Ghana: The burden of debt service payment under structural adjustment

Barfour Osei
University of Ghana
Legon

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I. Introduction

One of the greatest problems facing many sub-Saharan African (SSA) countries is their external indebtedness. The severity of the problem is seen from the size of the current debt relative to income, and the high debt service payment. From an estimated total $6 billion at end-1970, external debt of SSA countries had risen to an estimated $161 billion by end-1990 (World Bank, Debt Tables, 1990-91) representing over 110% of GNP. The debt service payment had also risen from under $1 billion to over $10 billion, representing about 25% of export earnings. The huge expansion in the size of debt relative to income cannot only lead to capital flight but can also discourage future external funding for development in the region. The high debt service payment means that a significant proportion of convertible currency is consumed by debt, thereby limiting the countries' ability to import goods and services. The debt service also constitutes a considerable share of the budget in many countries and so imposes significant constraints on domestic investment.

The size of the current debt and the debt service payments is compounded by the greater poverty and the more serious structural weaknesses of sub-Saharan Africa economies. Structural weaknesses such as lack of a diversified export base make it more difficult for the countries to adjust to changing world economic conditions. Also, higher population growth in these countries makes achieving higher per capita income growth more difficult. These weaknesses constrain the countries from achieving the rapid growth that is necessary to escape from debt difficulties.

Since the beginning of the last decade, many sub-Saharan African countries have embarked on structural adjustment. A dominant economic issue is how and how far the debt problem constrains the drive to rapid and sustainable growth. It is recognized, that the debt problem varies not only among groups of countries, but also countries in the same group. Therefore, the proper understanding of the debt problem would necessarily require in-depth analyses of the situation in individual countries, followed, by a synthesis of the lessons from the particular experiences. This study on Ghana is an effort in that direction.

The purpose of this study is to explore in detail the implications of Ghana's external indebtedness for sustained economic growth. The focus of the analyses is on debt in the 1983-1990 period during which Ghana pursued an economic recovery programme (ERP) and adopted structural adjustment policies. Where necessary, data are drawn from outside this period for comparative analysis. Specific issues addressed include:

- examination of the main features of the debt, including the size, type, sources, structure and terms.
- assessment of the debt burden and causes of the present debt difficulties;
- assessment of the sustainability of the debt;
- evaluation of the impact of the debt on economic growth.

The main objective is to provide a better understanding of Ghana's debt problem in order that adequate and effective debt management measures can be sought.

The study is divided into six sections. Following this Introduction, Section II provides background information. It examines Ghana's economic structure and performance, and traces the accumulation of debt before the onset of the ERP. The dimensions of the debt are also discussed in this section. Section III assesses the debt burden and the causes of the current debt difficulties. Section IV tackles the issue of debt sustainability and fiscal stability. The impact of the debt on long-term economic growth is assessed in Section V, while Section VI brings up the conclusion.

II Background information

The Ghanaian economy: structure, performance and debt accumulation

A useful starting point in studying Ghana's present debt problems is to look at the economy's performance, its structural change and past debt accumulation, since the present debt problems cannot be divorced from any of these.

The Ghanaian economy suffered a protracted decline in the three decades following independence in 1957, particularly in the 1970s and early 1980s. Output growth rate was a modest 2.2% per annum between 1960 and 1970, but declined at a rate of 0.5% percent per annum during the following decade (See Table 1). With a fast-growing population, Ghana moved from classification as a medium-income country in the 1960s to a low-income country by the end of the 1970s.

The economy has always been dominated by agriculture. An attempt at changing this structure contributed to the poor economic performance during the first decade after independence. The government sought to stimulate social and economic development through industrialization, by establishing a number of import-substituting industries. Consequently, manufacturing grew rapidly, increasing its share of GDP from 2% to 9% between 1957 and 1969. Manufacturing also became an important contributor to exports, with a 14% share in 1969.

The industrialization attempt was, however, biased against agriculture. The share of agriculture in GDP dropped from nearly 60% to 46% between 1957 and 1969. There was no clear policy to develop agriculture to feed the newly established industries, most of which relied on imported raw materials. Hence the attempt to make the country self-reliant through import substitution also made it foreign exchange dependent. Due to its neglect, agriculture, primarily cocoa, remained a relatively low productivity sector, in the sense that even though it was the largest employer of labour it contributed proportionately less to GDP. Cocoa, for example, employed 17% of the labour force to produce only 8% of GDP. As the nation's major foreign exchange earner and also a major contribution to tax revenue, cocoa's neglect without an appropriate substitute contributed immensely to the decline in the economy[1].

The industrialization effort and the speed at which it was pursued dictated the pace of debt accumulation. "We need to do in ten years what has taken others a hundred years to do"[2]. In the atmosphere of haste to industrialize, heavy foreign borrowing became

necessary, especially after 1961, due to a sharp shortfall in export earnings[3]. The plants and equipment were financed largely by foreign suppliers' credits[4]. These credits were quick-maturing, and the heavy reliance on them caused debt problems to emerge early in the post-independent development effort. External debt rose sharply from almost nothing at independence to nearly $600 million at end-1965; over 80% of this total were suppliers' credits that had become due for repayment. However, due to the neglect of cocoa on one hand and external factors on the other hand, export earnings did not improve, as the debt rose and repayments became due. Hence, Ghana was by end-1965 facing debt repayment crises, which were resolved through debt rescheduling agreements in 1966, 1968 and 1970.

The structure of the economy continued to be dominated by agriculture, and the neglect of the sector precipitated the economic decline over the 1970-1982 period. By 1982, the share of agriculture had returned to 57% (Table 1) and yet the nation was not producing enough to feed itself. The increase in the share of the agricultural sector was mainly the statistical consequence of a decline in the industrial sector. Industry's share of GDP fell from 15% to 6%, an annual average rate of decline of about 2 percentage points. The contribution of the service sector also dropped from 49% in 1960 to 38% in 1982, since the hard economic conditions and struggle for survival reduced demand for services.

The decline in industry was a reflection of its dependence on imported inputs, which was hampered by a severe foreign exchange constraint. The foreign exchange constraint was due to two main reasons. On one hand, domestic production of the main export commodity - cocoa - fell drastically. On the other hand, Ghana's international credit rating was very low for the 1970-1982 period, and the country was left far behind the rest of the developing world in the borrowing stampede of the 1970s. Capital inflows almost dried up. New commitments and disbursement of external funding remained only modest throughout the period, as a result mainly of lack of action on macro-economic adjustment. Commitments averaged $45 million -55 million per year in the first half of the decade, and increased to an average of about $100 million per year during the second half (Table 2). Actual disbursements fell below these levels. The only significant jump in new debt was in 1980, following the short-lived optimism on the return of the country to civilian government (in 1979) after seven years of military rule. Consequently, the country's external indebtedness remained low in both relative and absolute terms throughout the 1970s. Yet, debt repayment problems persisted due to the foreign exchange constraint. The "yentua"[5] policy of the government in 1972 was a reflection of the desperation of the situation. This was followed by debt rescheduling in 1974.

The ERP was initiated in 1983 to reverse the decline in the economy, stabilize prices and maintain a favourable balance-of-payments position. The programme is roughly divided into two phases, the initial three-year stabilization phase (1983-86) and the subsequent years of adjustment and growth. Since it began, the economy has shown signs of recovery: output growth has averaged about 5% per annum since 1984 (see

Table 1: Some macro-economic indicators of Ghana

	1960-70	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Growth rate of GDP (%)	2.2	-12.4	0.5	-3.5	-6.9	-4.6	8.6	5.1	5.2	4.8	5.6	5.1	3.0
Inflation (%)	2.0	29.8	50.2	116.5	22.3	122.8	39.7	10.3	24.6	39.8	31.4	25.0	37.1
Share in GDP (%)													
A. National accounts													
Consumption	88	87	93	95	96	96	98	94	93.6	92.2	94.5	93.8	93.3
Gross domestic investment	-	12.7	5.6	4.6	3.4	3.7	6.9	9.6	9.4	10.4	10.3	13.5	15.1
Gross domestic savings	-	9.6	4.5	4.0	3.7	3.3	5.6	7.6	7.7	8.2	10.7	6.0	10.8
B. Sectoral distribution													
Agriculture	44	48	53	54	55	55	49	45	48	51	50	49	48
Industry	19	21	16	14	12	11	11	17	17	16	17	17	16
Services	37	31	31	32	33	34	40	39	35	33	34	33	34
C. Balance of payments													
Exports	20	20	9	5	3	6	8	10	16.6	19.7	18.5	16.9	16.0
Imports	24	19	9	5	3	6	8	12	-20.1	-26.2	-24.2	-24.4	-25.1
Current account balance	-	0.7	0.3	-3.3	-0.3	-2.4	-2.7	-4.5	-4.2	-4.9	-4.9	-5.8	-7.6
Overall balance	-	5.2	-1.6	-5.3	1.1	-2.1	-1.9	-1.8	-1.2	3.0	2.4	2.4	1.4
Index (1980 = 100)													
Export volume index	222.6	142.8	100.0	103.1	116.5	84.0	85.7	103.7	114.9	123.8	139.0	166.6	176.6
Export unit volume index	24.6	65.5	100.0	82.8	65.4	65.6	83.1	76.6	82.8	84.3	83.0	-	-

Source: Bank of Ghana, *Quarterly Digest of Statistics*, various issues; *Economy Survey*, various issues.
World Bank (1992), *African Development Indicators*.

Table 2: The total external debt and growth rates (1970-90)

Year	Total external debt (Current $) Millions	Growth in debt debt (Current $) %	Total external debt (Constant $) Millions	Growth in debt debt (Constant $) %
1970	1048.79	-	3361.50	-
71	1154.12	10.0	3507.96	4.3
72	1167.01	1.1	3287.35	-6.2
73	1277.11	9.4	2922.44	-11.1
74	1290.82	1.1	2112.63	-27.7
75	1315.75	1.9	1957.96	-7.3
76	1340.68	1.9	1971.59	0.7
77	1365.61	1.9	1847.92	-6.3
78	1390.54	1.8	1712.48	-7.3
79	1415.47	1.8	1456.24	-14.9
1980	1440.40	1.8	1212.71	-16.1
81	1833.34	27.3	1587.31	29.9
82	1907.00	4.0	1739.96	9.6
83	2039.12	6.9	1953.18	12.3
84	2431.00	19.2	2388.02	22.3
85	2736.00	12.5	2736.00	14.5
86	2669.00	-2.4	2581.24	-5.6
87	3126.60	17.1	2745.04	6.3
88	3133.22	0.2	2635.17	-4.0
89	3223.60	2.9	2681.03	1.7
90	3521.80	9.2	2692.50	0.4

Source: World Bank, *World Debt Tables*, various issues.
* Calculated as the value of external debt deflated by the World Unit Import Value Index, 1985 = 100 (See Dornebusch, 1987).

Table 1), and the severe foreign exchange constraint seems to have eased. Even though agriculture still dominates the economy with a share in GDP of about 50% since 1983, the industrial sector has staged a remarkable recovery. The share of industry in GDP increased from 7% in 1983 to 17% by 1985, dropping only marginally to 16% in 1990. This growth is partly due to the rehabilitation of existing plant and equipment, and the availability of imported raw materials made possible by an easing of the foreign exchange constraint. The constraint has eased as a result of the substantial external capital inflows that have backed the programme. At the beginning of the ERP (1984-86), commitments of external funding averaged about $420 million (1984-86). (See Table 10.) In 1990, total commitments were twice that level, reaching over $850 million. Gross disbursements have also increased very substantially, averaging at least $250 million a year since the inception of the programme. The sustained high levels of commitments and disbursements suggest that the aid effort on the part of donors could be strong given

serious commitment on the part of the recipient to pursue economic reforms. The higher inflows have however resulted in a sharp increase in the pace of debt accumulation. The situation is particularly problematic as the structure of the economy, in terms of its ability to earn foreign exchange to meet debt servicing, has not changed.

Dimensions of the debt

Data sources and problems

The measurement of external debt is fraught with both conceptual and practical problems (see, e.g., Krueger, 1987; Ajayi, 1991). A major practical problem is inadequacy of data. This problem extends to inconsistencies in published debt figures. Time series data from official Ghanaian sources are not consistent. Publications of the World Bank and the International Monetary Fund (IMF) also often have the same defect, as the figures on debt sometimes depend on which World Bank or IMF publication is used.

Nonetheless, external debt data used in this study are largely drawn from World Bank publications. This data source has obvious advantages. To a large extent, statistics obtained from this source are not available from official Ghanaian sources. Also, the World Bank figures enable easy and meaningful international comparisons. However, where necessary the data have been supplemented with information obtained from the Bank of Ghana.

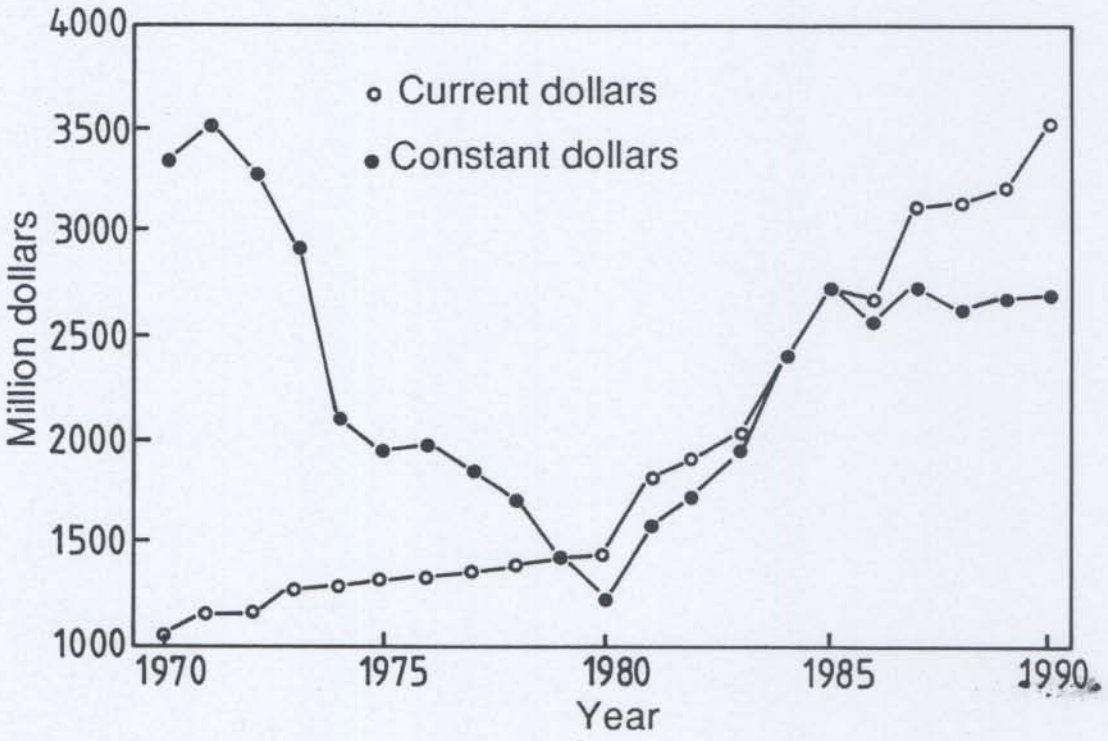
The following standard definitions, distinctions and categorizations have been followed. External debt is defined by type. Long-term debt is debt that has an original or extended maturity of more than 12 years. Short-term debt is debt that has an original maturity of one year or less. Debt with an original or extended maturity of between 1 and 12 years is classified as medium-term debt. With regard to long-term debt, distinction is also made between public and publicly guaranteed debt on one hand, and private non-guaranteed debt on the other. Public and publicly- guaranteed debt is an obligation of the national government, and autonomous public bodies, as well as obligations of private debtors that are guaranteed by the government. Private non-guaranteed debt is obligations of private debtors that are not guaranteed by the government or any public entity.

Creditors are categorized as either official or private. Debt from official creditors comprises loans and credits from international organizations (multilateral donors) and loans from governments (bilateral donors) and their agencies.

The total debt

The total debt is the sum of public and publicly-guaranteed debt and private non-guaranteed debt (long-term debt), medium-term debt including IMF credits, and short-term debt. Table 2 shows Ghana's total external debt in both current and constant US dollars($) since 1970. The growth rates of the debt are also shown in the table. The growing trends in the total debt are depicted in Figure 1.

Figure 1: Trends in total debt



The stock of debt has increased very sharply since the inception of the ERP, rising from $2.0 billion in 1983 to $3.5 billion at end-1990. One reason behind the sharp increase is that Ghana's reported debt in the pre-ERP period was underestimated. The reported debt excluded payment arrears, which totalled over $232 million in 1984 by the Bank of Ghana's own estimates. However, the one significant factor that has influenced

the level and growth of debt since the ERP is the government's determined effort at macro-economic adjustment. As indicated elsewhere, the reforms have been supported with substantial levels of loans and credits. The sharpest increase in the level of debt was experienced between 1983-85, the stabilization and rehabilitation phase of the ERP. This is to be expected, as the level of shortages in the economy at the start of the programme was such that Ghana needed massive injections of capital inflows if the reforms were to take root. More significantly, there significant shortfalls in export earnings between 1983-85 (see Table 1), which made increased borrowing a necessity to furbish the economy. The level of debt actually fell in 1986, as a result of improvements in export receipts that year.

Structure, source, composition and type of debt

Since 1983, some major changes have occurred within the total debt, with significant bearing on how the debt affects the economy. Important changes occurred in the maturity structure of the debt. Compared with the pre-ERP period, the structure reveals a shift towards long-term debt (see Table 3).

Under the ERP, medium-term debt became significant during the stabilization period, as its share in total debt increased, and the share of long-term debt decreased. At the initial stages of the ERP, the share of long-term debt reduced somewhat, from 45% in 1983 to 33% in 1984 and to 32% in 1985. At the same time the share of medium-term debt increased steadily from 18% to 40%, due largely to the increased use Ghana made of IMF credits during the stabilization phase of the programme. This is a reflection of the existing practice in international development cooperation that requires developing countries undertaking economic adjustment to initially seek IMF funding. Most of the major donors only maintain sizeable long-term lending programmes if the country has an IMF-supported adjustment programme. The problem, however, is that this situation saddles the adjusting country with heavy quick-maturing debt, as the case of Ghana clearly illustrates. Since 1986, however, the shift has been towards long-term debt. This share in the total debt increased from 52% in 1987 to 62% in 1990. A major significant feature since 1986 is the drastic reduction of short-term debt. This is the result of the conversion of some short-term debt into long-term, following re-structuring agreements between Ghana and some creditors. This structural change has reduced the incidence of bunching together of repayments that create severe pressures on the balance of payments.

Within long-term debt an important classification is made into public and publicly-guaranteed debt on one hand and private non-guaranteed debt on the other. This classification, shown in Table 4, indicates that the debt is overwhelmingly public and publicly-guaranteed. Private non-guaranteed debt hovered around 1% of the total both before and during the ERP. This is a reflection of the dominant role of the public sector in the socio-economic development of the country, and also of the perceived low

Table 3: Structure of total debt ($million)

Year	Total (1)	Long-term debt (2)	Medium-term debt (3)	Short-term debt (4)
1970	1048.79	524.00	314.64	209.75
71	1154.12	555.82	325.09	273.21
72	1167.01	587.24	335.54	244.27
73	1277.11	618.66	345.99	312.46
74	1290.82	650.08	356.44	384.30
75	1315.75	681.50	366.89	267.36
76	1340.68	696.48	377.34	266.86
77	1365.61	711.46	387.79	266.36
78	1390.54	726.44	398.23	265.87
79	1415.47	741.42	408.65	265.40
1980	1440.40	756.40	342.10	341.90
81	1833.34	887.84	365.10	580.40
82	1907.00	861.00	352.92	693.08
83	2039.12	869.33	655.19	514.60
84	2431.00	823.26	908.36	699.38
85	2736.00	909.88	1087.81	738.31
86	2669.00	1224.26	1180.60	264.14
87	3126.60	1611.00	1257.80	257.80
88	3133.22	1854.90	1166.61	111.71
89	3223.60	1998.63	1116.11	108.86
90	3521.80	2310.63	1164.50	106.67

Source: World Bank, *World Debt Tables*, various issues. Bank of Ghana, External Debt Department.

credit-worthiness of private investment activity. This situation requires attention if the private sector is to play any meaningful role in the development process.

Other important changes have also occurred in the source composition of the debt (Table 5). The source of debt is either private or official and Table 5 reveals the steady decline of private debt in the total portfolio: from about 15% during 1974-1982 to about 5% in 1983-1990. This is an important difference between Ghana's debt structure and those of other severely indebted sub-Saharan African countries, such as Nigeria and Côte d'Ivoire, where debt from private sources has increased.

Within official debt there is division into bilateral debt and multilateral debt. Both bilateral and multilateral debt have increased steadily since 1983 (see Table 5). The important feature of multilateral debt is the increased share of World Bank debt since 1986; by 1990, this debt made up over 60% of multilateral debt and nearly 40% of total official debt. The increased share of World Bank debt is largely responsible for

improvements in the terms of debt from an average maturity of 24 years with 5 years grace period and 4% per annum rate of interest during 1970-1982, to 34 years maturity, with 8 years grace period and 2.9% rate of interest since the ERP (Table 6). On the other hand, the increased share has implications for debt relief: this type of debt is never forgiven and is rarely rescheduled.

The pattern of repayments (principal plus interest) has followed closely that of the total debt rising sharply from the outset of the ERP (see Table 7). The sharp increase in repayments from 1983 is due in part to pre-ERP factors. As indicated earlier, Ghana had accumulated a substantial amount of arrears by the start of the ERP. It was a requirement of the IMF that Ghana clear these arrears quickly in order to enhance its international creditworthiness. The arrears were scheduled to be cleared by end-1988. Moreover, debts that were rescheduled in 1974 had become due for repayment from 1983, after the expiry of a 10-year grace period. Thus, the bulk of debt service payments by end-1988 was due to accumulated arrears and rescheduled debt prior to the ERP. The retirement of these debts is reflected in the fall of repayments in 1989 and 1990. However, from 1985, debt service payment to the IMF became more significant, reflecting the increased use Ghana made of IMF funds after 1983.

Table 4: Total external debt by type ($million).

Year	Long-term debt				Medium-term debt				Short-term debt	
	Public and publicly guaranteed		Private non guaranteed		IMF Credits		Other			
	Amount	Share*(%)	Amount	Share	Amount	Share	Amount	Share	Amount	Share
1970	514	49.0	10	0.9	40	3.8	275	26.2	209	19.9
71	545	47.2	10	0.8	20	1.7	305	26.4	273	23.6
72	578	47.5	9	0.7	2	0.1	332	28.4	244	20.9
73	610	47.7	8	0.6	0	0	345	27.0	312	24.4
74	644	49.9	6	0.5	2	0.1	352	27.2	284	22.0
75	670	50.9	10	0.7	45	3.4	321	24.4	267	20.3
76	686	51.1	10	0.7	60	4.5	371	27.7	267	19.9
77	701	51.3	10	0.7	63	4.6	324	23.7	266	19.4
78	716	51.5	10	0.7	61	4.4	337	27.1	265	19.1
79	732	51.7	9	0.6	74	5.2	334	23.6	265	18.7
1980	746	51.8	10	0.7	43	2.9	299	20.7	342	23.7
81	877	47.8	10	0.5	28	1.5	337	18.4	580	31.6
82	845	44.3	16	0.8	21	1.1	634	33.2	693	36.3
83	848	41.5	21	1.0	280	13.7	628	30.8	514	25.2
84	791	32.5	32	1.3	468	18.2	619	25.5	639	28.7
85	866	31.6	40	1.5	658	24.0	522	19.0	753	26.9
86	1186	44.4	38	1.4	748	28.0	509	19.0	264	9.9
87	1581	50.6	30	0.9	748	23.9	517	16.5	257	8.2
88	1800	57.4	54	1.7	689	22.2	477	15.2	111	3.5
89	1940	60.2	58	1.7	680	21.0	436	13.5	108	3.3
90	2252	63.8	58	1.6	626	17.7	478	13.5	106	3.0

Source: World Bank, *World Debt Tables*, Various Issues. Bank of Ghana, External Debt Department.

Table 5: Composition of external debt: Official versus private ($ millions)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Official																					
Bilateral	667	745	749	839	834	860	761	802	773	799	966	954	981	994	1050	1297	1177	1147	1181	1148	1244
Multi-lateral	149	156	166	184	214	243	358	317	337	330	359	782	819	897	1233	1246	1227	1689	1699	1787	2112
Of which:																					
IMF	40	20	2	0	2	45	60	63	61	74	43	28	21	280	468	658	748	748	689	680	626
World Bank	74	74	78	72	117	194	226	243	290	243	244	366	356	414	482	483	483	700	876	1030	1310
Private																					
Private Guaranteed	223	243	243	246	236	202	212	236	270	277	105	87	91	121	116	153	227	260	198	130	107
Private Non-Guaranteed	10	10	9	8	6	10	10	10	10	9	10	10	16	21	32	40	38	30	54	58	58

Source: World Bank, *World Debt Tables*, various issues. Bank of Ghana, External Debt Department.

Table 6: Average terms of debt (all creditors)

Year	Total debt	Terms of Lending: Interest rate (%)	Maturity period (Years)	Grace period (Years)	Grant element (at 10 % discount rate)
1970	1048.79	2.0	36.7	9.7	66.8
71	1154.12	3.8	32.0	7.0	66.2
72	1167.01	3.0	35.0	8.0	68.4
73	1277.11	3.0	35.0	8.0	68.4
74	1290.82	5.2	26.6	6.8	36.8
75	1315.75	5.2	26.6	6.8	36.8
76	1340.68	5.0	30.0	6.0	49.8
77	1365.61	5.0	30.0	6.0	49.8
78	1390.54	4.4	25.0	6.0	54.9
79	1415.47	4.4	25.0	6.0	54.9
1980	1440.40	1.6	38.7	9.1	68.5
81	1833.34	3.7	24.5	5.6	44.7
82	1907.00	5.9	17.8	4.3	26.5
83	2039.12	2.2	36.5	7.7	63.7
84	2431.00	1.9	39.1	8.5	69.8
85	2736.00	4.2	30.2	7.2	46.9
86	2669.00	4.7	26.0	6.0	39.2
87	3126.60	1.9	29.2	7.8	58.3
88	3133.22	2.0	30.0	8.0	64.0
89	3223.60	2.0	29.0	8.0	64.0
90	3521.80	2.0	29.0	8.0	64.0

Source: World Bank, World Debt Tables, various issues. Bank of Ghana, External Debt Department.

Table 7: Repayments

Year	Principal	Interest	Total
1970	5.30	7.00	12.30
71	8.20	8.00	16.20
72	7.40	7.00	14.40
73	10.75	9.90	20.65
74	14.10	13.00	27.10
75	24.20	16.30	40.50
76	34.30	18.80	53.30
77	18.30	15.50	33.80
78	41.40	23.90	65.30
79	39.50	26.30	65.80
1980	33.70	26.30	59.90
81	40.30	30.10	70.40
82	58.00	41.50	99.50
83	136.40	67.10	203.50
84	132.70	101.00	233.70
85	252.30	102.80	355.10
86	250.00	105.30	355.30
87	161.80	121.50	283.30
88	176.60	126.60	303.20
89	142.50	111.90	254.40
90	158.00	100.00	258.00

Source: World Bank, *World Debt Tables*, various issues. Bank of Ghana, External Debt Department.

III The debt burden and its causes

The debt burden

Debt repayment inevitably imposes constraints on a debtor country's growth prospects since it involves the transfer of resources to other countries. Therefore, in order to adequately appreciate the problem of indebtedness, it is essential to relate the debt and its repayments to some income resources generated by the debtor out of which the repayments could be made.

A number of macro-economic aggregates and the debt data are often used to assess the debt burden of a country. The following ratios are often used:

- total debt service to export of goods and services
- interest payment to export of goods and services
- debt outstanding and disbursed to GNP
- total debt service to GNP
- interest payment to GNP
- total external debt to export of goods and services
- total external debt to GNP

However, movements in the ratio of debt service payment to export of goods and services (debt-service ratio) and total external debt to income (GNP) are the two most important index used to assess the debt burden; the higher the ratios, the greater the burden.

These indexes are shown in Table 8. The trends have also been indicated against a background of levels considered as normal (see World Bank, *World Debt Tables*, 1989-1990, vol. 1) in Figures 2-4. A very clear picture emerges from the table and figures: the debt problem has been critical since 1983 and Ghana is justifiably a severely indebted low-income country. The debt service ratio rose sharply, from 39% in 1983 to a peak of 67% in 1988, before falling back to about 39% in 1990. It must be pointed out again that the sharp rise in the debt service ratio from 1983 was due largely to repayments of accumulated arrears and rescheduled debt prior to the ERP. Nonetheless, the debt service ratio has since 1983 been above 30% - a reflection of a state of severe indebtedness. Likewise, the levels of both the debt-export ratio and the debt-GNP ratio (Figures 3 and 4) have remained above normal since 1983, also reflecting the critical nature of Ghana's debt. However, while the outlook on the debt-service ratio should be for a moderation following the conclusion of repayments on the accumulated arrears, the same cannot be said for the debt-export ratio and the debt-GNP ratio. It is obvious that Ghana's ability to generate higher growth in exports and income is crucial for any moderation in these ratios.

Figure 2: The debt-service ratio

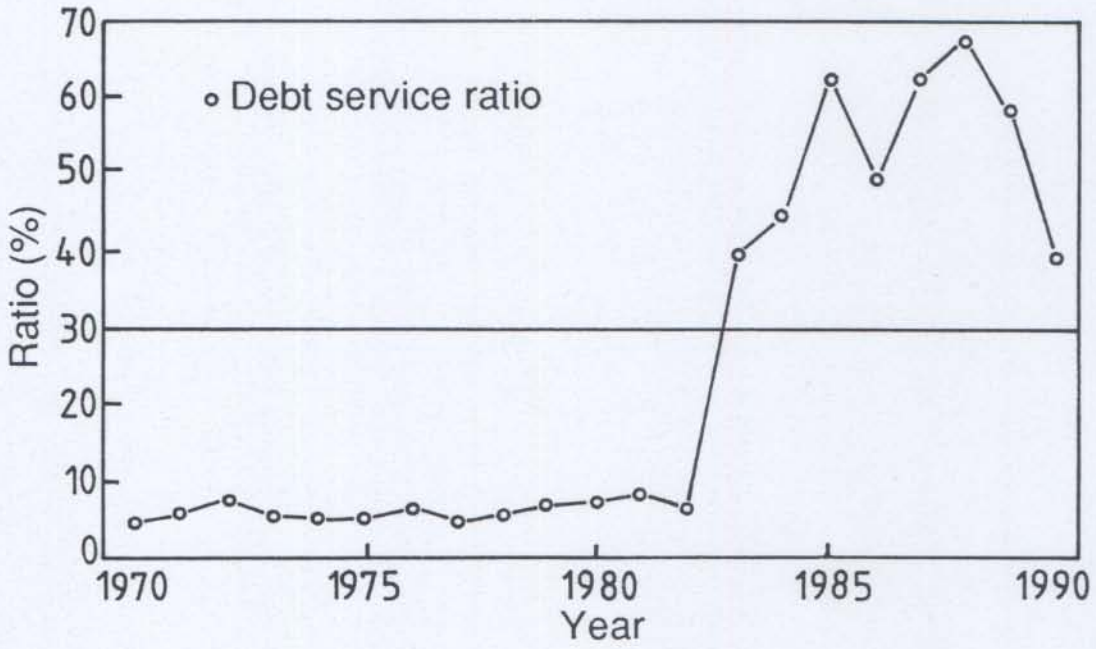


Figure 3: The debt-export ratio

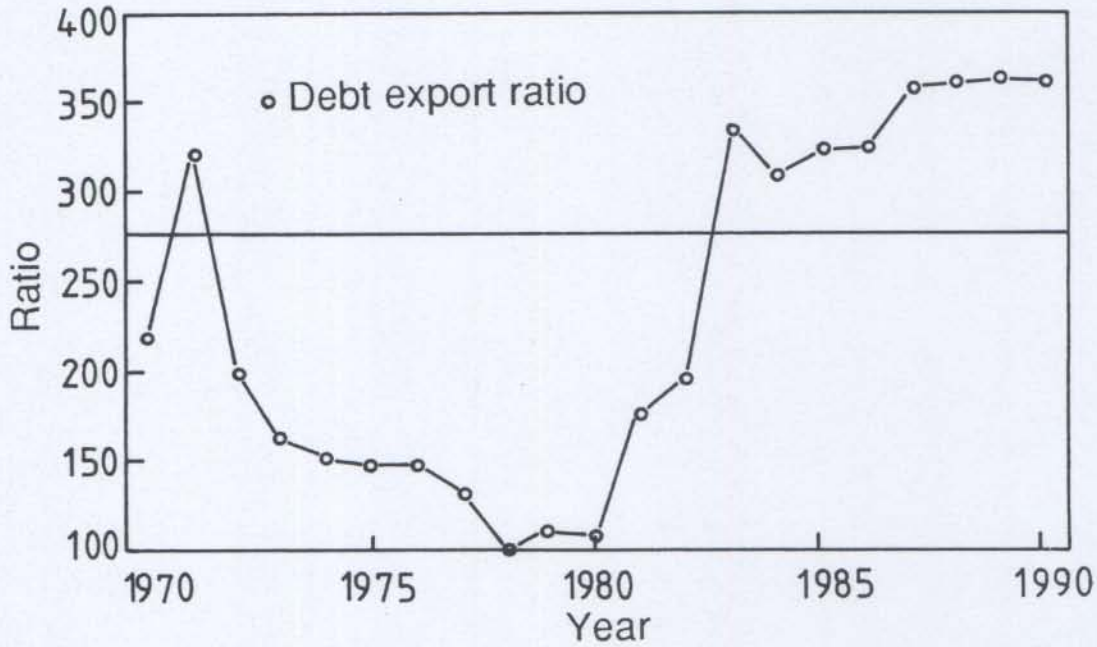


Figure 4: The debt-GNP ratio

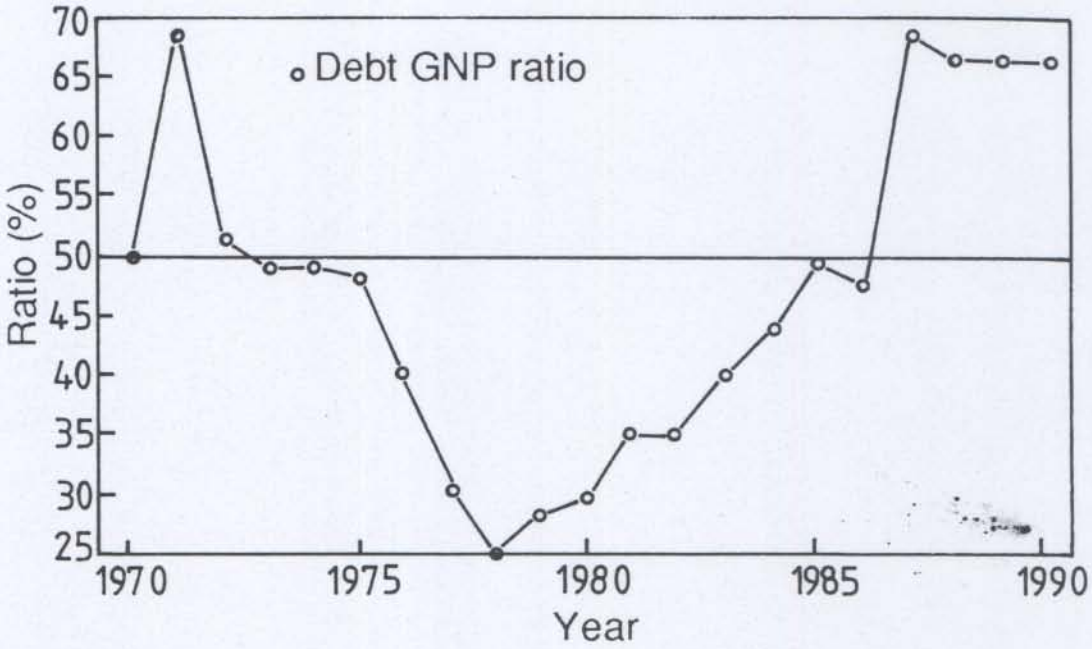
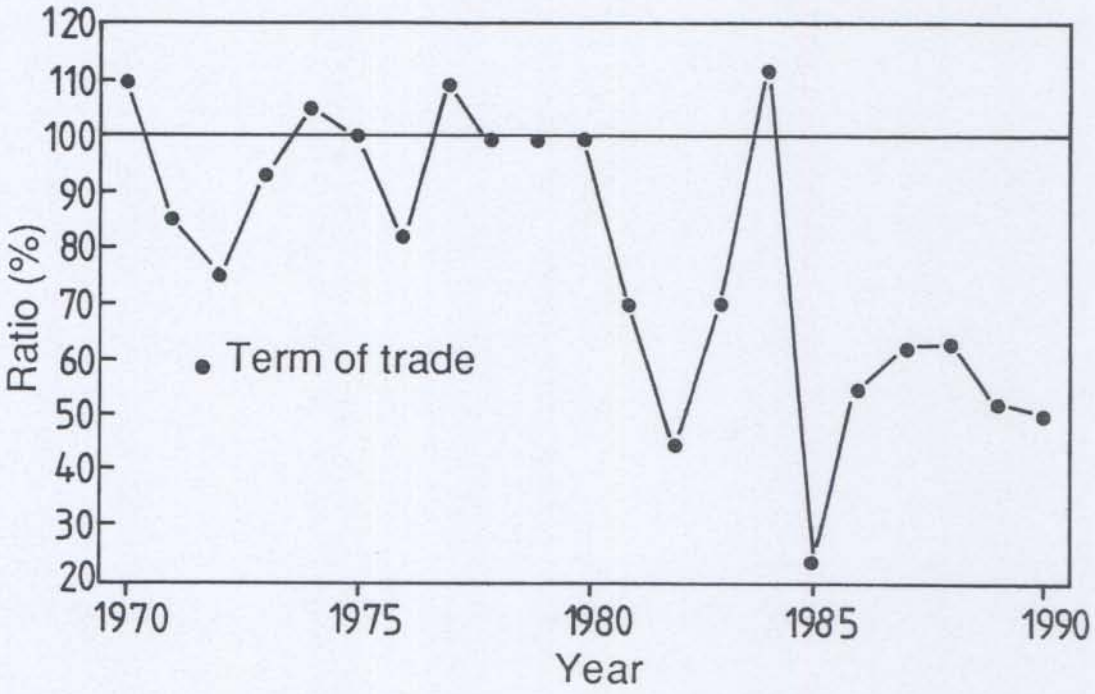


Figure 5: Terms of trade (1975=100)



It is common to use the debt service ratio and the debt-GNP ratio as indexes of liquidity and solvency, respectively[6]. A liquidity problem refers to the inability of a country to service its debts now in the amount initially contracted. Lack of liquidity occurs when a country does not have enough cash on hand to pay current obligations (Eaton and Taylor, 1986). The solvency issue relates to whether the value of a country's liabilities exceeds the ability to pay at any time; a country is insolvent when it is incapable of servicing its debt in the long run (Ajayi, 1991). With reference to the debt-service ratio and the debt-GNP ratio, it is clear that Ghana has faced liquidity difficulties since 1983, and that its ability to remain solvent has also been impaired.

It is obvious that Ghana's credit-worthiness over the past decade has been kept intact only by the massive inflows of external grants, loans and credits. The concern, however, is how long Ghana can expect to depend on such inflows.

Causes of the debt problems

The literature abounds with causes of debt crises in Third World countries. The underlying issue emphasized by Dornbusch and Fischer (1985) as well as Greene and Khan (1990) relates to the fundamental aim of borrowing: that the addition to the stock of external debt over time must contribute to growth and development and, in particular, to the country's ability to make payments to creditors. The argument is that a debtor country will face repayment difficulties if it is unable to generate sufficient increase in output and export earnings. Many factors - domestic and external - are responsible for this outcome. The domestic factors often cited include wrong macro-economic policies such as fiscal irresponsibility and exchange rate misalignment (Muns, 1984; Khan and Knight, 1983). Other domestic factors include policies that deter savings, such as negative real interest rates, which in turn reduce investment and encourage capital flight. Also, when long-run projects are financed with short-term credits, debt problems occur (Tanzi and Blejer, 1984). External factors, including oil shocks, deterioration in the terms of trade (Greene and Khan, 1990) and rising foreign interest rates (Krumm, 1985), also contribute to debt problems.

Ghana's severe debt situation is the combined effect of a number of factors. The crucial factor is the country's inability to generate sufficient foreign exchange through export earnings. Consequently, the country's current account deficit, which has continued to widen (see Table 1), has been hard to sustain for balance of payments stability. The country is unable to generate sufficient foreign exchange through exports due to its long-standing dependence on a few export commodities (cocoa and gold), the international prices of which have been subject to wide fluctuations. The effect of these since the inception of the ERP is quite clear. Since 1983 Ghana's export volume has more than doubled (see Table 1). Export values, however, have increased by a much smaller proportion. The less than proportionate increase in export values is due to the decline

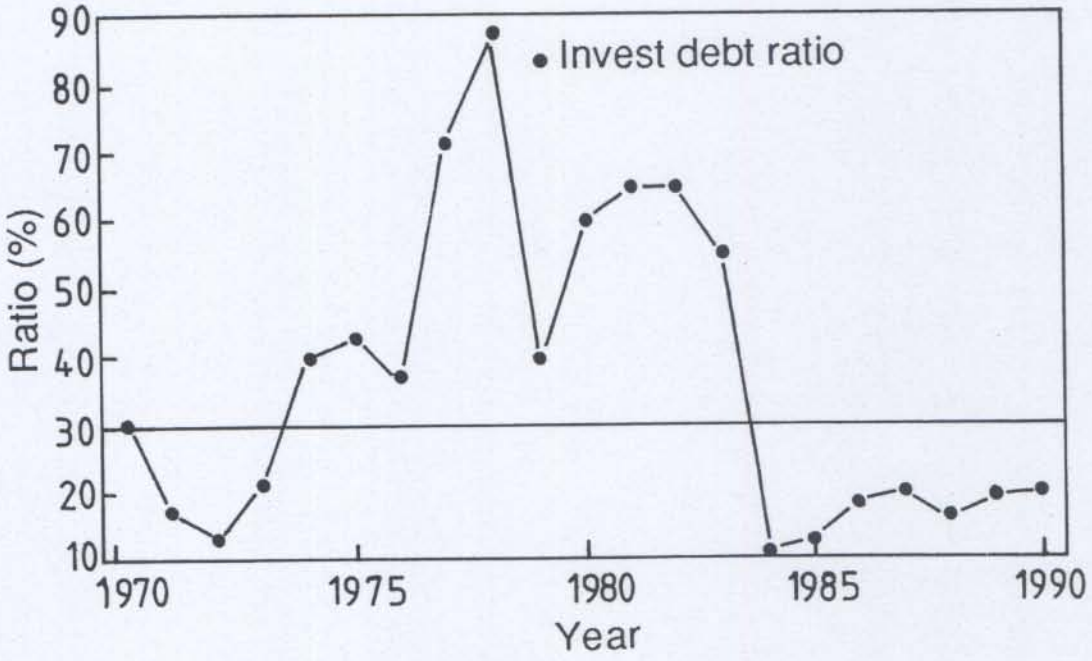
in the real prices of cocoa and gold. The real prices of both commodities decreased during the 1980s, with sharper and continuous deadlines since 1984. For example, with 1980 as a base year, the index of real cocoa prices declined continuously from 113.2 in 1984 to 35 in 1990 and that for gold from 63.2 in 1984 to 48.2 in 1990. Indeed, there is a clear case for Ghana to reduce its long-standing dependence on so few primary commodities by widening and sustaining the base of its non-traditional exports.

Another factor behind Ghana's debt difficulties is the low rate of return on investment to which borrowed funds are applied. When capital inflows finance productive investments with rates of domestic and external returns that are higher than the cost of borrowing, the debt service should normally be met from the increased future stream of foreign exchange earnings and still leave a considerable net benefit for the recipient economy. In Ghana's case, much of the capital inflows went into infrastructural investments that have long gestation periods and/or large indivisibilities so that returns are low especially in their early years. Indeed, it is estimated that the average rate of return on investment with regard to the major projects and programmes to which foreign loans were applied is in the range 0.8% - 1.1% (Dordunoo, 1990), while the average rate of interest on debt during 1983-1990 was between 2.2% - 4.7% (see Table 6). As long as the rate of interest on a loan is above the rate of return on a given volume of investment from such a loan, there are bound to be debt difficulties. It certainly bears on Ghana to re-direct borrowed funds into more productive investments to generate adequate returns.

Low savings is another factor contributing to Ghana's debt difficulty. Ghana has one of the lowest domestic saving rates in sub-saharan Africa. In spite of major successes of the ERP, such as the lowering of inflation (see Table 1) and reforms carried out in the financial sector, the domestic savings effort remains low. The rate of gross domestic savings to GDP, at an average 6% between 1983-1990, is about one-third of the 1970 level[7]. Consequently, the rate of domestic investment is also low. The average rate of domestic investment to GDP at 9% between 1983-1990 is not even enough to replace depreciated capital, as the required minimum is estimated at about 13% (World Bank, 1990). The investment-debt ratio (see Figure 6) also shows the critical nature of the low investment effort.

It is essential that Ghana intensify its efforts to increase domestic saving. Major obstacles to the efficient functioning of the financial system including lack of competition, lack of confidence of the saving public in the financial system, and discriminatory rules against privately-owned financial institutions (see also Osei, 1992b) have to be addressed in an effort to expand the scope of business of the financial system to increase savings.

Figure 6: Investment-debt ratio



A paradox: Deteriorating debt profile, low saving/investment, but strong economic growth

It is paradoxical that in the face of the deteriorating debt profile and low savings and investment, Ghana has maintained strong economic growth since 1984. This derives from the state of the Ghanaian economy prior to the ERP, and to reforms carried out under the ERP. However, a most significant factor behind the strong economic growth is the fortuitous return to normalcy in the weather. Adequate rains since 1984 have played a major part in restoring agricultural production. Output of food crops has risen, turning the severe food shortages of the pre-ERP era into surpluses. Production of cocoa has also recovered.

In addition, since 1983 there have been important changes in the foreign aid climate. Besides the sharp increases in inflows of foreign capital, the credit pipeline has been restructured, shifting available funds from slow-disbursing project aid to faster-moving programme support. This has increased the pace of disbursement. In effect, even though the debt stock has also increased sharply, foreign credit has been available on time to

enable Ghana to restore some momentum to its import programme, so crucial to economic growth. Also, the availability of credits on time has quickly revived some existing plant and machinery of the industrial sector, which now contributes appreciably to income growth.

Moreover, since the inception of the ERP, there has been what may be termed "reversed public sector fungibility"[8]. While acquiring debt, Ghana has overhauled its tax machinery, and the budgetary focus has been geared toward the elimination of subsidies. The result, as discussed in Osei (1992a), is that external credit over the ERP period supplements (rather than replaces, as was the case between 1970-1982) productive state expenditure, contributing to the strong economic growth.

Certainly, the massive inflows of foreign capital since 1983 have propped up the economy and enabled some changes to be made. The problem, however, remains the Ghanaian economy's low ability to repay the mounting debt. As we have already seen the economy is still structurally weak in its dependence on a few primary commodities for foreign exchange earnings. In fact, the calculations in Table 9 indicate that the rate of growth of debt has exceeded the rate of growth of exports for the greater part of the 1983-1990 period.[9] As long as the rate of growth of debt exceeds the rate of growth of exports, difficulties in repayments are bound to occur.

Table 8: External debt outstanding and some debt burden indicators

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total debt outstanding ($ million)	1048.8	1315.8	1440.4	1833.3	1907.0	2039.1	2431.0	2736.0	2669.0	3126.6	3133.2	3223.6	3521.3
As % of GDP	29.2	38	33	37	38	44	46	52	53	70	62	68	60
As % of exports of goods	122	123	134	188	214	339	324	343	364	382	323	393	380
Debt service ratio (%)	5.0	5.4	7.4	8.0	6.6	39	44	62	49	62	67	58	39

Table 9: Sustainable borrowing

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Growth rate of debt (%)	-	10.0	1.1	9.4	1.1	1.9	1.9	1.9	1.8	1.8	1.8	27.3	4.0	6.9	19.2	12.5	-2.4	17.1	0.2	2.9	9.2
Growth rate of exports(%)	-	-18.2	13.7	47.6	14.2	19.9	-0.1	14.1	-2.2	16.7	4.2	-31.4	-14.2	-37.3	36.6	10.5	21.0	10.7	5.8	-7.3	10.6
U	-	-28.2	12.6	38.2	13.1	18.0	-2.0	12.2	-4.0	14.9	2.4	-58.7	48.2	-44.2	17.0	-2.0	23.8	-6.4	5.6	-10.2	1.4

U = Unsustainable borrowing defined as the excess of the percentage rate of growth of debt over exports.

Table 10: External inflows: Commitments and disbursements($million)

Year	Commitments			Disbursement		
	Official	Private	Total	Official	Private	Total
1974	45	-	45	13	18	31
75	166	-	166	31	-	31
76	116	22	138	41	-	41
77	70	-	70	53	-	53
78	92	-	113	84	28	112
79	125	-	125	149	-	149
1980	194	-	194	182	-	182
81	44	-	44	103	-	103
82	48	-	48	94	-	94
83	127	-	127	123	50	173
84	196	33	230	98	19	118
85	418	47	465	139	42	181
86	210	128	338	256	109	366
87	588	42	630	347	18	365
88	486	0	486	390	-	391
89	797	40	837	525	44	569
90	808	42	850	535	38	573

Source: World Bank, *World Debt Tables*, various issues. Bank of Ghana, External Debt Department.

IV Debt sustainability and fiscal stability

There is no gainsaying that sustained economic growth is possible only within a sound macro-economic framework. In such a framework, fiscal policy plays a key role; sound fiscal policy is crucial to macro-economic stability. Essentially, there is a link between external debt sustainability and fiscal stability, especially in a situation like Ghana's, where external debt is largely public sector debt. (See, e.g., Fischer and Easterly, 1990; Wijnbergen, 1989.)

The theoretical underpinning to the link between external debt and fiscal behaviour is quite straight forward. Basically, there are four ways of financing public sector deficit: printing money running down exchange reserves, borrowing abroad and/or and borrowing domestically. Each of these forms of finance could result in major macro-economic imbalance: money printing may lead to inflation; foreign reserves use may be associated with the onset of exchange crises; foreign borrowing may lead to external debt crises; and domestic borrowing may be associated with higher real interest rates. Of course, there are links between these problems. For instance, high transfers as a result of debt crises could cause government domestic borrowing to increase. This increase will reduce credit that otherwise would be available to the private sector, thereby putting pressure on domestic interest rates. Even where interest rates are controlled, high domestic borrowing may lead to credit rationing and crowding-out of private sector investment.

The arithmetic of the relationship between external debt and fiscal behaviour is as follows: The increase in the sum of domestic and external debt is equal to the government budget deficit net of money creation. If only the government borrowed abroad, then the decrease in the government's external debt would equal the current account balance. Therefore, the current account balance is the sum of the increase in domestic government debt, the budget surplus, and money creation.

The decomposition of the 1983-1990 data (see Table 11) shows that the non-interest government surplus amounted to 41% of the current account balance, the seigniorage tax (defined as variation of central bank liabilities in real terms) amounted to 28% and the domestic debt increased to 31%. However, if foreign grants are removed from government revenue, the decomposition shows a drop of the government surplus to 21%, the seigniorage tax to 41% and the domestic debt increase to 38%.

These results are quite interesting. They point first to the high dependence of government revenues on foreign grants and highlight the need for increasing revenue generation by the government towards self-sustaining growth. As indicated elsewhere, fiscal reforms put in place under the ERP have to some extent overhauled the tax

Table 11: Current account counterparts (¢millions)

	1983	1984	1985	1986	1987	1988	1989	1990
Non-interest current account	-3,159	-684	1,850	12,792	30,463	42,647	65,870	69,154
Seigniorage*	23,697	24,384	26,580	93,408	-24,980	192,957	123,034	73,170
Government surplus (with grants)	-4,934	-4,844	-7,580	299	4,059	8,911	9,894	12,874
Domestic debt	29,319	32,908	37,766	50,686	47,908	54,325	48,785	64,684
By holder:								
Bank of Ghana	16,778	19,881	21,634	27,267	23,954	21,841	13,686	13,691
Commercial banks	4,780	4,535	5,210	5,238	6,200	7,187	5,000	16,483
Secondary banks	1,241	1,481	3,482	7,973	6,074	-	-	-
SSNIT	1,951	2,388	2,898	6,140	7,326	14,754	11,936	18,046
Private sector(including public institutions)	4,569	4,623	4,541	4,069	4,354	10,543	18,163	16,463

Sources: Statistical Service, Economic Survey, 1988; ISSER (1993), The State of the Ghanaian Economy In 1992, Table Appendix B.7

*Note: Seigniorage is defined as variation of central bank liabilities.

machinery and eliminated some subsidies. These, in addition to the effects of exchange rate reforms, have increased government revenue. However, there is still need for further measures and reforms to increase government revenue, especially since the government's overall budget deficit remains quite substantial.[10]

The decomposition also reveals the importance of the seigniorage tax in total government revenue. The literature is clear on the dangers of high dependence on the seigniorage. It is well known that rates of seigniorage of much more than 2.5% of GNP are not sustainable in developing countries (Fischer, 1982; Fischer and Easterly, 1990), and that even that rate would be tenable only in a very rapidly growing economy. Ghana has maintained rates of seigniorage to GNP more than three times that level since 1983, indicating the instability of the situation. The high dependence on this tax is a contributing factor to the government's inability to bring down inflation to below the two-digit level and to target rates.

It is also clear from the decomposition that the domestic debt accounted for a high share of the current account balance. Domestic borrowing is usually an act of expediency by a government that would prefer to finance by taxation but finds it inconvenient to do so. Its use is more often advised as a temporary measure to meet emergencies that otherwise would require sharp increases in taxation. Contrary to the Ghana government's declared intention of reducing its domestic borrowing, the domestic debt has increased continuously (see Table 11).[11] The implications of the increases in domestic debt for interest rates and private investment is clear. The domestic debt increase is a major factor behind the substantial pressures on domestic interest rates especially bank lending rates, which increased from 19% in 1983 to 33% in 1990. The high cost of borrowing is a major constraint to private investment. The rise in domestic interest rates may be thought of as a version of the transfer problem involved in foreign debt service, as the government is forced to repay its own domestic debt at higher interest rates.

These results indicate that there is a continuing fiscal problem in Ghana. While servicing external debt, Ghana has maintained an unstable fiscal stance. Sowa (1992) has reached a similar conclusion. His analyses showed that except for 1985 and 1989, Ghana pursued an unsustainable fiscal policy during 1983-89. He explains fiscal sustainability as the situation in which the actual is less than or equal to the financeable deficit.

These conclusions require that Ghana take steps to ensure fiscal stability as she attempts to meet her external debt repayments. The literature cites many fiscal adjustment prescriptions that Ghana might take. These include the introduction of new taxes such as the value-added tax (VAT) to increase government revenue; the elimination of waste in government expenditure; the intensification of divestiture/privatization of state enterprises (see, e.g., Tsikata and Amuzu, 1993). Also, as pointed out by Fischer and Easterly (1990), sustainable fiscal policy depends on how fast an economy is growing.[12] The lesson here is that accelerated growth must be a target for Ghana to maintain fiscal stability and external debt servicing.

V Debt and economic growth

The need for Ghana to pursue accelerated growth in order to reduce its debt problems and, more importantly, to break out of its low income status makes it worth while to investigate how far external indebtedness would affect future growth. This section attempts to analyse the effect of debt on medium-term growth.

Debt problems have been incorporated into models, commonly referred to as growth-cum-debt models, to address issues relating to debt sustainability. The focus is on how and how far debt affects the growth prospects of debtor countries. The literature on the growth-cum-debt models has gone through two main phases. First phase authors Avramovic (1964), King (1968) and Solomon (1977), for instance, were concerned with making judgements on the debt capacity of developing countries in the context of the Harrod-Domar growth model. The direct focus in the literature was on describing how debt situations evolve over time. Other authors, including Dhonte (1979), Loser (1977), Nagy (1978), and Feder and Just (1977), have examined the circumstances under which countries experience debt-servicing difficulties. The attention here was on the external performance of the debtor's economy in relation to debt service claims. Another set of authors focused on the supply side of the international financial market. The set of studies including Weiss (1981), Feder and Ross (1982), and Sachs and Cohen (1982) examined factors that influence lending behaviour. The second phase which represents the most recent literature, includes studies by Cohen (1985; 1988), Solis and Zedelo (1985) and Van Wynbergen (1989). These studies provide a way to relate foreign indebtedness to long-run growth.

Debt and economic growth in Ghana

The issue of how far debt would affect growth in Ghana is analysed following some of the approaches developed in the second phase literature.

The model[13] uses a level of output(Y) is given by

$$Y = \sigma k \tag{1}$$

where σ is the reciprocal of the incremental capital-output ratio, and K is capital stock.

Let $\triangle Y = \sigma(\triangle k)$ (2)

and

$$\Delta k = I_t - \delta k_{t-1} \quad (3)$$

where I is investment and δ is the depreciation rate of capital.

Equation 1 becomes

$$Y_t = \sigma I_t + (1 - \delta)Y_{t-1} \quad (4)$$

Given the following identities

$$C_t + I_t + X_t - M_t = Y_t = C_t + S_t + r_t D_{t-1} \quad (5)$$

where X is exports, M is imports S, is savings, r is the rate of interest, and D is debt, and

$$d_t = M_t - X_t + r_t D_{t-1} \quad (6)$$

Consequently,

$$I_t = S_t + d_t \quad (7)$$

Let the savings function be

$$S_t = s(Y_t + r_t D_{t-1}) \quad (8)$$

Using Equation 4, investment can be expressed as

$$I_t = \left[\frac{S(1-\delta)}{1-S\delta}\right] y_{t-1} - \left[\frac{S}{1-S\delta}\right] r_t \Delta_{t-1} + \left[\frac{1}{t-S\delta}\right] d_t \quad (9)$$

The equations solved are 4 and 9 for a number of possible paths of D and r_t. The rule used for D_t is the dynamic equation

$$D_t = D_{t-1} (1 + \gamma) \tag{10}$$

where γ is a constant that is varied in each scenario.

Equation (10) implies that

$$\Delta D_t = \gamma D_{t-1} \tag{11}$$

and since

$$\Delta D_t = d_t \tag{12}$$

we have

$$d_t = \gamma D_{t-1} \tag{13}$$

which implies that

$$(M_t - X_t) = (\gamma - r) D_{t-1} \tag{14}$$

Thus, various scenarios of τ and γ would not only allow an assessment of economic growth prospects, but also the different paths of the trade balance ($M_t - X_t$), as well as indications of the debt burden such as D_t/GDP.

Empirical results

The value of γ is varied in the scenario from 0.00 to 0.10. The incremental capital-output ratio is calculated following its conventional definition as the ratio of capital formation in the current period to the increase in GDP over the previous period. Allowing for three possible values of the rate of interest ($r = 0.01$, 0.03 or 0.06), simulations were run for the period 1991-2000. The income growth prospects, the different paths of the trade balance and the debt burden under the various scenarios are summarized in Table 12.

In terms of the model, varying the rate of interest has very little impact on income growth, the trade balance and the debt burden; little is lost in these indicators if the rate of interest is doubled from 3% to 6%.

The estimates indicate that given the various scenarios, Ghana's trade balance would widen. As a percentage of GDP, the trade balance would grow from about 5.9 to a peak of about 7.7, before falling marginally to about 7.1. Consequently, the debt burden would remain high. The debt to GDP ratio would stay above the critical 50%. These results re-emphasize the necessity for Ghana to pursue export expansion towards self-sustaining growth.

The growth estimates indicate that Ghana would maintain a 4%-5% growth rate for the next decade. This may be considered satisfactory, especially if viewed against the average rate for SSA for the last ten years at below 2%, and which most analysts believe may not improve in the next decade. However, there may be very little cause for optimism if the 4%-5% growth rate is considered in relation to the accelerated growth Ghana needs to break out of its poverty trap. The World Bank (1992) estimates that at the current rates of economic growth (5%) and population increase (about 3%), the average poor Ghanaian would not cross the poverty line for another half a century. By contrast, if the pace of economic growth could be raised to 8% a year, this cross-over time would be reduced to about 23 years.

Our earlier question of whether Ghana can achieve accelerated growth suggests that there may be preconditions for fast growth that do not yet exist in Ghana. The results here indicate that external debt is one factor that constrains rapid growth.

Table 12: Results of growth-cum-debt model

		Trade balance	GROWTH PROSPECTS								
γ	D_t	$M_t - X_t$	$r = 0.01$		$\sigma = 0.25$			$r = 0.03$ $\sigma - 0.25$			$r = 0.06$ $\sigma - 0.25$
				$\frac{D_t}{GDP}$	$\frac{M_t-X_t}{GDP}$		$\frac{D_t}{GDP}$	$\frac{M_t-X_t}{GDP}$		$\frac{D_t}{GDP}$	$\frac{M_t-X_t}{GDP}$
			g			g			g		
0.00	3522	351	0.0465	0.606	0.059	0.0422	0.608	0.059	0.0399	0.610	0.059
0.01	3557	359	0.0557	0.600	0.058	0.0456	0.599	0.061	0.0402	0.610	0.068
0.02	3628	412	0.0557	0.585	0.064	0.0468	0.574	0.065	0.0402	0.591	0.068
0.03	3736	551	0.0550	0.565	0.078	0.0492	0.555	0.078	0.0411	0.582	0.065
0.04	3885	559	0.0542	0.551	0.075	0.0501	0.551	0.079	0.0456	0.566	0.062
0.05	4079	585	0.0554	0.543	0.075	0.0542	0.542	0.078	0.0486	0.558	0.079
0.06	4323	585	0.0463	0.546	0.075	0.0412	0.544	0.078	0.0401	0.559	0.078
0.07	4626	588	0.0463	0.550	0.071	0.0412	0.551	0.072	0.0401	0.554	0.075
0.08	4996	590	0.0465	0.556	0.069	0.0412	0.556	0.069	0.0401	0.571	0.072
0.09	5446	605	0.0448	0.571	0.067	0.0400	0.570	0.069	0.0388	0.581	0.071
0.10	5991	605	0.0437	0.591	0.068	0.0400	0.589	0.069	0.0388	0.670	0.071

VI Conclusion

The basic conclusion reached in this study is that external debt represents a major constraint to Ghana's economic performance. The current debt situation requires that Ghana take steps to increase its ability to service foreign debt by vigorously pursuing export expansion. This draws attention to the long-standing dependence of the economy on a few traditional export commodities. Ghana could encourage more non-debt foreign exchange earnings, such as tourism, as well as take steps to widen and sustain the base of its non-traditional exports. Steps must also be taken to attract more direct investment, which will not only bring in the external finance, but also the skills and technology so essential for the rapid expansion of the economy. In addition, Ghana should pursue further internal reforms to increase domestic savings and fiscal reforms that would increase the government's revenue, so as to minimize its dependence on types of financing that are detrimental to the economy's health.

Ghana has a case for debt relief as it carries out its internal reforms. The creditors could grant debt reduction on a wider scale in order to reduce the debt stock and reduce repayments. Other remedial measures such as debt rescheduling should recognize the dependence of the Ghanaian economy on cocoa, with built-in flexibility to correspond with international cocoa prices.

Notes

1. Ghana's standing as the world's leading producer of cocoa began to slip after 1965, so that by the 1970/71 crop season she contributed only 26% of the world's output, as compared to 37% ten years earlier (See, Gill & Duffus, *Cocoa Market report*, January 1972, p.14).

2. Nkrumah, K., New Release, Accra, April 8, 1961 (Quoted in Killick (1978).

3. Eshag and Richards (1977) compared the performance of Ghana's economy with that of neighbouring Côte d'Ivoire during the period 1960-65 to gauge the extent to which differences in performance may be due to contrasting economic policies or to factors over which the government had little or no control. They concluded that deterioration in the terms of trade was a major factor behing the loss of foreign exchange in Ghana. Other observers including Berg (1971) have disputed that the terms of trade was a significant factor in the loss of foreign exchange to Ghana over the 1960-65 period. Nonetheless, it has been estimated that the loss of income to Ghana due to deterioration in the terms of trade was about $300 million for 1962-65 (*Economic Survey*, 1968).

4. In the atmosphere of urgency, the speed with which deals on these credits were consummated made them particularly attractive. Some observers have concluded that access to such suppliers' credits made Ghana accept projects that had not previously been thought of, thereby increasing the volume of investment and the dependence on borrowing. (see e.g., Krassewki, A. 1974).

5. "Yentua" is a local word that literally translates as "we shall not pay".

6. Liquidity and solvency may also be determined in a number of other ways. A simple rule for solvency is that the export growth rate be greater than the interest rate on debt (Eaton and Taylor, 1986; Cohen, 1985). And, the difference between net debt (total indebtedness minus foreign reserves) and export earnings may also be used as an indicator of liquidity problem (Ajayi, 1991).

7. Underlying the poor savings effort is the low per capital income, which is still below pre-ERP levels. Also, the financial system still lacks depth. Thisis reflected in the

low M2/GDP ratio which in 1990 was 14%. This does not compare well with other sub-Saharan African countries like Kenya, Zambia and Côte d'Ivoire, where rates of 30% are common.

A major external factor that has alos contributed to the poor savings effort is the sharp deterioration in the country's terms of trade. Figure 5 indicates clearly the sharp deterioration in the terms of trade since 1984. This deterioration affects domestic savings through the so-called Harberger-Laursen-Metzler effect, which argues simply that a terms of trade deterioration decreases real income and the decrease in real income reduces saving out of any given income, both measured in terms of exportables.

8. Public sector fungibility" may refer to a situation where there is replacement of roductive state expenditure by external credit. This occurs when a country in receiving credit that switches local resources into unporductive expenditure and/or into reductions in taxation.

9. The literature sometimes considers the excess of the percentage rate of growth of debt over the precentage rate of growht of exports of goods and services as the rate of unsustainable borrowing. (See, for example, Simonsen, 1985; Ajayi, 1991.) In this sense, Ghana could be regarded as having undertaken unsustainable borrowing during alternate years, in 1983, 1985, 1987 and 1989. The growth rates of debt in these years were greater than the growth rate of exports (see Table 9).

10. The overall budget deficit, which stoof at about 2.4% of GDP at the start of the ERP, fell very considerably to about 0.8% of GDP in 1988-89. However, by 1990 it had risen again to 1.3% of GDP (see world Bank, 1991; Table 1.6). The worsening fiscal performance, even as government expenditure continued to shrink, is due to deterioration in revenue performance.

11. It is noticeable from Table 11 that there has been a major shift away from the central bank as the principal source of deficit financing. Indeed, non-banking private sector increased its share of domestic debt from 15.6% in 1983 to 25.5% in 1990. This is a positive development in the government's efforts at reducing inflationary pressures in the economy, notwithstanding the adverse consequence of the increase in the domestic debt.

12. This point is seen clearly from the following identity, which shows the determinants of the change in government debt:

    Change in d = (primary deficit/GNP) - (seigniorage/GNP) + (real interest rate-growth rate) xd

where d is the ratio of government debt of GNP. Higher growth rate reduces the last term in the equation.

13. This model follows very closely Solis and Zedillo (1985). Which was also applied by Ajayi (1991).

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