Center For Economic Research on Africa
School of Business
Montclair State University
Upper Montclair, New Jersey 07043

The Debt Crisis and Minerals-exporting Developing Countries: Problems and Prospects

March 1989
(pdf version September 2000)

Ira Sohn
Department of Economics and Finance
School of Business
Montclair State University

Abstract

This paper reviews the debt experience of developing countries that have been dependent primarily on export earnings of minerals before and after the commodity boom and bust period from the 1970s and 1980s. Adjustment to changing primary commodity prices has varied across the sample of countries covered, reflecting both external pressures as well as internal policy choices. Emphasis is given to variations in domestic policies as well as an assessment of proposals for developed countries to reduce or write off mounting external debt levels. Reprinted, with permission, from *Natural Resources Forum*, vol. 12:4, 1988.

1. Introduction

The debt crisis of the developing countries. which began in 1982, had its origins in economic and financial events, some domestic, some external. which took place during the 1970s. This paper traces the evolution of those events. describes the economic and financial trends for a group of minerals-exporting developing countries before and during the crisis. and examines the mediumterm prospects of restoring economic growth to them. Section 2 provides a general overview of the macro-economic successes achieved by the developing countries from 1965 to 1980, the evolving external environment which precipitated the debt crisis and the macroeconomic adjustments required bv these countries in response to it. Section 3 examines a subset of these developing- countries - 12 (low- and lower-middle income) fuel- and non-fuel minerals-exporting countries - whose economic and financial fortunes have been sharply reversed from the 1965-1980 trend because of the hostile external environment they have faced since 1982 which came about because of the deep global recession of 1981-2, the high real interest rates applied to their external debt since 1981 and the severe deterioration in their terms of trade since 1981-2 relative to the 1970s. The final section, Section 4, explores the medium-term policy choices available to the developing countries to deal with the debt crisis.

2. A 20-Year Overview of Economic Trends in the Developing Countries

With the eruption of the developing countrv debt crisis in August of 1982 , when Mexico announced that it was unable to fulfill its debt-service obligations, 15 years of unprecedented economic growth came to an abrupt end. As shown in Table 1, from 1965 to 1980, real Gross Domestic Product (GDP) for all developing countries increased at an annual rate of 5.95%. In addition, *per capt . ta* living standards, approximated by real per capita consumption, increased at an annual' rate of 5.6%; growth in investment expenditures increased at an annual rate of 9.2%; and exports grew at an impressive annual rate of 4.8% due, on the one hand, to the continued liberalization of the international trading system and, on the other hand, to an annual rate of growth of 3.75% in the GDP of the developed countries (World Bank, 1987a).

Table 1

Growth of Real GDP, 1965-1986

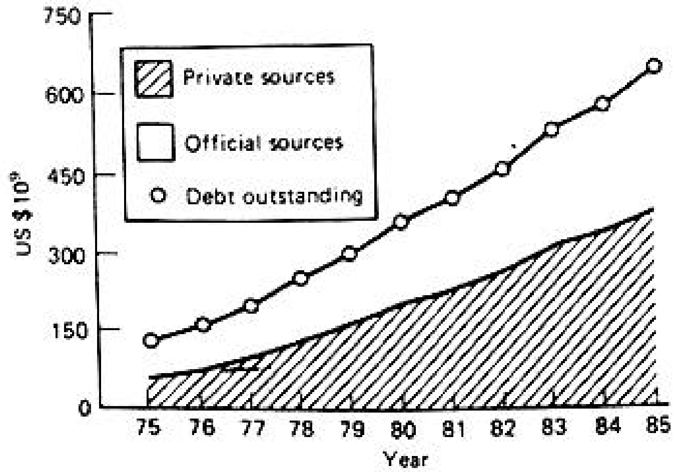
(annual percentage change)

Country Group	1965-1973 average	1973-1980 average	1981	1982	1983	1984	1985	1986
Developing Countries	6.5	5.4	3.4	2.1	2.1	5.1	4.8	4.2
Low-Income Countries	5.5	4.6	4.8	5.6	7.7	8.9	9.1	6.5
Middle-Income Countries	7.0	5.7	2.8	0.8	0.0	3.6	2.8	3.2
Oil Exporters	6.9	6.0	4.1	0.4	-1.9	2.3	2.2	-1.1
Exporters of Manufactures	7.4	6.0	3.3	4.2	4.9	7.8	7.8	7.0
Highly Indebted Countries	6.9	5.4	0.9	-0.5	-3.2	2.0	3.1	2.5
Sub-Saharan Africa	6.4	3.2	-1.0	-0.2	-1.5	-1.7	2.2	0.5
High-Income Oil Exporters	8.3	7.9	1.4	-0.5	-6.9	1.2	-3.8	8.2
Industrial Market Economies	4.7	2.8	1.9	-0.5	2.2	4.6	2.8	2.5

Note : Data for developing countriews are based on a sample of 90 countries. Data for 1986 are estimates.
Source: World Bank (1987a)

A large share of the impressive rate of economic growth achieved by many developing countries during the period 1965-1980 can be attributed to the performance of their export sector. Because of the aforementioned strong growth in the developed countries, the vigorous demand for imported natural resources (fuel, non-fuel and agricultural commodities) by the developed countries helped to firm commodity prices at levels well above their historical values (IMF, 1986). For manv developing countries commodities plav a prominent role in their export structure and, as a result. comprise a large share of their foreign currency earnings. Despite price-induced substitution and conservation measures introduced into the developed countries during the 1970s and the earlv 1980s. more than 80% of world demand for metals and energy in 1985 was still concentrated in the developed countries *(Metal Statistics,* 1986: IEA, 1987). Because the demand for most resources is 'derived demand', a strong link exists between the consumption levels of minerals, their prices, and the level of economic activity in the developed countries.

Figure 1
Debt Outstanding in Developing Countries, 1975-1985

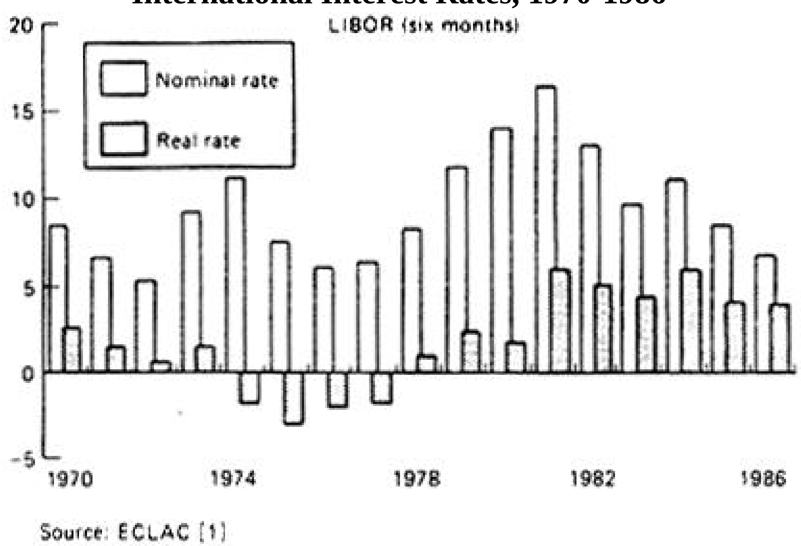


Source: World Bank [1987b]

As a result of steadily rising revenues from their mineral exports and low (and, in some vears, even negative) real interest rates on international loans. Manv minerals-exporting developing countries, in order to promote higher economic growth, borrowed heavilv in the international capital markets during the 1970’s (see Figs I and 2). International banks, flush with 'petrodollars', for which demand in the developed countries was low because of reduced growth in the wake of two oil price increases, continued to extend new credits to manv minerals-exporting developing countries on the assumption that revenues from mineral exports would continue to grow as thev had in the past. In fact. because of these increased revenues the value of the debt-to-exports ratio, closely watched ratio used to assess a country's credit-worthiness, remained virtually unchanged during the 1970s despite massive accumulations of external debt *(The Economist,* 1987). During this period real interest rates were so low and the growth in export revenues was so strong that the developing countries had little difficulty in meeting their required debt-service payments.

With US inflation reaching 14% in 1980-1, the US Federal Reserve Board raised domestic interest rates to unprecedented post-Second World War highs. This produced a recession in the USA in 1981-2 and, because the USA economv is such a large consumer of world products, a global recession followed. Growth in industrial market economv countries fell to 1.9% in 1981 and to -0.5% in 1982 before recovering to an annual average rate of 3.0% during 1983-1986. For the commoditv-exporting developing countries, during 1981-82 real non-oil commodity prices fell to a 30-year low while real interest rates (incorporating terms of trade changes) increased bv 30% between 1980 and 1982 (World Bank. 1987a). Bv 1985. as a result of both volume and price reductions in mineral exports due to the deflationary pressures exerted bv the global recession, the debt-to-exports ratio of the developing countries nearly doubled from its 1980 level. This led creditors to reduce substantially or eliminate entirely new loans to them.

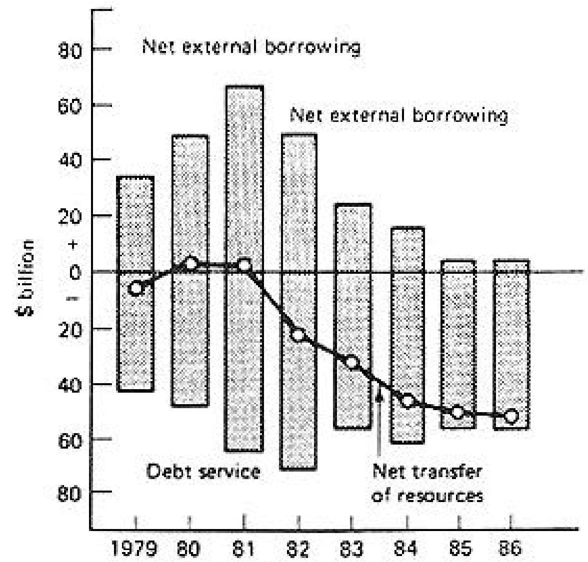
Figure 2
International Interest Rates, 1970-1986



With the decline in commodity prices, most of the indebted minerals-exporting developing countries have been forced to halt or significantly limit interest and/or principal payments on loans as a result of the continuing debt crisis. Living standards in those countries, measured bv per capita consumption, has fallen by approximately 2% per annum from 1980 to 1984 while GDP, investment expenditures and imports have fallen bv 3.10 and 9% per annum. respectively.

Since 1981 the major debtor countries have become net capital exporters (Fig. 3). In 1986. with the collapse of mineral prices, the terms of trade of the heavily annual GDP growth in the highiv indebted developing countries as a group averaged 1.1% (World Bank, 1987a). Because of population growth, living standards on a per capita basis have actually declined more than these numbers would indicate.

Figure 3
Net External Borrowing in Selected Developing Countries, 1979-1986



Source: *The Economist* [1987]

The debt crisis has had particularly, adverse affects on the indebted developing countries who rely on mineral exports to service their debt and to promote economic growth. The next section of this paper examines the effects of changes in real interest rates, commodity prices and GDP growth in the developed countries, on the domestic macroeconomies of 12 minerals-exporting developing countries.

Table 2
Selected Minerals-Exporting Developing Countries

Country	Income status[a]	Borrowing status[b]	Principal minerals exports	Percentage of 1986 Merchandise exports concentrated in principal mineral export(S)	Level of external debt (X10^9 1985 US$)
Chile	Poor	Market	Copper	Greater than 40	20.(1
Ecuador	Poor	Market	oil	Approximately 60	9.2
Egypt	Poor	Official	oil	Approximately 60	4.0
Indonesia	Poor	Market	Oil	Approximatelv 60	36.0
Jamaica	Poor	Official	Bauxite alumina	Greater than 50	3.8
Mauritania	Poor	Official	Iron ore	Approximately 40	1.4
Morocco	Poor	Official	Phosphate rock	Greater than 30	11.0
Nigeria	Poor	Market	oil	Approximatelv 95	18.3
Peru	Poor	Market	Copper, oil, lead, zinc	Approxi mately 60	13.7
Togo	Very Poor	Official	Phosphate rock	Approximately 60	0.9
Zaire	Very Poor	Official	Copper, zinc. cobalt	Approximately 60	5.0
Zambia	Very Poor	Official	Copper	Greater than 80	4.5

a. According to the World Bank, ‘poor’ and ‘very poor’ countries had per capita incomes ‘greater than $400 but less than $1500’ and ‘less than $400’, respectively, in 1985.
b. According to the International Monetary Fuind, between 1978 and 1982, market (official) borrowers had two-thirds of their loans from commercial (official) creditors.
Sources: World Bank (1987a), IMF (1986), and *The Economist* (1987).

3. Macroeconomic Trends in Minerals-Exporting Developing Countries, 1965-1985

Developing countries are classified by the World Bank according to per capita income levels and by the International Monetarv Fund by borrowing status - official or market borrower. Table 2 presents the 12 minerals-exporting developing countries examined in this section according to borrowing status; in addition the table shows their principal mineral export(s), the percentage of total 1986 exports concentrated in those minerals, and their level of external debt in 1986. Tables 3 and 5 track the trends in the domestic economy and debt-related variables of those 12 countries during the period 1965-1985.

Turning first to Table 3, as expected, real annual GDP growth in all 12 countries was appreciably higher in the period 1965-1980 than in the subsequent 5-year period (see row A, Table 3). In addition, from 1965 to 1980, private consumption in most of the 12 minerals-exporting developing countries advanced at relatively high rates (row B). The poor performance of Chile, Jamaica, Zaire and Zambia over this period can be attributed to internal problems which depressed both the actual growth in GDP and private consumption. With the exception of Mauritania, Zaire and Zambia. the growth rate in private consumption in 1980-1985was less than the growth rate achieved in 1965-1980 (row- B). However, after incorporating the growth of population from 1980 to 1985 in Zambia and Zaire, the growth in living standards, if measured by consumption per capita, was negative during this period. One possible explanation for the higher rate of growth in personal consumption in the period 1980-1985 compared with the period 1965-1980 in Mauritania, Zaire and Zambia was the fact that personal consumption was being supported by negative growth in Gross Domestic Investment (row, C). In fact. had it not been for negative growth in gross domestic investment during the period 1980-1985 in nine of the 12 countries, the growth in living standards would have been even lower.

A significant part of the satisfactory, or as the case mav be, poor annual GDP growth of the countries examined from 1965 to 1980 can be attributed to the performance of their export sectors (row, D). Almost without exception, from 1965 to 1985 the export sector played an increasing role in total economic activity in those developing countries (row E). On the other hand, the enhanced role of the export sector increased the exposure of the economies of those countries to external conditions in the world economy. At the same time that the ratio of exports to GDP was increasing in these countries, so was the degree of dependence on their principal mineral export(s) (row F). Only in the case of Chile, Mauritania and Morocco was there a reduction in the degree of export dependence over the 20-vear interval. Even with the reduction, copper in Chile and iron ore in Mauritania, still accounted for 64 and 58%, respectively, of their total merchandise exports in 1985. This increasing degree of export concentration among the 12 countries examined increased the exposure of their national economies to global developments.

Table 3

Trends in Macro-Economic Variables: 1965-1985

	Chile	Ecuador	Egypt	Indonesia	Jamaica	Mauritania	Morocco	Nigeria	Peru	Togo	Zaïre	Zambia
A. GDP growth (average annual %)												
1965-1980	1.9	8.4	6.7	7.9	1.5	*2.1*	5.7	7.9	3.9	4.4	1.4	1.8
1980-1985	-1.1	1.5	5.2	3.5	0.5	*0.2*	3.0	3.4	1.6	1.8	1.0	0.1
B. Growth in private consumption (average annual %)												
1965-1980	1.0	6.8	5.7	6.3	1.5	1.8	4.6	7.0	4.2	5.4	0.2	0.4
1980-1985	-2.2	1.3	3.0	5.9	0.1	6.3	2.6	1.5	1.0	1.9	0.6	2.2
C. Growth in gross domestic investment (average annual %.)												
1965-1980	0.5	9.5	11.5	16.1	3.3	19.2	11.1	14.7	0.2	9.0	6.7	3.6
1980-1985	-13.5	-7.2	0.7	5.6	2.1	8.1	3.1	18.7	16.5	6.8	4.4	14.0
D. Growth in exports (average annual %.)												
1965-1980	7.9	15.2	2.0	9.7	-0.2	2.7	3.6	11.5	2.3	5.4	4.4	4.7
1980-1985	2.3	6.3	3.9	1.1	-7.3	14.9	3.5	9.9	4.4	4.2	2.9	0.3
E. Exports/GDP(%)												
1965-1980	14.0	16.0	18.0	5.0	33.0	42.0	18.0	18.0	16.0	20.0	36.0	49.0
1980-1985	29.0	27.0	27.0	23.0	55.0	60.0	27.0	17.0	22.0	41.0	39.0	39.0
F. Dependence Ratio (percentage of merchandise exports provided byprincipal mineral exports)												
1965-1980	89.0	2.0	8.0	43.0	28.0	94.0	40.0	32.0	18.0	33.0	72.0	97
1980-1985	64.0	74.0	72.0	75.0	67.0	58.0	32.0	96.0	38.0	52.0	74.0	94
G. Growth in global consumption of principal mineral export(s) (average annual %)												
1965-1980	2.8	4.7	4.7	4.7	7.5	3.0	4.6	4.7	4.7	4.6	2.8	2.8
1980-1985	1.0	1.3	1.3	1.3	1.8	0.0	1.3	1.3	1.3	3.0	1.0	1.0

Source: IMF (1986, 1987), World Bank (1987a,b), US Bureau of Mines (1987) and*Metal Statistics* (1986).

The solid 3.75% average annual rate of growth in GDP of developed countries from 1965 to 1980 was accompanied by strong global demand for fuel and non-fuel minerals and steadily firming mineral prices throughout the period (row G, Table 3 and Table 4). However, as a result of the 1981-2 global recession and the more moderate growth in the industrialized countries since the recovery in 1982 – along with continued substitution and conservation efforts with respect to the consumption of fuel and non-fuel minerals – the rate of growth in the global consumption of minerals from 1980 to 1985 slowed significantly from the rate achieved during the period 19675-1980 (row G, Table 3).

Table 4

Price Indices of Selected Commodities, 1965-1985

(1980=100)

Mineral	1965	1970	1975	1980	1985
Bauxite	15.2	20.0	49.6	100	77.3
Copper	34.5	56.9	62.7	100	64.7
Iron Ore	57.6	55.8	83.7	100	83.2
Lead	36.8	36.1	49.7	100	45.1
Petroleum	4.6	4.5	37.4	100	97.3
Phosphate Rock	30.0	23.6	145.6	100	72.6
Zinc	39.4	41.7	102.5	100	113.4

Source: IMF (1987)

Concurrently with the rise in living standards in the developing countries over the period 19651980, which was fuelled bv the relatively high annual growth in economic activitv in the developed countries, many developing countries borrowed heavily, intending to service their rising levels of debt with revenues earned primarily from growing minerals exports (rows D and C, Table 3).

A profile of the evolution of the external debt environment faced by the 12 mineral-exporting developing countries examined in this study is presented in Table 5. Rows A, B and C of this table track the growth in external debt, the debt to GNP and the debt-to-exports ratio. Despite the very high rate of growth in external debt from 196O to 1980. the debt-to-export ratio grew much more modestly for most of the 12 countries being examined (row C). As a result of firming minerals prices caused by strong demand from the developed countries, growth in the export revenues of those 12 developing countries remained strong throughout the decade (Table 4 and rows D and G, Table 2). Owing to low, and in some years negative, real rates of interest on international loans (row D, Table 5 and Fig. 2), those indebted minerals-exporting countries continued to service foreign creditors (rows E and F), while sustaining relatively high rates of growth in GDP and private consumption (rows A and B, Table 3). In fact, by 1980, only Chile, Morocco and Peru had debt service-to-exports ratios greater than 20% (row E).

Table 6
Foreign debt prices
(US cents per US$ of face value)

Country	May 1987	*November /987*
Argentina	58-60	33-37
Brazil	62-65	37-41
Chile	67-70	50-53
Colombia	85-88	72-76
Ecuador	52-55	31-34
Mexico	57-60	48-52
Peru	14-18	2-7
Philippines	70-72	55 -60
Venezuela	72-74	49-53

Source: The Wall Street Journal (1987).

The high debt service-to-exports ratio in 1980 for Morocco can be explained by a very adverse change in its terms of trade form 1975 to 1980, cauded by a reduction of more than 40% in the price of its principal export, phosphate rock, from its 1975 price (Table 4). The high debt service-to-exports ratio in the case of Peru was the result of relatively slow growth in exports over the period (row D, Table 3). As for Chile, despite its high 1980 debt service-to-exports ratio, it was not significantly different form its 1970 level.

However, during the period 1980-1985, with slower economic growth in the developed countries reducing the rate of growth in global consumption of the minerals (row G. Table 3), there was a softening of minerals prices (Table 4) which, in conjunction with rising real interest rates (Fig. 2 and row D. Table 5) and rising debt service-to-exports ratios (row E. Table 5), resulted in a marked slowing down in the growth rate of external debt (row A, Table 5). By 1985 seven of the 12 minerals-exporting deviaoping countries had debt service-to-exports ratios in excess of 25% and interest pavments-to-exports ratios close to or greater than 16% (rows E and F. Table 5). Eleven of these 12 countries. in 1985, were transferring more than 4% of their GNPs to foreign creditors. The once exception, Peru, had earlier unilaterally imposed a ceiling on debt-service transfers.

Since 1985 the debt-to-exports ratio of the major debtors has continued to rise because of lower export volumes and a further decline in minerals prices. According to the World Bank (1987a). for all developing countries the debt service-to-exports ratio. the ratio of debt service to GNP and the ratio of interest pavments to exports continued to rise in 1986, whereas the growth in real GNP in 1986 was slower than in 1985. Since 1980 the debt burden has reduced average income bv one-seventh in the middleincome developing countries. chieflv in Latin America. and bv one-quarter in the po orest countries. mostl%- in Africa *(Neit, York Times, 1988).*

4. Medium-Term Prospects for Indebted Minerals-Exporting Developing Countries

Since 1982 most indebted developing countries have entered into rescheduling agreements with their private and official creditors, in addition to renegotiating the rate of interest on their loans. These agreements and the promise of extending new credit have usually required commitments from debtor governments to implement major structural adjustments in their domestic economies, i.e. reduce public sector deficits, curb the growth in monetarv aggregates and inflation. and adopt realistic trade and exchange-rate policies to foster a competitive environment along marketorientated lines. This, in essence, was the thinking of the Baker Plan. which was proposed in October 1985. However, on the whole, because of domestic political and social pressures, debtor governments have been unable and/or unwilling to implement the Baker-type reforms necessary to convince private and official creditors to extend new credits.

Table 5

Changes in Debt-Related Variables, 1970-1985

	Chile	Ecuador	Egypt	Indonesia	Jamaica	Mauritania	Morocco	Nigeria	Peru	Togo	Zaïre	Zambia
A. External Debt (average annual growth)												
1970-75	11.1	23.9	22.4	28.9	10.2	47.2	19.7	14.8	13.8	24.2	41.0	13.8
1975-80	22.7	53.3	29.0	15.0	3.7	34.1	32.2	50.7	14.5	54.0	20.1	20.9
1980-85	10.7	9.0	7.0	11.1	14.5	12.5	9.6	15.6	6.5	-2.3	2.3	38.2
B. Debt/GDP												
1970	0.32	0.15	0.23	0.30	0.73	0.14	0.18	0.05	0.39	0.16	0.09	0.36
1975	0.63	0.17	0.42	0.33	0.72	0.42	0.19	0.03	0.33	0.19	0.24	0.48
1980	0.45	0.53	0.70	0.28	0.80	1.22	0.39	0.10	0.54	0.93	0.42	0.90
1985	1.42	0.79	0.77	0.45	2.19	2.30	0.93	0.26	0.88	1.42	1.12	2.10
C. Debt/Exports												
1970	2.02	0.94	1.83	2.45	1.83	0.26	1.01	0.34	2.14	0.52	0.37	0.63
1975	2.37	0.63	2.12	1.47	1.42	0.99	0.87	0.11	2.95	0.68	1.68	1.29
1990	1.93	2.01	2.66	0.94	1.35	3.03	2.17	0.32	2.06	1.81	1.96	1.99
1985	4.30	0.79	3.67	1.79	3.46	3.99	3.50	1.41	3.67	2.84	1.97	5.29
D. Average Nominal Interest Rate On International Loans (%)												
1970	6.8	6.2	7.6	2.6	6.0	6.0	4.6	6.0	7.4	4.6	6.5	4.2
1975	7.3	7.4	4.9	8.0	6.2	2.6	7.3	7.6	7.6	7.8	6.5	8.1
1980	13.8	11.1	5.8	8.1	7.7	3.5	8.2	10.6	9.4	4.0	4.7	6.5
1985	9.4	9.4	8.6	8.1	7.7	1.9	8.5	9.3	9.4	0.8	3.1	2.3
E. Debt Service/ Exports												
1970	19.1	8.6	37.0	7.0	2.8	3.3	8.6	4.2	11.6	3.9	4.4	6.3
1975	27.2	4.4	28.0	7.5	7.2	20.8	7.2	2.7	25.6	9.5	14.8	10.8
1980	21.9	18.8	21.0	7.9	14.2	11.1	36.5	1.8	31.2	8.1	16.7	18.1
1985	26.2	28.8	34.0	20.1	36.5	13.1	32.3	30.8	7.9	27.4	14.8	10.2
F. Interest Payments/ Exports (%)												
1970	6.2	2.6	5.6	2.0	1.7	0.4	3.4	1.5	3.5	1.0	1.1	2.8
1975	8.5	1.5	6.9	2.5	4.5	2.9	2.5	0.4	10.9	2.5	6.1	5.3
1980	7.7	9.7	6.0	3.7	7.8	4.8	18.8	1.6	11.2	3.4	9.0	6.6
1985	21.4	21.8	8.5	8.3	18.8	7.1	15.3	9.7	3.9	11.8	9.4	5.0
G. Total Debt Service/GDP(%)												
1970	3.0	1.4	4.7	0.9	1.1	1.8	1.5	0.6	2.1	0.9	1.1	3.6
1975	7.2	1.2	5.5	1.7	3.7	8.8	1.5	0.7	2.7	2.7	2.2	4.1
1980	5.2	5.0	5.7	2.4	8.4	4.5	6.5	0.6	8.1	4.2	3.6	8.2
1985	8.5	8.0	7.1	5.0	23.0	12.2	8.6	5.6	1.9	13.7	7.9	4.0
H. Interest payments/												
1970	1.0	0.4	0.7	0.2	0.7	0.2	0.6	0.2	0.6	0.3	0.3	1.6
1975	2.3	0.4	1.4	0.6	2.3	1.2	0.5	0.1	1.2	0.7	0.9	2.0
1980	1.8	2.6	1.6	1.1	4.6	1.9	3.4	0.5	2.9	1.7	2.0	3.0
1985	7.1	6.1	1.8	2.1	11.9	4.3	4.1	1.8	0.9	0.9	5.1	2.0

World Debt Tables do not report short-term debt in 1970 and 1975. Since short-term debt is included in the 1980 and 1985 figures, the 1975-1980 growth rates are overstated.
Source: The World Bank (1987b)

With the debt-to-exports and interest payments to GNP ratios rising above the 1995 levels (rows C and H, Table V), many debtor countries have delayed principal repayments and/or postponed or severely limited interest pavments to their external creditors. Although the short-term domestic benefits of this strategy - to maintain or to raise consumption levels - are apparent, the higher medium and long-term costs of this policy are slowly being recognized by debtor governments. One of the major costs is the exclusion of those countries from future participation in lnternational capital markets.

With private creditors building loan-loss reserves against their impaired loans and with short-term (trade) credit beginning to dry up, the leverage of the creditors is increasing. Recentiv some of the debtors. e.g,. Peru and Brazil, have made overtures to return to more-conventional solutions to their debt problems. With large discounts on developing country debt in the secondary markets (Table 6). it is becoming increasingly unlikelv that private creditors will renew, let alone increase, credits to debtor countries after sustaining large losses on existing loans. In 1985 more than 80% of the outstanding debt of 17 heavily indebted countries was owed to private creditors *(Tlze Economist.*

1986). Official creditors (governments and multilateral institutions) - despite the recent sharp increase in their disbursements (Fig. 1) and the proposed increase in the World Bank's capital base - are not in a position to replace private creditorsm, because the resources of official creditors are insufficient for the task. The level of resources required to deal with the debt crisis is such that schemes which do not include private creditors are unlikely to succeed.

To restore living standards and GNP to their pre-1980 levels, the developing countries must increase the growth in investment. either by external borrowing or by generating current account surpluses. With the former option all but excluded because of heavy debt-service requirements, thev must generate large trade surpluses, i.e. high growth in exports. For the group of developing countries under discussion this is a formidable problem in the medium term. On the one hand, their exports are heavilv concentrated in minerals (Table 2) and, despite the improved growth rates in industrialized countries, the growth in demand for minerals - both fuel and non-fuel due to continuing conservation and substitution measures - at least in the medium term, is expected to be modest at best (Sohn, 1986, 1987).

On the other hand, although those developing countries will no doubt, over the long term, try to diversify their exports away from their current excessive reliance on minerals, their export structures are more or less fixed in the medium term. Because the short-term strategy of expanding per capita consumption by limiting debt-service pavments has probably run its course, what are the policy choices available to those countries over the medium term that will -restore investment growth in their economies and lead to a resumption in the flow of external credit necessary to promote income growth in the future?

One major factor in the continuing debt crisis is the lack of credibility with which debtor governments are viewed by both official and private creditors, that is, their inability to implement an agreed course of action. All parties need to be reminded that it took approximately 15 vears for this debt crisis to develop and it could require as long or longer for it to dissipate. During past rescheduling negotiations most official and private creditors agreed to stretch out principal repayments and to accept reduced interest rates on existing loans.

In a separate agreement with Mexico, the IMF has developed a plan that would enable Mexico to draw on additional credits if oil prices fall below an agreed theshold level. a variation on the fund's well-known compensatory financing facility. The case for a similar facility has been made to protect debtor countries against market-induced increases in interest rates because an increasing percentage of outstanding debt is being contracted at variable rates of interest. For the most part, economic recovery in those indebted developing countries will no doubt have to be initiated and implemented indigenousIv. and the necessary economic restructuring will require continued (and probabiv more) austerity over the medium term. Proposals to repudiate and/or to continue in arrears on interest pavments are having, and will continue to have, a crippling effect on the future growth prospects of these developing countries as foreign loans dry up. Ultimately, a nonpayment policy will lead to further reductions in living standards.

5. Conclusions

If the 12 minerals-exporting developing countries examined in this studv are to continue to increase their adhesion to the world trading and financial svstem that is responsible, in part, for the im pressive gains in their income and general living standards from 1965 to 1980, then the economic and financial choices available to those countries appear to be limited indeed. The desire to continue to participate in the world economy of the approaching 21st century willrequire major restructuring of their economies at considerable cost in terms of foregone consumption over the short term. The ultimate issue for these countries is whether or not the political and social willingness can be mobilized to implement the necessary changes to permit them to continue their participation in the increasingly competitive world economy

References

ECLAC 1986. *Preliminary Overview of the Latin American Economy*, 1986. United Nations.

The Economist 1986. Taking up the running (a survey of the World Bank), (27 September), 24.

The Economist 1987. The limits to cooperation (a survey of the world economy (26 September), 46-53

International Energy Association 1987. *Energy Conservation in IEA Countries.* OECD. Paris

International Monetary Fund 1986. *World Economic Outlook* Washington, D.C.. DC. p. 140.

International Monetary Fund 1987. *International Financial Statistics Yearbook,* 1987. Washington. DC.

Metal Statistics. 73rd Edn. Metallgesellschaft, Frankfurt-am-Main (1986).

The New York Times (19 January 1988).

Sohn, 1. 1986. External debt and prospects for minerals-exporting developing countries. *Natural Resources Forum 10(4).*

Sohn. 1. 1987. External debt and oil prices: some prospects for oil-exporting developing countries. *Energy Policy* (October).

United States Bureau of Mines 1987. *Mineral Facts and Problems,* 1976 and *Mineral Industry Surveys*, 1987. Washington. DC.

The Wall Street Journal (16 November 1987). 34.

World Bank 1987a. *World Development Report 1987* Oxford Universitv Press. New York.

World Bank 1987b, *World Debt Tables 1986-87.* Washington. DC.