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DEBT AND DEVELOPMENT OF LESS

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DEVELOPED COUNTRIES,

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BY

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WOLFGANG DAUSINGER

Dipl.Oek. University of Giessen, 1982

A MASTER'S REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF ARTS

Department of Economics
KANSAS STATE UNIVERSITY
Manhattan, Kansas
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### LD 2668 ,R4 1984 D38

# Y77505 PP5745

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#### 1. INTRODUCTION

#### 1.1. Intention and Procedure of the Analysis

The indebtedness of the third world has been a main issue of public discussion in the last few years. Most attention has been directed towards repayment problems resulting in a break-down of the world-wide financial system. Indeed, the banking system has been shaken by many debt renegotiations with developing countries who have been unable or unwilling to pay their regular debt services. 2

The importance of international financial relations cannot be overstated. Economists concerned about developing countries ask this question: how have the tremendous capital flows of the last decade affected the people of the debtor

countries? Did growing external debts support or hamper development? The expression "development" will be used to refer to economic growth plus improvement in income distribution 3. The subject is even more important when we consider how many countries are affected by indebtedness.

From a global perspective, absolute debts are concentrated in a few countries. In 1980 the five major debtors accounted for about 39% of total non-OPEC countries' debt(see table A-2 and A-9, appendix) But an analysis of development must also survey the situation of many other developing countries, whose debts are striking in terms of their economic capacity. 4

After a short introduction, which includes an historical perspective, the analysis will turn to the size of indebtedness and its distribution among developing countries (chapter 2). Chapter 3 deals with the effects of inflows on domestic savings and growth. The theoretical discussion is supplemented by statistical calculations. Chapter 4 shows possible effects of debts on policies of debtor countries. Scenarios of indebtedness vary with countries, but an analysis wouldn't be complete without a study of a particular country. The experiences of Brazil, one of the main debtors, gives a good example of what can happen to other countries.

#### 1.2 External Debts and the Balance of Payments

The balance of payment statement is a record of a coun-

try's international economic transactions. Within the bookkeeping system, the current account plus capital account has to equal zero.<sup>5</sup> The current account consists of the balance of goods and services (which includes investment income), plus net grants, remittances and unilateral transfers. The total current account balance is negative for less developed countries (LDCs) as a whole since 1970. In 1982, the deficit of all LDCs reached \$118 billion<sup>6</sup>.

The current account defict is financed by capital flows and the use of reserves. Capital inflows are a very hetereogeneous group of loans and direct investments. The objective of this report is to analyze the impact of total debt and net changes of debt on economic variables in the debtor countries.

#### 1.3 Historical View on Developing Countries' Indebtedness

Since the late Middle Ages, several transactions were made among European countries to help particular nations. Along with technology and international trade, capital transfers were also growing and pushing the development in new countries outside of Europe. During the nineteenth century, international flows were important for the world-wide economy.

Most of the developing countries of today did not exist or were ruled by foreign powers at that time. Borrowing was used by many of the developing nations to overcome their capital shortage and to accelerate internal growth. The indebtedness of former British colonies reached about the same level (measuring debt as a ratio of GNP) as it does today for developing countries. The USA's total external debt was estimated at 40 percent of GNP in the 1830's. 10 But, the net indebtedness was reduced to about 10 percent in 1914. The reduction indicates the fast development of the USA and also higher repayments than inflows of foreign capital. 11

Canada and Australia had a similar experience to the U.S. although lagging at least a decade behind the USA. Canada, for example, increased its outside capital by 208 percent to \$3.7 billion between 1900 and 1913. 12 The ratio of external debts to GNP for Canada was over 100 percent and close to that mark for Australia and New Zealand in the first 15 years of the twentieth century 13

These countries were quite successful in increasing their average material level of living. But, there were several differences from the situation of developing countries in recent times. Unlike today, the early debt figures included direct investments. The USA, Canada and Australia, with a sparse population density but plenty of human skills and natural resources, were not underdeveloped in the same sense that today's LDCs in Asia, Africa and Latin America are. 14

Before the first World War, nations which remained underdeveloped also borrowed abroad. Most Latin American countries, for example, relied on capital imports to finance military expenditures, set up infrastructure, or make other economic investments. 15 By 1913, Latin America accounted for 20 percent (\$8.8 billion) of all foreign-held assets in the world. 16

Independent nations in Asia and northern Africa were also heavy debtors. Egypt and the Ottoman Empire desired to keep up with the industrialization of European countries. Egypt in creased its foreign debts significantly from 1854 on. About 25 years later, the financial problems made the country collapse. In 1876, debts reached 68.5 million pounds sterling compared to 3 million in 1863. Finally, the debt service payments took two-thirds of the total government revenues and about half the value of exports. Despite financial failure, Egypt's development increased rapidly in some sectors. Infrastructure projects like railroads, telegraph, and schools were undertaken in great numbers. The basis for agricultural production was also improved by land cultivation and irrigation. 17

The time between the two World Wars is well known for the world-wide economic disturbances. The problems among the Western countries reduced the concern about developing countries Nevertheless, after the build-up of high debts in the 1920's, the depression of the 1930's brought many defaults. Latin American countries especially showed significant figures of indebtedness indicating a high burden of debt services. The

records of the main debtors exhibit incredible jumps for Bolivia (in terms of Boliviars). But the rapid debt acceleration was concentrated among only a few LDCs. For example, there was virtually no change for Egypt (see table A-1, appendix)<sup>18</sup>. During this period, the debtors' ability to service their debts worsened, produced by the collapse of the world trade system and the falling prices for export commodities.<sup>19</sup> Let us focus now on countries that were sources of capital.

In the nineteenth century, the main creditors were European countries. England and France were regarded as the world financial centers supplying most of the capital(see Table 1.3.-1). They, like other European nations, used their capital for economic expansion, strategic goals, and for the support of colonial empires.<sup>20</sup>

Table 1.3.-1 Main Creditor Counties in 1913

Creditors	Gross Credits (in \$billion)	Percent of Total		
United Kingdom France Germany	18.0 9.0 5.8	40.9 20.4 13.2		
Total	44.0	100		

Source: McMullen, N.J., "Historical Perspectives..." p.14

The First World War changed the situation on the creditor side dramatically: The USA changed from net debtor to the largest creditor in the world. But the most capital went to Canada and war-shaken Europe, not to underdeveloped countries of Asia, Africa and Latin America<sup>21</sup>.

This short overview shows that there have been large international capital movements in the last 150 years. But, this report will focus on indebtedness of developing countries since 1970.

# 2. STRUCTURAL AND QUANTITATIVE PERSPECTIVE ON THE DEBTS OF DEVELOPING COUNTRIES

#### 2.1. The Situation Before 1970

From the 1950's to the beginning of the 1970's, cheap energy, stable political order, liberalization of trade and so forth led to substantial world-wide growth. Debts of developing countries increased gradually. A high portion of loans was concessional. Public debt services were also increasing for most developing countries. But in a time of high growth rates, it was not a major concern. 1

This analysis deals with events after 1970. The next chapter will select the huge abundance of data and concentrate on the absolute debts, private debts, and new net debts and debt services. These criteria will be applied to appropriate groups of developing countries, but also to single debtors. Notes about creditors and the reasons for indebtedness will accompany the quantitative survey.

#### 2.2. The Dimensions of Indebtedness

The fourfold world-wide oil-price increase of 1973-74 worsened the subsequent domestic economic and international debt position of many developing countries, resulting in greater attention to debt problems since the mid-1970's. From 1971 to 1981, the external debts of non-OPEC developing countries rose from \$75 billion to \$520 billion (see table A-2, appendix). Debts increased constantly with a particularly high rate of growth in 1977/78. The acceleration of indebtedness slowed down at the beginning of the 1980's, but still grew by more than 10 per cent per annum (see table A-2, appendix).

External debts exist in many forms and with different conditions. The distinction between public and private loans provides some striking facts for further discussion. In the 1960's, public institutions accounted for most of the capital transfers, which were mostly concessional loans. During the 1970's, the total amount of concessional loans increased by about 200% in absolute figures and reached \$118 billion in 1982. But, concessional debt as a share of the total constantly declined to 22.6% in 1982 (See Table 2.2.-1).

Table 2.2.-1 Debt of Non-OPEC Developing Countries

Years	71	75	77	78	79	80	81	82
Non-concessional debt (in \$ billion)	45	103	163	207	249	293	340	402
Concessional debt (in \$ billion)	30	49	64	75	83	92	105	118
Concessional debt as a % of total debt	40	32	28	29	25	24	24	23

Source: OECD (Organisation for Economic Cooperation and Development), <u>Debt of Developing Countries</u>, <u>1982 Survey</u> (Paris 1982), p.28 and personal calculations.

The very low percentages of the concessional loans does not include the grants or grant-like flows which are a considerable part of Official Development Assistance (ODA). Still, 14 to 21 percent of all transfers by OECD countries are grants (see table 2.2.-2).

Table 2.2.-2 Net Flow of Financial Resources from OECD - Countries

Years	1970	1975	1979	1980	1981
Total Flows (in \$ billion)	15.9	44.8	75.4	75.3	88.0
Official Development Assistance (in \$billion	6.9 n)	13.8	22.8	27.3	25.6
Of which bilateral grants (in \$billion)	3.3	6.3	11.7	14.1	13.1
Grants (as Percentage of Total Flows)	21	14	15	19	15

Source: OECD (Organisation for Economic Cooperation and Development), <u>Development Cooperation</u>, <u>1982 Review</u> (Paris, 1982), p.178

Analyzing the net-flows of each year, it is obvious that the official assistance moved up sluggishly compared to non-concessional flows. Since 1975, private flows have always been about 2/3 of all transfers, with direct investment at about 14% in the long run (see table A-3, appendix). In the period of 1979/80, non-concessional loans lost a bit of their upward trend. The tremendous changes per year pushed the amount of net-private flows to 53.8 billion in 1981 (1970: \$7.2 billion). Only in 1979, the transfer didn't reach the level of the previous year (see table A-4, appendix).

The composition and size of external debt differ substantially among developing countries. A closer look shows the highly different distribution between country groups.

Not surprisingly, the debts of low-income countries is dominated by concessional loans, which nearly maintained their relative level from 1970. LICs (low income countries) and MICs (middle income countries) have almost the same percentage increase in total debts from 1970 to 1982 (LIC: 491%, MIC: 476%)<sup>5</sup>. Nevertheless, NICs (Newly Industrialized Countries) were responsible for the largest share of total LDC debt and additionally only 3 per cent of their loans came from concessional sources in 1982 (see table A-5, appendix). In general, the higher the income of a country group, the lower is their share of concessional funds. With the exception of low income countries, concessional loans are decreasing for developing countries (see table A-6, appendix).

The present debt structure explains debt-service patterns. The composition of debts determines interest payments and the sequence of amortization due to particular maturities. Non-OPEC developing countries' annual debt service is dominated by increased non-concessional debt. In 1982, the debt service due to public concessional loans made up only 6.2% of the total \$98.3 billion payments (see table A-7, appendix), implying that problems with debt services result from private loans. Only a few LICs are an exception to such a statement. The year

(1978) with the highest change in non-concessional debt-service (+46.6) perfectly fits to the highest increase in total debts and private debts in the same year.

During the decade of observation, the share of amortization within total transfers was declining. In 1982, interest payments took more than half of all payments. Developing countries had relatively less means to repay the debts because of high interest rates (see table A-7, appendix).

The NICs carried the main burden of debt-service, reflecting their high private liabilities. Because of the high absolute external debts and debt services, NIC problems are often discussed in Western mass media. But, despite the varying absolute level of debt services, LDC's at all level of income face a dramatic increase in debt service. In the period of 1976 to 1982 (6 years), LLDC (31 countries labelled least developed countries) had an increase of 200%, LIC of 219%, and MIC of 273% in debt service (see table A-8, appendix).

Aggregate amounts and averages for groups can be misleading. For example, within the LIC group, the largest debtors experienced a relative decline of their debt service while other debtors had substantial increases. Within MICs and NICs, indebtedness varied widely. The dependency on private and net-floating interest loans by some countries makes enormous differences within the same income groups. 6

The presentation of data concerning single countries is essential for us to discuss the effects of debts on development. Therefore, the next chapter selects the main debtors according to several criteria.

#### 2.3. · The Major LDC Debtors

The following analysis tries to point out the dimensions of indebtedness for individual countries. To do this it is necessary to discuss a few absolute and relative indicators.

Ranking non-OPEC developing countries according to their total absolute debts shows the dominance of Brazil and Mexico who accounted each for over \$40 billion in 1980. India, South Korea, Argentina, Turkey, and Egypt each had external debts more than \$10 billion. In 1980 six out of the twelve major debtors had a GNP per capita over \$1000 and only two (India and Pakistan) had a per capita income below the limit of \$500 (see table A-9, appendix).7

Private loans were even more concentrated. Mexico and Brazil were responsible for half of the bank-transfers in 1975. Before the oil crisis, only a few developing countries had access to private creditors, but during the 1970's, more and more countries established connections to capital markets.<sup>8</sup>

But, a country's total debt figure is not a good indicator of the extent of its debt problems. Also, debt per head does not give comparable figures for all countries. GNP per capita - despite the well-known measurement problems - is a common indicator for the economic performance of a country. Thus a ratio of debt per capita to per capita income, gives a more reliable figure to compare the debt-stock of different countries.

Among the main debtors Egypt (59.2%), Peru and Morrocco show the highest debt - income ratios. Some countries with a small population, that are rarely mentioned by the Western media like Togo(87.8%), Bolivia(72%) and Zambia (61.5%), have even a higher relative debt (see table A-9, appendix). The findings indicate that indebtedness is a problem related to an individual country's policies and economic environment, not confined to the middle-income block.

A ratio of private debt (floating interest rates) to GNP would allow us to analyze the share of costly loans which are vulnerable to interest changes on a real basis. Yet we have not included these ratios, as they are considered in the following evaluation of debt services.

The ranking by absolute debt service reflects total debts and the size of private debts. On this ranking, India, Pakistan, and Turkey are ranked lower than total debts would indicate and Chile and Peru higher. Most debtors have recently accounted for an enormous expansion of debt services. Brazil and Mexico top the debt service table with by far the highest absolute burden (see table A-10, appendix).

For seven of the eight countries with the highest debt services, debt service payments grew faster than total debts from 1975 to 1980. This fact is due to high interest-rate loans, whereas fast-growing debt-services of lower income countries are a result of increased borrowing (see table A-11, appendix).

A high absolute debt-service level also does not indicate a debt problem, unless used in combination with other indicators. One of the widely used indicators is the debt-service ratio which is the annual ratio of debt service to foreign exchange earnings from the export of goods and services. In 1973, Abbott states that three countries - Egypt (34.6%), Peru (32.5%) and Uruguay (30.1%) - had a ratio more than 30% and two countries (India and Mexico) had a ratio between 20% and 30%. 9 The calculation for 1980 points out the drastic worsening of this debt service ratio for the main debtors. In 1980, a debt service ratio over 15% can be observed for countries from different income groups (see table A-10, appendix). 10 Although this cannot be demonstrated historically, it is commonly thought that 15% is a dangerous limit beyond which the debtor can have problems in maintaining domestic growth. 11

There are several other ratios (including variations of the debt-service ratio) which can help to examine the debtproblem of developing countries. But the selected ratios are sufficient to give a good overview about the dimension of the debt problem.

#### 2.4. Origins of the Indebtedness

The reasons for the accelerating debt problem of the third world can be classified in three categories:

- 1) The change of world economic framework in the 1970's
- 2) Internal mistakes and economic failure of the debtor countries
- 3) The behavior of the private banks.

None of the reasons is fully explanatory and none of them fits every developing country. But, altogether, the following arguments clarify the origins of the problem.

Several "external shocks" forced considerable changes within the international trade system. The exploding oil price of 1973-74 was only the beginning of the present pattern of indebtedness. The changing oil price affected the entire (commodity) terms of trade (TOT)<sup>12</sup> system. The experienced deterioration in the overall terms of trade of developing countries without oil resources can be attributed mainly to the rapid rise in import prices. <sup>13</sup> The negative TOT-changes did not characterize all non-oil LDC's. For example oil exporters and some low income countries in Africa and Asia, benefitted from price reductions in grain imports after 1979. <sup>14</sup>

Table A-12(appendix) shows two TOT declines for developing countries in the period 1973 to 1982. 15 But, except in low-income Africa, export purchasing power did not decline with the term of trade (see table A-12, appendix). Nevertheless, developing countries planning has been hurt by fluctuating prices for primary goods, which created uncertain expectations about export incomes. 16

Industrialized country growth also has a direct impact on the current account of third world countries. Cline estimates that a one percentage point growth in OECD countries reduces the LDC-deficit by \$7 billion. 17 But the average growth rate of GNP of industrialized countries fell from 5 per cent annually (between 1963-72) to 2 percent annually after 1972. 18

Besides the western recession, debtors are hurt seriously by political intervention in international trade, which limits the export efforts of all countries. 19 Rising unemployment caused an upsurge of protectionist pressure after 1973. Protectionism became more fashionable also against developing countries. Despite the barriers, exports in some semi-industrialized countries made progress. But, protection did hurt these countries, as well as LDC's as a whole. 20

The high demand for the U.S. dollar and a tight U.S. monetary policy led to a appreciation of the dollar.<sup>21</sup> Since most debts are denominated in or partially tied to U.S. dol-

lars, a stronger dollar increases the value of the existing debt stock and debt services compared to the domestic currencies.

Moreover, it is obvious that developing countries have depended heavily on commercial loans from private banks since the late 1970s.<sup>22</sup> That alone would increase the interest-payment liability compared to concessional loans. Additionally, the debtors had to face higher interest rates combined with low inflation in the major Western countries (see table 2.4.-1). After 1978, average real interest rates became positive and shifted more burden on the debtors' shoulders.<sup>23</sup>

Table 2.4-1 Prime Rate and Price Inflation in World Trade

	Prime Rate	Inflation Rate
1970-73	6.7	12.6
1979-82	15.5	4.4

Source: Dornbush, Rudiger, "The Latin American..." p.7 .

Developing country policy mistakes like the overexpansion of domestic demand and the overvaluation of currencies, also led to excessive trade deficits.<sup>24</sup> Expansionary government policies accompanied by fiscal deficits are largely responsible for endemic inflation in the third world. More important for the current account was that exchange rate changes did not keep up with domestic and foreign inflation. The results have often

been an appreciation of real exchange rate. 25

Many countries have stressed fast industrialization, and have relied on foreign industrial technology. Wrong decisions about socialization of industrial enterprises (Venezuela) and diversification of industrial products (Mexico) added to the existing debt problem.<sup>26</sup>

On the creditor side the financing of private loans directly or indirectly through the Eurocurrency market changed the behavior of private financial institutions. This new market experienced a rapid increase in the number of participating banks. Due to central bank deposits and recycled petrodollars, deposits reached \$200 billion in 1975, compared with \$20 billion in 1967. New operational techniques like "roll over" credits and syndication policy reduced the risk for single banks and favoured the riskier lending to developing countries.27 Private banks also expected that central banks and government would back their business in cases of default.28 Eurocurrency lending concentrated on a few countries which are industrializing rapidly, export orientated, or which have rich resources.29 Medium and long-term credits to developing countries accounted for \$13.4 billion in 1977. 1975 marked the serious involvement of LDC's when their share went up to 39% of all Eurocurrency borrowing (see table 2.4.-2).

Table 2.4.-2 Medium and Long-Term Credit from the Eurocurrency Market Years 1973 1974 1975 1976 1977 Total Credits 21.8 24.3 21.0 28.8 41.6 (in \$billion) Credit to LDCs 6.3 8.2 11.0 13.4 4.5 (in \$billion) Credit to LDCs 20.6 21.5 39 38.1 32.2 (percent of total)

Source: Seiber, Marilyn J., "Debt Escalation...", p.43.

#### 2.5. The Major Creditors of Developing Countries! Debt

The four sources of the financial transfers to developing countries are the DAC countries (Development Assistance Committee - DAC)30, OPEC-members, the group of centrally planned countries, and other developing countries. A loan can be given as a bilateral official transfer, through a multilateral intermediary, or as credit by a private financial institution. The largest share of official loans was from DAC countries, whose bilateral loans (1981) accounted for 51 percent of total ODA. The OPEC members accounted for 20 percent. The contribution of centrally planned countries is almost negligibly small (see table 2.5.-1). Almost 90 percent of the total resource flow was from DAC countries. This includes the recycling of OPEC surplusses and deposits of other

developing countries by private banks.<sup>31</sup> It is easy to attach the private loans to particular banks, but it is hard to say who made the deposits for the loans.

The dominant private lending institutions are still the US-banks. Their claims on developing countries continued to increase to about \$ 100 billion in 1982. But the US-share of all bank claims declined from 55% to 36% from 1975 to 1982. 32

Table 2.5.-1 Net Resource Receipts of Developing Countries by Sources

Years		1970	1973	1977	1981
ODA		8.1	12.4	20.4	35.5
	OECD	5.7	7.09	10.08	18.28
	OPEC	0.4	2.03	4.28	6.91
	CMEA*	0.96	1.35	1.09	2.21
	Multilateral OPEC (multilateral)	1.07	1.96 	4.83 1.2	8.00 0.4
Nonconcessional Loans		7.23	15.03	33.08	53.25

<sup>\*</sup> Council for Mutual Assistance (10 Centrally Planned Economy Countries)

Source: OECD, <u>Development Cooperation</u>..., p.51.

#### 3. DEBTS, CAPITAL TRANSFERS AND ECONOMIC GROWTH

#### 3.1. Preliminary Remarks

Borrowing by developing countries is often explained in connection with their economic growth. For different reasons, the developing countries suffer limitations of domestic capital accumulation. Inflows from abroad can overcome the lack of capital within a country and provide additional funds for the economic growth process. 1

Without growth, foreign loans would be a heavy burden for future generations of a country. Therefore, economic growth should also be regarded as a necessity for the debtor during a period of external indebtedness - if we assume regular repayments.

Up to the late 1960's, the belief of the benefit of capital transfers was widespread and without contradiction. The basic Keynesian model operates with a stable incremental output-capital ratio and stable savings and import propensities.<sup>2</sup> In the last decade, the basic model was subject to disagreement. Several cross-country analyses and time series have been done about capital imports and growth. Different opinions about this problem will be discussed in two steps.

First, we take a closer look at the relationship between foreign debts, capital imports, and savings. Total savings represent a source for investments. The question is how do debts affect total and domestic funds which are available for investment (Chapter 3.2)? The second step is to examine the impact of domestic savings and foreign capital on growth.

LDC data are inexact, thus distorting statistical findings. Beside this inevitable shortcoming, most studies do not include the high non-concessional indebtedness, which is a phenomenon of the late 1970s and early 1980s.

In the following some studies focus only on total capital inflows while others focus on concessional loans (aid). These expressions are not identical with net changes of foreign debt. Capital inflows include gifts, loans, and direct private investment. But direct investments are only a small share of total inflows (see table A-3, appendix) and like gifts (grants) - only of minor importance.

A concessional loan generates lighter conditions for the debtor, concerning debt service payments, than private (non-concessional) loans. If there are negative effects on growth from concessional debts one can expect similar (or worse) results for private loans. In recent years a decreasing share of loans has been concessional. The implications of concessional debts from earlier studies are even more severe with regard to today's high share of non-concessional debts. Therefore

earlier findings about concessional debts or total capital transfers are relevant to the current situation.

#### 3.2. Effects of Capital Inflows on Savings

#### 3.2.1. A Theoretical Discussion

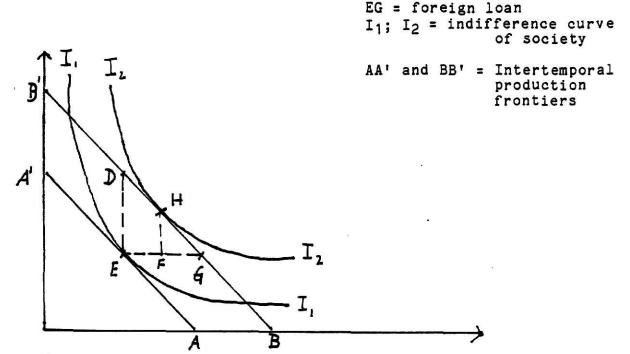
A traditional Harrod model focuses on the saving limits of a country. Any capital import will add resources to saving and therfore to growth.<sup>3</sup> Chenery and Strout<sup>4</sup> extended the pure savings gap by introducing a foreign exchange gap. The main thought is that rapid growth requires large reallocation of labor and capital. Shortages of imports will limit further investment on growth. Potential domestic savings are hampered because of insufficient supplies of goods. Ex post, the two gaps (saving and foreign exchange) must be equal, but ex ante, they can differ. The larger gap should be filled with sufficient capital transfers to support a developing country's growth and to avoid structural bottlenecks.

The two gaps theory and the positive effects of capital transfers on savings and growth were attacked heavily. The opponents stress the excessive inflexibility of the model, where foreign and domestic goods cannot be substituted. In the long run, a substitution is more the decision of governments who are unwilling to reduce domestic consumption.<sup>5</sup>

The saving gap implies that foreign loans are totally used for accumulation and added to domestic savings. The critics think that aid and private loans substitute domestic saving. If there are certain policy targets for growth and investment, only certain funds are necessary to achieve the planned goals. 7

The choice of a society between present C(t) and futu consumption C(t+1) can be shown in terms of indifference curves and a intertemporal production frontier (see figure 1).

Figure 1.8



The initial equilibrium is at point E, where the community's time preference reaches the highest possible level  $(I_1)$  under the restriction of a given production frontier (AA'). A foreign loan (EG) shifts the production frontier to

the right (from AA' to BB'). One expects that under no circumstances either present or future consumption would decline. Normally the society will choose a new equilibrium like point H. It seems unrealistic that the society would choose point D, which represents the case of the saving gap. In D the total amount of foreign loan would be invested. In H the capital inflow leads to a rise in current consumption (EF) and therefore to a fall in domestic savings. Following the analysis, one can state that a part of the additional available funds from the foreign loan is offset by a decline in domestic savings.

Papanek<sup>9</sup>, a strong proponent of capital transfers and concessional debts<sup>10</sup> differentiates between two plausible saving functions. If domestic savings are a function of investment opportunities or dependent on government policies (government's saving effort), it is most likely that they will fall as a result of foreign loans, especially if we assume that governments have a fixed growth rate as objective, which requires a certain amount of capital.

Foreign loans increase domestic saving, if saving is a function of income, its concentration, or the available foreign exchange. The contradictory statements about the behavior of domestic saving call for a closer look at the empirical results.

#### 3.2.2. Finding of Empirical and Statistical Studies

In a cross-section-study, Griffin<sup>11</sup> found that domestic savings were diminished by 73% of foreign inflows. The simple regression analysis (36 countries) doesn't prove too much, but time-series for Colombia, Israel, Algeria and Guinea showed similar results. The lower domestic savings can be explained by smaller efforts of the governments to collect taxes or to strengthen the tax system or a change in the expenditure composition because of foreign capital. Also, cheap and easy capital will weaken the incentives for private entrepreneurs to save. Studies by other economists show also a negative relationship between the external inflows and domestic savings. But, the results vary significantly and cover different time periods and countries.

Running a cross-country regression, Rahman determined a negative coefficient of 0.25 for capital inflows on domestic saving. He suggests that a particular country will relax politically burdensome tax efforts and raise import intensities due to the availability of foreign funds. 12 Weiskopf 13 states a similar relationship. He comes up with a coefficient of at least -0.23 as a result of time series for four countries. Papanek's 14 results for his savings function show a very strong negative correlation for aid (-1.0) and a lower impact (-0.38)

of private loans. The coefficients for savings and total inflows is between -0.63 and -0.73.

But Papanek<sup>15</sup> doubts the impact flows have on domestic savings and suggests another causality for the strong negative correlation. He claims that poor countries and countries with economic and political crisis have low savings and therefore they have great capital inflows. Countries in need get more financial help for political reasons. Wars or political disturbances, changes of terms of trade, and weather conditions hamper domestic savings and cause high external inflows. These facts explain the results of the regression analysis without blaming external inflows for negative effects. Papanek maintains that most of high savers are exporters of natural resources. Low savers were affected by external factors as described above.<sup>16</sup>

Gupta<sup>17</sup> found in his cross-section model for forty countries, a very high negative relationship between private loan (-1.05) and aid (-0.70) to savings. In a deeper (elasticity) multiplier analysis for the entire model, the importance of external transfers is reduced and other factors like GNP growth-rates, the percentage of labor force in agriculture and the dependency rate seem to be more important for the domestic saving-rate.

This survey gives the impression that domestic savings and capital inflows are negatively correlated. The argument that the countries in need will receive more capital from outside

might have been right in the sixties, but seem to be wrong for the 1970's and early 80's. Private loans are not made to help the poor, but to countries where profit and securities can be expected (by the creditors). Therefore, the assumption of partly substitued domestic savings is convincing (see also Figure 1), even if the degree of the effect may vary with time and different countries. The next step will be to analyze the growth pattern with regard to capital transfers and savings.

#### 3.3. Determinants of Economic Growth

Capital accumulation is a core process of economic growth. There are other factors like technical progress which influence economic growth, but an increasing capital stock is a dominant factor at least in the long run. In order to raise the standard of living and to provide enough jobs for fast-growing population, developing countries have to enlarge their capital equipment. The financial means can either come from domestic savings or from external transfers. 18 But a high volume of saving does not insure growth. Savings have to be transformed into economic growth. The crucial point is the use of available funds. Inefficiency, corruption, miscalculation, and carelessness in using resources, will lead to misallocations. 19

The role of foreign inflows as a factor of growth became a controversial one during the 1970's. Bauer, 20 for example,

does not believe that a shortage of savings and external loans can retard growth in the receiving countries. In his opinion, certain customs and institutions determine the growth process in particular countries.<sup>21</sup>

But a standard rule for investments in general can also be applied for the use of foreign resources. Foreign loans will increase the growth of income as long as the productivity of the additional capital exceeds the rate of interest on foreign borrowing.<sup>22</sup>

This statement is still based on a savings gap analysis. Chenery and Strout<sup>23</sup> stress the importance of external flows, which meet also the shortage of hard currency in many developing countries. But, non-convertibility of most LDCs domestic currencies means that external loans have to raise hard currency revenues for a country. Otherwise, the fraction for future imports would be cut by debt services.

The relevance of the objections against foreign inflows will be discussed by using statistical results that also include some models already mentioned in chapter 3.2.2.

The findings with regard to the relationship between external inflows and economic growth are even more confusing than the models concerning saving performances. Griffin<sup>24</sup> found no close correlation between inflows and growth, and low coefficients with different signs for different country groups. For Latin America, he came up with a negative correlation; he

found similar results with a time series for Turkey.

What could be the explanation for such a reverse correlation, which stands in opposition to traditional economic opinion? In chapter 3.2., the possible negative impacts on savings were analyzed. Foreign flows also might alter the composition of investment. Capital has been invested in large infrastructure projects, which have no sudden impact on growth and long periods of payoff. Concessional loans and export credits can be tied to investments of western patterns, which might be not appropriate for a developing country. As it was mentioned at the beginning of this chapter, the quality of investments is decisive for its success.

Especially in developing countries, successful investments cannot be taken for granted. A lack of competition, inexperienced administration and corruption, make a failure quite possible. All these arguments lead to the conclusion that inflows might change the capital output ratio. With regard to a changing capital output ratio, loans and capital transfers might have no impact on growth even if they increase total savings.<sup>25</sup> This argument is a contradiction to the traditional assumption of a constant ratio (see chapter 3.2.) and strengthen the scepticism about the benefits of foreign loans.

Goergens<sup>26</sup> introduces the economic system of a country as a component for growth effectiveness. His statistical observations suggest that in free market economies,

concessional inflows are slightly positive related to growth. Centrally planned countries were not able to transfer concessional transfers into a growth process - at least it was not measureable.

The negative assessment of external loans forced a lot of contradiction. Papanek<sup>27</sup> examined the impact of different variables on growth. In his regression analysis, aid influenced growth by far the most. Savings and private loans came up with only loose correlations. This is not surprising on the basis of Chenery's argument, because aid can fill the foreign exchange gap and is designed for economic progress. Despite other factors, foreign inflows and savings explain over one third of the growth rate.

Similar results exist from other studies. Gupta, 28 for example, comes up with approximately the same total figure. But he emphasizes the importance of private loans for growth whereas domestic savings play only a minor role. Mosley's 29 data indicate a very low coefficient for growth and inflows (4%-25%). The loose relationship indicates that other factors can influence growth significantly. Therefore, the thesis of a positive impact of inflows on growth collapses for developing countries as a group.

But different debtor groups may experience varying results. To countries with a lack of minimum cultural base, inflows and savings provide only little momentum to income

changes. But countries with a lack of sufficient capital can use capital imports to their advantage.<sup>30</sup> This study makes a good point, but it is practically impossible to decide which country is hampered by cultural insufficiency and which not.

In their study about Asian countries, Dowling and Hiemenz<sup>31</sup> suggest a separation in low and high growth countries. By that procedure, they can extract different determinants of GNP changes. Trade liberalization and resource mobilization by the government turns out to be the dominant factor for the low growth country group. Changes of GDP were not related to inflows and savings. But in high-growth countries, economic policies have taken advantage of inflows - at least in form of concessional loans.

The present studies don't allow a definite judgment about the effects of external debts on economic growth. They are mostly regression analysis which show a certain relationship between two or more variables. The data were from earlier periods, when financial aid was the main inflow and private debts were of minor importance. Nevertheless, a moderate substitution of domestic saving by capital inflows is likely to occur. But, a positive effect by inflows on growth seems also to be sure for most countries. Especially in low income countries, other economic variables influence the growth process. It is even possible that political and social factors prevent any "push" by external loans.

Interpreting the studies about debt and growth, one has to consider that private loans have much harder conditions than concessional loans. Non-concessional debts have higher interest rates, shorter repayment periods, and no or less interest free years. Therefore, non-growth producing investments are punished faster and harder by the higher payable debt service. This fact cannot be underestimated with the exploding non-concessional loans in the 1970's and early 1980's (see tables A-4 and A-5, appendix).32

#### 4. POSSIBLE IMPACTS OF INDEBTEDNESS ON ECONOMIC POLICY

### 4.1. Policy Choice Under Increasing Indebtedness

Foreign debts create a complex system of interdependent economic and political issues. Therefore, it is necessary for an analysis to distinguish between new net inflows and debt services. In this section positive net flows will be the only concern.

External loans can be used to finance a current account deficit, but they simultaneously enlarge the action opportunity for governments, public dominated companies, and industries. Therefore, loans support in general the policy of a ruling government. Without foreign inflows existing programs would be endangered or an entire new economic structure would be necessary.

Developing countries perform many different political strategies which work towards a biased income distribution and (or) against economic development. In this section only 3 examples will be presented to show possible connections between policies and net changes of debt. Many countries suffer from the 3 following strategies: an overevaluation of their currency, a biased price system for agricultural goods, and an inefficient tax system.<sup>3</sup>

Under a flexible exchange rate system, capital inflows tend to appreciate the currency. But most developing countries practice administered fixed exchange rates, which are, as mentioned before, often overvalued. An expected trade deficit without available external resources will force a government to act. It will establish either trade controls or announce a depreciation. Therefore, one can deduce that the opportunity to finance larger trade deficits has the tendency to keep the value of a currency high. The overvaluation of the domestic currency hampers exports and efforts of import substitution, while importers are benefitting.

A similar argument can be used about disincentives for efficient budgets. On the revenue side, a government may put more efforts in increasing the tax performance facing low capital imports. Indeed, Mosley<sup>8</sup> comes to such results but doesn't get a negative relationship with concessional loans as an isolated variable. The final result of increased taxes depends on the particular tax-structure. Progressive income taxes are often blocked by institutional restraints and powerful individuals.<sup>9</sup> Therefore, higher revenues would likely be collected by export or indirect taxes.

In many developing countries, the agricultural pricing system drains resources out of rural areas and gives governments the opportunity to feed the poor in urban centers. 10 These countries find support for their policy in

food imports (concessional and under market conditions). Without foreign financing of the trade deficit, food imports (products which could be produced domestically) would compete harder with other imports.

It is most likely that new additional flows support certain policies as descriped above. But the economic results of the 3 strategies vary among different countries. Disregarding growth effects (in this section) the described policies have severe implications on income distribution.

Though the three policies are not directed against the poor in general, they often absorb administrative capacity and hamper the agricultural sector. 11 However, as Schultz 12 pointed out, poverty in the world is mainly a problem of rural areas. But policies supported by inflows (as see above) often neglect rural areas and the majority of the population. That fact clearly contradicts an accomplishment of basic need demands, which would ensure a human life for the poor in LDCs.

#### 4.2. Long-Run Indebtedness and Structural Adjustment

Considering the dependency on the trade policy (tariffs, quotas) of industrialized countries and inability of diversification of their exports, Third World countries are highly vulnerable to changing export revenues. Higher prices

of strategic imports can also worsen the balance of payments and lead to liquidity crises. $^{13}$ 

There are two main possibilities to overcome the deficit. The particular country can use its currency reserves or try to get credits at the international capital markets to finance the deficit. The other way is to start structural adjustments, which include budget cuts. A combination of both strategies is also possible. 14

Short-term trade disturbances can mostly be compensated by external loans. If this is the case, a development program must not be interrupted and can continue as planned by the government. Financing a long-run structural crisis with external loans is a limited method. Internal adjustments are necessary to avoid negative effects for the entire society.

There is the opportunity to pay debt services by new loans (rolling over) instead of using export earnings. But, a rolling over is harder to achieve for countries on a low economic income level and with a slow growth process. 16 Therefore, it is indispensable for developing countries with high debts to cut back imports. 17

Adjustments can be made in nearly all sectors of the economy. But, their realization depends on political circumstances. 18 The ability for economic changes is determined by the power of the government, other interest groups, or more generally by the priority list of the country. 19

A capital shortage force a country to cut back in the field of social transfers and basic needs. Recurrent costs of social programs are a volatile part in the budget.<sup>20</sup> But, abandoning social programs concerning health care, education, shelter, building, and nutrition hits the very poor part of the population. Besides the aspect of morality, it will worsen the human capital resources of a country, therefore, the development plattform for its future.

The population of rural areas is threatened seriously by budget pressure. The governments know that their voters or the active part of the society is situated in urban areas. Whereas, the rural inhabitants have only a weak political representation. They are mostly not able to organize potential resistance against an unfavourable budget change. 21

The assessment of investments by their profitableness or even by their foreign currency earnings, leads to less investment in infrastructure. Infrastructure projects often have long pay-off periods and many side-effects which are not recognizable in the short-run.<sup>22</sup>

High cost of imports may even prevent planned projects in the industrial sector.<sup>23</sup> High debts and the following import restriction also force existing companies to reduce their economic activities. Losses of rentability and bankruptcies - for example - are reported from Latin America. The shrinking economic activities produce unemploymment and poverty.<sup>24</sup>

All the above thoughts point out the severe political decisions of adjustment process including budget cuts. A government will choose the least troublesome way to solve the described problem. It is most likely that disadvantages have to be taken by the poor and noninfluential rural population.

Most of the solutions discussed here will touch the opportunity of future growth in a negative way. Only the reduction of luxury and military goods would not influence the development, but would lead to discontent within the dominating groups of many developing countries.

# 4.3 <u>High Debts and Economic Performance: The Brazilian Experience</u>

In the context of indebtness it is necessary to evaluate particular contries. In the following Brazil gives an example of indebtedness and its effects in the so called newly industrialized countries. In 1983 Brazil's debt climbed to \$93 billion<sup>25</sup> compared to \$57 billion in 1980, which was the highest external debts of all developing countries (see table A-9, appendix).

After 1964 Brazil turned around its economic policy. Import substitution was abandoned and more emphasis was put on exports and a classic stabilization policy<sup>26</sup>. That policy resulted in tremendous GNP growth rates from 1964 to 1974 (see table A-14, appendix)

But after 1974 the GNP growth rates declined drastically. Gouvernment officials blamed external shocks like the oil crisis and higher import bills for the slacking economic activity. The problems were regarded as short dated. Therefore Brazil tryed to maintain the high growth rates despite the changing world economy. Rising import costs were financed by a depletion of international reserves and massive foreign borrowing<sup>27</sup>. Besides the dropping of GNP growth, Brazil experienced a fast acceleration of inflation, which stopped at about 110 per cent in 1980 (see table A-14, appendix). Only one of the reasons was that the money suppley was boosted by the inflow of capital<sup>28</sup>

Hollist's analysis explains the reversal as a result of an inappropriate production system and the policy of financing industrialization by deficits. Development plans emphasized heavy machinery and consumer durables which were only of minor relevance for 70 per cent of the population<sup>29</sup>.

Baer states that supposing a stable ratio of foreign debt to GNP on the level of 1973, the per capita income in 1981 would have been higher than with the increasing debt path. Very questionable indeed is the ambitious investment in nuclear power considering the huge hydroelectrical power reserves. Also the expansion of steel mills during a weak world demand makes little sense. Both programs had large import components and put heavy burden on the trade balance. Without the

projects, debts could have remained more stable 30.

A closer look at the Brazilian balance of payments indicates the high trade deficits in the period from 1974 to 1976. Later in the 70's exports kept pace with imports but the service deficit was fast growing. The biased service balance is mainly due to exploding net interest payments which are derived from debts after the oil price shock. It occurs that Brazil was forced to finance the increasing debt services by further borrowing (see table A-15, appendix).

Another question is whether the population could benefit from the economic development. The Brazilian government believed that it was only a question of time when poor classes would gain from the economic growth process<sup>31</sup>.

The existence of massive poverty and concentration of income are accepted facts of the Brazilian development<sup>32</sup>. From 1960 to 1976 the trend shows increasing inequality. The very poor and the middle class have been most negatively afffected and lost up to about 50 per cent of their relative income share. The highest income group was able to gain significantly in this period. In short, the relative figures indicate a dramatic concentration of income of the top dicile of population (see table A-16, appendix)

The production system clearly favored industrial projects and neglected the agricultural sector. The production for basic food supply like rice and beans was slightly decreasing

since 1970.<sup>33</sup> But considering population growth the per capita production declined at least by 10 per cent. However total agricultural output rose by 5.4 per cent annually<sup>34</sup>.

Other non-monetary indicators confirms the presence of widespread poverty in Brazil during the period of high indebedness. The World Bank states that 37 per cent of Brazilian children are affected by malnutrition (first degree) and 20 per cent suffer severe malnutrition. Additionally the general health condition of the population seems to bee poor compared to other countries with similar GNP levels 35.

Due to greater balance of payment problems the Brazilian government emphasized more food exports (soybeans and cocoa) which compete with the basic food production for domestic consumption. This fact results in raising internal food prices which were above the general price index $^{36}$ .

Finally Hollist concludes that the increasing indebtedness makes it difficult to change the existing production system. The economy has to keep up the capability of paying debt services. That requires influence of foreign currency and a priority for exports. But without turning around the production patterns, chances for the majority of the population will not improve 37.

#### 5. CONCLUSION

High indebtedness of developing countries is not a phenomenon of recent times. In the nineteenth century and after the first World War some countries already experienced high debts. But since the first oil price shock a large number of countries have been involved in indebtedness. Fast increasing net changes of debts occurred together with a dramatic increase of non-concessional debts. These two facts were responsible for fast growing debt services, which generated increasing burdens for borrowers.

Debts are not characteristic for one particular income group of countries. But absolute debts and private debts are concentrated among developing countries with high per capita income (NIC). Nevertheless many countries from low and middle income groups show a higher indebtness than the major debtors, if we compare the relevant ratios.

The analysis shows that the benefits of foreign loans are unsure for developing countries. Foreign loans tend to reduce domestic saving efforts, but most likely they increase the amount of capital which is available for investments.

On the other side, one has to keep in mind that the use of foreign loans has to generate enough capital returns and

foreign currency earnings to pay debt-services. Otherwise investments financed by foreign loans make no contribution to economic growth or hamper other sectors of an economy. It seems unrealistic that the majority of developing countries has the economic capacity to absorb the huge inflows of the last 10 years in a productive manner.

Capital transfers have the tendency to support the policy of ruling governments. But the policy in many developing countries favours only an influential minority of the population. Therefore it is doutful that possible benefits of capital inflows reach other parts and sectors (agriculture) of the society, which are not in the interest of the dominant groups.

High consecutive positive net changes of debt result in high absolute debts. Absolute debts at a certain level restrict the creditworthness of a debtor and hinder the issue of new loans. In this case the country has to go through a painful adjustment process. The adjustment process probably hits the entire economy of a country and especially the political less powerful part of the population.

#### NOTES

#### 1. INTRODUCTION

<sup>1</sup>Some recent publications are: Greenwald, John, "A Crisis of Confidence," <u>Time</u>, vol. 123, (May 28, 1984), pp. 86-87 and Bertram, Christoph, "Wann sturzt das Kartenhaus ein?" in <u>Die Zeit</u>, vol. 39, no. 30 (July 27, 1984), p. 1. Bertram also describes political riots and resistance against adjustments due to high debts in Latin America.

<sup>2</sup>World Bank, <u>World Development Report 1983</u> (New York, Oxford University Press, 1983), p. 23.

<sup>3</sup>Hagen, Everett E., <u>The Economics of Development</u> (Homewood, Illinois, Richard D. Irwin, 1980), p. 9.

<sup>4</sup>Arnau, Sanchez J. C., "Debt and Development," Arnau, Sanchez J. C. (editor), <u>Debt and Development</u> (New York, Praeger Publisher, 1982), p.3.

<sup>5</sup>Nafziger, Wayne E., <u>The Economics of Developing Countries</u> (Belmont, Wadsworth, 1984), p. 389.

<sup>6</sup>World Bank, <u>World Development Report 1983</u>, p.19.

7 <u>Ibid</u>. In the following, the expressions "inflows" and "transfers" are mainly used with regard to debts.

<sup>8</sup>The terminology about indebtednessis notclear in the literature. In this report the analysis deals with stock variables and flow variables. The terms: flow, inflow, transfer, capital import, and loan are used for net changes (of debt per time period). The sum of net changes of debt accumulate to total debt (stock).

9Actions were mostly undertaken to reduce a temporary gold (silver) shortage and to strengthen the reserves of the receiving country. see Kindelberger, C.. P., Manias. Panics. and Crashes. A History of Financial Crises, (New York, Basic Books Publisher, 1978), p. 182-189.

10 New York Times, "Cleveland and Britain," May 27, 1977, p.1.

11 McMullen, N. J., "Historical Perspectives on Developing Nations' Debts," Franko, Lawrence G. and Seiber, Marilyn J. (editors), <u>Developing Country Debt</u> (New York, Pergamon Press, 1979), p. 3.

- 12 Viner, Jacob, <u>Canada's Balance of International Indebtedness</u>. 1900-1913 (Cambridge, Mass., Harvard University Press, 1924), pp. 106, 299.
- 13 McMullen, N. J., "Historical Perspectives..." p. 5.
- 14 Ibid.
- 15 Corm, G., "The Indebtedness of Developing Countries: Origins and Mechanisms," Arnau, S.J.C. (editor), <u>Debt and Development</u> (New York, Praeger Publisher, 1982), p. 29.
- 16 Abbott, George C., <u>International Indebtedness and the Developing Countries</u> ( New York, Scharp, 1979), p. 14.
- 17corm, G., "The Indebtedness...," p. 24, 43.
- Some of the greatest debtors are quoted in alphabetical order to give an impression of their performance over the period of observation.
- 19 McMullen, N. J., "Historical Perspectives...," p. 6-7.
- 20 Abbot, George C., <u>International Indebtedness</u>..., p. 12-13.
- <sup>21</sup> Abbott, George C., <u>International Indebtedness</u>...," pp. 17-19.

# 2. A STRUCTURAL AND QUANTITATIVE PERSPECTIVE ON DEBTS OF DEVELOPING COUNTRIES

1 McMullen, N. J., "Historical Perspectives...," p. 14.

<sup>2</sup>There are several different figures for external debts, depending on the number of countries and the source of assessment. The percentage changes mentioned are taken from OECD publications. Most of the following debt figures are according to OECD sources. This procedure ensures the uniformity of the data material. In principle all types of debts are reported with the exception of a) military debts (about 10% of total) b) debts with a maturity of less than 1 year, c) arrears on debt services (\$8 billion, 1980) and d) in domestic currency.

3Abbott, George C., <u>International Indebtedness</u>..., p. 104.

<sup>4</sup>Most but not all debts from public creditors are concessional, therefore, the true expressions cannot be used identically. Nevertheless, for the most part, public loans are concessional.

- <sup>5</sup>It should be noted that these are the statistical categories used by OECD. The World Bank and IMF each use different subgroups. The OECD concept comprises 61 countries in the LIC-group and
- 60ECD, External Debt..., pp.16-17.
- 7 Nafziger (p. 411) reports the same ranking, but with slightly higher assessment of debts.
- <sup>8</sup>Solomon, Robert, "A Quantitative Perspective on the Debt of Devloping Countries", Franko, Lawrence G. and Seiber, Marilyn J. (editors), <u>Developing Country Debt</u> (New York Pergamon Press, 1979), p. 28.
- 9Abbott, George C., <u>International Indebtedness</u>..., p. 123.
- 10 There are also a few countries like Egypt and Peru which reduced (or stayed on) their 1973 ratio.
- 11 Abbott, George C., <u>International Indebtedness</u>..., p. 121.
- <sup>12</sup>Terms of trade (TOT) represent the price index exports divided by the price index of imports.
- 13 Khan, Mohsin S. and Knight, Malcolm, "Sources of Payments Problems in LDCs," <u>Finance and Development</u>, Vol. 20, no. 4 (December, 1983), p.3.
- 14 World Bank, World Development Report 1983, p. 12.
- 15Between the two periods LDCs experienced a recovery of their terms of trade. See Kahn, Mohsin S. and Knight, Malcolm, "Sources of Payments...," p. 2.
- <sup>16</sup>Several examples of price jumps (up and down) are given at: World Bank, World Development Report 1983, p. 11.
- 17 Cline, W. R., "External Debt: System Vulnerability and Dvelopment," Columbia Journal of World Business, vol. 17, no. 1 (1982), p. 8.
- 18 Khan, Mohsin, S. and Knight, Malcolm, "Sources of Payments...," p. 3.
- <sup>19</sup>Dornbush, Rudiger, "The Latin American Dimension," Challenge (July/Aug 1984), p. 10.
- 20 World Bank, World Development Report 1983, p. 13.
- 21U.S. President, Council of Economic Advisors, Economic Report of the President (1984), p. 46,51.

- <sup>22</sup>Nafziger, Wayne E., <u>The Economics</u>..., p. 410. See also chapter 2.2.
- <sup>23</sup>Khan, Mohsin S. and Knight, Malcolm, "Sources of Payments...," p. 3.
- <sup>24</sup>Khan, Mohsin S. and Knight, Malcolm, "Sources of Payments..," p. 4 and U.S. President, Council of Economic Advisors, "Economic Report..," p. 74.
- $^{25}$ Khan, Mohsin S. and Knight, Malcolm, "Sources of Payments...," p. 4.
- <sup>26</sup>Glismann, H. H. and NunnenKamp, Peter, <u>Die Entwicklunglander</u> am Rand der <u>Verschuldungskrise</u> <u>Uberlegungen zu Ursachen und Folgen am Beispiel Latein Amerikas</u>, Kieler Diskussionbeitrage (Kiel, 1983), p. 16.
- <sup>27</sup>Seiber, Marilyn J., "Debt Escalation: Developing Countries in the Eurocurrency Market," Frano, Lawrence G. and Seiber, Marilyn J. (editors), <u>Developing Country Debt</u> (New York, Pergamon Press, 1979), p. 44.
- <sup>28</sup>Glismann, H.- H. and Nunnenkamp, Peter, <u>Die Entwicklunlander...</u>, p. 17.
- <sup>29</sup>Seiber, Marilyn J., "Debt Escalation..." p. 52.
- 30"DAC-countries" is a denotation for 17 industrialized countries.
- 310ECD, <u>Development Cooperation</u>..., p. 49.
- 32 Volcker, Paul A., "How Serious is the U.S. Bank Exposure," Challenge (May-June, 1983) p. 14. The U.S. share declined, while hundreds of smaller banks participated in lending; some borrowers have over a thousand different lenders.

#### 3. CAPITAL TRANSFERS AND ECONOMIC GROWTH

<sup>1</sup>Wionzek, Miguel S. (coordinator), "External Indebtedness of the Developing Countries. A background report to the Mexico City Meeting." Wionzek, Miguel S. (editor), <u>LDC External Debt and the World Economy</u> (Mexico, 1978), p. 24.

<sup>2</sup>Griffin, Keith, "Foreign Capital, Domestic Savings, and Economic Development," <u>Bulletin of the Oxford University</u>
<u>Institute of Economics and Statsitics</u>, vol. 30 (1970) p. 100.

- $\frac{3}{\text{Lbid.}}$ , p. 101. According to the expression g = (s + a) k; k = incremental output capital ratio; s = portion of income saved; g = growth rate; a = inflow as a portion of income.
- <sup>4</sup>Chenery, Hollis B., and Strout, Allan M., "Foreign Assistance and Economic Development", <u>American Economic Review</u> (Sept. 1966).
- <sup>5</sup>Griffin, Keith, "Foreign Capital...," p. 102.
- <sup>6</sup>For example: Griffin, Keith, "Foreign Capital...," p. 102 and Griffin, Keith and Enos, J. G., "Foreign Assistance Objectives and Consequences," <u>Economic Development and Cultural Change</u>, vol. 18 (April 1970), p. 320.
- 7Even if transfers or aid are tied to a project, a substitution effect among projects and also between consumption and investment cannot be denied.
- <sup>8</sup>Griffin, Keith, "Foreign Cappital...," p. 104.
- 9Griffin, Keith and Enos, J. G., "Foreign Assistance...," pp. 336-7.
- 10 Papanek, Gustav F., "The Effect of Aid and Other Resource Transfers on Savings and Growth in Less Developed Countries," Economic Journal, vol. 82, (Sept. 1972) pp. 934-950 and Papanek, Gustav, F., "Aid, Foreign Private Investment, Savings and Growth in Less Developed Countries," Economic Journal, vol.83 (January/Febrary, 1973) pp. 120-130.
- <sup>11</sup>Griffin, Keith, "Foreign Capital...," pp. 104-5 and Griffin, Keith and Enos, J. G., "Foreign Assistance...," p. 321.
- <sup>12</sup>Rahman, Anisar M., "Foreign Capital and Domestic Savings: A Test of Haavelmo's Hypothesis with Cross Country Data,"

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- 14Papanek, Gustav F., "Aid...," p. 127.
- 15 Ibid., p. 126.
- 16 Papanek, Gustav F., "The Effect...," p. 945.
- 17Gupta, Kanhaya L., "Foreign Capital Inflow, Dependency Burden and Savings Rates in Developing Countries: A Simultaneous Equation Model," Kyklos, vol. 28, no. 2, (1975), p. 363.

- <sup>18</sup>United Nations "Capital Accumilation: The Core Process",
  Tangri, Shanti S. and Gray, Peter H. (editors), <u>Capital Accumul</u>
  <u>Economic Development</u> (Bosten ,D.C. Heath and Company, 1967), p.
  11, and Riechenbacher, Kurt, "Government Policies and Economic
  Growth in Developing Countries", Miller, Norman C. (editor), <u>In</u>
  <u>national Reserves.</u> <u>Exchange Rates and Developing Country</u>
  <u>Finance</u>, (New York , 1974) pp.37-38.
- 19 Tangri, Shanti S., "Investment and Economic Development", Tangri, Shanti S. and Gray, Peter H. (editors), <u>Capital Accumuland Economic Development</u> (Boston, D.C. Heath and Company, 1967), p.9.
- <sup>20</sup>Bauer, P.T., <u>Dissent on Development. Studies and Debates in Development Economies</u> (Cambridge Mass., Harvard University Press, 1972), pp. 96 and 98.
- <sup>21</sup>As Bauer states, his opinion is opposed by many other economists.
- <sup>22</sup>Thirwall, A.P., <u>Financing Economic Development</u> (London, The MacMillan Press LTD., 1976), p.59.
- <sup>23</sup>Chenery, Hollis B. and Strout, Allen M., "Foreign Assistance...".
- <sup>24</sup>Griffin, Keith, and Enos J.B., "Foreign Assistance..." pp.317-18. Griffin is more concerned about aid, but in the time of his study private loans were not important.
- 25Seiber, Marilyn J., "Debt Escalation...", p.108.
- <sup>26</sup>Goergens, Egon, "Development Aid An Obstacle to Economic Growth in Developing Countries", <u>German Economic Review</u>, vol. 14, no 3-4, (1976), pp. 214.
- 27Papanek, Gustav F., "The Effect of Aid...", pp.121-22.
- 28Gupta, Kamhaya C., "Foreign Capital Inflow...", pp.363-64.
- 29 Mosley, Pan, "Aid Savings and Growth Revisted", Oxford Bulletin of Economics and Statistics, vol. 42, no.2 (May 1980), p.82.
- 30 Gulati, Umesh C., "Effect of Capital Imports on Savings and Growth in Less Developed Countries", Economic Inquiry, vol. 16, no 4 (1978), p. 567.
- 31 Dowling Jr., John M. and Hiemenz U., "Aid, Savings and Growth in the Asian Region", <u>The Developing Economies</u> (December 1982), pp.9-10.

<sup>32</sup>Most statistical analysis use data from the 1960s or early 1970s, which represent an other dimension of debts compared to the time after the first oil shock.

## 4. POSSIBLE IMPACTS OF INDEBTNESS ON ECONOMIC POLICY

OECD, "How Serious is the Debt Problem of the Developing Countries", The OECD - Observer, no. 120 (1983), p. 14.

<sup>2</sup>Baran, Paul, "The Political Economy of Backwardness", Agarwala, A.N. and Singh S.P. (editors), <u>The Economics of Underdevelopment</u> (London, Oxford University Press, 1958), p.90. This opinion is stressed by Marxists or supporters of the dependency theory. Without accepting the whole theory it is hard to reject the particular argument.

3US President, Economic Report, p.29.

<sup>4</sup>Compare the behavior of the US dollar in recent years. See US President, <u>Economic Report</u>, pp. 46 and 51.

<sup>5</sup>Root, Franklin R., <u>International Trade and Investment</u> (Cinnoinati, Southwestern, 1984), p. 185

6Friedman, Milton, "The Case of Flexible Exchange Rates", Friedman, Milton (editor), <u>Essays in Positive Economics</u> (1957) p.418. A depreciation of their real exchange rate would help many developing countries to generate more export earnings. The available amount of foreign currency would increase.

<sup>7</sup>Nafziger, Wayne E., <u>The Economics</u>..., p.440.

<sup>8</sup>Mosley, Pan, "Aid, Savings...", p. 87. Mosley's findings are based on the thirty poorest countries.

9Hagen, Everett E., The Economics...", p. 270.

10 Hansen, B. and Nashashibi K., Foreign Trade Regimes and Economic Development. Egypt. (New York, 1975), pp. 165-66.

11 US President, Economic Report 1984, p.29.

12Schultz, Theodore W., "Nobel Literature: The Economics of Being Poor", <u>Journal of Political Economy</u> (August 1980), p. 639.

13See also chapter 2.4.

- <sup>14</sup>Bird, G., <u>The International Monetary System and the Less</u> <u>Developed Countries</u>, (London, 1982), p. 117.
- 15 Ibid.
- <sup>16</sup>Lee, F. A. and Eng, M., "Developing Country Access to the International Capital Markets," <u>Columbia Journal of World Business</u>, vol. 14, no. 3 (1979), p. 76.
- <sup>17</sup>This fact holds only if the country hasn't success in promoting exports sufficiently.
- <sup>18</sup>Jeker, R., "Assessment of the Risks from a Developing Country's point of View: Zambia," Schweizerisches Institut fur Aussenwirtschafts Structur und Marktforschung, Hochschule S Gallen fur Wirtschafts- und Sozialwissenschaften (editor), Internationale Verschuldung, Entwicklungstendenzen, Risiken, Risikopolitik (Zurich, 1978), p. 119.
- <sup>19</sup>Wood, J. D. "Risks Associated with External Debt: The Borrower's Perspective," in: Aussenwirtschafts, Zeitschrift fur Internationale Wirtshaftsbeziehungen, vol. 33, 1978, p. 104.
- <sup>20</sup>Bertram, Christoph, "Wann...," p. 1. The problems of adjustments forced by the IMF are excluded from the analysis.
- <sup>21</sup>World Bank, <u>World Development Report 1981</u> (New York, Oxford University Press, 1981).
- 22World Bank, World Development Report 1982
- <sup>23</sup>Neue <u>Zuricher Zeitung</u>, "Akzenturierter Verlust an Wachstunsdynamik," (Accentuate loss of growth dynamic), (1-8-1983), no. 4 p. 11.
- <sup>24</sup>Jeker, R. "Assessment...," p. 123.
- <sup>25</sup>Greenwald, John, "A Crisis...," p. 87.
- <sup>26</sup>Baer, Werner, "The Brazilian Growth and Development Experience: 1964-1974," Roett Riordanian (editor), <u>Brazil in t Seventies</u> (Washington D.C., American Enterprise Institute for Public Policy Research, 1976), pp. 45-46.
- 27Hollist, Ladd W., "Brazil's Debt-Burdened Recession: Consequences of Short Term Difficulties or of Structures of Production and Consumption," Aronson, David J. (editor), <a href="Debt">Debt and the Less Developed Countries</a> (Boulder, Westview Press, 1979), p. 171.
- <sup>28</sup>Baer, Werner, <u>The Brazilian Economy</u>, (New York, Praeger Publishers, 1983), p. 124.

- <sup>29</sup>Hollist, Ladd W., "Brazil's Debt-Burdened...," p. 171.
- 30Baer, Werner, The Brazilian Economy, p. 123.
- 31 Hollist, Ladd W., "Brazil's Debt-Burdened...," p. 177.
- 32Hewlett, Sylvia A., "Poverty and Inequality in Brazil," Hewlett, Sylvia A. and Weinert, Richard S. (editors), <u>Brazil and Mexico</u> (Philadelphia, Institute for the Study of Human Issues, 1982), p. 318.
- 33Baer, Werner, The Brazilian Economy, p. 316.
- 34Ibid.
- 35Hewlett, Sylvia A., "Poverty and Inequality...," p. 322.
- 36World Bank, <u>Brazil</u>, <u>Human Resources Special Report</u>, (Washington, 1979), p. 28. Soybean production increased by 22.5 percent in 1970-79. See Baer, Werner, <u>The Brazilian Economy</u>, p. 316.
- 37Hollist Ladd W., "Brazil's Debt-Burdened...," p. 178.

#### APPENDIX

Table A-1. Foreign Debt of Devloping Countries between the Two World Wars Year 1920 1925 1930 1935 1940 Argentina 715 920 1209 1276 1190 (in pesos 000,000) Bolivia 11 88 171 4186 234 (in boliv. 000,000) Brazil 1030 1146 1228 1357 1315 (in cruceros, gold 000,000) Chile 1134 1225 2759 2718 2377 (in pesos 000,000) 90.0 96.9 94.4 Egypt 104.2 91.6 (in E.pound 000,000)

Source: United Nations, Public Debt. 1914-1946 (New York, 1948)

Table A-2 Total External Debts of Non-OPEC Developing Countries

Years	According to McMullen (	According to Wionzek in billion U.S.	According to OECD '82	Per Annum Change in % According to OECD
1967 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982	33.9 50 56.8 66.8 82.3	33 57 65.8 79.2 94.9 116.8 138.7	75  152 184 227 282 332 385 445 520	19.3(av. '71-75) 17.3 18.9 24.2 17.7] 15.9 15.6 16.8

urces: McMullen, N. J., "Historical Perspectives...," p. 11.
Wienzek, Miguel S. (coord), "External Indebtedness...," p. 41
OECD, External Debt..., p. 28.
Personal calculations.

Table A-3. Composition of External Financial Receipts of Developing Countries (percent shares of total receipts)

Year	I	II	III
	Official	Non-Concessional	Direct
	Development	Flows	Investment
	Assistance	(including dir.inv.)	(part of II)
1970	42.5	57.5	19.4
1972	43.1	56.9	18.1
1974	45.5	54.5	5.2
1975	36.9	63.1	21.2
1976	33.8	66.2	14.8
1977	31.9	67.1	14.2
1978	32.7	67.3	14.2
1979	35.8	64.2	15.7
1980	38.0	62.0	10.8
1981(est.	34.0	65.9	14.1

Source: OECD (Organization for Economic Cooperation and Development), <u>Development Cooperation</u>, <u>1982 Review</u> (Paris, 1982), p. 178. Personal calculations.

Table A-4. Net Resource Receipts of Developing Countries by Sources

Year	Official Assistance (\$billion)	Non-Concessional Flows minus Direct Investment (\$billion)	Increase of Non-Concessional (in percent)
1970	8.08	7.2	**
1971	9.4	8.5	18.1
1972	10.1	9.1	7.1
1973	12.4	15.0	64.8
1974	16.5	17.9	19.3
1975	20.1	22.8	27.3
1976	19.7	19.9	31.1
1977	20.4	33.8	13.0
1978	27.2	44.3	31.1
1979	30.6	41.5	-7.2
1980	36.4	48.9	17.8
1981(est.)	35.5	53.8	10.0

Source: OECD (Organization for Economic Cooperation and Development), <u>Development Cooperation</u>, <u>1982 Review</u>, p.178 Personal calculations

Table A-5. Total Disbursed Debts by Country Income Groups

Years		71	75	76	77	78	79	80	81	82
Total d (\$billi										
	Income ntries C)	18	40	47	56	66	76	86	95	110
0:	f which LLD	C	• •	10	12	14	16	14	21	26
	dle Income ntries C)	25	40	48	60	75	91	107	124	144
	ly Indust. ntries	32	72	89	111	141	165	192	226	266
Concess: debt of debt (%)	total									
LIC		74	73	72	71	69	68	67	69	69
MIC		45	33	• •	• •			25		24
NIC		16	9			• •	• •	4	• •	3

Source: OECD (Organization for Economic Cooperation and Development), <u>External Debt..., pp. 34-35</u> Personal calculations.

Table A-6. Structure of Financial Flows to Developing Countries by Income Groups of 1977 (in percent) Income Year Groups 1970 1973 1975 1977 1979 Over \$1000 ODA 28.5 17.8 19.3 15.8 14.1 Non-Con-80.7 84.2 71.5 82.2 85.9 cessional \$500-1000 46.1 ODA 59.9 62.6 48.7 48.3 Non-con-40.1 37.4 51.3 51.7 53.9 cessional Under \$500 75.8 67.2 73.5 ODA 72.5 73.3 Non-con-26.5 24.2 27.5 26.7 32.8 cessional

Source: United Nations, <u>Handbook of International Trade and Development Statistics</u>. <u>Supplement 1980</u> (New York, 1980) p.

Table A-7. Total Annual Debt Service of Non-OPEC Developing

Countries (in \$billion)

	Interest	Amorti- zation	Total Debt No Service	n-con- cessional	Conces- sional
1971	2.6	6.9	9.5	8.0	1.5
1975	7.5	13.4	20.9	18.3	2.6
1976	8.5	16.7	25.2	22.4	2.8
1977	10.6	21.6	32.2	29.0	3.2
1978	14.5	31.6	46.1	42.5	3.6
1979	20.5	36.9	57.4	53.4	4.0
1980	29.9	35.3	65.2	60.4	4.8
1981	39.5	42.3	81.8	76.4	5.4
1982 (est.)	49.7	48.6	98.3	92.2	6.1

Source: OECD, External Debt..., p. 29 .

Table A-8. Total Annual Debt Services by Country Income Groups

Income Group	(% incr.) 76-82	1976	1978 1978	n \$bil: 1979	lion) 1980	1981	1982
LIC	219	3.6	5.2	5.8	7.9	9.3	11.5
Of whic LLDC	h 200	0.6	0.7	0.9	1.2	1.4	1.8
MIC	273	6.3	12.1	14.4	16.8	20.2	23.5
NIC	314	15.3	28.8	37.1	40.5	52.3	63.3

Source: OECD, External Debt..., p. 37 .

Table A-9. <u>Debt Situation of the Largest Non-OPEC Debtors</u>

Country (Ranked by absolute debts in 1980)		rsed Debt billion) 1975	GNP (\$ per cap. 1980	Debt p.cap./ GNP p. cap. (in %) 1980
Brazil Mexico India So. Korea Argentina Turkey Egypt Pakistan Chile Phillipines Morocco Peru	43 18 17.6 15.6 14.5 13.8 9.2 9.0 8.5 7.3 7.1	23 16.6 12.4 5.8 4.3 3.6 5.1 5.4 3.7 2.7 1.8 3.3	2050 2135 237 1520 2395 1495 582 300 2160 720 860 935	23.4 28.9 11.2 30.3 24.1 22.1 59.2 37.3 37.5 24.0 43.6
Other Countri	ies (not ran	ked)		
Bolivia Sudan Ivory Coast Jamaica Zaire Zambia	2.3 3.4 4.5 1.3 4.1 2.0	0.7 1.4 0.9 0.6 1.8 1.1	570 410 1150 1040 220 560	72 44.3 47.1 56.8 32.2 61.5

Source: World Bank, World Development Report 1982, and OECD, External Debt..., annex 1 . and personal calculations.

Table A-10 Developing Countries with the Largest Debt Service

Country (Rankedby debt service 1980)	Debt se (in \$ bil 1980	lion)	Export earnings 1980 (in\$ bil.)	Debtservice ratio =debt ser./ exp. of goods and ser.(in % 1980
Brazil Mexico So., Korea Argentina Chile Egypt Peru Morocco	13.7 9.3 3.3 2.8 2.2 1.8 1.6	4.0 2.5 0.7 1.0 0.64 0.6 0.5	23.3 24.7 19.6 11.2 6.3 6.5 4.9 3.3	58.8 37.7 16.8 25.0 34.9 27.7 33.0 39.4
Other Countr	ies (not ra	anked)		
 Bolivia Ivory Coast Jamaica Togo Zambia Pakistan	0.29 0.9 0.2 0.13 0.34 0.73	0.09 0.14 0.01 0.02 0.13 0.29	1.05 2.8 1.4 0.37 1.47 3.3	27.6 32.1 14.3 35.1 23.1 22.1

Sources: OECD, External debt..., annex 1 . and United Nations, 1981. Statistical Yearbook (New York, 1983), pp. 255-83, and personal calculations.

Table A-11. <u>Increases of Disbursed Debt and Debt Services</u> (percent)

Countries	Disbursed Debt 1975-80	Debt Service Increase 75-80
Brazil Mexico So. Korea Argentina Egypt Chile Peru Morocco	141 159 203 262 170 143 115 305	243 272 376 180 206 249 240 664
Bolivia Ivory Coast Togo Zambia	229 400 542 82	222 542 550 161

Source: Personal calculations.

Table A-12. Changes in Terms of Trade and Purchasing Power

	Change of ToT (inpercent)		Change in power of (in per	
Developing countries	1973-76	1979-82	1973-76	
low income Asia Africa	12.1 15.3	-3.2 -13.8	58.5 -18.7	15.7 -3.5
middle income oil importers	-9.5	-10.7	4.5	2.5

Source: World Bank, World Development Report 1983, p.13.

Table A-13: Discount Rates of Central Banks

Years	1970	1973	1976	1979	1980
USA	5.5	7.5	5.25	12	13
Uni. Kingdom	7	13	14.25	17	14
France	7	. 11	10.5	9.5	9.5
WGermany	6	7	3.5	6	7.5

Source: United Nations, 1981 Statistical Yearbook, pp. 309 - 311.

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Table A-14 : Brazilian Real Rates of Growth and Inflation

Year	GNP	General Price Index
1968	11.2	25.5
1970	8.8	19.8
1972	11.7	16.8
1973	14.0	16.2
1974	9.5	33.8
1975	5.6	30.1
1976	9.7	48.6
1977	5.4	38.6
1978	4.8	40.5
1979	6.8	76.8
1980	7.9	110.2
1981	-1.9	95.2
1982 (est.)	1.3	99.7

Source: Baer, Werner, The Brazilian Economy, p.112

Table A-15: Balance of Payments: Brazil
(in billion \$)

Year	Trade Balance I	Service Balance II	Net interest payment(part of II) III	Foreign loans IV
1972	-0.2	-1.3	-0.4	4.4
1974	-4.7	-2.4	-0.7	7.3
1975	<b>-</b> 3.5	-3.2	-1.5	7.5
1976	-2.2	-3.9	-1.5	8.7
1977	0.1	-4.1	-2.1	8.5
1978	-1.0	-6.0	-2.7	13.7
1979	-2.7	-7.8	-4.1	11.2
1980	-2.8	-10.2	<b>-</b> 7.5	12.2
1981	1.3	-13.2	-10 3	15.3
1982	0.8	-15.3	-10.8	11.0

Source: Baer, Werner, The Brazilian Economy, p.137

Table A-16: Brazilian Income Distribution.

Income groups		Relative income levels (% of total income)	
(percentile)	1960	1970	1977
1 - 10	1.9	1.2	1.0
11 - 20	2.0	2.2	2.2
21 - 30	3.0	2.9	2.7
31 - 40	4.4	3.7	3.2
41 - 50	6.1	4.9	4.4
51 - 60	7.5	6.0	5.1
61 - 70	9.0	7.3	6.7
71 - 80	11.3	9.9	9.8
81 - 90	15.2	15.2	14.5
91 -100	39.6	46.7	50.4

Source: Hewlett, Sylvia A., "Poverty and...", p.320

in (i) in (ii)

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## DEBT AND DEVELOPMENT OF LESS

## DEVELOPED CONTRIES

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## AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF ARTS

Department of Economics

KANSAS STATE UNIVERSITY

Manhattan, Kansas,

1984

### ABSTRACT

During the last decade developing countries' indebtness reached new dimensions, which have never been experienced before. Considering the current debt situation the following facts are striking: Fast increasing total debts, the dominant role of private debts, and the large number of countries which are serious debtors.

The huge capital inflows affect the borrowing countries in different ways. The initial goal of this report is to concentrate on possible economic impacts of indebtness in the debtor countries. Within that analysis the promotion of economic growth through foreign capital inflows is a central issue.

Foreign loans tend to increase the total amount which is available for investments. Therefore they improve the potential chances for the debtors growth. But most developing countries have used these additional resources partly for consumption or unproductiv investments. In these cases debt service payments generate heavy burdens for the particular economy, which often leads to a painful adjustment process in the long run.

Foreign loans also influence current economic policies of the debtors. Considering the political structure in most developing countries capital inflows support biased policies, which neglegt political weak groups and rural areas.

It is doubtful, that development of most debtors made significant progress during the period of fast increasing debts. Even incountries where capital transfers generated growth, the classes below (or close) the existence level were often not able to benifit from their countries' capital inflows.