, US investors showed a high preference for FDI in Mexico. Among European investors, Germany, the UK and Switzerland played the most important role. They provided approximately 77 per cent of European flows to Latin America.

---

[1] Even for the prefered investment locations, FDI typically accounted for a fairly small portion of total fixed capital formation. The only exception over years was Singapore, where the share of FDI was above 10 per cent. By contrast, FDI contributed to far less than 5 per cent to overall gross fixed capital formation in Latin American countries such as Argentina, Brazil, Chile and Colombia.

With respect to the specific situation of Brazil, Table III.4 reveals that Japan, the UK and the US played the most important role as source countries in 1988-1990. However, total FDI flows dropped significantly in 1989 and 1990, after total flows had increased in 1987 and 1988 (data are based on the US$ rate of December 31, 1990); flows were only US$ 0.5 billion in 1990.

In sharp contrast to the situation of Brazil, preliminary data for 1990 suggest that high FDI inflows took place in several Asian as well as selected Latin American countries. The main reasons for this recovery are as follows [OECD, 1991a, p.16]:

- Several Asian countries achieved substantial economic growth rates, and the prospects for economic growth improved in some Latin American countries (e.g. Chile, Mexico).
- New investment opportunities arose from economic adjustment programs, which included the privatization of state enterprises and debt-equity conversions.
- Recently, an increasing number of developing countries accepted that the private sector should play a decisive role for future export performance and economic growth.
- Reform programs established in coordination with multilateral institutions had a catalytic effect.

In essence, the most recent trends suggest that credible economic reforms are honoured by foreign investors with increasing FDI flows. This may provide important lessons for Brazil which appears to be lagging behind in implementing such reforms (for a detailed discussion, see Chapter III).

4. Official Development Finance[1]

Official development finance (ODF) - bilateral and multilateral - consists of concessional development assistance (ODA) and other

[1] This section mainly refers to Tables IV.1 and IV.2 (Appendix I) and the corresponding references.

ODF. ODA comprises grants and loans with a grant element of at least 25 per cent. Other ODF mainly includes non-concessional loans from DAC member countries, multilateral lending, as well as the consolidation of arrears on bilateral debt [OECD, 1991a, p. 14].

During the last decade, total net flows of ODF to all developing countries gradually expanded to about US$ 78 billion. The share of ODF in total net resource flows increased from 35.4 per cent in 1980 to 54.5 per cent in 1990. In 1990, 80.6 per cent of total ODF was given in the form of ODA. ODF has become more concentrated on low-income countries (LICs) which accounted for 63 per cent of total ODF at the end of the 1980s, compared to 52 per cent in 1981-1982 [SECCHI, 1991]. Nevertheless, the Latin American share in ODF was relatively stable (11 - 15 per cent).

A more disaggregated analysis shows that Latin America has received a substantial part of ODF from the EC and individual European DAC member countries, which together are the largest donor to Latin America in absolute terms (followed by the US and Japan). In 1986-1988, 27.6 per cent of ODF funds came from Europe, after roughly 17 per cent in the early 1980s. The EC and its member countries increased the share of flows devoted to Latin America from 6.4 per cent in 1980-1982 to 11.9 per cent in 1986-1988, and are close to the world average now. Within Europe, Germany remained the major donor to Latin America and also to Brazil. Recently, Italy increased its flows rapidly and nearly reached the volume of France in 1986-1988. On the contrary, the UK only played a minor role during the last decade.

With respect to the regional distribution within Latin America, South America received approximately two thirds of European outflows, but less than one quarter of ODF from the US. More than 75 per cent of the ODF flows of the US to Latin America were directed towards Central America [SECCHI, 1991].

The situation of Brazil differs somewhat from the overall picture

for Latin America. After ODF flows more than doubled between 1980 and 1985 (to US$ 2.1 billion), the volume decreased to roughly one quarter of the 1985-level in 1988, and recovered only modestly in 1989. The relative importance of flows from the EC and its member countries increased dramatically in the 1980s (1980: 22.1 per cent; 1987-1988: 86.4 per cent). Within the EC, France and Germany were the main donors. Net ODF flows of the US to Brazil were negative in 1988 (US$ -15 million) and 1989 (US$ -200 million).

5. Net Resource Flows to Developing Countries in the Medium Term

The above analysis of recent capital flows shows that, as a consequence of the debt crisis, private flows to developing countries were substantially reduced during the 1980s. This was especially true for Latin America. Only very recently, some Latin American countries regained limited access to international capital markets. This raises the question about the future prospects of developing countries in attracting foreign capital.

A scenario for aggregate net resource flows to developing countries in the medium term is offered by the WORLD BANK [1990, pp. 44-51]. Based on the World Bank's working hypothesis that developing countries continue with their adjustment policies, net resource flows might increase slightly faster than industrial countries' GNP during the coming years. In its base scenario, the World Bank projects an annual growth rate of 7.4 per cent for aggregate net resource flows to developing countries in 1989-1995. When applying the World Bank's estimations of average growth rates for different types of flows until 1995 to OECD base data, the scenario given in Table 2 is obtained.

The current composition of aggregate net resource flows is not expected to change significantly [WORLD BANK, 1990, pp. 44-51]:

- ODF is expected to contribute significantly to total net resource flows also in the future. In particular, multilateral lending is expected to rise quickly, partly as a result of recent capital increases of the World Bank, the Inter-American Development Bank and the Asian Development Bank.

Table 2 - Net Resource Flows to Developing Countries, 1980, 1989, 1995 (US$ billion)[a]

	1980	1989	1995[P] base-year: 1989	1995[P] base-year: 1990	Annual growth rates until 1995[P] (per cent)
Total net resource flows	129.3	122.7	188.3	203.5	7.4
Official development finance	45.7	64.9	98.5	109.9	7.2
Private flows	66.1	48.3	75.3	88.1	7.7
Foreign direct investment	11.2	30.4	43.1	42.8	6.0
International bank lending	49.0	10.5	24.3	37.2	15.0

P: Projection

[a] The scenario is based on the World Bank's estimation of the annual growth rates until 1995. However, base data refer to OECD statistics. The base period for the first column of 1995 is 1989, for the second column the preliminary OECD data for 1990 are used.

Source: WORLD BANK [1990, p. 45]; OECD [1991a]; own calculations.

- A solid economic environment is deemed necessary to support additional private flows. In relative terms, international bank lending could increase to some extent given the low volume in 1989, but will hardly reach the pre-debt crisis level soon. Creditworthiness will have to be restored first. Furthermore, Japanese banks are likely to be reluctant to expand lending because of the need to rebuild capital. Besides traditional bank lending, a number of more recent techniques, including project finance, could play a more important role in the future.

- The attractiveness of debt-equity swaps largely contributed to the recent increase in FDI. Due to the diminishing debt overhang, the motivation for debt-equity programs could decrease. Furthermore, FDI in manufacturing which aims at domestic markets is expected to be limited, except in rapidly growing countries. On the contrary, large privatization programs in a somewhat more stable environment could induce increasing FDI flows, provided that credible arrangements are offered for remittances. Hence, the expected annual average increase of FDI by 6 per cent depends to a large extent on country-specific conditions, and could be higher in well performing economies.

The above scenario suggests that capital flows will not rise massively on average. It has to be stressed that a wide margin of error has to be taken into account when projecting financial flows to developing countries. A number of external uncertainties, including the consequences of the current changes in the international economic environment (for a more detailed discussion, see Chapter II.2), might lead to substantial deviations from the projected flows. Furthermore, from an individual country's point of view it is extremely relevant how total flows are allocated between developing countries. It can be expected that the country-specific performance determines to a large extent the availability of funds for a particular country. Therefore, the major determinants of capital flows to developing countries will be analysed in more detail in the subsequent chapter.

II. Major Determinants of Recent Capital Flows to Developing Countries

1. The Role of Domestic Policies in Developing Countries

a. Determinants of International Creditworthiness

Risk illusions of creditors were a crucial factor as concerns the generous bank lending to developing countries that occurred until the early 1980s. Credit guarantees provided by the borrowers' and lenders' governments distorted the incentives to follow macroeconomically efficient lending strategies. Banks did not rigorously discriminate between good and bad credit risks [NUNNENKAMP, 1986a]. But even after risk illusions had been destroyed it continued to be heavily debated whether the access to foreign loans could be encouraged by favourable domestic policies and good economic performance. The confusion about the determinants of commercial lending appears to be mainly because conflicting hypotheses apply to different lending regimes. Most importantly, a distinction has to be drawn between voluntary lending and defensive lending (which is sometimes called "involuntary" lending).

It is no longer to be disputed that the borrowers' economic policies figured prominently in determining whether or not external debt became unmanageable[1]. Provided that private creditors have learnt this lesson, well performing countries should have had better access to voluntary lending recently. Additional loans for supply constrained borrowers could be expected to be positively related to policy and performance indicators such as higher investment ratios, increasing world-market shares, real exchange rate devaluation, and reduced government budget deficits[2]. However, the impact of domestic policies is less straightforward under conditions of defensive or "involuntary" lending. In this case, favourable policies and good performance may even lead to reduced, rather than increased, bank lending [KRUGMAN, 1988; 1989]. This is because it may be in a bank syndicate's interest to provide loans "involuntarily" to problem debtors in order to protect existing claims. According to this reasoning, the incentive of banks to orchestrate new loans is weakened if the market valuation of the inherited debt improves due to policy reforms and better economic performance of the debtor.

In order to test these conflicting hypotheses on the role of domestic economic policies, separate (pooled cross-country) regressions were run for 14 developing countries for which defensive lending has been orchestrated in the 1980s,[3] and for 12 developing countries not benefiting from such lending [NUNNEN-

---

[1] For a discussion of domestic policies with regard to debt problems, see e.g. BANETH [1986]; KHAN and KNIGHT [1983]; NUNNENKAMP [1986b] and ZAIDI [1985].

[2] By contrast, lending is demand determined in the case of non-constrained borrowers. The focus of this paper being on Latin America, lending to non-constrained borrowers is not considered in the following. For conceptual details, see NUNNENKAMP [1986a; 1986b, Chapter 6].

[3] Defensive or "involuntary" lending was defined according to WATSON et al. [1988]. This lending regime comprises countries for which concerted credit extension, i.e. equiproportional increases in loan exposure coordinated by bank advisory committees, took place. The lending to all countries without such concerted credit extension is considered to be voluntary in the following.

KAMP, 1990].[1] Net transfers (NTR) and, alternatively, gross disbursements (DIS) of loans from private sources were considered as dependent variables.[2]

The results presented in Table 3 strongly contest the notion of bad policies inducing further lending, which would have required significantly negative signs of the investment ratio (INVR), world-market performance (WMSHD) and the exchange rate variable (REXR).[3] Hence, it would be a losing proposition for credit constrained countries to attempt attracting more (defensive) lending by consciously adopting unfavourable economic policies. The results rather indicate that it pays for borrowers to implement adjustment programs in order to improve their economic performance. Private creditors honoured adjustment efforts in the 1980s by easing credit constraints, most notably in the case of higher investment ratios, better world-market performance and real exchange rate devaluation. This conclusion also holds for developing countries for which defensive lending had been orchestrated.

The empirical evidence demonstrates that policy reforms are indispensable in order to restore the international creditworthiness of credit constrained debtors. This does not mean, however, that narrowly defined adjustment programs are a sufficient condition for a resumption of commercial bank lending on a voluntary basis [NUNNENKAMP, 1988]. This qualification is particularly relevant for Latin America where sovereign risk and credibility problems have become evident since the early 1980s [see also EL-ERIAN, 1991].

---

[1] For a similar approach, see EATON and GERSOVITZ [1980; 1981a]. By contrast, most other empirical studies did not distinguish different lending regimes [e.g. EDWARDS, 1984; 1986; NUNNENKAMP, 1986a].

[2] For detailed definitions of variables and data sources, see Appendix II.

[3] The negative sign of DEFR in the NTR-equation for countries without defensive lending cannot be interpreted as an indication that bad policies were honoured. It rather reveals that these countries could no longer finance high public sector deficits once net transfers were reduced.

Table 3 - The Impact of Economic Policies, External Shocks and Sovereign Risk on Net Transfers and Disbursements of Credits from Private Sources[a], 1983-1986

Lending regime	Dependent variable	Explanatory Variables: Const.	INVR	WNSHD	REXR	DEFR	TOT	DSERG	TRADE	SHDEX	STDG	$\bar{R}^2$ / F	No. of observations
14 countries benefiting from defensive lending	NTR[b]	-4.64* (-1.72)	0.185* (1.88)	0.145** (2.30)	-0.008 (-0.18)	0.056 (0.26)	-0.035 (-0.39)	-0.231 (-1.31)	-	0.023 (1.10)	0.009 (0.07)	0.23 2.19	33
	DIS[b]	-7.86** (-3.26)	0.282** (3.20)	0.113* (2.01)	-0.067* (-1.80)	-0.277 (-1.44)	0.088 (1.10)	0.633** (4.00)	-	0.016 (0.85)	0.003 (0.02)	0.73 11.55	33
12 countries not benefiting from defensive lending	NTR	-14.18** (-3.78)	0.474** (3.23)	0.016 (0.71)	-0.075** (-2.63)	-0.233** (-4.20)	0.167** (2.44)	-0.361** -3.62)	-0.023 (-0.57)	0.039 (1.34)	0.258 (1.67)	0.69 6.27	22
	DIS[b]	-4.87 (-1.11)	0.249* (1.93)	0.009 (0.32)	-0.010 (-0.29)	-0.064 (-1.07)	0.063 (0.76)	0.109 (1.08)	-	0.008 (0.24)	0.044 (0.24)	-0.05 0.87	22

[a]All regressions were estimated using the ordinary least squares technique. For detailed definitions of variables and data sources, see Appendix II. All explaining variables, except EDTG, were calculated as averages of periods t and t-1. t-statistics in parentheses; ** indicates significance at the 5 per cent level (two-tailed t-test); * 10 per cent level. - [b]TRADE excluded in order to avoid serious multicollinearity problems.

Source: NUNNENKAMP [1990].

Sovereign-risk considerations relate to the willingness of a country to service external obligations. The impact of sovereign risk on private lending to developing countries is ambiguous at the theoretical level. According to standard arguments, rational lenders will consider the borrowers' incentives to default when deciding whether to grant further credits (for an overview, see EATON et al. [1986]). Therefore, voluntary lending is supposed to be negatively related to the benefits to be reaped from defaulting on external debt, and positively related to the potential costs of such debtor behaviour.[1] However, the expectation of

[1] The borrowers' benefits from default primarily depend on the debt-service burden [EATON, GERSOVITZ, 1981b, p. 302]. When considering the default costs, the borrowers have to take into account the sanctions that may be imposed on them by the creditors [SACHS, 1984, pp. 17f.].

default may induce, rather than prevent, further lending to constrained borrowers once debt-servicing problems have emerged [KRUGMAN, 1988; COHEN, SACHS, 1986, pp. 539f.]. The latter reasoning suggests that the bargaining power of debtors in transfer negotiations increases if accumulated debt is high enough to pose a serious threat for the creditors' financial position. Potential benefits from default are thus expected to be positively related to additional defensive lending.

Lending decisions were indeed affected by sovereign risk considerations in the 1980s. In Table 3, the borrowers' potential benefits from default are proxied by total debt-service obligations (DSERG). This proxy indicates the amount of domestic resources which could be saved by not making credit payments. Under conditions of defensive lending, credit disbursements (DIS) were positively related to a higher contractual debt-service burden. At first sight, this appears to support the KRUGMAN-line of reasoning that further lending is to be expected once DSERG reveals a higher default probability. However, the observation that a higher debt-service burden induced higher loan disbursements is mainly because of the way reschedulings were typically organized in the 1980s. Especially US banks insisted on the transfer of interest payments to avoid that loans had to be classified as non-performing. Additional credits were granted to ensure that interest payments could be made by borrowers. Not surprisingly, the need to refinance interest obligations was positively related to the debt-service burden.

However, defensive loan disbursements did not improve the borrowers' access to international capital markets in terms of additional net financing. In contrast to the DIS-equation, the banks' incentive to ensure that interest payments are made by debtors did not result in higher net transfers (NTR). The empirical estimates of the NTR-equation rather support the standard sovereign risk argument that net transfers are negatively related to

the benefits that debtors may realize by defaulting on external debt.[1] The latter finding is most important since negative net transfers - experienced by Latin American countries in the recent past - constitute the central problem in international credit relations. Hence, credit constrained debtors are interested in higher net transfers, rather than credit disbursements per se.

All in all, the empirical results on the determinants of commercial bank lending to developing countries suggest that domestic policy reforms are indispensable in order to restore international creditworthiness. But economic adjustment programs have to be supplemented by policy measures that contain sovereign risk and credibility problems. Such measures should aim at reducing the considerable uncertainties private creditors are presently facing in many Latin American countries whether governments will stick to a preannounced policy course (for more detailed policy conclusions, see Section II.1.d).

b. Domestic Policies and the Attractiveness for Foreign Direct Investment

The question of how to revitalize foreign direct investment (FDI) flows to developing countries after the decline of FDI in the 1970s and early 1980s is today all the more relevant, as expectations are being pinned increasingly on FDI to alleviate foreign debt problems. However, many heavily indebted countries may not only be constrained in terms of new private lending but also in terms of FDI inflows. In order to overcome constraints in the supply of FDI, the determinants of FDI flows have to be identified in the first place. In the following, the focus is on determinants that may provide scope for policy action by the host countries (for a more comprehensive assessment, see AGARWAL et al. [1991]).

---

[1] The evidence on the impact of sanctions which may be imposed by creditors when default occurs is fairly poor. The proxies of potential default costs, i.e. trade dependence (TRADE), short-term trade financing (SHDEX) and the variability of domestic absorption (STDG) remained insignificant. This result adds to the widespread scepticism about the effectiveness and credibility of the threat to impose sanctions.

Among the factors that have been often considered in the literature to be of major importance in determining the movement of FDI - especially to developing countries - are: the intensity of trade relations and the degree of import protection,[1] the size and growth of the host countries' domestic markets,[2] currency valuation,[3] and labour costs.[4] But in order to analyse the development of FDI in the 1980s, the set of explanatory variables has to be extended to include non-traditional factors, i.e.:

- the impact of different attitudes of host countries towards FDI, i.e. restrictions and regulations imposed on the activities of foreign investors;
- the impact of political and economic instability; and
- the effects of a debt overhang and sovereign risk relating to the possibility of future expropriation and restrictions imposed on capital repatriation and profit remittances.

The relevance of trade relations and developing countries' trade policies has been evaluated for the hosts of German FDI [AGARWAL et al., 1991]. The pooled cross-country regression for the 1977-1987 period revealed the following result:[5]

$$
\begin{aligned}
(1)\ FDIR = {} & \underset{(10.5)}{0.64^{**}} \cdot FDIR(-1) + \underset{(4.2)}{0.28^{**}} \cdot YR + \underset{(2.5)}{0.22^{*}} \cdot EXRG \\
& \underset{(-2.3)}{- 0.05^{*}} \cdot EXDMR - \underset{(-2.7)}{0.12^{**}} \cdot TAR + \underset{(0.1)}{0.01} \cdot GU \\
& \bar{R}^2 = 0.94.
\end{aligned}
$$

---

[1] See e.g. AGARWAL [1978]; SCHRÖDER [1986]; GUBITZ [1988]; EUH, MIN [1986]; and KUMAR [1987].

[2] See e.g. BANDERA, WHITE [1968]; TAKAHASHI [1975]; and SCHWARTZ [1976].

[3] See e.g. ALIBER [1971; 1972]; and FROOT, STEIN [1989].

[4] See e.g. KRAVIS, LIPSEY [1982]; and STEVENS [1973].

[5] Dependent variable: deflated German gross FDI outflows (FDIR). For the definition of the controlling variables (YR, EXDMR, GU), see Appendix II. All variables, except GU, expressed in logarithmic terms. t-value in parentheses; **, * significant at 1 and 10 per cent levels; number of observations: 198.

The trade regime of host countries turned out to be an important factor of the policy framework for (German) FDI. Sometimes it is argued that import barriers serve as an incentive for FDI as the latter is a medium to jump over protectionist fences. Survey studies on the motivation of foreign investors to engage in a country provided some support for this view. For example, KAYSER et al. [1981] concluded that German FDI was often undertaken to overcome trade restrictions in developing countries. By the econometric exercise of equation (1), however, export activity is shown to be a predecessor of FDI in developing countries. Market penetration (measured by EXRG, i.e. German exports in relation to the host country's GNP) had a significantly positive impact on FDI, while the degree of import barriers in the host countries affected FDI negatively.

The rate of import protection was measured in two ways: TAR in equation (1) represents the unweighted average of total import charges. Alternatively, TAR was replaced by an indicator for the frequency of non-tariff trade measures (results not shown). In both variants, trade barriers turned out to be an obstacle, rather than an incentive, for German companies to invest in developing countries. This challenges the widespread belief that import protection is a promising means to attract FDI. Especially in countries with small domestic markets, this strategy is bound to fail. But even for fairly large economies, openness with regard to foreign trade appears to be superior in the longer run. The goods produced in sheltered economies typically involve high costs and are not competitive in international markets. Highly protectionist countries will, therefore, not be considered as favourable investment locations by multinational companies aiming primarily at worldwide sourcing and net-working.

The impact of traditional and non-traditional factors on overall FDI flows to developing countries (DIUSD) is shown by the regression results presented in Table 4. The estimates were based on pooled cross-country OLS regressions for the 1980s. However, the country coverage and the estimation period differs between the

various estimates. This is mainly because of data constraints.[1]

FDI flows were clearly stimulated by higher real growth rates (dYR) and relatively large domestic markets (GNP) (Section A, Table 4). This demonstrates that foreign investors were ready to invest if the economic performance of a country offered good profit opportunities. Total hourly labour costs (TLC) are highly significant - but with an unexpected positive sign - when considered at absolute levels. This result appears to contradict the traditional argument of low labour costs attracting FDI. However, it is unit-labour costs, i.e. productivity-adjusted rather than absolute wage levels, which matter for investors. The labour cost variable turned insignificant when TLC was corrected for labour productivity gains (i.e., in the case of TLC - (VAD1 + VAD2); results not shown). This may still be surprising insofar as a negative sign could be expected. Nevertheless, this result is quite reasonable:

- Because of the lack of labour-cost data, the estimates had to be based on the experience of only 10 countries in the 1977-1985 period. Most of these sample countries had adopted import-substitution strategies. Consequently, multinational companies aiming at exploiting the domestic market potential of these host countries applied relatively capital-intensive production techniques so that unit-labour costs were of less relevance.

---

[1] The exchange-rate variable introduced as a controlling variable in some of the equations (see e.g. EXUS in Section A, Table 4) is not discussed in the following. Principally, it can be hypothesized that a devaluation of the local currency encourages FDI inflows, while such inflows may be discouraged by high volatility of exchange rates. However, empirical results are not very dependable (for details, see AGARWAL et al. [1991, pp. 13ff. and pp. 72f.]). Exchange-rate volatility which negatively affects trade relations in the first instance can even induce export-substituting FDI devoted to the domestic markets of host countries, if investment is a means to bypass the foreign exchange market to some extent. Furthermore, FDI data cannot be appropriately split up into a price and a quantity component. Hence, the exchange-rate effects on FDI flows in real terms can hardly be isolated, especially if FDI flows have to be approximated by changes in FDI stocks. For example, the (negative) effects of devaluation on the valuation of existing stocks in the respective host country may outweigh the (positive) effects on new FDI inflows.

Table 4 - Determinants of Total Net FDI Inflows to Developing Countries (DIUSD)[a]

A. Traditional Explanations, 1977-1985[b]

DIUSD = 0.508***DIUSD(-1) - 0.126***EXUS + 0.115*GNP + 3.675*dYR
(6.7) (-6.3) (1.8) (1.9)

+ 1.063**TLC - 0.202VAD1 - 0.478*VAD2 + 49.58**GU $\bar{R}^2$ = 0.99
(4.8) (-0.9) (-2.0) (3.7) NOB: 81

B. Political and Economic Instability, 1980-1987

DIUSD[c] = -248.01* - 158.41**PS - 1.61**PSL - 56.33SSL(-2)
(-2.11) (-2.83) (-5.84) (-1.05)

+ 0.25INF + 16.39**INV + 0.05**LSTOCK $\bar{R}^2$ = 0.52
(0.66) (3.38) (6.47) NOB: 97

C. Debt Overhang, 1981-1987[d]

DIUSD = 209.5** + 9.65**DII + 5.75**GDP $\bar{R}^2$ = 0.42
(3.23) (2.84) (5.61) NOB: 146

D. Sovereign Risk, 1982-1987[e]

a) Countries with restrictive attitudes towards FDI

DIUSD[c] = -48.5 - 4135.7*BENST - 122.48**PRESCU - 75.62UMS + 0.097**LSTOCK
(-0.32) (-2.14) (-2.97) (-0.85) (6.89)

$\bar{R}^2$ = 0.65

NOB: 42

b) Countries with favourable attitudes towards FDI

DIUSD[c] = -32.1 + 3282.7**BENST - 7.99PRESCU - 1.67UMS - 0.061LSTOCK
(-0.46) (4.29) (-0.89) (-0.03) (-1.19)

$\bar{R}^2$ = 0.73
NOB: 42

[a]All regressions were estimated using the ordinary least squares technique. Standard errors used to calculate the t-statistics given in parentheses below the coefficients have been adjusted for heteroscedasticity. Values in parentheses behind a variable indicate the length of a time lag. For the definition of variables, see Appendix II. **, * significant at the 1 and 10 per cent levels. - [b]All variables except GU expressed in logarithmic terms. - [c]Three-period moving average. - [d]DIUSD ≠ 0; DII (1980) ≥ 40. - [e]DIUSD = 0 included.

Source: AGARWAL et al. [1991].

- Moreover, it has to be taken into account that opposing effects of labour costs on different types of FDI may neutralize each other. Follow-up inflows of FDI are induced insofar as capital widening of existing companies is encouraged by rising labour costs if the production technology allows for substitution between labour and capital. By contrast, the creation of new plants is likely to be discouraged. Hence, it would be strongly misleading for developing countries to conclude that labour costs are irrelevant for the decisions of foreign investors.

Even fast growing economies with labour cost advantages may, however, fail to attract FDI inflows when the government's stance towards foreign investors is overly restrictive. This is reflected in the significantly positive coefficient of GU. Higher values of this variable indicate a relatively high degree of openness towards FDI, e.g. in terms of liberal ownership regulations, non-bureaucratic approval procedures and favourable rules on the repatriation of profits and capital. It is noteworthy that hostility vis-à-vis foreign investors, still spread in the 1970s, disappeared considerably in the 1980s [UNCTC, 1988]. Many developing countries have relaxed restrictions on the activities of foreign investors. This trend may seriously impair the attractiveness for FDI of those host countries that maintained fairly strict regulations.

Political and economic instabilities, especially if they are expected to continue in the future, tend to increase the problems of cost-benefit analysis by entrepreneurs and, thus, to discourage them from investments. The traditional determinants of FDI may again be overruled if host countries were characterized by serious political and economic instability. Section B of Table 4 indeed shows that political instability (PS) and labour-market unrest (PSL) clearly reduced the attractiveness of a country for foreign investors (see also EDWARDS [1991]). The impact of econo-

mic instability was less straightforward. High and stable investment ratios (INV) as a sign of economic stability helped to attract foreign equity capital[1]. By contrast, inflation (INF) did not significantly impact on FDI, notwithstanding that it could be considered to be a clear indication of an unsound management of the economy. This surprising result can be attributed to the fact that many foreign investors were trapped in debt-ridden Latin American countries where both the degree and the fluctuation of inflation increased in the 1980s. The insignificant effect on FDI of structural and sectoral adjustment programs financed by the World Bank (SSL) indicates that foreign investors were rather sceptical as concerns the credibility and sustainability of such programs.

Since the early 1980s, foreign investors could also be expected to account for risks originating from impaired ability or unwillingness of developing countries to service external obligations. Similar to external debt, the profitability of new FDI may be affected by a debt overhang.[2] The expected income from productive investment which remains with the foreign investor is likely to decline due to higher expected taxes (in order to service the inherited debt) [SACHS, 1989] and stagnating markets.[3] Under such conditions, investors actually refrained from productive investment. The degree of the debt overhang, reflected in low values of the respective variable DII,[4] was strongly and negatively related to FDI (Section C, Table 4).

It can be concluded that, on average, foreign investors and foreign creditors responded in a similar way to debt problems in

---

[1] This corresponds to the results of SCHNEIDER, FREY [1985] and GOLDBERG [1972].

[2] A debt-overhang situation prevails if the inherited debt is sufficiently large that creditors do not expect with confidence to be fully repaid.

[3] For a different view, see KRUEGER [1989].

[4] Changes in the Institutional Investor magazine's country credit rating since 1980 (DII) were used as a proxy for the existing debt overhang. Gross domestic product (GDP) was used as a controlling variable.

developing countries, namely by limiting their engagement. This result is most relevant for debt-ridden Latin American economies. Parallel behaviour of foreign capital providers renders it extremely difficult for these countries to change their external financing structure in favour of FDI unless debt problems are overcome. According to the above estimates, earlier proposals to replace debt by FDI - and thereby reduce debt problems - were based on rather naive (implicit) assumptions on the substitutability of different types of private capital transfers.

Similarities between the behaviour of foreign investors and creditors could also be expected with regard to sovereign risk. Sovereign countries may not only default an external debt,[1] but may also benefit from expropriation of foreign investments and from imposing restrictions on profit and capital remittances.[2] Such risks can be supposed to be higher (and, thus, the flow of FDI to be lower), the more resources host countries may save by imposing sovereign measures on FDI. Section D of Table 4 reveals that potential benefits from sovereign measures against FDI - proxied by the ratio of FDI stocks over GDP (BENST) - clearly discouraged further inflows for countries with restrictive FDI regulations.[3] By contrast, high FDI stocks induced even more FDI flows to countries with favourable attitudes towards FDI. The latter result indicates that a liberal treatment of FDI and a cooperative stance of host countries towards foreign investors helps to enhance the attractiveness for FDI through reputation building.

All in all, the empirical results lead to the conclusion that FDI flows can no longer be explained exclusively by traditional vari-

---

[1] For the discussion of sovereign risk in the case of foreign debt, see Section II.1.a above.

[2] This is to be expected for unspecific, i.e. broadly based, expropriations in the first place, whereas specific expropriations depend on firm- or industry-specific factors [see PICHT, STÜVEN, 1988].

[3] For further sovereign risk variables, see Appendix II and the detailed discussion in AGARWAL et al. [1991]. As most of these variables turned out to be of limited impact, the results are not presented here.

ables like domestic market size and real economic growth. Foreign investors appear to be well aware of restrictive regulations and the riskiness of their transfers due to political instability, a considerable debt overhang, and the threat of sovereign measures of host countries. Hence, two conditions have to be fulfilled if substantial new FDI inflows are to be attracted. First, macroeconomic reforms are required in order to improve the general economic policy framework and the ability to service external obligations. Additionally, restrictive regulations have to be abolished to provide clear signals for foreign investors, who appear to be mainly concerned about sovereign risk in host countries with an interventionist tradition with respect to FDI policies.

c. Government Interventions and the Efficiency of Debt and FDI Inflows

As argued above, the chances of debt-ridden developing countries to restructure their external financing are limited at best, unless transfer risks are reduced for both foreign creditors and investors. Several countries have attempted to overcome this dilemma by implementing debt-equity swap programs. It is heavily debated in the literature whether such (frequently costly) promotion schemes have resulted in <u>additional</u> FDI inflows. BERGSMAN and EDISIS [1988] found that Western commercial banks as direct investors in developing countries brought additional FDI when they converted their debt claims into equity capital. But in the case of other multinational corporations this is more doubtful. On an aggregate basis, the extremely high ratios of authorized debt-equity swaps to total FDI inflows point to substantial displacement effects, i.e., FDI undertaken in the context of swaps would have been undertaken anyway.[1]

---

[1] This ratio amounted to 0.96 in the case of Argentina. It even exceeded unity in the case of Brazil, Chile, and Mexico, which is partly because the figures on authorized swaps and FDI transactions are not strictly comparable [AGARWAL et al., 1991, p. 112]. For the displacement effects in the case of Chile, see FFRENCH-DAVIS [1990]. Additionally, negative effects on either inflation or domestic capital markets are to be expected, depending on the financing of the swaps (see e.g. KUME, ITO [1989]).

Moreover, the economic performance effects of financial restructuring remain uncertain in the presence of government restrictions that hinder an efficient use of debt and FDI inflows. Typically, FDI is considered superior to debt (in terms of growth and investment effects) because managerial skills and technological know-how are transfered in addition to foreign finance [WORLD BANK, a, 1985; PICHT, 1987a]. Moreover, FDI provides for risk-sharing with foreign investors, in contrast to debt which is characterized by fixed repayment schedules. Empirically, however, the perceived superiority of FDI is less straightforward. Evidence from cross-country regressions [LÄCHLER, NUNNENKAMP, 1987][1], performed for 36 developing countries and the period before the outbreak of the debt crisis, reveals that the investment and growth effects of FDI did not exceed those of debt (Table 5). The impact of debt on economic growth was even significantly higher relative to FDI.[2] The hypothesis of a general superiority of FDI over debt has, therefore, to be rejected.

Table 5 - Impact of Capital Flows on Investment[a] and Economic Growth: Cross-Country Regression Results[a]

Endogenous variable	Estimation period	Constant	FDI	AID	DEBT	$\bar{R}^2$ F	SSR	Number of observations
IR	1976-1979	19.20	-1.74	-0.30	1.95	0.36	712	35
		(1.63)	(1.86)	(0.24)	(0.44)	7.27		
IR	1976-1981	19.74	-2.36	-0.66	2.49	0.53	359	32
		(1.30)	(1.52)	(0.21)	(0.45)	12.84		
GR	1976-1979	4.26	-2.89	-0.23	0.002	0.21	184	36
		(0.81)	(0.93)	(0.21)	(0.22)	4.15		

[a]All estimates were made by ordinary least square methods. Figures in parentheses are standard errors. SSR denotes the sum of squared residuals. For detailed definitions of variables, see Appendix II.

Source: LÄCHLER, NUNNENKAMP [1987].

[1] The distinction between debt and FDI inflows, which is of interest here, was largely neglected in other empirical studies. For exceptions, see FEDER, REGEV [1985], and HANSON [1974].

[2] A standard F-test procedure was used to test the proposition of different coefficient values, by imposing pair-wise restrictions on the parameter values (results not shown here).

This somewhat surprising result can be attributed to two types of government interventions: (1) moral-hazard behaviour by the recipient country due to time-inconsistency problems and resulting in non-cooperative transfer negotiations, and (2) measures which interfere with an efficient use of the transfered resources. Time inconsistency may affect the effectiveness of FDI in the first place. As argued by LÄCHLER [1985], the capital recipient has an ex-post incentive to invest a smaller proportion of available funds once FDI transfers have taken place. This is because a fixed share of the expected marginal investment returns accrues to the foreign investor. In particular, the incentive to undertake public investments that are complementary to FDI inflows is weakened, since alternative uses of the resources increase the share of expected returns that remains with the capital recipient. Only a credible commitment not to reduce domestic investment efforts ex post would rule out moral hazard and result in cooperative transfer relations.

Time-series regressions for Chile and Mexico provided some support for this theoretical argument (for details, see CORSEPIUS et al. [1989]). They underlined the importance of the type of transfer relations in determining the relative performance effects of FDI and debt. In Chile, the correlation between FDI inflows and public investment was found to be negative, indicating non-cooperative transfer relations. Accordingly, FDI had a lower impact on overall investment relative to debt (results not shown here). On the other hand, Mexico apparently succeeded to engage in cooperative transfer relations. Public investment in Mexico responded positively to FDI inflows and, consequently, the investment effect of FDI significantly exceeded that one of debt.

Particularly the economic growth effects of capital inflows depended on government regulations on the use of the transfered resources. This is evident from detailed country studies on Chile, Malaysia, Mexico and South Korea [CORSEPIUS, 1988a; 1988b; SCHWEICKERT, 1991; NUNNENKAMP, 1989]. The efficiency of debt inflows was impaired in more or less the same way in the four

sample economies. Repayment guarantees of the government and artificially reduced borrowing costs weakened the incentive of borrowers to scrutinize the profitability of investment projects. A selective allocation of foreign loans frequently prevented that foreign resources were put into their most productive use. Similarly, selective and discriminating approval procedures, as well as restrictive local participation rules tended to affect the efficiency of FDI inflows negatively. But differences in the regulation of FDI were much more pronounced among the sample countries than in the case of external debt: FDI regulations were most restrictive in Mexico and South Korea, significantly less so in Malaysia, and fairly liberal in Chile. This explains why the difference between the economic growth impact of FDI and debt was significantly positive in Chile, somewhat less pronounced in Malaysia, and insignificant in Mexico and South Korea (results not shown).

In judging on the relative merits and disadvantages of FDI and debt, it is thus crucially important to consider the institutional and regulatory framework governing different capital transfers in the country in question. The empirical analyses do not support the widely held belief that financial restructuring in favour of FDI per se provides an easy way out of the economic difficulties of credit constrained countries. Typically, over-indebted countries are also constrained in terms of FDI. Moreover, the economic performance effects of financial restructuring remain uncertain at best, unless time-inconsistency problems are contained and the incentives for an efficient use of external resources are strengthened.

d. Conclusions on Domestic Policy Choices

The above discussion suggests that there is considerable scope to improve a country's attractiveness for foreign capital and to enhance the efficiency of both debt and FDI inflows. Internal adjustment efforts are absolutely necessary to regain access to foreign risk capital. The design and implementation of comprehensive and consistent reform packages cannot be discussed in detail

here. However, it is noteworthy that a far-reaching consensus has emerged in recent years as concerns important ingredients of promising adjustment programs. The subsequent summary focuses on major policy instruments available to reform-minded governments (for a detailed discussion, see e.g. WILLIAMSON [1990]):

- Large and sustained fiscal deficits are a primary source of macroeconomic instability. The restoration of fiscal discipline is, therefore, urgently required.
- A critical review of public expenditure priorities may help to enhance the economic growth effects of government spending. For example, public spending should be switched from subsidies and military expenditures to education and health as well as complementary investment in infrastructure.
- Tax reform is required to contain fiscal deficits and provide the state with adequate resources. Most importantly, the tax base should be broad and tax evasion must be prevented by an improved tax administration and enforcement.
- In the context of financial market liberalization, selective credit allocation should be discontinued; and real interest rates should be positive in order to discourage capital flight and increase domestic savings.
- The stimulation of exports, in particular non-traditional exports, requires a competitive exchange rate and the stabilization of excessively volatile real exchange rates.
- Import liberalization constitutes another element of an outward- and efficiency-oriented economic policy framework. First of all, quantitative import restrictions should be abolished. They may be replaced by tariffs in a first step.

More specifically, a critical review of debt and FDI policies may help to ensure an efficient use of both types of external finance. As concerns FDI, the degree of foreign ownership should not be unduly restricted. Otherwise the growth-enhancing transfer of technological and managerial skills is likely to suffer. Selective approval procedures should be abolished as far as

possible. FDI should also be allowed in activities where domestic firms are engaged. This would add to efficiency-increasing competitive pressures. Foreign investors should not be isolated from competition either. Entry barriers for competing enterprises must be relaxed to encourage an efficient use of FDI. Import protection granted to approved foreign investors should be phased out. In this way, the risk would be reduced that FDI is confined to sectors in the production of which the capital-recipient country has no comparative advantages.

As concerns debt inflows, selective and discriminating debt-allocation policies must be revised in order to translate the investment effects into favourable economic growth effects. Heavy and human-capital intensive industries that are not in line with the capital-recipient country's comparative advantage should not be granted preferential access to foreign loans. The chances that foreign loans flow to the most productive use would be further improved if (1) the subsidization of foreign borrowing was discontinued, (2) an overvaluation of domestic currencies was avoided, and (3) public bail-outs of defaulting private debtors were no longer granted.

The recent priority on financial restructuring is mistaken if considered as an alternative to revise economic policies that gave rise to the unproductive use of foreign capital of various types. Attempts to attract FDI by offering subsidies to foreign investors (e.g. tax and tariff exemptions, as well as generous discounts in the context of swap operations), while at the same time maintaining constraining regulations, are likely to fail. It appears more promising to adhere to the rule: "what is good policy for domestic investors is also good for foreign investors", i.e., to create a stable and favourable general framework for investment and to keep ad-hoc interventions to the minimum. Furthermore, it is not only the rules and regulations that matter, but also how they are applied in practice. Most notably, the approval procedure should be fast and transparent.

It may take considerable time to restore the confidence of - foreign and domestic - investors once the credibility of governments has been substantially eroded. During this transition period, the subsidization of FDI may be justified, unless this is regarded as a substitute for economic policy reform. In order to avoid a waste of public resources, the subsidization must be limited to the degree which is necessary to compensate for increased risk in the transition period. This may be achieved, e.g., by introducing auction mechanisms into debt-equity swap operations.[1] Similar incentives should be granted to domestic investors. In this way, distortions due to unfair competition between foreign and domestic investors could be avoided.

Beyond these short-term considerations, developing countries are well advised to build up a reputation as cooperative borrowers and cooperative hosts of FDI. Otherwise the chances to regain access to private capital transfers at favourable conditions appear to be fairly remote, particularly for many Latin American countries. It appears not very promising to press hard for further debt-service concessions.[2] The reluctance of foreign capital providers to maintain, not to speak of increasing, their engagement is likely to mount in the case of repeated and protracted debt renegotiations which create considerable uncertainties as to the timing and final outcome. Creditor-debtor confrontation will not only impair the chances for renewed private lending, but is also likely to have adverse implications on other forms of capital inflows such as FDI [EL-ERIAN, 1991].

Towards improving perceptions of country risk, policy-induced bottlenecks that impede a successful mobilization of domestic savings should be removed, complementary public investments main-

---

[1] In this way, a market-based determination of redemption prices of debt paper could be ensured.

[2] Especially for Latin America, the reversal of capital flows since 1982 was hardly due to higher debt-service payments. Negative net transfers were rather caused by drastically reduced inflows of new bank credits (see Table II.4 in Appendix I and NUNNENKAMP [1988]).

tained and expanded, and the widespread bias in favour of high-risk projects reduced. Especially a world-market oriented development approach provides a clear signal that cooperative transfer relations are aimed at. Such a strategy limits the transfer risk of foreign capital providers, since export earnings are generated out of which external payment obligations could be serviced.

Furthermore, the above discussion suggests that economic adjustment programs have to be supplemented by policy measures that help to overcome credibility problems, which again relates to Latin America in the first place. Such measures should aim at reducing the considerable uncertainties foreign creditors and investors are presently facing whether governments will stick to a preannounced economic policy course. In this respect, it would be helpful if policy makers in capital-recipient countries were prepared to "tie their own hands" (on the following, see CALVO, FRENKEL [1992]). This may be achieved in various ways: First, the early steps of an economic reform program must be significant to signal the commitment of the government. Policy pronouncements accompanied by concrete actions, the reversal of which would be politically costly, are most helpful in this context. The higher the political costs of policy reversal, the higher the credibility of policy pronouncements and the lower the weight given by foreign capital providers to past policy failures.

Secondly, the policy-making apparatus should be designed in a way as to provide effective checks and balances in order to reduce time-inconsistency problems. An example for such internal legal constraints on ad-hoc interventions by the government is the establishment of an independent central bank. Thirdly, external legal constraints may be imposed on the government by entering into international agreements, e.g. by joining the GATT and complying to its rules. Fourthly, credibility may be enhanced by adopting an economic program that is supported by an international financial institution, i.e., by receiving the endorsement of independent experts, and by agreeing to the conditionality which

is typically associated with international financial support of reform programs. Of course, these methods to tie the government's hands are not mutually exclusive, but may rather reinforce each other in overcoming credibility problems.

2. Changes in the International Economic Environment and the Developing Countries' Attractiveness for Foreign Capital

It has been argued above that there is considerable room for domestic policy makers to overcome the currently prevailing "perverse" situation of capital-exporting developing countries. It may be objected, however, that costly adjustment efforts will largely remain useless in view of the widespread concern about the adequacy of global savings and their distribution. Unfavourable international capital-market conditions may indeed render it even more difficult for traditional capital recipients to attract foreign capital in the future.

Global savings have emerged as a major issue of concern in the last few years. First of all, this is due to the fact that national savings have declined in virtually all OECD countries (for a detailed discussion, see DEAN [1991]). Moreover, the United States have absorbed considerable savings from abroad since the emergence of huge budget deficits - and are still doing so. At the beginning of the 1990s, global competition for internationally mobile risk capital has further intensified. OECD countries' savings have increasingly been used domestically, most notably in Germany after unification. The completion of the European internal market may negatively affect other countries' relative locational advantages for international investors. And, finally, fresh demand for foreign capital has evolved in Central Europe and the former Soviet Union.

The topical question, to be shortly discussed subsequently, is whether developing countries can stand this fiercer competition for foreign capital, or whether they will be pushed onto the sidelines irrespective of the degree of domestic adjustment

efforts. The basic arguments may be exemplified by refering to the possible consequences of Western European integration (EC 1992) and the radical changes in Central and Eastern Europe after the collapse of the socialist regime. Both developments will effect far-reaching changes in the world economy (for a broader discussion, see e.g. HIEMENZ [1991]; NUNNENKAMP [1991]). As concerns international capital transfers, private capital in the form of bank loans and direct investment could be increasingly diverted from developing countries and concentrated in Europe. It would certainly be wrong to dismiss such fears out of hand. However, on closer inspection they prove to be undifferentiated and solely concentrated on the risks involved.

EC 1992: Any analysis of the effects of the EC-1992 program on developing countries at this stage is bound to be conjectural. The question of the EC's relations with the outside world is still unresolved to a significant extent. Investment flows will partly depend on whether the EC will look like a "fortress" for third countries or be a liberal trading partner. In any event, however, the EC has become an attractive location for foreign capital, which may indirectly affect the relative competitive position of developing countries (see also HIEMENZ et al. [1992]):

- Foreign investors may increasingly concentrate their activities on the EC and cut back on their engagement in other regions.
- In particular, investment may be relocated to the EC periphery because EC members such as Spain, Portugal, Ireland and Greece have a factor endowment similar to many developing countries.

Such risks should not be overrated, though. First, FDI in developing countries is still focused on the manufacturing sector, while FDI in the EC is increasingly shifting to the service sector. The significant differences in the sectoral distribution of FDI limit the adverse effects of higher FDI in the EC on FDI flows to the Third World. Secondly, most of the larger multinational enterprises have already adjusted their portfolios to the EC-1992 program so that the future impact may not be as great

[GITTELMAN, 1990]. Third, a relocation of investment to the benefit of countries such as Spain and Portugal would quickly be countered by rapidly increasing wage costs on the EC periphery as a result of the "Social Charter" of the Community. The same applies in the case of a revaluation of the currencies of the capital-importing EC countries, something which these countries would be very unlikely to be able to avoid, once they are fully integrated into the envisaged European Monetary Union.

Finally, the structural change which the removal of barriers to the free movement of goods and production factors will induce within the EC offers the opportunity for higher economic growth well into the 1990s. This would not only increase the EC's demand for imports from developing countries, but also the financial resources of the member countries available for capital transfers to developing countries. Such positive aspects of the EC-1992 program are often ignored in the current discussion.

The risks inherent in the EC-1992 program will probably affect the developing countries to different degrees. Similarly, only some of these countries will be able to grasp the opportunities offered by EC 1992. In view of the strong relation between trade and FDI (see also Section II.1.b), primarily the developing countries that are integrated into the international division of labour, and on which the EC's additional import demand will be concentrated, might benefit from larger FDI inflows. This may pose many Latin American countries at a serious disadvantage as compared to their competitors in East and Southeast Asia, unless the former open up towards world markets.

Eastern Europe: Similar conclusions probably apply with respect to the effects of the reforms in post-socialist countries on the developing countries.[1] It is true that Western donors are pre-

[1] Again an analytically sound assessment is hardly possible at the present stage; on first attempts in this direction, see OECD [1990].

pared to give considerable financial support to the reform process in Eastern Europe. Nevertheless, the risks for developing countries are kept within reasonable bounds, given the considerable transformation problems in Eastern Europe. It is unlikely that creditworthy developing countries will be squeezed out of the international capital market as a consequence of the emerging demand for private capital in post-socialist countries. There are tight limits on the access to international capital markets of East European reforming countries because of their existing high indebtedness in hard currency. Furthermore, the absorptive capacity for foreign capital in Eastern Europe is constrained in the short term by administrative bottlenecks, remaining ambiguity concerning property rights, etc.

There is no reason to believe that there will be a massive shift of FDI from the developing countries to Eastern Europe [UNIDO, 1990, p. 15]. In view of the infrastructural decay and the above mentioned bottlenecks, it is extremely doubtful that there will be an immediate FDI boom in the post-socialist countries. Even if this were to happen, it is unlikely that foreign investors would relinquish attractive locations in the Third World. First evidence suggests that future investment in Eastern Europe will be motivated primarily by the intention to penetrate the respective national markets, rather than serving as a platform for exports. Consequently, developing countries with growing domestic markets and cost advantages for export-oriented direct investment are unlikely to be negatively affected. The latter may rather benefit from new market opportunities in Eastern Europe. Again, risks and chances are unevenly distributed among developing countries. Recent attempts by European, and particularly German, companies to intensify their involvement in Asian developing countries, where they are currently underrepresented in comparison to their American and Japanese competitors [AGARWAL, 1988], are likely to continue, notwithstanding the developments in Eastern Europe. By contrast, it may become more difficult for Latin American economies to attract further domestic-market oriented FDI from Europe.

To summarize, the major changes in the international economic environment must not necessarily impair capital flows to developing countries. But the fiercer competition for foreign capital will, in all probability, lead to a further differentiation of the Third World. Far Eastern countries have implemented fairly liberal investment policies, opened up to world markets, and have become successful suppliers of manufactured exports. Moreover, they are expected to achieve relatively high growth rates of their GDP due to sound macroeconomic policies. As shown above, these are major determinants of the attractiveness for foreign capital. Hence, these countries will be able to maintain their competitive position, if not indeed improve upon it, as the anticipated changes in the world economy create more opportunities than risks for them.

The prospects of Latin America are more ambiguous. The negative impact of economic policy failures on their relative competitive position will probably become even stronger than in the past. Hence, they will maintain, or even raise, their share of capital flows from industrialized countries only through successful stabilization, structural reforms and restoring credibility. The intensified worldwide competition for foreign capital requires immediate action by developing countries with impaired attractiveness for foreign capital.

III. Brazil's Position in the International Competition for Foreign Capital

1. Impaired Attractiveness for Foreign Capital

Until the early 1980s, foreign investors and creditors were eager to engage in Brazil in order to participate in the "Brazilian Economic Miracle" of high growth and booming exports. The large though untapped domestic market as well as the country's endowment with vast natural resources and semi-skilled labour offered favourable profit opportunities. Consequently, foreign loans were

easily available, and the country was considered a priority location for FDI.

The situation has changed fundamentally in the 1980s. With the eruption of the debt crisis, it became evident that the domestic market potential as well as the availability of natural resources and labour were insufficient ingredients to guarantee high returns on investment in the longer run. External shocks and misguided economic policies rendered it difficult to sustain the impressive growth of per-capita income and exports of the 1970s. Foreign investors and creditors became increasingly reluctant to transfer further capital to Brazil.

The change in perceptions is most dramatically reflected by the deterioration of Brazil's international creditworthiness. Secondary market prices for Brazilian debt, which were still at a level of 75 per cent of face value in 1986, declined steadily to a bottom value of only 22 per cent at the end of 1989 (Table V.2, Appendix I); the subsequent slight recovery (32 per cent in mid-1991) did not prevent that Brazil was among the debtor countries with the highest secondary market discounts in 1991. In the 1982-1989 period, the country suffered from negative net transfers of about US$ 32 billion as a consequence of sharply reduced bank lending (Table II.4). In addition, annual FDI inflows (reinvestment included) dwindled from US$ 2.7 billion in 1982 to US$ 0.35 billion in 1986 (Table III.4). The temporary recovery of FDI in 1987-1989 was largely due to debt conversions.[1] In 1990, FDI inflows amounted to less than 18 per cent of 1982-flows.

2. Strategic Choices

The Brazilian government has basically three options to deal with the current situation of impaired attractiveness for foreign capital. The <u>first option</u> follows from the proposition of some

[1] 1988 was a record year for debt-swap operations. Altogether US$ 6.7 billion worth of debt was eliminated in this year. The pace of debt-equity swaps slowed considerably in 1989 [EIU, a, No. 4, 1989, p. 14]. See also PORST [1991, pp. 68f.].

observers that, from now on, Brazil should exclusively rely on internal resources to finance necessary investments.[1] This would imply a deliberate isolation from international capital markets, based on the overly pessimistic assumption that any attempt of Brazil to regain access to foreign investment funds is bound to fail. Ultimately, this proposition implies that Brazil should repudiate all its foreign payment obligations. It would not make sense to transfer any debt-service payments if it were unreasonable to expect any benefits from such a behaviour, e.g. in terms of renewed lending by foreign private creditors.

The critical question is whether the assumptions underlying this first option are valid. This is extremely unlikely to be the case. Notwithstanding the recent progress in raising national savings,[2] an exclusive reliance on internal resources will, in all probability, result in a low-growth scenario. Savings in Brazil are extremely short term, due to inflationary expectations and a more general lack of confidence as regards government policies. They can hardly be used to finance longer-term investment projects. With time deposits of 30 days and more being the exception, it is virtually impossible for financial intermediaries to extend medium- and long-term credits in national currency (see also PORST [1991, pp. 136ff.]). Moreover, a deliberate isolation from international capital markets by repudiating external debt is going to add to the adjustment costs to be borne internally. This argument would hold even if it were true that the honouring of contractual debt obligations does not induce new bank lending in the short run. The government's stance towards the foreign debt issue is also relevant with respect to other types of external finance. Debtor countries following the first option will not get financial assistance from the international financial institutions. As shown above, further FDI inflows are also discouraged

---

[1] For example, US-professor Jeffrey SACHS adhered to such a position at a conference held in São Paulo in 1989.

[2] According to IBGE-data, gross savings increased from the bottom figure of 13.3 per cent of GNP in 1983 to an average figure of about 23 per cent in 1987-1990.

by debtor-creditor confrontation. Reduced FDI inflows, in turn, render it increasingly difficult to modernize the capital stock and, thereby, improve labour productivity and international competitiveness. The growth prospects will be further impaired if domestic investors react to non-cooperative debt policies in a similar way as foreign investors, i.e. by transfering their capital abroad rather than investing at home (capital flight). The fact that capital flight is mainly to be observed in countries with impaired attractiveness for foreign capital strongly suggests that such parallel behaviour is likely to happen.

The significant risk of a shortage of investment funds has prevented most governments from opting for outright debt repudiation. Also Brazil rather followed the second option of partial default, temporary and unilateral debt-service moratoria, and protracted debt renegotiations with its foreign creditors. As a result, the country ran considerable interest arrears on commercial bank debt (March 1990: US$ 5.3 billion [INSTITUTE OF INTERNATIONAL FINANCE, 1990]; end-1990: US$ 8.4 billion [EIU, a, No. 1, 1991]). Underlying is the agreement among Brazilian politicians that if they had to choose between paying the external debt and domestic economic growth, they would choose to grow. However, it is highly doubtful whether there is such a simple choice, especially if it is true that foreign capital continues to be required to fully exhaust the country's growth potential.

Brazil represents a telling example of negative net transfers (out of bank loans) being due to reduced credit disbursements, rather than a higher debt-service burden (Table II.4). Actual annual debt-service payments (interest and amortization) in the period 1985-1989 amounted, on average, to less than half the 1982-figure. At the same time, credit disbursements virtually dried up. A further reduction of debt-service payments - achieved by unilateral action or by using the threat of unilateral action to enforce creditor concessions - would, of course, save the country resources which could be invested. However, the overall effects of this option on total investment funds and, thereby, on

the medium-term growth prospects are probably not too different from outright debt repudiation:

- Brazil might be cut off from international bank lending for long, after credit losses have been realized by its creditors. Any defensive lending would be discontinued, since the incentives of creditors to protect outstanding claims through additional loans are further weakened by non-cooperative debt policies.
- As in the case of debt repudiation, the adverse effects of non-cooperative debt policies are not confined to Brazil's relations with foreign commercial banks. Foreign investment would be discouraged as well, and creditor governments as well as international financial institutions would hardly be willing to grant official financial assistance under conditions of persistent debtor-creditor confrontation.[1]
- Finally, it remains highly doubtful whether any domestic resources retained through partial default will be invested productively, unless the general investment climate is improved. Under prevailing economic policy conditions, they may rather be used for consumption or fuel capital flight.[2]

The critical assessment of unilaterally enforced debt-service reduction does not rule out mutually agreed debt concessions. A reduction of contractual obligations would trigger an investment response that is in excess of that which would result solely from the larger domestic availability of resources under the second option, once the perceptions of country risk are lowered [ELERIAN, 1991, p. 5]. Hence, the third option of Brazil requires a two-sided approach, whereby the implementation of sound economic

---

[1] For example, the IMF was believed to have reached an agreement with Brazil in September 1990 on an economic program which the Fund was willing to support with a stand-by loan of some US$ 2 billion. However, Brazil's interest arrears acted as a barrier to the signing of the program [EIU, a, No. 1, 1991, p. 28].

[2] It has been estimated that Brazil's unreported foreign assets amount to about one third of the country's external debt [PORST, 1991, p. 72].

policies by the Brazilian government would be supported by voluntary and market-based debt and debt-service reduction operations.

The third option implies that debt negotiations take place on the basis of a consistent and mutually agreed macroeconomic framework. In particular, a cooperative debt strategy has to take into account that Brazil's foreign debt problem is to a large extent a fiscal problem, i.e. a problem of an overindebted government. The concept of the public sector's fiscal payment capacity is of relevance here (for a detailed discussion, see OHANA, MUSSI [1991]). A sustainable balance has to be struck between revenue-increasing measures (e.g. improved tax collection), cuts in unproductive government expenditures, basic public investment requirements, and debt-service payments. Brazil and its creditors may refer to a third party, e.g. the IMF, as a mediator to reach an agreement on measures which may strengthen the government's payment capacity on the one hand, and on creditor concessions allowing for growth-oriented public investment and fiscal consolidation during the difficult transition period on the other hand.

The experiences of Chile and Mexico point to major advantages of a cooperative approach towards solving foreign debt problems [EL-ERIAN, 1991]:

- Through a menu of market-based debt operations, these countries succeeded to alleviate their debt burden substantially.[1]
- Debt-overhang concerns of foreign capital providers were reduced. Secondary market discounts fell to about 10 per cent in the case of Chile, while secondary market prices for bank claims on Mexico improved from less than 40 per cent of face value in 1989 to 55 per cent in mid-1991 (Table V.2).

[1] This menu included voluntary market-based debt-equity conversions, direct cash buybacks, conversions of debt into collateralized discount bonds, reduced interest par bonds, etc. In this way, Chile reduced its debt to banks by more than half in four years. Gross bank-debt reduction through conversions into bonds amounted to US$ 15 billion in the case of Mexico.

- International credit rationing has been gradually relaxed. Spontaneous long-term bank lending is slowly recovering, particularly in the form of trade and project financing which Chile, for example, used as the main source of voluntary external funding. Recently, there has been a significant increase in bond activity and FDI.[1]
- Recent estimates suggest a significant repatriation of flight capital,[2] which again points to parallel behaviour of foreign and domestic investors.
- The share of private investment in GDP increased from the bottom value of 11 per cent in 1983 to 14.4 per cent in 1989 in Mexico, and from 4.9 to 15.5 per cent in the case of Chile [PFEFFERMANN, MADARASSY, 1991].

The restoration of access to voluntary capital-market financing has clear benefits. Inter alia, it provides a wide and flexible range of financing instruments to fund productive investment, and signals reduced credit and transfer risks to economic agents in other international and domestic markets. The experiences of Chile and Mexico strongly suggest that market re-entry is a realistic option once the domestic policy framework is improved. In Brazil, important prerequisites for an improved attractiveness for foreign capital are still lacking. Most fundamentally, credibility problems have to be overcome to restore the confidence of foreign and domestic investors. In this context, the policy conclusions of Section II.1.d apply (see also CARNEIRO, WERNECK [1989]). More specifically, a serious attempt must be made to tackle the internal bottlenecks to an improved attractiveness for foreign capital in particular policy areas. The subsequent evaluation of Brazil's relative competitive position shall help to

---

[1] For example, bond issues by Mexican public and private sector companies exceeded US$ 1.5 billion in the first five months of 1991. FDI inflows registered in Mexico in 1989-1990 were twice the level recorded in 1987-1988 [EL-ERIAN, 1991, p. 3].

[2] A study by Chartered West LB Ltd. estimated net total inflows of flight capital of US$ 14 billion for Chile, Mexico and Venezuela in 1989-1990 (as compared to outflows of US$ 4.5 billion in 1987-1988).

identify such bottlenecks and provides first clues how to improve the country's position in worldwide competition for risk capital.

3. The Competitive Position of Brazil: Major Bottlenecks

a. An Overview on Competitiveness

The best known and most comprehensive assessment of international competitiveness is provided by the annual "World Competitiveness Reports" compiled by the World Economic Forum in Geneva [WORLD ECONOMIC FORUM, a]. The approach adopted is to identify a set of indicators of international competitiveness and to compare these indicators across countries. More than 300 indicators are compressed into 10 baskets ranging from the dynamism of the economy to socio-political stability. About one third of the indicators is based on "learned judgement", i.e. the opinions of businessmen and other experts, rather than on hard data.

The World Competitiveness Reports portray the competitive position of Brazil relative to nine other newly industrializing countries in Asia and Latin America.[1] An overall picture is provided by Figure 1. The ranking of part A is calculated according to standard deviation values of all (quantitative and qualitative) criteria considered in the report. The relative competitiveness of Brazil is shown to be extremely poor. Moreover, the country is the tail-light (and the distance to major competitors is more pronounced) if the ranking is based solely on qualitative criteria, i.e. expert perceptions on competitive strengths and weaknesses (part B).

Table 6 presents the ranking in terms of the 10 principal factors (baskets) of competitiveness, whereby a rank of "1" ("10") reveals the most favourable (unfavourable) position within the sample.[2] In 1990, Brazil was surpassed by all other sample economies with respect to five principal factors. Its rank position

---

[1] A separate ranking is provided for 22 developed countries.

[2] For 1986 the most unfavourable position is given by "9", since Indonesia was not included.

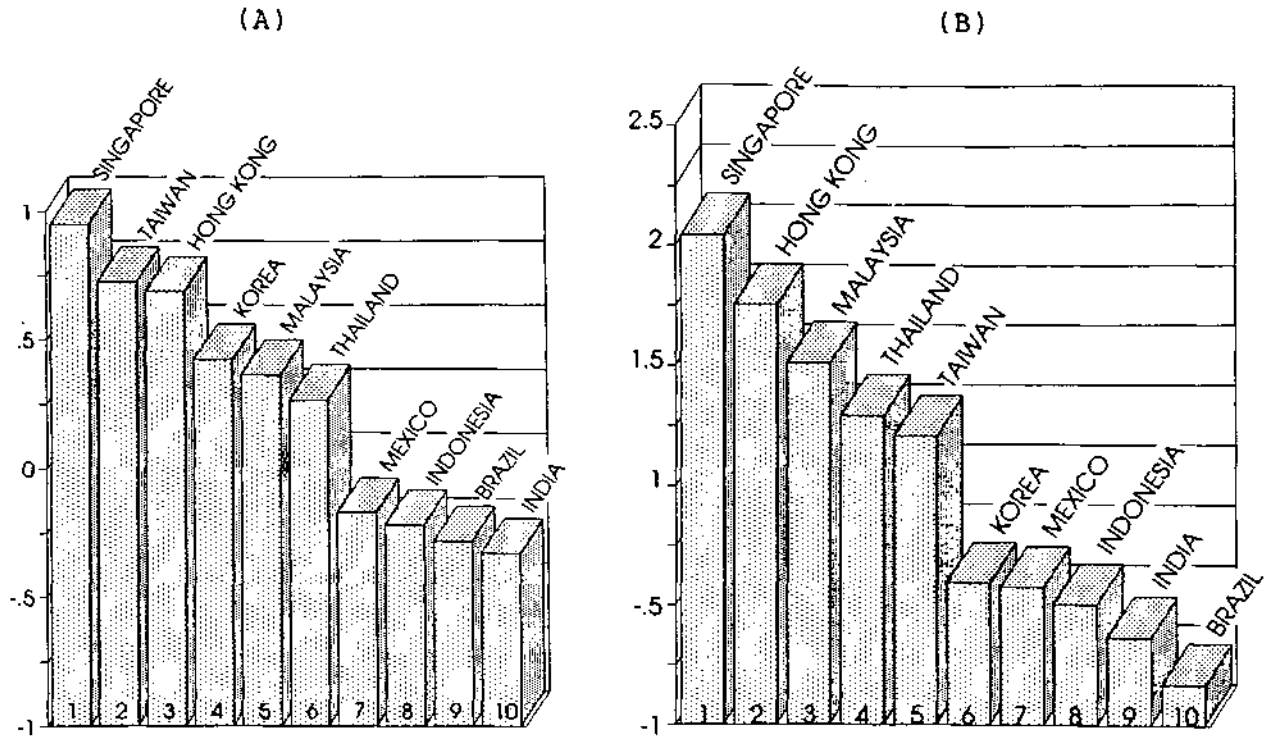
Table 6 - Rankings on Principal Factors of Competitiveness,[a] 1986 and 1990

	Brazil 1986	Brazil 1990	Hong Kong	India	Indonesia	Korea, Rep.	Malaysia	Mexico	Singapore	Taiwan	Thailand
Dynamism of the economy	8	9	4	6	8	2	5	10	3	1	7
Industrial efficiency	9	10	3	9	7	6	5	8	1	4	2
Market orientation	7	6	1	8	9	5	4	10	2	3	7
Financial dynamism	6	10	2	8	6	4	7	9	1	3	5
Human resources	6	7	4	10	9	3	5	8	1	2	6
Impact of the state	6	10	1	8	9	7	4	5	2	6	3
Natural endowment utilization	2	2	6	9	3	7	1	4	10	8	5
International orientation	9	8	2	10	9	5	6	7	1	3	4
Future orientation	5	10	8	4	9	3	6	7	2	1	5
Socio-political stability	7	10	2	9	8	6	3	7	1	4	5

[a]For explanations, see text. For all countries, except Brazil, only the 1990-rankings are presented. Rank 1(10) stands for the most (least) competitive country.

Source: WORLD ECONOMIC FORUM [a].

Figure 1 - The Competitive Position of Brazil vis-à-vis Selected Newly Industrializing Countries, 1990



Source: WORLD ECONOMIC FORUM [a, 1990].

was only slightly better in most of the remaining areas.[1] Moreover, the country's ranking deteriorated significantly between 1986 and 1990 as concerns financial dynamism, state interference, future orientation, and socio-political stability.

A closer inspection of individual indicators underlying the principal factors of competitiveness provides more detailed insights on specific adjustment needs in Brazil. Appendix III provides a list of items in which Brazil's position vis-à-vis its major competitors was found to be most unfavourable (rank position 8 to 10). It is evident from this list that most of the bottlenecks towards an improved competitiveness are not exogenous to the policy-making apparatus, but could be influenced or even removed by appropriate policy measures.

---

[1] Not surprisingly, the natural resource endowment provided a notable exception.

Appendix III has to be selective due to the large number of indicators presented in the World Competitiveness Reports. More importantly, the relative weight of different indicators remains open to question.[1] This renders it difficult to identify those policy areas that could be of overriding importance if Brazil were determined to improve its position in the competition for risk capital. However, a recent study proves to be helpful in making such a choice [HIEMENZ, NUNNENKAMP et al., 1991]. By means of pooled cross-country regressions, it was found that international competitiveness for risk capital can be explained by a limited set of policy and endowment variables. In particular, the estimates suggest that macroeconomic instability and policy-induced distortions of goods and factor markets significantly reduce the locational advantages of individual countries in the international competition for investable funds. The subsequent discussion thus focuses on these policy areas.

b. Macroeconomic Instability

In the above mentioned study of HIEMENZ, NUNNENKAMP et al. [1991], macroeconomic stability was shown to be of crucial importance in determining the overall investment climate in particular countries. This result is hardly surprising. Fragile macroeconomic conditions give rise to increased uncertainty of potential investors and their financiers, and render it more difficult to assess the profitability of longer-term investment and finan-

---

[1] The relative importance of each basket of indicators and individual indicators within each basket - as expressed by the applied weighting scheme - is assumed by the WORLD ECONOMIC FORUM rather than estimated empirically. Another flaw is that many indicators are not very precise from an analytical point of view. There are considerable overlaps between indicators, and double-counting is due to the fact that the indicators capture both the causes and effects of competitiveness.

cing.[1] Uncertainties may result from instabilities prevailing in the country's domestic economy and in its international economic relations. Therefore, indicators of both types of instability have to be considered. The subsequent variables appear to be most relevant:[2]

- Inflation: High and volatile inflation rates represent an obvious sign of unsound management of the economy [GREENE, VILLANUEVA, 1991; SCHNEIDER, FREY, 1985].
- Budget deficit: High and rising public deficits fuel inflationary expectations or make private agents anticipate a tighter credit squeeze and crowding out in the future.
- Foreign debt rescheduling: Reschedulings point to the prevalence of a debt overhang. Disincentives for capital inflows and investment result from the anticipation of private agents that incremental income will be subject to higher taxation [KRUGMAN, 1988; SACHS, 1989].
- Exchange-rate fluctuation: High volatility of the key price concerning a country's external relations creates considerable uncertainties with respect to both trade and capital flows.

The ranking of 26 mainly middle-income developing countries with respect to the above four indicators reveals Brazil's competitive position in terms of macroeconomic instability in the second half of the 1980s (Table 7).[3] Evidently, Brazil was among the most

---

[1] Additional uncertainty is created in Brazil by the highly complex and sometimes inconsistent regulatory framework. Moreover, this framework is subject to frequent and erratic changes, and the outcome of legal decisions is highly uncertain (for details, see PORST [1991, pp. 78ff.]). As long as uncertainties remain manageable, higher risk premia will be asked for. Such a strategy is no longer optimal if uncertainties are becoming extremely strong. Under such conditions, investors and capital providers will rather refrain from an engagement altogether or apply a rationing strategy.

[2] For a detailed discussion of the underlying economic rationale and of additional indicators, see HIEMENZ, NUNNENKAMP et al. [1991, Chapter III].

[3] For reasons of comparability, Table 7 refers to the period 1985-1988, since more recent data were lacking for several sample countries.

Table 7 - Brazil's Ranking in Terms of Macroeconomic Instability within a Sample of 26 Developing Countries, 1985-1988[a]

	Inflation		Budget deficit[b]		Rescheduling[c]		Exchange-rate volatility[d]	
	p.c.	rank	p.c.	rank	p.c.	rank	st.dev.	rank
Argentina	309.0	2	-4.45	11	11.8	5	1.33	19
Brazil	314.5	1	-11.89	1	3.7	9	0.98	12
Chile	23.6	9	-0.69	20	15.8	4	0.49	1
Colombia	26.2	8	-1.54	17	0.0	19	0.77	7
Costa Rica	17.4	11	-3.64	13	6.8	8	0.83	10
Ecuador	36.3	7	-0.66	21	18.7	1	1.25	18
Guatemala	20.0	10	-1.05	18	1.2	11	1.04	13
Hong Kong	5.4	20	2.25	26	0.0	19	1.65	24
India	7.7	16	-8.49	5	0.0	19	1.55	21
Indonesia	6.8	17	-1.90	16	0.0	19	0.52	2
Kenya	8.6	15	-4.92	9	0.0	19	1.48	20
Korea, Rep.	4.1	22	0.20	24	0.0	19	1.62	23
Malaysia	0.1	26	-7.46	7	0.0	19	1.55	22
Mexico	95.3	4	-10.13	3	17.5	2	0.54	3
Pakistan	5.4	21	-7.80	6	0.0	19	0.82	8
Peru	219.9	3	-3.68	12	2.9	10	0.62	4
Philippines	9.1	13	-2.88	14	9.9	6	1.09	15
Singapore	0.3	25	-0.47	22	0.0	19	2.30	25
Sri Lanka	6.1	18	-10.30	2	0.0	19	0.96	11
Taiwan	1.4	24	1.23	25	0.0	19	2.95	26
Thailand	3.8	23	-2.82	15	0.0	19	1.23	17
Tunisia	5.5	19	-5.31	8	0.0	19	1.07	14
Turkey	44.7	6	-4.63	10	0.0	19	0.82	9
Uruguay	70.6	5	-1.05	19	8.4	7	1.21	16
Venezuela	16.2	12	-0.26	23	15.9	3	0.66	5
Zimbabwe	8.7	14	-8.98	4	0.0	19	0.77	6

[a]Period averages and ranks; 1(26) is attached to the country with the worst (highest) attractiveness in terms of the respective indicator. - [b]In per cent of GDP; positive in the case of surplus. - [c]Average amount of debt rescheduled in periods t, t-1, and t-2 in per cent of GDP. - [d]Standard deviation of the real exchange rate over the past five years; low (high) values if exchange-rate volatility is above (below) the sample average.

Source: HIEMENZ, NUNNENKAMP et al. [1991].

unstable sample countries. The country represented the tail-light as concerns average annual inflation rates and the magnitude of budget deficits. Taking the four indicators together, Brazil achieved only 23 out of 97 possible ranking points. In this respect, only Mexico performed even worse during 1985-1988.

In contrast to Mexico, it is unlikely that the position of Brazil has improved considerably since the late 1980s. The evidence rather suggests that macroeconomic instability continued to be a major problem:

- Notwithstanding periodic price freezes and controls, the annual average of consumer-price inflation was even higher in 1989-1990 than before.[1] After the defreezing of prices in mid-1991, monthly inflation rates again returned quickly to double-digit levels.

- An astounding turnaround was achieved in the central government finances. In sharp contrast to the deficit of over 9 per cent of GDP in the financial year 1989, a surplus of around 1 per cent of GDP was reported for 1990 [EIU, a, No. 2, 1991, p. 9]. However, this drastic improvement is hardly sustainable since it was mainly achieved through extraordinary measures and transitory influences such as the accumulation of arrears on the external debt and the deferment of payments on the internal debt (see also OHANA, MUSSI [1991]).[2] No new structural measures were taken up to mid-1991 to consolidate the fiscal position. Hence, the EIU estimated a "latent" operational deficit in the order of 4 per cent of GDP.

- In contrast to many debtor countries, Brazil's debt situation deteriorated further, the huge amount of arrears being the clearest indication. Another indication is capital flight (conservative estimate for 1988: US$ 4 billion [EIU, a, No. 2,

---

[1] According to EIU [a, No. 3, 1991, p. 3], the annual average figures amounted to 1287 and 2938 per cent in 1989 and 1990 respectively.

[2] Expenditures on federal debt servicing fell by 88 per cent in real terms; their share in total expenditure fell from 33.8 per cent to 6.1 per cent [EIU, a, No. 1, 1991, p. 14].

1989, p. 5]) through overinvoicing of imports and underinvoicing of exports, while other debtors succeeded to induce a reflow of flight capital.

- As concerns exchange-rate volatility, recent evidence suggests increased rather than reduced instability. The index of the real effective exchange rate (deflated by wholesale prices) plummeted from 1988 = 100 to around 50 in March 1990, indicating a drastic real appreciation of the domestic currency. The subsequent increase to 93 (January 1991) was not sustained in the next months (March 1991: 78; July 1991: 81 [EIU, a, No. 2, 1991, p. 17 and No. 3, 1991, p. 15].

All in all, macroeconomic instability continues to be a major stumbling bloc to an improvement of Brazil's attractiveness for foreign capital. It remains the centerpiece of macroeconomic reforms to break inflationary expectations. For this end, fiscal consolidation must be sustainable, i.e. based on a permanent restructuring of government revenues and expenditures. Success at the inflation front would also help to stabilize real exchange rates and, thereby, plug another source of macroeconomic instability. Without achieving greater macroeconomic stability, the credibility of any plan towards structural reform is bound to be seriously eroded (see also CARNEIRO, WERNECK [1989]).

c. Goods Markets Policies

While it is relatively easy to evaluate macroeconomic stability in a cross-country perspective, it is much more difficult to construct indicators on policy-induced goods markets distortions, which could then be compared across countries competing for foreign capital (for a more detailed discussion, see HIEMENZ, NUNNENKAMP et al. [1991]). Principally, distortions in both the domestic and the foreign rate of transformation have to be considered. They tend to reduce the overall efficiency of production and, thereby, the expected long-term rate of return to investment. Hence, a higher degree of policy-induced goods markets distortions can reasonably be assumed to lead to impaired

attractiveness for risk capital, at least in the longer run.

Distortions of the domestic rate of transformation can arise from discriminatory taxes and subsidies, administrative price fixing, and similar measures which interfere with the relative profitability of production among sectors. Restrictive entry and exit regulations (e.g. by nationality), public monopolies and officially sanctioned cartels may further reduce the locational advantages of a country for foreign capital. Distortions of the foreign rate of transformation may be caused by trade policy interventions such as tariffs, trade taxes and subsidies, quantitative controls and other types of non-tariff trade barriers, as well as state trading. Ample empirical evidence suggests that excessive trade interventions induce an inefficient use of resources which may ultimately undermine a country's position in the international competition for risk capital.

The empirical verification of goods markets distortions suffers from conceptual flaws and data constraints.[1] Therefore, the relative competitive position of Brazil within the sample of 26 developing countries has to be interpreted with great care. Inter alia, the following indicators were considered by HIEMENZ, NUNNENKAMP et al. [1991]:

- The sum of all indirect taxes levied on goods and services plus all subsidies (in per cent of government revenues) was taken as a proxy for the distortionary impact of government interventions in domestic prices and protection costs.[2] In the Brazilian case, this indicator improved dramatically during the 1980s so that the country moved from the bottom (1979-1981) to the top of the sample (1985-1988). As shown below, however, price

---

[1] The former are due to the fact that distortionary policy interventions cannot be separated unambiguously from measures that aim at correcting market imperfections (e.g. externalities).

[2] An obvious disadvantage, resulting from data problems, is the inclusion of non-distortionary taxes such as a uniform value-added tax.

distortions in Brazil are mainly due to non-tax related government interventions.

- The share of non-tax revenues (comprising administrative fees and entrepreneurial income from government property) in total government revenues was considered to be an indication of excessive interference of the government with private sector activities. In this respect, Brazil ranked among the five least competitive sample countries throughout the 1980s. However, non-tax revenues in this country consisted primarily of property income from social security funds [IMF, Government Finance Statistics Yearbook 1990, p. 176], which may or may not deter private investors.
- The ratio of non-fuel imports to GDP was taken as a measure for the openness of the sample countries to foreign competition. With an average ratio of less than 4 per cent in 1985-1988, Brazil was clearly the least open economy. The low indicator value for Brazil can at least partly be attributed to a large country bias.
- By contrast, Brazil would appear to be relatively open if the degree of trade distortions were approximated by government revenues derived from trade taxes (in per cent of total government revenues). In the case of Brazil, however, the underlying assumption that tariff revenues and non-tariff interventions are highly correlated, so that the former provide a correct measure for openness, is not valid.

The above analysis reveals that the competitive position of Brazil with respect to goods markets distortions is difficult to assess in quantitative terms in a cross-country perspective. Nevertheless, there is strong evidence that policy interventions in goods markets contributed considerably to the country's impaired attractiveness for foreign capital. The broader approach adopted by the WORLD ECONOMIC FORUM [a], which also includes the qualitative assessments of experts, clearly points to competitive disadvantages of Brazil vis-à-vis nine major competitors. State intervention is considered to be most pervasive in Brazil, and

international orientation is revealed to be weaker only in India and Indonesia (Table 6). More specifically, the ranking of Brazil is extremely unfavourable as regards particular indicators of goods markets distortions (see Appendix III). Most noteworthy are: entry regulations resulting in oligopolistic market structures (see also PORST [1991, p. 53]), price regulations, unequal fiscal treatment among enterprises, high trade barriers and restrictive local-content requirements.

Further evidence on policy-induced goods markets distortions has been presented in country-specific analyses (see e.g. EIU [a, var. iss.]; CARNEIRO, WERNECK [1989]; PORST [1991]). According to CARNEIRO, WERNECK [1989], 3-4 per cent of GDP was transfered each year to the private sector in the form of government expenditures or forgone revenue during the 1980s. To a large degree, these transfers were selective and discriminatory. Examples were the plethora of fiscal exemptions, as well as cheap inputs and special credit facilities for so-called priority sectors. The applied import-substitution strategy "implied the choice of selected capitalists which were eligible to receive substantial transfers from the public vaults. In return, the level of direct bureaucratic controls over imports, prices and export permits has probably never been so high and widespread in the Brazilian economy" [ibid, pp. 26f.].

More recently, some goods markets distortions were relaxed while the government continued to resort to periodic domestic price controls. Since the late 1980s, the government has lowered import tariffs quite considerably (most notably for industrial inputs). The number of prohibited import items has been reduced, quantitative restrictions have been relaxed, financing restrictions on capital goods imports have been removed, and selective export incentives (BEFIEX) have been phased out. Most importantly, the extensive system of discretionary and non-tariff barriers has been tackled.[1] These measures were certainly steps in the right

[1] An important administrative change was the abolition of CACEX in 1990, which may have reduced uncertainties about the future course of foreign trade policy.

direction, i.e. to improve the Brazilian industry's competitiveness by helping it to lower production costs. However, the sustainability of trade liberalization is open to question as long as the domestic currency is overvalued in real terms, thereby putting considerable pressure on the balance of payments. Substantial exchange-rate overvaluation was observed e.g. in the last quarter of 1989 and the first quarter of 1990 [EIU, a, var. iss.].[1]

Interventionist price policies persisted, however, at the internal front. The Summer Plan of early 1989 represented another attempt to tackle run-away inflation through a freeze on the prices of 180 basic products. Again, serious price distortions emerged, combined with speculative buying and hoarding. Erratic price-policy changes continued into the Collor-administration.[2] Although formal price controls were removed in 1990, prices remained policed with hundreds of companies being forced to submit monthly reports on production costs and prices, and the government being committed to prevent "abusive" pricing [EIU, a, No. 3, 1990, p. 9]. In another abrupt change of course, the government adopted a new price freeze in early 1991 (the fifth since 1986) after inflation had soared and attempts to form a social pact (Entendimento Nacional) had failed.

Arguably, the latest price freeze has not been used as a substitute for serious reforms, as in the case of former freezes [EIU, a, No. 1, 1991, p. 10]. As shown above, some of the major causes of persistent inflation have indeed been tackled through fiscal restraint, deregulation and trade liberalization. However, double-digit monthly inflation returned after the defreezing of prices, and already in August 1991 there were rumours of a new shock plan. This indicates that there is still a serious lack of

---

[1] The exchange rate was freed in March 1990. In the presence of foreign exchange controls, however, this is only a first step towards undistorted exchange rates.

[2] For example, direction was changed and price controls were removed in July 1990, after it had been announced in March that maximum price increases would be set for each month.

credibility and consistency of Brazilian economic policies. Credibility problems arise, for example, because the fiscal consolidation is regarded unsustainable by economic agents (see also Section III.3.b). Moreover, attempts of far-reaching trade liberalization are undermined unless a consistent exchange-rate policy allows for competitive real exchange rates. In other words, sustainable macro stabilization and consistent structural reforms have to go hand in hand in order to restore the confidence of private agents in general, and the attractiveness for foreign capital in particular.

d. Factor Market Conditions

Another major factor impacting on a country's competitive position in international capital markets are domestic capital and labour market conditions. As concerns the latter, it has frequently been argued that cheap labour represents a major element of a country's attractiveness for foreign capital (see the literature given in Section II.1.b). Notwithstanding relatively low unit-labour costs, however, a country may fail to become an attractive investment location if a particularly poor endowment with human capital is a binding constraint for economic development and/or ineffective collective bargaining arrangements lead to excessive labour market disputes. The competitive position of Brazil as regards the three major aspects of labour market conditions is evaluated in the following, before turning to domestic capital markets (for a detailed analysis of the Brazilian labour market, see SPINANGER [1988]).

Cross-country comparisons of unit-labour costs are flawed by conceptual and data problems (for a comprehensive discussion, see PICHT [1987b]). Although existing empirical findings mainly refer to the mid-1980s, they indicate important policy challenges facing the Brazilian government. Brazil had clear labour cost advantages in manufacturing industries such as iron and steel as well as automobile production during the 1970s, not only vis-à-vis industrialized countries but also vis-à-vis competitors

such as South Korea [PICHT, 1987b; FISCHER, NUNNENKAMP et al., 1988]. However, trends in unit-labour costs since the mid-1970s showed a rise of unit-labour costs in Brazil, whereas cost reductions were achieved e.g. in Korea, Mexico and Taiwan. Brazil's loss in unit-labour-cost advantages was partly due to relatively large increases in hourly labour costs, and partly due to an insufficient improvement of labour productivity. Most notably, Brazil's position was increasingly challenged by a small group of other newly industrializing countries.

This is rather unlikely to have changed significantly, notwithstanding temporary setbacks in manufacturing earnings in recent years. According to the WORLD ECONOMIC FORUM [a], Brazil's ranking continued to be extremely poor as far as labour productivity developments are concerned. The poor record in terms of R & D efforts and technological improvements points into the same direction (see Appendix III). Therefore, it is important to realize that discrepancies between wage and productivity developments may at least partly be traced to a wide range of labour market interventions. They comprise e.g.: minimum wages, regulations on effective working time and job termination, non-wage labour costs, etc. (SPINANGER [1988]; see also PORST [1991, pp. 126ff.]). Such policy measures may have contributed to the deterioration of Brazil's international competitive position, in particular vis-à-vis the country's competitors in Asia where labour markets have remained relatively free of policies either directly or indirectly increasing labour costs. Hence, labour market policies should be carefully reviewed and revised where necessary.

Such a review should include collective bargaining arrangements if they gave rise to excessive labour market unrest. Measured by the number of strikes and lockouts per worker in the manufacturing sector, Brazil ranked in a medium position among 21 sample countries in 1985-1988 [HIEMENZ, NUNNENKAMP et al., 1991, Table 17]. But this situation marked a significant deterioration of industrial relations during the 1980s. The number of strikes

and lockouts per 1000 workers soared from 1.7 in 1981 to 26.1 in 1987. Frequent strikes and unofficial stoppages continued to be a salient feature more recently [EIU, a, No. 2, 1989, p. 6], and 1990 saw "an increase in labour militancy" [ibid, No. 4, 1990, p. 7]. It is thus not surprising that Brazil ranked most unfavourably when experts were asked to which extent industrial relations in 10 newly industrializing countries were conducive to labour peace (WORLD ECONOMIC FORUM [a, 1990, p. 227]; see also Appendix III).

Brazil's competitive position is similarly weak as concerns its endowment with human capital, i.e. the third aspect of labour market conditions. The scarcity of skilled labour can be traced to the public education system and vocational training facilities which are both inadequate to meet the requirements of a competitive economy (see Appendix III).[1] Further evidence is provided by comparing the ratio of secondary school enrollees in per cent of the respective population age cohort among developing countries [HIEMENZ, NUNNENKAMP et al., 1991, Table 18]. During the 1980s, Brazil hardly succeeded to raise this ratio (1979-1984: 34-35 per cent; 1985-1988: 37 per cent). Consequently, Brazil ranked at the lower end of a sample of 26 countries in the late 1980s, and was even surpassed by countries with significantly lower per-capita income such as Colombia, Ecuador, Indonesia, Peru, the Philippines, Sri Lanka, and Zimbabwe.

In a summary assessment of labour market conditions in 95 countries, FROST & SULLIVAN [1988] placed Brazil in the least attractive country group. The ranking was based on the availability of adequate labour, the level of wages, and the flexibility in the use of labour. This unfavourable position of Brazil appears to be consistent with the evidence presented above.

As concerns domestic capital market conditions, the picture is similarly bleak. This is already evident from Brazil's ranking in

[1] See also EIU [b, p. 9]: "The quality of education has deteriorated dramatically since 1980".

terms of financial dynamism as shown by the WORLD ECONOMIC FORUM [a] (see also Table 6). Moreover, a further deterioration of Brazil's relative position is revealed by this organization over the 1986-1990 period. The tail-light position in 1990 results from the long list of individual indicators pointing to extremely poor financial market conditions (Appendix III). Three factors stand out: First of all, the Brazilian system of financial intermediation is generally deficient and does not meet the requirements of an internationally competitive economy. Banks play a limited role as a source of lending, and the range of financial alternatives available to enterprises is fairly narrow. Secondly, the government and state banks strongly interfere with the allocation of financial resources. Private sector companies, and particularly foreign enterprises (see also Section III.3.e), are at a disadvantage vis-à-vis the public sector in accessing capital markets. And, thirdly, lending for non-privileged enterprises is expensive. Short-term interest rates were typically very high in real terms in recent years (see e.g. EIU [a, No. 4, 1989, p. 10]), notwithstanding that the Constitution of 1988 commanded an upper limit of 12 per cent.

The lending possibilities of banks have often been further constrained in the context of stabilization programs. A freeze on lending was an element of the Summer Plan of early 1989. Similarly, commercial lending was curtailed by the Collor-Plan which asked the banks to use a significant share of their funds for buying privatization certificates (Certificados de Privatização). More generally, it is hardly possible to provide medium and long-term investment loans because savers prefer extremely short-term deposits (e.g. in the overnight market). It is thus not surprising that bank credits contracted in real terms over much of the 1980s [HIEMENZ, NUNNENKAMP et al, 1991, Table 13].

Financial deepening, proxied by the supply of broad money (M2) relative to GDP, was found to be particularly poor in Brazil. The country ranked at the bottom of the sample of 26 developing countries, and was again surpassed by many less advanced competitors

[ibid].[1] This unfavourable position has, of course, largely to be attributed to the highly inflationary environment in Brazil. Extremely high rates of inflation contributed to the demonetization of the economy. The evidence on financial deepening, hence, provides another indication of the interrelatedness of policy failures, and underlines the earlier conclusion that comprehensive and consistent reforms are required to improve Brazil's international competitiveness. Isolated financial market reforms will be of limited use unless macroeconomic instability is contained. At the same time, however, macro stabilization is unlikely to do the job alone. The structural deficiencies of the Brazilian financial system are clearly demonstrated by the fact that financial deepening was lower than in other Latin American countries which were plagued by similarly high inflation (e.g. Argentina and Peru).

e. Attitudes towards Foreign Direct Investment

Brazil's relative attractiveness for FDI has deteriorated during the 1980s, even though the country did not change dramatically with respect to its overall openness towards FDI.[2] This is because other major recipients of FDI in the Third World liberalized regulations to a considerable extent [UNCTC, 1988], leaving Brazil with a relatively poor image in recent years. The deterioration of Brazil's relative position is evident from Table 8, which compares the ranking of developing countries in 1980 and 1988 with respect to their openness towards FDI:

- The 1980-ranking is based on an assessment by the Ifo-Institute in Munich for 36 countries [OSTERKAMP, 1983]. This study covers various aspects of FDI regulations, e.g. restrictions on: the financing of FDI; locational choices; the use of imported and

---

[1] For example, the indicator values of the proxy of financial deepening were about twice and three times higher for Sri Lanka and Uruguay as compared to Brazil in the mid-1980s.

[2] The rather restrictive Leí da Informatica represented a notable exception.

Table 8 - Ranking of Developing Countries with Respect to Their Openness towards FDI[a], 1980 and 1988

	1980	1988	Change 1980-1988
Hong Kong	1	1	0
Singapore	2	1	-1
Tunisia	3	4	-1
Brazil	4	18	-14
Morocco	5	9	-4
Ivory Coast	6	7	-1
Thailand	7	5	2
Argentina	7	15	-8
Malaysia	9	9	0
Kenya	9	15	-6
Philippines	11	3	8
Mexico	12	13	-1
Colombia	13	6	7
Indonesia	14	14	0
India	15	17	-2
Pakistan	15	9	6
Peru	15	20	-5
Venezuela	18	18	0
Egypt	19	9	10
Nigeria	20	20	0
Korea, Rep.	21	7	14

[a]For explanations, see text. Only those countries are included for which both rankings were available. Rank 1(21) reveals the most open (closed) economy.

Source: OSTERKAMP [1983]; FROST & SULLIVAN [1988].

domestic inputs; employment opportunities; production technologies; production and distribution activities; pricing policies; capital and profit remittances. Additionally, tax rates, the administrative efficiency, uncertainties arising from dispute settlement and expropriation risks were evaluated.

- The 1988-ranking is constructed from an assessment by FROST & SULLIVAN [1988] for 95 countries. The nine criteria included in the ranking of Table 8 are similar to the 1980-assessment: controls on ownership, approval process, dispute settlement, employment of nationals, performance requirements, exchange controls, repatriation restrictions, investment incentives, and tax rates.

The two rankings of Table 8 are not strictly comparable, due to some differences in the selection of indicators and possible national biases in the evaluation.[1] However, the decline of Brazil from the top to the bottom of the sample is too pronounced to be only explained by such factors. A similarly drastic change in the ranking (in the opposite direction) is only observed for Korea, which opened up towards FDI in the 1980s. This supports the view that the liberalization of FDI regulations in major competing countries leaves much to be desired concerning Brazil's attractiveness for FDI.

On closer inspection of the various criteria underlying the 1988-ranking, some areas can be identified in which policy action is most urgently required to improve Brazil's relative position. Each country was scored by FROST & SULLIVAN [1988] on a 1-5 basis, with "1" being the least favourable and "5" being the most favourable score. The picture for Brazil is as follows (the average score of all 95 countries for the respective criterion is given as a reference measure in parentheses):

Score 4:

- Tax rates, i.e.: level of corporate taxes; discrimination against foreign firms in tax policy (average: 2.93);

Score 3:

- Controls on ownership, i.e.: percentage of ownership allowed; number of sectors in which ownership is permitted;[2] requirements for joint ventures and regulations specifying that foreign assets must be sold to local interests after a specified period of time (average: 3.44);
- Dispute settlement, i.e.: reliability of local courts and administrative agencies in resolving disputes; discrimination of foreign businesses vs. local interests; preferential treat-

[1] For example, the assessment of the Ifo-Institute is mainly based on "learned judgement" by German experts.

[2] Most importantly, foreign activities in mining are strictly limited [PORST, 1991, pp. 40 and 75].

ment of some foreign investors over others; availability of international dispute settlement for cases involving foreign business (average: 3.55);

Score 2:

- Approval process, i.e.: the amount of time and expense involved in obtaining required bureaucratic approvals; honesty and competence of the bureaucracy; de-facto requirements for local agents and cash outlays (average: 2.75);
- Employment of nationals, i.e.: the existence and enforcement of quotas mandating employment of host country nationals; requirements for local participation in management; residence requirements for foreign nationals intended to limit expatriate employment (average: 3.25);
- Performance requirements, i.e.: regulations concerning local content, offsetting part of imports with exports, countertrade, barter, and devoting a percentage of production to exports; regulations concerning the use and sharing of technology (average: 3.42);
- Exchange controls, i.e.: ease of access to the foreign exchange needed to conduct business; use of multiple exchange rates (average: 3.08);
- Repatriation restrictions, i.e.: severity of restrictions on repatriating profits and capital, including limitations and taxes (average: 3.56);
- Investment incentives, i.e.: scope and magnitude of incentives in the form of tax holidays, free trade zones, and subsidies (average: 3.39).

The scoring of Brazil was better than the average for only one criterion (tax rates). For six out of nine criteria, the country was posited in a very unfavourable category (score 2). The deviation from the sample average was most pronounced with respect to performance requirements and repatriation restrictions. More recent studies on the climate for foreign investment in Brazil suggest that the picture has not changed fundamentally since the

late 1980s [PORST, 1991].[1] One of the major concerns is that restrictions imposed on technology transfers may lead to a technological isolation of Brazil. Bottlenecks are mainly due to bureaucratic interference with licensing agreements, technology contracts and consultancy [ibid, p. 96].

The overall picture on FDI policies in Brazil indicates that reform requirements go far beyond the most recent steps to revive FDI. In late May 1991, a proposal permitting FDI in the Brazilian stock market was approved by the National Monetary Council. Until recently, foreign institutional investors could only buy Brazilian stocks through foreign equity funds established in the country. Similar possibilities for foreign companies and individuals are planned. Furthermore, a great potential for FDI is seen in the context of debt-equity conversions linked to privatization operations (see also EIU [a, No. 2, 1991, p. 15]). A Brazilian debt fund which intended to invest in privatized companies through debt conversion was in preparation in mid-1991 [WORLD BANK, 1991]. It was announced that debt-equity swaps will be accepted in privatization operations with a 25 per cent discount. Given secondary market notations for Brazilian debt of about one third of face value, this involves a considerable subsidization of investors. Therefore, the conclusions drawn in Section II.1.d apply. Most importantly, FDI promotion schemes must not be misunderstood as a substitute for a comprehensive review of restrictive FDI policies which have contributed to the country's impaired attractiveness for foreign risk capital.

---

[1] It is noteworthy, however, that PORST [1991, p. 81] draws a much more favourable picture as far as repatriation restrictions in Brazil are concerned. He points out that the government generally refrained from imposing transfer restrictions even when the foreign exchange situation was critical. Major exceptions were delayed remittances in 1989 and the blocking of dividend and profit remittances, which foreign investors had deposited in central-bank accounts, in March 1990 (Collor-Plan). Additional problems with which foreign investors are confronted in Brazil comprise: strictly limited access to local financing [EIU, b, p. 48; PORST, 1991, pp. 82f.], no access to subsidized BNDES-credits, and discrimination of foreign companies in public procurement.

IV. Summary and Conclusions

In the 1980s, developing countries - in particular in Latin America - were bypassed by international lenders and investors. Negative net transfers out of commercial bank lending represented the most serious problem facing Latin America since the outbreak of the debt crisis. Private creditor banks were no longer prepared to extend further credits so that even reduced debt-service payments could not prevent net transfers from turning negative.

On top of that, most developing countries lost their attractiveness as hosts of foreign direct investment (FDI) relative to industrialized countries. Latin American economies were significantly affected by the reorientation of FDI towards the industrialized world. The increase of official development finance remained by far insufficient to compensate the slump in private financial flows to this region.

The dismal financial situation of most developing countries, including Brazil, in the 1980s was mainly a consequence of the inherited debt problems and deteriorating economic as well as political conditions. Although far from being over, the debt situation has slightly improved most recently, which is partly due to debt-relief operations. Some debtor countries have attempted to stabilize their economies and implemented structural adjustment programs (e.g. Mexico). At the same time, net resource flows to developing countries recovered slowly from the seriously depressed level, and some heavily indebted countries regained access to the international capital market to a limited extent. Hence, most recent trends suggest that economic reforms in debtor countries were honoured by foreign creditors and investors by resuming capital transfers to these countries.

This recent experience supports previous cross-country analyses on the role of domestic economic policies in attracting foreign capital. Empirical results on the determinants of commercial bank lending to developing countries indicate that it pays for borro-

wers to implement adjustment programs in order to improve their economic performance. Private creditors reacted to adjustment efforts by easing credit constraints. This does not mean, however, that narrowly defined economic reforms are a sufficient condition for a resumption of bank lending on a voluntary basis. This qualification is particularly relevant for Latin America where credibility and consistency problems have to be tackled in the first instance.

Similar conclusions hold with respect to the attractiveness of developing countries for FDI. Foreign investors were ready to engage if the economic performance of a country offered good profit opportunities. Empirical evidence on German FDI challenges the widespread view that import protection by capital-recipient countries is a promising means to attract FDI in the longer run. Even fast growing economies with production cost advantages may, however, fail to revive FDI inflows when the government's stance towards foreign investors is overly restrictive and political and economic instabilities are expected to continue in the future.

In general, foreign investors and foreign creditors responded in a similar way to debt-related problems of capital-recipient countries, namely by limiting their engagement. This parallel behaviour renders it extremely difficult for debt-ridden Latin American countries to change their external financing structure in favour of FDI, unless the fundamental causes of impaired attractiveness for foreign capital are overcome. Furthermore, the economic performance effects of financial restructuring remain uncertain in the presence of government regulations that hinder an efficient use of debt and FDI inflows. This has important implications with respect to debt conversion operations. Most notably, highly subsidized - i.e. costly - debt-equity swaps must not be considered to be an alternative to revise economic policies that have led to an unproductive use of both types of foreign capital.

The empirical analyses on debt and FDI flows to developing countries suggest the following policy conclusions:

- Internal adjustment efforts are absolutely necessary to regain access to foreign capital. A fair degree of consensus has emerged as concerns the crucial ingredients of promising reform programs. Important elements are, e.g.: sustainable fiscal consolidation, tax enhancement, deregulation of domestic financial markets, competitive exchange rates, trade liberalization, and openness towards FDI.
- There is no reason to be overly pessimistic about the capital-inducing effects of domestic policy reform. Of course, it will take time to restore the confidence of creditors and investors once the credibility of governments has been substantially eroded. To this end, policy-makers should be prepared to tie their own hands, in order to reduce the uncertainties of economic agents whether governments will stick to a preannounced policy course.

These policy conclusions remain valid even though a shortage of global savings and the fiercer worldwide competition for investment funds may render it more difficult for developing countries to attract foreign capital in the future. It would be a self-defeating proposition to refrain from domestic adjustment efforts in view of unfavourable international capital market conditions. Quite the contrary: Only reform-minded countries will be able to stand the fiercer competition for foreign capital, as well as to contain the risks and to exploit the chances that emerge from the recent changes in the international economic environment.

Immediate action is required especially in those countries which are still suffering from a seriously impaired attractiveness for foreign capital. This applies to Brazil in the first instance, as the country appears to be lagging behind major competitors in implementing credible and consistent reforms. The assessment of different options to deal with the inherited debt problems of Brazil reveals that persistent debtor-creditor confrontation is likely to result in a low-growth scenario. Non-cooperative debt policies do not only discourage foreign creditors to resume lending, but also have adverse effects on other types of external

finance (multilateral financial assistance and FDI). Furthermore, it remains highly doubtful whether domestic resources retained through debt repudiation or partial default will be invested productively, unless the general investment climate is improved. Hence, Brazil is well advised to strive for an agreement by which the implementation of sound economic policies would be supported by voluntary debt and debt-service concessions. Experience suggests that capital market re-entry would be realistic under such circumstances.

To achieve such a deal, a serious attempt must be made to tackle the internal bottlenecks to an improved attractiveness for foreign capital. Ample evidence suggests that most of the factors that led to the deterioration of Brazil's relative competitive position in the past could be influenced or even removed by appropriate policy measures. The subsequent policy areas deserve priority attention:

- Macroeconomic stabilization: Without achieving greater macroeconomic stability, the credibility of any plan towards structural reform is bound to be seriously eroded. It remains the centerpiece of macroeconomic reforms to break inflationary expectations. To this end, fiscal consolidation must be sustainable, i.e. based on a growth-oriented restructuring of government revenues and expenditures. Success at the inflation front would also help to stabilize real exchange rates and, thereby, plug another source of macro instability.
- Goods markets policies: The government should continue to remove policy-induced goods markets distortions. The recent progress achieved in dismantling trade barriers must be sustained which, inter alia, requires to avoid exchange rate overvaluation. Furthermore, liberalization at the external front must be supplemented by discontinuing the tradition of interventionist price policies in domestic markets. Sustainable fiscal restraint is a major precondition in this respect.
- Factor market policies: The competitive position of Brazil in the global race for risk capital could also be improved if

labour market deficiencies were overcome. It appears illusory to expect that this could be achieved within short. Problems such as insufficient labour productivity, non-cooperative industrial relations and the shortage of human capital seem to be deep-routed in the socio-political climate of the country. However, this must not be regarded as an excuse to carefully review restrictive labour market regulations, and to evaluate the possibilities for restructuring government spending in favour of human-capital formation. Similarly, it may take time to overcome the structural deficiencies of domestic financial markets. But again there is scope for immediate policy action. Most importantly, discriminatory practices with regard to the allocation of financial resources should be discontinued.

- FDI policies: The recent liberalization of FDI regulations in major competing countries (e.g. in Asia) leaves much to be desired about Brazil's relative attractiveness for FDI. Reform requirements go beyond the most recent steps to revive FDI. The first priority should not be given to costly promotion schemes, e.g. a subsidization of foreign investors in the context of debt-equity swaps. It appears more promising to relax restrictive performance requirements, and to refrain from bureaucratic interference with licensing agreements etc. so that Brazil could benefit from technology transfers to a greater extent.

Obviously, the above policy areas are closely intertwined. Structural reforms in particular markets may fail if macroeconomic instability is going to persist. At the same time, the chances for macro stabilization could be improved if structural weaknesses of factor and goods markets were overcome. Consequently, reform programs have to be comprehensive and consistent to trigger a favourable response by foreign capital providers (and domestic investors!). While consistency would help to restore Brazil's attractiveness for foreign capital, a renewed inflow of capital, in turn, would add to the sustainability of domestic adjustment efforts. Hence, the government's principal aim must be to restore the confidence of economic agents by designing a credible reform program.

Appendix I - Statistical Tables

I. Net Resource Flows

II. Bank Lending

III. Direct Investment

IV. Official Development Finance

V. Capital Markets

Table I.1. - Total Net Resource Flows to Developing Countries: 1980-1990

	US$ billion											Per cent of total		
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990[a]	1980	1985	1990
I. Official development finance (ODF)	45.7	46.3	44.1	42.4	47.7	48.9	56.4	61.7	65.6	64.9	77.6	35.4	58.6	54.5
1. Offical development assistance (ODA)	37.7	37.1	33.8	33.9	35.0	37.3	44.5	48.4	51.5	52.3	62.1	29.2	44.7	43.6
of which:														
Bilateral disbursements	29.9	29.2	26.3	26.3	27.2	28.8	35.0	38.3	40.2	40.7	49.7	23.1	34.5	34.9
Multilateral disbursements	7.8	7.9	7.5	7.6	7.8	8.5	9.5	10.1	11.3	11.6	12.4	6.0	10.2	8.7
2. Other ODF	8.0	9.2	10.3	8.5	12.7	11.6	11.9	13.3	14.1	12.6	15.5	6.2	13.8	10.9
of which:														
Bilateral disbursements	3.2	3.5	3.7	1.3	4.5	3.7	4.1	6.6	7.6	5.6	6.0	2.5	4.4	4.2
Multilateral disbursements	4.8	5.7	6.6	7.2	8.2	7.9	7.8	6.7	6.5	7.0	9.5	3.7	9.5	6.7
II. Total export credits	17.5	18.0	13.7	4.6	6.2	4.0	-0.7	-2.6	-2.1	9.5	4.0	13.5	4.8	2.8
1. DAC countries	16.7	17.0	12.7	3.9	5.2	3.4	-0.9	-2.9	-2.1	9.6	3.9	12.9	4.1	2.7
of which: short term	2.4	2.6	3.0	-3.5	0.3	3.2	3.0	4.1	2.0	4.8	4.0	1.9	3.8	2.7
2. Other countries	0.8	1.0	1.0	0.7	1.0	0.6	0.2	9.3	-	-0.1	0.1	0.6	0.7	0.1
III. Private flows	66.1	74.3	58.2	47.8	31.7	30.5	26.7	33.7	43.8	48.3	60.8	51.1	36.6	42.7
1. Direct investment (OECD)	11.2	17.2	12.8	9.3	11.3	6.6	11.3	21.1	25.3	30.4	32.0	8.7	7.9	22.5
of which: offshore centres[b,c]	N.A.	N.A.	4.1	3.7	3.8	3.7	6.2	12.6	11.4	8.0	N.A.	N.A.	4.4	N.A.
2. International bank lending[b,c]	49.0	52.0	37.9	35.0	17.2	15.2	7.0	7.0	7.8	10.5	18.5	37.9	18.2	13.0
of which: short term	26.0	22.0	15.0	-25.0	-6.0	12.0	-4.0	5.0	4.0	8.0	9.0	20.1	14.4	6.3
3. Total bond lending[c]	1.6	1.3	4.8	1.0	0.3	4.5	1.2	-0.4	1.3	-0.3	0.8	1.2	5.4	0.6
4. Other private	2.0	1.8	0.4	0.2	0.3	1.3	3.9	2.5	5.2	3.7	5.0	1.6	1.6	3.5
5. Grants by non-governmental organisations	2.3	2.0	2.3	2.3	2.6	2.9	3.3	3.5	4.2	4.0	4.5	1.8	3.5	3.2
Total net resource flows (I+II+III)	129.3	138.6	116.0	94.8	85.6	83.4	82.4	92.8	107.3	122.7	142.4	100.0	100.0	100.0
Memorandum items:														
Total net credits from IMF	2.6	6.2	6.3	12.4	5.3	0.5	-2.0	-4.9	-4.4	-2.1	-2.2			
Recorded asset transactions, net[d]	N.A.	N.A.	-27.6	-8.1	-19.5	-9.2	-12.8	-11.1	-21.4	-19.4	-25.0			
Interest + dividends paid by LDCs,gross	N.A.	N.A.	-95.3	-92.4	-91.3	-94.8	-82.3	-74.9	-94.5	-96.2	-96.0			
Total offical grants	N.A.	N.A.	21.0	21.7	23.8	25.9	30.1	32.3	35.3	36.0	43.0			

[a]Provisional. - [b]Includes changes in interest arrears. Excludes Taiwan. - [c]Accounting entries related to bonds for bank debt exchanges under the Mexican debt restructuring of February 1990 are not reflected in this table. - [d]Excludes Taiwan and offshore centres and, as regards transactions, changes in offical reserves.

Source: OECD (1986, 1991a). - Own calculations.

Table I.2. - Total Net Resource Flows to Latin America and the Caribbean: 1980-1990

	US$ billion											Per cent of total				
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990[a]	1980	1982	1985	1989	1990
I. Official development finance (ODF)	6.5	7.0	7.8	6.8	9.9	10.8	11.4	13.1	11.4	12.4	14.6	11.4	15.8	47.6	41.6	36.4
1. Offical development assistance (ODA)	4.0	4.1	4.2	4.7	4.9	5.4	5.8	7.1	7.3	7.9	N.A.	7.0	8.5	23.8	26.5	N.A.
of which:																
Bilateral disbursements	3.0	3.1	3.3	3.7	3.9	4.4	4.8	6.1	6.1	6.7	N.A.	5.2	6.7	19.4	22.5	N.A.
Multilateral disbursements	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.2	1.2	N.A.	1.7	1.8	4.4	4.0	N.A.
2. Other ODF	2.5	2.9	3.6	2.1	5.0	5.4	5.6	6.0	4.1	4.5	N.A.	4.4	7.3	23.8	15.1	N.A.
of which:																
Bilateral disbursements	0.5	0.7	1.3	-0.5	1.3	2.1	1.6	3.4	1.3	2.1	N.A.	0.9	2.6	9.3	7.0	N.A.
Multilateral disbursements	2.0	2.2	2.3	2.6	3.7	3.3	4.0	2.6	2.8	2.4	N.A.	3.5	4.7	14.5	8.1	N.A.
II. Total export credits	5.5	5.3	2.6	2.4	1.4	1.3	0.9	0.7	1.3	2.1	1.8	9.6	5.3	5.7	7.0	4.5
1. DAC countries	5.2	5.0	2.3	2.2	1.0	1.3	0.9	0.6	1.3	2.1	N.A.	9.1	4.7	5.7	7.0	N.A.
of which: short term	0.7	1.6	0.6	-	0.1	1.4	1.6	1.5	1.0	0.8	N.A.	1.2	1.2	5.7	2.7	N.A.
2. Other countries	0.3	0.3	0.3	0.2	0.4	-	-	0.1	-	-	N.A.	0.5	0.6	-	-	N.A.
III. Private flows	45.2	51.8	39.0	18.5	18.6	10.6	6.2	8.1	11.0	15.3	23.7	79.0	78.9	46.7	51.3	59.1
1. Direct investment (DAC)	7.3	8.2	5.9	3.8	5.8	5.1	3.9	6.4	9.4	9.8	N.A.	12.8	11.9	22.5	32.9	N.A.
2. International bank lending[b,c]	36.0	41.0	28.3	15.3	13.7	6.2	1.6	3.7	1.5	6.0	N.A.	62.9	57.3	27.3	20.1	N.A.
3. Total bond lending[c]	0.8	1.5	4.0	-0.8	-1.0	-0.8	-1.4	-2.1	-1.4	-1.1	N.A.	1.4	8.1	-3.5	-3.7	N.A.
4. Other private	0.7	0.8	0.5	-0.1	-0.3	-0.3	1.6	-0.4	0.8	-0.1	N.A.	1.2	1.0	-1.3	-0.3	N.A.
5. Grants by non-governmental organisations	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.7	0.7	N.A.	0.7	0.6	1.8	2.3	N.A.
Total net resource flows (I+II+III)	57.2	64.1	49.4	27.7	29.9	22.7	18.5	21.9	23.7	29.8	40.1	100.0	100.0	100.0	100.0	100.0
Memorandum items:																
Total net credits from IMF	-0.1	0.3	1.9	6.9	3.9	1.5	0.2	-0.8	-0.5	-0.2	1.2					
Recorded asset transactions, net[d]	-2.0	-8.1	-8.0	-5.4	-7.2	-1.6	0.4	-7.1	-5.1	-2.1	-6.0					
Interest + dividends paid by LDCs,gross	-22.8	-40.7	-37.3	-37.6	-39.7	-33.7	-25.6	-36.2	-31.4	-30.0						
Total offical grants	N.A.	N.A.	2.2	2.4	2.7	3.2	3.5	4.1	4.4	4.7	5.6					

[a]Provisional. - [b]Includes changes in interest arrears and long- and short-term transactions. - [c]Accounting entries related to bonds for bank debt exchanges under the Mexican debt restructuring of February 1990 are not reflected in this table. - [d]Excludes offshore centres and, as regards transactions, changes in offical reserves.

Source: OECD (1989, 1991a). - Own calculations.

Table II.1. - Commercial Bank Claims on Developing Countries: 1986-1990

	US$ billion					Per cent of total				
	1986	1987	1988	1989	1990	1986	1987	1988	1989	1990
All developing countries	601.8	649.0	644.1	640.9	627.3	100.0	100.0	100.0	100.0	100.0
By geographic region:										
Africa	55.9	61.1	57.0	54.8	55.5	9.3	9.4	8.8	8.6	8.8
Asia	119.6	136.8	139.6	139.2	166.0	19.9	21.1	21.7	21.7	26.5
Eastern Europe	72.1	84.6	87.4	97.9	78.5	12.0	13.1	13.6	15.3	12.5
Latin America	256.3	259.8	252.3	234.2	204.3	42.6	40.0	39.2	36.5	32.6
Middle East	52.5	57.4	59.9	65.6	66.9	8.7	8.8	9.3	10.2	10.7
Other Europe	45.4	49.3	47.9	49.2	56.1	7.5	7.6	7.4	7.7	8.9
Selected Latin American countries										
Argentina	32.4	35.2	37.6	32.4	29.8	5.4	5.4	5.8	5.1	4.8
Brazil	81.1	80.9	76.0	70.8	65.2	13.5	12.5	11.8	11.0	10.4
Chile	14.1	12.9	10.9	9.1	8.6	2.3	2.0	1.7	1.4	1.4
Mexico	74.2	75.8	71.5	70.1	55.0	12.3	11.7	11.1	10.9	8.8

Source: World Bank (1988, 1991). - Own calculations.

Table II.2. - Commercial Bank Claims on Developing Countries - Selected Creditors: 1985-1990

		US$ billion						Per cent of total	
		1985	1986	1987	1988	1989	1990	1985[a]	1990[b]
Dutch commercial bank claims on	All developing countries	0.5	7.2	12.2	12.4	13.0	14.2[d]	100.0	100.0
	Latin America	-	5.0	4.7	4.6	5.0	5.3[d]	38.5	37.3
	Brazil	-	-	0.9	0.9	0.8	0.9[d]	7.4	6.3
French commercial bank claims on	All developing countries	72.2	83.2	90.2	96.1	90.8	83.6[d]	100.0	100.0
	Latin America	21.3	22.6	23.5	24.9	21.8	18.2[d]	29.5	21.8
	Brazil	8.1	8.7	8.9	8.6	8.5	8.0[d]	11.2	9.6
German commercial bank claims on	All developing countries	57.8	69.8	83.6	81.2	91.0	119.5	100.0	100.0
	Latin America	18.0	20.4	23.5	22.4	22.7	27.7	31.1	23.2
	Brazil	6.1	7.3	8.6	7.7	8.1	9.5	10.6	7.9
Italian commercial bank claims on	All developing countries	N.A.	12.4	14.4	14.6	15.4	N.A.	100.0	100.0
	Latin America	N.A.	4.8	4.9	4.7	4.6	N.A.	38.7	29.9
	Brazil	N.A.	1.0	1.0	0.9	0.8	N.A.	8.1	5.2
Japan's commercial bank claims on	All developing countries	N.A.	N.A.	75.9[c]	84.0[e]	N.A.	N.A.	100.0	100.0
	Latin America	N.A.	N.A.	33.8[c]	35.6[e]	N.A.	N.A.	44.5	42.4
	Brazil	N.A.	N.A.	9.1[c]	9.7[e]	N.A.	N.A.	12.0	11.6
Swiss commercial bank claims on	All developing countries	16.6	19.5	24.6	21.9	21.7	N.A.	100.0	100.0
	Latin America	6.8	6.9	7.4	6.7	6.4	N.A.	41.0	29.5
	Brazil	1.7	1.9	2.4	2.1	2.2	N.A.	10.2	10.1
UK commercial bank claims on	All developing countries	64.6	65.6	65.1	60.5	52.9	44.0	100.0	100.0
	Latin America	30.1	30.9	30.7	27.3	23.6	16.9	46.6	38.4
	Brazil	9.1	9.5	9.7	7.6	6.9	4.7	14.1	10.7
US commercial bank claims on	All developing countries	129.5	118.0	107.4	92.6	79.2	69.4	100.0	100.0
	Latin America	82.4	78.9	74.7	64.7	53.2	44.3	63.6	63.8
	Brazil	22.8	22.4	21.3	19.4	16.3	11.4	17.6	16.4

[a]For Dutch commercial banks and Japanese commercial banks: 1987, for Italian commercial banks: 1986. - [b]For Italian and Swiss commercial banks: 1989, for Japanese commercial banks: 1988. - [c]Third quarter. - [d]Second quarter. - [e]First quarter.

Source: World Bank (1988, 1991). - Own calculations.

Table II.3a - Outstanding Commercial Bank Claims on Selected Latin American Countries - Selected Creditors: 1986

US$ million

	French	%	German	%	United Kingdom	%	United States	%
All developing countries	83216	100.0	69813	100.0	65649	100.0	117959	100.0
Latin America	22614	27.2	20376	24.2	30880	47.0	78945	66.9
Argentina	2005	2.4	3682	5.3	4110	6.3	8524	7.2
Bolivia	-	-	124	0.2	99	0.2	96	0.1
Brazil	8655	10.4	7257	10.4	9515	14.5	22404	19.0
Chile	-	-	1014	1.5	2089	3.2	6459	5.5
Mexico	5528	6.6	3909	5.6	8674	13.2	23654	20.1
Peru	-	-	579	0.8	663	1.0	1344	1.1
Uruguay	-	-	119	0.2	381	0.6	929	0.8
Venezuela	2602	3.1	2123	3.0	2642	4.0	9112	7.7

Source: World Bank (1991). - Own calculations.

Table II.3b - Outstanding Commercial Bank Claims on Selected Latin American Countries - Selected Creditors: 1990[a]

US$ million

	French	%	German	%	United Kingdom	%	United States	%
All developing countries	83629	100.0	119471	100.0	44041	100.0	69375	100.0
Latin America	18165	21.7	27707	23.2	16856	38.3	44292	63.8
Argentina	2087	2.5	6099	5.1	2352	5.3	3497	5.0
Bolivia	21	0.0	218	0.2	8	0.0	8	0.0
Brazil	7962	9.5	9505	8.0	4694	10.7	11444	16.5
Chile	528	0.6	1388	1.2	567	1.3	3085	4.4
Mexico	2202	2.6	3353	2.8	4909	11.1	15212	21.9
Peru	660	0.8	910	0.8	276	0.6	116	0.2
Uruguay	108	0.1	147	0.1	237	0.5	771	1.1
Venezuela	2436	2.9	2188	1.8	2140	4.9	6440	9.3

[a]French commercial bank claims: second quarter.

Source: World Bank (1991). - Own calculations.

Table II.4. - Commercial Bank Lending to Developing Countries - Disbursements, Debt Service and Net Transfers: 1980-1989

US$ billion

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Change 1989 compared with 1980
All developing countries											
Disbursements	56.5	N.A.	60.0	42.2	38.4	31.2	30.4	31.7	31.3	27.9	-28.6
Debt service	46.7	N.A:	63.3	54.1	60.2	61.4	58.4	61.6	63.5	49.7	3.0
Net transfers	9.8	N.A.	-3.3	-11.9	-21.8	-30.2	-28.0	-29.9	-32.2	-21.8	-31.6
Latin America and the Caribbean											
Disbursements	33.2	N.A.	34.2	19.2	17.6	8.7	6.7	8.4	7.9	5.1	-28.1
Debt service	30.3	N.A.	38.0	29.9	33.3	29.8	26.6	24.0	29.3	19.0	-11.3
Net transfers	2.9	N.A.	-3.8	-10.7	-15.7	-21.1	-19.9	-15.6	-21.4	-13.9	-16.8
Argentina											
Disbursements	4.1	7.6	2.9	2.2	0.5	3.0	1.8	2.0	0.8	0.1	-4.0
Debt service	2.2	3.1	2.9	2.9	3.4	4.7	4.3	3.6	2.1	0.3	-1.9
Net transfers	1.9	4.5	-	-0.7	-2.9	-1.7	-2.5	-1.6	-1.3	-0.2	-2.1
Brazil											
Disbursements	7.8	13.6	11.5	4.5	7.0	0.3	0.2	-	3.0	1.4	-6.4
Debt service	9.7	12.6	12.7	8.1	8.3	6.4	5.1	4.6	9.8	4.0	-5.7
Net transfers	-1.9	1.0	-1.2	-3.6	-1.3	-6.1	-4.9	-4.6	-6.8	-2.6	-0.7
Chile											
Disbursements	3.3	5.0	2.5	1.6	1.0	0.8	0.5	0.2	0.6	0.9	-2.4
Debt service	1.8	2.8	2.8	1.9	2.1	1.6	1.2	1.2	1.0	1.3	-0.5
Net transfers	1.5	2.2	-0.3	-0.3	-1.1	-0.8	-0.7	-1.0	-0.4	-0.4	-1.9
Mexico											
Disbursements	10.1	13.8	8.6	5.3	5.3	3.0	2.0	5.0	1.7	1.1	-9.0
Debt service	8.2	9.3	10.1	9.1	12.3	10.8	8.8	7.7	9.1	8.0	-0.2
Net transfers	1.9	4.5	-1.5	-3.8	-7.0	-7.8	-6.8	-2.7	-7.4	-6.9	-8.8

Source: World Bank (1989, 1990). - Own calculations.

Table II.5. - Maturity Distribution of Bank Claims on Selected Latin American Countries: 1990[a]

	Total	<1 yr.	>1 yr. <2 yr.	>2 yr.	Unallo-cated	<1 yr.	>1 yr. <2 yr.	>2 yr.
	US$ million					per cent		
All developing countries	524467	223685	37234	248910	14638	42.6	7.1	47.5
Latin America	179124	61154	9580	105051	3339	34.1	5.3	58.6
Argentina	25106	6170	499	18158	279	24.6	2.0	72.3
Bolivia	213	138	15	60	-	64.8	7.0	28.2
Brazil	54984	20688	3908	29809	579	37.6	7.1	54.2
Chile	8577	3896	316	4335	30	45.4	3.7	50.5
Mexico	46854	14567	2168	29234	885	31.1	4.6	62.4
Peru	2957	1666	166	1016	109	56.3	5.6	34.4
Uruguay	2520	1058	128	1331	3	42.0	5.1	52.8
Venezuela	21249	5565	1102	13876	706	26.2	5.2	65.3

[a]Second quarter.

Source: World Bank (1991).

Table III.1. - Foreign Direct Investment Flows: 1983-1989

Host Countries	1983	1984	1985	1986	1987	1988	1989	1983	1985	1989
	US$ million							Per cent of total		
Total	48908	53375	48041	75958	109737	137981	181752	100.0	100.0	100.0
Industrial Countries	33331	38077	35890	63833	95319	123044	163235	68.2	74.7	89.8
Developing countries	15577	15298	12151	12075	14419	14937	18517	31.8	25.3	10.2
Asia	5132	4594	4863	5723	8638	7990	7648	10.5	10.1	4.2
Middle East	5592	6148	2327	2461	104	-621	2105	11.4	4.8	1.2
Latin America and the Caribbean of which:[a]	3510	3232	4018	3152	4227	6061	5406	7.2	8.4	3.0
Argentina	185	268	919	574	-19	1147	1028	5.3	22.9	19.0
Bolivia	7	7	10	10	38	-10	-24	0.2	0.2	-0.4
Brazil	1560	1598	1348	320	1225	2969	1171[b]	44.4	33.5	21.7
Chile	135	78	64	60	105	125	269	3.8	1.6	5.0
Mexico	461	390	491	1160	1796	635	1852	13.1	12.2	34.3
Peru	38	-89	1	22	32	26	59	1.1	0.0	1.1
Venezuela	86	18	68	16	21	89	213	0.2	1.7	3.9

[a]Percentage values refer to Latin America and not to world total. - [b]Not necessarily comparable to previous data. Figure is based on the US$ rate of December 31, 1990. Banco Central do Brasil (1991).

Source: IMF (1990). - Own calculations.

Table III.2. - Foreign Direct Investment Flows to Latin America[a] - Selected Source Countries: 1980-1988 (annual averages, US$ million)

	1980-82		1983-85		1986-88	
	US$	%	US$	%	US$	%
Europe	1276.7	27.9	1101.7	48.3	1870.3	46.8
of which:						
France	327.3	28.1	132.3	12.0	71.4	3.8
Germany	333.5	28.6	212.5	19.3	276.5	14.8
Italy	24.4	2.1	155.2	14.1	96.8	5.2
United Kingdom	285.3	24.5	257.6	23.4	499.7	26.7
Switzerland	176.5	15.2	151.2	13.7	671.2	35.9
Sweden	40.8	3.5	78.9	7.2	57.2	3.1
Total Above[b]	1164.3		987.7		1627.7	
United States	2575.0	56.3	-136.6	-6.0	770.6	19.3
Japan	633.1	13.9	1121.2	49.1	1311.0	32.8
Others	86.2	1.9	196.0	8.6	48.1	1.1
World Total	4571.0	100.0	2282.0	100.0	4000.0	100.0

[a]Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Haiti, Honduras, Guatemala, Mexico, Nicaragua, Panama, Peru, Paraguay, Uruguay, Venezuela. - [b]The share of these six countries on FDI from Europe is 91 per cent for 1980-82; 89.7 per cent for 1983-85; 89.4 per cent for 1986-88.

Source: Secchi (1991).

Table III.3. - Structure of FDI Stocks by Area of Origin - Selected Latin American Countries: the 1970s versus the 1980s (per cent of total stock)

	Year	EC %	Other Europe %	USA %	Japan %	Others %	Total %	Total US$ million
Argentina	1976	34.8	14.0	39.8	0.4	9.0	100.0	3502.6
	1977-86[a]	40.6	5.7	45.2	1.6	6.9	100.0	3136.0
Brazil	1977	30.6	13.1	30.4	10.7	15.2	100.0	11228.5
	1988	36.3	11.6	28.4	9.6	14.1	100.0	30681.3
Bolivia	1977	14.3	0.3	56.9	0.3	28.2	100.0	256.0
	1989	11.2	0.8	69.3	0.2	18.5	100.0	605.8
Chile	1983	27.8	2.2	48.8	2.3	18.9	100.0	1993.6
	1988	18.4	1.3	49.3	2.3	28.7	100.0	4108.7
Colombia[b]	1977	14.5	7.7	53.6	1.3	22.9	100.0	807.2
	1988	10.6	1.3	72.7	1.3	14.1	100.0	3010.7
Ecuador[c]	1972-88	18.4	13.5	32.5	N.A.	35.6	100.0	781.9
Mexico	1977	12.3	5.7	68.6	2.9	10.5	100.0	5642.9
	1989	18.7	5.6	63.0	5.1	7.6	100.0	26562.6
Peru	1971[a]	14.0	8.3	54.9	2.2	20.6	100.0	424.8
	1988	13.5	10.0	48.8	4.5	23.2	100.0	1184.0
Venezuela[b]	1981	11.2	6.2	55.6	4.0	23.0	100.0	5494.4
	1987	14.6	5.7	56.2	3.6	19.9	100.0	1795.8

[a]Cumulated authorised investment for the period. - [b]Excludes the oil sector. - [c]Cumulated investment for the period.

Source: Secchi (1991).

Table III.4. - Foreign Investment and Reinvestment in Brazil: 1982-1990

	US$ million[a]									Per cent (period averages)		
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1982-1984	1985-1987	1988-1990
Total:	2673.7	1661.7	1698.4	1033.5	352.9	1304.4	2845.5	1171.3	473.8	100.0	100.0	100.0
Investment	1766.5	1138.5	1045.0	556.4	180.6	909.2	2406.1	857.9	397.1	100.0	100.0	100.0
Reinvestment	907.2	523.2	653.4	477.1	172.3	395.2	439.4	313.4	76.7	100.0	100.0	100.0
Canada total:	59.0	77.5	264.2	52.4	-190.1	37.1	193.6	240.6	9.6	6.6	-3.7	9.9
Investment	48.9	56.3	93.6	3.0	-17.6	13.0	190.1	100.2	43.0	5.0	-0.1	9.1
Reinvestment	10.1	21.2	170.6	49.4	-172.5	24.1	3.5	140.4	-33.4	8.2	-9.5	13.3
France total:	139.7	88.6	83.5	139.8	93.4	114.8	276.8	86.2	19.8	5.2	12.9	8.5
Investment	50.4	34.5	1.4	26.4	19.6	55.5	211.4	39.7	11.9	2.2	6.2	7.2
Reinvestment	89.3	54.1	82.1	113.4	73.8	59.3	65.4	46.5	7.9	10.8	23.6	14.4
Germany total:	375.0	405.4	272.6	188.3	48.3	-145.1	11.2	65.7	38.4	17.5	3.4	2.6
Investment	246.4	321.2	12.1	-2.3	19.2	-135.9	-29.8	24.0	21.5	14.7	-7.2	0.4
Reinvestment	128.6	84.2	260.5	190.6	29.1	-9.2	41.0	41.7	16.9	22.7	20.2	12.0
Italy total:	280.0	-217.0	108.3	20.8	15.6	63.4	187.0	201.2	2.2	2.8	3.7	8.7
Investment	247.9	-239.8	57.7	22.9	16.9	55.7	86.3	117.3	1.0	1.7	5.8	5.6
Reinvestment	32.1	22.8	50.6	-2.1	-1.3	7.7	100.7	83.9	1.2	5.1	0.4	22.4
Japan total:	166.0	113.4	158.8	135.0	100.7	143.6	267.4	135.6	115.2	7.3	14.1	11.5
Investment	114.6	84.6	116.4	108.5	72.4	117.2	247.3	127.9	111.0	8.0	18.1	13.3
Reinvestment	51.4	28.8	42.4	26.5	28.3	26.4	20.1	7.7	4.2	5.9	7.8	3.9
Netherlands total:	97.2	-39.0	82.2	34.2	279.1	5.2	33.3	66.8	39.0	2.3	11.8	3.1
Investments	73.3	-14.2	57.2	25.4	106.6	-4.8	33.3	28.0	33.9	2.9	7.7	2.6
Reinvestment	23.9	-24.8	25.0	8.8	172.5	10.0	0.0	38.8	5.1	1.2	18.3	5.3
Switzerland total:	-21.3	195.9	-7.8	544.4	-18.7	-1.0	-17.2	-92.0	-50.7	2.8	19.5	-3.6
Investment	-109.8	113.9	58.4	508.5	-35.7	2.0	42.5	-43.0	-48.7	1.6	28.8	-1.3
Reinvestment	88.5	82.0	-66.2	35.9	17.0	-3.0	-59.7	-49.0	-2.0	5.0	4.8	-13.3
United Kingdom total:	100.7	142.3	281.6	119.6	57.4	132.1	486.4	116.4	85.9	8.7	11.5	15.3
Investment	10.2	65.4	184.3	72.3	28.2	87.6	431.3	93.7	77.0	6.6	11.4	16.4
Reinvestment	90.0	76.9	97.3	47.3	29.2	44.5	55.1	22.7	18.9	12.7	11.6	11.7
United States total:	940.4	593.9	335.3	76.1	-77.8	822.9	1009.8	357.1	57.8	31.0	30.5	31.7
Investment	645.1	500.1	242.3	134.9	-28.9	664.4	840.5	358.6	6.7	35.1	46.8	32.9
Reinvestment	295.3	93.8	93.0	-58.8	-48.9	158.5	169.3	-1.5	51.1	23.1	4.9	26.4

[a]Investment data are based on the US$ rate of December 31, 1990.

Source: Banco Central do Brasil (1991). - Own calculations.

Table IV.1. - Net Official Disbursements to Latin America: 1980-1988[a] (annual averages, US$ million)

	1980-82			1983-85			1986-88		
	US$	%[b]	%[c]	US$	%[b]	%[c]	US$	%[b]	%[c]
EC & Members[d]									
ODF[e]	814.6	17.2	6.4	1225.9	17.8	9.7	2278.6	27.6	11.9
of which ODA grants	370.8	40.5	4.6	390.0	26.2	5.2	718.4	30.0	5.8
ODA loans	217.9	23.7	11.2	114.8	12.8	6.5	234.1	32.6	8.0
OOF	226.1	7.8	8.5	721.8	15.6	21.6	1347.6	25.9	33.1
France									
ODF	140.6	3.0	3.6	228.0	3.2	5.3	442.6	5.2	6.6
of which ODA grants	32.3	3.6	1.1	44.4	3.0	1.7	74.0	3.1	2.0
ODA loans	93.2	9.7	13.7	44.9	5.0	6.9	83.2	11.2	6.9
OOF	15.2	0.7	1.8	139.2	2.9	12.5	285.5	5.2	17.0
Germany									
ODF	473.4	10.1	16.4	634.9	9.4	22.1	1061.5	12.9	25.1
of which ODA grants	179.8	19.8	11.4	158.0	10.7	12.0	278.5	11.7	13.4
ODA loans	94.3	10.4	36.3	43.3	4.8	6.4	99.8	13.6	11.2
OOF	202.4	7.0	33.5	433.8	9.7	48.1	683.3	13.5	53.5
Italy									
ODF	14.8	0.2	-	167.7	2.2	13.7	429.5	5.1	16.9
of which ODA grants	11.7	1.2	6.2	40.6	2.6	9.5	125.8	5.2	9.1
ODA loans	1.5	0.1	-	5.9	0.7	3.2	35.0	5.5	5.5
OOF	1.7	-	-	121.3	2.3	21.7	268.8	4.7	35.7
United Kingdom									
ODF	44.9	0.9	2.6	30.4	0.5	2.4	21.8	0.3	1.5
of which ODA grants	42.1	4.3	3.8	18.0	1.3	2.0	16.7	0.7	1.3
ODA loans	-0.8	-	-	0.5	0.1	-	0.4	0.1	-
OOF	3.6	0.1	0.4	12.0	0.3	2.7	4.9	0.1	1.6
Norway									
ODF	4.1	0.1	1.3	9.6	0.1	2.9	24.5	0.3	4.6
of which ODA grants	3.9	0.4	1.3	9.6	0.6	3.0	24.5	1.0	4.7
ODA loans	0.2	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
OOF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table IV.1. continued

		1980-82			1983-85			1986-88		
		US$	%[b]	%[c]	US$	%[b]	%[c]	US$	%[b]	%[c]
Sweden										
ODF		30.6	0.6	3.7	59.5	0.9	7.8	69.3	0.9	6.4
of which	ODA grants	13.5	1.5	2.2	17.9	1.2	3.3	39.0	1.6	4.2
	ODA loans	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-	-
	OOF	17.3	0.4	5.4	37.1	1.0	16.8	23.1	0.4	6.0
United States										
ODF		692.3	13.2	11.4	1114.0	15.5	14.5	1419.0	17.2	22.2
of which	ODA grants	212.7	22.9	6.4	683.3	44.4	11.6	972.7	41.0	14.5
	ODA loans	123.7	14.5	10.7	279.7	31.0	31.2	98.3	12.8	23.3
	OOF	356.0	9.4	23.1	151.0	0.9	28.2	348.0	6.2	-
Japan										
ODF		353.4	7.3	13.1	421.0	6.6	14.4	753.8	9.3	13.2
of which	ODA grants	93.2	10.2	12.0	112.6	7.5	10.4	220.7	9.2	9.9
	ODA loans	61.6	7.0	4.2	99.2	10.9	7.1	143.7	19.7	5.2
	OOF	197.9	6.5	47.5	207.6	5.3	60.6	389.8	8.1	78.9
World Total										
ODF		4816.9	100.0	11.0	6712.1	100.0	15.3	8165.3	100.0	15.1
of which	ODA grants	918.9	100.0	4.3	1514.7	100.0	6.6	2389.3	100.0	7.5
	ODA loans	878.1	100.0	7.6	904.4	100.0	10.5	730.8	100.0	6.5
	OOF	3043.7	100.0	28.0	4293.5	100.0	35.4	5045.3	100.0	45.1
	of which									
	Export credits	589.9	100.0	25.2	482.7	100.0	-	215.8	100.0	-
	Other	2453.8	100.0	29.0	3810.8	100.0	34.1	4829.4	100.0	35.6
	Debt	3331.9	100.0	16.0	4715.3	100.0	24.2	5560.2	100.0	22.1

[a]Data on Venezuela were not available. - [b]Percentage of world total flows to Latin America. - [c]Percentage of flows of the respective category to all developing countries. - [d]Flows from the EC as an institution and its Development Assistance Committee (DAC) member countries combined. - [e]Abbreviations: Official development finance (ODF), official development assistance (ODA), other official flows (OOF).

Source: Secchi (1991).

Table IV.2. - Net Official Disbursements to Brazil: 1980-1989 (US$ million)

	US$ million									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total receipts[a]	4309.2	7776.2	7609.9	6104.8	7468.4	1321.6	998.7	-787.9	34[illegible]8	3421.9
ODF[b]	711.3	1069.5	1040.9	1501.6	1876.4	2070.0	1668.0	1851.3	511.2	919.2
of which ODA grants	96.3	88.9	100.2	88.5	112.1	107.6	128.5	156.4	186.0	180.4
ODA loans	-10.9	146.2	107.9	12.3	48.6	15.2	49.9	132.4	24.2	23.6
OOF	625.9	834.5	832.8	1400.7	1715.7	1947.1	1489.6	1562.5	300.9	715.2
EC & Members: Total receipts	2719.4	2592.5	2500.2	1672.7	2451.6	888.5	219.0	1121.7	464.0	688.0
ODF	156.9	334.6	299.0	202.3	526.8	1004.1	484.2	1602.4	303.5	930.8
of which ODA grants	60.2	51.9	66.0	55.8	58.7	51.1	68.8	80.3	110.5	90.8
ODA loans	6.9	150.8	76.5	20.9	26.6	22.6	15.7	107.1	6.7	-11.3
OOF	89.7	132.0	156.5	125.7	441.5	930.4	399.7	1415.0	186.3	851.4
France: Total receipts	885.7	1525.4	1920.3	649.8	877.3	167.9	17.7	93.2	-551.7	-20.5
ODF	11.8	111.9	74.3	18.7	132.6	172.6	13.5	552.4	33.6	677.3
of which ODA grants	9.7	8.2	7.0	7.0	9.5	6.2	13.3	12.2	11.9	10.5
ODA loans	-0.5	103.7	67.2	11.7	20.7	14.9	3.5	8.7	0.0	1.1
OOF	2.7	-	-	-	102.4	151.6	-3.3	531.5	21.7	665.7
Germany: Total receipts	1360.7	530.4	536.4	666.0	702.0	720.6	338.9	587.3	446.9	513.8
ODF	142.6	210.5	193.2	182.4	354.5	561.5	431.4	688.3	215.4	218.0
of which ODA grants	38.6	32.6	33.6	31.6	28.1	27.7	39.6	47.9	48.2	45.8
ODA loans	9.2	47.5	10.3	9.8	7.0	7.9	12.4	98.5	6.5	-12.6
OOF	94.9	130.4	149.3	141.1	319.5	525.8	379.4	541.9	160.7	184.8
Italy: Total receipts	114.0	61.5	-52.4	172.5	279.3	273.3	-48.0	296.5	118.3	113.1
ODF	-4.7	2.0	9.4	-12.7	14.5	254.9	34.3	330.8	35.2	13.3
of which ODA grants	1.2	1.2	2.4	2.6	3.8	3.8	7.4	8.8	30.5	18.5
ODA loans	-	-	-	-	-	-	-	-	-	-
OOF	-5.8	0.7	7.0	-15.3	10.7	251.1	26.9	322.0	4.7	-5.1

Table IV.2. continued

	US$ million									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Japan: Total receipts	71.4	542.1	611.1	223.0	1040.4	123.3	112.1	-329.0	403.8	-85.6
ODF	76.4	61.9	30.3	10.0	35.9	64.9	92.4	113.8	69.5	59.1
of which ODA grants	12.1	16.1	14.6	14.6	15.8	15.7	23.9	27.1	34.8	37.2
ODA loans	8.4	15.3	35.8	12.5	19.9	24.9	8.4	55.0	31.5	87.0
OOF	55.9	30.5	-20.2	-17.1	0.3	24.2	60.1	31.7	3.1	-65.0
Netherlands: Total receipts	28.6	55.2	-44.3	192.3	75.1	-14.3	48.1	40.2	32.0	74.7
ODF	7.0	8.3	4.8	4.1	6.8	5.6	4.1	6.5	10.3	10.3
of which ODA grants	7.3	7.6	4.8	4.1	6.8	5.8	4.5	6.2	10.2	9.9
ODA loans	-	0.7	-0.2	-0.2	-0.1	-0.1	-0.2	0.0	0.2	-
OOF	-	-	0.3	0.2	0.2	-0.1	-0.2	0.3	-0.1	0.4
Switzerland: Total receipts	141.6	85.0	18.6	77.4	0.5	14.1	1.1	1.4	1.6	1.4
ODF	0.6	0.3	0.4	0.6	0.7	0.4	1.1	1.4	1.6	1.4
of which ODA grants	0.6	0.3	0.4	0.6	0.7	0.4	1.1	1.4	1.6	1.4
ODA loans	-	-	-	-	-	-	-	-	-	-
OOF	-	-	-	-	-	-				
United Kingdom: Total receipts	231.3	266.4	278.4	90.7	64.2	66.0	338.1	438.7	384.5	201.8
ODF	1.2	0.3	16.6	8.1	9.4	5.1	1.3	1.2	2.6	2.0
of which ODA grants	2.3	1.3	17.4	8.5	9.0	5.2	1.3	1.3	2.6	2.2
ODA loans	-1.1	-1.0	-0.8	-0.4	-0.9	-	-	-	-	0.1
OOF	-	-	-	-	1.3	-0.1	0.0	0.0	-	-0.2
United States: Total receipts	318.0	3744.0	3503.0	2892.0	2695.0	-333.0	-450.0	-1705.0	2403.0	2721.0
ODF	-6.0	-59.0	-113.0	55.0	101.0	371.0	-12.0	29.0	-15.0	-200.0
of which ODA grants	2.0	1.0	1.0	1.0	13.0	13.0	14.0	6.0	7.0	3.0
ODA loans	-35.0	-32.0	-37.0	-14.0	-2.0	-69.0	-3.0	-23.0	-1.0	-18.0
OOF	27.0	-28.0	-77.0	68.0	90.0	427.0	-23.0	46.0	-21.0	-185.0

[a]Total receipts are shown as a memorandum item. They include in addition to OOF in particular guaranteed export credits, private direct investment and portfolio investment. - [b]Abbreviations: Official development finance (ODF), official development assistance (ODA), other official flows (OOF).

Source: OECD (1984, 1990, 1991b).

Table V.1. - Funds Raised on International Capital Markets: 1984-1991

	US$ million								Per cent	
	1984	1985	1986	1987	1988	1989	1990	1991 (first quarter)	1984	1990
All developing countries	34658	33204	28011	34430	31649	26123	27016	5573	100.0	100.0
Bonds	3425	7295	4805	4878	8719	6935	6611	2191	9.9	19.1
International[a]	2392	5552	2739	3397	5794	4345	4663	1176	6.9	13.5
Foreign[b]	1033	1743	2066	1481	2925	2590	1948	1015	3.0	5.6
Loans	21233	25909	23206	29552	22930	19187	20406	3382	90.1	58.9
International	29502	24293	19925	26271	19701	17975	19586	3284	85.1	56.5
Foreign	1731	1616	3281	3281	3229	1213	820	98	5.0	2.4
Latin America	16038	6366	1422	10340	7284	2051	1662	347	46.3	4.8
Selected Countries:										
Argentina	-	3700	17	2305	14	-	-	-	-	-
Bolivia	-	-	-	-	-	-	-	-	-	-
Brazil	6521	-	350	-	5200	100	-	25	18.8	-
Chile	780	1085	-	-	151	-	285	-	2.3	0.8
Mexico	8110	109	313	7700	-	310	985	322	23.4	2.8
Peru	-	-	-	-	-	-	-	-	-	-
Uruguay	-	-	45	-	12	-	12	-	-	-
Venezuela	-	48	-	30	828	-	348	-	-	1.0

[a] An "international bond" issue is one that is placed simultaneously on the market of at least two countries and is denominated in a currency which need not necessarily be that of either. - [b] A "foreign bond" issue is one which is placed, generally by a domestic syndicate, on the market of a single country.

Source: World Bank (1991). - Own calculations.

Table V.2. - Secondary Loan Prices: Selected Latin American Countries: 1986-1991 (per cent of face value)

	1986	1987				1988				1989				1990				1991	
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Argentina	66	65	47	37	34	28	24	23	22	17	14	18	13	11	12	13	20	17	24
Bolivia	7	9	9	9	11	11	11	10	10	9	11	11	11	11	12	11	11	11	11
Brazil	75	66	61	39	47	51	50	46	43	29	31	28	22	24	23	22	24	28	32
Chile	67	68	69	56	61	57	61	60	55	56	62	61	59	66	65	70	74	80	89
Mexico[a]	56	57	56	47	50	49	50	47	44	39	40	41	36	40	45	43	46	52	55
Peru	18	18	11	10	7	5	6	5	5	3	3	5	6	5	4	4	4	3	6
Uruguay[b]	65	71	74	66	59	60	60	60	60	55	55	55	50	45	49	46	56	51	59
Venezuela[c]	74	74	70	53	57	53	54	48	41	33	37	40	34	40	47	46	69	58	59

[a]Prices after February 1990 refer to par bonds offered under the Brady Initiative. - [b]Prices after December 1990 refer to par bonds offered under the Brady Initiative. - [c]Prices after August 1990 refer to par bonds offered under the Brady Initiative.

Source: World Bank (1988, 1991).

Appendix II - Definition of Variables

Table 3

a) Dependent variables

NTR = net transfers out of public and publicly guaranteed credits from private creditors plus total non-guaranteed private loans;
DIS = disbursements of the same types of debt.

b) Explanatory variables

INVR = gross fixed capital formation as per cent of GDP;
WMSHD = annual change in world-export-market share;
REXR = annual change in real effective exchange rate; (negative values indicate depreciation);
DEFR = government budget deficit as per cent of GDP (negative values for deficits);
TOT = annual change in the terms of trade;
DSERG = debt service on long-term debt as per cent of GNP;
TRADE = imports plus exports as per cent of GDP;
SHDEX = short-term debt as per cent of exports;
STDG = fluctuation in real GDP.

Source: IMF [b; c]; UNCTAD [a, 1988]; WORLD BANK [b, 1988].

Equation (1) on page 24

a) Dependent variable:

FDIR = deflated German gross FDI outflows;

b) Explanatory variables:

YR = real GNP of sample countries;
EXRG = German exports to sample countries in per cent of the sample countries' GNP;
EXDMR = real exchange rate (local currency per DM);
TAR = unweighted average of total import charges (tariffs and para-tariffs);
GU = see below (Table 4);

Source: Deutsche Bundesbank [unpublished data base]; World Bank [c]; IMF [b; c]; UNCTAD [b].

Table 4

a) Dependent variable

DIUSD = total FDI flows from all sources to sample countries [IMF, a];

b) Explanatory variables

Section A: Traditional explanations

EXUS = local currency per US-Dollar, period averages [IMF, c];
GNP = gross national product of sample countries;
dYR = change of real GNP of sample countries, in prices and exchange rates of 1980 [WORLD BANK, c];
TLC = total hourly labour costs in manufacturing [RIVEROS, 1989; IMF, c];
VAD1 = real value added in manufacturing (in prices of 1980) per employee [WORLD BANK, c; UNIDO, a];
VAD2 = VAD1 in 1980 multiplied with the index for real output per employee (1980=100) [WORLD BANK, c; UNIDO, a];
GU = classification of sample countries with regard to their attitudes towards FDI; 0 = restrictive; 1 = quite restrictive; 2 = semi-open; 3 = open (own judgement; for details, see AGARWAL et al. [1991, Chapter IV]).

Section B: Political and economic instability

PS = proxy for political instability; 1 = unstable government characterized by more frequent changes of party or parties in power and/or occurrence of riots or military coup d'états or border conflicts; 0 = stable government characterized by no or less frequent changes of power by democratic means and absence of riots, political unrest, military coup d'états or border conflicts [BANKS, 1989];
PSL = political strikes and lockouts measured as the number of workdays lost per employed person [ILO, a];
SSL = structural and sectoral adjustment loans received by the host developing countries; "1" is assigned to a country for the year in which SSL is received by it, and "0" for the remaining years and countries without adjustment loans [NICHOLAS, 1988];
INF = three-period moving average of annual rate of inflation, based on consumer price indices (1979-80=100) [UNCTAD, a, Table 2.9];
INV = three-period moving average of gross domestic investment as a percentage of GDP [UNCTAD, a, Table 6.4];
LSTOCK = stock of FDI, lagged by three periods.

Section C: Debt overhang

DII = change in the credit rating since 1980 [INSTITUTIONAL INVESTOR, a];
GDP = gross domestic product of sample countries.

Section D: Sovereign risk

BENST = stock of total FDI over GDP [UNCTAD, a; IMF, a];
PRESCU = proxy for the balance-of-payments situation of sample countries; three-period moving average of the current-account deficit (surplus) in per cent of GDP; negative values of PRESCU in the case of deficits [IMF, a].

UMS = proxy for foreign debt problems of sample countries, twice lagged; 0 = no reschedulings; 1 = reschedulings with official creditors; 2 = reschedulings with private creditors; 3 = reschedulings with both official and private creditors [WORLD BANK, b, 1989; HARDY, 1982];
LSTOCK = see above.

Table 5

a) Dependent variables

IR = aggregate investment as per cent of GDP;
GR = annual per-capita growth rate of GDP.

b) Explanatory variables

FDI = foreign direct investment;
AID = official grants;
DEBT = total debt inflows.

Source: IMF [c]; OECD [a]; WORLD BANK [a, 1983; c, 1984].

Appendix III - Major Bottlenecks to an Improved Competitiveness of Brazil

The subsequent factors appear to have contributed significantly to the relatively weak competitive position of Brazil vis-à-vis nine other newly industrializing countries. The list is based on the evaluation of competitiveness by the WORLD ECONOMIC FORUM [a, 1990], and individual indicators are grouped according to the ten "principal factors of competitiveness" given there. The list is highly selective; it covers only a minor fraction of the more than 300 indicators considered by the WORLD ECONOMIC FORUM. The focus is on those areas in which the Brazilian ranking within the country sample was most unfavourable (rank positions 8 to 10), and which may provide scope for a policy-induced improvement of competitiveness.[1]

Dynamism of the economy

- low real growth of per-capita GDP and industrial production;
- poor short-term economic prospects (next 2 years).

Industrial efficiency

- unfavourable trend in labour productivity;
- inadequate use of computer-based information technology;
- strong inflationary pressures;
- dominance of a limited number of enterprises, which is detrimental to new business development.

Market orientation

- limitations on the freedom of companies to set prices;
- no open competition for public works and procurement.

Financial dynamism

- high budget deficits;
- poor country-credit rating;

---

[1] In general, the indicators reflect the situation at the end of the 1980s. Growth rates typically refer to the period 1982-1988. The time horizon of expectations is given where available.

- relatively low gross domestic savings rate;
- banking sector interferes with business enterprises;
- limited role of banks as a source of private-sector credit;
- private sector is at a disadvantage vis-à-vis the public sector in accessing capital markets;
- limited availability of venture capital;
- limited availability of reasonably priced export credits and export insurance;
- high real short-term interest rates;
- few financial alternatives available to enterprises;
- restrictive financial regulatory framework;
- management is not free to allocate profits in an optimal way for the company;
- insufficient depreciation allowances and tax benefits that encourage capital expansion;
- enterprises are not free to transfer, consolidate or divest corporate assets;
- limitations on cross-border financial movements;
- non-competitive banking and financial services in newly deregulated global markets.

Human resources

- lack of new employment opportunities (over the next 3 years);
- vocational training does not meet the requirements of a competitive economy;
- compulsory education system does not meet the requirements of a competitive economy;
- low secondary school-enrollment ratio;
- limited availability of skilled labour;
- insufficient management education and managerial initiative;
- inadequate health-care facilities for workers and their families.

Impact of the state

- high growth of government consumption in GDP;
- work disincentives arising from taxation and social security systems;

- unequal fiscal treatment among enterprises;
- fiscal policy does not stimulate corporate investment and entrepreneurial activity;
- poor responsiveness of government in adapting legislation to new economic realities;
- high government subsidies in per cent of GDP;
- government does not use its resources to promote industrial competitiveness;
- government rules, regulations and bureaucracy restrain efficient and profitable conduct of business;
- government priorities directed towards income redistribution, rather than investment and growth.

Natural endowment utilization

- government's agricultural policies favour political interests over long-term needs;
- high energy imports in per cent of merchandise exports.

International orientation

- relatively low growth of exports of goods and services;
- limited flexibility of producers in modifying products to suit foreign markets;
- relatively high degree of exchange-rate instability (parity changes to SDR);
- exchange-rate policy discourages international competitiveness;
- high trade barriers prevent the importation of goods, services and capital to a great extent;
- restrictive local-content requirements;
- pressure groups limit new industrial developments to a great extent;
- trade legislation and trade practices are not conducive to long-term competitiveness;
- businesses are inadequately prepared to exploit the chances offered by the European market by 1992 and the US/Canadian free-trade agreement;
- inadequate government support for investing abroad;
- limited extent to which foreign inbound investment is welcome;

- foreign investors cannot rely on government pledges for facilities;
- limitations for foreign investors to acquire controlling interests in companies;
- low government support for procurement abroad;
- limitations on the freedom of enterprises to negotiate ventures;
- limitations on expatriate work permits.

Future orientation

- limited extent to which firms take a long-term view;
- ineffectiveness of market forces in redeploying resources in traditional industries;
- reluctance of enterprises to invest over the next 2 years;
- low expected increase of R & D spending over the next five years;
- low degree of synergies developed between state and private R & D efforts;
- insufficient protection of intellectual property rights discourages corporate R & D;
- low efficiency of companies in seeking new technologies and commercially exploiting them.

Socio-political stability

- low stability of the country's socio-political climate;
- low general economic literacy;
- limited confidence in the administration of justice;
- threats of expropriation of personal or corporate assets;
- low effectiveness of businesses in gaining public acceptance of corporate views and concerns;
- industrial relations are not conducive to labour peace;
- organized labour affects corporate operations considerably;
- unequal income distribution;
- country does not prevent corruption;
- low degree of public consensus on government economic policies;
- long-term protection of environment not adequately addressed.

References

AGARWAL, Jamuna P. [1978], "Zur Struktur der westdeutschen Direktinvestitionen in Entwicklungsländern - Einfluß von Außenhandelsverflechtung und relativen Lohnkosten". Die Weltwirtschaft, No. 1, pp. 114-132.

AGARWAL, Jamuna P. [1988], "Europäische Direktinvestitionen in Ostasien - Ein internationaler Vergleich". Die Weltwirtschaft, No. 1, pp. 138-143.

AGARWAL, Jamuna P., Andrea GUBITZ, Peter NUNNENKAMP [1991], Foreign Direct Investment in Developing Countries: The Case of Germany. Kieler Studien, 238. Tübingen.

ALIBER, Robert Z. [1970], "A Theory of Direct Foreign Investment". In: Charles P. Kindleberger (ed.), The International Corporation. Cambridge/Mass., pp. 17-34.

ALIBER, Robert Z. [1971], "The Multinational Enterprise in a Multiple Currency World". In: John H. Dunning (ed.), The Multinational Enterprise. London, pp. 49-56.

BANDERA, Vladimir N., Joseph T. WHITE [1968], "US Direct Investments and Domestic Markets in Europe". Economica Internazionale, Vol. 21, pp. 117-133.

BANETH, Jean [1986], "Government Policies in Developing Countries: Was Capital Wasted?". In: Herbert Giersch (ed.), The International Debt Problem: Lessons for the Future. Tübingen, pp. 74-94.

BANKS, Arthur S. (ed.) [1989], Political Handbook of the World: 1989. New York.

BERGSMAN, Joel, Wayne EDISIS [1988], Debt-Equity Swaps and Foreign Direct Investment in Latin America. International Finance Corporation, Discussion Papers, 2. Washington.

CALVO, Guillermo A., Jacob A. FRENKEL [1992], "Transformation of Centrally Planned Economies. Credit Markets and Sustainable Growth". In: Georg Winckler (ed.), Central and Eastern Europe. Roads to Growth. International Monetary Fund, Austrian National Bank. Washington, pp. 111-137.

CARNEIRO, Dionisio D., Rogério L.F. WERNECK [1989], Brazil: Medium-Term Development Issues. Paper prepared for the WIDER Seminar on Medium and Long Run Strategic Issues, Oslo, September 1989 (mimeo).

COHEN, Daniel, Jeffrey D. SACHS [1986], "Growth and External Debt under Risk of Debt Repudiation". European Economic Review, Vol. 30, pp. 529-560.

CORSEPIUS, Uwe [1988a], Government Regulations, External Financing, and Economic Performance: The Case of Chile. Institute of World Economics, Working Papers, 336. Kiel.

CORSEPIUS, Uwe [1988b], Government Regulations, External Financing and Economic Performance: The Case of Mexico. Institute of World Economics, Working Papers, 345. Kiel.

CORSEPIUS, Uwe, Peter NUNNENKAMP, Rainer SCHWEICKERT [1989], Debt versus Equity Finance in Developing Countries. An Empirical Analysis of the Agent-Principal Model of International Capital Transfers. Kieler Studien, 229. Tübingen.

DEAN, Andrew [1991], "Changes in International Savings Behaviour". In: Horst Siebert (ed.), Capital Flows in the World Economy. Tübingen, pp. 35-60.

EATON, Jonathan, Mark GERSOVITZ [1980], "LDC Participation in International Financial Markets: Debt and Reserves". Journal of Development Economics, Vol. 7, pp. 3-21.

EATON, Jonathan, Mark GERSOVITZ [1981a], "Debt with Potential Repudiation: Theoretical and Empirical Analysis". Review of Economic Studies, Vol. 48, pp. 289-309.

EATON, Jonathan, Mark GERSOVITZ [1981b], Poor-Country Borrowing in Private Financial Markets and the Repudiation Issue. Princeton Studies in International Finance, 47. Princeton.

EATON, Jonathan, Mark GERSOVITZ, Joseph E. STIGLITZ [1986], "The Pure Theory of Country Risk". European Economic Review, Vol. 30, pp. 481-513.

ECONOMIST INTELLIGENCE UNIT (EIU) [a], Brazil: Country Report. London, various issues.

ECONOMIST INTELLIGENCE UNIT (EIU) [b], Brazil: Country Profile 1990-91. London 1990.

EDWARDS, Sebastian [1984], "LDC Foreign Borrowing and Default Risk: An Empirical Investigation, 1976-80". American Economic Review, Vol. 74, pp. 726-734.

EDWARDS, Sebastian [1986], "The Pricing of Bonds and Bank Loans in International Markets: An Empirical Analysis of Developing Countries' Foreign Borrowing". European Economic Review, Vol. 30, pp. 565-589.

EDWARDS, Sebastian [1991], "Capital Flows, Foreign Direct Investment, and Debt-Equity Swaps in Developing Countries". In: Horst Siebert (ed.), Capital Flows in the World Economy. Tübingen, pp. 255-281.

EL-ERIAN, Mohamed A. [1991], The Restoration of Latin America's Access to Voluntary Capital Market Financing: Developments and Prospects. International Monetary Fund, Working Papers, WP/91/74. Washington.

EUH, Yoon D., Sang H. MIN [1986], "Foreign Direct Investment from Developing Countries: The Case of Korean Firms". The Developing Economies, Vol. 24, No. 2, pp. 149-168.

FEDER, Gershon, Uri REGEV [1975], "International Loans, Direct Foreign Investment, and Optimal Capital Accumulation". Economic Record, Vol. 51, pp. 320-325.

FFRENCH-DAVIS, Ricardo [1990], "Debt-Equity Swaps in Chile". Cambridge Journal of Economics, Vol. 14, No. 1, pp. 109-126.

FISCHER, Bernhard, Peter NUNNENKAMP et al. [1988], Capital-Intensive Industries in Newly Industrializing Countries. The Case of the Brazilian Automobile and Steel Industries. Kieler Studien, 221. Tübingen.

FROOT, Kenneth A., Jeremy C. STEIN [1989], Exchange Rates and Foreign Direct Investment: An Imperfect Capital Markets Approach. National Bureau of Economic Research, Working Papers, 2914. Cambridge/Mass.

FROST & SULLIVAN , INC. [1988], Measurement of the Investment Climate for International Business. Special Report Prepared for the United States Agency for International Development (AID). Washington (mimeo).

GITTELMAN, Michelle [1990], "Transnational Corporations in Europe 1992: Implications for Developing Countries". The CTC Reporter, No. 29, pp. 35-42.

GOLDBERG, Michael A. [1972], "Determinants of US Direct Investment in the EEC: Comment". American Economic Review, Vol. 62, No. 4, pp. 692-699.

GREENE, Joshua, Delano VILLANUEVA [1991], "Private Investment in Developing Countries. An Empirical Analysis". IMF Staff Papers, Vol. 38, No. 1, pp. 33-57.

GUBITZ, Andrea [1988], Der Zusammenhang zwischen Direktinvestitionen im Ausland und der deutschen Ausfuhr. Frankfurt/M. (mimeo).

GUPTA, Vinod K. [1983], "A Simultaneous Determination of Structure, Conduct and Performance in Canadian Manufacturing". Oxford Economic Papers, Vol. 35, pp. 281-301.

HANSON, James A. [1974], "Optimal International Borrowing and Lending". American Ecnomic Review, Vol. 65, pp. 616-634.

HARDY, Chandra S. [1982], Rescheduling Developing-Country Debts, 1956-1981: Lessons and Recommendations. Overseas Development Council, Washington.

HIEMENZ, Ulrich et al. [1992], "European Trade Policies towards Developing Countries". In: Ippei Yamazawa, Akira Hirata (eds.), Trade Policies towards Developing Countries. London (forthcoming).

HIEMENZ, Ulrich [1991], "Vision für die neunziger Jahre: Die Entwicklungsländer auf dem Abstellgleis?" Zeitschrift für Wirtschaftspolitik, Vol. 40, pp. 35-55.

HIEMENZ, Ulrich, Peter NUNNENKAMP et al. [1991], The International Competitiveness of Developing Countries for Risk Capital. Kieler Studien, 242. Tübingen.

INSTITUTE OF INTERNATIONAL FINANCE [1990], Improving the Official Debt Strategy: Arrears Are Not the Way. Washington.

INSTITUTIONAL INVESTOR [a], New York, var. iss.

INTERNATIONAL LABOUR OFFICE (ILO) [a], Yearbook of Labour Statistics. Geneva, var. iss.

INTERNATIONAL MONETARY FUND (IMF) [a], Balance of Payments Statistics. Washington, var. iss.

INTERNATIONAL MONETARY FUND (IMF) [b], Direction of Trade Statistics. Washington, var. iss.

INTERNATIONAL MONETARY FUND (IMF) [c], International Financial Statistics. Washington, var. iss.

KAYSER, Gunther et al. [1981], Deutsche Auslandsinvestitionen in Entwicklungsländern. Erfahrungen deutscher Unternehmen in Brasilien, Indien, Indonesien, Kolumbien, Mexiko und Tunesien. Munich.

KHAN, Moshin S., Malcolm D. KNIGHT [1983], "Sources of Payments Problems in LDCs". Finance and Development, Vol. 20, No. 4, pp. 2-5.

KRAVIS, Irving B., Robert E. LIPSEY [1982], "The Location of Overseas Production and Production for Export by U.S. Multinational Firms". Journal of International Economics, Vol. 12, No. 3/4., pp. 201-224.

KRUEGER, Anne O. [1989], Developing Countries' Debt Problems, Policy Reforms, and the Brady Plan. Paper for presentation at Western Economic Association, (mimeo).

KRUGMAN, Paul [1988], "Financing versus Forgiving a Debt Overhang". Journal of Development Economics, Vol. 29, pp. 253-268.

KRUGMAN, Paul [1989], "Private Capital Flows to Problem Debtors". In: Jeffrey D. Sachs (ed.), Developing Country Debt and Economic Performance. Vol. 1: The International Financial System. Chicago, pp. 299-330.

KUMAR, Nagesh [1987], "Intangible Assets, Internalization and Foreign Production: Direct Investments and Licensing in Indian Manufacturing". Weltwirtschaftliches Archiv, Vol. 123, No. 2, pp. 325-345.

KUME, G., K. ITO [1989], "International Direct Investment and Debt Problems in Developing Countries". In: OECD, International Direct Investment and the New Economic Environment: The Tokyo Round Table. Paris, pp. 71-98.

LÄCHLER, Ulrich [1985], Debt versus Equity in Development Finance. Institute of World Economics, Working Papers, 248. Kiel.

LÄCHLER, Ulrich, Peter NUNNENKAMP [1987], "The Effects of Debt versus Equity Inflows on Savings and Growth in Developing Economies". Weltwirtschaftliches Archiv, Vol. 123, pp. 631-650.

LANGHAMMER, Rolf J. [1991], "Competition among Developing Countries for Foreign Investment in the Eighties - Whom Did OECD Investors Prefer?" Weltwirtschaftliches Archiv, Vol. 127, No. 2, pp. 390-403.

NICHOLAS, Peter [1988], The World Bank's Lending for Adjustment. An Interim Report. World Bank Discussion Papers, 34. Washington.

NUNNENKAMP, Peter [1986a], "Bank Lending and Government Intervention in Capital Markets: Has Recycling Gone Too Far?". In: Herbert Giersch (ed.), The International Debt Problem: Lessons for the Future. Tübingen, pp. 42-65.

NUNNENKAMP, Peter [1986b], The International Debt Crisis of the Third World. Causes and Consequences for the World Economy. Brighton.

NUNNENKAMP, Peter [1988], Debt Strategies for Developing Countries: Future Options. Institute of Strategic and International Studies, International Economic Issue Papers. Kuala Lumpur.

NUNNENKAMP, Peter [1989], The Structure of External Financing in Malaysia: The Policy Framework for Foreign Direct Investment and Debt Inflows. Institute of World Economics, Working Papers, 368. Kiel.

NUNNENKAMP, Peter [1990], "Determinants of Voluntary and Involuntary Bank Lending to Developing Countries in the 1980s". Kyklos, Vol. 43, pp. 555-577.

NUNNENKAMP, Peter [1991], "What Are the Future Prospects for the Third World? Current Problems and Conclusions for Development Co-operation". Economics, Vol. 43, pp. 7-27.

NUNNENKAMP, Peter, Volker STÜVEN [1990], Wirtschaftsreform, Schuldenerlaß und Souveränitätsrisiko. Zum Problem fehlender Investitionsanreize. Institute of World Economics, Working Papers, 410. Kiel.

OECD [a], Geographical Distribution of Financial Flows to Developing Countries. Paris, var.iss.

OECD [1990], Economic Outlook, No. 47. Paris, pp. 47-52.

OHANA, Eduardo Felipe, Carlos Henrique F. MUSSI [1991], The External Debt Payment Capacity of Brazil: From Theory to Concept (mimeo).

OSTERKAMP, Rigmar [1983], "Zur Ausländerinvestitionspolitik der Entwicklungsländer". In: Hans-Gert Braun et al., Direktinvestitionen in Entwicklungsländern. Bedeutung, Probleme und Risiken. München, pp. 157-194.

PFEFFERMANN, Guy P., Andrea MADARASSY [1991], Trends in Private Investment in Developing Countries, 1990-91 Edition. International Finance Corporation, Discussion Papers, 11. Washington.

PICHT, Hartmut [1987a], The Political Economy of Debt Repudiation and Expropriation in LDCs. Institute of World Economics, Kiel (mimeo).

PICHT, Hartmut [1987b], Labor Costs and Productivity Trends in Selected Brazilian Manufacturing Industries: An International Comparison. Institute of World Economics, Working Papers, 294. Kiel.

PICHT, Hartmut, Volker STÜVEN [1988], Selective and Unspecific Expropriation of Foreign Direct Investments: Empirical Evidence and Implications for the Debt Crisis. Institute of World Economics, Working Papers, 344. Kiel.

PORST, Gunter [1991], Investitionsland Brasilien. Rahmenbedingungen, Wirtschaftsrecht und Wirtschaftspraxis. Institut für Iberoamerika-Kunde, Hamburg.

RIVEROS, Luis A. [1989], International Differences in Wage and Nonwage Labor Costs. World Bank, PPR Working Papers, 188. Washington.

SACHS, Jeffrey D. [1984], Theoretical Issues in International Borrowing. Princeton Studies in International Finance, 54. Princeton.

SACHS, Jeffrey D. [1989], "The Debt Overhang of Developing Countries". In: Jeffrey D. Sachs (ed.), Developing Country Debt and Economic Performance. Vol. I: The International Financial System. Chicago, pp. 80-102.

SCHNEIDER, Friedrich, Bruno S. FREY [1985], "Economic and Political Determinants of Foreign Direct Investment". World Development, Vol. 13, No. 2, pp. 161-175.

SCHRÖDER, Antonius [1986], Direktinvestitionen mittelständischer Unternehmen in Schwellenländern. Köln.

SCHWARTZ, Rebecca H. [1976], The Determinants of US Direct Investment Abroad. Ph.D. Diss., Texas Technical University, Lubbock.

SCHWEICKERT, Rainer [1991], "Government Regulations, External Financing, and Economic Performance: The Case of Korea". In: H.W. Singer (ed.), Aid and External Financing. New World Order Series, Vol. 9. New Delhi, pp. 445-481.

SPINANGER, Dean [1988], Tapping Brazil's Labour Potential: Trends and Insights. Institute of World Economics, Working Papers, 323. Kiel.

STEVENS, Guy V.G. [1973], "The Determinants of Investment". In: John H. Dunning (ed.), Economic Analysis and the Multinational Enterprise. London, pp. 47-88.

STIGLITZ, Joseph E., Andrew WEISS [1981], "Credit Rationing in Markets with Imperfect Information". American Economic Review, Vol. 71, pp. 393-410.

STÜVEN, Volker [1988], Incentive Effects of Self-Enforcing Contracts in International Lending. Institute of World Economics, Working Papers, 341. Kiel.

TAKAHASHI, Akira [1975], Some Short-Run Aspects of Direct Foreign Investment. Ph.D. Diss., University of Pittsburgh.

UNCTAD [a], Handbook of International Trade and Development Statistics. New York, var. iss.

UNCTAD [b], Handbook of Trade Control Measures of Developing Countries. Supplement: A Statistical Analysis of Trade Control Measures of Developing Countries. Geneva 1987 (mimeo).

UNIDO [a], Handbook of Industrial Statistics. New York, var. iss.

UNIDO [1990], Foreign Direct Investment Flows to Developing Countries: Recent Trends, Major Determinants and Policy Implications. PPD. 167. Vienna.

UNITED NATIONS CENTRE ON TRANSNATIONAL CORPORATIONS (UNCTC) [1988], Transnational Corporations in World Development. Trends and Prospects. New York.

WATSON, Maxwell et al. [1988], International Capital Markets. Developments and Prospects. International Monetary Fund, Washington.

WILLIAMSON, John (ed.) [1990], Latin American Adjustment: How Much Has Happened? Institute for International Economics, Washington.

WORLD BANK [a], World Development Report. Oxford, var. iss.

WORLD BANK [b], World Debt Tables. Washington, var. iss.

WORLD BANK [c], World Tables. Washington, var. iss.

WORLD ECONOMIC FORUM [a], The World Competitiveness Report. Geneva, var. iss.

ZAIDI, Iqbal M. [1985], "Saving, Investment, Fiscal Deficits, and the External Indebtedness of Developing Countries". World Development, Vol. 13, pp. 573-588.

Statistical Sources of Appendix Tables

BANCO CENTRAL DO BRASIL [1991], Boletim Mensal Separata. Brasilia, April.

INTERNATIONAL MONETARY FUND (IMF) [1990], Balance of Payments Statistics Yearbook. Washington.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD) [1984], Geographical Distribution of Financial Flows to Developing Countries. Disbursements, Commitments, Economic Indicators: 1979/1982. Paris.

--, [1986], Financing and External Debt of Developing Countries, 1985 Survey. Paris.

--, [1989], Financing and External Debt of Developing Countries, 1988 Survey. Paris.

--, [1990], Geographical Distribution of Financial Flows to Developing Countries. Disbursements, Commitments, Economic Indicators: 1985/1988. Paris.

--, [1991a], Financing and External Debt of Developing Countries, 1990 Survey. Paris.

--, [1991b], Geographical Distribution of Financial Flows to Developing Countries. Disbursements, Commitments, Economic Indicators: 1986/1989. Paris.

SECCHI, Carlo [1991], "European Financial Co-operation with Latin-America: A Variety of Approaches". In: Louis Emmerij, Enrique Iglesias (eds.), Restoring Financial Flows to Latin America. Paris, pp. 169-237.

WORLD BANK [1988], Financial Flows to Developing Countries. Quarterly Review. Debt and International Finance Division, Washington, December.

--, [1989], World Debt Tables 1989-90. External Debt of Developing Countries. Washington.

--, [1990], World Debt Tables 1990-91. External Debt of Developing Countries. Washington.

--, [1991], Financial Flows to Developing Countries. Quarterly Review. Debt and International Finance Division, Washington, June.