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Ghana: Selected Issues

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GHANA

Selected Issues

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	Page
Basic Data	5
Selected Social and Demographic Indicators	7
I. Public Service Reform	9
A. Introduction	9
B. Overview of Public Service Reform	9
C. The Public Sector Reinvention and Modernization Strategy (PUSERMOS) ...	14
D. Conclusion	15
II. Banking Sector Issues	17
A. Introduction	17
B. The Banking System and Its Evolution	17
C. Structure of the Banking System	23
D. How Far Have the Reforms Gone?	27
E. Lessons Learned and Next Steps	28
III. Tariff Reform in Ghana	31
A. Review of Tariff Policy	31
B. Directions for Further Reforms	41
IV. External Competitiveness in Ghana	47
A. Introduction	47
B. Evolution of the Exchange Rate System	47
C. Traditional Competitiveness Indicators	49
D. Competitiveness Indicators for Ghana	51
E. Conclusions	62

V. Trends in Cocoa World Markets and Options to Strengthen Ghana's Competitive Position	64
A. Introduction	64
B. Cocoa Trends in the Last Decade	64

Text Figures

1. Financial Deepening Indicators, 1980-96	25
2. Effective Rate of Tariff and Sales Tax on Imports, 1989-96	33
3. Share of Trade Taxes and Customs Duties in Total Tax Revenue, 1986-96	33
4. Selected African Countries: Statutory and Import-Weighted Averages of Tariff Rates	33
5. Exchange Rate, 1980-98	50
6. Real Effective Exchange Rate, 1980-97 (Index, 1980=100)	53
7. Real Effective Exchange Rate, 1980-98 (Index, 1990=100)	54
8. Real Effective Exchange Rate, 1980-97 (Index 1980= 100, Based on Import/Export Deflators)	56
9. Real Effective Exchange Rates, 1980-97, (Index 1990=100)	57
10. Real Effective Exchange Rate Based on Unit Labor Cost Index, 1981-97	58
11. Competitiveness with Neighboring Countries, 1980-1990	60
12. Competitiveness with Neighboring Countries, 1990-1998	61
13. World Cocoa Trends, 1987-97	65
14. Share of World Cocoa Production 1987	66
15. World Cocoa Prices, 1987-97	67
16. Côte d'Ivoire and Ghana: Production Trends, 1987-98	71
17. Cocoa Prices, 1987/88-97/98	73
18. Cocoa Cost Structure, 1987/88-97/98	79

Text Boxes

1. Exchange Rate Arrangements, 1983-87	48
2. Cocoa Production and Tax Revenues	74

Text Tables

1. Ghana Overview of the Public Sector	10
2. Comparative Civil Service Ratios	11
3. Chronology of the Evolution of the Banking System	18
4. Banking System Indicators	20
5. Selected Banking System Indicators as of June 1998	21
6. Statutory and Effective Tax Rates on Imports	35
7. Share of Imports by Main Exemption Regime and Associated Revenue Loss	36
8. Distribution of Main Imports by Exemption Regime and Associated Revenue Loss	38

9.	Ranking of Main Two-Digit Fcommodity Code Imports by Import Share and Associated Revenue Loss Owing to Exemptions	40
10.	Sector Classification of Imports by Revenue Loss Owing to the Exemptions System	41
11.	Main Features of Reform Options	42
12.	Simple and Import-Weighted Averages of Effective Tariff Rates Under the Reform Options	43
13.	Effective Tariff Rates Under the Reform Options	44
14.	Effects of Reform Options on Revenue and Loss Owing to the Exemptions System	45
15.	World Cocoa Production, 1987-97	68
16.	Distribution of Cocoa Export Proceeds, 1995	70
17.	Cocoa Marketing Systems in Côte d'Ivoire and Ghana	76
	Summary of Tax System, May 1997	84

Statistical Appendix Tables

18.	Gross Domestic Product by Sector, 1993-97	97
19.	Gross Domestic Product by Expenditure Category, 1993-97	98
20.	Composition and Growth of Gross Domestic Product by Sector, 1993-97	99
21.	Composition and Growth of Gross Domestic Product by Expenditure Category, 1993-97	100
22.	Saving and Investment, 1993-97	101
23.	Cocoa Bean Production, Consumption, Prices, Payments to Farmers, and Export Receipts, 1985/86-1997/98	102
24.	Operations of the Cocoa Board, 1990/91-1997/98	103
25.	Production, m Acreage, and Yield of Principal Food Crops, 1991-97	104
26.	Production and Exports of Logs, Sawn Timber, Veneer, and Plywood, 1991-97	105
27.	Domestic Fish Catch and Imports, 1991-96	106
28.	Mineral Production, 1991-97	107
29.	Index of Manufacturing Production, 1991-97	108
30.	Generation and Consumption of Electricity, 1989-97	109
31.	Average Monthly Earnings per Employee, 1980-97	110
32.	National Consumer Index, 1985-97	111
33.	National Consumer Index, 1998, Q1-Q2	112
34.	National Consumer Price Index, 1987-97	113
35.	Average Wholesale Prices of Selected Agricultural Commodities, 1989-97	114
36.	Retail Prices of Major Petroleum Products, December 1979-February 1998	115
37.	Central Government Operations and Financing, 1990-97	116
38.	Central Government Revenue and Grants, 1990-97	117

39.	Economic Classification of Central Government Expenditure and Net Lending, 1990-97	118
40.	Functional Classification of Central Government Expenditure, 1990-95	119
41.	Distribution of Outstanding Central Government Domestic Debt, 1990-97	120
42.	Operations of the Social Security and National Investment Trust, 1990-96	121
43.	Summary of Financial Operations of Major State-Owned Enterprises, 1990-97	122
44.	Public Investment Program, 1994-97	126
45.	Monetary Survey, 1994-98	127
46.	Monetary Authorities, 1994-98	128
47.	Deposit Money Banks, 1994-98	129
48.	Distribution of Bank Loans and Advances to Public Institutions and the Private Sector, 1991-97	130
49.	Reserve Ratios of Commercial Banks, 1972-98, June	131
50.	Interest Rate Structure of Banks, September 1995-June 1998	132
51.	Balance of Payments, 1990-97	133
52.	External Trade Indices, 1990-97	134
53.	Value, Volume, and Unit Price of Exports, 1990-97	135
54.	Direction of Trade, 1991-97	136
55.	Services and Transfers Account, 1992-97	137
56.	Clearing Accounts Under Bilateral Payments Agreements, June 1992-December 1997	138
57.	External Public Debt and Debt Services, 1991-97	139
58.	Classification of Subvented Agencies	140

Ghana: Basic Data

I. Social and Demographic Indicators

Area:		238,540 square kilometers
Population:	Total (mid 1996 estimate)	17.5 million
	Growth rate	2.7 percent
	GDP per capita (1996 estimate)	SDR 260

II. Economic Indicators, 1993-97

	1993	1994	1995	1996	1997
	(In billions of cedis)				
Gross domestic product (at current prices)	3,873	5,205	7,752	11,339	14,113
	(In percent of real GDP)				
Agriculture	36.9	37.8	38.8	39.0	35.8
Industry	24.8	24.9	24.3	23.6	25.7
Services	27.5	27.3	27.8	26.3	27.9
	(Annual percentage change)				
Nominal GDP	31.1	41.6	48.9	46.3	24.5
Real GDP	5.0	3.3	4.0	4.6	4.2
Exports (volume)	21.7	2.6	0.3	12.5	-0.6
Imports (volume)	17.1	-12.4	-0.5	13.8	13.7
Prices					
GDP deflator	24.9	30.1	43.2	39.8	19.5
National consumer price index (period average)	25.0	24.9	59.5	46.6	27.9
Export prices	-11.5	10.2	4.7	-2.4	-4.4
Import prices	-0.6	10.7	3.5	0.6	-3.1
Terms of trade	-10.9	3.1	7.3	-3.0	-1.4
	(In billions of cedis)				
Central government finance					
Revenue and grants	743	1,160	1,865	2,289	2,709
Expenditure and net lending	1,124	1,622	2,359	3,370	4,002
<i>Of which</i> : current expenditure	694	930	1,271	1,861	2,364
Surplus or deficit (-)	-382	-462	-495	-1,082	-1,293
(In percent of GDP)	-10.4	-9.3	-6.7	-9.5	-9.2
Foreign financing (net)	241	236	336	418	509
Domestic financing (net)	45	-39	-28	531	762
<i>Of which</i> : banking system	-22	-44	-67	226	528
	(Annual percentage change)				
Money and credit (end-of-period) 1/					
Net domestic assets 2/ 3/	2.6	20.5	15.8	32.3	33.5
Net claims on the government 2/ 3/	-3.9	-5.9	6.6	12.8	22.0
Credit to rest of the economy 3/ 4/	11.3	23.1	15.0	15.7	20.9
Broad money 5/	11.3	23.1	40.8	39.7	40.8
Velocity (ratio GDP/M2)	5.6	5.5	5.6	5.6	4.9

Ghana: Basic Data (concluded)

	1993	1994	1995	1996	1997
	(In millions of U.S. dollars)				
Balance of payments					
Exports, f.o.b.	1,064	1,227	1,431	1,571	1,492
<i>Of which:</i>					
Cocoa beans and products	286	320	390	552	470
Noncocoa products	778	907	1,042	1,045	1,020
Imports, f.o.b.	-1,728	-1,580	-1,687	-1,931	-2,128
<i>Of which: Oil</i>	-154	-171	-191	-253	-234
Trade balance	-664	-353	-256	-361	-638
Services and transfers (net)	105	88	114	40	42
Current account balance	-559	-265	-142	-321	-594
Capital account net	630	479	432	279	540
<i>Of which</i>					
Official capital (net)	370	295	170	358	499
Errors and omissions	-30	-50	-6	28	79
Overall balance	41	164	284	-14	25
Current account balance (in percent of GDP)	-9.4	-4.9	-2.2	-4.6	-8.6
Gross official international reserves					
End-of-period	420	593	710	605	508
In months of imports, c.i.f.	2.7	4.1	3.4	2.6	2.6
External public debt					
Disbursed and outstanding (end-of-period; including the Fund) 6/	5,444	5,703	5,875	6,174	6,549
Debt service (in percent of exports of goods and non factor services)					
Including the Fund	35.7	27.4	35.8	27.4	32.3
Excluding the Fund	29.1	20.5	28.3	19.5	21.9
Exchange rates					
End-of-period	822	1,051	1,446	1,740	2,250
Period average	649	957	1,200	1,637	2,050

Source: Ghanaian authorities.

1/ As of December 1996, the coverage was increase from 11 to 17 banks.

2/ Figures for 1993 include takeover of the accumulated revaluation losses of the Bank of Ghana by the government.

3/ Percentage change in relation to beginning money stock (M2).

4/ Includes cocoa financing.

5/ Broad money includes all foreign currency deposits held in commercial banks.

5/ Public and publically guaranteed medium- and long-term debt.

Ghana: Selected Social and Demographic Indicators

	Latest single year			Same region/income group	
	1970-75	1980-85	1990-95	Sub-Saharan Africa	Low income
Population					
Total population, midyear (millions)	9.8	12.6	17.1	583.4	3,179.9
Growth rate (annual average in percent)	2.2	3.7	2.6	2.8	1.6
Urban population (population in percent)	30.1	32.3	36.3	31.1	28.6
Total fertility rate (births per woman)	6.6	6.5	5.1	5.7	3.2
Population age structure (percent)					
0-14 years	...	...	43.0	...	...
15-64 years	...	...	53.0	...	...
65 and above	...	...	4.0	...	...
Life expectancy at birth (years)					
Total	50.0	53.0	59.0	52.0	63.0
Male	48.0	52.0	57.0	51.0	62.0
Female	52.0	55.0	61.0	54.0	64.0
Mortality					
Infant (per thousand live births)	107.0	98.0	73.0	92.0	69.0
Under age 5 (per thousand live births)	...	...	116.0	157.0	104.0
Adult (aged 15-59)					
Male (per 1,000 population)	...	...	320.0	433.0	244.0
Female (per 1,000 population)	...	...	253.0	359.0	211.0
Maternal (per 100,000 live births)	...	1,000.0	742.0	...	...
Income					
GNP per capita (US\$)	300.0	360.0	350.0	490.0	430.0
Consumer price index (1990=100)	...	31.0	323.0	...	...
Food price index (1990=100)	...	26.0	307.0	...	...
Income/consumption distribution (percent of income or consumption)					
Lowest quintile	...	...	7.9	...	...
Highest quintile	...	...	42.2	...	...
Social indicators					
Public expenditure (percent of GDP)					
Health	...	...	1.6	...	...
Education	3.6	1.9	3.4	...	...
Social security and welfare	...	...	...	...	...
Health and nutrition					
Access to safe water (percent of population)					
Total	35.0	...	56.0	47.0	53.0
Urban	86.0	57.0	76.0	...	...
Rural	14.0	40.3	46.0	...	...
Per capita supply (1993)					
Calories (per day)	...	...	2,141	...	...
Protein (grams per day)	...	...	34	...	...

Ghana: Selected Social and Demographic Indicators

	Latest single year			Same region/income group	
	1970-75	1980-85	1990-95	Sub-Saharan Africa	Low Income
Immunization rate (percent under 12 months)					
Measles	68	60	77
DPT	...	22	71	58	80
Child malnutrition (percent under 5 years)	27	...	42
Labor force					
Total labor force (in millions)	8	...	...
Participation rate (in percent)					
Total	47	...	...
Male	44	...	...
Female	51	...	...
Education (1993)					
Enrollment rates (in percent of age group)					
Primary enrollment	76	...	...
Female	70	...	...
Secondary enrollment	36	...	...
Female	28	...	...
Literacy (in percent of population 15 years and older)	60	...	...
Poverty incidence (percent of population below the poverty line) 1/					
National head count index		<u>1987-88</u>	<u>1992</u>		
Urban head count index		36.9	31.4		
Rural head count index		41.9	26.7		
Rural head count index		36.4	34.3		

Sources: Ghana Statistical Service, *Quarterly Digest of Statistics*; IMF, *International Financial Statistics*; and the World Bank.

1/ Poverty line estimated at Cedi 132,230 per year as at mid-1992. Based on the living standards surveys conducted by the Ghana Statistical Service in collaboration with the World Bank during 1987/88, 1988/98, and 1991/92.

I. GHANA: PUBLIC SERVICE REFORM¹

A. Introduction

1. A range of public service reform initiatives have been undertaken in Ghana since the early 1980s. However, they were introduced and implemented in an ad hoc manner, and have fallen short of intended outcomes. In order to make the public sector more cost effective and supportive of the private sector, the government launched the National Institutional Reform Program (NIRP) in late 1994. The NIRP intends to achieve these objectives through better coordination of the government's reform programs, particularly those aimed at (a) making the public sector more compact and efficient; (b) enhancing the compensation structure to enhance motivation, skills, and good governance; and (c) establishing monitorable indicators of progress and a timetable to complete the reforms.

2. The National Oversight Committee (NOC), a 20-member executive board with private sector participation, was established to oversee the work of the NIRP secretariat. Its authority was substantially enhanced in mid-1997 with the appointment of the Vice President of Ghana as Chairman.

B. Overview of Public Service Reform

3. The public service in Ghana is composed of centrally managed agencies, ministries, subvented agencies, district assemblies, and state enterprises (Table 1). The civil service, which covers the centrally managed agencies, ministries, and local government, accounts for only about twenty percent of total public sector employment as a result of the spin-off in the 1980s of the internal revenue, customs, education, and health services as subvented agencies.

4. During the period 1987-1994, public service reforms were introduced on a piecemeal basis. A lack of control over hirings and wages levels, notably at subvented agencies and state enterprises, resulted in an increasing government wage bill and wide disparity in wages among the various services. Nonetheless, job inspections and management reviews resulted in the reduction of the number of civil servants in central government from about 140,000 in 1987 to 90,000 in 1994; approximately 7,000 layoffs were due to the removal of "ghost" workers. Laid-off personnel received a redeployment package that was partly financed by the World Bank. In 1997, Ghana's wage bill was 5.4 percent of GDP, close to the unweighted average for 18 selected African countries, with the number of civil servants at about 84,000 in central government and almost 123,000 including local government. The ratio of the number of employees in the civil service and subvented agencies to total population was the second highest in the sample (Table 2).

¹Prepared by Joachim Harnack and Anthony Pellechio.

Table 1. Ghana: Overview of the Public Service
(As of end-1997)

	Centrally Managed Agencies	Ministries	Local Government	Subvented Agencies	State-Owned Enterprises
Number of units	6	21, with 50 departments	10 Regional Coordinating Councils; 110 District Assemblies	176	300
Main functions	Provide human, financial, and policy/legal services to entire public service	Policy formulation and monitoring by ministries, and implementation by departments	Policy formulation and implementation of development plans	Implementation of policies	Promote industrial development
Staff	7,363	77,009	38,494	416,000 1/	43,166
Cumulative total	7,363	84,372	122,866	538,866	582,043
Wages in percent of central government personnel outlays	4.1	46.7	1.4	47.8	... 2/

Source: National Institutional Renewal Program, *Public Sector Reinvention and Modernisation Strategy*, December 1997.

1/ Of which teachers: 180,000.

2/ Not part of the central government budget.

Table 2. Comparative Civil Service Ratios

	Civil service		Wages			
	As ratio	Ranking 1/	In percent of GDP			Ranking 1/
	to population		1995	1996	1997	1997
Benin	0.6	14	5.9	5.6	5.0	10
Botswana	4.5	1	8.8	8.4	9.6	1
Burkina Faso	0.4	17	5.3	5.0	4.8	12
Cameroon	1.2	4	4.7	4.1	4.3	13
Côte d'Ivoire	0.8	9	6.9	7.1	6.8	3
Gambia, The	0.9	7	6.0	5.9	6.4	6
<i>Ghana</i>	3.2	2	5.8	5.4	5.3	9
Guinea	0.8	9	4.3	4.4	4.2	15
Kenya	0.9	7	9.8	8.8	9.0	2
Malawi	1.2	4	7.0	5.0	5.9	7
Mali	0.4	17	3.9	3.7	3.8	16
Mozambique	0.5	15	2.9	2.7	3.0	18
Niger	0.5	15	5.3	3.3	4.3	13
Senegal	0.8	9	6.5	6.9	5.7	8
Tanzania	1.0	6	4.2	4.6	4.9	11
Togo	0.8	9	8.1	7.1	6.6	4
Uganda	0.7	13	2.5	2.7	3.3	17
Zambia	1.3	3	6.3	5.4	6.5	5

Sources: IMF, African Department, "Civil Service Data by Country"; and IMF, African Department, "World Economic Trends in Africa."

1/ 1 = highest.

5. The initiatives under the scope of the NIRP can be summarized as follows:
6. *Civil Service Performance Improvement Program (CSPIP)*. This program was launched by the Office of the Head of Civil Service in March 1995, covering 190 organizations with about 81,000 staff.² It addresses issues of motivation and performance, focussing on divisional and individual performance improvement plans, consolidation of the computerization process, and manpower ceilings. Feedback from managers resulted in the identification of 16 common problem areas in the civil service, and discussion groups have been set up to help solve these issues. The program is scheduled to run until 2006; as of mid-1998, 125 agencies had passed the problem identification stage.
7. *Public service wage reform*. In 1996, the Public Services Commission, with assistance from Price Waterhouse, began a review of the salary structure of the public service with the aim of resolving the long-standing issue of wage disparities. The review has three main objectives: eliminating ad hoc approaches to income administration in the short-term; establishing a remuneration policy implementation plan in the medium term, mainly based on a comprehensive exercise of job classification; and developing a sustainable structure for the long term in line with Ghana's Vision 2020 report on the Coordinated Program of Economic and Social Development Policies.
8. Because the government felt that wage structure and job classification issues transcended the public sector, it opted to work in the context of a Tripartite Commission, which includes trade unions and employers. Following several meetings, the government issued a confidential report—the "Price Waterhouse Report"—in mid-1998 outlining its proposed strategies from 1999 onward. The stated guiding principle of the report was to put into place a uniform salary structure based on tasks instead of positions. This implies a *salary alignment* in the short term and a *salary adjustment* in the medium term. The government is aware that the salary structure must be consistent with its macroeconomic targets, notably as regards prices. The social partners will give their reactions by end-1998. In the meantime, the government has granted an across-the-board 20 percent salary increase as a relief allowance for price increases, instead of the standard annual adjustment of the salary structure.
9. *Decentralization reform*. The local government law of 1988 created the District Assemblies as a first step toward decentralization. The Constitution of 1992 introduced the District Assembly Common Fund (DACF) for development programs, which receives at least 5 percent of central government domestic tax revenue. The Village Infrastructure Project of the World Bank is to be channeled through the DACF. It was seen early on, however, that district administrations were weak, and efforts were begun to strengthen their expenditure

²These organizations encompass 22 ministries, including the Office of the President, 48 departments and agencies, 10 regional coordinating councils, and 110 district assemblies. Subvented agencies and state-owned enterprises (SOEs) were not covered under CSPIP.

allocation and project implementation capabilities. However, progress was slow, and in 1995 the long-standing practice of funding half of local government staff salaries through the central government budget was abandoned in favor of full central funding. This was done in order to obtain better control over hiring policies of the district assemblies. A Local Government Act is being presented to parliament, which will create the administrative and accounting framework for the 110 district authorities.

10. As the government withdraws from the direct provision of services—both through privatization and removal of entry barriers—it is redefining its role as principally regulation of these activities. In this context, the government has established the independent Public Utilities Regulatory Commission (PURC) to review pricing and standards in the electricity and water sectors; the Energy Commission to monitor pricing in the petroleum sector and issue licenses to independent power producers; and the National Communications Agency to oversee the telecommunications sector.

11. *State-owned enterprise (SOE) reform.* The state enterprise sector is supervised by the State Enterprise Commission (SEC). As such, it is responsible for implementing the SOE reform program, whose objectives are developing the capacity of the SEC to monitor and evaluate the performance of the SOEs, including by improving the data base; strengthening the operation of the SEC's performance contract system; building capacity within the Ministry of Finance and the SEC to coordinate the implementation of the program and to manage the government's portfolio of equity investments, loans, and guarantees; and preparing selected SOEs for divestiture as well as building capacity within the Divestiture Implementation Committee (DIC) to accelerate the divestiture program.

12. The institutional framework for the sector is centered on the performance contract system, started in 1989, which introduced the concept of corporate planning to managers. It was initially set up for 12 enterprises; by 1995 this had increased to 47. In 1997 the SEC decided that all SOEs had to adopt performance contracts. This has helped improve the financial performance of the sector, further supported by the Statutory Corporation Act of 1993 aimed at standardizing regulations for SOEs and developing diagnostic action plans. As a result, government subsidies have virtually ceased, and privatization has accelerated.

13. The corporate planning process covers 3-5 years on a rolling basis with annual targets. The achievements under the plan are reviewed by the SEC and the Ministry of Finance at the end of the year, and grades and incentive bonuses (if called for) are determined. In 1997, 15 percent of enterprises had received a top grade, 40 percent a middle grade, and the remainder an unsatisfactory grade—mainly because of shortfalls in profitability and governance. The process will be further tightened in 1999—including through a more rigorous application of sanctions such as dismissal of managers.

14. While important progress has been achieved, the reforms are now entering a new phase both in terms of significance of the enterprises to be tackled and the need to increase the transparency of the reform process. In May 1998, the government added economically

significant state owned corporations to their divestiture list, including Ghana Airways, the Ghana Water and Sewerage Corporation, and all remaining state-owned banks. The list, which is posted on the DIC website, includes a provisional timetable. The government is committed to keeping the public informed, and will provide the number of bidders selected, the value of the transaction, as well as the DIC's audited accounts.

15. *Public Expenditure Reform.* In 1997, the government embarked on a comprehensive improvement of its procedures for budgetary planning, implementation, and monitoring under the Public Financial Management Reform Program (PUFMARP). The program is supported by the World Bank and other donors. As a first step, the government designed a new budget and public expenditure management system (BPEMS), which is expected to be fully operational in 2000. It will improve budget preparation and implementation, streamline cash management, and strengthen accounting procedures.

16. Accompanying the BPEMS is the medium-term expenditure framework (MTEF), designed to merge sectoral policy decisions with budget constraints. The sectoral policies are calibrated on a rolling 3-year macroeconomic and budgetary framework. Activities, such as primary education for one child or rehabilitating a mile of feeder road, are costed to determine what policy targets can be achieved within a ministry's overall budget ceiling. The government's aim is to have the MTEF fully operational for 2000. In preparation, the government has issued guidelines for the 1999 budget that include a macroeconomic framework consistent with the Policy Framework Paper (PFP) and budget guidelines for each entity over the next three years consistent with available resources.

C. The Public Sector Reinvention and Modernization Strategy (PUSERMOS)

17. When the NIRP was created, information was collected on the various public sector agencies based on a common review instrument, the Self-Appraisal Instrument (SAI). By the end of 1996, 250 institutions had been analyzed, and the information was used for a national workshop organized in May 1997. The workshop focused on coordination of reforms and development of human resources and was chaired by the Vice President, who had recently been appointed Chairman of the NOC. It developed a strategy for the next ten years covering the broad spectrum of public sector reforms, entitled the Public Sector Reinvention and Modernization Strategy (PUSERMOS). This strategy was approved by the Cabinet on December 18, 1997, and the NIRP was instructed to begin a pilot phase that would be completed no later than end-1999.

18. PUSERMOS seeks to clearly delineate functions of all components of the public sector, achieve efficient management and execution of these functions, attain effective delivery of services, and instill good governance. In addition to redefining and clarifying the national policy process through a Policy Management Group at the Office of the President, the PUSERMOS stresses reforms in two public service sectors: subvented and central management agencies. These reforms are to be implemented over the next ten years and would allow a significant decentralization of the government's activities. At the end of the

period, the civil service is to comprise no more than 2,500 staff, down from 84,000 presently. The restructured subvented agencies and local government institutions will absorb most of the staff moving from the civil service. Thus, the main focus of the strategy is not downsizing but reallocating functions within the public service. Nonetheless, severance costs are expected and the government will consider these in drafting each year's budget. The World Bank is supporting this reform effort through financial and technical assistance, guided by the conditions established under the Economic Reform Support Operation (ERSO). It encompasses assistance for the pilot project and preparation of a fully costed three-year reform program.

19. *Subvented agencies* employ over 70 percent of the civilian public service and include the education and health services, Highways Authority, universities, and a myriad of smaller agencies. They have been classified into four categories, viz., those that will be: (1) wholly subvented; (2) partially subvented; (3) wholly commercialized; and (4) closed down (Table 58). The NIRP's pilot phase covers at least 7 agencies in the first two categories, 5 in the third category, and 5 in the fourth category. Environmental studies, the legal framework, and procedures for closing down or commercializing subvented agencies are to be completed by end-1998. At that time, the Cabinet is expected to approve the specific subvented agencies for this phase.

20. The *central management agencies (CMAs)* will be reformed in a two-phase approach.³ The first phase will target the Ministry of Finance and Public Service Commission, that is, the very bodies carrying out the reforms. Putting a more coherent and transparent regulatory environment in place for them is therefore a prerequisite for launching the reforms. The initial activities will include a functional analysis of personnel management, budget and financial planning and implementation, and policy development; developing recommendations for streamlining functions among the CMAs; consensus building through focus group discussions; and costing and planning the reforms. This is complemented by work already underway to reform budget planning and management (PUFMARP), and improve Cabinet decision making.

D. Conclusion

21. Successful implementation of the PUSERMOS will be crucial to attaining the financial targets under the ESAF and World Bank programs. Ghana's government machinery will greatly benefit from modernization, both by making it more efficient and giving it the desired transparency. Specifically, without the reforms aimed at containing public expenditure, Ghana will be hard pressed to achieve the domestic primary surpluses that will allow it to "crowd in" the private sector and thus, through increased private sector activity, accelerate growth. Similarly, streamlining the subvented agencies will be crucial to instilling a sense of managerial

³The 14 CMAs include the Office of the President; the Cabinet; the National Development and Planning Commission (NDPC); the Office of the Head of the Civil Service; the Ministry of Finance; and the Public Service Commission.

responsibility in government operations. Thus, the size of the public sector and the time frame for the reforms need to be kept under constant review for the government to be able to actively support Ghana's development.

II. GHANA: BANKING SECTOR ISSUES⁴

A. Introduction

22. From 1989 to 1991, Ghana implemented a financial sector reform program aimed at rehabilitating its financial system, which suffered from inefficiency, lack of competition, and a large portfolio of nonperforming loans. Measures were taken to liberalize interest rates, revamp financial sector legislation, and strengthen bank supervision. These banking sector reforms were costly. Nonperforming loans were swapped for interest-bearing bonds and banks were recapitalized, at a cost estimated at about 6 percent of GDP.⁵ This chapter analyzes the strategy used to restructure the Ghanaian banking system and draws some lessons. The chapter is organized as follows. Section B reviews the development of the financial system in Ghana; the early reforms of 1989-91; and the second wave of reforms, characterized by the divestiture process that began in 1992 and is still ongoing. Section C describes the status of the banking sector at present, and compares it with the situation in other countries. Sections D and E summarize the main findings and point out issues that remain to be addressed.

B. The Banking System and Its Evolution

Historical Background

23. The first commercial banks set up in Ghana at the beginning of the twentieth century still operate today as Standard Chartered Ghana (SCB) and Barclays Bank Ghana (BBG) (see Table 3). Under colonial rule, their main business was trade finance, and they mainly served the expatriate community. In 1953, the first indigenous commercial bank, now Ghana Commercial Bank (GCB), opened to provide credit services to the local population. Following independence in 1957, the Bank of Ghana (BoG) was established, to serve as a central bank for the economy and to take over some of the functions that had been previously undertaken by the West African Currency Board. Throughout the period 1957 to 1983, the government followed a policy of intervention in economic activity and held a controlling interest in all commercial banks. Three state-owned development banks were established during this period: the National Investment Bank (NIB), the Agricultural Development Bank (ADB) and the Bank for Housing and Construction (BHC). In 1983, after the launching of the Economic Recovery Program, financial sector reforms were initiated, and private commercial banks were allowed to operate.

⁴Prepared by Luisa Zanforlin. This chapter benefited from data collected by an MAE mission consisting of Mr. Ugolini (head), Mr. McConnell, and Ms. Schumacher (consultants).

⁵See C. Dziobek and C. Pazarbaşıoğlu (1997).

Table 3. Ghana: Chronology of the Evolution of the Banking System

1888		Government Savings Bank is set up
1896		(British Bank of West Africa) Standard Chartered Bank of Ghana begins operations
1912		West African Currency Board is set up together with Gambia, Nigeria and Sierra Leone
1917		(Colonial Bank) Barclays Bank of Ghana begins operations
1953		(Bank of the Gold Coast) Ghana Commercial Bank begins operations
1957		Bank of Ghana is set up
1964		National Investment Bank is created
1965		Agricultural Development Bank is created
1972		Bank for Housing and Construction is created
1972		Repudiation of loans contracted by previous governments
1977		Social Security Bank is set up, wholly owned by SSNIT
1981		Freeze of deposits of 50,000 cedis or more
1988		Private banks are authorized to operate
1987	September	Liberalization of commercial bank interest rates
1989	July	Bank restructuring plan adopted by government
	August	New banking law strengthening the regulatory environment and the supervisory authority of the Bank of Ghana adopted
1990	January	Appointment of new management and boards of directors for all financially distressed banks
	April	Implementation of restructuring plans for three financially distressed banks begins
	May	Nonperforming loans of state enterprises in three financially distressed banks are replaced by BoG FINSAP bonds
	November	Abolition of requirement to lend to agriculture and decontrol of all bank charges and fees

Table 3. Ghana: Chronology of the Evolution of the Banking System

	November	Implementation of restructuring plans for three additional financially distressed banks begins
	December	Nonperforming loans of the private sector in financially distressed banks are replaced, primarily with BoG bonds
	December	First compliance test based on new capital adequacy requirements
1991	March	Restructuring plan for a seventh financially distressed bank is finalized
	March	Nonperforming loans of the private sector in four sound banks are replaced by BoG FINSAP bonds
1992	February	Government announces strategy to divest its bank shares
	October	New BoG law is enacted providing for stronger supervisory and regulatory powers
1993	May	New Financial Institutions (Non-Banking) Law and Home Mortgage Law are enacted
1995	March	Public offer of 30 percent of government shares in Social Security Bank (SSB) after merger with National Savings and Credit Bank: 21 percent only is subscribed
	October	Placement of 60 percent of the capital of the SSB through the Ghana Stock Exchange (GSE)
1996	February	Placement of 30 percent of government shares in GCB through the GSE; after oversubscription the public offer is raised to 42 percent
1997		A major check fraud, the A-Life affair, causes large losses to three state-owned banks
1998	June	Government divests $\frac{3}{4}$ of the remaining 40 percent shares it held in Barclays Bank

Sources: Kapur, I, and al., 1997; and information provided by the Ghanaian authorities.

Table 4. Ghana: Banking System Indicators

	1988	1991	1992	1998
Size of the sector				
Number of Banks	10	12	13	17
<i>of which: private 1/</i>	2	...	4	9
Number of branches	405	328	...	315
per head	3.3	2.1	...	1.8
of GCB (in percent)	...	84	...	43
Banking system assets/GDP	21	19	23	26
Nonperforming loans/total credit 2/	...	41	...	27
Asset concentration				
of 4 largest banks	81	77	72	55
Public sector share				
of total assets	79	73	70	37
of total capital	na	77	76	34
of total deposits	73	71	65	32
of total advances 3/	71	70	63	54
of nonperforming loans	...	...	...	84

Source: Ghanaian authorities, World Bank and IMF staff estimates.

1/ With more than 60 percent private capital (Barclays Bank, Local Branch of BCCI and Continental Acceptance Ltd. are here considered mixed ownership).

2/ June 1998 estimate.

3/ Total credit to the private sector.

Table 5. Ghana: Selected Banking System Indicators as of June 1998

Ownership Type	Nonperforming Loans 1/	Total Provisions 2/	Net Open Position 3/4/	Return on Assets 5/
State	50.8	69.4	78.7	-26.2
Private	7.0	68.2	31.9	6.7
Mixed	47.7	40.0	46.9	3.0
System	27.0	63.0	48.3	-4.2

1/ In percent of total loans.

2/ In percent of total non performing loans.

3/ In percent of total shareholders funds.

4/ As of August 1998.

5/ Estimated.

The First Wave of Banking Reforms: 1989–91

24. In the early eighties, after decades of state management, Ghana's banking system was in distress. Banks suffered from undue political influence, weak management, inadequate capital, outdated information and accounting systems, and poor internal controls. Moreover, they had large portfolios of nonperforming loans, insufficient provisions, and were often overexposed to a few clients, particularly state-owned enterprises. At the end of 1989, the banking system was close to a crisis, as nonperforming loans reached 41 percent of total credit. Faced with this situation, the government adopted a reform program with the objective of restructuring the banking system, while enhancing its competitiveness and efficiency. A new banking law was enacted in 1989, which laid out the basic regulatory framework for the banking system: minimum capital requirements, capital adequacy ratios, prudential lending ratios, exposure limits, accounting and auditing regulations. Supervisory activities of the BoG were also strengthened and the banks were required to submit accounts for off-site monitoring. Annual on-site inspections, as well as off-site surveillance, were to be conducted to verify banks' compliance with regulations.

25. During 1990 and 1991, most nonperforming loans in the balance sheets of banks were swapped with government-guaranteed interest-bearing bonds issued by the BoG, or were offset against liabilities to the government or the BoG.⁶ A total of C62 billion nonperforming loans were removed from banks' portfolios, of which C47 billion were replaced with bonds with 7, 9, and 15 percent interest with a 2 to 5 year maturity, which have been since rolled over. A recovery trust for nonperforming assets was formed in 1990 (NPART). The performance of the NPART as evaluated in 1995 seemed impressive: C13 billion were recovered out of a total C18 billion outstanding in non-performing loans. However, following years of high inflation, the amounts eventually paid represented much smaller values in real terms.

Divestiture and the Second Wave of Reforms: 1992–Present

26. In February 1992, the government announced a strategy to divest its shares of commercial banks. The divestiture was intended to increase competition and efficiency in the system. The program made early progress, but quickly stalled. The Social Security Bank (SSB) and the National Savings and Credit Bank, were restructured and merged: 21 percent of shares were divested through a public offer in March 1995, while 40 percent were sold to a strategic investor. In October 1995, 60 percent of its shares were listed on the Ghana Stock Exchange. In February 1996, 30 percent of the shares of GCB, the largest bank targeted for divestiture, were floated. After the initial offer was oversubscribed, the government decided to

⁶As part of the bank restructuring initiative, the Bank of Ghana acquired shares in commercial banks, an operation conceived as a temporary step, but which has remained to this day. This has given rise to a potential conflict of interest. However, the BoG expects to sell all its shares in commercial banks shortly, as part of the financial sector divestiture program.

increase the public offer to 42 percent of shares while looking for a strategic investor for the remaining 40 percent. Substantial delays were experienced in the negotiations with the strategic investor, partly because in 1997 the U.K. supervisory authorities objected to the proposed ownership transfer of the London Branch of GCB. Instead, the London branch was converted into an independent bank, Ghana International Bank.⁷ The discussions with a strategic partner GCB were still ongoing in the last quarter of 1998.

27. Four other banks had been set for divestiture: NIB, ADB, BHC and COOP. Discussions had began in 1995 with a strategic investor for NIB but failed to come to a conclusion. After two further calls for bids, the latest of which took place in August 1998, discussions are still ongoing. The program also envisaged the merger, prior to divestiture, of ADB, the largest development bank, with COOP. This process stalled in early 1997 after the A-Life check fraud caused significant losses to COOP. The authorities are now discussing whether a merger would still be appropriate in terms of the market value of both banks and their financial position. No progress was made with the plans to divest BHC, as its financial situation was also severely affected by the A-Life check fraud to the extent that some restructuring appears to be necessary before the government could proceed with the divestiture. In June 1998, the government divested $\frac{3}{4}$ of the remaining 40 percent of its shares in Barclays Bank.

C. Structure of the Banking System

28. The banking system in Ghana comprises 17 banks: 9 commercial banks, 4 development banks, and 4 merchant banks (Table 4). All together these banks account for about 90 percent of total deposits in the system. The financial sector also includes 130 rural banks, and several non-bank institutions, among which 4 brokerage companies, 2 discount houses, 7 savings and loans companies, the social security national insurance trust (SSNIT)⁸ and other minor financial institutions.

29. The banking penetration ratio for Ghana is relatively high. On average, Ghana has a bank branch every 54 thousand inhabitants, with the lowest branch per capita ratio in the Greater Accra region (one branch per 15 thousand) and the highest in the Northern parts of the country (one branch every 85 thousand inhabitants). About half of the banks have branches in the interior of the country, but GCB alone owns about 50 percent of all local branches, in each region of the country.

⁷ The ownership shares in GIB are as follows: Bank of Ghana, 51 percent; the social security national insurance trust (SSNIT), 15 percent; Ghana Commercial Bank, 20 percent; ADB, 9 percent; and State Insurance Corporation (SIC), 5 percent.

⁸This is a partially funded, defined benefit scheme and is the largest financial institution in the country.

30. Although the number of financial sector institutions is high and diverse, and has grown considerably since the early nineties, financial intermediation in the economy remains relatively modest. In 1997, the M2/GDP was 19 percent⁹, not too different from other countries in sub-Saharan Africa but roughly 1/3 of industrialized countries levels. This ratio has increased by just one percentage point between 1980 and 1997 showing little progress towards financial deepening. Holdings of currency are high, about 7 percent of GDP, only slightly above the average for the 1980-86 period. Credit to the private sector as a share of GDP has showed sluggish growth, increasing by only 3 percentage points since the beginning of the financial sector reform program in 1989; it reached 8 percent of GDP in end-1997, well below the average for sub-Saharan African countries (Figure 1). The M1/M2 ratio has shown a moderate decline in the last decade, which is noteworthy in the presence of persistent high inflation. In summary, Ghana seems to be moving toward increasing the depth of its financial system, albeit at a slow pace.¹⁰

31. Financial activity continues to be concentrated in a small number of core banks, though the changes with respect to the late eighties are more visible in this area. The potential for competition is well above the average of sub-Saharan Africa as none of the five top banks is excessively dominant. The Herfindahl concentration index for the top five banks in Ghana is 0.23, well below the average for sub-Saharan Africa (0.38 in 1996). Nevertheless, in August 1998, the two top banks alone held about 44 percent of deposits and 41 percent of assets of the banking system. The top five banks accounted for 76 percent of assets and 78 percent of deposits of the banking system. Public sector banks, which in 1992 accounted for 70 percent of the assets of the banking system, have lost their dominance but still account for 37 percent of assets and 32 percent of deposits (Table 3).¹¹

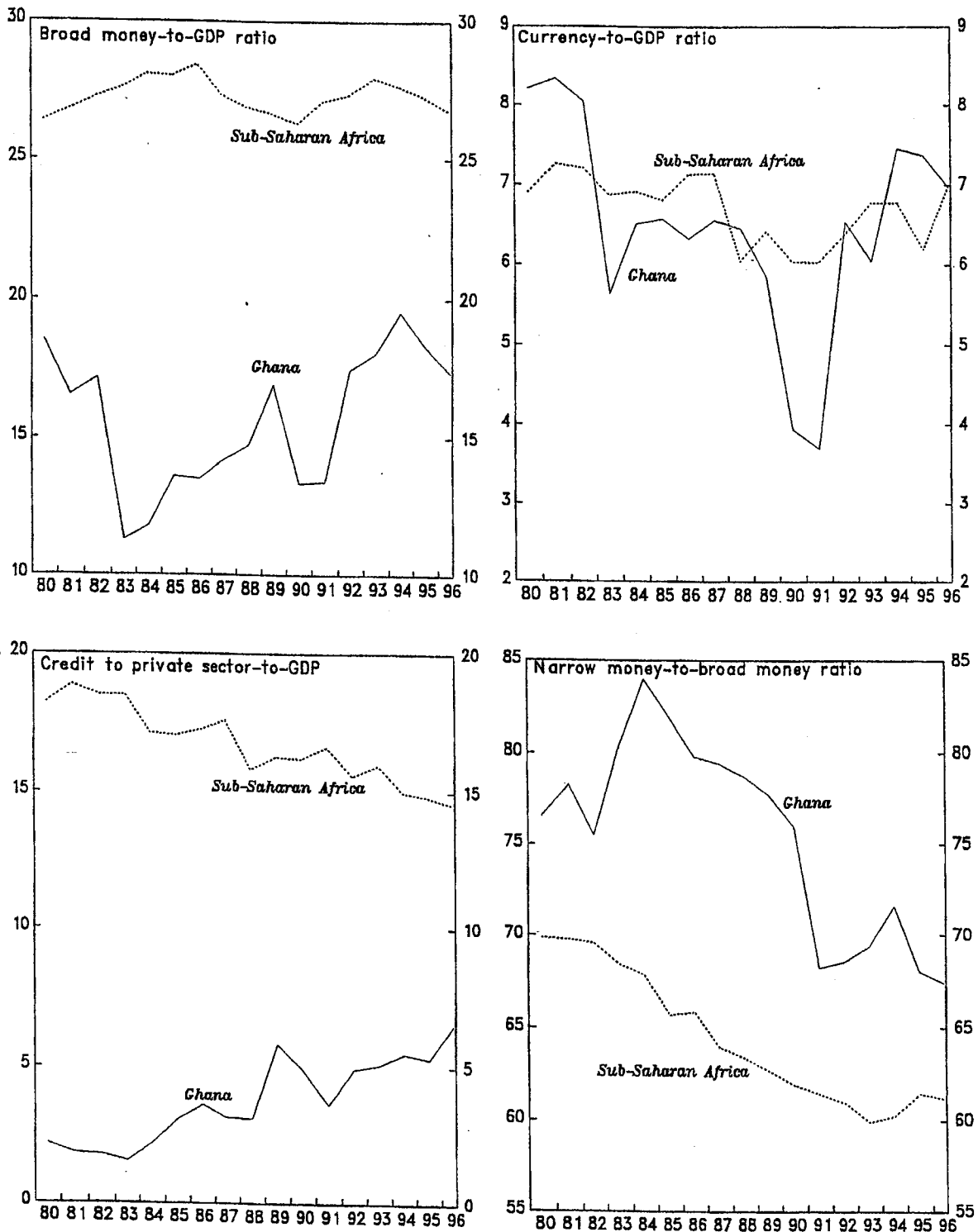
32. As in many other developing countries, the average share of nonperforming loans in the banking system is very high (27 percent of total credit to the private sector). However, if three small banks are excluded from the calculation, the average drops considerably (14 percent). Most of the nonperforming loans are held by state-owned banks (about 84 percent of the total), representing about 50 percent of total credit to the public of these banks. The average share of nonperforming loans in mixed ownership banks is similar to that of the state owned banks, while in private sector banks it drops to about 7 percent (Table 5).

⁹Excluding foreign currency deposits. The ratio including foreign currency deposits was 23.5 percent in 1997, but a comparable figure is not available for 1980.

¹⁰The apparently slow progress toward financial deepening has to be assessed in light of the economic dislocations of the 1970s and 1980s in Ghana. Also, the financial deepening indicators discussed in this chapter do not necessarily capture all facets of financial sector development.

¹¹Fifty-two percent of deposits and assets, if one includes banks in which the government has minority shareholding.

Figure 1. Ghana: Financial Deepening Indicators, 1980-96 1/



Sources: Data provided by the Ghanaian authorities; and staff estimates.

1/ Data for Sub-Sahara Africa are unweighted averages.

33. Interest rates have not been very responsive to changes in the macroeconomic environment. In 1995, the average inflation rate was about 50 percent, while lending rates were about 40 percent and saving rates barely reached 30 percent—both negative in real terms. In 1998, inflation more than halved but lending rates have remained around 30-40 percent. The fact that state owned banks with high shares of nonperforming loans still represent a significant segment of the financial market, may be one of the explanations for the behavior of interest rates.¹² Moreover, state-owned banks have high operational costs and a large portfolio of nonperforming loans, which increase the share of fixed costs. Demand deposits, which represent 33 percent of total deposits, yield no or little interest, implying that a downward adjustment in the interest rate paid on deposits would only marginally decrease banks' cost of funds. This cost structure suggests that a decline in interest rates is likely to reduce bank spreads, possibly to levels that will make them unprofitable. Therefore, these banks would be expected to resist as much as possible a decline in interest rates.

34. Another feature of the banking system in Ghana is its high dollarization: 32 percent of total assets and 27 percent of deposits were denominated in foreign currency in June 1998. For borrowers, the main attraction of foreign currency credits is the interest rate, which is much lower than in domestic currency loans; in July 1998, the interest rates on foreign currency loans were 27-36 percentage points lower than those on domestic currency loans, with the spread exceeding any reasonable expectation of devaluation. Lenders also have an incentive to lend in foreign currency as they need to maximize the rate of return on the resources obtained from foreign exchange deposits. Depositors still maintain a high share of their deposits in foreign currency both because of positive real interest rates¹³ and because of a continued lack of confidence in the sustainability of appropriate economic policies.

35. The dollarization of the banking system in Ghana has led the supervisory authorities to monitor closely the foreign exchange exposure of individual banks to ensure that they are not taking excessive risk. Available information seems to indicate that the net open positions of many of the Ghanaian banks are high.¹⁴ A rough estimate for the consolidated banking system showed the net open position to be around 50 percent of shareholders' funds, though for the public sector banks as a whole it averages about twice as much as the average for mixed and private ownership. The private sector banks as a whole have only a slightly more comfortable open foreign currency position of about 30 percent of shareholders' funds. Therefore, the banking system in Ghana is very vulnerable to exchange rate movements that could result in

¹²Another reason is that the government is still placing significant amounts of government securities to finance its deficit.

¹³Interest rates on foreign currency deposits range around 2-3 percent.

¹⁴Calculated as the ratio of the difference between assets and liabilities denominated in foreign currency to shareholders' funds.

large losses in relation to shareholders' funds. The authorities are considering amending and reissuing foreign exposure regulations before the end of 1998.

D. How Far Have the Reforms Gone?

36. The current structure of the banking system suggests that some progress has been achieved since the first wave of reforms; nevertheless, much remains to be done. Banks seem to rely excessively on income from government securities, with loans to the private sector still representing a relatively small portion of their assets. At an early stage in the banking reforms the supervisory authorities eliminated nonperforming loans from the balance sheet of the banking system at great cost; yet, by mid-1998, the supervisory authorities were again confronted with a banking system with an unacceptably large share of nonperforming loans.

37. In mid-1998, the average share of nonperforming loans in total credits in the banking system was still around 27 percent, only 14 percentage points below the levels early in the first wave of banking reforms (see Table 4).¹⁵ It is true, however, that if one abstracts from three small banks with serious problems, the share of nonperforming loans declines to about 14 percent for the whole sector, a more manageable ratio, particularly since the supervisory authorities have kept the pressure on banks to maintain adequate provisions against default risks. In addition, the bulk of nonperforming assets currently in the system does not relate to credit to state-owned enterprises, a widespread problem in the first wave of reforms.

38. The fact that state-owned banks have a significantly higher share of nonperforming loans than private banks suggests that the slow pace of the divestiture program may have endangered the success of the reforms and may now reduce significantly, or even eliminate, government proceeds from the divestiture. In particular, the situation of some state-owned banks is such that a liquidation may prove to be a simpler and more economical way to restore the banking system to full health.

39. On the positive side, the restructuring program has tended to increase the average capitalization of banks; in particular, the swap of bad loans and the enforcement of new regulations in the early nineties has been successful in improving the capital adequacy ratios in the system. Except for three banks that are experiencing problems, all other banks meet or exceed the minimum capital requirements, which is 6 percent of assets.¹⁶

¹⁵The nonperforming loans removed at the time of the restructuring represented about 41 percent of total credit extended to state owned enterprises and private firms. See World Bank (1994).

¹⁶The calculation of the minimum capital requirement does not follow the Basle Committee recommendations, although in practice it has resulted in levels of minimum capital in excess of the Basle Committee's 8 percent risk-weighted assets-to-capital ratio.

40. The regulatory framework developed in 1989, while for the greater part in line with the Basle Committee core principles, needs to be implemented with greater consistency and vigor. Penalties for noncompliance were stated in nominal terms and are now negligible after years of high inflation. In particular, the 1989 law does not provide for prudential regulations regarding foreign currency exposure, which, as mentioned above, have become a serious concern. In addition, the enforcement of the banking law regulations by the supervisory authorities has not been as strict as it could have been: penalties for noncompliance have at times been suspended on an ad hoc basis. For example, several banks are presently in noncompliance with single customer exposure limits. Moreover, improvements in the payment system have been slow, leaving the system open to fraud as shown in the 1997 A-Life incident. However, the authorities have recently renewed their efforts to modernize the payment systems by standardizing checks and using magnetic ink to permit the automation of most clearing procedures.

41. Finally, the revision of the legal framework has not succeeded in increasing significantly the speed with which commercial banks can recover losses associated with bad credit through the judicial system, thus placing an important obstacle to the development of the banking business.

E. Lessons Learned and Next Steps

42. The early banking reforms of Ghana were considered one of the more successful in Africa.¹⁷ Yet, the banking system is still not as healthy and competitive as one would expect six years after these reforms were completed. The main problem with the reforms was that the divestiture program, which was seen as the second phase of the reforms, has progressed very slowly. Therefore, most state-owned banks returned to the same practices that had been at the root of the problems faced by the banking system in the eighties: excessive political influence, weak management, backward information and accounting systems, inadequate credit approval procedures, and poor internal controls. As a result, nonperforming loans increased once again, further slowing down the divestiture process by reducing the attractiveness of these banks to potential investors.

43. To prevent the perpetuation of the existing problems with the banking system, a number of measures could be taken. First and foremost, the divestiture process needs to be accelerated and completed. This process should include the privatization, merger or liquidation of all state-owned banks and the complete divestiture of the shares of both the government and the central bank in all commercial banks. The government should also ensure that the shares held by SSNIT remain a minority (passive) investment.

¹⁷World Bank (1994).

44. Second, banks not meeting the minimum capital requirement, even if government owned, should be liquidated, if the shareholders are unable to recapitalize the bank. This may require the adoption of a more formal exit policy for financial institutions.

45. Third, bank profits for well-managed banks are high, so competition should be encouraged by allowing new, professionally managed banks to enter the market.

46. Fourth, prudential regulations should be updated and their enforcement strengthened. In particular, the implementation of an adequate foreign exchange exposure limits is urgent. Regulations on single creditor risk needs also to be enforced. Onsite and offsite supervision needs to be reinforced through close monitoring of banking procedures. The use of external auditors, as a complement to supervision by the central bank, may also be considered. Penalties for noncompliance with prudential regulations need to be made more meaningful and fully enforced.

47. Finally, the government needs to improve the environment for banking business. In addition to ensuring a stable macroeconomic environment, the government will need to strengthen the legal framework and the judicial system to facilitate recovery of nonperforming loans, while protecting borrowers from unfair practices. The payment system will also need to be modernized to prevent fraud and facilitate financial transactions.

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III. TARIFF REFORM IN GHANA¹⁸

A. Review of Tariff Policy

48. The trade and tariff system in Ghana has undergone substantial change since the launching of the Economic Recovery Program (ERP) in 1983 and the implementation of several liberalization programs through the mid-1990s. The index of aggregate trade competitiveness for Ghana is currently in the moderate range.¹⁹ (International Monetary Fund, 1997). After briefly reviewing past developments, this chapter presents the current tariff system in detail and examines the implications of reducing zero rating and exemptions, and lowering the top rate.

Recent Developments in Tariff Policy

49. The launching of the ERP initiated a significant break from the protectionist trade policies that had prevailed for many years. An important objective was to replace an economic development plan based on import substitution with a growth strategy based on export expansion. By liberalizing trade and submitting the economy to external competition, industry was expected to develop in sectors in which Ghana had a comparative advantage and, therefore, good prospects for growth through exports in the world market. In order to allow competition to work, the government needed to remove restrictions and distortions impeding trade and permit the private sector to respond to market incentives.

50. By 1983, constraints on trade were considerable as Ghana had become one of the most protectionist countries in the world (Edwards, 1990). During the ERP period, Ghana's trade and tariff system was simplified by the steady implementation of measures to remove quantitative restrictions on imports, abolish import licensing, remove limitations on the availability of foreign exchange, move away from a fixed exchange rate, and eliminate price controls. In 1983, the existing tariff system was replaced by a predominantly uniform tariff structure with a rate of 30 percent. Although the uniform tariff rate was replaced by a four-tiered cascading structure in 1986, rates in each tier were steadily lowered over the course of the ERP.

51. The performance of the manufacturing sector improved markedly with the trade and tariff reforms under the ERP. Prior to the ERP, during the peak period of the import substitution program in 1978-83, value added of the manufacturing sector declined at an annual average rate of 12 percent. Over the 1984-93 period, real value added in manufacturing grew at an average rate of about 8 percent annually. A disaggregated study of

¹⁸Prepared by Roman Arjona-Gracia, Anthony Pellechio, and Allan Crego (World Bank).

¹⁹International Monetary Fund, 1997. Ghana's restrictiveness index was 4 on a scale of 0-10.

the impact of trade liberalization found that its objectives were achieved (Biggs and Shah, 1997). Specifically, exporting firms grew substantially, benefiting from higher prices of their output and lower costs of inputs. Firms producing nontradable goods increased production, while those competing with imports, especially in textiles, contracted.

52. Decreases in tariff rates over the ERP period substantially reduced Ghana's effective tariff rate (Figure 2). In the period 1978-84, before trade liberalization began under the ERP, the effective import tariff rate was 17 percent (Farhadian-Lorie and Katz, 1988). The trade liberalization program came into effect in 1986, and, by 1988, the effective tariff rate had fallen to 7.4 percent. Through 1992, the effective import tariff rate continued to decline, largely from the lowering of statutory rates. Between 1992 and 1996, the effective rate fluctuated. In 1993, an unusually strong demand for imported consumer goods in the last quarter raised the average effective tariff rate for the year. In 1994, the effective rate returned to its average level in 1990-92. In 1995, it rose when import tariffs were collected along with the new value-added tax (VAT) on imports and the tax base was broadened by limiting exemptions. However, after the VAT was rescinded and the list of exempted imports was expanded again in 1996, the effective tariff rate declined to about 5 percent, its lowest level so far.

53. The government's 1994 budget simplified the tariff structure, enacting three ad valorem rates of 0, 10, and 25 percent of the c.i.f. value of imports. However, specific duties were applied to over 100 commodities at the eight-digit code level in the harmonized system, as well as to many textiles and garments. These specific duties were set up as alternatives to the domestic sales tax, with the higher of the two being applied. In addition, sales tax rates on imported goods were set at 0, 15, and 35 percent.

54. Taxes on international trade and, more specifically, import tariffs, have been and continue to be a major source of government revenue in Ghana (Figure 3). In 1986, the share of trade taxes in total revenue declined following the replacement of the prevailing uniform tariff rate of 30 percent by a cascading structure with lower rates. From 1989, the average share has fluctuated in the 25-30 percent range. The share of import tariffs in total tax revenue has followed a similar pattern, fluctuating in the 15-20 percent range since 1989.

55. Simple and import-weighted averages of statutory tariff rates for Ghana and a sample of other African countries are presented in Figure 4.²⁰ Ghana's average tariff rates are below those in the other countries, with the import-weighted average significantly lower than the rest of the sample. As shown in the next section, this difference follows primarily from the extensive zero rating and the erosion of the tariff base by exemptions in Ghana.

²⁰The simple and import-weighted averages are calculated using the formula $\sum_i w_i t_i / W$ and $w = \sum_i w_i$ where i indexes the statutory tariff rates and w_i equals the number of lines in the tariff schedule at rate t_i for the simple averages, and the c.i.f. value of imports at rate t_i for the import-weighted averages.

Figure 2. Ghana: Effective Rate of Tariff and Sales Tax on Imports, 1988-96
(In percent)

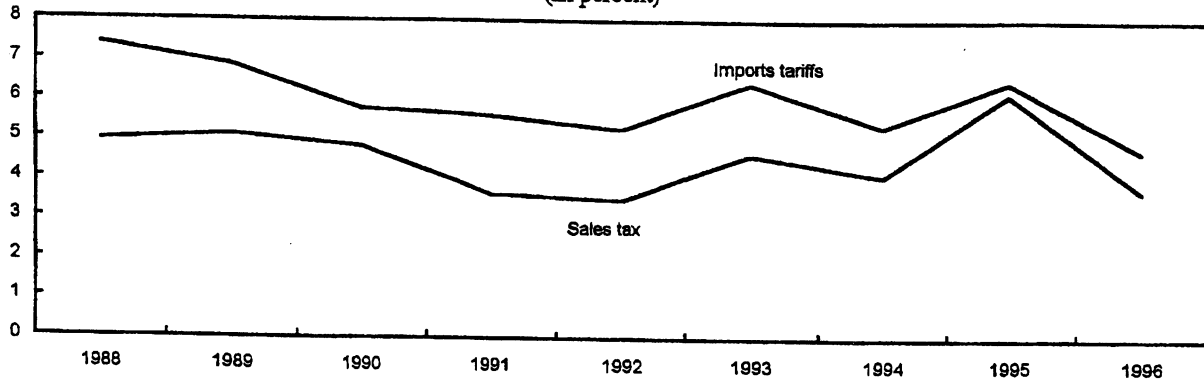


Figure 3. Ghana: Share of Trade Taxes and Imports Tariffs in Total Tax Revenue
(In percent), 1986-96

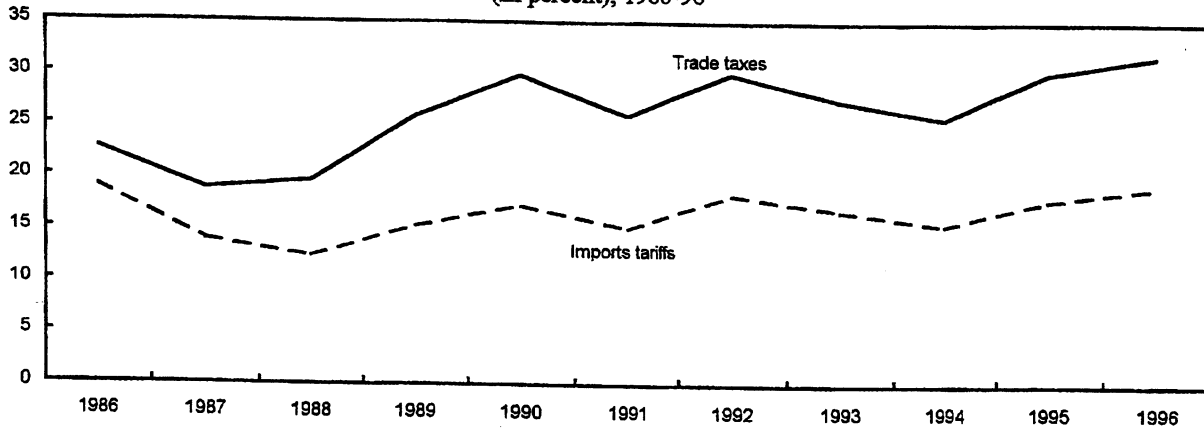
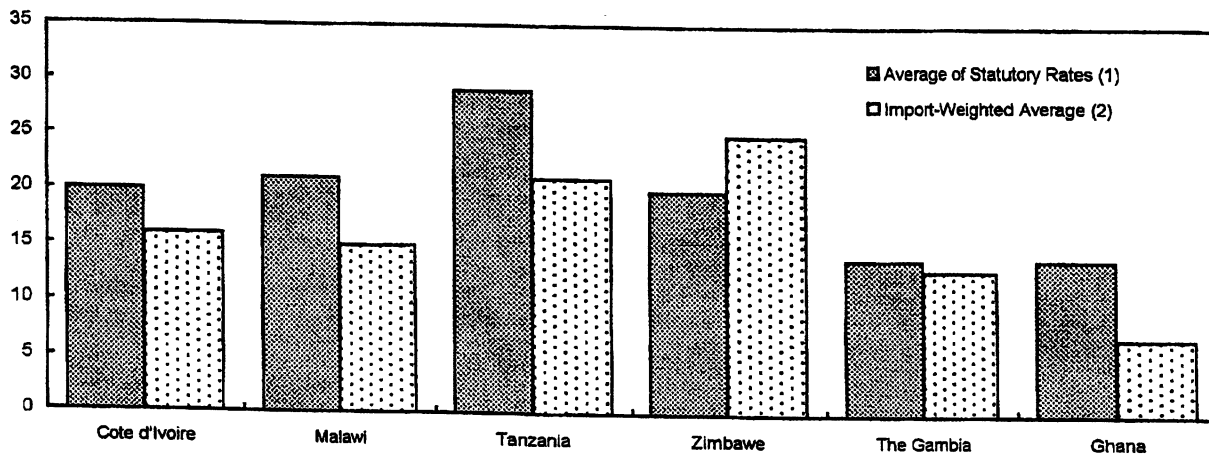


Figure 4. Selected African Countries: Statutory and Import-Weighted Averages of Tariff Rates



1/ Data for 1994, from Kirmani (1994)

2/ Data for 1997, from Aksoy (1998), and IMF staff calculations for Ghana and the Gambia

Key Features of the Current Tariff System

56. Ghana's current tariff structure is relatively simple, with four rates and no quantitative restrictions. The system was introduced in 1994 with three rates of 0, 10, and 25 percent, with the objective of enhancing uniformity and reducing dispersion. A 5 percent rate was added in 1998 to facilitate shifting zero-rated goods to a positive rate. The current system also incorporates a 15 percent sales tax. In addition, the tariff system has a significant number of exemptions. The problems created by extensive use of zero rating and exemptions have given rise to calls for further reform of the tariff system.

Statutory and effective tariff rates

57. Table 6 summarizes Ghana's tariff system by applying its rate structure and exemptions to import data for 1997.^{21, 22} It presents for each rate the number of lines in the tariff schedule, the number of lines with actual imports, the share in total c.i.f. import value, and the statutory and effective rates for the import tariff and sales, and other taxes on imported goods.

58. Zero-rated goods comprise a large share, nearly 47 percent, of import value. The share of goods imported at the 10 percent rate is almost 38 percent. Goods imported at the 5 percent and 25 percent rates together account for only about 15 percent of imports.

²¹The analysis in the remainder of this study is based on the Automated System for Customs Data Management (ASYCUDA) data set provided by the Ghana Statistical Service. This data set consists of all transactions in 1997 at the three main ports in Ghana (Tema, Kotoka International Airport, and Takoradi) and covers more than 95 percent of the total imports. Aggregate figures derived from this data set differ in value from similar figures reported by the customs administration. These differences are under review by Fund and Bank staff in collaboration with Ghanaian authorities. The outcome of this review is not expected to alter the main empirical results and conclusions of this study as it relies on statistics calculated as ratios or shares whose values are unlikely to change significantly.

²²The analysis excludes petroleum products which are subject to special excises and fees, but not to either specific or ad valorem import tariffs. All petroleum product imports take place at the Tema Oil Refinery, the state oil refinery that has a monopoly in the importation of petroleum products.

Rates (in percent)		Features			Rates (in percent)				Difference between statutory and effective rates
		Number of lines in schedule	Number of lines with actual imports	Import share (in percent)	Import tariff	Sales tax	Other taxes	Total taxes	
0	Statutory	785	673	46.8	0.0	0.0	0.7	0.8	
	Effective				0.0	0.0	0.7	0.7	0.0
5	Statutory	106	73	3.3	5.0	0.0	0.0	5.0	
	Effective				0.7	0.0	0.0	0.7	4.3
10	Statutory	2,605	1,884	37.9	10.0	12.2	1.3	24.9	
	Effective				5.5	4.5	1.2	11.5	13.4
25	Statutory	2,447	1,813	12.0	25.0	15.0	3.9	48.7	
	Effective				13.6	7.9	1.3	24.1	24.6
Total	Statutory	5,973	4,443	100.0	6.9	6.9	1.4	15.8	
	Effective				3.7	2.8	1.0	7.6	8.2

59. The effective tariff rate corresponding to each positive statutory rate is much lower because of exemptions—specifically, 0.7 percent at the 5 percent statutory rate, 5.5 percent at the 10 percent rate, and 13.6 percent at the 25 percent rate. The effective sales tax rate is also considerably lower than the simple average of the statutory sales tax rates applied at the 10 and 25 percent tariff rates (the sales tax is not applied at the 5 percent tariff rate). In particular, the effective sales tax rate is 4.5 percent for an average statutory sales tax rate of 12.2 percent at the 10 percent tariff rate and 7.9 percent for an average statutory sales tax rate of 15 percent at the 25 percent tariff rate.

60. Taxes on imports other than tariffs and sales taxes show little or no variation between the statutory and effective rates at each tariff rate, with one exception. At the 25 percent tariff rate, other taxes have a 3.9 percent statutory rate but an effective rate of 1.3 percent, indicating that exemptions have a significant impact on other taxes at the top tariff rate.

The system of exemptions

61. A comparison of the revenue collected by the customs administration and the potential revenue that could have been collected if there were no exemptions reveals the following:

- The total tax revenue foregone to exemptions amounts to approximately 52 percent of potential revenue, or 8.2 percent of the total c.i.f. value of imports.

- Elimination of exemptions would more than double total revenue collection at the 10 and 25 percent rates. At the 5 percent rate, elimination of exemptions would increase revenue collection from 0.7 percent of total revenue to 5 percent.

62. Certain exemptions are required by regional and international agreements, such as the ECOWAS Protocol, Geneva Convention, and donor-funded contracts. They cannot be altered unilaterally by the government and are not subject to domestic tariff policy considerations alone.

63. Fifteen different programs of exemption from import tariffs are currently available. The share of the total c.i.f. value of imports for the seven main exemption regimes, as well as their share of the total revenue loss generated by all exemptions, is presented in Table 7.

Regime	Import Share	Share of Total Revenue Loss
Ministry of Finance	12.8	36.7
Mining and Minerals Commission	7.2	16.7
Volta Aluminum Company	3.2	10.5
Diplomatic privileges	2.1	9.0
Ghana Investment Centre	4.4	8.5
Registered manufacturers	9.5	7.3
National Revenue Secretariat	1.4	4.8
Total	40.5	93.4

64. The exemption system has the following features:

- The seven main regimes produce 93.4 percent of the total revenue loss from exemptions. The exemptions listed under the Ministry of Finance account for over 36 percent of the total loss, over twice the loss from the next largest regime.²³
- A large share of the total loss is not necessarily associated with a large import share. Specifically, the regimes for the Mining and Minerals Commission and the Volta Aluminum Company (VALCO) generate 16.7 percent and 10.5 percent of the total revenue loss but have relatively small import shares of 7.2 percent and 3.2 percent, respectively.²⁴

65. The composition of imports in the main exemption regimes, as shown in Table 8, reveals the following:

- Exemptions do not appear to be based on the economic use of the commodities under each regime.
- For most regimes, a few commodities have relatively large shares of the revenue loss under a particular regime; the rest of the commodities have small shares, under 1 percent of total revenue loss for most items. For example, imports of aluminum oxide account for 37.5 percent of the total revenue loss under the VALCO regime; transmission and reception equipment, 18.3 percent of the loss of the National Revenue Secretariat (NRS) regime; and instruments for physical or chemical analysis, 12.3 percent of the loss under the Ghana Investment Centre.

²³It is important to note that the Ministry of Finance has no discretionary powers to grant exemptions. Exemptions classified under Ministry of Finance cover exemptions from all other ministries, departments, and agencies under various contractual agreements. They also cover nongovernmental organizations, as well as exemptions granted by parliament. Only parliament has the power to grant exemptions under the Constitution of Ghana.

²⁴With regard to VALCO, the Government of Ghana is bound by the Master Agreement that was signed in 1964.

Table 8. Ghana: Distribution of Main Imports by Exemption Regimes and Associated Revenue Loss Due to the Exemptions System

Regime	Harmonized System Code	Commodity	Regime Loss ¹	Total Loss ²
1. Ministry of Finance	852520	Transmission and reception apparatus	7.6	3.0
	380810	Insecticides, rodenticides, herbicides, etc.	4.9	1.9
	902780	Instruments for physical or chemical analysis	3.7	1.5
	854420	Coaxial cables	3.3	1.3
	852790	Radio-telephonic apparatus	2.8	1.1
	630510	Sacks and bags for packing	2.6	1.0
	100190	Wheat and meslin	2.4	0.9
	730719	Tube or pipe fittings of iron and steel	2.3	0.9
	930330	Sporting, hunting, or target-shooting rifles	2.3	0.9
2. Mining and Minerals Commission	732611	Grinding balls and similar articles for mills	9.3	1.7
	730890	Structures of iron and steel	8.2	1.5
	283711	Cyanides and cyanide oxides of sodium	6.3	1.1
	841391	Pumps for liquids	4.3	0.8
	722880	Other bars and rods of other alloy steel	4.2	0.7
3. Volta Aluminum Company	281820	Aluminum oxide	37.5	4.2
	271312	Petroleum coke, bitumen, and residues of oils	14.3	1.6
	281310	Sulfides of nonmetals	6.9	0.8
	281810	Artificial corundum	6.7	0.7
	282612	Fluorides and complex fluorine salts	4.4	0.5
4. Diplomatic Privileges	151519	Other vegetable fats and oils	30.5	3.0
	220890	Undenaturated ethyl alcohol	19.1	1.8
	220300	Beer made from malt	12.9	1.3
	220421	Wine of fresh grapes	12.7	1.2
	100110	Durum wheat	2.9	0.3
5. Ghana Investment Center	902780	Instruments for physical or chemical analysis	12.3	1.1
	852731	Reception apparatus for radio telephony	5.1	0.5
	851730	Telephonic or telegraphic switching apparatus	4.6	0.4
	852520	Transmission and reception apparatus	4.2	0.4
	847330	Parts and accessories for HS 84.69 - 84.72	3.7	0.3

Table 8. Ghana: Distribution of Main Imports by Exemption Regimes and Associated Revenue Loss Due to the Exemptions System

Regime	Harmonized System Code	Commodity	Regime Loss ¹	Total Loss ²
6. Registered manufacturers	281810	Artificial corundum	6.0	0.5
	330210	Mixtures of odoriferous substances	4.3	0.3
	390210	Polyethylene	4.2	0.3
	390110	Polyethylene	4.2	0.3
	110710	Malt	4.0	0.3
7. National Revenue Secretariat	852520	Transmission and reception apparatus	18.3	0.9
	630510	Sacks and bags for packing	8.2	0.4
	320890	Paints and varnishes	7.6	0.4
	100190	Durum wheat	4.6	0.2
	721690	Angles, shapes, and sections of iron and steel	4.4	0.2

¹Percent of total revenue loss within the respective exemption regime.

²Percent of total revenue loss of the entire exemption system.

66. Table 9 examines the revenue loss from exemptions by broad categories of imports. Nuclear reactors, mineral fuels, and vehicles comprise nearly half of the total import value. However, some of the main sources of revenue losses—electrical machinery, articles of iron and steel, and inorganic chemicals—do not have large import shares.

HS-2 Code	Commodities	Import Share	Share of Total Revenue Loss
84	Nuclear reactors, boilers and parts thereof	18.2	6.2
87	Vehicles other than railway or tramway	15.9	2.8
27	Mineral fuels, mineral oils and byproducts	8.9	2.0
85	Electrical machinery and equipment and parts thereof	8.1	20.9
98	Special classification provisions	6.4	0.1
94	Furniture; furnishings; various signs; prefabricated buildings; etc.	4.5	0.9
28	Inorganic chemicals	3.3	9.2
73	Articles of iron and steel	3.2	9.1
90	Optical apparatus	2.6	5.5

67. Table 10 presents imports and revenue loss distributed by main uses of imports. The largest losses arise from exemptions on capital goods and intermediate goods, which account for approximately 32 percent and 44 percent of total loss, respectively. The loss from exemptions for consumer goods is almost 18 percent.

Sectors	Import Share	Share of Total Revenue Loss
Agriculture	4.5	5.3
Capital Goods	41.2	31.6
Consumer Goods	17.7	17.9
Intermediate Goods	19.7	44.4
Mining	6.1	0.2
Unclassified	10.8	0.7

B. Directions for Further Reforms

68. As Ghana continues its efforts to achieve sustainable growth, the government will need to carry out tariff reforms to prevent misallocation of resources and loss of efficiency owing to distortionary effects of the tariff structure. However, trade tariffs still represent a significant source of revenue, and, therefore, any change in the tariff system needs to take into account its effects on revenue. The analysis of the present tariff structure in Ghana highlights three important points: (a) the widespread use of zero rates, in many cases without economic justification; (b) the generous use of exemptions, which reduces transparency and creates discriminatory treatment of users; and (c) the relatively high top rate of 25 percent, which may need to be reduced for Ghana to be in line with the tariff structure recommended for countries in the West Africa Economic and Monetary Union and, therefore, in a competitive position for foreign investment. This section examines several reform packages proposed with these points in mind to gauge their impact on effective tariff rates and revenue.

Options for Tariff Reforms

69. Reform packages can take many forms, and it would be impossible to cover all of them. The purpose of the analysis in this section is not to advocate a specific package of tariff reforms, but to explore the implications of a limited number of reform options on the effective tariff rate and tariff revenues. In particular, we examine the likely effects of various combinations of three elements:

- a reduction in the top tariff rate from 25 percent to 20 percent;
- a reduction in the value of tariff exemptions to one-half of their current level, with exemptions for sales tax and other taxes remaining at their current level; and

- an increase in the tariff on zero-rated consumer goods to 5 percent.

70. These three elements will be combined into six different options in an effort to identify some trade-offs among revenue loss, removal of distortions, and reduction of tariff dispersion. In order to simplify the examination of their impact, the demand for imports is assumed to remain unaffected by changes in the tariff system. The six options, as shown in Table 11, are the following:

- Option 1, which reduces the value of tariff exemptions by one-half;
- Option 2, which reduces the value of tariff exemptions by one-half and the top tariff rate from 25 percent to 20 percent;
- Option 3, which moves consumer goods from the zero-rated category to the 5 percent rate;
- Option 4, which applies the 5 percent rate to zero-rated consumer goods and reduces the top tariff rate from 25 percent to 20 percent;
- Option 5, which lowers the value of tariff exemptions by one-half and applies the 5 percent rate to zero-rated consumer goods; and
- Option 6, which reduces the value of tariff exemptions by one-half, applies the 5 percent rate to zero-rated consumer goods, and lowers the top tariff rate from 25 percent to 20 percent.

Option	Zero-Rating	Tariff Exemptions	Top. Rate (in percent)
<i>Current</i>	<i>Unchanged</i>	<i>Current</i>	25
Option 1	Unchanged	Reduced by one-half	25
Option 2	Unchanged	Reduced by one-half	20
Option 3	Consumer goods	Current	25
Option 4	Consumer goods	Current	20
Option 5	Consumer goods	Reduced by one-half	25
Option 6	Consumer goods	Reduced by one-half	20

Impact of Tariff Reform Options

71. This section analyzes the implications of the different tariff reform options listed above on average and effective tariff rates and revenue collection. Table 12 presents the simple and import-weighted averages of import tariff rates under each of the options. Table 13 describes the impact of the tariff reform options on effective tariff rates. Finally, Table 14 describes the effects on revenue.

72. As can be seen from Table 12, the effect of any one of the options being considered is less than 1.5 percentage points in the case of simple average nominal tariffs, and at most about 0.6 of a percentage point in the case of the import-weighted average nominal tariffs. Options 2, 4, and 6 lower both tariff averages: by 1.3-1.5 percentage points for the simple averages, and by 0.4-0.6 percentage points for the import-weighted averages. Options 3 and 5 increase them marginally. Option 1 leaves the averages unchanged, as it modifies only the existing exemption system.

System	Simple Average	Import-Weighted Average
<i>Current</i>	11.15	6.94
Option 1	11.15	6.94
Option 2	9.67	6.35
Option 3	11.33	7.09
Option 4	9.85	6.50
Option 5	11.33	7.09
Option 6	9.85	6.50

73. Effective tariff rates are much lower than average statutory tariff rates because of the widespread use of exemptions. As one would expect, the halving of tariff exemptions would significantly increase the effective tariff rates and the reclassification of lines has a more modest impact based on the change in the benefit associated with the reclassified items. The effective tariff rates under each option are presented in Table 13 below. As can be observed, for options that involve halving of the exemptions (options 1, 2, 5, and 6), the effect is much

larger than in those that involve only a reclassification of lines (options 3 and 4). The largest effect occurs in option 5, which not only eliminates half of the exemptions but also reclassifies zero-rated consumer goods, while maintaining the top tariff rate at 25 percent. Option 4 actually results in a small reduction of the average effective tariff rate as the effect of the reduction in the top rate dominates the switching of zero-rated consumer goods to the 5 percent tariff group.

Table 13. Ghana: Effective Tariff Rates Under the Reform Options
(In percent)

Rates	Current	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
0 percent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 percent	0.7	2.9	2.9	1.9	1.9	3.5	3.5
10 percent	5.5	7.7	7.7	5.5	5.5	7.7	7.7
20 percent	--	--	15.4	--	10.9	--	15.4
25 percent	13.6	19.3	--	13.6	--	19.3	--
Total	3.7	5.3	4.9	3.8	3.5	5.5	5.0

74. Table 14 below summarizes the impact of the different reform options on revenue and on the losses owing to the exemption system. The main effect of the reform options on tariff revenue comes from the reduction of exemptions. The adoption of any of the options that assume a reduction of exemptions (options 1, 2, 5, and 6) generates a gain in revenue ranging from 16 percent to 23 percent of current tariff revenue. Moreover, option 3, which assumes the application of a 5 percent tariff to zero-rated consumer goods, but changes neither the exemptions nor the top rate, shows a 1 percent increase in tariff revenue. The only case that results in a modest reduction (4 percent) in tariff revenue is option 4, which, in addition to the reforms of option 3, also assumes a decline in the top rate from 25 percent to 20 percent. This latter element has a stronger negative effect on tariff revenue than the effect arising from the reclassification of zero-rated consumer goods to the 5 percent tariff group.

Table 14. Ghana: Effects of Reform Options on Revenue and Loss Owing to the Exemptions System ¹

System	Percent of Current Revenue	Percent of Current Loss Due to Exemptions
<i>Current</i>	100	100
Option 1	121	80
Option 2	114	78
Option 3	101	101
Option 4	96	97
Option 5	123	81
Option 6	116	78

¹Aggregate import tariff revenue computed from the data set used in this study is about 25 percent higher than import tariff revenue reported for 1997 in the budget (see footnote 3). Possible reasons for these differences include problems with collection procedures, reporting, and data, and potential discrepancies between tariff calculations in this study and actual calculations. Calculations in this study reflect the application to 1997 data of the tariff structure in 1998, which incorporates changes implemented in March 1998. However, these changes are unlikely to explain the higher revenue computed from the data set.

Conclusion

75. This study highlights the trade-offs between reductions in tariff dispersion, average tariff rates, and tariff revenue. Option 5 brings the maximum positive effect in terms of increasing revenue, and it reduces somewhat tariff dispersion by raising the tariff applicable on zero-rated consumer goods to 5 percent. However, it also results in the largest increase in the average tariff rates, both simple and import-weighted averages. Options 4 and 6 minimize the tariff dispersion while reducing modestly average tariff rates. Option 4, however, results in the sharpest decline in tariff revenue of all the options examined; option 6, meanwhile, increases tariff revenue by 16 percent and seems to represent the most balanced reform package among those studied in this chapter.

76. Further reform of the tariff structure needs to be considered in the context of integration with the value-added tax (VAT) being introduced at the end of 1998. Imports will be exempt from the VAT only if they are exempted under the VAT law. Reductions in zero-rating and exemptions under the tariff system should be pursued in part to bring the taxation of imports in line with the taxation of consumption embodied in the VAT.

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IV. EXTERNAL COMPETITIVENESS IN GHANA²⁵

A. Introduction

77. At the time of its independence in 1957, Ghana was the world's largest producer of cocoa, and its external reserves were equivalent to three years of imports. Ghana was basically an export-driven economy, and its per-capita income was second only to South Africa in sub-Saharan Africa. After independence, Ghana's leadership changed the economic strategy to emphasize industrialization and import substitution to be achieved through increased government intervention in the economy. By 1982, Ghana's economy had virtually collapsed. The country had depleted its foreign exchange reserves and incurred large external payments arrears. Inflation was running at more than 100 percent, the parallel exchange rate was over 20 times the official rate, and cocoa production had declined to less than one third of its peak. Ghana's external competitiveness was declining precipitously.

78. In 1983, Ghana launched an economic recovery program (ERP) aimed at restoring growth and stabilizing prices. During the period 1983-91, relative prices were realigned to encourage domestic production and exports, a floating exchange rate regime was adopted, and the exchange and trade system was gradually liberalized. Moreover, through 1991, considerable progress was made in reducing macroeconomic imbalances, although inflation remained high and variable. However, in the wake of the 1992 elections, the government granted a large increase in civil service wages, rekindling inflationary pressures despite its subsequent efforts to regain control of the fiscal situation. Since a floating exchange rate regime was in place, the expectation was that any loss of competitiveness from domestic price inflation would be offset by exchange rate movements. The question that this chapter addresses is whether the floating exchange rate system, as well as other policies used by the authorities since 1983, were able to avoid an erosion of Ghana's external competitiveness.

B. Evolution of the Exchange Rate System²⁶

79. Following independence the cedi was pegged to the pound sterling until 1971, when the peg was changed to the U.S. dollar (Box 1).²⁷ The collapse of cocoa prices during the sixties forced the government to devalue in December 1971 to moderate the domestic effects of the deterioration in the terms of trade. The government was toppled soon after the devaluation and the cedi was appreciated in steps and then pegged at C1.15 per US dollar in March 1973. During the remainder of the seventies the authorities were generally unwilling to

²⁵Prepared by Stefania Fabrizio, with the collaboration of Andrew Bvumbe.

²⁶See Kapur, I. and others (1991) for details.

²⁷In the period from independence to 1971, the cedi was devalued only once in mid-1967.

Box 1. Ghana: Exchange Rate Arrangements, 1983-1997

Initial conditions

- Official exchange rate pegged; the intervention currency was the pound sterling until December 1971; thereafter, the U.S. dollar.
- An active parallel market with rates that differed significantly from the official rate.
- Widespread restrictions on trade and payments.
- Direct allocation of foreign exchange through licenses and import programs.
- Import deposit requirements.
- Bilateral payments arrangement with various countries

Measures after 1983

- Adoption of a real exchange rate rule, in which exchange rate movements were linked to the inflation differential between Ghana and its major trading partners. Also a system of bonuses on foreign exchange receipts and surcharges on payments was introduced (April 1983).
- The system of bonuses and surcharges was abolished (October 1983)
- Authorized foreign exchange dealers permitted to open foreign accounts for residents and non-residents (June 1985)
- A dual exchange rate system with two windows was introduced, one of the windows being an auction. Bank of Ghana (BoG) sold foreign exchange to end users only (September 1986)
- Foreign exchange bureaus were established resulting in two spot foreign exchange markets (February 1988)
- A wholesale foreign exchange auction system was introduced and the retail one was discontinued (April 1990)
- Weekly wholesale foreign exchange auction coordinated by BoG was replaced by an interbank market (March 1992)
- Ghana accepted the obligations of Article VIII, Sections 2, 3, and 4, of the Funds Articles of Agreement (February 1994).

devalue the cedi and, faced with balance of payments problems, tended to resort to ad hoc restrictions on trade and exchange rate payments. The cedi parity was maintained until June 1978, when the cedi was devalued to C2.75 per US dollar, and then kept unchanged until April 1983, when it was again devalued in the context of the ERP.

80. From April 1983 to September 1986, the authorities adopted a real exchange rate rule with periodic adjustments in the cedi rate in accordance with the inflation differential between

Ghana and its major trading partners (see Figure 5).²⁸ During the seventies and most of the eighties, administrative controls still played an important role in the allocation of foreign exchange, giving rise to a very active parallel foreign exchange market. In 1982, the parallel market exchange rate reached as high as 2,100 percent of the official rate, but after the adoption of the real exchange rate rule it fell to twice the official exchange rate in early 1986. In September 1986, a dual exchange rate market was introduced, in which the exchange rate in one of the windows was determined by auction.²⁹ In February 1987, the dual exchange rate system was eliminated, and all operations began to be conducted at the auction rate. In order to curb the parallel market for foreign exchange, foreign exchange bureaus were allowed to operate beginning February 1988. This initiative led to the absorption of the parallel market in the redefined legal structure. The result was, however, an exchange system with two spot foreign exchange markets: the bureau rate and the auction rate. This system remained in place until April 1990.

81. By April 1990, the spread between the bureau rate and the auction rate had narrowed to around 8 percent, and the Bank of Ghana was able to unify these two rates. It also introduced, at the same time, a system of weekly wholesale foreign exchange auctions, which remained in place until an interbank market in foreign exchange was set up in March 1992.

82. With foreign exchange being allocated by market mechanisms, the need for exchange restrictions gradually declined. From October 1986, the reforms of the exchange rate system were accompanied by the removal of import licencing, rationalization of import tariffs and the removal of all restrictions on payments and transfers for current international transactions. By February 1994, Ghana was able to accept the obligations of Article VIII, Sections 2, 3 and 4 of the IMF Articles of Agreement.

C. Traditional Competitiveness Indicators

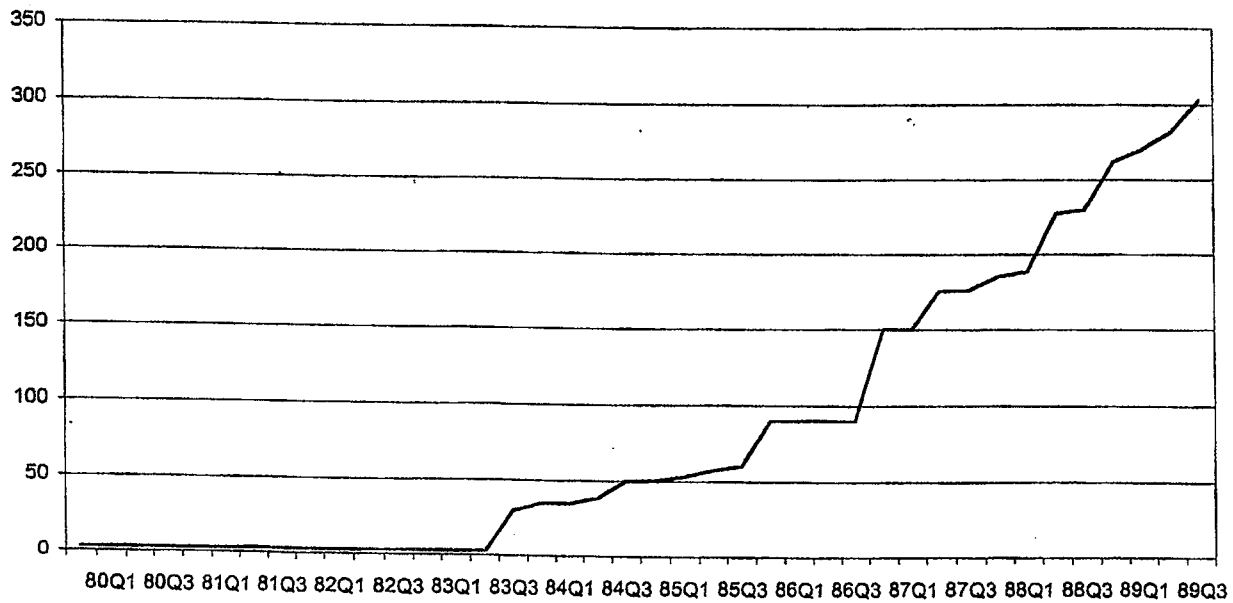
83. A useful measure of competitiveness is the real exchange rate, whose movements are associated with changes in a country's balance of trade in goods and nonfactor services. The real exchange rate is usually constructed by deflating the nominal exchange rate, using price

²⁸In April 1983, the government also introduced a system of bonuses for foreign exchange receipts and surcharges for payments. This cumbersome system was abolished in October 1983.

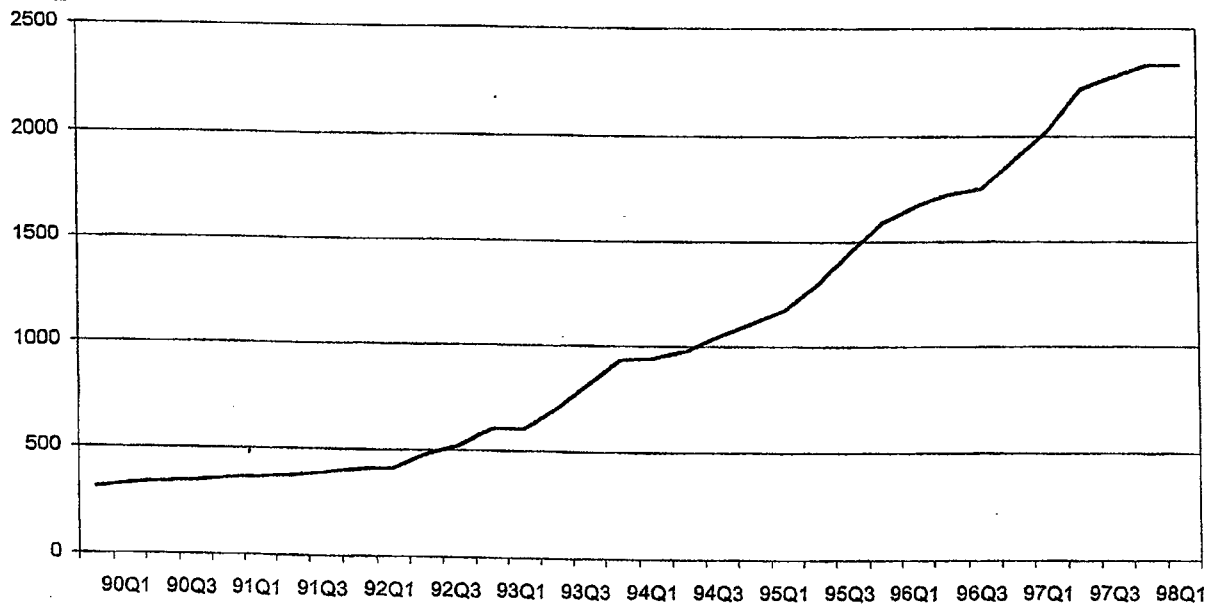
²⁹Foreign exchange for debt service payments for debt contracted before January 1, 1986, petroleum imports, and essential drugs were provided at a pegged rate (C90 per US dollar) through the first window. All other transactions were conducted through the second window. Foreign exchange earnings from cocoa and residual oil products were surrendered at the first window exchange rate.

Figure 5. Ghana: Exchange Rate, 1980-98
(In cedis per U.S. dollar, end-of-period)

1980-89



1990-98



Sources: IMF, International Financial Statistics.

indices, such as the consumer price index (CPI), GDP deflator, export deflator, import deflator, or cost indices, like unit labor costs.

84. No single indicator provides an unambiguous assessment of competitiveness, with each indicator having pros and cons. Therefore, each indicator needs to be carefully considered. Regarding the price indices, CPI-based real exchange rates are easily available and cover a large range of products that are fairly comparable across countries (Turner and Van't dack (1993)). In addition, because wages are often influenced by CPI developments, CPI-based real exchange rates could be a good proxy for developments in a country's cost competitiveness. However, CPI-based real exchange rates also reflect taxes and other institutional distortions, include the prices of services, many of which are nontradable, and do not take directly into account the prices of many tradable goods, like intermediate goods. Real exchange rates based on GDP deflators incorporate the ratio of the relative prices of nontradable to tradable goods at home and abroad, and accordingly, movements in important determinants of trade flows; however, these data are less frequently available and less accurately constructed. Real exchange rates based on export and import deflators provide useful information on a country's export and import performance, respectively, and consequently on its trade balance. However, as each indicator does not contain information relevant for assessing both import and export performance, they may not incorporate all the information on competitiveness needed to explain movements in the trade balance (Marsh and Tokarick, 1994). Furthermore, these indicators cover country-specific range of products, that are often difficult to compare across countries.

85. Indicators based on unit labor costs provide information about underlying costs of production and are defined similarly across countries. However, they are essentially focused on the manufacturing sector and cannot detect changes in the costs of other components of production, such as capital and intermediate inputs, and they are subject to large measurement errors (Lipschitz and McDonald (1991)).

D. Competitiveness Indicators for Ghana

86. In this section, Ghana's competitiveness is assessed using indicators based on prices and unit labor costs. In particular, real effective exchange rates are calculated considering the consumer price index, GDP, export, and import deflators, and unit labor costs. The choice of competitiveness indicators is limited by the availability and accuracy of data. The results are analyzed taking into consideration these limitations, as well as advantages and disadvantages of each indicator.

Price-based indicators using CPI, GDP, export, and import deflators

87. Ghana's CPI-based real effective exchange rate (REER) vis-à-vis its major trading partners (United Kingdom, Germany, United States, Japan, France, Netherlands, Italy, Canada, Belgium, Brazil, Korea, Australia, Switzerland, China, Spain, Sweden, the Taiwan

Province of China, Malaysia, Austria, and India)³⁰ was calculated for the period 1980-97 (Figure 6, top panel). The figure shows an appreciation of the REER of 180 percent over the period 1980-82, clearly indicating a deterioration of Ghana's competitiveness. However, in 1983 this tendency started to reverse, and Ghana's REER depreciated by 93 percent by 1987 in comparison with its peak in 1982. The gain in competitiveness continued, although at a lower pace, through 1994. The last three years, 1995-97, are instead characterized by a slight deterioration of Ghana's competitiveness, as shown by the CPI-based REER that in 1997 had already appreciated 35 percent with respect to its 1994 level (Figure 7, top panel).

88. Ghana's competitiveness as indicated by the CPI-based REER reflects the nominal appreciation of the cedi over the period 1980-82, followed by a series of devaluations, in particular, during the first stage of the reform of the exchange rate system that started in 1983. As seen above, the cedi was devalued in stages from C2.75 per U.S. dollar in April 1983, to C90 per U.S. dollar by January 1986, which meant a devaluation of 3,172 percent in less than three years. As the reform of trade and the exchange rate continued through 1994, the cedi continued to depreciate, reaching a value of C1,052 per U.S. dollar at the end of 1994. In 1995, the CPI-based REER started to appreciate, reflecting a surge in inflation from 35 percent at the end of 1994 to 70 percent in 1995. The appreciation of the CPI-based REER continued in 1996-97, although at a lower pace.

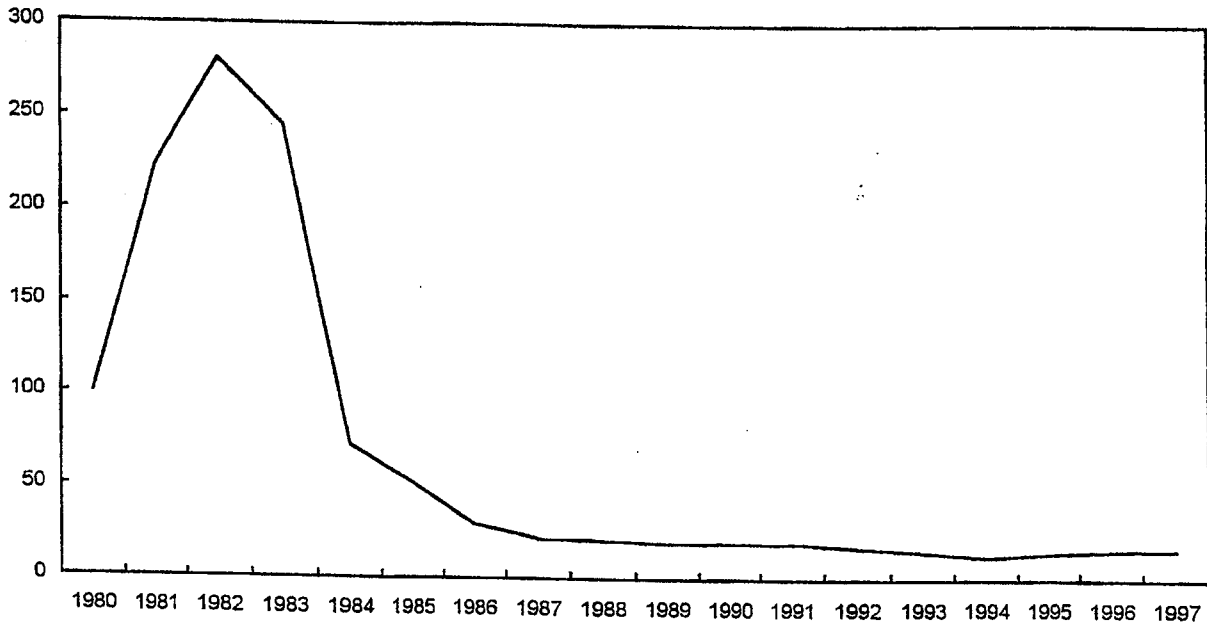
89. The real effective exchange rate based on the GDP deflator presents a picture very similar to the one given by the CPI-based REER (Figure 6, bottom panel). From 1980 to 1982, Ghana's competitiveness deteriorated markedly, as indicated by the appreciation of 139 percent of the GDP-deflator-based REER. However, it improved noticeably after 1983, as the GDP-deflator-based REER depreciated by 75 percent and 91 percent in 1984 and 1987, respectively, with respect to its 1982 level. The gain in competitiveness continued until 1994, although at a lower pace. Afterward, the GDP-deflator-based REER shows a slight appreciation over the period 1995-97 (Figure 7, bottom panel).

90. The real effective exchange rate based on the export deflator (Figures 8 and 9, bottom panel) shows an overall gain in competitiveness over the entire period under consideration. Unlike the other two indicators, the export-deflator-based REER indicates a gain in competitiveness over the period 1995-97. This gain could be attributed to the fact that the export price grew less than consumer and GDP indices, which in turn could be explained by the fact that Ghana exports mainly commodities such as cocoa and gold, whose prices are determined in the world market. If the depreciation of the REER based on export deflator was mainly related to the fact that Ghana is a price taker, an assessment on competitiveness based on such an indicator could be misleading.

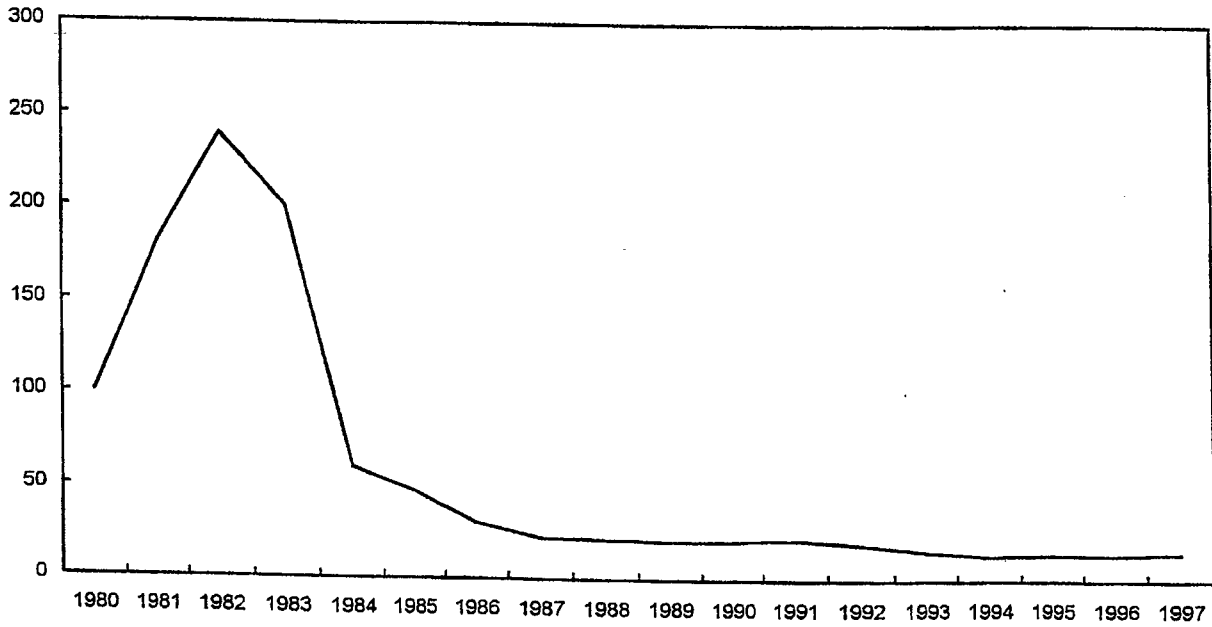
³⁰ The trading patterns and their relative weights for the calculation of the REER are those used by the IMF's Information Notice System.

Figure 6. Ghana: Real Effective Exchange Rate, 1980-97
(Index, 1980=100)

Based on CPI



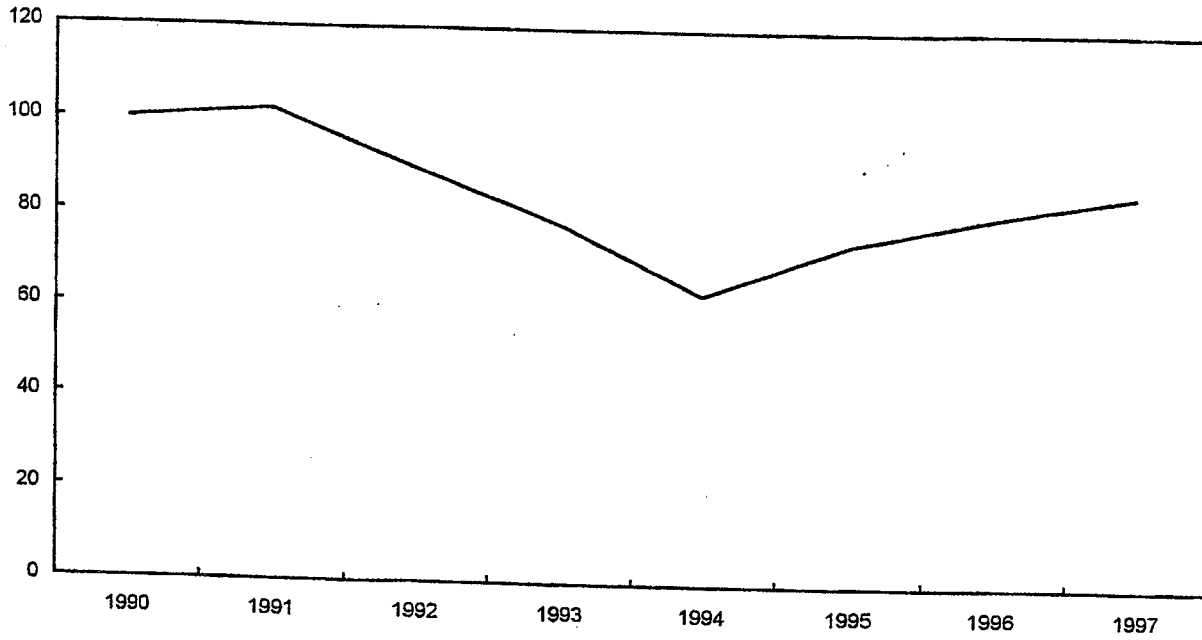
Based on GDP deflator



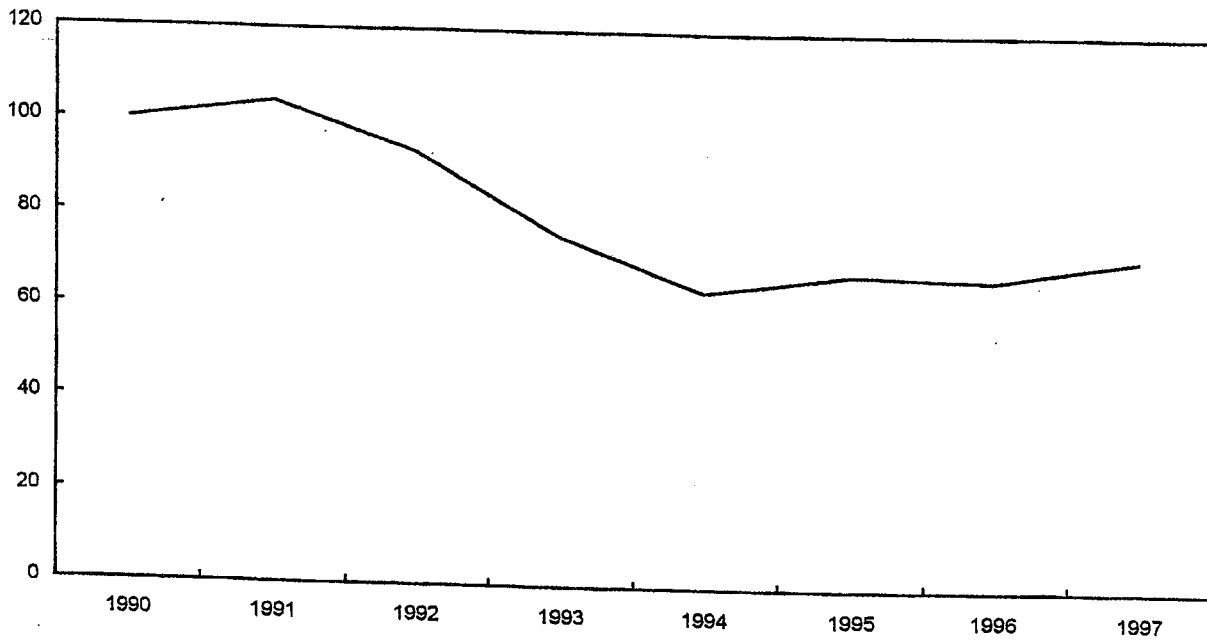
Sources: IMF, Information Notice System and WEO.

Figure 7. Ghana: Real Effective Exchange Rate, 1990-97
(Index, 1990=100)

Based on CPI



Based on GDP Deflator



Sources: IMF, Information Notice System and WEO.

91. Like the previous indicator, the real effective exchange rate based on import deflator (Figures 8 and 9, top panel) shows an overall gain in competitiveness over the period 1983-1997. This gain could reflect that the growth of import prices was slower than the growth of the prices of local products that are part of the basket of the CPI products. In 1997, this difference could be attributed to the sharp reduction in petroleum prices. However, to the extent that similar declines were observed by Ghana's competitors in international markets, it is not clear that the external competitiveness of Ghana was affected in a significant manner.

Unit-Labor-Cost-Based Indicators

92. The real effective exchange rate based on unit labor cost indices (ULCI)³¹ was calculated for the period 1981-97 (Figure 10).³² This indicator suggests that there was a strong deterioration of Ghana's competitiveness from 1981 to 1982, followed by a remarkable gain thereafter. The ULCI-based REER appreciated by 49 percent from 1981 to 1982, and in the following five years it depreciated by 77 percent with respect to its 1982 level. After a slight appreciation in 1989, the ULCI-based REER continued to depreciate, reaching its lowest point in 1991. In 1992, Ghana's ULCI-based REER appreciated by 41 percent with respect to its 1991 level, and in the following two years it regained approximately the level reached in 1991. During the last two years under study, 1996-97, the ULCI-based REER shows a slight appreciation, suggesting that Ghana's competitiveness has recently shown a tendency to deteriorate.

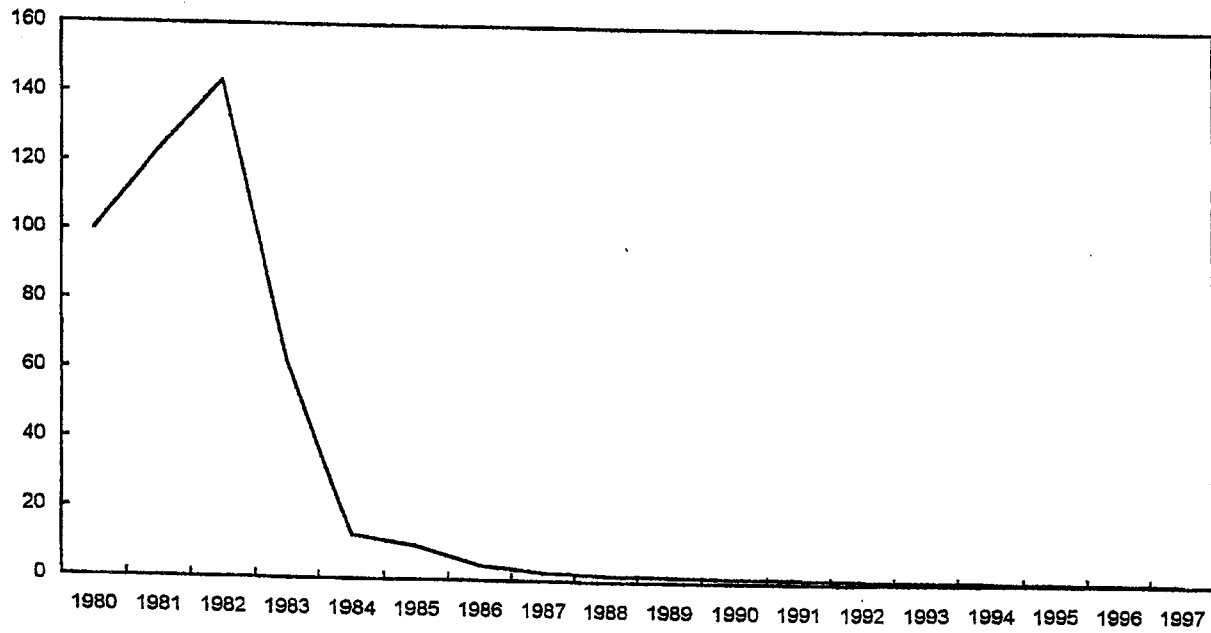
93. Over the period 1981-90, the pattern of Ghana's competitiveness suggested by the ULCI-based REER was mainly driven by the behavior of the cedi before and during the ERP. In 1992, the ULCI-based REER appreciated remarkably, as a wage increase of 80 percent was granted to public employees. In the following years, Ghana's government made efforts to contain wage increases. These efforts are reflected in the slight gain in Ghana's competitiveness in 1993-94. However, despite the wage containment, over the last three years, 1995-97, the indicator suggests a slight tendency for Ghana's competitiveness to weaken.

³¹ The ULCI is defined as the ratio of the index of monthly compensation per worker to the index of monthly production per worker in the manufacturing sector. The calculation of the ULCI for Ghana for the period 1992-97 is based on the assumption that the growth rate of the monthly compensation per worker and the number of workers in the manufacturing sector are equal to the growth rates of the average monthly salary of contributors to Ghana's social security system and the number of contributors to the system in the manufacturing sector, respectively.

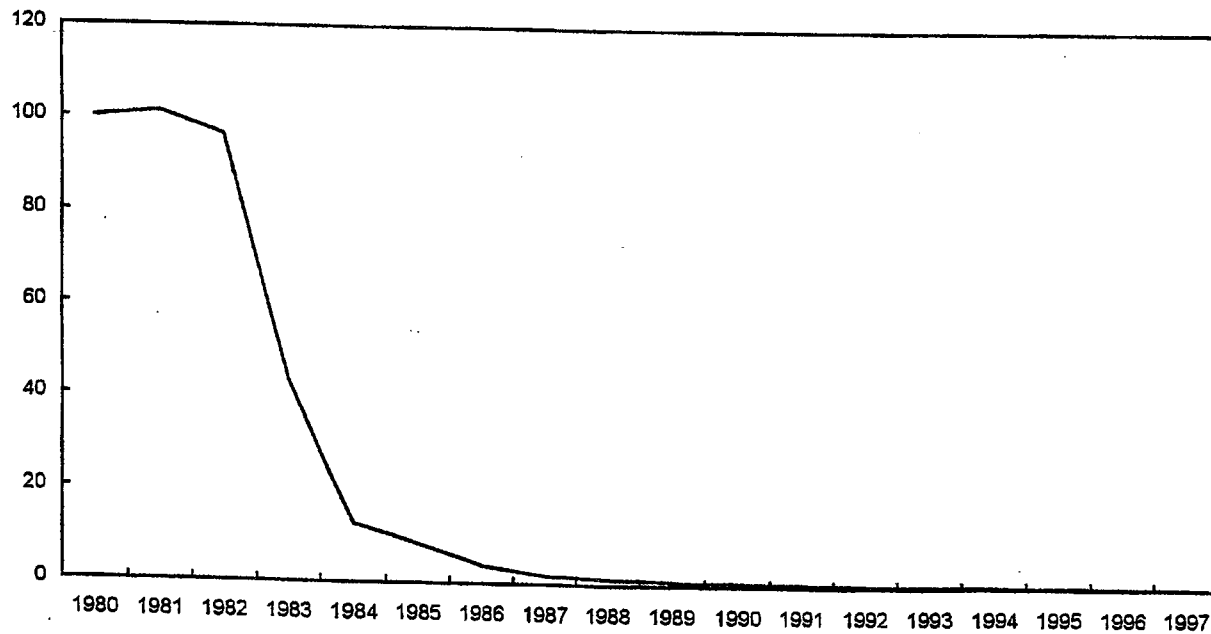
³² The trading partners for the calculation of the ULCI-based REER are those used by the IMF's Information Notice System, excluding Brazil, China, Malaysia, and India. The selection of the trading partners was limited by the availability of data.

Figure 8. Ghana: Real Effective Exchange Rate, 1980-97
(Index, 1980=100)

Based on Import Deflator



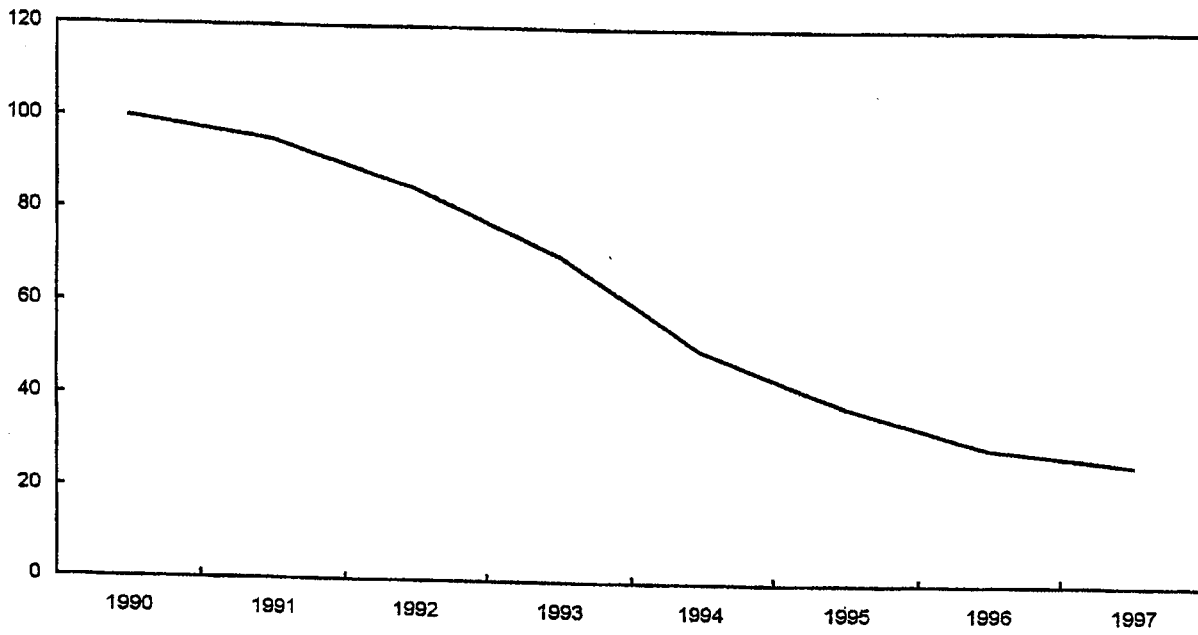
Based on Export Deflator



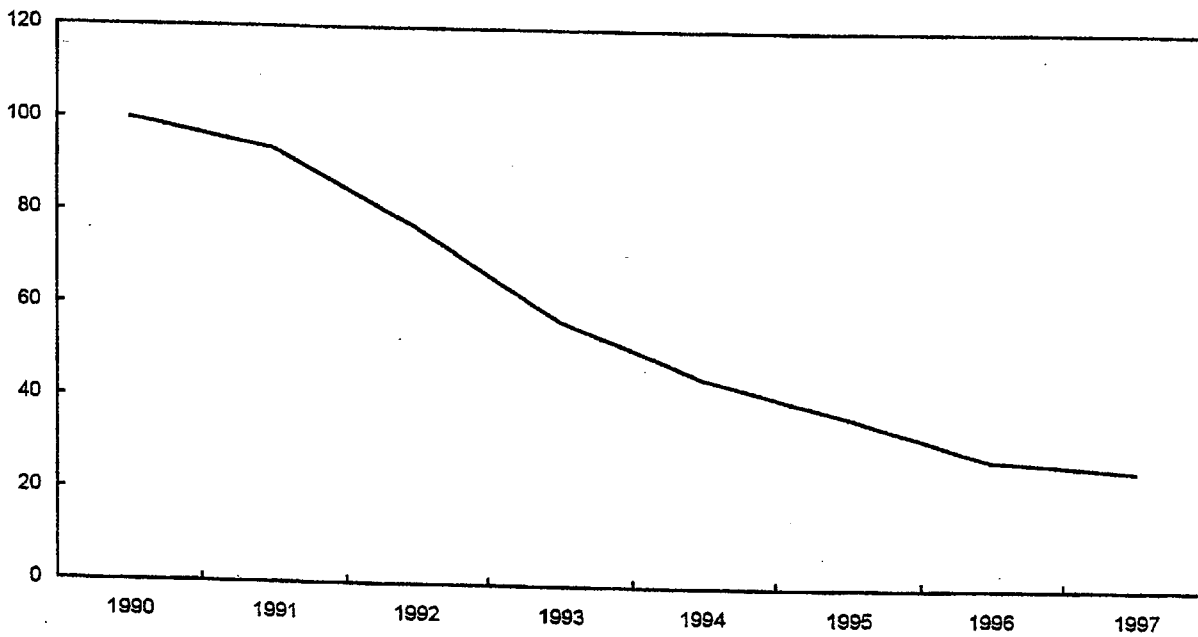
Sources: IMF, Information Notice System and WEO.

Figure 9. Ghana: Real Effective Exchange Rate, 1990-97
(Index, 1990=100)

Based on Import Deflator

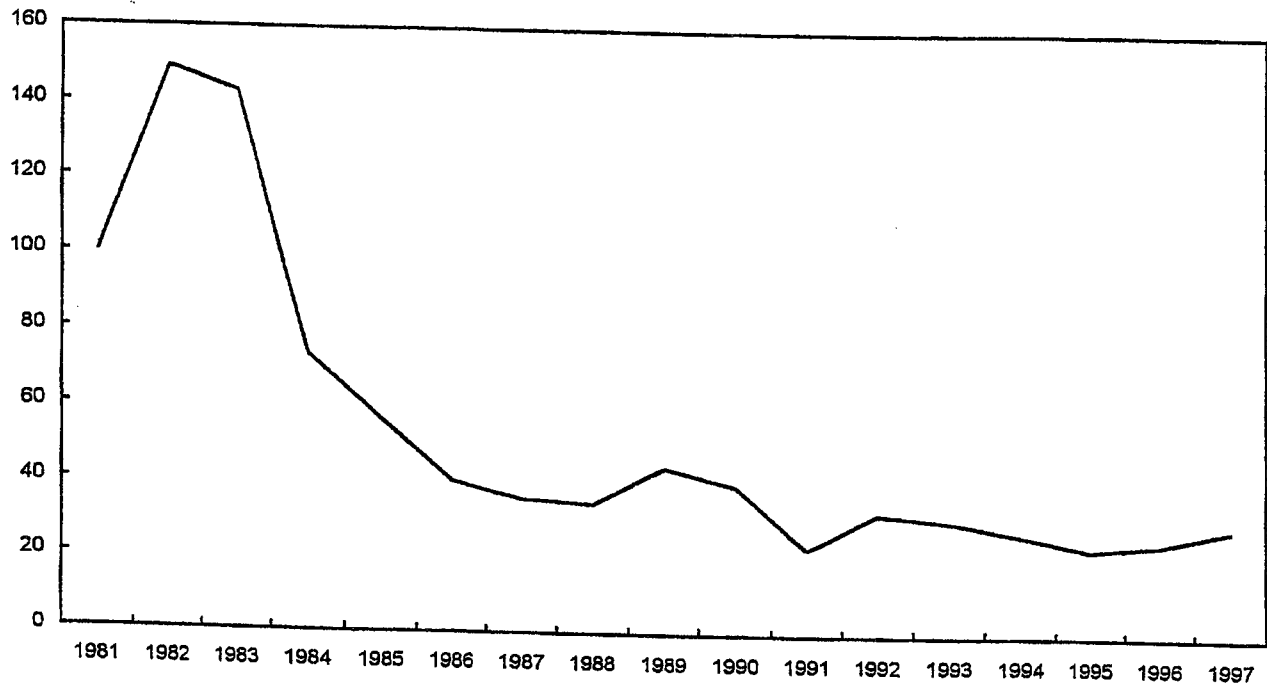


Based on Export Deflator



Sources: IMF, Information Notice System and WEO.

Figure 10. Ghana: Real Effective Exchange Rate Based on Unit Labor Cost Index, 1981-97
(1981=100)



Sources: IMF, Information Notice System; SSNT; and staff estimates.

A comparison with some neighboring countries

94. Ghana's competitiveness was compared with that of its neighboring countries, Burkina Faso, Côte d'Ivoire, Nigeria, and Togo, from the first quarter of 1980 to the second quarter of 1998. The comparison is built on the CPI-based REER, calculated considering three different groups of trading partners. The first group comprises all major trading partners of the country; the second one consists of the major trading partner,³³ and the third one comprises all major trading partners, excluding the major partner. The analysis covers two periods, from the first quarter of 1980 to the second quarter of 1990, and from the third quarter of 1990 to the second quarter of 1998. The two periods highlight the performance of Ghana's competitiveness with respect to its neighboring countries before and after Ghana concluded its exchange system reform, which occurred in the second quarter of 1990.

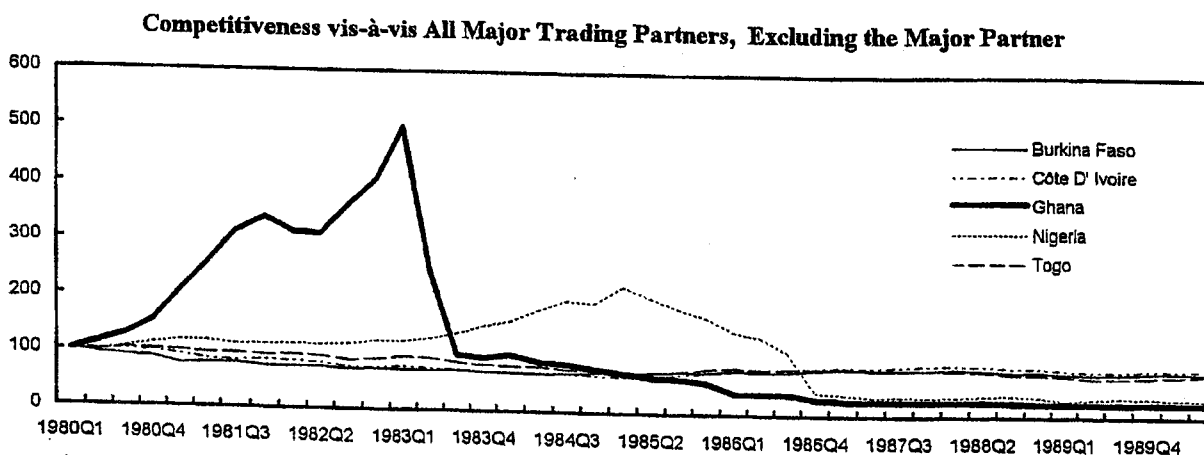
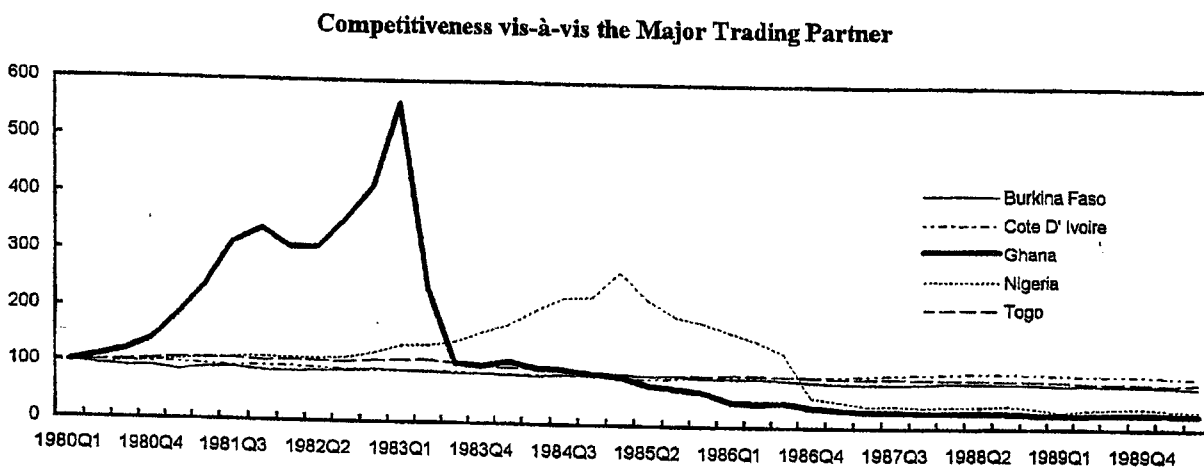
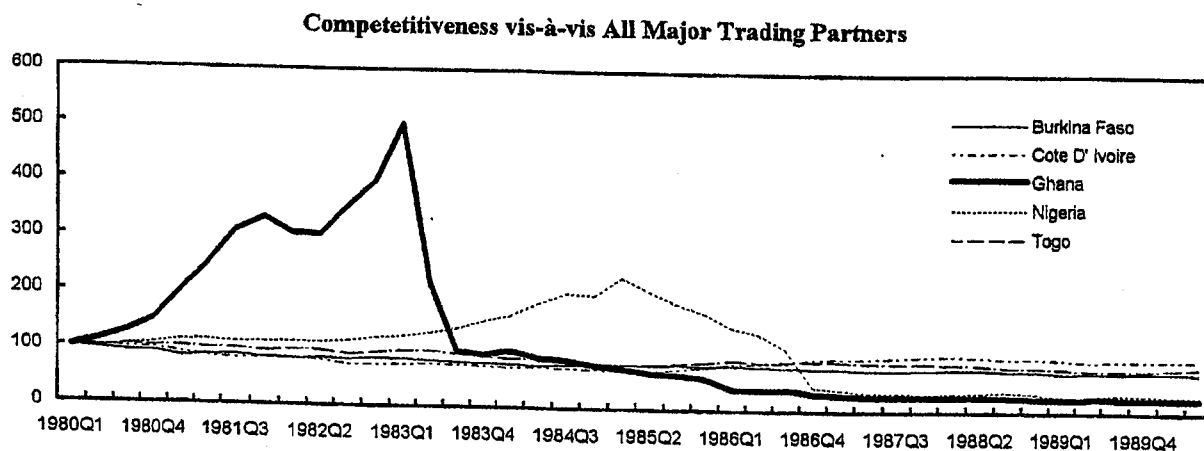
95. Ghana's competitiveness vis-à-vis its major trading partners deteriorated markedly from the first quarter of 1980 to the first quarter of 1983, while the competitiveness of its neighboring countries remained relatively stable, with the exception of Nigeria. This tendency was reversed between the second quarter of 1983 (Figure 11, top panel) and the second quarter of 1985, when Ghana began to gain competitiveness with respect to all other countries, a trend that continued until the second quarter of 1990.

96. After the conclusion of the exchange system reform in 1990, Ghana continued to gain in competitiveness with respect to all other countries, except Nigeria, until the first quarter of 1994, when the CFA devalued (Figure 12, top panel). Afterwards, Ghana's competitiveness followed a behavior close to that of the CFA countries considered in the study (Burkina Faso, Côte d'Ivoire, and Togo), while Nigeria's competitiveness deteriorated markedly. From the third quarter of 1990 to the second quarter of 1998, Ghana's real effective exchange rate followed closely the pattern of the real effective exchange rate of the CFA countries, although after the devaluation of the CFA it appreciated slightly faster.

97. Ghana's competitiveness against its major partner country, the United Kingdom, shows a similar pattern, over the period 1980-89 (Figure 11, middle panel). Overall, from the third quarter of 1990 to the second quarter of 1998, Ghana's competitiveness remained broadly unchanged, after a slight improvement through the first quarter of 1994, followed by a slight deterioration that continued until the first half of 1998 (Figure 12, middle panel). In the third quarter of 1992, Ghana's competitiveness experienced a slump, as the pound sterling devaluated and exited from the European Monetary System. Over the period under consideration, Ghana's bilateral real effective exchange rate roughly followed the bilateral real effective exchange rates of the CFA countries, Burkina Faso, Côte d'Ivoire, and Togo.

³³ The major trading partner of Ghana, is the United Kingdom, which accounts for almost a 17 percent weight in the effective exchange rate. The major trading partner of Burkina Faso, Côte d'Ivoire, and Togo is France; for Nigeria is the United Kingdom.

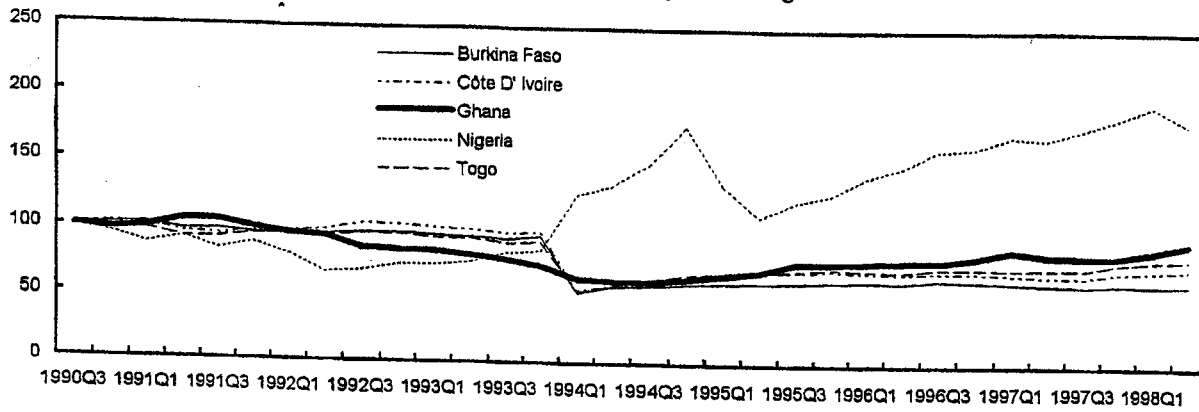
Figure 11. Ghana: Competitiveness with Neighboring Countries, 1980Q1-1990Q2
(Index, 1980Q1=100)



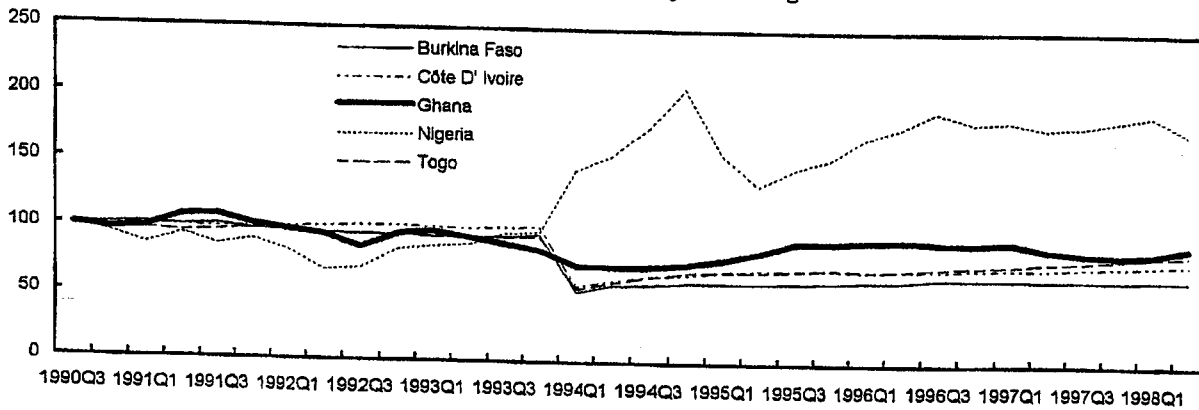
Source: IMF, Information Notice System.

Figure 12. Ghana: Competitiveness with Neighboring Countries, 1990Q3-1998Q2
(Index, 1990Q3=100)

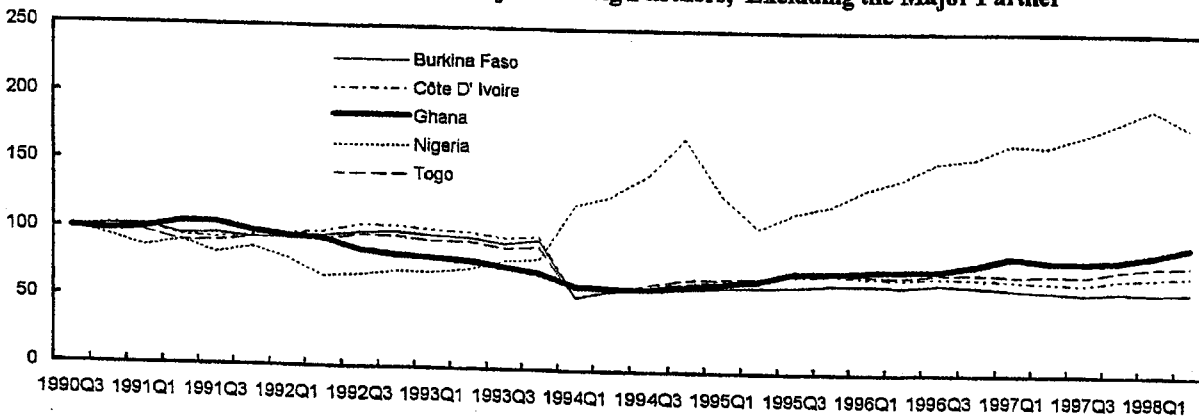
Competitiveness vis-à-vis All Major Trading Partners



Competitiveness vis-à-vis the Major Trading Partner



Competitiveness vis-à-vis All Major Trading Partners, Excluding the Major Partner



Source: IMF, Information Notice System.

98. Ghana's competitiveness against its other major trading partners, mostly the European Union, the United States, and Japan, also showed a deterioration from 1980 to the end of 1983, followed by a markedly gain through the beginning of 1990 (Figure 11, bottom panel). From the third quarter of 1990 to the second quarter of 1998, Ghana's competitiveness followed smoothly the behavior of the CFA countries under consideration (Figure 12, bottom panel). Overall, Ghana's competitiveness remained quite stable from 1990 to the first half of 1998, with its level in the second quarter of 1998 very close to its 1990 level. However, while from 1990 to the first half of 1994, Ghana's competitiveness showed a tendency to improve, from the second half of 1994 to the first half of 1998, there seems to have been a slight but continuous deterioration of Ghana's competitiveness.

E. Conclusions

99. On the basis of a set of price (consumer, GDP, export, and import price indices) and unit labor cost indicators, Ghana's competitiveness deteriorated sharply from 1980 to 1982, followed by an improvement through 1994. The evidence for the three year 1995-97 is mixed. The REERs based on the CPI and the GDP deflator, and on unit labor costs indicate an appreciation, while the REER based on export and import deflators shows a depreciation. Different factors, as reflected by the different indicators, can account for this mixed evidence, including the fact the Ghana's import and export deflators declined faster than the GDP deflator, the CPI, and ULCI. This faster decline, in the case of the export deflator, mainly reflects the fact that Ghana, whose main exports are commodities like cocoa and gold, is a price taker. In that case, the REER based on the export deflator could lead to misleading results. Compared with its neighboring countries, Ghana's competitiveness shows a similar, although smoother, pattern as the CFA countries Burkina Faso, Côte d'Ivoire, and Togo from the third quarter of 1990 to the second quarter of 1998, although after the devaluation of the CFA its tendency to appreciate was slightly steeper. Overall, Ghana's competitiveness remained quite stable from 1990 to the first half of 1998, with its level in the second quarter of 1998 very close to its 1990 level. However, while from 1990 to the first half of 1994, Ghana's competitiveness improved, from the second half of 1994 to the first half of 1998 most indicators point to a deterioration.

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V. TRENDS IN COCOA WORLD MARKETS AND OPTIONS TO STRENGTHEN GHANA'S COMPETITIVE POSITION³⁴

A. Introduction

100. In the 1964/65 crop season, Ghana's cocoa production reached its peak at 581,000 metric tons. At that time, Ghana was the largest world producer of cocoa accounting for 38 percent of world production. Since then, Ghana's cocoa production plummeted, bottoming in 1983/84 when production was only 160,000 metric tons and market share was 10 percent. From 1983/84 onwards, Ghana's production began to recover, although in 1997/98 it was still two-thirds of its 1964/65 peak. This chapter summarizes world cocoa trends in the last decade, as well as the reforms being implemented by Ghana to modernize its cocoa sector and avoid a further erosion of its market share. The chapter focuses in particular on the similarities and differences with Côte d'Ivoire, Ghana's neighbor and the largest world producer of cocoa. The paper concludes with a discussion of next steps and options, which the Ghana authorities will need to consider to ensure the long-run success of its cocoa industry.

B. Cocoa Trends in the Last Decade³⁵

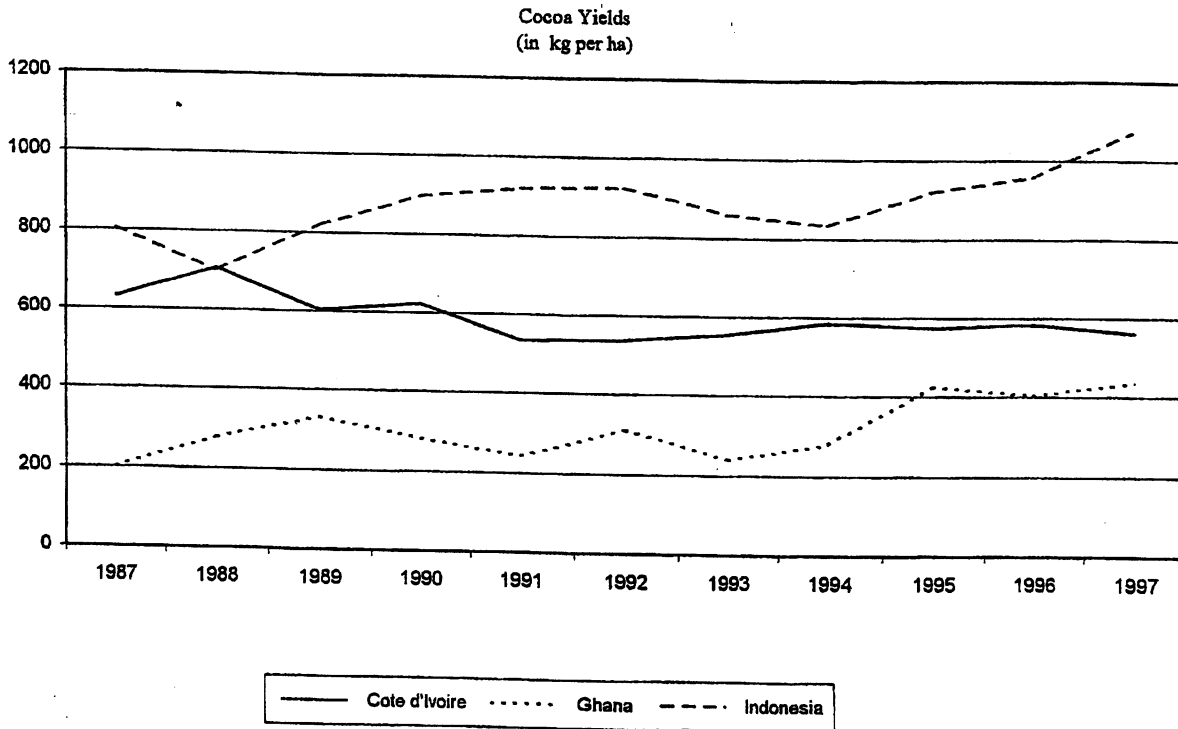
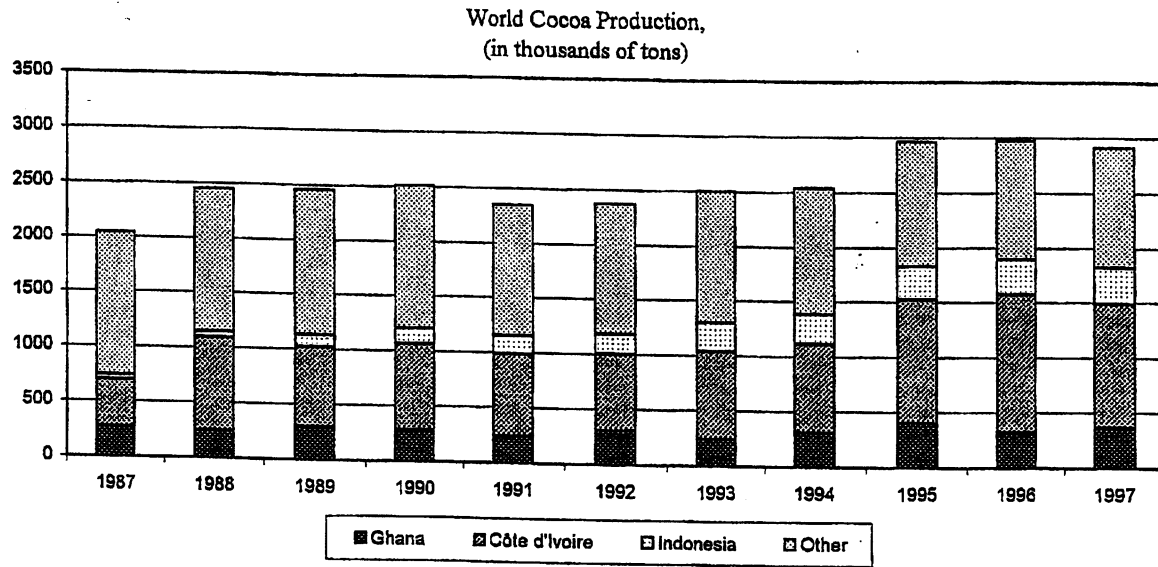
101. During the 1987-97 decade, world cocoa production had a generally upward trend increasing on average by about 4 percent a year (Figure 13). Ghana's production followed closely world trends, and therefore Ghana's share of world production remained unchanged at 13 percent. The same is not true, however, of Ghana's main competitors. Côte d'Ivoire, the world largest cocoa producer, saw its share of world production increase steadily from 21 percent in 1987 to 38 percent in 1997 (Figure 14 and Table 15). Indonesia, the fastest growing cocoa producer during the decade, expanded its production at an average annual rate of 21 percent, increasing its share of production from 2 percent in 1987 to 11 percent in 1997.

102. The rapid increase in the market shares of Côte d'Ivoire and Indonesia during 1987-97 is remarkable because international price developments were not particularly favorable during the period. World cocoa prices tend to have ten-year cycles with recent troughs taking place in the second year of each decade. Therefore, the first half of the 1987-97 decade was one of declining prices, while the second half benefited from increasing prices (Figure 15). In spite of the upward price trends since 1992, by 1997 world cocoa prices were still 15-19 percent below their levels in 1987. Clearly, factors other than world prices were playing an important role in sustaining the rapid expansion of the cocoa production in Côte d'Ivoire and Indonesia, while maintaining Ghana's growth barely in line with world production.

³⁴Prepared by Tatsuya Kanai, Anthony Pellechio, and Sérgio Pereira Leite.

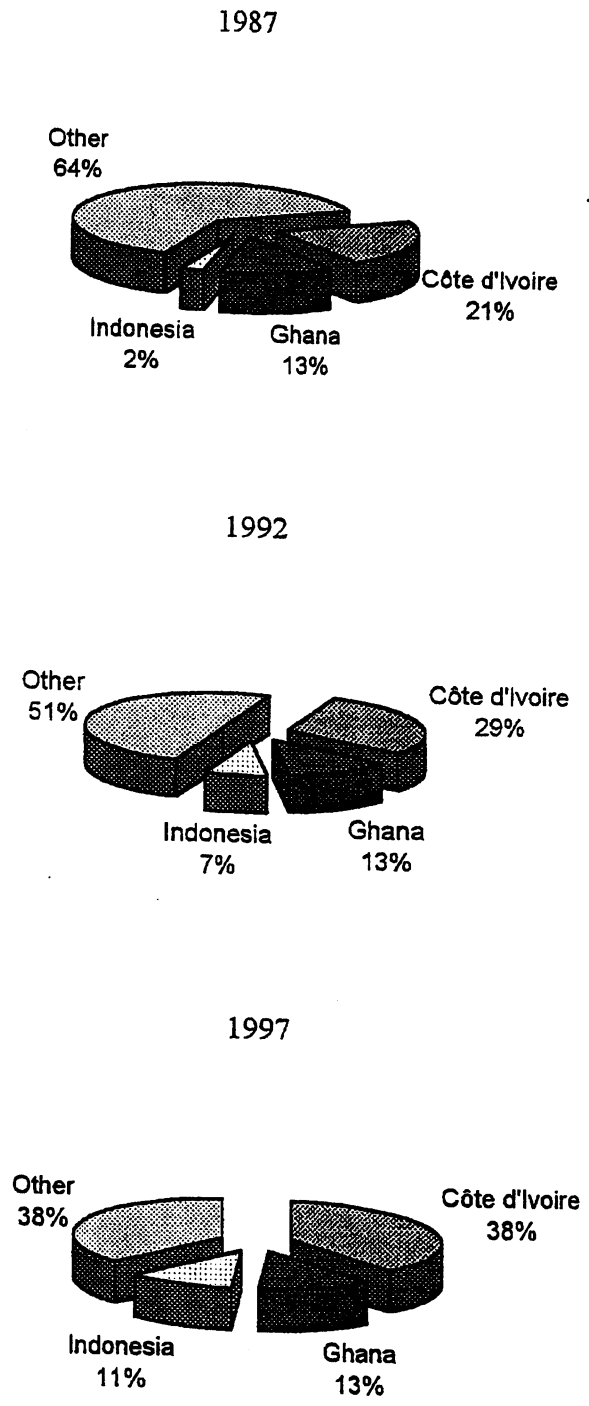
³⁵For an overview of world trends in consumption, commercial production, and marketing, see Amoah (1996).

Figure 13. World Cocoa Trends , 1987-97



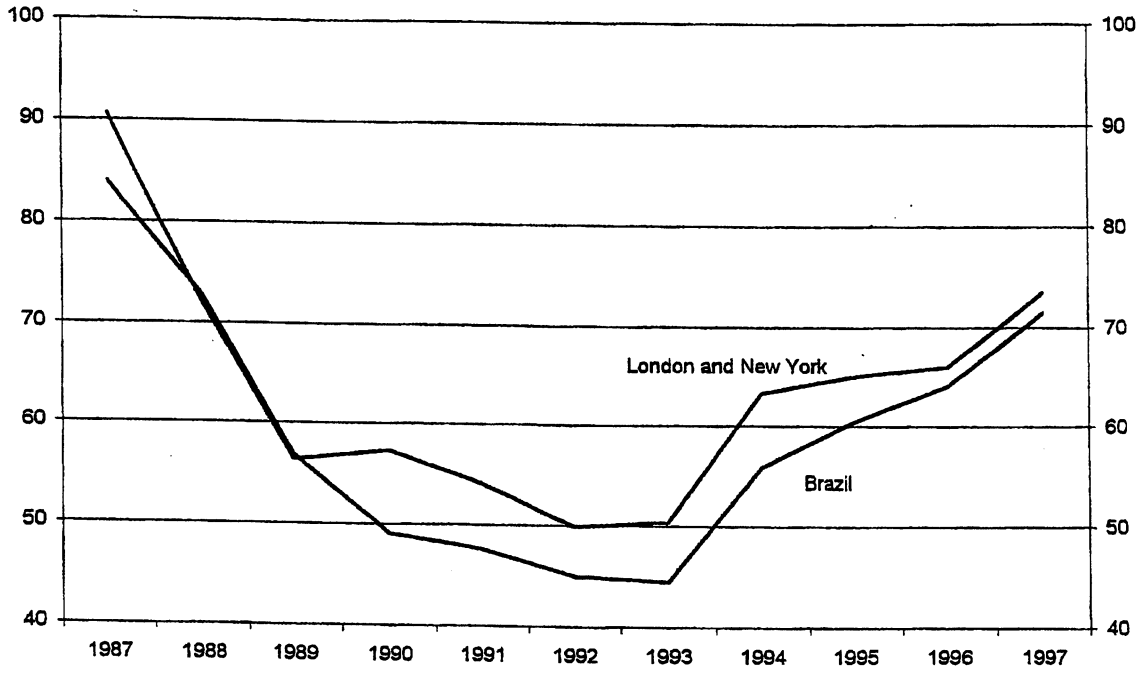
Source: FAO Yearbook.

Figure 14: Share of World Cocoa Production



Source: FAO Yearbook.

Figure 15. World Cocoa Prices, 1987-97
(In U.S. cents per pound)



Source: IMF, International Financial Statistics

Table 15. World Cocoa Production, 1987-1997

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
(In thousands of metric tons)											
Production	2,044	2,452	2,460	2,511	2,347	2,373	2,506	2,538	2,962	2,978	2,918
Côte d'Ivoire	427	849	725	781	747	697	804	809	1,120	1,254	1,119
Ghana	268	247	300	284	243	312	240	309	404	323	370
Indonesia	50	49	111	142	169	175	258	270	305	318	333
Brazil	329	392	393	356	321	329	341	330	296	257	293
Malaysia	190	227	225	247	230	220	220	177	131	120	120
(In percent)											
Share of world production	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Côte d'Ivoire	20.89	34.62	29.47	31.10	31.83	29.37	32.08	31.88	37.81	42.11	38.35
Ghana	13.11	10.07	12.20	11.31	10.35	13.15	9.58	12.17	13.64	10.85	12.68
Indonesia	2.45	2.00	4.51	5.66	7.20	7.37	10.30	10.64	10.30	10.68	11.41
Brazil	16.10	15.99	15.98	14.18	13.68	13.86	13.61	13.00	9.99	8.63	10.04
Malaysia	9.30	9.26	9.15	9.84	9.80	9.27	8.78	6.97	4.42	4.03	4.11
(In kg per hectare)											
World's average yield	388	448	446	473	429	435	442	441	481	484	483
Côte d'Ivoire	632	707	604	624	534	536	554	584	574	583	560
Ghana	202	278	333	284	243	312	240	281	425	403	435
Indonesia	806	700	818	896	920	925	861	833	919	957	1,074
Brazil	507	559	595	536	481	449	464	473	402	376	404
Malaysia	1,024	975	855	830	711	629	723	661	626	597	609
(In U.S. cents per pound)											
World prices											
Brazil	83.96	72.68	56.85	49.07	47.54	44.99	44.47	55.91	60.46	64.07	71.40
London and New York	90.62	71.84	56.34	57.32	54.1	49.87	50.41	63.31	64.98	66.01	73.43
(In U.S. dollar per metric ton)											
Export price 1/											
Côte d'Ivoire	2,177	2,008	1,800	978	965	1,099	1,400	1,395	1,301	1,250	1,387
Ghana	2,102	1,490	1,309	1,290	1,237	1,000	950	1,238	1,522	1,374	1,473
(In U.S. dollars per metric ton)											
Producer price 1/											
Côte d'Ivoire	1,339	1,282	1,308	717	740	722	430	609	631	572	763
Ghana	699	634	584	625	542	432	317	561	739	668	799
(In percent)											
Distribution of f.o.b. export revenue 1/											
Côte d'Ivoire	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Producers	61.49	63.84	72.64	73.37	76.63	65.70	30.70	43.62	48.47	45.71	55.00
Marketing costs	26.53	23.35	13.48	12.55	21.03	20.34	33.73	22.66	20.05	20.74	18.36
Taxes	11.98	12.82	13.88	14.09	2.34	13.96	35.57	33.72	31.48	33.54	26.64
Ghana	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Producers	33.25	42.56	44.62	48.49	43.79	43.23	33.36	45.32	48.56	48.62	54.26
Marketing costs	43.57	27.65	28.31	27.87	41.67	33.40	19.36	20.71	16.26	19.50	19.58
Taxes	23.18	29.79	27.07	23.64	14.55	23.36	47.28	33.97	35.18	31.89	26.16

Source: FAO Yearbook; International Financial Statistics; and data provided by the Ghanaian and Ivoirien authorities.

1/ The data is for the crop year beginning in the year reported at the top of each column.

2/ Includes stabilization margins.

103. While cocoa production has given rise to many econometric studies, it is not easy to identify precisely the factors behind the relative expansion in cocoa production during the last decade. Price effects, for example tend to affect production with long delays because of the time it takes for a cocoa tree to begin production. Moreover, a cocoa tree once it reaches maturity it will continue to produce even when given only minimal care. Comparative advantage in production is likely to play a role in making cocoa production more profitable in a country than in another. Data on cocoa yield per hectare show that during 1987-97 Indonesia and Côte d'Ivoire had yields per hectare that were on average 2 to 3 times higher than those in Ghana (Figure 13). These differences are explained mostly by the use of high yield hybrid varieties, but also by better husbandry.³⁶

104. However, higher yields are no guarantee of success in world cocoa markets and by themselves can not explain why the production in certain countries had grown faster than in others. Malaysia and Brazil have yields per hectare that are close to those in Indonesia and Côte d'Ivoire, respectively, but have lost significant market share during this decade (from 25 percent of world production in 1987 to 14 percent in 1997). The main problem in these countries seems to have been a profit squeeze resulting from declining cocoa prices and competition from alternative opportunities for the use of the factors of production, particularly labor, that had been employed in cocoa production. The outbreak of cocoa diseases also played a role in the decline of cocoa production in Brazil and Malaysia. Nevertheless, available evidence points to the importance of underlying economic incentives—such as production costs, domestic producer prices, and profitability of alternative crops—in determining production levels, albeit not necessarily in the short term.

105. Assuming that prices of cocoa are determined in world markets, and abstracting differences in quality, the nominal price paid to cocoa farmers depend mainly on marketing, extension services, financial costs, and taxes.³⁷ Data for 1995 indicate that different countries chose to distribute cocoa proceeds in markedly different ways among producer payments, marketing costs, and taxes (Table 16). The producer share in cocoa revenue is much lower in Côte d'Ivoire and Ghana than in any of the other producers listed below, all of which have more liberal cocoa marketing systems. Moreover, both marketing costs and taxes were higher in these two countries than in any of the other five countries. The next section compares

³⁶Part of the yield differences between neighboring countries, such as Ghana and Côte d'Ivoire, could be explained by smuggling of cocoa from one country to the other in response to differences in producer prices (which raise apparent yields in the importing country while reducing apparent yields in the exporting country).

³⁷Other important factors are exchange rates and domestic prices, as they determine how much the cocoa farmer receives in terms of other goods he can purchase. For simplicity's sake, marketing costs will henceforth encompass marketing, extension services and financial costs.

production incentives, marketing arrangements and other production characteristics between Côte d'Ivoire and Ghana in more detail.

C. Comparisons with Côte d'Ivoire³⁸

106. Côte d'Ivoire and Ghana are neighboring countries, but have different marketing systems, although in both countries the government still has a predominant role in managing the system.

Table 16. Distribution of Cocoa Export Proceeds, 1995
(in percent)

Country	Share of producer payments in export proceeds	Share of marketing and financial costs in export proceeds	Share of taxes in export proceeds
Brazil	72	10	17
Cameroon	75	10	15
Côte d'Ivoire	43	23	34
Ghana	45	21	34
Indonesia	78	12	10
Malaysia	91	9	0
Nigeria	88	12	0

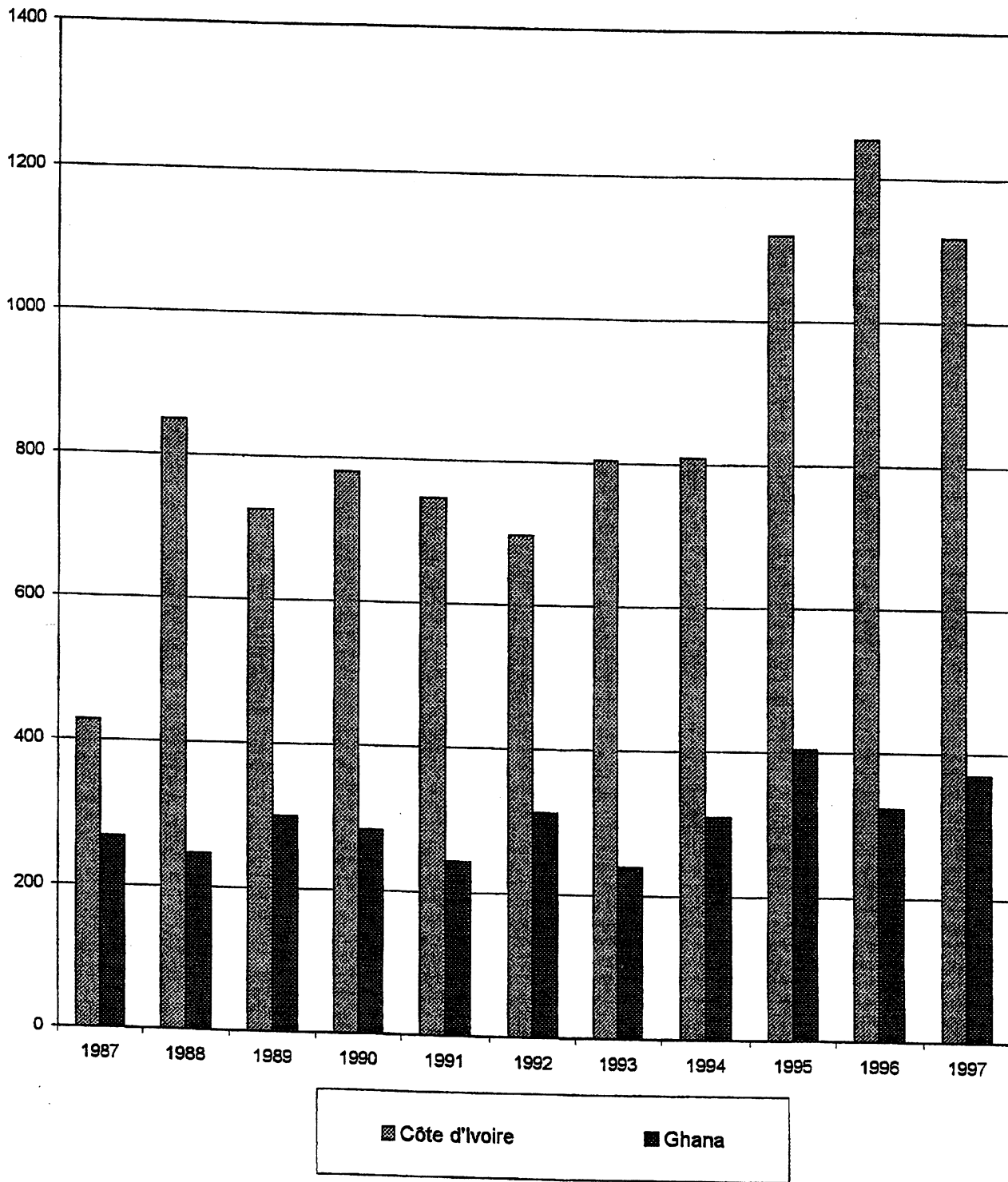
Source: Varangis and Schreiber (1996); and Fund staff estimates for Côte d'Ivoire and Ghana.

107. Côte d'Ivoire's cocoa production increased at an average annual rate of 10 percent during 1987-97; while Ghana's production increased at an average annual rate of only 3 percent only during the same period. As Figure 16 shows, marked changes in Côte d'Ivoire's production took place in 1988 and in 1995 and explain much of the performance for the decade. The increase in 1988 seems to have its origins earlier in the eighties, when higher producer prices and government incentives convinced Ivoirien farmers to use higher yielding hybrid varieties. Output tended to stagnate in the first half of the nineties, as an overvalued exchange rate and sharply lower farmgate prices eroded producer incentives. The CFA devaluation and rising world prices for cocoa reinvigorated production in the 1995/96 season.

108. Ghana's production fell dramatically in the seventies and the first half of the 1980s owing to excessive taxation, and misguided economic policies. For example, in the 1983/84

³⁸For additional information on Côte d'Ivoire's cocoa developments, see IMF (1998).

Figure 16. Côte d'Ivoire and Ghana: Production Trends, 1987-98
(In thousands of metric tons)



Sources: FAO Yearbook

crop season, the share of taxes in cocoa export revenue was as high as 44 percent. From 1986 onward, however, Ghana's production has had a steady, if unspectacular growth, helped by policy reforms aimed at restoring macroeconomic stability and farmers' incentives (see Section D below).

109. Figure 17 compares export and producer prices between Côte d'Ivoire and Ghana during the period 1987/88-1997/98. The comparison is subject to some uncertainty because Côte d'Ivoire's cocoa export proceeds were only available in CFA francs and their conversion to US dollars depends on the exchange rate used. For this study, it was assumed that $\frac{1}{3}$ of the crop was exported in a calendar year and $\frac{2}{3}$ in the next calendar year; the exchange rate used took this factor into consideration. Two main conclusions can be reached from these comparisons.

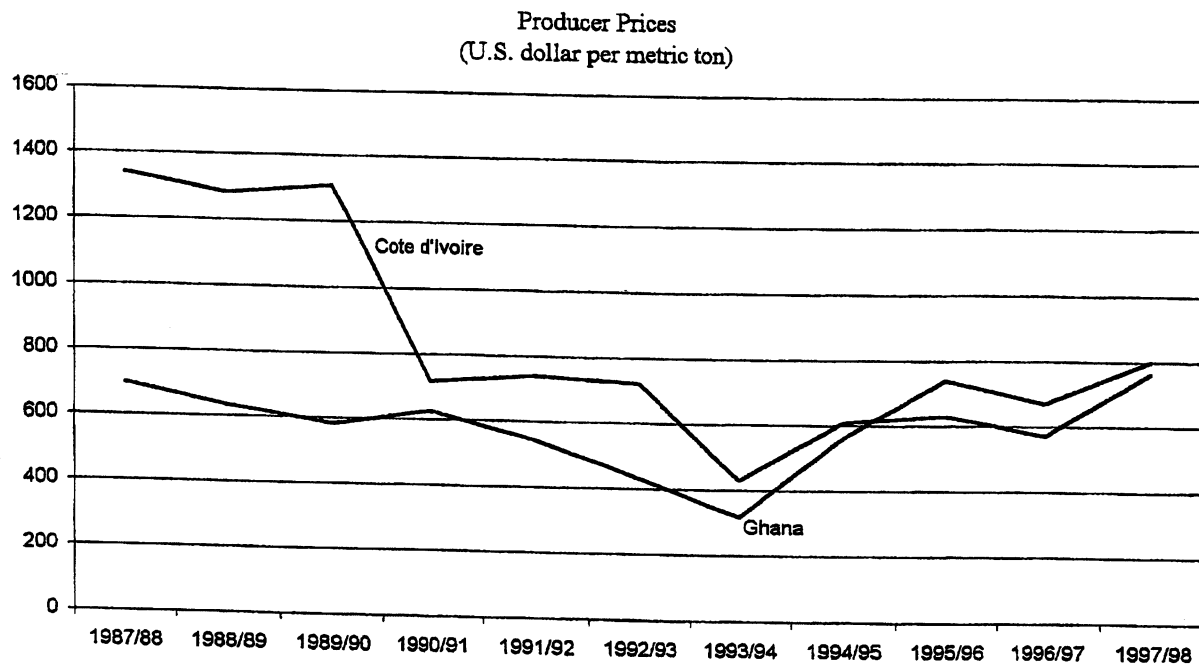
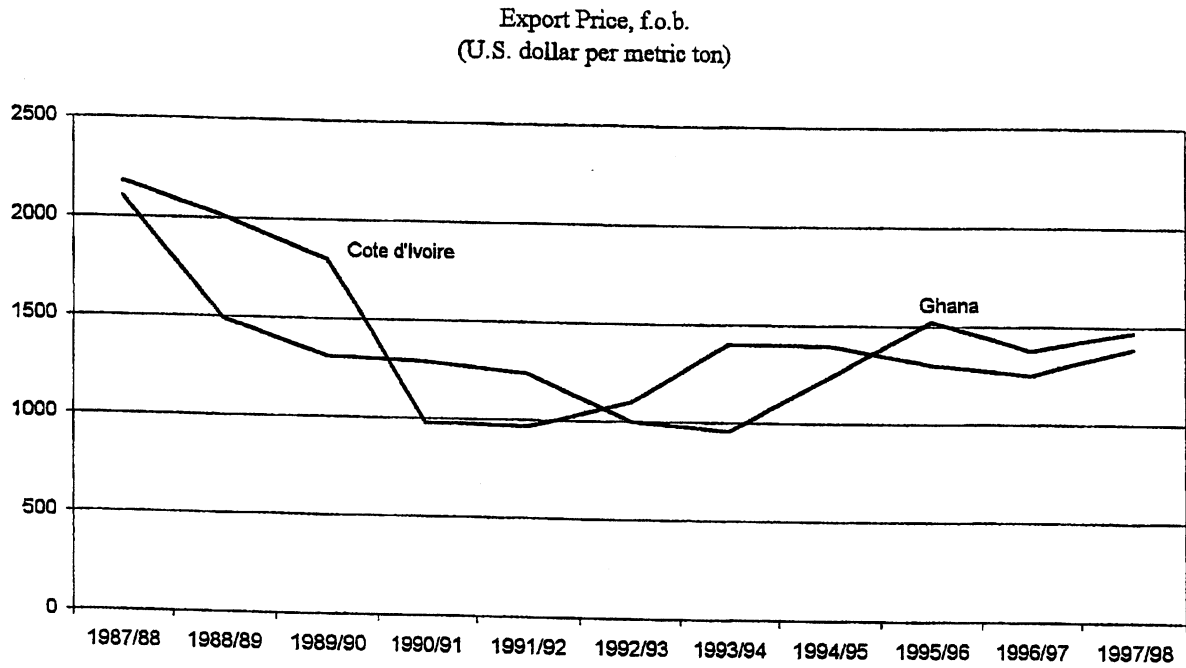
110. First, despite the premium that Ghana's cocoa is supposed to command in world markets, the average price obtained by Côte d'Ivoire was often higher than that of Ghana in the last decade. This result is surprising, but may be the result of better timing of cocoa sales, or better ability to negotiate high prices owing to Côte d'Ivoire's higher market share. It raises doubts about the cost-effectiveness of Ghana's stringent quality controls, and about Ghana's strategy to sell cocoa for delivery later in the crop season—assuming that this is done to fetch higher export prices.

111. Second, producer prices in Ghana have been consistently below those in Côte d'Ivoire during the 1987-95 period (Figure 17), despite the fact that Ghana's cocoa normally fetches a premium in world cocoa markets on account of its higher quality.³⁹ Only since then has Ghana's producer prices exceeded those in Côte d'Ivoire. It is worth mentioning, however, that even in recent years it is not clear that the higher producer prices translate into higher incentives to produce cocoa in Ghana than in Côte d'Ivoire. Costs of production are likely to be higher in Ghana than in Côte d'Ivoire, because Cocobod's insistence on quality control forces farmers to invest more time in readying the crop for purchase. Further, Ghana may have been disadvantaged by the pattern of exporting cocoa in smaller batches later in the season with the result that higher storage costs have to be paid. Since yields are lower and quality controls stricter in Ghana, cocoa farmers there may still have lower profits per unit sold than in Côte d'Ivoire.

112. In a recent study, Aleš Bulíř (1998) showed that the cocoa production trends in Ghana can be reasonably explained by price incentives: the real international price for cocoa, the real producer price, and the smuggling incentive, which is measured by the differential between the Ghanaian and Ivoirien producer prices in US dollar terms (see Box 2). These results suggest that an important part of the explanation for relative production trends may be found in

³⁹This premium has, however, tended to decline in recent years as processors develop new techniques to compensate for quality differences in cocoa beans.

Figure 17. Cocoa Prices, 1987/88-97/98



Sources: Data provided by the Ghanaian and the Ivoirien authorities and staff estimates

Box 2 . Cocoa Production and Tax Revenues

From the early 1960s to the early 1980s, the officially recorded production of cocoa in Ghana declined by 60 percent. Aleš Bulíř (1998) tests whether price incentives could explain this trend. He uses three variables to measure price incentives: the real international price, the real producer price, and the differential between Ghanaian and Ivoirien producer prices in US dollar terms (the smuggling incentive). He concludes that, while there is little evidence of domestic short-term substitution between cocoa and other crops, the real international price and the smuggling incentive contribute significantly to explain cocoa production in Ghana.

Other points made in the paper:

- The taxation of cocoa producers in Ghana has been generally higher than in most other cocoa producing countries.
- The producer-international price ratio has been generally below the levels in other producer countries; producer prices in Brazil and Malaysia and, up to 1993, in Cameroon and Côte d'Ivoire averaged 60-80 percent of international prices.
- Bulíř concludes that lower producer prices will only temporarily boost government revenue. The revenue impact of lower producer prices dissipates completely after two years; after that, government revenue will decline from its initial level as supply continues to drop.
- If the farmers' share of international price stabilizes in 1996-2000 at 55 percent (compared with a baseline scenario in which the farmers' share stabilizes at 50 percent), and assuming the smuggling incentive is zero, then, *ceteris paribus*, the supply of cocoa would rise to 440,000 metric tons in 2000 from 320,000 in 1995. As a result government revenue would increase by about 15 percent between 1996 and 2000. However, too high an increase in the producer price would not raise supply by much in the medium term and would be detrimental to government finances. For example, raising the farmers' share to 65 percent would increase the annual supply only to about 460,000 metric tons, and government revenue would decline by 30 percent when compared with the baseline scenario.
- The speed of adjustment to long-run price changes is high: more than one-third of the deviation from the long-term equilibrium in the previous year translates into the current supply decisions made by farmers.

Source: Bulíř (1998).

differences in real producer prices and, in the case of neighboring countries such as Ghana and Côte d'Ivoire, in relative producer prices.

113. Since producer prices tend to be higher in Côte d'Ivoire than in Ghana, Ghanaian farmers have diverted some of their crop across the border to Côte d'Ivoire helping boost its neighbors' production statistics. Bulíř (1998) estimated that smuggling may have reduced Ghana's officially recorded supply of cocoa by as much as 40,000-60,000 metric tons, while similarly raising Côte d'Ivoire's supply. Ghana's reluctance to increase domestic producer prices is explained by its dependence on cocoa taxes for a significant share of fiscal revenue

and the fact that the Cocobod would need to streamline its operations and shed personnel, if it were to reduce its marketing costs. Table 17 provides an overview of the key differences between the marketing arrangements used in Côte d'Ivoire and Ghana during 1987-97.

D. Ghana Cocoa Reforms, 1987-97

114. The government has pursued reforms since the mid-1980s to reverse the decline in cocoa production that reached its all-time low in 1983/84. To encourage recovery, cocoa producer prices were raised by about 185 percent between the 1983/84 and the 1990/91 crop years, while improvements were made in the availability of inputs and extension services. Real price increases were achieved through a steady rise in the share of the cocoa export price paid to producers, specifically, from 25 percent in the 1986/87 crop year to 56 percent in the 1998/99 crop year. Moreover, the Ghanaian authorities seem to be following closely developments in cocoa marketing across the border in Côte d'Ivoire and making sure that smuggling incentives are minimized. In fact, since 1994/95 crop season, the distribution of cocoa export revenue among producers receipts, marketing costs, and taxes has been almost exactly the same as in Côte d'Ivoire (Figure 18).

115. In order to achieve the targeted increase in the farmers' share in cocoa revenue, the government had to take steps to upgrade the efficiency of the cocoa marketing and distribution system, including reductions in the operating costs of the Cocobod. In 1987, the staff of the Cocobod was reduced by nearly 12,000, in part by limiting its role in road haulage and construction and maintenance of cocoa feeder roads. By 1990, the share of haulage provided by the Cocobod was reduced to no more than 10 percent, with the private sector and railways increasing their participation. Simultaneously, the Cocobod embarked on a program to further reduce its staff during 1992-94, resulting in a reduction of its labor force by about 5,000. To further help reduce marketing costs—thereby allowing producers' share of cocoa revenue to rise—the government in March 1992 permitted private traders to compete with the Produce Buying Company (PBC) in the purchasing of cocoa. Nevertheless, the PBC still accounts for about 70 percent of domestic crop purchases.

Table 17 . Cocoa Marketing Systems in Côte d'Ivoire and Ghana

Feature	Côte d'Ivoire	Ghana
Key agency	<i>Caisse de Stabilization (CAISTAB)</i>	Cocoa Board (Cocobod)
Type of marketing arrangement	Price stabilization fund	Marketing board
Harvest season	Major crop is in October-January. Most exports take place from November through February	Major crop is in October-March. Most exports take place during January-September. Stocks are held for longer periods than in Côte d'Ivoire, increasing costs.
Domestic purchase	Carried out by 700 licensed traders within a cost and price structure established by CAISTAB at the beginning of each crop year (including indicative producer prices).	Cocobod, through its subsidiary, the Produce Buying Company (PBC); since March 1992, private traders were also allowed to purchase the crop from farmers, but have to sell it to the Cocobod at a pre-agreed price. PBC purchased about 70 percent of the crop in 1996/97.
Domestic price determination	Government, through CAISTAB; uses a price/margin structure for each stage of the marketing chain (<i>barème</i>)	Government, based on recommendation by the Producer Price Review Committee, which consists of representatives from Cocobod, government, licensed buying companies and members of the farmers' association.
Taxation	About 26.6 percent of cocoa revenue in 1997/98 (including stabilization margins).	About 26.2 percent of cocoa revenue in 1997/98
Marketing costs and margins	On average, 21.2 percent of cocoa revenue in 1987-97	On average, 27.1 percent of cocoa revenue in 1987-97
Producer prices	On average 57.9 percent of cocoa revenue in 1987-97. For 1997/98, producer prices were 55 percent of cocoa revenue.	On average 44.2 percent of cocoa revenue in 1987-97. For 1997/98, producer prices were 54.3 percent of cocoa revenue.

Table 17 . Cocoa Marketing Systems in Côte d'Ivoire and Ghana

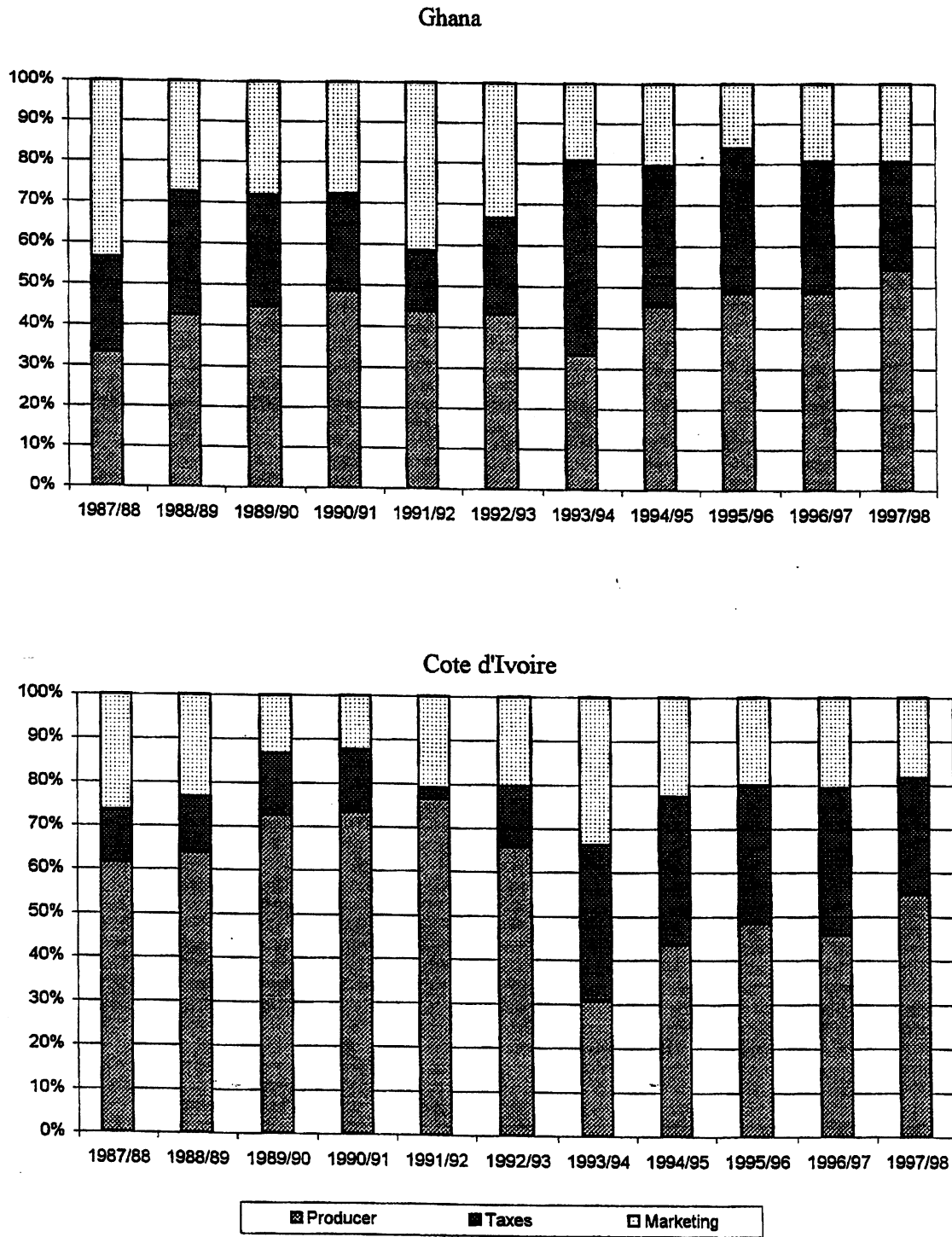
Feature	Côte d'Ivoire	Ghana
Stabilization fund	CAISTAB sets aside resources resulting from better-than-expected export revenue and use it to moderate domestic price declines in years of declining world prices.	Some stabilization could be achieved since the cocoa tax is the residual between the export revenue and all domestic costs. In practice, the main concern has been to stabilize fiscal revenue.
Exports	Five large and about 35 smaller licensed exporters; CAISTAB auctions off export rights daily using a computer-aided system; CAISTAB directly negotiates and sells up to 15 percent of the crop.	The Cocobod, through its subsidiary the Cocoa Marketing Company (CMC) negotiates and sells all exports of cocoa. CMC has modest operating costs and a good reputation in world markets. Cocoa exports are often sold forward.
Transport	CAISTAB used to apply a system of transport cost equalization under which transporters were reimbursed on a ton-kilometer basis. However, since the 1995/96 crop, CAISTAB no longer administers transport costs, which are paid by traders directly (the transport costs, as reflected in the <i>barème</i> , should on average cover the actual costs)	Done by PBC.
Quality control	CAISTAB is responsible for bean quality control at the export stage, but standards are less strict than in Ghana. Quality has tended to decline, as traders mix high- and low-quality beans so as to increase shipment volumes and revenues	Cocobod's Quality Control Division is responsible for quality inspection, grading and fumigation both up-country and at the ports. It operates a thorough quality control and grading system that has successfully safeguarded the quality reputation of Ghana's cocoa, albeit at a significant cost.
Financing	Traders are the main source of input financing to farmers. Large traders use their own funds, while smaller traders obtain funds from large exporters. Exporters rely on commercial banks for pre-export finance.	Crop and export financing is arranged through the Cocobod, which uses syndicated foreign loans.

Table 17 . Cocoa Marketing Systems in Côte d'Ivoire and Ghana

Feature	Côte d'Ivoire	Ghana
Domestic processing	There is considerable domestic grinding capacity, currently of the order of about 250,000 tons per year. Domestic processors receive a subsidy of about CFAF 100/kg on beans they process to compensate for the use of low grade beans for domestic processing	In recent years, CMC sales to domestic processing plants have been around 70,000 tons per year, mostly from its mid-crop, but also from the main crop. These sales are made at a discount below the fob price, which is supposed to be the equivalent of CMC's savings when compared with exported beans costs.

Source: Varengis and Schreiber (1996), and IMF staff.

Figure 18. Cocoa Cost Structure, 1987/88-97/98
(In percent of export revenue)



Sources: IMF staff estimates.

116. In 1995, in its request for the current three-year ESAF arrangement, the government signaled its intention to remove the Cocobod's monopoly in cocoa exporting, while retaining its quality control function. A study was commissioned by the government and financed by the World Bank to examine the scope and pace of the cocoa sector reforms (LMC International (1996)). The study recommended a gradual approach to liberalization of cocoa marketing in Ghana. It proposed that the producers' share in export revenue be increased to about 65 percent in two years by withdrawing the Cocobod and its subsidiaries from the domestic purchases of cocoa beans, and by transferring extension services from the Cocobod to the Ministry of Agriculture (and the absorption of these services into the budget). The report claimed that any effort to increase the producers' share beyond 65 percent would require a reduction in cocoa taxes.⁴⁰ It recommended that Cocobod's control of exports be maintained based on the perception that its removal might adversely affect quality control, reliability of deliveries, forward sales, and the predictability of export receipts and taxes.

117. The government has continued moving ahead cautiously toward greater liberalization of the cocoa sector while assessing its options to maintain the competitiveness of Ghana's cocoa. It has agreed to increase the farmers' share in the f.o.b. price of cocoa to 56 percent for the 1998/99 crop, to 58 percent for the 1999/2000 crop and to 60 percent for the 2000/01 crop. It has directed the Cocobod to prepare a two-year program of cost-cutting measures to support at least one half of the intended increase in the producers' share. The PBC will be offered for sale early in 1999 in a manner designed to foster competition in the domestic cocoa purchasing market. The Government is also unifying the extension services of the Cocobod and the Ministry of Agriculture, although costs associated with the reorganization of these services, including retrenchment, remain an obstacle that the government hopes to resolve with World Bank assistance.

E. Next Steps and Conclusions

118. Ghana's cocoa production is growing less than that of its close competitors. Moreover, Ghana remains significantly more dependent on cocoa for foreign exchange earnings and tax revenue than its competitors and, therefore, more vulnerable to errors in its cocoa sector strategy. These factors call for the government to carefully assess its options, design a strategy, and implement it forcefully. The government has indicated that it plans, with World Bank assistance, to conduct a major workshop on cocoa sector reforms in January 1999, with the objective of developing its strategy to deepen the cocoa sector reforms. The workshop will have work groups dealing with issues related to production, marketing, finance and infrastructure, and taxation and pricing.

⁴⁰The report does not explicitly recommend tax reductions, although it states that the optimal tax (that is, the export tax that would maximize the exporting country revenue when faced with an inelastic demand for its exports) would be around 10-15 percent of export revenue. The report implies that any changes in cocoa taxes will need to be decided with an eye on their impact on the budget.

119. Ghana's competitors are continuing their reforms, making it crucial for Ghana to accelerate its own reforms so as to strengthen its competitive position. Building on the reforms undertaken since the early 1990s, Côte d'Ivoire will further liberalize cocoa marketing beginning in October 1999, with the aim of strengthening the role of the private sector and increasing producers' income. The key elements of the reform schedule include the abolition of the indicative producer price, the elimination of the administrative price schedule (*barème*) and the stabilization system, and the liberalization of exports. These reforms are being supported by ongoing efforts to strengthen producer organizations and provide support to young farmers and women to ensure that these groups take full advantage of the liberalized system. The stabilization fund (CAISTAB) will be restructured and its mission will be limited to ensuring quality control, preparing statistics on production and exports, and monitoring marketing and stocks.

120. As LMC International Ltd (1996) states, "Given the weaknesses identified in Ghana's current marketing arrangements, no sustainable argument for maintenance of status quo can be made." There is therefore an urgent need for action in this area. Some tentative conclusions can already be drawn and could serve as a starting point for the deliberations at the forthcoming workshop on cocoa.

121. First, the experience of Ghana's competitors suggests that marketing costs can be reduced from their current level of 14-15 percent of the f.o.b. price to 10 percent. The first priority of the cocoa reforms should therefore be to lower marketing costs rapidly to not more than 10 percent of the f.o.b. price. Further reductions beyond this point would be more difficult to achieve.

122. Second, cocoa taxes are important for fiscal revenue in Ghana, and therefore reductions in cocoa taxes will need to be considered carefully. While initial tax reductions may not have a significant impact on fiscal revenue (see Bulif (1998)), further reductions certainly will. Thus, the timetable for reduction in cocoa export taxes would need to be closely coordinated with other revenue-enhancing tax reforms.

123. Third, quality control has resulted in a premium for Ghanaian cocoa in the world market. However, this premium is declining and is not clear that it would continue to be a net advantage in the future. Quality control is likely to decline with liberalization as it has happened in other countries. Increasingly, importers are carrying out their own tests on the commodities they buy irrespective of official certificates. Therefore, Ghana will need to ponder what changes in quality control procedures it should introduce to ensure that the benefits from quality control exceed its costs.

124. Fourth, Ghana normally ships cocoa later than Côte d'Ivoire. In doing so it incurs higher storage costs. Available evidence seems to indicate that ensuring shorter times between domestic purchases and shipments is likely to result in a net profit for Ghana. Also, there is no

reason why cocoa storage operations should be undertaken by the Cocoa Board. Both these aspects of cocoa marketing need to be re-examined urgently.

125. Fifth, cocoa sales to domestic processors have tended to be below world prices representing an implicit subsidy. There seems to be no justification for this practice. The authorities could discontinue the subsidies and use the savings to increase producers' prices.

126. Sixth, the Cocobod has an arrangement with a large European cocoa processor to process cocoa beans into cocoa liquor, which is then delivered in liquid form to chocolate manufacturers in Europe. This aspect of Ghana's cocoa marketing has been criticized by traders, processors and manufacturers outside Ghana for its lack of transparency, and may need to be reconsidered.⁴¹

127. Seventh, a careful analysis of the advantages and disadvantages of forward sales needs to be made. It is true that it may initially be more difficult to sell cocoa forward in a situation of many exporters. CMC's good reputation as a counter-party is well deserved and it may take time for other Ghanaian cocoa exporters to establish similar reputations. The reduction in the share of the crop sold forward will increase uncertainty for producers, taxes and balance of payment forecasts. These difficulties need to be seen in perspective, however. Most commodity markets are not dominated by forward contracts, and still are able to function effectively.

128. Eighth, Ghana meets its financing needs for cocoa exports and domestic purchases through a syndicated loan in the international market. Liberalization of cocoa exports and marketing would mean that individual exporters and traders will need to find their own financing. Importers are likely to finance most of the exports, but domestic marketing will have to be done through the domestic banking sector. Since domestic banks may need to look for new loans anyway as the fiscal deficit declines, there is no reason to believe that this financing will not be forthcoming. It is true, however, that overall interest costs may be higher in the case of liberalization than under present conditions.

129. Ninth, as Varangis and Schreiber (1996) point out, the government should begin implementing a program to prepare the sector for further reforms. It could provide training of local operators to improve their knowledge of world cocoa markets; it could set up or strengthen professional associations dealing with cocoa trade, including farmers' associations and their management; and it could provide increased market information to all participants in the cocoa economy.

⁴¹Amoah (1998).

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Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates								
A. Central government											
1. Taxes on income and profits											
1.1. Tax on companies											
<p>1.11. Tax on company income Income Tax Decree, 1975 (S.M.C.D. 5); Income Tax (Amendment) Decree, 1977 (S.M.C.D. 129); Income Tax (Amendment) Decree, 1978 (S.M.C.D. 195); Income Tax (Amendment) Act, 1980 (Act 398); Income Tax (Amendment) (No. 2) Act, 1980 (Act 419); Income Tax (Amendments) by Decree P.N.D.C.L. 39, 1982; 61, 1983; 127, 1985; 166, 1986; 177, 183, and 192, 1987; 205, 1988; 222, 1989; 231, 1990; 270, 1991; 303, 1992; and Income Tax Regulations L1252 and L1511.</p>	<p>Domestic and foreign companies operating in Ghana are taxed on taxable income accruing in, derived from, brought into, or received in the country. Taxable income includes net profits, interest, royalties, and rent income of companies formed exclusively for real estate development but excludes dividends from other companies. Prior to 1989, the assessment year ended June 30 and tax was payable annually. Following the 1983 budget, all income tax assessments are on a calendar year basis, payable quarterly in arrears. For tax purposes, net profit is assumed to be not less than 5 percent of turnover unless the company is within its first five years of assessment. However, this is waived with respect to companies engaged in mining or farming, and with 10 consecutive years of assessment, or companies that have maintained adequate books of accounts and submitted reliable records for 10 consecutive years of assessment to the satisfaction of the Commissioner. For domestic subsidiaries of nonresident companies, a further floor to net profits exists in that the subsidiary's share of the consolidated group profits should at least be equal to the subsidiary's share of group turnover.</p>	<p>Exemptions include the income from cocoa farming, income of other agricultural companies during the first five years of operation, and the income of some public enterprises (e.g., Bank of Ghana and COCOBOD). Deductions allowed include expenditures incurred in the production of income, including interest and rent. Losses incurred in farming are offset and carried forward for two years. Since 1995 a loss incurred can be carried forward for the next five years following the year in which the loss was incurred. This provision is effective for manufacturing, real estate, and all enterprises. Insurance companies have no time limit.</p>	<p>The basic tax rate is 35 percent.</p>								
		<p>Initial depreciation allowances: (Percent)</p> <table> <tr> <td>Buildings</td> <td>10</td> </tr> <tr> <td>Agricultural plantations</td> <td>10</td> </tr> <tr> <td>Mining (exploration and capital expenditure)</td> <td>20</td> </tr> <tr> <td>Plant expenditure</td> <td>20</td> </tr> </table>	Buildings	10	Agricultural plantations	10	Mining (exploration and capital expenditure)	20	Plant expenditure	20	
Buildings	10										
Agricultural plantations	10										
Mining (exploration and capital expenditure)	20										
Plant expenditure	20										

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.11 Tax on company income (continued)		<p>Initial depreciation allowances (continued): A further investment allowance of 5 percent is available for capital expenditure by industrial concerns.</p> <p>Annual depreciation allowances: (Percent)</p> <p>Buildings (mining and timber companies) 5 (other) 3 Mining (exploration and capital expenditure) 10 Plant expenditure 7.5-20</p> <p>Investment allowance: Granted at 5 percent to industrial firms for capital capital expenditure on plant and machinery (in the year of investment).</p> <p>A further depreciation allowance of 10 percent is available to companies maintaining a sinking fund for the replacement of plant and buildings in a separate bank account, provided that the accrued addition to the sinking fund exceeds the value of all capital allowances.</p> <p>Companies engaging in non-traditional exports (other than cocoa and coffee beans, timber logs, electricity, unprocessed gold or any other mineral) are subject to a concessionary tax rate of 8 percent.</p>	

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
<p>1.12 Casino tax Casino Revenue Tax Decree, 1973 (N.R.C.D. 200); Gambling Machine Decree, 1973 (N.R.C.D. 174); Casino Revenue Tax (Amendment) Decree, 1974 (N.R.C.D. 267); Gambling Machines (Amendment) Decree, 1974 (N.R.C.D. 276); Casino Revenue Tax (Amendment) Decree, 1976 (S.M.C.D. 45); and Budget 1985.</p>	<p>Tax is levied as an annual license fee on each gambling table and slot machine.</p>	<p>Since 1995, manufacturing companies located outside Accra receive the following rebates: Accra-Tema: No rebate. All other regional capitals: 25 percent of tax liability All other places: 50 percent of tax liability.</p>	<p>The annual license fee is C 150,000 per casino table in Accra, C 80,000 per casino table elsewhere, and C 20,000 per slot machine.</p>
<p>1.2 Taxes on individuals</p>			
<p>1.21 Income tax Income Tax (Amendment) Decree, 1969 (N.L.C.D. 377); Taxation Act, 1970 (Act 330); Taxation (Amendment) (No.2) Act, 1970 (Act 344); Income Tax (Amendment) Act, 1971 (Act 388); Taxation (Amendment) Decree, 1972 (N.R.C.D. 97); (Standard Assessments) Instrument, 1968 (L.I. 590); Income Tax</p>	<p>This tax is payable, subject to the deductions and exemptions noted, on income received by, or accruing to, persons in Ghana.</p> <p>In addition to wages and salaries, income includes profits, nonbank interest receipts, dividends (which are taxed at the source at 10 percent, final tax), royalties, pensions, rental income and payments in kind (other than dental and medical costs).</p>	<p>Exemptions include:</p> <ul style="list-style-type: none"> (a) income derived from cocoa production; (b) income derived from farming for an initial period of 3-10 years; (c) interest on savings accounts; (d) retirement and sickness annuities; (e) armed forces disability pensions; 	

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates														
<p>1.21 Income tax (continued) (Standard Assessments) (Amendment) Instrument, 1977 (L.I. 1120); Income Tax (Amendment) (No. 2) Act, 1981; Income Tax (Amendment) Act, 1983; and Income Tax (Amendment) Acts of 1984, 1985, 1986, 1987, 1988, and 1989; and P.N.D.C.L. 96, 127, 166, 127, 116, 117, and 183.</p>	<p>Standard assessments, now known as quarterly/monthly/daily advance tax payments, are applied on certain categories of small business owners and self-employed professionals in the course of determining their actual liabilities.</p>	<p>(f) widows' and orphans' pensions. Additionally, the income of a wide variety of charitable, educational, religious, and research institutions is exempt.</p>	<table border="1"> <thead> <tr> <th data-bbox="1629 589 1801 675">Taxable Income Nonconsolidated wages</th> <th data-bbox="1818 618 1938 675">Tax rate (in percent)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1629 678 1801 706">First C 318,000</td> <td data-bbox="1898 678 1938 706">Nil</td> </tr> <tr> <td data-bbox="1629 709 1801 737">Next C 522,000</td> <td data-bbox="1898 709 1938 737">5</td> </tr> <tr> <td data-bbox="1629 740 1801 768">Next C 1,080,000</td> <td data-bbox="1898 740 1938 768">10</td> </tr> <tr> <td data-bbox="1629 771 1801 799">Next C 6,480,000</td> <td data-bbox="1898 771 1938 799">15</td> </tr> <tr> <td data-bbox="1629 802 1801 829">Next C 7,600,000</td> <td data-bbox="1898 802 1938 829">25</td> </tr> <tr> <td data-bbox="1629 833 1801 860">Over C 16,000,000</td> <td data-bbox="1898 833 1938 860">35</td> </tr> </tbody> </table>	Taxable Income Nonconsolidated wages	Tax rate (in percent)	First C 318,000	Nil	Next C 522,000	5	Next C 1,080,000	10	Next C 6,480,000	15	Next C 7,600,000	25	Over C 16,000,000	35
Taxable Income Nonconsolidated wages	Tax rate (in percent)																
First C 318,000	Nil																
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Next C 1,080,000	10																
Next C 6,480,000	15																
Next C 7,600,000	25																
Over C 16,000,000	35																

Deductions include a married man's allowance of C 200,000 (also for a married woman with a dependent husband and unmarried men and women with two or more dependent children), social security and provident fund contributions, and life insurance premiums (up to C 240,000 and not exceeding 10 percent of the sum assured). A deduction of C 240,000 per dependent child attending secondary school is provided. A disablement relief of 25 percent of income from self-employment is provided to disabled persons, while self-employed persons above 60 years of age are granted relief amounting to C 300,000 of chargeable profits. Other deductions include 30 percent of rental income as well as rates and mortgage interest relating to the property.

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates							
<p>1.22 Capital gains taxes Capital Gains Tax Decree, 1975 (N.R.C.D. 347) as amended in 1976 (S.M.C.D. 46); Budget 1984 and P.N.D.C.L. 198, 232, and 267.</p>	<p>This tax is levied on realized capital gains from the sale of buildings, businesses, and business assets including goodwill, land, stocks and shares, and other assets determined by the authorities. Realized capital gains are computed as the price received from the asset less the purchase price and allowable deductions.</p>	<p>In addition to deducting the original purchase price of the asset from the realized sum, deductions are allowed for the cost of improvements and alterations. Capital gains arising during a merger, amalgamation, or reorganization of companies are exempt. Capital gains arising out of the disposal of securities of companies listed on the Ghana Stock Exchange are exempt for the first 5 years of the life of the Ghana Stock Exchange.</p>	<p>Tax payable on the assessed capital gain is computed at a flat rate of 5 percent.</p> <p>Any gain up to C 50,000 is exempt.</p>							
<p>2. Social security contributions</p>	<p>Social Security Decree, 1973 (N.R.C.D. 127).</p>	<p>All establishments with five or more employees are required to contribute to the social security and national insurance trust fund. Contributions are based upon each employee's earnings, with contributions from both employer and employee. Employees' contributions are withheld at source. Other employees and self-employed persons may enroll on a voluntary basis.</p>	<p>Enterprises with fewer than five employees are exempt.</p>	<table border="0"> <tr> <td data-bbox="1644 732 1776 789">Contribution by:</td> <td data-bbox="1818 699 1938 789">Percent of employee's basic pay:</td> </tr> <tr> <td data-bbox="1644 797 1745 821">Employer</td> <td data-bbox="1839 797 1892 821">12.5</td> </tr> <tr> <td data-bbox="1644 829 1745 854">Employee</td> <td data-bbox="1850 829 1892 854">5.0</td> </tr> </table>	Contribution by:	Percent of employee's basic pay:	Employer	12.5	Employee	5.0
Contribution by:	Percent of employee's basic pay:									
Employer	12.5									
Employee	5.0									
<p>3. Payroll taxes (other than social security contributions)</p>	<p>3.1 Selective alien employment tax</p>	<p>Selective Alien Employment Decree, 1973 (N.R.C.D. 201); Selective Alien Employment Tax (Amendment) Decree, 1974 (N.R.C.D. 248); Selective Alien Employment Tax (Amendment) (No. 2) Decree, 1974 (N.R.C.D. 268); Budget 1985; P.N.D.C.L. 196.</p>	<p>This tax is levied on both Ghanaian and foreign firms employing expatriate personnel. The tax is not deductible for income tax purposes. Beginning in 1995, the tax is administered by the Ghana Investment Promotion Centre.</p>	<p>Expatriate employees in the following fields are exempt:</p> <ul style="list-style-type: none"> (a) logging and saw milling; (b) fishing; (c) mining; (d) oil prospecting; (e) government departments and statutory corporations; 	<p>Tax is levied at the annual rate of C 500,000 for each expatriate employee.</p>					

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates														
Selective alien employment tax (continued)		(f) manufacturers who have operated in Ghana for less than five years; (g) farming operations; (h) missionaries of religious bodies; (i) employees of hospitals (including clinics and dressing posts) other than government hospitals.															
4. Taxes on property																	
4.1 Death and gift taxes																	
4.11 Gift tax Gift Tax Decree, 1975 (N.R.C.D. 348); and Budget 1984 as amended by P.N.D.C.L. 195 and 233.	This tax is levied on the recipient of gifts of land, buildings, securities, or money according to a graduated rate, which increases with the total open market value of gifts received within any 12-month period.	Asset transfers under a will are exempt, as are gifts between spouses and gifts between a parent and child. Gifts to religious bodies and for charitable or educational purposes are also exempt. Allowable deductions include gifts received up to C 50,000 in value in any 12-month period, provided that the total value of gifts received in the last five years does not exceed C 50,000 in value. Where the five-year total exceeds C 50,000, tax is payable on the balance received in the latest year.	Tax is payable according to a scale which increases with the value of gifts received. <table border="1"> <thead> <tr> <th data-bbox="1650 764 1766 821">Value of Gifts (In cedis)</th> <th data-bbox="1829 764 1955 821">Rate of Tax (Percent)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1717 857 1860 880">0 - 50,000</td> <td data-bbox="1906 857 1944 880">Nil</td> </tr> <tr> <td data-bbox="1661 889 1860 912">50,001 - 250,000</td> <td data-bbox="1906 889 1944 912">5.0</td> </tr> <tr> <td data-bbox="1650 922 1860 945">250,001 - 500,000</td> <td data-bbox="1906 922 1944 945">7.5</td> </tr> <tr> <td data-bbox="1650 954 1860 977">500,001 - 750,000</td> <td data-bbox="1906 954 1944 977">10.0</td> </tr> <tr> <td data-bbox="1650 987 1871 1010">750,001 - 1,000,000</td> <td data-bbox="1906 987 1944 1010">12.5</td> </tr> <tr> <td data-bbox="1650 1019 1839 1042">1,000,001 or more</td> <td data-bbox="1906 1019 1944 1042">15.0</td> </tr> </tbody> </table>	Value of Gifts (In cedis)	Rate of Tax (Percent)	0 - 50,000	Nil	50,001 - 250,000	5.0	250,001 - 500,000	7.5	500,001 - 750,000	10.0	750,001 - 1,000,000	12.5	1,000,001 or more	15.0
Value of Gifts (In cedis)	Rate of Tax (Percent)																
0 - 50,000	Nil																
50,001 - 250,000	5.0																
250,001 - 500,000	7.5																
500,001 - 750,000	10.0																
750,001 - 1,000,000	12.5																
1,000,001 or more	15.0																

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
5. Taxes on goods and services			
5.1 General sales tax			
<p>5.11 Sales tax Sales tax Act, 1965 (No. 257) and Sales Regulations, 1965 (LI 389), as amended through Sales Tax (Amendment) Decree, 1973 (NRCD 196); Sales Tax Exemptions (Amendment) Regulations, 1975 (LI 1026); Sales Tax (fees) (Amendment) Regulation, 1975 (LI 1023); Budget 1985-91.</p>	<p>A single-state sales tax is levied on a wide variety of locally produced and imported goods at the manufacturer's level.</p> <p>Manufacturers who are registered with CEPS may have the Import Sales Tax on Raw Materials deferred.</p>	<p>Exemptions from sales tax include:</p> <ul style="list-style-type: none"> (a) animals, livestock, and poultry produced in Ghana; (b) animals, livestock, and poultry imported for breeding purposes; (c) animal product in its raw state produced in Ghana; (d) agricultural and aquatic food product in its raw state produced in Ghana; (e) seeds, bulbs, rootings, and other forms of propagation; (f) agricultural inputs; (g) fishing equipment and fish caught by Ghanaian-owned vessels; (h) all goods imported or purchased for Missions etc. (i) printed matter (books and newspaper); (j) laboratory equipment for educational purposes and library equipment; (k) machinery; (l) crude oil and hydrocarbon products; and (m) goods for the disabled. 	<p>The sales tax rate is generally 15 percent on concessionary, consumption, and luxury goods. The rates are applied equally on the f.o.b. price on domestically produced goods and on the c.i.f. plus duty value of imports.</p>
<p>Sales Tax Act has been consolidated into: Customs, Excise and Preventive Service (Management) Law, Part IVA and IVB; Customs and Excise (duty rates and other taxes) Law, 1991 (P.N.D.C.L. 262); Budget 1992-96.</p>			
5.2 Excise taxes			
<p>5.21 Tobacco Customs and Excise Tariff, 1973; Cigarettes (Special Tax) Decree, 1976 (S.M.C.D. 40); Cigarettes Special Tax (Amendment) Decree, 1977 (S.M.C.D. 111); Cigarettes (Special Tax Law), 1983 (P.N.D.C.L. 73); Budget 1985-96.</p>	<p>Special duties are applied to tobacco products, both local production and imports.</p>	<p>None.</p>	<p>Tobacco products are taxed at a rate of 170.65 percent of ex factory price and a sales tax of 15 percent.</p>

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.22 Spirits and beer Customs and Excise Tariff, 1973; Beer (Special Tax) Decree, 1975 (N.R.C.D. 342); Beer and Stout (Special Tax) (Amendment) Decree, 1977 (S.M.C.D. 110); 1983 (P.N.D.C.L. 72); Budget 1985-96.	Ad valorem excises are applied to alcoholic beverages.	None.	Ad valorem rates of excise duty applied on the invoice price are: 75.8 percent for bottled beer and Guinness Stout; 25 percent on spirits; and 10 percent on malt. All alcoholic beverages are subject to a sales tax of 15 percent.
5.23 Luxury goods Budget 1995.	Ad valorem excise is applied to domestically manufactured and imported luxury goods.	None.	Ad valorem rate of 15 percent is applied in addition to a sales tax of 15 percent.
5.24 Petroleum products Budget 1987-95.	Specific excises are applied to petroleum products.	None.	Excise duties in cedis per liter vary as follows: Premium 621.50 Kerosene 397.00 Gas oil 567.00
5.25 Other excises	This tax is the domestic counterpart to the cocoa export tax (see 6.21 below) and is levied on the Cocoa Marketing Board's sales of cocoa within Ghana.	None.	The levy is 100 percent duty on all proceeds from domestic cocoa sales by the Cocoa Marketing Board after allowing for the producer price of cocoa and costs of the Board.
5.25.1 Local duty on cocoa Cocoa (Local Duty) Ordinance, 1952; Cocoa Duty Decree, 1973 (N.R.C.D. 168); Cocoa Duty Decree, 1974 (N.R.C.D. 265); and Cocoa Duty (Amendment) Decree, 1977 (S.M.C.D. 112).			
All laws on excise taxes have been consolidated into the Customs, Excise and Preventive Service (Management) Law, Parts IVA and IVB; and the Customs and Excise (duty rates and other taxes) Law, 1991 (P.N.D.C. 262); Budget 1992- 96.			

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.3 Selective tax on services			
5.31 Airport tax Airport Tax Act, 1963 (No. 209); Airport Tax (Amendment) Decree, 1973 (N.R.C.D. 203); Airport Tax (Amendment) Decree, 1977 (S.M.C.D. 119); and Budget 1985- 96.	This tax is levied on passengers departing from airports for both domestic and international destinations. The tax is ceded to the Civil Aviation Authority.	None.	The tax is levied at C 22,000 for international flights and C 500 for domestic flights.
5.32 Service tax	Admission tickets for a wide variety of entertainment are taxed on the basis of the admission price.	None.	Tickets are taxed at 15 percent of their value.
	Accommodation. This tax is an ad valorem levy on accommodations and food by hotels and restaurants.	Exemptions include services less than C 200 in value. Foreign diplomatic staff are also exempt.	Tax is levied at the rate of 15 percent on the value of accommodation and food.
	Advertisement through all media.	None.	Tax is levied at the rate of 15 percent on the cost of advertisement.
	Betting. This tax is levied on all sums wagered in regular betting, on the sums paid for licenses in sweepstakes, or prize money paid from football pools.	None.	Tax is levied at the rate of 15 percent of: (a) sums wagered at betting events; (b) football pool prize money paid out; (c) sums paid for sweepstake tickets.

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
6. Taxes on international trade			
6.1 Taxes on imports			
<p>6.11 Customs duties Customs and Excise Decree, 1972 (N.R.C.D. 114); Customs and Excise Tariff, 1973 (L.I. 838); Customs and Excise Tariff (Amendment) Regulations, 1976 (L.I. 1080); Customs and Excise Tariff (Amendment) Regulations, 1977 (L.I. 1286); Customs and Excise Tariff (Amendment) (No.2) Regulations, 1983 (L.I. 1291); Customs and Excise Tariff (Amendment) Regulations 1984 (L.I. 1309); Budget 1985-96.</p>	<p>Duties are levied on most imported goods, generally as ad valorem taxes on the c.i.f. value, but for some goods the rates are specific.</p>	<p>Exemptions are granted for special purposes. Most imports of World Bank projects, the Volta Aluminum Company Ltd. (VALCO), Volta River Authority, diplomats, and certain welfare organizations are also exempt.</p> <p>Items that are duty free are:</p> <ul style="list-style-type: none"> (a) agricultural machinery and tractors; (b) bank notes and coins; (c) crude oil; (d) educational material; (e) newsprint; and (f) postage stamps. <p>Other exempted goods include:</p> <ul style="list-style-type: none"> (a) items imported for purpose of exhibition at trade fairs; (b) advertising materials; (c) aircraft parts; (d) passengers' baggage and effects not for resale; (e) jute bags imported by COCOBOD; (f) agrochemicals; and (g) foodstuff of West African origin. 	<p>Ghana maintains a column tariff, based on the Harmonized System. There are four ad valorem rates: 0 percent, 5 percent, 10 percent, and 25 percent. A special tax of 10 percent is applied to certain items such as textiles, alcoholic and nonalcoholic beverages, tobacco, etc. Motorcars including cross country cars of cylinder capacity in excess of 2,500 cc and vehicles designed for traveling on snow, golf carts, and similar vehicles attract a special tax of 17.5 percent.</p>
6.2 Export taxes			

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
<p>6.21 Cocoa export duty Customs and Excise Tariff, 1973 (L.I. 838); Excise Tariff (Amendment) Regulations 1975 (L.I. 1024); and Customs and Excise Tariff (Amendment) Regulations, 1978</p>	<p>This tax is levied on the f.o.b. price received by the Cocoa Marketing Board for all cocoa exported from Ghana.</p>	<p>None.</p>	<p>The cocoa levy is a 100 percent duty on all proceeds received from cocoa exports after paying producers' costs and COCOBOD's marketing and other costs.</p>
<p>6.21 Cocoa export duty (continued) (L.I. 1162). All laws under taxes on international trade have been consolidated into the Customs, Excise and Preventive Service (Management) Law, Part III; and Customs and Excise (duty rates and taxes) Law, 1991 (P.N.D.C. 262); Budget 1992-96.</p>			
<p>7. Other taxes</p>			
<p>7.1 Stamp duties</p>			
<p>Stamp Act, 1965 (Act 3111); Stamp Act (Amendment) Decree, 1975 (N.R.C.D. 355); and Stamp Act 1980 (S.M.C.D. 424).</p>	<p>Ad valorem or specific rates of tax are levied on a range of legal documents and instruments, including bills of exchange, promissory notes, bills of lading, agreements, conveyances, extracts from registers, and mortgages.</p>	<p>Exemptions include instruments transferring ships, transactions where the Government would be liable for the stamp tax, and the transfer of company shares to a Ghanaian citizen.</p>	<p>Duties are both specific and ad valorem, varying with the particular instrument. Examples of rates are: Mineral lease C 10,000 Agreements C 2 Mortgages 1.0 percent of the face value Checks C 0.1 Conveyance or transfer C 5 for every C 60 of the amount or fraction thereof.</p>
<p>7.2 Other taxes, not elsewhere classified</p>			

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
7.21 Taxes on minerals and mining Minerals and Mining Law (P.N.D.C.L. 153); Selective Alien's Employment Tax Decree, 1973 (N.R.C.D. 201, 248, and 268); Income Tax Decree, 1975 (S.M.C.D. 5); and Regulations 1986 (L.I. 1340).	The Minerals and Mining Law makes taxable any holder of a mining lease. Tax is also payable on the carry forward cash balance of an individual involved in mining operations. There are no tax holidays. Tax jurisdiction under S.M.C.D. 5 makes persons involved in the industry taxable on income accruing in, derived from, brought into, and received in Ghana for resident companies subject to deductions and exemptions noted.	Exemptions include: (a) exemption of staff from payment of income tax relating to furnished accommodation at the mine site; (b) personal remittance quota for expatriate personnel free from any tax imposed by any enactment for the transfer of external currency out of Ghana; and (c) exemption from the selective aliens employment tax under the Selective Alien Employment Tax Decree (N.R.C.D. 201).	Mining operations 35 percent Rate of royalty 3-12 percent; depending on profitability and certain operating costs.
7.21 Taxes on minerals and mining (continued)			
7.22 Additional Profit Tax Law 1986 (P.N.D.C.L. 122).	An additional profit tax is chargeable on the carry forward cash balance of a year of assessment. The qualifying expenditure governing the determination of capital allowance under this law is deemed to have been incurred during January 1–December 31, 1984 at a value to be determined by the Ministry of Finance and Economic Planning. The Secretary for Finance and Economic Planning has the responsibility for fixing the rate of return for the operation.	None.	Additional profit tax 25 percent Current recommended rate of return 17.5 percent

Ghana: Summary of Tax System, May 1997

Tax	Nature of Tax	Exemptions and Deductions	Rates
7.23 Petroleum Income Tax Law 1987 (P.N.D.C.L. 188)	This law covers all persons carrying on petroleum operations, and is payable on income from the sale of petroleum less deductions.	Deductions allowed: (a) rent; (b) interest paid on loans; (c) repairs of premises used for the business; (d) bad and doubtful debts; (e) contributions to a pension fund approved by the Commissioner—where such contributions exceed 25 percent of the employees' remuneration, a 25 percent deduction is allowed; and (f) losses incurred during a previous year of accounting, with the deduction being a sum equal to or less than the amount of such loss.	Petroleum companies: 35 percent unless a provision is made in particular petroleum agreement making alternative arrangements for paying the tax at a different rate, or another tax altogether.

B. Local governments

No details available.

Sources: International Bureau of Fiscal Documentation, *African Tax Systems*, and information provided by the Ghanaian authorities.

Table 18. Ghana: Gross Domestic Product by Sector, 1993-97

	1993	1994	1995	1996	1997
(In millions cedis at constant 1993 prices)					
Agriculture	1,430.0	1,456.7	1,511.2	1,590.1	1,658.4
Agriculture and livestock	994.0	1,003.0	1,038.4	1,103.5	1,132.7
Cocoa	108.1	121.3	134.7	138.6	151.5
Forestry and logging	107.7	109.6	111.8	114.8	139.5
Fishing	220.2	222.8	226.3	233.2	234.7
Industrial	961.1	994.5	1,035.3	1,084.4	1,153.3
Mining and quarrying	211.4	222.1	234.3	244.2	257.8
Manufacturing	363.3	368.7	375.4	388.4	416.9
Electricity, water, and gas	99.6	104.9	111.2	118.3	130.4
Construction	286.8	298.8	314.4	333.5	348.2
Services	1,065.8	1,118.6	1,170.8	1,220.3	1,300.2
Transport, storage, and communications	166.0	176.1	183.5	192.7	206.6
Wholesale and retail trade 1/	224.7	237.1	252.5	273.4	299.4
Finance, real estate, and business services	158.8	165.2	170.1	177.3	189.2
Public administration defense and other services	409.5	430.4	451.9	462.6	482.4
Community, social and personal services	70.8	72.9	74.8	75.6	81.1
Producer of private non-profit services	36.0	36.9	38.0	38.7	41.5
Net Indirect Taxes	415.6	429.3	442.7	456.4	422.0
Gross domestic product	3,872.5	3,999.1	4,160.0	4,351.2	4,533.9
(In billions of cedis at current market prices)					
Agriculture	1,430.0	1,971.2	3,006.0	4,417.0	5,050.1
Agriculture and livestock	994.0	1,307.0	1,827.0	2,750.0	3,192.6
Cocoa	108.1	235.2	524.0	690.0	656.1
Forestry and logging	107.7	139.0	211.0	297.0	477.2
Fishing	220.2	290.0	444.0	680.0	724.2
Industrial	961.1	1,294.0	1,882.0	2,673.0	3,622.6
Mining and quarrying	211.4	293.0	371.0	536.0	719.8
Manufacturing	363.3	472.0	723.0	979.0	1,277.5
Electricity, water, and gas	99.6	139.0	206.0	302.0	425.7
Construction	286.8	390.0	582.0	856.0	1,199.6
Services	1,065.8	1,420.8	2,152.6	2,977.0	3,935.8
Transport, storage, and communications	166.0	224.0	303.0	423.0	580.4
Wholesale and retail trade	224.7	297.8	465.0	654.0	917.0
Finance, real estate, and business services	158.8	209.0	302.6	430.0	586.6
Public administration defense and other services	409.5	540.0	825.0	1,124.0	1,377.0
Community, social and personal services	70.8	103.0	185.0	249.0	341.6
Producers of private non-profit services	36.0	47.0	72.0	97.0	133.2
Net indirect taxes	415.6	519.0	712.0	1,272.0	1,504.9
Gross domestic product	3,872.5	5,205.0	7,752.6	11,339.0	14,113.4
(Annual percentage of change)					
<i>Memorandum items:</i>					
GDP deflator	...	30.2	43.2	39.8	19.5
GDP at current market prices	...	34.4	49.0	46.3	24.5
GDP at constant 1993 prices	...	3.3	4.0	4.6	4.2
Per capita real GDP	...	0.1	0.9	1.4	1.2

Sources: Statistical Service; and staff estimates.

1/ Revised estimates.

2/ Estimates.

3/ Including restaurants and hotels.

Table 19. Ghana: Gross Domestic Product by Expenditure Category, 1993-97

	1993	1994	1995	1996	1997
(In million of cedis at constant 1993 prices)					
Consumption	3,616.9	3,542.0	3,686.2	3,704.5	4,082.2
Government	568.2	583.1	588.2	593.6	592.5
Private sector	3,048.7	2,958.9	3,098.0	3,110.9	3,489.7
Total investment	860.6	1,027.1	940.8	1,078.6	1,115.3
Gross fixed capital formation	921.3	965.8	1,002.7	1,016.1	1,054.5
Inventories	-60.7	61.3	-61.9	62.5	60.8
Foreign balance	-604.7	-570.0	-467.0	-431.9	-663.6
Exports of goods and non factor services	693.3	729.8	908.4	1,120.6	1,115.7
Imports of goods and non factor services	-1,298.0	-1,299.8	-1,375.4	-1,552.5	-1,779.3
Gross domestic expenditure	5,775.5	5,868.9	6,002.4	6,335.6	6,976.8
Gross domestic product	3,872.8	3,999.1	4,160.0	4,351.2	4,533.9
(In billion of cedis at current market prices)					
Consumption	3,616.9	4,548.8	6,845.8	9,994.6	12,726.5
Government	568.2	714.3	935.9	1,365.6	1,743.8
Private sector	3,048.7	3,837.9	5,909.9	8,629.0	10,982.7
Total investment	860.6	1,246.7	1,552.1	2,434.2	3,405.5
Gross fixed capital formation	921.3	1,174.5	1,638.0	2,332.0	3,278.2
Inventories	-60.7	72.2	-85.9	102.2	127.3
Foreign balance	-604.7	-590.7	-645.3	-1,089.6	-2,018.6
Exports of goods and non factor services	693.3	1,171.5	1,898.9	2,827.3	3,393.9
Imports of goods and non factor services	-1,298.0	-1,762.2	-2,544.2	-3,916.9	-5,412.5
Gross domestic expenditure	5,775.5	5,868.9	6,002.4	6,335.6	6,976.8
Gross domestic product	3,872.8	5,204.8	7,752.6	11,339.2	14,113.4

Sources: Ghana Statistical Service.

Table 20. Ghana: Composition and Growth of Gross Domestic Product by Sector, 1993-97

	1993	1994	1995	1996 Prov.	1997 Prov.
	(In percent of nominal GDP)				
Agriculture	36.9	36.4	36.3	36.6	36.6
Agriculture and livestock	25.7	25.1	25.0	25.4	25.0
Cocoa	2.8	3.0	3.2	3.2	3.3
Forestry and logging	2.7	2.7	2.7	2.6	3.1
Fishing	5.7	5.6	5.4	5.4	5.2
Industrial	24.9	24.9	24.9	24.9	25.5
Mining and quarrying	5.5	5.6	5.6	5.6	5.7
Manufacturing	9.4	9.2	9.0	8.9	9.2
Electricity, water, and gas	2.6	2.6	2.7	2.7	2.9
Construction	7.4	7.5	7.6	7.7	7.7
Services	27.5	28.0	28.2	28.0	28.6
Transport, storage, and communication	4.3	4.5	4.4	4.4	4.5
Wholesale and retail trade 1/	5.8	5.9	6.1	6.3	6.6
Finance, real estate, and business services	4.1	4.1	4.1	4.1	4.2
Public administration defense and other services	10.6	10.8	10.9	10.6	10.6
Community, social and personal services	1.8	1.8	1.8	1.7	1.8
Producers of private non-profit services	0.9	0.9	0.9	0.9	0.9
Net indirect taxes	10.7	10.7	10.6	10.5	9.3
Gross domestic product	100.0	100.0	100.0	100.0	100.0
	(Annual percentage changes in 1993 constant prices)				
Agriculture	...	16.1	18.1	14.9	34.0
Agriculture and livestock	...	0.9	3.5	6.3	2.6
Cocoa	...	12.2	11.0	2.9	9.3
Forestry and logging	...	1.8	2.0	2.7	21.5
Fishing	...	1.2	1.6	3.0	0.6
Industrial	...	16.1	18.5	20.2	27.5
Mining and quarrying	...	5.1	5.5	4.2	5.6
Manufacturing	...	1.5	1.8	3.5	7.3
Electricity, water, and gas	...	5.3	6.0	6.4	10.2
Construction	...	4.2	5.2	6.1	4.4
Services	...	26.2	24.3	22.8	42.2
Transport, storage, and communication	...	6.1	4.2	5.0	7.2
Wholesale and retail trade 1/	...	5.5	6.5	8.3	9.5
Finance, real estate, and business services	...	4.0	3.0	4.2	6.7
Public administration defense and other services	...	5.1	5.0	2.4	4.3
Community, social and personal services	...	3.0	2.6	1.1	7.3
Producers of private non-profit services	...	2.5	3.0	1.8	7.2
Net indirect taxes	...	3.3	3.1	3.1	-7.5
Gross domestic product	...	3.3	4.0	4.6	4.2

Sources: Ghana Statistical Service.

1/ Including restaurants and hotels.

Table 21. Ghana: Composition and Growth of Gross Domestic Product
by Expenditure Category, 1993-97

	1993	1994	1995	1996	1997
	(In percent of nominal GDP)				
Consumption	93.4	87.4	88.3	88.1	90.2
Government	14.7	13.7	12.1	12.0	12.4
Private sector	78.7	73.7	76.2	76.1	77.8
Total investment	22.2	24.0	20.0	21.5	24.1
Gross fixed capital formation	23.8	22.6	21.1	20.6	23.2
Inventories	-1.6	1.4	-1.1	0.9	0.9
Foreign balance	-15.6	-11.4	-8.3	-9.6	-14.3
Exports of goods and nonfactor services	17.9	22.5	24.5	24.9	24.0
Imports of goods and nonfactor services	-33.5	-33.9	-32.8	-34.5	-38.3
Gross domestic expenditure	149.1	145.2	141.1	144.2	152.7
Gross domestic product	100.0	100.0	100.0	100.0	100.0
	(Annual percentage changes in constant 1993 prices)				
Consumption	...	-2.1	4.1	0.5	10.2
Government	...	2.6	0.9	0.9	-0.2
Private sector	...	-2.9	4.7	0.4	12.2
Total investment	...	19.3	-8.4	14.6	3.4
Gross fixed capital formation	...	4.8	3.8	1.3	3.8
Inventories	...	-201.0	-201.0	-201.0	-2.7
Foreign balance	...				
Exports of goods and nonfactor services	...	0.9	2.5	0.8	-5.1
Imports of goods and nonfactor services	...	5.9	12.3	24.1	-1.3
Gross domestic expenditure	...	3.3	4.0	4.6	4.2
Gross domestic product	...	3.3	4.0	4.6	4.2

Sources: Statistical Service; and staff estimates.

1/ Total investment expenditure published by the GSS is smaller than the staff's estimate; it differs by the amount of government domestic investment expenditure on commitment basis and by the estimate of foreign financed investment expenditure.

Table 22. Ghana: Saving and Investment, 1993-1997

	1993	1994	1995	1996	1997
(In billions of cedis at current market prices)					
National income	3,470.6	4,688.0	7,083.6	10,318.4	12,847.7
Net transfer from abroad	335.8	451.4	628.0	788.6	1,180.0
National disposable income	3,806.4	5,139.4	7,711.6	11,107.0	14,027.7
Total consumption	3,616.9	4,548.8	6,845.8	9,994.6	12,726.5
Net saving	189.5	587.2	865.8	1,112.4	1,301.2
Net capital formation	531.6	835.5	1,037.8	1,633.7	2,408.8
Consumption of fixed capital	329.0	411.2	514.0	800.8	996.7
Gross capital formation	860.6	1,246.7	1,551.8	2,434.5	3,405.5
Buildings	461.3	563.3	832.1	1,092.0	1,445.2
Other construction work	64.1	92.6	143.2	235.2	385.6
Land improvements and plantations	0.7	1.3	1.6	2.2	3.5
Transport equipment	168.4	210.8	271.5	401.8	602.2
Machinery and equipment	226.8	306.5	389.3	601.1	868.7
Change in stocks	-60.7	72.2	-85.9	102.2	127.3
External current account balance	362.7	-248.3	172.4	530.0	1,109.0
GDP	3,872.5	5,204.8	7,752.6	11,339.2	14,113.4
(In percent of nominal GDP)					
National disposable income	98.3	98.7	99.5	98.0	99.4
Total consumption	93.4	87.5	88.3	88.1	90.2
Net saving	4.9	11.3	11.2	9.8	9.2
Net capital formation	13.7	16.1	13.4	14.4	17.1
Gross capital formation	22.2	24.0	20.0	21.5	24.1
External current account balance	9.4	4.7	2.2	4.7	7.9

Sources: Ghana Statistical Service.

Table 23. Ghana: Cocoa Bean Production, Consumption, Prices, Payments to Farmers, and Export Receipts, 1985/86-1997/98

Oct. 1-Sept. 30	Production			Consumption		Producer Price 2/	Payments to cocoa farmers	Export receipts (beans)
	Main Crop	Midcrop	Total	Domestic 1/	Export			
	(Thousands of metric tons)					(Cedis per metric ton)	(In millions of cedis)	
1985/86	205	14	219	25	193	56,600 3/ 85,500 4/	12,786	40,225
1986/87	218	9	227	22	205	85,500 3/ 150,000 4/	21,590	52,869
1987/88	173	15	188	20	168	150,000 3/ 165,000 4/	32,149	66,600
1988/89	290	15	300	20	281	165,000 3/ 174,400 4/	49,594	115,717
1989/90	282	13	295	20	275	174,400 3/ 224,000 4/	52,000	105,000
1990/91	261	32	293	20	242	224,000 3/ 251,200 4/	66,502	117,962
1991/92	229	13	242	23	254	251,200 3/ 258,000 4/	60,879	131,089
1992/93	262	49	311	30	281	258,000 3/ 308,000 4/	67,915	137,866
1993/94	220	20	240	40	200	308,000 3/ 700,000 4/	86,784	243,805
1994/95	260	30	290	30	260	700,000 3/ ... 4/	205,500	381,360
1995/96	349	54	403	58	345	840,000 3/ 1,200,000 4/	372,666	693,605
1996/97	295	25	320	60	260	1,200,000 3/ 1,800,000 4/	399,963	709,200
1997/98	360	30	390	60	330	1,800,000 3/ 2,250,000 4/	711,000	1,109,434

Source: Cocoa Board.

1/ Includes sales to processing companies; most of the processed products are then exported.

2/ Including bonus payments until 1986/87, but excluding bonus payments thereafter.

3/ Main crop.

4/ Midcrop.

Table 24. Ghana: Operations of the Cocoa Board, 1990/91-1997/98

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96 Actual	1996/97 Actual	1997/98 Budget
(In millions of cedis)								
Revenue	134,560	141,983	168,302	267,240	460,432	793,990	873,325	1,396,265
Exports	119,522	126,450	137,866	243,805	381,360	693,605	709,200	1,109,734
Local deliveries	13,938	15,223	19,220	16,347	72,072	73,836	136,831	233,206
Miscellaneous	206	310	11,216	7,088	7,000	26,549	27,294	53,325
Other	894	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Costs	105,600	109,848	138,034	147,451	306,410	523,990	607,393	1,006,062
Producer proceeds	64,714	62,034	67,915	86,784	205,500	372,666	399,963	711,000
Licensed buying agents	13,871	14,661	--	15,116	32,580	86,475	88,400	125,463
Freight	2,406	1,857	--	16,862	31,238	16,984	28,896	36,660
Finance costs 2/	9,892	8,576	19,449	5,060	7,402	16,157	21,311	29,115
Administration 3/	3,800	11,406	4,661	4,108	3,523	13,138	6,457	7,104
Other 4/	10,917	11,314	46,009	19,521	26,167	18,570	62,366	96,720
Profits/Losses (-) before taxes	28,960	32,135	30,268	119,789	154,022	270,000	265,932	390,203
Duties paid	31,552	20,610	36,703	122,999	154,022	270,000	265,932	390,203
Profits/Losses (-) after taxes	-2,592	11,525	-6,435	-3,210	0.0	0.0	0.0	0.0
(In thousands of metric tons)								
Memorandum items:								
Purchases	287.9	247.0	312.0	255.0	309.0	403.8	323.0	390.0
Shipments	262.0	277.0	301.0	240.0	290.0	403.8	323.0	390.0
Of which:								
Exports	242.0	254.0	281.0	200.0	260.0	345.4	260.0	330.0
Local deliveries	20.0	23.0	20.0	40.0	30.0	58.4	60.0	60.0
(In cedis per metric ton)								
Value of exports	493,893	497,835	490,626	1,219,025	1,466,769	2,008,121	2,727,692	3,362,830
Value of local deliveries	696,900	661,870	961,000	408,675	2,402,400	1,264,315	2,280,517	3,886,767
Average price received	509,389	511,455	521,880	1,083,967	1,563,559	1,900,547	2,619,291	3,443,436
Producer proceeds	224,779	251,150	217,676	340,329	665,049	922,897	1,238,276	1,823,077
Total costs	366,794	444,729	442,417	578,239	991,618	1,297,647	1,880,474	2,579,646
Duties paid	109,594	83,441	117,638	482,349	498,453	668,648	823,319	1,000,521

Source: Cocoa Board.

1/ Crop year ending September 30.

2/ Mainly discount charges on bills drawn to finance the purchases of cocoa, export duty, and operations of the Cocoa Board

3/ Includes provision for doubtful debts and depreciation. Includes all other Cocoa Board costs in 1992/93.

4/ Includes outlays for produce inspection, research, construction of feeder roads, and subsidies for insecticides and spraying. Includes a provision of 8.5 billion cedis for retrenchment in 1993/94.

Table 25. Ghana: Production, Acreage, and Yield of Principal Food Crops, 1991-97

	1991	1992	1993	1994	1995	1996	1997
(In thousands of metric tons)							
Production							
Cassava	5,702	5,662	5,972	6,025	6,611	7,111	7,150
Plantain	1,178	1,082	1,322	1,475	1,636	1,823	1,878
Cocoyams	1,297	1,202	1,236	1,148	1,383	1,552	1,535
Yams	2,632	2,331	2,720	1,700	2,126	2,275	2,417
Maize	932	731	961	939	1,034	1,008	1,021
Guinea corn	241	259	328	394	360	353	320
Millet	112	133	198	168	209	193	139
Rice	151	132	157	162	221	216	197
(In thousands of hectares)							
Acreage							
Cassava	535	552	532	520	551	591	593
Plantain	174	157	164	165	213	227	223
Cocoyams	203	196	173	191	203	214	205
Yams	227	224	207	219	176	178	187
Maize	610	607	637	618	569	665	663
Guinea corn	263	307	309	293	335	314	317
Millet	209	210	204	208	193	150	187
Rice	95	80	77	84	100	105	109
(In metric tons per hectare)							
Yield							
Cassava	10.7	10.3	11.2	11.6	12.0	12.0	12.1
Plantain	6.8	6.9	8.1	6.0	7.7	8.0	8.4
Cocoyams	6.4	6.1	7.1	6.4	6.8	7.3	7.5
Yams	11.6	10.4	13.1	11.0	12.1	12.8	12.9
Maize	1.5	1.2	1.5	1.5	1.6	1.5	1.5
Guinea corn	0.9	0.8	1.1	1.1	1.1	1.1	1.0
Millet	0.5	0.6	1.0	0.9	1.1	1.0	0.7
Rice	1.6	1.7	2.0	2.0	2.2	2.1	1.8

Source: Statistical Service, Quarterly Digest of Statistics

Table 26. Ghana: Production and Exports of Logs, Sawn Timber, Veneer, and Plywood, 1991-97

	1991	1992	1993	1994	1995	1996	1997
(In thousands of cubic meters)							
Logs	1,229	1,318	1,682	1,681	1,194	1,166	1,170
Exports	215	161	496	572	80	2	0.4
Sawmill intake	924	916	980	1026	959	947	969
Veneer/plywood intake	46	54	63	78	97	190	193
Unrecorded uses and changes in stocks	44	187	143	5	58	27	8
Sawn timber	578	549	600	530	580	618	740
Exports	183	232	238	259	286	239	279
Local sales	202	200	333	249	270	349	424
Own use	--	--	...	...	...	...	...
Unrecorded uses and changes in stocks	193	117	29	22	24	30	37
Veneer	23	26	30	40	51	61	73
Exports	20	23	25	35	45	54	65
Local sales	2	2	3	3	4	4	5
Own use	1	1	2	2	2	3	3
Changes in stocks	...	...	...	...	...	...	...
Plywood	2	3	3	2	6	37	48
Exports	1	2	2	1	4	20	26
Local sales	1	1	1	1	1	14	18
Changes in stocks	...	...	...	0	1	3	4

Sources: Statistical Service; and Ministry of Lands and Natural Resources.

Table 27. Ghana: Domestic Fish Catch and Imports, 1991-96

	1991	1992	1993	1994	1995	1996
	(In thousands of metric meters)					
Total domestic marine catch 1/	290	371	319	287	337	376
Volta Lake catch	45	45	40	42	52	60
Other inland catch	12	12	12	12	13	13
Landings from foreign vessels on contract	0	0	0	0	0	0
Imports of fish and fish products 2/	3	3	37	19	2	1
Total fish supply	350	431	408	360	404	450
	(In millions of cedis)					
Total domestic marine catch 1/	122,536	192,755	236,461	295,447	353,850	589,825
Volta Lake catch	28,530	35,089	40,000	63,000	74,600	118,201
Other inland catch	7,560	9,357	1,200	18,000	23,650	25,610
Landings from foreign vessels on contract	--	--	--	--	--	--
Imports of fish and fish products 2/	48,305	7,221	10,515	8,641	2,310	1,970
Value of total fish supply	153,304	244,422	298,976	385,088	454,410	735,606

Source: Ministry of Agriculture.

1/ Excluding fish caught by foreign vessels.

2/ Mostly frozen fish.

Table 28. Ghana: Mineral Production, 1991-97

	1991	1992	1993	1994	1995	1996 1/	1997 1/
Value of output	(In millions of cedis)						
Gold	76,865.4	205,786.3	265,606.6	359,173.5	765,755.1	970,588.5	1,152,464.9
Diamonds	4,658.3	8,498.0	9,404.0	19,350.6	15,344.0	23,696.9	24,570.0
Manganese	9,333.5	12,811.0	10,185.1	10,720.3	8,076.1	10,463.1	21,820.3
Bauxite	6,050.2	9,000.5	8,968.7	8,653.2	12,605.4	13,693.9	20,654.4
Volume	(In units specified)						
Gold ('000 kg)	26.1	31.4	38.6	43.3	51.3	48.3	53.5
Diamonds ('000 carats)	419.4	584.5	616.0	426.1	622.7	714.3	585.5
Manganese ('000 metric tons)	415.2	477.7	361.7	269.7	100.0	266.8	333.4
Bauxite ('000 metric tons)	485.1	498.1	482.5	426.1	513.0	383.4	500.7
Unit values	(In cedis per unit)						
Gold (gram)	5,388	6,554	6,881	8,295	14,927	20,095	21,541
Diamonds (carat)	11,107	14,539	15,266	26,768	24,641	33,175	39,944
Manganese (metric ton)	22,477	26,818	28,159	39,749	11,867	39,217	65,447
Bauxite (metric ton)	12,472	17,655	18,588	20,308	24,572	35,717	41,251

Sources: Statistical Service; and staff estimates.

1/ Estimates.

Table 29. Ghana: Index of Manufacturing Production, 1991-97

(1977 = 100)

	Weights	1991	1992	1993	1994	1995	1996	1997 1/
Food products	15.00	59.3	62.8	90.3	90.8	99.6	102.5	109.3
Beverages	8.11	93.0	112.2	105.5	109.4	109.0	116.2	123.9
Tobacco and tobacco products	7.75	49.6	47.1	52.2	53.0	52.0	53.1	53.1
Textiles, wearing apparel, and leather goods	13.71	39.1	23.7	60.2	48.0	54.8	56.1	55.5
Sawmill and wood products	7.22	133.6	120.2	91.9	98.2	100.2	105.3	105.0
Paper products and printing	1.94	49.3	54.6	33.7	47.1	45.1	49.3	54.1
Petroleum products	19.00	92.2	65.0	65.8	94.4	101.4	103.5	7.3
Chemical products other than petroleum	6.56	44.7	56.7	38.4	129.8	140.0	148.2	159.8
Cement and other nonmetallic mineral products	2.98	125.6	177.0	206.2	217.0	258.1	258.9	241.8
Iron and steel products	3.25	...	356.0	392.8	541.1	581.6	584.5	590.5
Nonferrous metal basic industries	9.62	104.6	115.8	109.9	88.8	119.8	125.6	149.9
Cutlery and other nonferrous metal products	0.49	63.2	83.3	99.9	124.0	102.4	116.4	116.4
Electrical equipment and appliances	1.34	40.0	46.3	52.6	29.8	42.9	53.5	67.8
Transport equipment and other products	3.03	...	11.0	...	...	...	...	...
Overall index	100.00	71.3	76.9	87.3	101.2	109.9	115.0	101.0
Memorandum items:								
Percentage change in overall index		12.3	7.9	13.5	15.9	8.6	4.6	-12.2
Average capacity utilization (in percent) 2/		40.5	44.5	45.7	...	...	...	...

Sources: Statistical Service, Quarterly Digest of Statistics.

1/ Provisional.

2/ For large and medium-scale factories.

Table 30. Ghana: Generation and Consumption of Electricity, 1989-1997
(In billions of kilowatt-hours)

	1989	1990	1991	1992	1993	1994	1995	1996	1997
Electricity generation	5,320	5,731	6,116	6,603	6,312	6,105	6,134	6,626	6,885
Akosombo	4,383	4,827	5,150	5,566	5,280	5,128	5,094	...	...
Kpong	847	893	959	1,036	1,011	947	1,021	...	...
Other 1/	90	11	7	1	21	30	19	...	...
Electricity consumption	5,116	5,537	5,768	6,188	6,197	6,004	6,234	6,658	7,342
Electricity Corporation of Ghana	1,463	1,627	1,753	2,021	2,291	2,466	2,693	3,089	3,387
Mines	300	315	408	419	469	590	654	718	748
Volta Aluminum Company	2,788	2,789	2,795	2,854	2,822	2,275	2,198	2,212	2,467
Exports	526	761	808	894	395	448	451	0	0
Other 2/	39	45	4	...	220	225	238	639	740

Source: Ministry of Fuel and Power.

1/ Including amounts generated by diesel units operated by the Electricity Corporation of Ghana and mining companies.

2/ Refers to Akosombo Township, Akosombo Textiles, and Aluworks and NED (1993 only).

Table 31. Ghana: Average Monthly Earnings per Employee, 1980-97 1/
(Cedis per month)

	All sectors	Agriculture, forestry, and fishing	Mining and quarrying	Manufacturing	Construction	Commerce	Transport, storage, and communications	Finance insurance, etc.	Minimum wage 2/
(Private sector)									
1980	581	416	676	567	552	803	603	516	5.33
1981	672	683	785	713	...	...	955	647	12.00
1982	868	734	1,616	841	533	1,197	999	949	12.00
1983	1,301	1,173	1,643	1,345	842	1,529	1,701	962	25.00 3/
1984	3,280	2,973	4,074	3,940	1,615	2,958	2,671	2,602	35.00 4/
1985	4,702	3,264	5,994	5,535	3,032	4,781	6,509	7,331	70.00 5/
1986	7,956	5,454	6,480	8,453	4,970	8,240	11,846	15,179	90.00
1987	15,310	8,749	8,506	15,859	7,273	12,104	12,930	17,352	112.50
1988	18,660	13,317	14,433	21,755	8,502	17,811	22,170	22,131	146.25
1989	35,356	19,077	22,488	43,067	12,567	21,695	41,466	58,497	170.00
1990	39,566	23,094	27,340	51,482	18,766	28,485	36,121	63,985	218.00
1991	37,174	18,308	39,490	31,659	30,167	29,762	60,636	100,761	460.00 6/
1992	...	...	...	...	...	...	...	...	460.00 6/
(Public sector)									
1980	441	332	612	527	328	417	530	452	5.33
1981	579	490	862	631	516	481	614	557	12.00
1982	607	543	863	709	518	577	714	570	12.00
1983	1,071	833	2,214	1,256	891	859	1,014	928	25.00 3/
1984	2,122	2,199	3,354	2,399	1,564	1,405	2,302	2,080	35.00 4/
1985	3,461	2,675	10,534	4,108	2,474	2,689	3,503	4,254	70.00 5/
1986	7,333	5,787	12,024	9,520	5,109	5,395	10,312	7,597	90.00
1987	9,324	8,269	17,200	15,505	6,923	9,528	...	13,639	112.50
1988	12,738	10,379	11,331	20,047	8,836	12,393	17,802	19,098	146.25
1989	21,869	20,527	16,742	17,573	14,090	20,321	23,579	37,256 7/	170.00
1990	28,037	20,798	38,827	22,266	19,406	23,605	32,211	30,484 7/	218.00
1991	34,826	39,565	26,760	44,804	23,250	30,490	37,255	45,107	460.00 6/
1992	...	...	...	...	...	...	...	...	460.00 6/
(Total economy)									
1984	2,287	2,298	3,370	3,441	1,573	1,843	2,321	...	33.96 4/
1985	3,633	2,753	10,471	5,059	2,602	3,348	3,631	4,548	70.00 5/
1986	7,433	5,740	11,920	8,787	5,076	6,200	10,408	8,422	90.00
1987	10,524	7,955	17,017	15,216	6,882	9,483	...	13,877	112.50
1988	13,805	10,594	11,523	21,411	13,465	13,923	17,948	19,374	146.25
1989	24,257	19,608	17,177	36,793	13,879	20,857	26,013	43,068	170.00
1990	30,056	20,948	38,028	45,045	19,183	25,375	32,560	33,650	218.00
1991	35,212	39,231	27,417	34,226	25,738	30,689	39,119	50,016	460.00 6/
1992	...	...	...	...	...	...	...	...	460.00 6/
1993	...	...	...	...	...	...	...	...	602.80
1994	...	...	...	...	...	...	...	...	790.00
1995	...	...	...	...	...	...	...	...	1,200.00
1996	...	...	...	...	...	...	...	...	1,700.00
1997	...	...	...	...	...	...	...	...	2,000.00

Source: Statistical Service.

1/ December data for the year indicated.

2/ Cedis per day.

3/ From April 1983.

4/ From April 1984.

5/ From December 1984.

6/ From July 1991.

7/ Excludes allowances and other regularly paid bonuses and honoraria.

Table 32. Ghana: National Consumer Index, 1985-97
(Monthly averages; 1977 = 100)

	Overall index	Food	Nonfood	Beverages and tobacco	Clothing and footwear	Rent, fuel, and power	Furnishings 1/	Medical care and health	Transport and communications	Recreation 2/	Miscellaneous 3/
(weight)	(100.0)	(49.2)	(50.8)	(6.2)	(19.2)	(6.8)	(5.1)	(1.8)	(4.3)	(5.5)	(1.9)
1985	3,647.2	2,717.7	4,547.4	4,801.5	4,643.7	3,372.8	5,404.0	4,100.2	4,741.5	4,435.3	4,987.1
1986	4,543.1	3,268.8	5,777.3	6,369.4	5,732.6	4,807.3	6,829.0	4,754.5	6,364.6	5,317.0	5,917.2
1987	6,352.0	4,527.1	8,119.4	8,826.8	8,373.7	6,740.6	9,703.9	5,908.9	8,551.8	7,253.9	7,543.9
1988	8,343.9	6,071.0	10,545.2	11,478.5	10,884.0	9,134.5	12,327.1	7,519.2	11,163.0	9,038.9	10,170.9
1989	10,449.3	7,593.8	13,214.9	14,619.4	13,469.1	11,421.7	15,034.9	8,580.3	14,551.5	12,015.6	12,433.7
1990	14,341.5	10,643.8	17,922.8	19,342.5	17,422.5	17,284.9	19,861.4	11,663.7	21,778.1	16,647.8	16,231.4
1991	16,927.4	11,599.1	22,088.0	22,215.7	20,135.7	24,940.4	22,559.1	14,684.2	30,827.5	21,731.5	18,585.1
1992	18,629.8	12,800.4	24,275.6	23,486.1	21,875.4	30,069.0	23,869.1	15,627.3	31,500.5	25,185.9	20,747.9
1993	23,279.7	15,994.6	30,335.4	29,151.3	25,733.4	39,397.7	29,445.6	17,242.6	42,024.8	33,829.6	26,517.8
1994	29,069.5	20,160.5	37,697.8	35,994.0	32,586.9	46,084.1	37,624.7	19,582.6	49,862.0	45,666.9	32,432.3
1995	46,354.6	32,660.9	59,617.1	55,025.0	52,277.1	67,336.7	57,613.3	25,778.9	83,463.1	79,041.5	48,387.5
1996	67,937.8	44,344.9	90,787.6	81,723.5	80,507.6	90,500.2	86,255.4	36,771.7	164,556.9	108,897.4	69,239.6
1997	86,882.2	53,630.8	119,086.4	107,583.0	101,205.9	122,027.4	105,930.4	44,480.5	229,453.2	151,253.2	89,886.5
1995											
Q1	36,591.8	25,506.6	47,327.8	43,641.0	40,839.4	55,423.7	45,625.6	21,721.0	64,332.3	63,759.8	38,729.1
Q2	43,642.7	30,404.8	56,463.6	51,943.0	48,820.0	66,290.0	54,105.4	23,991.4	80,523.8	73,719.5	45,976.1
Q3	50,286.9	35,978.0	64,144.8	58,612.8	56,171.0	70,098.5	61,917.2	27,791.4	92,243.9	86,875.8	52,495.1
Q4	54,897.2	38,754.3	70,532.2	65,903.1	63,278.0	77,534.4	68,804.7	29,611.7	96,752.5	91,810.7	56,249.7
1996											
Q1	61,203.8	41,761.7	80,033.8	73,638.4	72,029.4	85,454.7	77,895.4	33,311.9	124,818.3	96,941.5	62,093.2
Q2	67,241.8	44,282.5	89,478.1	79,233.1	79,050.5	89,186.1	87,995.7	37,094.9	161,120.2	108,164.7	66,701.1
Q3	70,098.1	45,019.9	94,386.6	82,768.3	83,996.4	92,545.4	88,808.4	38,012.1	179,722.7	110,432.2	72,686.4
Q4	73,207.3	46,315.8	99,251.9	91,254.2	86,953.5	94,314.5	90,822.3	38,668.0	192,566.4	120,051.3	75,477.8
1997											
Q1	79,808.7	50,174.8	108,509.3	98,912.7	93,751.5	106,542.4	97,039.7	40,469.1	209,938.4	135,361.2	83,961.7
Q2	86,901.1	54,945.6	117,850.1	104,703.2	100,680.6	123,490.8	104,079.4	43,487.3	229,655.4	145,479.3	88,465.8
Q3	89,985.1	55,220.5	123,654.7	110,636.8	104,500.5	128,508.6	110,318.6	46,021.5	238,523.6	157,898.6	92,572.3
Q4	90,834.1	54,182.4	126,331.5	116,079.5	1,058,980.9	129,567.7	112,283.7	47,944.1	239,695.2	166,273.9	94,546.4

Sources: Statistical Services; and staff estimates.

1/ Including furniture, furnishings, and household equipment and operations.

2/ Including recreation, entertainment, education, and cultural services.

3/ Including miscellaneous goods and services.

Table 33. Ghana: National Consumer Index, 1998 Q1-Q2 1/
(Monthly averages; September 1977 = 100)

	Overall index	Food	Nonfood	Beverages and tobacco	Clothing and footwear	Rent, fuel, and power	Furnish- ings 2/	Medical care and health	Transport and com- munications	Recrea- tion 3/	Miscel- laneous 4/
(weight)	(100.0)	(51.9)	(48.1)	(3.6)	(9.6)	(9.2)	(7.3)	(4.3)	(6.5)	(4.9)	(2.8)
1998											
Q1	106.2	108.8	104.0	102.8	104.2	106.8	103.5	99.9	102.0	101.9	109.4
Q2	118.2	127.4	110.1	108.2	107.5	115.8	108.1	112.9	109.1	106.4	115.3

Sources: Statistical Services; and staff estimates.

1/ Revised CPI.

2/ Including furniture, furnishings, and household equipment and operations.

3/ Including recreation, entertainment, education, and cultural services.

4/ Including miscellaneous goods and services.

Table 34. Ghana: National Consumer Price Index, 1987-97
(Year-on-year percentage changes)

	Overall index	Food	Nonfood	Beverages and tobacco	Clothing and footwear	Rent, fuel, and power	Furnishings 1/	Medical care and health	Transport and communications	Recreation 2/	Miscellaneous 3/
(weight)	(100.0)	(49.2)	(50.8)	(6.2)	(19.2)	(6.8)	(5.1)	(1.8)	(4.3)	(5.5)	(1.9)
1987	34.2	35.7	33.4	32.9	33.5	33.5	29.9	29.9	36.6	37.2	30.2
1988	26.6	26.5	26.6	26.8	26.4	32.1	22.6	21.7	24.9	26.6	30.4
1989	30.5	31.9	29.7	34.9	28.3	31.6	28.4	16.3	27.8	33.5	26.8
1990	35.9	32.0	38.1	24.2	24.9	58.2	26.9	39.3	89.4	56.0	24.0
1991	10.3	4.6	13.3	10.3	11.0	33.7	8.3	18.5	11.2	6.8	11.4
1992	13.3	17.0	11.5	8.2	9.0	16.0	8.1	5.8	3.9	29.4	13.6
1993	27.7	26.2	28.4	28.2	23.8	32.9	28.8	11.6	34.9	30.6	34.0
1994	34.2	40.2	31.2	32.9	36.4	21.6	36.6	17.2	22.8	40.2	25.9
1995	70.8	67.2	72.8	71.4	78.0	56.1	64.0	47.4	86.6	82.5	60.6
1996	32.7	20.8	29.0	37.1	32.4	22.8	29.9	28.4	95.1	34.6	33.9
1997	20.8	13.9	24.0	22.5	18.6	34.0	21.6	22.4	23.7	31.4	22.4
1995											
January	35.6	41.1	32.8	30.4	39.0	21.0	33.8	12.9	20.7	46.3	26.3
February	38.4	43.8	36.1	31.8	40.2	22.9	34.8	14.6	36.3	49.8	28.8
March	43.6	46.5	42.1	35.6	43.4	37.2	38.0	17.1	49.8	53.5	32.4
April	49.9	51.9	49.0	42.8	50.5	42.6	42.8	20.6	57.5	62.4	39.8
May	56.1	57.8	55.2	49.6	57.1	47.5	48.3	24.0	62.0	72.3	46.1
June	61.9	63.8	60.8	54.2	63.7	48.8	57.3	27.9	70.3	76.4	52.0
July	67.2	70.6	65.4	59.1	63.9	49.9	58.1	36.9	79.8	93.7	60.3
August	69.9	72.9	68.4	59.1	68.3	50.6	62.1	41.3	84.7	97.2	59.2
September	69.8	75.0	67.1	59.6	69.8	52.5	61.3	43.8	85.3	78.3	59.1
October	69.1	73.0	67.1	62.4	67.3	56.2	61.1	47.4	84.8	78.5	58.1
November	70.2	70.3	70.2	68.4	71.3	62.2	64.9	41.5	81.6	79.6	59.6
December	70.8	67.9	72.8	71.4	78.0	56.1	64.0	47.4	86.6	82.5	60.6
1996											
January	69.2	65.0	71.4	73.5	78.3	57.5	68.6	52.9	99.5	55.2	62.8
February	68.0	65.2	69.5	67.8	75.4	60.5	72.4	50.2	91.8	51.7	59.4
March	64.8	61.2	66.6	65.3	75.5	45.8	71.1	56.8	91.8	49.4	59.0
April	60.3	54.1	63.4	58.1	70.3	37.6	72.1	52.4	96.3	50.7	51.9
May	54.2	45.6	58.8	53.7	61.0	33.0	63.9	62.4	104.7	47.7	39.8
June	48.4	38.3	53.8	46.5	55.5	33.2	53.2	49.2	99.2	42.2	44.0
July	42.6	29.6	49.7	42.1	54.5	33.3	49.6	40.3	91.8	30.0	37.8
August	39.2	24.9	46.9	39.7	48.9	33.1	42.8	36.0	95.1	27.0	38.8
September	36.5	21.1	45.0	41.9	45.5	29.7	38.3	34.2	97.4	24.4	39.0
October	34.3	18.8	28.5	39.0	42.7	25.5	34.3	29.4	100.0	24.9	35.4
November	33.2	19.0	30.6	39.5	37.9	18.8	29.8	34.1	102.2	32.5	32.5
December	32.7	20.8	29.0	37.1	32.4	22.8	29.9	28.4	95.1	34.6	33.3
1997											
January	31.5	21.2	27.3	34.3	31.2	31.2	27.6	21.1	82.8	37.5	33.0
February	30.6	19.2	23.8	35.4	31.1	31.1	26.2	23.9	68.8	38.6	37.8
March	29.2	20.1	19.9	33.4	28.2	28.2	21.2	19.6	56.1	42.7	34.9
April	29.1	23.4	17.6	33.4	26.8	34.9	16.3	21.6	46.1	37.4	32.0
May	29.6	24.7	31.9	30.5	29.1	41.5	18.4	11.7	39.7	32.6	38.1
June	29.0	24.2	31.4	32.7	26.2	39.0	20.1	18.8	42.1	33.6	28.2
July	29.2	24.8	31.2	33.9	25.8	39.5	22.3	20.1	39.0	33.6	28.5
August	28.2	22.8	30.7	33.8	23.7	37.7	23.4	21.2	30.9	46.5	27.1
September	27.7	20.3	31.1	33.4	23.7	39.4	27.1	21.9	28.7	48.9	26.5
October	27.4	20.0	45.3	33.5	24.8	38.9	27.2	24.3	25.2	47.7	25.8
November	24.2	17.2	37.2	26.1	22.1	37.2	24.3	25.4	24.6	37.6	27.8
December	20.8	13.9	33.4	22.5	18.6	34.0	21.6	22.4	23.7	31.4	22.4

Sources: Statistical Service; and staff estimates.

1/ Including furniture, furnishings, and household equipment and operations.

2/ Including recreation, entertainment, education, and cultural services.

3/ Including miscellaneous goods and services.

Table 35. Ghana: Average Wholesale Prices of Selected
Agricultural Commodities, 1989-97

(In cedis per unit)

	Unit of measurement	1989	1990	1991	1992	1993	1994	1995	1996	1997
Maize	100 kg.	5,424	8,633	9,434	10,048	11,938	13,863	24,708	32,814	64,326
Millet	93 kg.	10,633	10,956	14,362	14,632	17,060	18,357	30,527	42,784	69,918
Guinea corn	109 kg.	9,415	10,603	13,404	14,544	17,169	17,918	29,757	43,210	67,156
Rice	100 kg.	18,132	18,503	19,277	21,179	26,970	35,164	55,159	80,270	104,707
Yams	100 tubers	23,668	30,102	29,469	29,070	43,582	53,310	82,219	87,427	142,086
Cocoyams	91 kg.	5,354	7,984	7,680	9,117	11,725	16,017	26,679	25,301	42,306
Cassava	91 kg.	2,510	4,274	4,000	4,048	5,342	5,733	9,550	10,269	15,878
Plantain	16 kg.	698	1,109	887	1,069	1,698	1,940	4,160	3,693	6,538
Cowpeas	109 kg.	17,734	20,479	23,059	21,861	30,988	35,991	46,428	97,907	109,470
Tomatoes	51 kg.	4,934	6,969	11,150	13,380	24,352	14,575	25,023	34,866	56,857
Groundnuts	82 kg.	16,275	17,205	20,670	25,973	33,114	34,576	54,346	69,025	114,775

Source: Ministry of Agriculture.

Table 36. Ghana: Retail Prices of Major Petroleum Products,
December 1979-February 1998

(In cedis per liter) 1/

Date of Price Change	Premium gasoline	Regular gasoline	Kerosene	Gas oil	ATK 2/	RFO 3/	LPG 4/
December 1, 1979	1.65	1.54	0.77	...	...	...	...
November 6, 1980	2.31	2.2	1.1	1.32	...	...	0.18
January 15, 1981	2.49	2.27	1.21	1.43	...	...	0.18
June 18, 1981	2.86	2.64	1.98	1.12	...	...	0.18
September 7, 1981	2.71	2.49	1.87	1.1	...	...	0.18
October 1, 1982	2.71	2.49	1.1	1.87	1.28	0.71	0.18
April 22, 1983	5.5	4.73	2.9	3.5	3.63	3.02	0.37
October 11, 1983	7.7	6.71	4.4	5.28	5.77	3.13	0.57
September 13, 1984	13.2	12.32	7.7	10.12	9.9	5.9	1.58
October 5, 1984	18.7	17.6	10.12	15.4	14.3	9.35	2.06
April 19, 1985	20.9	19.8	11	17.6	15.76	10.3	2.23
September 9, 1985	23.1	22	12.1	18.7	17.6	10.3	1.39
January 16, 1986	33	31.9	19.8	28.6	26.4	16.5	3.33
March 20, 1986	30.8	29.7	17.6	25.3	25.3	14.3	3.33
June 30, 1986	33	31.9	17.6	28.6	26.4	14.3	3.33
February 1, 1987	41.79	39.6	24.2	36.3	37.4	26.4	4.4
January 16, 1988	51.69	50.59	37.4	49.49	48.39	29.92	6.6
January 13, 1989	60.6	59.5	41.8	55.1	...	...	88.18
January 11, 1990	79.3	...	59.4	72.7	75.05	...	100
March 31, 1990	88.1	...	66	81.4	67.13	...	100
September 2, 1990	133	...	100	111	93.48	...	100
November 3, 1990	222	...	178	189	180.38	...	100
January 3, 1991	222	...	178	189	180.38	...	100
March 29, 1991	200	...	156	166	139.32	...	100
February 3, 1992	200	...	156	166	139.32	...	100
September 19, 1992	222	...	156	188	161.32	...	100
January 6, 1993	355	...	250	302	258	...	120
January 17, 1994	422	...	275	360	...	...	200
February 2, 1995	522	...	333	450	...	162.86	275.86
February 2, 1996	621.5	...	397	567	...	200.52	344
June 7, 1996	665.6	...	411	607.8	459.2	217.86	380
February 1, 1997	778.9	...	493.2	729.5	560	301.68	828.4
January 1, 1998	755.6	...	493.2	729.5	...	...	828.40
February 23, 1998	744.4	...	493.2	722.2	...	...	828.40

Source: Ministry of Fuel and Power.

1/ Except LPG, which is in cedis/kg.

2/ Aviation turbine kerosene.

3/ Residual fuel oil.

4/ Liquefied petroleum gas.

Table 37. Ghana: Central Government Operations and Financing, 1990-97
(In billions of cedis)

	1990	1991	1992	1993	1994	1995	1996	1997
Total revenue and grants	296.6	429.6	425.1	742.8	1,160.2	1,864.7	2,288.6	2,708.9
Revenue	239.4	354.4	333.6	578.1	975.8	1,584.6	1,997.6	2,446.7
Direct taxes	55.1	62.4	62.1	110.3	170.5	275.0	433.3	606.4
Indirect taxes	99.5	172.8	164.2	277.5	395.8	503.7	732.4	833.4
Trade taxes	65.0	84.3	75.5	121.4	274.8	359.9	544.9	630.2
Nontax revenue	19.8	34.9	31.7	69.0	134.7	446.1	287.0	376.7
Foreign grants	57.2	75.3	91.5	164.7	184.4	280.1	291.1	262.2
Total expenditure and net lending	341.4	463.5	689.3	1,124.5	1,621.8	2,359.4	3,370.2	4,001.6
Recurrent expenditure	206.2	273.0	400.4	694.3	929.6	1,270.6	1,861.1	2,364.3
Wages and salaries	82.3	105.6	171.1	227.6	297.1	431.0	612.6	750.6
Goods and services	45.0	60.5	69.2	141.2	170.0	190.1	242.9	283.8
Subsidies and transfers 1/	51.6	64.1	99.1	190.7	232.1	320.7	426.2	412.8
Interest	27.3	42.8	61.0	134.8	230.5	328.8	579.3	917.0
Capital expenditure (total)	135.2	190.5	288.9	430.2	692.2	1,088.8	1,509.1	1,637.3
Capital expenditure (domestic)	57.8	78.6	131.3	143.3	236.2	524.1	682.3	541.8
Development	48.3	67.2	119.4	135.3	227.9	508.3	573.5	536.6
Net lending	9.5	11.4	11.9	8.0	8.3	15.8	108.8	5.2
Capital expenditure (foreign)	77.4	111.9	157.6	286.9	456.0	564.8	826.8	1,095.5
Surplus or deficit (-)	-44.8	-33.9	-264.2	-381.7	-461.6	-494.7	-1,081.6	-1,292.7
Domestic arrears (net change)	0.0	0.0	21.0	16.0	9.0	81.0	-11.7	-84.0
Divestiture proceeds	0.0	0.0	0.0	79.5	255.3	106.2	143.5	105.7
Financing	44.6	33.9	243.2	286.2	197.3	307.5	949.0	1,271.0
Foreign (net)	72.6	85.6	99.1	240.9	236.2	335.8	418.0	508.8
Borrowing	106.3	124.9	141.8	306.9	351.1	530.0	855.1	980.5
Repayments	-33.7	-39.3	-42.8	-66.1	-115.0	-194.2	-437.1	-471.7
Domestic (net)	-28.0	-51.7	144.2	45.4	-38.8	-28.3	531.0	762.2
Banking system	-20.8	-50.7	102.5	-22.1	-44.3	-66.5	226.4	527.9
Other	-7.2	-1.1	41.7	67.5	5.5	38.2	304.6	234.2
	(In percent of GDP)							
Total revenue and grants	15.4	17.7	15.2	20.2	23.4	25.1	20.2	19.2
Of which: tax revenue	11.4	13.2	10.8	13.9	17.0	15.3	15.1	14.7
Total expenditure and net lending	17.8	19.1	24.6	30.6	32.8	31.8	29.7	28.4
Surplus or deficit (-)	-2.3	-1.4	-9.4	-10.4	-9.3	-6.7	-9.5	-9.2
Domestic primary balance 2/	0.1	1.9	-4.9	-3.4	0.8	1.6	0.3	3.2
Current savings 3/	1.7	3.4	-2.4	-3.2	0.9	4.2	1.2	0.6

Sources: Data provided by the Ghanaian authorities; and staff estimates.

1/ Includes pensions to government employees.

2/ Defined as total revenue minus noninterest domestic expenditure.

3/ Defined as total revenue minus recurrent expenditure.

Table 38. Ghana: Central Government Revenue and Grants, 1990-97

	(In billions of cedis)							
	1990	1991	1992	1993	1994	1995	1996	1997
Total revenue and grants	296.6	429.6	425.1	742.8	1,160.2	1,864.7	2,288.6	2,708.9
Tax revenue	219.7	319.5	301.8	509.2	841.1	1,138.5	1,710.6	2,070.0
Direct taxes	55.1	62.4	62.1	110.3	170.5	275.0	433.3	606.4
Individual	17.4	18.7	21.1	44.3	62.3	80.8	131.1	225.1
Personal	10.8	11.7	15.7	37.0	51.5	65.4	110.5	194.9
Self-employed	6.6	7.0	5.4	7.3	10.9	15.4	20.6	30.2
Corporate	34.0	39.9	34.5	54.3	89.5	157.2	242.3	293.1
Other	3.7	3.8	6.5	11.7	18.7	37.0	59.9	88.3
Indirect taxes	99.5	172.8	164.2	277.5	395.8	503.7	732.4	833.4
Sales tax	50.7	64.5	66.4	94.3	144.3	210.1	329.6	407.4
Sales tax on domestic goods	22.9	29.6	31.0	39.7	57.5	69.9	172.2	198.0
Sales taxes on imports	27.8	34.9	35.4	54.6	86.8	140.1	157.4	209.4
Petroleum	25.4	78.8	70.3	151.9	201.7	224.0	290.2	314.3
Excise	23.4	29.5	27.5	31.2	49.8	69.6	112.6	111.6
Trade taxes	65.0	84.3	75.5	121.4	274.8	359.9	544.9	630.2
Import taxes	37.8	48.1	55.2	85.6	128.7	202.6	267.2	364.3
Customs duties	34.5	43.5	49.5	72.1	106.1	162.5	214.2	277.2
Special tax	2.5	3.7	5.3	7.6	5.0	6.4	11.2	16.6
Other import charges	0.8	0.9	0.3	5.9	17.6	33.8	41.7	70.5
Export duty - cocoa	27.2	36.2	20.4	35.7	146.2	157.2	277.7	265.9
Nontax revenue	19.8	34.9	31.7	69.0	134.7	446.1	287.0	376.7
Grants	57.2	75.3	91.5	164.7	184.4	280.1	291.1	262.2
Program grants	27.8	36.3	32.7	66.6	49.5	93.8	78.4	64.2
Project grants	29.4	39.0	58.8	98.1	134.9	186.3	212.7	198.0
	(In percent of GDP)							
Direct taxes	2.9	2.6	2.2	3.0	3.4	3.7	3.8	4.3
Indirect taxes	5.2	7.1	5.9	7.6	8.0	6.8	6.5	5.9
Trade taxes	3.4	3.5	2.7	3.3	5.6	4.9	4.8	4.5
Nontax revenue	1.0	1.4	1.1	1.9	2.7	6.0	2.5	2.7
Grants	3.0	3.1	3.3	4.5	3.7	3.8	2.6	1.9
Total revenue and grants	15.4	17.7	15.2	20.2	23.4	25.1	20.2	19.2

Source: Ministry of Finance

Table 39. Ghana: Economic Classification of Central Government Expenditure and Net Lending, 1990-97
(In billions of cedis)

	1990	1991	1992	1993	1994	1995	1996	1997
Total expenditure and net lending	341.4	463.5	689.3	1,124.5	1,621.8	2,359.4	3,370.2	4,001.6
Current expenditure	206.2	273.0	400.4	694.3	929.6	1,270.6	1,861.1	2,364.3
Noninterest expenditure	178.9	230.2	339.4	559.5	699.1	941.9	1,281.8	1,447.3
Wages and salaries	82.3	105.6	171.1	227.6	297.1	431.0	612.6	750.6
Goods and services	45.0	60.5	69.2	141.2	170.0	190.1	242.9	283.8
Items 2-5	42.7	55.5	67.1	94.2	142.3	157.3	242.9	283.5
Other goods and services	2.3	5.0	2.1	47.0	27.7	32.8	0.0	0.3
Subventions	26.9	33.6	41.0	139.9	94.8	135.0	239.0	210.8
Transfers to households	24.7	30.5	58.0	50.8	137.2	185.7	187.2	202.0
Pensions	7.4	9.2	13.6	...	29.7	58.1	67.0	76.9
Gratuities	3.5	4.3	5.0	...	7.1	28.6	38.7	54.7
Social security	5.8	7.7	12.3	...	36.5	47.6	54.9	66.5
End-of-service benefits	0.0	0.0	19.9	32.8	27.7	31.3	10.0	0.0
Other benefits	8.0	9.3	7.2	18.0	36.3	20.1	16.6	4.0
Interest payments	27.3	42.8	61.0	134.8	230.5	328.8	579.3	917.0
Domestic	17.5	29.6	34.9	94.3	166.4	232.9	434.5	645.0
External	9.8	13.2	26.1	40.4	64.0	95.8	144.8	272.0
Capital expenditure	135.2	190.5	288.9	430.2	692.2	1,088.8	1,509.1	1,637.3
Capital expenditure (domestic)	57.8	78.6	131.3	143.3	236.2	524.1	682.3	541.8
Development	48.3	67.2	119.4	135.3	227.9	508.3	573.5	536.6
Net lending	9.5	11.4	11.9	8.0	8.3	15.8	108.8	5.2
Capital expenditure (foreign)	77.4	111.9	157.6	286.9	456.0	564.8	826.8	1,095.5
Change in arrears (net)	0.0	0.0	21.0	16.0	9.0	81.0	-11.7	-84.0
	(In percent of GDP)							
Current expenditure	10.7	11.2	14.3	18.9	18.8	17.1	16.4	16.8
Wages and salaries	4.3	4.3	6.1	6.2	6.0	5.8	5.4	5.3
Expenditure on goods and services	2.3	2.5	2.5	3.8	3.4	2.6	2.1	2.0
Subventions	1.4	1.4	1.5	3.8	1.9	1.8	2.1	1.5
Transfers to households	1.3	1.3	2.1	1.4	2.8	2.5	1.7	1.4
Interest payments	1.4	1.8	2.2	3.7	4.7	4.4	5.1	6.5
Capital expenditure and net lending	7.0	7.8	10.3	11.7	14.0	14.7	13.3	11.6
Total expenditure and net lending	17.8	19.1	24.6	30.6	32.8	31.8	29.7	28.4

Source: Ministry of Finance

Table 40. Ghana: Functional Classification of Central Government Expenditure, 1990-95¹
(In billions of cedis)

	1990	1991	1992	1993	1994	1995
Total expenditure	254.5	340.3	498.8	813.5	1,156.3	1,284.2
General public services	49.5	41.7	58.5	83.9	145.4	93.6
Defense	9.0	15.2	23.2	39.5	30.9	34.5
Public order and safety	0.0	17.2	21.5	30.8	23.9	42.9
Education	64.8	78.8	118.4	179.2	207.6	258.7
Health	25.7	28.7	39.5	56.6	58.6	73.6
Social security and welfare	18.4	23.9	34.6	57.8	112.3	138.8
Social security and assistance	13.8	21.2	30.9	51.9	99.0	...
Welfare	4.6	2.7	3.7	5.8	13.3	...
Housing and community amenities	6.6	7.5	8.6	12.4	16.8	48.7
Other community and social services	6.9	7.8	7.0	10.1	20.6	...
Economic services	38.3	54.8	82.7	129.7	137.3	199.3
Agriculture, forestry, and fishing	10.4	12.4	19.8	28.4	26.8	18.5
Mining, manufacturing, and construction	2.6	3.2	7.7	11.0	18.5	24.6
Electricity, gas, steam, and water	1.0	1.1	4.9	7.0	12.8	21.5
Roads	16.1	28.2	42.6	72.2	75.5	116.7
Other transport and communications	3.2	4.3	5.1	7.3	...	...
Other economic services	4.8	5.6	2.6	3.8	3.7	18.0
Interest on public debt	27.3	42.8	61.0	134.8	230.1	328.8
Other purpose	0.0	12.6	16.7	27.9	108.8	13.9
Special efficiency	8.0	9.3	27.1	50.8	64.0	51.4
	(In percent of GDP)					
Education	3.4	3.2	4.2	4.9	4.2	3.5
Health	1.3	1.2	1.4	1.5	1.2	1.0
Defense	0.5	0.6	0.8	1.1	0.6	0.5
Social security and welfare	1.0	1.0	1.2	1.6	2.3	1.9
Economic services	2.0	2.3	3.0	3.5	2.6	1.8
Total expenditure	13.2	14.0	17.8	22.1	23.2	16.5

Source: Ministry of Finance

1/ Reported on a cash basis, excluding net lending and unallocable outlays.

Table 41: Ghana: Distribution of Outstanding Central Government Domestic Debt, 1990-97
(In millions of cedis; end of period)

	1990	1991	1992	1993	1994	1995	1996	1997
Domestic debt	53,962	48,163	122,875	616,640	674,726	875,586	1,326,397	2,198,440
Monetary authorities	13,691	16,667	51,277	450,540	450,552	611,617	621,699	622,441
Deposit money banks	9,518	858	280	275	275	275	74,125	736,998
Social security fund	15,713	18,430	32,261	94,526	78,325	70,365	54,925	52,504
Financial intermediaries 1/	15,040	12,208	39,057	71,299	145,574	193,329	575,648	786,497
<i>Memorandum item:</i>								
Domestic debt as a percent of GDP	2.8	2.0	4.4	16.8	13.6	11.8	11.7	15.6

Source: Bank of Ghana

1/ Total debt held by financial intermediaries and the nonfinancial sector.

Table 42. Ghana: Operations of the Social Security and National Investment Trust, 1990-96
(In millions of cedis)

	1990	1991	1992	1993	1994	1995	1996
Contributions 1/							
From central government	17,356	20,657	32,361	86,100	83,352	115,685	170,062
From others	8,045	10,507	12,085	54,030	39,820	54,698	76,272
	9,311	10,149	20,085	32,070	43,532	60,988	93,790
Property income							
From central government stock	6,712	8,954	10,287	18,850	27,345	38,604	79,577
Other	5,981	7,208	7,783	13,473	20,679	15,283	29,331
	731	1,746	2,505	5,377	6,665	23,321	50,246
Total revenue	24,068	29,611	42,648	104,950	110,697	154,290	249,639
Administrative expenditures							
Wages and salaries	3,562	4,999	6,948	9,933	17,766	20,299	30,500
Other	1,205	2,307	3,467	4,957	9,769	9,314	12,294
	2,358	2,692	3,481	4,977	7,896	10,985	18,206
Transfers to households							
Superannuation benefits/pensions	957	787	1,449	3,321	81,242	13,545	20,800
Other 2/	857	502	550	704	1,129	2,004	2,483
	100	285	899	2,618	6,995	11,541	18,317
Acquisition of fixed capital assets 3/	13,133	17,676	11,851	18,904	24,722	79,748	75,086
Total expenditure	17,652	23,461	20,247	32,158	50,612	113,592	126,386
Surplus	6,416	6,150	22,401	72,792	60,085	40,698	123,253
Financing							
Acquisition of central government securities	-6,416	-6,150	-22,401	-72,792	-60,085	-40,698	-123,253
Short-term deposits	-3,689	-2,717	-13,831	-62,264	16,200	7,960	15,440
Other 4/	-12	-1,650	-1,889	1,128	-14,485	20,608	284
Unidentified	-1,471	2,426	-1,942	-10,477	-67,010	-132,768	-8,327
	-1,244	-4,209	-4,739	-1,179	5,210	63,502	-130,650
Memorandum item:							
Interest accruing to members' accounts	1,378	...	...	...	...	...	...

Source: Social Security and National Insurance Trust.

1/ Combined employer/employee contributions from the sector shown.

2/ Emigration, death, survivor, disability, sickness, and unemployment benefits.

3/ Acquisition of offices, workers' accommodations, and real estate developments for leasing.

4/ Includes loans to the Bank for Housing and Construction and State House Corporation, as well as investment in an equipment leasing company.

Table 43. Ghana: Summary of Financial Operations of Major State-Owned Enterprises, 1990-97
(In millions of cedis)

	1990	1991	1992	1993	1994	1995	1996	1997
Electricity Corporation of Ghana								
Revenues	11,081	14,466	24,458	46,530	59,831	103,826	114,704	139,433
Costs	10,604	17,202	25,826	36,305	52,078	115,916	151,065	191,358
<i>Of which : wages and salaries</i>	1,029	...	...	4,414	4,611	7,577	11,767	15,825
Gross profit	477	-2,736	-1,368	10,225	7,753	-12,090	-12,090	-51,925
Tax paid	...	...	...	...	...	...	...	...
Dividend payments	...	...	...	...	...	...	...	...
Subvention receipts	...	...	...	...	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...	...
Investment	480	480	480	8,264	13,654	7,839	31,297	28,025
Foreign financing of investment	...	...	...	18,309	16,868	15,839	21,261	46,653
Ghana Airways Corporation								
Revenues	18,274	25,576	30,248	41,000	65,206	101,408	101,679	128,220
Costs	19,138	25,008	29,982	43,132	66,402	102,987	155,261	206,662
<i>Of which : wages and salaries</i>	...	...	1,138	3,946	4,675	6,080	12,959	16,090
Gross profit	136	568	266	-2,132	-1,196	-1,579	-26,666	-9,905
Tax paid	264	60	70	...	...	...	30	57
Dividend payments	336	...	...	...	...	...	...	...
Subvention receipts	...	...	...	...	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...	...
Investment	464	137	223,886	180	199	91	91	91
Foreign financing of investment	...	...	...	0	0	0	0	0
Ghana Cocoa Board (Cocoa Division) 1/								
Revenues	100,207	107,599	63,000	134,760	184,784	360,806	...	...
Costs	89,479	106,662	60,000	140,388	187,191	360,806	...	...
<i>Of which : wages and salaries</i>	...	...	290	...	58,252	...	...	...
Gross profit	10,728	937	3,000	-5,629	-2,408	...	...	...
Tax paid	...	...	945	...	...	...	...	...
Dividend payments	...	...	100	...	...	...	...	...
Subvention receipts	...	...	...	...	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...	...
Investment	...	223,886	110	223,886	...	...	...	...
Foreign financing of investment	...	...	...	...	...	...	...	...
Ghana Oil Company Limited								
Revenues	29,568	48,208	...	76,107	95,006	110,633	156,284	217,170
Costs	28,777	46,756	...	76,085	94,844	110,406	155,959	216,839
<i>Of which : wages and salaries</i>	233	...	...	964	1,095	1,395	1,921	3,141
Gross profit	791	1,452	...	325	571	695	1,218	1,356
Tax paid	224	378	...	309	406	472	673	728
Dividend payments	15	100	...	0	104	104	142	190
Subvention receipts	...	...	...	...	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...	...
Investment	110	110	...	109	109	110	110	110
Foreign financing of investment	...	...	...	20,885	13,840	14,201	16,626	27,934

Source: Ministry of Finance

Table 43. Ghana: Summary of Financial Operations of Major State-Owned Enterprises, 1990-96 (continued)
(In millions of cedis)

	1990	1991	1992	1993	1994	1995	1996
Ghana Water and Sewerage Corporation							
Revenues	7,264	9,309	15,005	21,717	22,237	36,824	42,486
Costs	13,189	11,681	10,659	31,605	46,445	38,599	51,426
<i>Of which: wages and salaries</i>	1,622	1,523	1,523	5,558	6,374	6,528	10,690
Gross profit	-5,925	-2,372	4,346	-9,888	-24,208	-1,775	-8,940
Tax paid	...	...	...	...	...	...	...
Dividend payments	...	...	...	...	...	...	...
Subventoin receipts	4,767	6,204	6,204	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...
Investment	335	192	192	55	913	423	...
Foreign financing of investment	...	...	...	37,923	60,813	109,841	108,283
State Shipping Corporation 1/							
Revenues	10,957	5,873	3,108	7,058	9,701	3,094	...
Costs	7,752	6,400	3,171	7,472	6,994	4,135	...
<i>Of which: wages and salaries</i>	...	...	...	1,164	725	...	...
Gross profit	3,205	-527	-63	-414	2,707	-1,041	...
Tax paid	...	...	...	...	...	...	...
Dividend payments	...	...	...	...	...	...	...
Subventoin receipts	...	...	...	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...
Investment	...	...	...	...	...	...	...
Foreign financing of investment	...	...	...	...	...	...	...
Tema Oil Refinery							
Revenues	3,875	6,810	9,000	10,201	15,100	16,747	124,988
Costs	3,435	5,359	7,000	7,866	10,291	15,756	151,242
<i>Of which: wages and salaries</i>	...	612	918	902	1,173	1,390	-26,254
Gross profit	440	1,451	2,000	2,335	4,809	9,892	...
Tax paid	25	187	187	263	631	1,700	...
Dividend payments	2	2	2	...	...	...	...
Subventoin receipts	...	...	...	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...
Investment	34	34	34	3,924	5,277	4,319	631
Foreign financing of investment	...	...	...	2,077	674	4,246	...
Volta River Authority							
Revenues	39,437	48,654	55,300	70,874	94,313	187,837	234,509
Costs	27,508	32,865	24,341	20,277	53,136	47,132	62,240
<i>Of which: wages and salaries</i>	686	1,126	...	6,413	4,347	9,960	15,182
Gross profit	11,929	15,789	30,959	50,597	41,177	140,705	172,269
Tax paid	...	...	...	...	...	...	...
Dividend payments	...	...	...	...	...	...	...
Subventoin receipts	...	5,323	5,323	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...
Investment	4,376	7,833	7,833	7,600	...	9,880	7,356
Foreign financing of investment	...	...	...	...	...	...	...

1/ Liquidated in 1996.

Table 43. Ghana: Summary of Financial Operations of Major State-Owned Enterprises, 1990-96 (concluded)
(In millions of cedis)

	1990	1991	1992	1993	1994	1995	1996
Ghana National Procurement Agency							
Revenues	9,631	10,822	16,304	29,815	31,191	56,354	...
Costs	6,898	8,743	14,438	26,573	26,481	49,696	...
<i>Of which: wages and salaries</i>	48	114	275	405	425	702	...
Gross profit	2,733	2,079	1,866	3,242	4,710	6,658	...
Tax paid	...	202,785	222,785	544,275	247	787	...
Dividend payments	...	130	...	500	...	785	...
Subventoin receipts	...	...	...	...	...	...	...
Net lending receipts	...	...	...	4,045	...	...	...
Investment	1,097	4,558	5,943	3,956	19,797	4,951	...
Foreign financing of investment	...	...	...	...	...	...	...
Total 3/							
Revenues	266,734	313,164	426,437	518,787	607,388	1,033,975	...
Costs	232,836	285,178	344,577	450,220	533,836	824,005	...
<i>Of which: wages and salaries</i>	8,448	10,507	10,720	39,513	104,944	51,721	...
Gross profit	33,898	27,986	81,860	68,566	73,552	209,970	...
(In percent of total revenues)	12.7	8.9	19.2	13.2	12.1	20.3	...
Tax paid	533	204,014	224,920	548,496	5,594	59,049	...
(In percent of total profit)	1.6	729.0	274.8	800.0	7.6	28.1	...
Dividend payments	533	5,555	5,425	500	7,209	16,336	...
Subventoin receipts	4,767	6,204	6,204	0	0	0	...
Net lending receipts	0	0	0	34,932	14,326	12,085	...
Investment	7,021	246,892	240,299	472,620	90,316	139,448	...
Foreign financing of investment	0	0	0	1,024,274	95,665	140,419	...
<i>Memorandum item:</i>							
Ghana National Petroleum Corporation							
Revenues	88,997	...	...	...	...	...	...
Costs	90,215	...	...	...	...	...	...
<i>Of which: wages and salaries</i>	...	...	...	...	...	...	...
Gross profit	-1,218	...	...	...	...	...	...
Tax paid	...	...	...	...	...	...	...
Dividend payments	...	...	...	...	...	...	...
Subventoin receipts	...	...	...	...	...	...	...
Net lending receipts	...	...	...	...	...	...	...
Investment	706	...	...	...	...	...	...
Foreign financing of investment	...	...	...	...	...	...	...

Source: State Enterprise Commission; and staff estimates.

1/ Cocoa Board figures are staff estimates based on annual crop year accounts ending September 30.

2/ Cocoa Board revenues are net of export duty paid on cocoa.

3/ Excludes Ghana Railway Corporation in 1993 and Ghana Airways Corporation in 1994.

Table 44. Ghana: Public Investment Program, 1994-97 1/
(In millions of cedis)

	1994		1995		1996		1997	
	Actual		Actual		Actual		Provisional	
	Investment by sector	Percentage distribution	Investment by sector	Percentage distribution	Investment by sector	Percentage distribution	Investment by sector	Percentage distribution
Directly productive sectors	43.6	8.2	67.8	8.8	98.8	6.0	160.3	15.2
Agriculture	9.4	1.8	50.5	6.5	69.4	4.2	138.1	13.1
Industry	1.1	0.2	1.2	0.2	5.8	0.4	11.4	1.1
Mining and forestry	33.1	6.3	16.1	2.1	23.6	1.4	10.8	1.0
Economic infrastructure	383.6	72.5	549.8	71.3	1,103.2	67.0	625.9	59.5
Water	96.3	18.2	99.0	12.8	91.3	5.5	15.3	1.5
Transport and communication	65.2	12.3	59.4	7.7	72.4	4.4	18.4	1.7
Energy	57.6	10.9	154.3	20.0	362.8	22.0	302.8	28.8
Roads and highways	150.5	28.5	222.7	28.9	521.6	31.7	275.9	26.2
Works and housing	14.1	2.7	14.5	1.9	55.1	3.3	13.5	1.3
Social and administrative sectors	98.7	18.7	152.5	19.8	440.8	26.7	264.0	25.1
Education	58.2	11.0	83.3	10.8	80.3	4.9	72.9	6.9
Health	26.8	5.1	48.5	6.3	139.8	8.5	170.6	16.2
Local gov't and community development	2.5	0.5	9.3	1.2	188.3	11.4	20.5	1.9
PAMSCAD 2/	0.4	0.1	0.5	0.1	0.3	0.0	0.0	0.0
Other	10.7	2.0	10.9	1.4	32.1	1.9	...	...
Culture	2.9	0.5	1.5	0.2	5.0	0.3	2.5	0.2
Total	528.8	100.0	771.6	100.0	1,647.8	100.0	1,052.7	100.0

Source: Data provided by the Ghanaian authorities.

¹ Formulated on the basis of a ₵ 1600/US\$1 exchange rate (end-April 1996) for foreign sources of funding.

² Program of Actions to Mitigate the Social Costs of Adjustment.

Table 45. Ghana: Monetary Survey, 1994-98
(In billions of cedis, unless otherwise specified; end of period)

	1994	1995	1996	1997	1998
	Dec.	Dec.	Dec.	Dec.	June
Bank of Ghana					
Net foreign assets	-225	51	28	92	147
(in millions of U.S. dollars)	-214	35	16	41	63
Net domestic assets	686	572	871	1111	974
Claims on government (net)	175	114	289	134	-167
Claims on deposit money banks	7	8	9	33	11
Claims on nonbank sector (including public enterprises)	149	189	146	76	13
Bank of Ghana bills (-)	-479	-657	-518	-195	-26
Other items net; assets +	836	917	945	1062	1143
Reserve money (RM)	461	623	899	1203	1122
Currency outside banks	369	546	721	982	837
Bank reserves	89	69	169	212	273
Nonbank deposits	4	8	10	9	13
Deposit money banks 1/					
Net foreign assets	393	409	610	720	535
Reserves	89	107	201	219	258
Cash	23	39	46	58	48
Deposits from Bank of Ghana	65	67	154	162	210
Bank of Ghana bills	369	564	475	178	13
Credit from Bank of Ghana	-20	-18	-29	-44	-50
Domestic credit	234	362	699	1936	2759
Claims on government (net)	-69	-76	-39	635	1120
Claims	0	0	90	681	1175
Deposits	69	76	129	46	55
Claims on private sector 2/	303	438	738	1301	1638
Of which: In foreign currency	13	47	90	331	508
Other items net; assets +	-267	-331	329	-679	-866
Total deposits	798	1093	1627	2330	2648
Monetary Survey					
Net foreign assets	168	460	638	812	682
Net domestic assets	1003	1188	1719	2508	2816
Domestic credit	557	666	1134	2146	2605
Claims on government (net)	106	39	249	769	954
Claims on private sector 1/	452	627	885	1377	1651
Bank of Ghana bills held by nonbanks	-37	-33	-37	-17	-13
Other items net; assets +	483	555	622	379	224
Broad money (M2) 3/	1170	1648	2358	3320	3498
Currency	369	546	721	982	837
Deposits	802	1101	1637	2339	2661
Of which: foreign currency deposits	203	318	531	729	721
Memorandum Item:					
Broad money (12-month change in percent)	53.00	40.80	39.70	40.80	28.10
Excluding foreign currency deposits (cedi M2)	46.20	37.40	37.40	41.90	34.20
Reserve money (12-month change in percent)	78.90	35.10	44.30	33.80	29.30
Currency/M2 ratio	0.32	0.33	0.31	0.30	0.24
Velocity (GDP/average of M2)	5.50	5.59	5.56	4.95	...
Reserve money multiplier (M2/RM)	2.54	2.64	2.62	2.76	3.12

Sources: Ghanaian authorities; and Fund staff estimates and projections.

1/ From December 1996, the coverage was increased from 11 to 17 banks.

2/ Including public enterprises

3/ Newly defined broad money includes all foreign currency deposits held in commercial banks.

Table 46. Ghana: Monetary Authorities, 1994-1998
(In billions of cedis)

	1994	1995	1996	1997	1998
	Dec.	Dec.	Dec.	Dec.	June
Net foreign assets	-225.3	50.9	28.3	92.5	147.3
(In millions of U.S. dollars)	-214.0	35.1	16.2	41.1	63.4
Net domestic assets	686.5	572.2	870.9	1,110.6	974.3
Claims on government (net)	174.5	114.4	288.7	133.7	-166.8
Claims on government	492.6	608.7	613.2	772.1	649.0
Treasury bills	2.9	4.2	10.3	13.4	42.7
Ghana stocks	12.8	17.1	12.1	14.3	15.6
Government overdrafts	42.3	152.9	0.0	0.0	0.0
Long-term government stocks	434.6	434.6	590.7	590.7	590.7
Government deposits	318.1	494.3	324.5	484.7	815.8
Claims on deposit money banks	6.7	8.3	9.4	33.0	11.1
Claims on nonbank sector (including public enterprises)	148.8	189.1	146.5	76.5	12.8
Claims on public enterprises	148.8	151.9	135.8	71.9	6.3
Of which: claims on Cocoa Board	0.2	0.0	0.0	0.0	0.0
claims on Ghana National Petroleum Corporation	...	...	128.0	62.6	0.0
Claims on private sector	0.0	0.0	0.0	0.0	0.0
Claims on other financial institutions	0.0	37.2	10.7	4.6	6.5
Bank of Ghana bills (-)	-479.5	-656.8	-518.2	-194.9	-25.7
Held by banks	-442.7	-623.9	-481.5	-178.4	-13.1
Held by nonbanks	-36.8	-32.9	-36.7	-16.5	-12.6
Other items net (assets +)	836.1	917.1	944.6	1,062.3	1,143.0
Reserve money	461.3	623.1	899.2	1,203.1	1,121.6
Currency outside banks	368.8	546.3	720.0	981.8	836.5
Bank reserves	88.6	68.9	168.6	212.4	272.5
Cash	23.3	39.2	43.4	57.5	48.3
Deposits	65.3	29.7	125.4	154.8	224.2
Required reserves	29.7	38.8	109.6	186.4	211.9
Excess reserves	35.5	-9.0	15.7	-35.6	12.3
Nonbank deposits	3.9	7.9	9.6	8.9	12.6
<i>Memorandum item:</i>					
Exchange rate (cedis/US\$)	1,052.6	1,449.3	1,740.4	2,250.4	2,323.0

Source: Bank of Ghana

Table 47. Ghana: Deposit Money Banks, 1994-1998 1/
(In billions of cedis)

	1994	1995	1996	1997	1998
	Dec.	Dec.	Dec.	Dec.	Jun.
Net foreign assets	392.6	409.0	610.1	719.7	534.5
(In millions of US dollars)	373.0	282.2	350.5	319.8	230.1
Reserves	88.7	106.7	201.3	219.2	258.0
Cash	23.3	39.2	46.3	57.6	48.3
Deposits with Bank of Ghana	65.4	67.5	154.9	161.7	209.7
Bank of Ghana bills	369.4	564.1	475.3	178.4	13.1
Credit from Bank of Ghana	-19.8	-17.6	-29.4	-44.4	-50.3
Domestic credit	233.9	362.1	698.9	1,935.8	2,758.7
Claims on Government (net)	-68.9	-75.7	39.5	635.1	1,120.4
Claims	0.3	0.3	89.2	681.1	1,175.4
Deposits	69.2	76.0	128.7	46.0	55.0
Claims on nonbank private sector (including public enterprise)	302.8	437.8	738.3	1,300.6	1,638.3
Claims on public enterprises	21.8	36.4	48.3	56.7	226.1
Cocoa financing	7.8	8.1	9.1	87.3	25.4
Credit to private sector	273.3	393.3	680.9	1,156.6	1,386.8
of which : In foreign currency	13.1	46.7	90.0	331.0	508.0
(in millions of U.S. dollars)	...	...	51.7	147.1	218.7
Other items net (assets +)	-267.1	-330.8	328.8	-678.9	-865.5
Total deposits	797.8	1,093.3	1,627.3	2,329.7	2,648.5
Demand deposits	320.9	371.1	502.2	776.5	934.4
Savings and time deposits	273.8	404.3	594.0	823.8	992.8
Foreign currency deposits	203.1	318.0	531.1	729.3	721.3
(in millions of U.S. dollars)	192.9	219.4	305.2	324.1	310.5
<i>Memorandum item:</i>					
Exchange rate (cedis/US\$)	1,052.6	1,449.3	1,740.4	2,250.4	2,323.0

Source: Bank of Ghana

1/ In 1996, the coverage was increased from 11 to 17 banks.

Table 48. Ghana: Distribution of Bank Loans and Advances to Public Institutions and the Private Sector, 1991-97

	1991	1992	1993	1994	1995	1996	1997
(In billions of cedis; end of period)							
Agriculture, forestry and fishing 1/	12.4	14.7	17.3	24.4	42.1	79.7	154.2
Mining and quarrying	1.2	2.5	3.2	5.4	6.5	29.0	66.3
Manufacturing	23.0	37.9	51.2	86.6	129.3	227.1	295.8
Construction	14.4	27.0	32.8	43.6	50.8	72.2	131.0
Electricity, gas, and water	1.6	3.4	5.8	6.2	6.3	14.3	20.8
Commerce	25.9	44.5	66.1	89.3	137.2	199.1	432.6
Imports	5.9	12.5	14.9	18.9	23.6	34.5	58.8
Exports	4.7	9.0	12.3	20.0	44.6	58.5	51.4
Domestic 2/	15.2	23.0	38.8	50.4	69.0	106.1	322.4
Transport, storage, and communications	5.3	5.6	6.9	8.3	8.0	13.7	21.5
Services	7.2	11.0	13.8	18.6	33.2	68.3	121.2
Miscellaneous	2.9	4.6	10.1	12.9	19.2	29.0	50.5
Total	93.9	151.3	207.1	295.2	432.5	732.4	1,293.8
(Shares in total; in percent)							
Agriculture, forestry, and fishing 1/	13.2	9.7	8.4	8.3	9.7	10.9	11.9
Mining and quarrying	1.3	1.6	1.5	1.8	1.5	4.0	5.1
Manufacturing	24.5	25.1	24.7	29.3	29.9	31.0	22.9
Construction	15.3	17.9	15.8	14.8	11.7	9.9	10.1
Electricity, gas, and water	1.7	2.3	2.8	2.1	1.5	2.0	1.6
Commerce	27.6	29.4	31.9	30.3	31.7	27.2	33.4
Imports	6.3	8.3	7.2	6.4	5.5	4.7	4.5
Exports	5.0	5.9	5.9	6.8	10.3	8.0	4.0
Domestic	16.2	15.2	18.7	17.1	16.0	14.5	24.9
Transport, storage, and communications	5.7	3.7	3.3	2.8	1.8	1.9	1.7
Services	7.6	7.3	6.7	6.3	7.7	9.3	9.4
Miscellaneous	3.1	3.0	4.9	4.4	4.4	4.0	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Annual percentage changes)							
Agriculture, forestry, and fishing 1/	2.2	18.4	17.3	41.5	72.4	89.2	93.4
Mining and quarrying	12.6	111.5	28.8	69.5	21.1	345.8	128.6
Manufacturing	0.6	64.8	34.9	69.1	49.3	75.7	30.2
Construction	35.9	87.9	21.2	33.0	16.5	42.2	81.4
Electricity, gas, and water	451.9	116.7	70.5	5.5	1.6	128.4	45.7
Commerce	61.6	71.8	48.6	35.2	53.6	45.2	117.3
Imports	43.5	110.7	19.2	26.6	24.7	46.5	70.4
Exports	40.2	89.2	37.8	62.0	122.9	31.2	-12.1
Domestic 2/	78.9	51.2	68.8	29.9	36.9	53.8	203.8
Transport, storage, and communications	20.2	5.1	22.7	21.3	-3.4	69.8	57.1
Services	13.5	54.0	24.7	35.2	78.7	105.6	77.4
Miscellaneous	9.2	57.8	120.3	27.1	48.9	51.1	74.1
Total	22.9	61.1	36.9	42.6	46.5	69.3	76.7

Source: Bank of Ghana.

1/ Excludes loans and advances to the Cocoa Board. 2/ Includes loans and advances to the Cocoa Board.

Table 49. Ghana: Reserve Ratios of Commercial Banks, 1992-98: June
(End-of-period figures, in billions of cedis)

	Deposits subject to reserve ratios	Actual reserves			Reserve ratios							
		Cash	Other assets 1/	Total	Cash		Actual	Other assets 1/		Total		
					Minimum			Minimum	Actual	Actual		
					Demand 2/	Time 3/				Actual	Excess	
1992												
March	260.6	51.9	98.9	150.7	18.0	18.0	19.9	24.0	37.9	57.8	15.8	
June	280.4	58.4	113.4	181.8	18.0	18.0	20.8	24.0	40.4	61.2	24.9	
September	304.6	60.7	136.2	196.9	18.0	18.0	19.9	24.0	44.7	64.6	23.5	
December	344.3	69.9	140.8	218.7	18.0	18.0	20.3	24.0	40.9	63.5	21.5	
1993												
March	350.1	57.8	181.2	239.0	10.0	10.0	16.5	32.0	51.8	68.3	26.3	
June	362.4	45.2	209.3	254.5	10.0	10.0	12.5	47.0	57.7	70.2	13.2	
September	381.9	46.3	220.6	267.0	10.0	10.0	12.1	47.0	57.8	69.9	12.9	
December	418.7	38.7	264.4	303.1	5.0	5.0	9.3	52.0	63.1	72.4	15.4	
1994												
March	440.1	35.5	297.9	333.4	5.0	5.0	7.9	52.0	66.5	74.4	17.4	
June	507.2	42.8	341.7	384.5	5.0	5.0	8.4	52.0	67.4	75.8	18.8	
September	546.0	47.1	364.4	411.5	5.0	5.0	8.6	52.0	66.7	75.4	10.4	
December	614.4	53.6	437.7	401.4	5.0	5.0	8.7	52.0	71.2	80.0	23.0	
1995												
March	654.1	60.0	437.7	505.7	5.0	5.0	10.4	52.0	66.9	77.3	20.3	
June	720.2	72.3	447.6	519.9	5.0	6.0	10.0	52.0	62.1	72.2	15.2	
September	836.4	78.1	427.4	505.5	5.0	5.0	9.3	52.0	51.1	60.4	3.4	
December	954.4	109.1	468.2	577.3	5.0	5.0	11.4	52.0	49.1	60.5	3.5	
1996												
March	996.9	100.1	500.0	600.1	5.0	...	10.0	52.0	50.2	60.2	3.2	
June 4/	1121.0	97.6	707.0	803.5	5.0	...	8.7	52.0	63.0	53.9	-3.1	
September	1221.6	110.8	542.0	652.8	5.0	...	9.1	52.0	44.4	53.4	-3.6	
December	1311.8	152.8	626.3	779.0	10.0	...	11.6	52.0	47.7	62.5	5.5	
1997												
March	1376.4	180.2	722.3	902.5	5.0	5.0	13.1	47.0	52.5	65.6	13.6	
June	2154.7	172.6	1161.1	1333.7	4.0	4.0	8.0	35.0	53.9	61.9	22.9	
September	2264.6	197.9	973.8	1171.7	4.0	4.0	8.0	35.0	43.0	51.7	12.7	
December	2319.4	273.5	1120.4	1393.9	4.0	4.0	11.8	35.0	48.3	60.1	21.1	
1998												
March	2526.2	250.8	1325.9	1576.8	4.0	4.0	9.9	35.0	52.5	62.4	23.4	
June	2679.7	281.9	1419.9	1701.8	4.0	4.0	10.5	35.0	53.0	63.5	24.5	

Sources: Bank of Ghana; and staff estimates.

1/ Comprises treasury bills, government securities, Bank of Ghana bills, cocoa bills, and grain cotton bills, and export finance bills.

2/ Cash reserve requirements on demand deposits.

3/ Cash reserve requirements on time and savings deposits.

4/ From June 1996, First Atlantic and Metro Allied have been added.

Table 50. Ghana: Interest Rate Structure of Banks, September 1995-June 1998
(In percent per annum)

	1995		1996				1997				1998	
	Sept.	Dec.	March	June	Sept.	Dec.	March	June	Sept.	Dec.	March	June
Money market rates 1/												
Bank of Ghana instruments												
91-day	39.00	40.50	40.99	41.46	42.59	42.76	42.80	42.80	42.80	42.48	39.50	35.24
180-day	32.00	33.00	33.47	35.83	35.83	36.00	38.60	38.60	38.60	38.60	38.60	38.60
1-year	36.00	39.00	39.36	39.86	40.30	42.52	42.79	42.79	42.79	42.80	39.50	35.24
2-year	33.00	33.00	33.00	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50
Treasury bills (91-day)	39.00	40.50	40.99	41.63	42.59	42.76	42.80	42.80	42.80	42.48	39.50	35.24
Bank of Ghana rediscount rate	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Commercial bank rates 2/												
Demand deposits	7.17	6.35	6.35	6.50	6.50	6.50	7.21	7.21	6.69	6.69	8.75	8.50
Savings deposits	21.69	25.75	27.69	27.52	27.53	27.25	27.50	27.50	27.50	27.68	27.25	24.00
Time deposits												
3-month	28.38	32.90	34.15	34.32	34.32	35.62	35.68	35.68	35.93	36.21	32.00	32.88
6-month	29.16	31.65	33.64	33.83	33.83	35.33	35.55	35.55	35.89	36.04	36.25	34.13
12-month	29.77	32.40	34.91	34.92	35.00	34.79	34.92	34.92	35.04	35.00	33.75	31.25
24-month	30.83	31.33	35.25	35.25	35.25	31.25	31.25	31.25	28.83	27.17	29.50	27.00
Certificates of deposit	24.46	29.89	32.46	32.30	32.30	33.10	33.10	33.10	33.50	32.60	31.00	29.25
Lending rates												
Agriculture	33.65	38.66	38.65	38.96	39.50	40.73	41.52	41.52	42.22	42.22	42.00	41.75
Export trade	33.25	38.54	39.65	39.64	40.39	41.88	42.48	42.48	42.88	42.88	42.00	41.75
Manufacturing	35.21	40.33	41.57	41.61	41.86	43.55	43.92	43.92	44.22	44.22	44.00	43.75
Mining and quarrying	36.30	41.01	41.60	42.17	41.83	43.23	44.07	44.07	44.39	44.39	42.00	41.75
Construction	36.52	41.58	42.06	42.41	42.52	44.36	44.70	44.70	45.00	45.00	45.25	43.75
Other sectors	36.30	41.79	42.71	43.05	43.30	45.32	45.82	45.82	46.35	46.35	46.25	45.25

Source: Bank of Ghana.

1/ Discount rates on financial instruments; end-period data.

2/ Weighted average of monthly lending and deposit rates.

Table 51. Ghana: Balance of Payments, 1990-97
(In millions of U.S. dollars)

	1993	1994	1995	1996	1997
Exports f.o.b.	1,063.6	1,226.8	1,431.2	1,570.1	1,489.9
Cocoa	285.9	320.2	389.5	551.6	470.0
Other	777.7	906.6	1,041.7	1,045.4	1,019.9
Imports f.o.b.	-1,728.0	-1,579.9	-1,687.2	-1,931.0	-2,128.2
Oil	-153.6	-171.1	-191.0	-253.1	-233.9
Non-oil	-1,574.4	-1,408.8	-1,496.2	-1,677.9	-1,894.3
Trade balance	-664.4	-353.1	-256.0	-360.9	-638.3
Services (net)	-412.1	-383.5	-409.3	-442.2	-478.2
Freight and insurance	-123.9	-106.9	-116.4	-99.2	-151.3
Investment income (net)	-112.3	-110.9	-129.8	-139.7	-130.1
Other services	-175.9	-165.7	-163.1	-203.3	-196.8
Unrequited transfers (net)	517.4	471.8	523.2	481.7	519.6
Official	256.2	200.8	260.0	205.7	159.7
Private	261.2	271.0	263.2	276.1	359.9
Current account balance	-559.0	-265.0	-142.0	-321.0	-594.0
Capital account balance	630.1	478.8	432.0	279.0	540.0
Official capital (net)	370.2	295.3	170.0	358.0	499.0
Long-term loans	462.8	312.1	322.3	309.3	415.7
Inflows	508.7	369.4	397.1	385.9	489.7
Amortization	-45.9	-57.3	-74.7	-76.6	-74.0
Medium-term loans	-92.6	-16.8	-152.0	49.0	83.7
Inflows	124.0	113.2	103.6	175.4	239.8
Amortization	-216.6	-130.0	-256.0	-127.0	-156.1
Trust fund	0.0	0.0	0.0	0.0	0.0
Private capital (net)	106.3	205.8	259.0	70.0	92.0
Direct investments	25.0	30.0	35.0	20.0	36.0
Other	81.3	175.8	224.0	50.0	56.0
Short-term capital (net)	153.6	-22.3	62.4	-149.0	-52.0
Errors and omissions	-30.0	-50.0	-6.0	28.0	79.0
Overall balance	41.2	163.8	284.0	-14.0	25.0
Financing	-41.2	-163.8	-249.1	14.0	-24.9
IMF (net)	-1.5	-82.8	-65.3	-85.6	-165.7
Payments arrears	0.0	0.0	0.0	0.0	0.0
Bilateral balances	12.5	3.2	3.0	-0.4	0.2
Other	-52.2	-84.2	-186.8	100.0	140.6

Sources: Bank of Ghana; and Fund staff estimates.

Table 52. Ghana: External Trade Indices, 1990-97

(1985 = 100)

	1990	1991	1992	1993	1994	1995	1996	1997
Exports								
Price index	90.0	88.0	83.2	73.7	84.1	97.8	95.4	91.2
Percentage change	3.3	-2.2	-5.5	-11.4	14.1	16.3	-2.4	-4.4
Volume index	157.5	179.3	187.4	228.2	230.8	231.5	260.4	258.8
Percentage change	7.4	13.8	4.5	21.7	1.1	0.3	12.4	-0.6
Value index	141.8	157.8	156.0	168.2	194.0	226.3	248.4	236.0
Percentage change	10.9	11.2	-1.2	7.8	15.3	16.6	9.8	-5.0
Imports								
Price index	126.8	124.1	127.3	127.0	140.0	151.8	152.8	148.0
Percentage change	11.6	-2.2	2.6	-0.2	10.2	8.4	0.7	-3.1
Volume index	141.5	158.3	170.4	202.6	168.1	165.5	188.3	214.2
Percentage change	7.3	11.9	7.7	18.9	-17.0	-1.5	13.8	13.7
Value index	179.5	196.4	217.0	257.4	235.3	251.3	287.7	317.0
Percentage change	19.8	9.4	10.5	18.6	-8.6	6.8	14.5	10.2
Terms of trade								
Price index	71.0	70.9	65.4	58.0	60.0	64.4	62.5	61.6
Percentage change	-7.5	-0.1	-7.9	-11.2	3.4	7.3	-3.0	-1.4

Sources: Data provided by Ghanaian authorities; and Fund staff estimates.

1/ Price and value indices are in terms of U.S. dollars.

Table 53. Ghana: Value, Volume, and Unit Price of Exports, 1990-97
(In millions of U.S. dollars unless otherwise noted)

	1990	1991	1992	1993	1994	1995	1996	1997
Cocoa beans	323.8	313.4	276.8	250.5	295.0	361.1	479.6	384.8
Volume (metric tons)	247,380	243,040	223,774	263,665	238,269	237,262	349,067	261,251
Unit value (\$/ton)	1,309	1,290	1,237	950	1,238	1,522	1,375	1,473
Cocoa products	36.8	33.1	25.6	35.4	25.2	28.4	72.2	85.2
Volume (metric tons)	20,756	21,745	19,328	22,839	14,050	13,864	45,382	532,656
Unit value (\$/ton)	1,773	1,521	1,327	1,550	1,795	2,050	1,592	1,600
Sheanuts	1.3	0.2	0.7	1.0	0.8	0.8	4.5	6.7
Volume (metric tons)	4,171	600	3,115	3,444	3,000	3,000	21,467	32,018
Value (\$/ton)	316	335	212	278	260	260	209	210
Coffee	0.6	0.4	0.9	1.0	1.2	1.2	1.4	3.6
Volume (metric tons)	680	825	1,908	1,679	2,040	2,000	869	3,144
Unit value (\$/ton)	853	505	493	590	602	602	1,631	1,145
Timber and timber products	118.0	124.2	113.9	147.4	165.4	190.6	146.9	172.0
Volume (cubic meters)	370,000	393,598	406,662	727,813	780,000	590,000	364,771	442,017
Unit value (\$/cu. meter)	319	316	280	203	212	323	402.6	389.1
Gold	201.7	304.4	343.4	434.0	548.6	647.2	612.4	579.2
Volume (fine ounces)	526,361	834,986	995,377	1,210,473	1,435,415	1,689,470	1,584,378	1,747,018
Unit value (\$/ounce)	383	365	345	358	382	383	386.5	331.5
Diamonds	16.5	19.2	19.3	17.3	20.4	14.8	13.4	11.4
Volume (carats)	636,371	663,390	690,408	552,854	717,419	645,100	634,192	562,651
Unit value (\$/carat)	26	29	28	31	28	23	21.2	20.2
Bauxite	10.0	8.6	9.5	8.4	9.5	10.4	8.5	10.8
Volume (metric tons)	368,629	320,313	399,155	364,642	451,802	526,335	383,612	536,732
Unit value (\$/ton)	27	27	24	23	21	20	22.1	20.1
Manganese	14.2	20.2	16.4	13.9	9.6	6.4	7.1	11.6
Volume (metric tons)	255,310	281,195	285,055	309,122	245,256	200,000	229,227	355,232
Unit value (\$/ton)	56	72	58	45	39	32	31.1	32.5
Residual oil	28.6	19.7	19.2	14.2	17.7	17.3	22.1	...
Volume (metric tons)	227,472	205,442	187,930	140,588	194,068	156,007	196,100	...
Unit value (\$/ton)	126	96	102	101	91	111.2	112.8	...
Electricity	88.5	96.0	95.6	69.1	56.4	53.1	58.2	67.6
Volume (million KWH)	3,556	3,610	3,763	3,236	2,712	2,456	2,573	2,887
Unit value (\$/000 KWH)	25	27	25	21	21	22	23	23.4
Other	56.7	58.1	64.9	71.7	77.0	100.0	144.0	157.1

Source: Bank of Ghana.

Table 54. Ghana: Direction of Trade, 1991-97
(In percent)

	Exports							Imports						
	1991	1992	1993	1994	1995	1996	1997	1991	1992	1993	1994	1995	1996	1997
Industrial countries	92.4	77.4	71.0	72.4	71.2	68.2	64.0	84.0	64.6	61.4	59.5	57.5	61.5	59.8
France	1.0	1.6	5.1	5.8	7.8	7.5	6.7	1.2	3.1	4.8	3.6	3.5	4.0	4.9
Germany, Federal Republic of	45.2	6.5	15.7	14.8	11.9	9.1	9.2	5.5	9.0	5.7	5.6	7.6	5.4	6.0
Italy	0.6	1.5	3.2	5.2	3.6	8.5	3.0	1.4	5.9	2.9	8.0	3.5	7.2	3.8
Japan	3.2	1.8	4.6	3.8	4.0	3.9	4.5	3.7	6.6	4.0	6.8	4.0	3.4	2.6
Netherlands	16.4	4.8	3.7	4.7	3.4	2.5	7.4	47.2	3.2	4.5	4.1	5.0	3.0	3.9
United Kingdom	17.7	9.6	8.6	13.0	14.6	15.8	11.7	11.9	17.2	17.4	15.8	16.4	16.3	15.2
United States	1.3	2.6	17.5	12.6	11.4	9.6	8.4	8.2	10.2	11.6	6.7	6.8	10.2	10.5
Other	7.0	49.1	12.7	12.4	14.5	11.2	13.1	4.9	9.3	10.5	9.0	10.6	12.0	12.9
Other European	0.6	1.5	1.0	1.3	2.1	2.5	3.8	1.2	1.6	0.2	1.1	1.1	1.1	1.3
Rest of the world	7.0	21.2	28.1	26.3	26.7	29.3	32.2	14.9	33.8	38.4	39.3	41.4	37.5	38.9

Source: IMF, Direction of Trade Statistics Yearbook, 1997.

Table 55. Ghana: Services and Transfers Account, 1992-97

(In millions of U.S. dollars)

	1993		1994		1995		1996		1997	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
Total services and transfers	688.3	-582.9	646.6	-558.3	703.2	-588.9	678.2	-638.6	721.2	-679.8
Total services	156.3	-568.3	159.3	-542.8	164.3	-573.2	180.3	-622.4	191.6	-669.8
Freight and merchandise insurance	36.4	-160.3	37.1	-144.0	37.9	-154.0	39.6	187.6	41.3	-193.2
Other transportation	45.9	-68.3	46.8	-69.7	47.8	-71.1	48.1	-74.2	50.2	-77.6
Travel	10.6	-19.7	10.8	-20.1	11.0	-20.5	12.7	-22.4	14.6	-23.4
Investment income	11.6	-123.9	11.8	-122.7	13.7	-143.5	23.5	-163.1	26.7	-158.1
IMF charges	0.0	-17.8	0.0	-14.8	0.0	-11.1	0.0	-7.2	0.0	-5.1
Interest medium term loans	0.0	-26.9	0.0	-30.7	0.0	-39.7	0.0	-45.8	0.0	-49.5
Interest long term loans	0.0	-60.1	0.0	-59.0	0.0	-71.6	0.0	-72.6	0.0	-67.7
Other official interest payments	0.0	-8.2	0.0	-2.8	0.0	-1.3	0.0	-7.0	0.0	-4.1
Private suppliers' credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Banking loans	0.0	-1.7	0.0	-4.8	0.0	-9.2	0.0	-18.6	0.0	-17.8
Profit and dividends	0.0	-9.2	0.0	-10.6	0.0	-10.6	0.0	-11.7	0.0	-12.7
Government (n.i.e.)	11.3	-113.3	11.5	-101.8	11.8	-98.7	12.4	-92.8	13.0	-117.0
Other services	40.5	-82.8	41.3	-84.5	42.1	-86.1	44.0	-93.9	45.8	-99.1
Total transfers	532.0	-14.6	487.3	-15.5	538.9	-15.7	497.9	-16.2	529.6	-10.0
Official	265.3	-9.1	210.8	-10.0	270.0	-10.0	215.6	-10.0	169.7	-10.0
Private	266.7	-5.5	276.5	-5.5	268.9	-5.7	282.3	-6.2	359.9	0.0

Sources: Bank of Ghana; and Fund staff estimates.

Table 56. Ghana: Clearing Accounts Under Bilateral Payments Agreements, June 1992–December 1997

	1992		1993		1994		1995		1996		1997	
	June	Dec. 1/	June	Dec.	June	Dec.	June	Dec.	June	Dec.	June	Dec.
Active account (millions of U.S. dollars) 2/	38.6	33.1	25.8	20.8	17.5	17.5	26	14.6	14.6	14.9	14.9	14.8
Bulgaria	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
China	0.6	0	0	0	0	0	0	0	0	0	0	0
Cuba	21.9	17.3	12.9	8.5	5.3	5.5	5.5	5.4	5.4	5.7	5.7	5.6
German Dem. Rep. 3/	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	0	0	0	0	0	0
Romania	10.1	10.3	11.4	11.4	11.3	11.3	11.3	0	0	0	0	0
Yugoslavia	0.7	0.8	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Poland	0	0	0	0	0	0	0	0	0	0	0	0
U.S.S.R.	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Czechoslovakia	0.8	0.8	0.4	0	0	0	0	0	0	0	0	0
Hungary	1.6	0.7	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Inactive accounts (millions of cedis) 4/	191.7	191.7	191.7	191.7	191.7	191.7	191.7	191.7	191.7	191.7	191.7	191.7
China	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
Egypt	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Others	152.1	152.1	152.1	152.1	152.1	152.1	152.1	152.1	152.1	152.1	152.1	152.1

Source: Ghanaian authorities.

1/ Revised position after GDR account reconciliation.

2/ Minus (positive) sign indicates net debit (credit) position of Ghana.

3/ The GDR accounts were reconciled in 1992, taking effect from December 1991. The 1992 flow, therefore, used the revised 1991 December position for consistency with end-1992 position. Similarly, the 1991 flow takes into account the unreconciled position of December 1991 compared with December 1990.

4/ The changes are mainly due to exchange rate fluctuations.

Table 57. Ghana: External Public Debt and Debt Service, 1991-97
(In millions of U.S. dollars)

	1993	1994	1995	1996	1997
Long and medium-term debt 1/	4,508.30	4,841.30	5,035.60	5,597.70	6,156.30
Bilateral loans	1,292.70	1,302.00	1,399.60	1,483.70	1,655.00
Multilateral loans	3,215.60	3,539.30	3,636.00	4,114.00	4,501.30
IMF	738.00	686.90	661.80	547.90	353.60
<i>Of which:</i>					
Tranche Policies/CFF	159.40	127.40	115.10	85.70	33.80
Trust Fund/SAF/ESAF	578.70	559.60	546.70	462.20	319.80
Short-term loans 2/	197.00	175.00	178.00	28.00	40.00
Total external debt	5,443.50	5,703.10	5,874.90	6,173.90	6,549.90
Debt service payments					
Principal	329.10	270.10	438.20	328.40	396.00
Medium term	216.60	130.00	255.50	126.50	156.00
Long term	45.90	57.30	74.70	76.60	74.00
IMF repurchases	66.60	82.80	108.00	125.30	165.70
Interest	102.70	105.90	127.80	144.30	140.00
Medium-term	28.60	35.50	45.10	61.10	65.00
Long-term	60.10	59.00	71.60	72.60	68.00
IMF charges 3/	14.00	11.40	11.10	10.60	7.00
Total					
Including IMF	431.80	376.00	566.00	472.70	536.00
Excluding IMF	351.20	281.80	446.90	336.80	363.30

Sources: Data provided by the Ghanaian authorities; and staff estimates.

1/ Including medium-term debt owed by the Bank of Ghana to foreign commercial banks.

2/ Consists of short-term oil credits, Cocoa Board debt, and Bank of Ghana debt.

3/ Excluding SDR charges.

Table 58. Ghana: Classification of Subvented Agencies

Category 1	To be wholly subvented
1.	Forestry Commission
2.	Ghana Airways Authority
3.	National Council for Tertiary Education
4.	Immigration Service
5.	Prisons Service
6.	Fire Service
7.	Police Service
8.	Serious Fraud Service
9.	General Legal Council
10.	Law Reform Commission
11.	Council for Law Reporting
12.	Prices and Incomes Board
13.	National Population Council
14.	Statistical Service
15.	Fisheries Commission
16.	Ghana Veterinary Council
17.	Environmental Protection Agency
18.	National Accreditation Board
19.	National Board of Prof. And Tech.
20.	Examination
21.	Divestiture Implementation Committee
22.	Customs Excise and Preventive Service
23.	Internal Revenue Service
24.	Land Commission
25.	Minerals Commission
26.	National Commission on Children
27.	NCWD
28.	Ghana FAO Representative
29.	National Road Safety
30.	Commission of Human Rights
31.	National Electoral Commission
32.	National Commission on Culture
33.	National Commission for Civic Education
34.	National Service Secretariat
35.	Narcotics Control Board
36.	Public Tribunals
37.	Legal Aid Board

Table 58. Ghana: Classification of Subvented Agencies (continued)

Category 2	To be partially subvented
1.	Grains and Legumes Development Board
2.	Irrigation Development Authority
3.	Forestry Research Institute
4.	Ghana Export Promotion Council
5.	Ghana Tourist Board
6.	Ghana Standards Board
7.	NBSSI
8.	Secretariat (CSIR)
9.	Crops Research Institute
10.	Animal Research Institute
11.	Soil Research Institute
12.	Soil Research Centre
13.	Building and Roads Research Institute
14.	Food Research Institute
15.	Institute of Aquatic Biology
16.	Industrial Research Institute
17.	Water Resources Research Institute
18.	Oil Palm Research Institute
19.	Scientific Instrumentation Centre
20.	Nyakpala Agricultural Research Institute
21.	Ghana Grains Development Project
22.	Technology Transfer Centre
23.	Plant Genetic Research
24.	Government Technical Training Centre
25.	Ghana Library Board
26.	University of Ghana
27.	University of Science and Technology
28.	School of Administration
29.	University of Cape Coast
30.	Institute of African Studies
31.	Institute of Stat. Soc. Econ-Res. (ISSR)
32.	Institute of Adult Education
33.	College of Arts UST
34.	University of Ghana Medical School
35.	Volta Basin Research Institute
36.	University Research Stations
37.	Regional Institute Population Studies
38.	School of Medical Science (UST)
39.	School of Agriculture (Cape Coast)
40.	Ministry of Energy - Technical Division

Table 58. Ghana: Classification of Subvented Agencies (continued)

Category 2	To be partially subvented (continued)
41.	State Enterprises Commission
42.	Boadi Cattle Project (UST)
43.	Noguchi Memorial Institute
44.	Technical Cons. Centre (UST)
45.	Ghana Research Appr. Tech. Ind. Sch. (GRATIS)
46.	Science Technology Policy Research Institute
47.	Accra Polytechnic
48.	Cape Coast Polytechnic
49.	Takoradi Polytechnic
50.	Kumasi Polytechnic
51.	Tamale Polytechnic
52.	Distance Education
53.	University College of Education
54.	St. John's Ambulance Brigade
55.	Scientific Research into Plant Medicine
56.	Jachie Training Centre
57.	Jirapa Orphanage
58.	Abor Research Centre
59.	Ghana National Comm. - Local (UNESCO)
60.	West African Examinations Council - Local
61.	West African Examinations Council - International
62.	Ghana National Commission - UNESCO (International)
63.	School of Engineering (UST)
64.	Institute of Renewable Natural Resources (UST)
65.	School of Performing Arts
66.	Ghana Institute of Languages
67.	Institute of Professional Studies
68.	University of Development Studies
69.	University of Ghana (London)
70.	Dental School
71.	National Sports Council
72.	National Youth Organising Committee
73.	National Sports College (Winneba)
74.	Pharmacy Board
75.	Medical and Dental Council
76.	Christian Health Association
77.	MDPI
78.	National Vocational Training School
79.	School of Social Work
80.	Ashanti Mampong Babies Home

Table 58. Ghana: Classification of Subvented Agencies (continued)

Category 2	To be partially subvented (continued)
81.	GIMPA
82.	Ghana Atomic Energy Commission
83.	Ghana News Agency
84.	Ghana Institute of Journalism
85.	National Film and TV Institute
86.	Legon Centre for Inst. Affairs
87.	Veterans Association of Ghana
88.	Ghana Armed Forces Staff College
89.	National Symphony Orchestra
90.	Abibigroma
91.	Museums and Monuments
92.	Ghana Dance Ensemble
93.	W.E.B. de Bois Memorial Centre
94.	Kwame Nkrumah National Park
95.	School of Communication Studies
96.	Ghana Investment Centre
97.	School of Mines - Kumasi
98.	School of Mines - Tarkwa
99.	Nurses and Midwives Council
100.	Regional Maritime Academy
Category 3	To be commercialized
1.	Ghana Railway Corporation
2.	Ghana University Press
3.	Institute of Chartered Accountant
4.	International Students Hostel
5.	Land Valuation Board
6.	HOTCAT
7.	Land Title Registry
8.	Ghana Broadcasting Corporation
9.	Ghana News Agency (Ghana)
10.	Ghana News Agency (London)
11.	National Theatre
12.	Ghana Dance Ensemble
Category 4	To be closed down or privatized
1.	Development and Application Intermediate Technology
2.	Ghana National ATLAS Project
3.	Ghana National Science and Technology

Table 58. Ghana: Classification of Subvented Agencies (concluded)

Category 4	To be closed down or commercialized (continued)
4.	Public Servant Housing Loans Board
5.	Technical Services Centre
6.	National Teacher Training Council
7.	Institute for Educational Plan and Administration
8.	Education Commission
9.	Integrated Commission for Centres Employment Skills
10.	Ghana Science Education
11.	Ghana Academy of Arts and Science
12.	Encyclopedia Africana Project
13.	Organisation of Trade Union Unity
14.	Opportunities Industrialisation Centre
15.	Ghana Co-operative Council
16.	Ghana Co-operative College
17.	Local Government Training School
18.	National Association of Local Authorities
19.	Armed Forces Sports Control Board
20.	Pan African Writers Association
21.	All African Students Union
22.	Ghana Book Development Council
23.	Confiscated Assets Committee
24.	Armed Forces School
25.	National Revenue Secretariat