III Ghana, 1983–91

Michael Nowak, Rifaat Basanti, Balazs Horvath, Kalpana Kochhar, and Roohi Prem

In 1983, after years of mismanagement, Ghana launched an economic recovery program (ERP). The country's response to the policies adopted during 1983–91 was impressive: severe fiscal imbalances were brought under control, a highly distorted exchange and trade system was liberalized, and inflation was lowered significantly. This was achieved without a contraction in domestic demand. A strong recovery in real growth allowed tangible increases in real per capita incomes, reversing a long decline, but private sector activity was still limited, and saving and investment performance was uneven. In reviewing Ghana's adjustment record, it should be noted that a real annual growth rate of 5 percent, which translates into 2 percent on a per capita basis, while impressive by sub-Saharan African standards, would not be sufficient to propel Ghana onto an accelerated growth path. At this rate of growth, it would take 30-40 years for Ghana to eradicate poverty (i.e., for the absolute poor to cross the "poverty line").

This paper examines why output response was strong during the ERP, but private saving and investment lagged. The paper examines some factors that may have influenced the path of saving, investment, and growth, particularly during the period of economic adjustment. The next section reviews progress in structural reforms and assesses the remaining structural obstacles to faster investment and output growth. Finally, the paper draws some conclusions and policy implications from the analysis.

Long-Term Economic Performance

Origins of the 1978–82 Crisis

At independence in 1957 Ghana was the world's largest cocoa producer, per capita income was the highest of all countries in sub-Saharan Africa, and its external reserves were equivalent to three years of imports. However, by 1982–83 Ghana's economy had virtually collapsed. Per capita income had dropped by one third from its level a decade earlier, and the country had depleted its foreign exchange reserves and incurred large external payments arrears. Inflation was running at 123 percent, and the parallel market exchange rate was over 20 times the
official rate, cocoa production had declined to less than one third of earlier levels.\textsuperscript{2}

Long-term trends in economic performance in Ghana have been well documented in a number of studies.\textsuperscript{3} In general, these studies have demonstrated that Ghana’s economy responded well to episodes of liberalization even when they were brief, and declined precipitously when interventionist policies were intensified (Table 3-1). During the 1960s two main periods of civilian rule emphasized a greater role for public sector intervention in the economy, and during the 1970s a succession of military governments progressively intensified controls. Over the course of the 1960s and 1970s policies relied on direct public sector planning and intervention through the parastatal sector, controls on foreign exchange, prices, and credit, and quantitative restrictions on imports. These policies weakened the economy significantly. Government deficits increased, the balance of payments deteriorated, and inflation surged. Gross fixed investment declined steadily from 19 percent of GDP in 1961 to 9 percent by 1977, and real GDP growth, which had averaged 3-4 percent a year in the 1960s, came to a halt during 1972–77.

The period just prior to the ERP (1978–82) was one of persistent and severe economic decline and a succession of political crises with frequent changes in government. Overvalued exchange rates and price controls severely distorted the incentive system against agriculture in general and cocoa exports in particular. Export earnings fell to a low point of 7 percent of GDP, and external financing dried up as confidence in the economy declined. Price controls led to a proliferation of parallel markets, and the emergence of acute shortages of goods and services, foreign exchange, and imports. Even the parastatals in the industrial sector were affected by shortages of inputs and spare parts, which contributed to the collapse in investment and output. High fiscal deficits reflected a shrinking revenue base and contributed to high inflation.

To compound these difficulties Ghana experienced a severe drought in 1983, world cocoa prices had already started their decline, and more than 1 million Ghanaians who had been working in Nigeria during the oil boom were sent back home. On the eve of the ERP Ghana’s financial and structural problems posed a formidable policy challenge.

\textsuperscript{2}Cocoa production fell from 560,000 tons a year in 1965 to 400,000 tons by 1975 and 160,000 tons in 1983.
\textsuperscript{3}See, for example, Leith (1974), Killick (1978), Stryker (1991), and Islam and Wetzel (1994). These studies analyzed the changes in economic policy in Ghana during distinct periods since independence, which generally mirrored changes in political regimes. The discussion here follows the same time periods prior to the ERP.

**Adjustment, 1983–91**

With the launching of the ERP in April 1983, the Government set out to shift away from economic controls and centralized regulation and in favor of a more liberal, market-oriented approach.\textsuperscript{4} The ERP was supported by financial assistance from the Fund, the World Bank, and other multilateral and bilateral sources. The key elements of the reform strategy were (1) a realignment of relative prices to encourage more productive activity, promote exports, and strengthen economic incentives; (2) a progressive shift away from direct controls and intervention and toward greater reliance on market mechanisms; (3) the early restoration of fiscal discipline, an increase in public saving, and reduced recourse to bank financing of the Government; (4) the rehabilitation of economic and social infrastructure; and (5) the implementation of structural and institutional reforms to enhance efficiency in the economy and encourage private saving and investment.\textsuperscript{5}

The initial phase of the ERP, 1983–86, was essentially a period of economic stabilization. It featured exchange and price decontrol, a restoration of fiscal discipline, and discrete devaluations of the cedi, followed by the introduction of an auction-based exchange rate system. The economy responded well to the change in policy strategy and experienced a sustained recovery in growth, a sharp reduction in inflation, from 123 percent in 1983 to 33 percent in 1986, and an improvement in the overall balance of payments (Table 3-2, Chart 3-1). However, exports remained unduly concentrated in cocoa, and the economy was therefore vulnerable to swings in world cocoa prices. Structural and institutional rigidities persisted in the agricultural, financial, and parastatal sectors.

During the next phase of adjustment, 1987–91, the thrust of policies was broadened to encompass structural and institutional reforms. Most of the structural reforms were implemented gradually, building on the successful implementation of preceding reforms. The systematic dismantling of the control-oriented regulatory framework was difficult, given the legacy of the pre-ERP period and strong political opposition to reforms in such segments of the economy as the parastatal sector. Nonetheless, the structural reforms spanned a wide range. Foreign exchange bureaus

\textsuperscript{4}See Abbey (1990).
\textsuperscript{5}Ghana’s adjustment policies were supported by three stand-by arrangements during 1983–87; an extended fund facility arrangement in 1987, which was replaced in the same year by a structural adjustment facility arrangement for 1987–88; and enhanced structural adjustment facility arrangements during the period November 1988–March 1992.

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## Table 3-1. Ghana: Selected Indicators of Long-Term Economic Performance, 1972-94

(Period average in percent, unless otherwise specified)

<table>
<thead>
<tr>
<th></th>
<th>Pre-Adjustment</th>
<th>Adjustment</th>
<th>Post-Adjustment</th>
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<tr>
<td>National income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real GDP growth</td>
<td>0.3</td>
<td>3.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>-2.7</td>
<td>1.7</td>
<td>2.1</td>
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<tr>
<td>Industry</td>
<td>1.5</td>
<td>5.6</td>
<td>6.4</td>
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<tr>
<td>Services</td>
<td>0.7</td>
<td>5.7</td>
<td>7.6</td>
</tr>
<tr>
<td>Shares in GDP</td>
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<tr>
<td>Agriculture</td>
<td>49.7</td>
<td>52.4</td>
<td>46.4</td>
</tr>
<tr>
<td>Industry</td>
<td>19.9</td>
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<td>Services</td>
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<td>Private</td>
<td>5.5</td>
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<td>Public</td>
<td>4.8</td>
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<td>7.6</td>
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<tr>
<td>Gross national savings</td>
<td>10.8</td>
<td>9.1</td>
<td>8.0</td>
</tr>
<tr>
<td>Private</td>
<td>13.0</td>
<td>5.2</td>
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<td>Public</td>
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<td>Fiscal balance (Narrow)</td>
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<tr>
<td>Fiscal balance (Broad)</td>
<td>...</td>
<td>-2.8</td>
<td>-2.1</td>
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<td>Monetary system</td>
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<tr>
<td>Broad money growth</td>
<td>36.9</td>
<td>55.9</td>
<td>33.9</td>
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<tr>
<td>Nominal lending interest rate</td>
<td>11.8</td>
<td>21.9</td>
<td>25.9</td>
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<tr>
<td>Prices and exchange rates</td>
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<tr>
<td>Inflation (CPI, end of period)</td>
<td>116.4</td>
<td>246.0</td>
<td>18.0</td>
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<tr>
<td>Parallel market exchange rate premium</td>
<td>568.7</td>
<td>142.2</td>
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<tr>
<td>Official exchange rate (cedis per U.S. dollar)</td>
<td>1.2</td>
<td>47.1</td>
<td>264.0</td>
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<tr>
<td>Terms of trade index (1985=100)</td>
<td>142.7</td>
<td>100.1</td>
<td>82.8</td>
</tr>
<tr>
<td>External sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise exports, f.o.b. (percent of GDP)</td>
<td>15.7</td>
<td>8.2</td>
<td>15.5</td>
</tr>
<tr>
<td>Merchandise imports, f.o.b. (percent of GDP)</td>
<td>12.6</td>
<td>8.5</td>
<td>19.1</td>
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<td>Current account, including official transfers (percent of GDP)</td>
<td>0.6</td>
<td>-1.4</td>
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<tr>
<td>Gross international reserves (months of imports)</td>
<td>2.0</td>
<td>2.9</td>
<td>2.7</td>
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<td>External debt outstanding (percent of GDP)</td>
<td>22.4</td>
<td>29.2</td>
<td>56.7</td>
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<tr>
<td>External debt service (percent of exports)</td>
<td>6.4</td>
<td>43.7</td>
<td>50.2</td>
</tr>
</tbody>
</table>

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

1Broad coverage from 1983 onward, which includes capital expenditure financial through external project grants and loans. Prior to 1983 no distinction was made between broad and narrow coverage.
2Commercial banks' unsecured lending rate.
3End period data related to last year of the subperiod.
4Defined as the market rate/official rate, in percent, end-period data.

were introduced in 1988, and the exchange system was further liberalized. A flexible producer pricing policy for cocoa was introduced, and reforms in the financial management of public enterprises were implemented. A major restructuring of the financial sector was initiated in 1990 with the removal of non-performing assets from the portfolio of distressed banks. Toward the end of the ERP period, a number of initiatives for promoting the private sector were undertaken, including corporate income tax reforms in 1991. During this phase, economic performance continued to improve. GDP growth was sustained in the range of 5 percent a year, and exports continued to record strong growth, despite a cumulative decline
Table 3-2. Ghana: Selected Economic and Financial Indicators, 1983–94

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<tr>
<td>Real GDP</td>
<td>-4.6</td>
<td>8.6</td>
<td>5.1</td>
<td>5.2</td>
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<td>5.6</td>
<td>5.1</td>
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<td>5.3</td>
<td>3.9</td>
<td>5.0</td>
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<td>Consumer price index (annual average)</td>
<td>122.8</td>
<td>39.7</td>
<td>10.3</td>
<td>24.6</td>
<td>39.8</td>
<td>31.4</td>
<td>25.2</td>
<td>37.2</td>
<td>18.0</td>
<td>10.1</td>
<td>25.0</td>
<td>24.9</td>
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<tr>
<td>Consumer price index (end of period)</td>
<td>142.4</td>
<td>6.0</td>
<td>19.5</td>
<td>33.3</td>
<td>34.2</td>
<td>26.6</td>
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<tr>
<td>Broad money</td>
<td>38.1</td>
<td>72.1</td>
<td>59.5</td>
<td>53.7</td>
<td>53.0</td>
<td>43.0</td>
<td>26.9</td>
<td>18.0</td>
<td>19.9</td>
<td>52.9</td>
<td>27.4</td>
<td>46.2</td>
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<tr>
<td>Velocity (GDP/End-period M2)</td>
<td>8.8</td>
<td>7.7</td>
<td>6.1</td>
<td>5.9</td>
<td>5.6</td>
<td>5.9</td>
<td>7.2</td>
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</tr>
<tr>
<td>Gross investment</td>
<td>3.7</td>
<td>6.9</td>
<td>9.6</td>
<td>9.7</td>
<td>13.4</td>
<td>14.2</td>
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<td>15.9</td>
<td>12.8</td>
<td>14.8</td>
<td>15.9</td>
</tr>
<tr>
<td>Gross national savings</td>
<td>3.0</td>
<td>5.9</td>
<td>7.1</td>
<td>8.2</td>
<td>11.3</td>
<td>12.5</td>
<td>13.7</td>
<td>10.9</td>
<td>12.3</td>
<td>7.3</td>
<td>5.6</td>
<td>11.0</td>
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<tr>
<td>Surplus or deficit (-)</td>
<td>-2.7</td>
<td>-1.8</td>
<td>-2.2</td>
<td>0.1</td>
<td>0.5</td>
<td>0.4</td>
<td>0.7</td>
<td>0.2</td>
<td>1.5</td>
<td>-4.8</td>
<td>-2.5</td>
<td>2.2</td>
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<tr>
<td>Total expenditure</td>
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<td>11.8</td>
<td>14.4</td>
<td>14.9</td>
<td>14.6</td>
<td>15.1</td>
<td>13.2</td>
<td>15.2</td>
<td>12.2</td>
<td>18.3</td>
<td>24.5</td>
</tr>
<tr>
<td>Broad surplus or deficit (-)</td>
<td>-2.7</td>
<td>-2.3</td>
<td>-3.0</td>
<td>-3.3</td>
<td>-2.4</td>
<td>-2.8</td>
<td>-2.1</td>
<td>-2.2</td>
<td>-1.3</td>
<td>-8.1</td>
<td>-7.2</td>
<td>-3.4</td>
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<td><strong>External sector</strong></td>
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<td>Current account balance</td>
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<td>14.4</td>
<td>14.9</td>
<td>14.6</td>
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<td>15.2</td>
<td>12.2</td>
<td>18.3</td>
<td>24.5</td>
</tr>
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<td>External debt outstanding</td>
<td>9.7</td>
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<td>58.0</td>
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<td>9.8</td>
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<td>4.5</td>
<td>4.0</td>
<td>7.1</td>
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<td>Debt service/exports</td>
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<td>40.4</td>
<td>54.7</td>
<td>47.8</td>
<td>58.3</td>
<td>68.0</td>
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<td>28.9</td>
<td>25.1</td>
<td>35.7</td>
<td>27.4</td>
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<td>Gross reserves (months of imports)</td>
<td>4.6</td>
<td>2.4</td>
<td>2.4</td>
<td>2.2</td>
<td>2.2</td>
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<td>4.1</td>
<td>2.9</td>
<td>2.7</td>
<td>4.1</td>
</tr>
</tbody>
</table>

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

1. Excluding capital outlays financed through external project aid.
2. Including official grants.
3. End-period data: including debt to the IMF.

of 35 percent in the terms of trade. The overall balance of payments and the fiscal balance recorded surpluses throughout this period, and foreign reserves reached the equivalent of 4.1 months of imports in 1991. External arrears were eliminated as Ghana normalized its relations with creditors. The inflation rate, which remained in excess of 30 percent during 1986–90, was reduced significantly in 1991.

From the perspective of saving-investment balances, the turnaround during the ERP period was quite dramatic (Table 3-3). Between 1970 and 1983, saving and investment declined sharply, while during the ERP there was a reversal of these trends, although the improvement in saving stemmed entirely from better fiscal performance.

**Recent Developments, 1992–94**

After 1991, there was a marked downturn in economic performance. The year 1992 was a watershed in the political and constitutional history of Ghana: a new constitution was adopted in April, and presidential and parliamentary elections were held in November and December. In the run-up to multiparty elections, large increases in wages and in wage-related benefits were granted to public sector employees. Accordingly, the fiscal balance turned from a surplus of 1.5 percent of GDP in 1991 to a deficit of 4.8 percent in 1992 and was mainly financed by the banking system. Inflationary and balance of payments pressures intensified. The Government implemented policies in 1993–94 with the object of regaining control over public finances, but had only limited success in reducing the budget deficit, excluding foreign exchange receipts from the sale of public assets. Additional monetary impulses emanated from large balance of payments surpluses and from borrowing by the national petroleum corporation from the Bank of Ghana. As a result, the growth of broad money accelerated in 1994 to 46 percent, and inflationary pressures intensified. Both private...
saving and investment declined, and government savings also fell. However, government investment remained strong and foreign investment increased, mainly in response to privatization of the mining industry and buoyant gold prices.

**Long-Term Growth: Empirical Studies**

This section attempts to identify the determinants of Ghana’s long-term growth using three approaches based on endogenous growth models. The first approach, based on cross-country analysis (Barro (1989)), relates the growth of real per capita income to rates of physical and human capital accumulation, and to the initial level of per capita income. While the results do not directly capture the impact of policies, they do suggest that based on its factor accumulation over the sample period (1960–92), and its initial relative income gap, Ghana could have been

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8The accumulation of physical capital is measured by the share of investment in GDP, and of human capital by the initial primary and secondary school enrollment ratios and the population growth rate. The level of per capita income is usually measured relative to that in industrialized economies (to capture technological “catching up” effects).
expected to grow substantially faster than it actually did. In Ghana’s case, two thirds of the sample period (1960–82) was characterized by severe structural distortions, and the uncertainty of economic conditions and policies probably had a critical influence in lowering Ghana’s growth.

The second approach was used to examine the influence of economic policies and external conditions on Ghana’s long-term growth. This approach, based on an analysis of cross-country and time-series panel data (Fischer (1993)), explores the effect of macroeconomic and structural policies on output growth and the channels—total factor productivity growth and capital accumulation—through which these effects are transmitted. The long-term rates of capital accumulation and economic growth in Ghana during 1970–92 were lower than the averages in sub-Saharan Africa and all developing countries as a group. This relatively poor performance reflected economic policies in Ghana that for most of the period were not supportive of growth, capital accumulation, and productivity gains, compared with these two groupings. The results averaged over the entire sample period (1970–92) indicate that Ghana’s poor average long-term growth performance relative to other countries was not surprising, since a number of Ghana’s macroeconomic policy factors during a significant part of the sample period were negatively correlated with growth, through both the investment and productivity channels: macroeconomic instability as measured by high inflation, policy rigidities, and uncertainty as measured by high levels of parallel market exchange rate premia, large budget deficits, and a significant deterioration in the terms of trade. The analysis also suggests that Ghana’s relatively low growth during this period was associated with a low initial level of investment in human capital. Moreover, Ghana’s rate of capital accumulation was likely to have been adversely affected by its high level of trade taxation and underdeveloped financial system.

The third approach, based on Bruno and Easterly (1994), was used to differentiate Ghana’s stronger growth record during the ERP from its long-term growth record. This analysis indicates that Ghana’s growth performance during 1970–82 (the pre-adjustment period) was significantly worse than the world average, after controlling for the long-term determinants of growth. However, during the ERP, growth shifted to rates markedly above the world average, and by somewhat more in the second phase (1986–91) of the adjustment program. While Ghana’s growth performance after 1991 did not improve compared with the 1986–91 period, it continued to be stronger than before the ERP. This may reflect the ongoing impact of the adjustment policies pursued under the ERP. The strengthening of growth since 1983 was significant even after

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*More specifically, this approach examines the effects of several macroeconomic policy indicators—the inflation rate, the budget deficit-to-GDP ratio, and the parallel market exchange rate premium—and changes in the terms of trade. The effects of structural policies and distortions are explored using the following indicators: the initial primary school enrollment ratio, the ratio of broad money-to-GDP (as a measure of financial sector development), and the average trade tax rate (as a measure of the degree of protection or openness).

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10This approach involves estimating the basic long-term “growth” regression (Barro (1989)) across a panel of countries and four relevant sub periods corresponding to Ghana’s adjustment experience. The estimated equation was used to identify the difference between Ghana’s per capita income growth and the world “average” after controlling for the long-term determinants of growth.

11Chart 3-2 shows this dramatic turnaround in Ghana’s growth performance relative to Africa.
controlling for the investment variable. This result indicates that other determinants including productivity gains had contributed significantly to the shift in Ghana's economic performance. In particular, policy-related factors—especially the reduction in the parallel market exchange rate premium—were found partly to account for the growth differential between Ghana and the world average.

Indeed, estimates of total factor productivity growth for Ghana confirm that there was a significant rebound in productivity growth during the ERP period. After experiencing, on average, a decline at the rate of 1.6 percent during 1970-82, total factor productivity turned around dramatically and grew at a rate of about 3.2 percent during the ERP. Moreover, these productivity gains were steady and sustained in both phases of the adjustment program. These productivity developments in Ghana compare quite favorably with sub-Saharan Africa, as well as several comparator countries in the region.

12 These estimates are based on purchasing power parity adjusted data. Alternative estimates (shown below) based on a Cobb-Douglas production function and actual investment and labor force data confirm these trends in total factor productivity developments during the pre-ERP and ERP periods. In addition, they indicate a slowdown in average total factor productivity growth in the postadjustment period relative to the ERP.

Average Total Factor Productivity Growth (in percent):

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>-2.57</td>
<td>2.22</td>
<td>2.48</td>
<td>1.37</td>
</tr>
</tbody>
</table>

Investment and Output During Adjustment

In marked contrast to many developing countries, Ghana achieved a strong, and almost immediate, sustained recovery in output growth following the launching of adjustment policies under the ERP (Table 3-1, Charts 3-1 and 3-2). While the initial impressive economic recovery no doubt partly reflected a rebound from a prolonged period of extreme economic depression, the fact that higher growth rates persisted throughout the 1980s suggests that more fundamental factors were at work. The period of adjustment was also marked by a substantial recovery in public investment supported by concessional external inflows. At the same time, the revival of private investment and saving was slow and modest.

Saving

After falling to very low levels in the early 1980s, national saving rose significantly—from under 4 percent of GDP to 18 percent between 1983 and 1988 (Chart 3-3). The recovery in saving during the first five years of the ERP mainly reflected a large inflow of external grants. Movements in domestic saving were similar to those of national saving.
sharp turnaround in central government saving, from
dissaving of over 4 percent of GDP a year on aver­
age in the preadjustment period to positive savings
of more than 5 percent of GDP. The private sector
(including public enterprises) saving response to the
adjustment program was slower and more modest.
After 1988, saving fell sharply to below 5 percent in
1993, reflecting declines in both private (from 1988
on) and public saving (during 1992–93).

Firm evidence on the determinants of private save­
ing in Ghana is scant and attempts to estimate di­
rectly a private savings equation were not successful,
in part reflecting data difficulties. Nonetheless,
econometric estimates of a savings function based
on panel data for African countries suggest that the
main determinants of the recovery in private saving
between 1983 and 1988 were the sharp drop in the
rate of inflation and the improvement in the terms of
trade. Although inflation was reduced sharply, it
remained high and variable throughout the ERP
and probably dampened saving by creating uncertainty
about future returns on savings or the future course
of policies. The decline in saving after 1988 is
largely explained by the deterioration in the terms of
trade. The steady rise in government saving under
the ERP probably also had a negative impact on pri­
vate saving throughout this period; however, avail­
able empirical evidence suggests that the increase in
public saving was likely to be only partly offset by
the drop in private saving.

While one would expect a role for other factors
such as interest rates to influence saving behavior,
primarily through their impact on financial saving,
however it is difficult to gauge the magnitude of
their influence empirically. Moreover, because of
likely measurement errors, it is probable that
changes in financial saving may have led to a larger
impact on measured than on true savings. The
increase in real interest rates during the ERP from
sharply negative to mildly negative levels may have
encouraged financial saving. On the other hand, sev­
eral factors may have discouraged financial saving,
including low returns as a result of high transactions
costs and a lack of confidence in the banking system,
reflecting the weak financial health of banks. High
rates of inflation are also likely to have a consider­
able impact on the structure of saving. With only a
limited range of domestic financial instruments
available to investors until recently, and none yield­
ning positive real returns before 1991, asset accumu­
lation was confined to the hoarding of consumer
durables or the acquisition of foreign currency.

### Investment

During the latter half of the 1970s, both private
and public gross fixed investment fell to minimal lev­
els—reaching 2 percent and 1 percent of GDP by
1982, respectively, which was insufficient to offset
capital depreciation (Chart 3–4). Following the start
of the ERP, the rate of public investment recovered
strongly with the help of substantial foreign financ­
ing, and by the mid-1980s it had surpassed the levels
achieved in the 1960s and 1970s. This investment
was aimed at rehabilitating infrastructure, which had
suffered years of neglect. In contrast, the recovery in
private investment was more modest and uneven, and
only during the second phase of the ERP (1987–91)
were substantially higher rates of investment consis­
tently attained. In 1992 and 1993, private investment
slumped in the wake of slippages in the implementa­
tion of financial policies. The level of foreign direct
investment (except in the gold sector) also remained
very low throughout the entire period.

Econometric estimates of private investment indi­
cate that policy-related factors had a considerable in­
fluence on the path of investment during the ERP
(Chart 3–5). The most important impact of policies
on private investment behavior was through their ef­
fect on macroeconomic instability and uncertainty.
In particular, the estimated equations show that the
parallel market exchange rate premium, which prob­
bly captures the influence of macroeconomic insta­
bility as well as the impact of foreign exchange con­
trols, had a major adverse effect on private
investment during 1976–83. This confirms the re­
results of empirical analyses on the determinants of
long-term growth discussed above. Moreover, the
elimination of the exchange rate premium between
1983 and 1991 appears to have been by far the most
important positive influence on the recovery of
private investment over the course of the ERP.

In contrast, the econometric results do not provide
any evidence that the rise in public investment fol­

---

14The fiscal policies underlying the performance of public sav­
16The results of Hadjimichael and Ghura (1995) reject the hy­
thesis of full Ricardian equivalence, which predicts changes in
public saving would be fully offset by changes in private saving;
this result has been confirmed in several other studies for devel­
oping countries (e.g., Corbo and Schmidt-Hebbel (1993)).
17The presence of liquidity constraints is probably the most im­
portant reason for rejecting Ricardian equivalence: their role is in part
evidenced by the significance of foreign saving in estimates of a pri­
vate consumption function for Ghana (e.g., Islam and Wetzel (1994)).
18See Aryeetey (1993b).
Following the adoption of the ERP directly boosted private investment. On the contrary, it appears that public investment—whether at the Central Government level or including public enterprise investment—had a significant, albeit small, direct crowding-out effect on private investment. Any beneficial impact of public capital spending on private investment, appears to have operated indirectly through its effects on aggregate demand, which (measured by lagged GDP growth) did provide a significant stimulus to investment—especially later in the adjustment process when economic activity recovered sharply.

The available evidence on the effects of monetary conditions on private investment provides a mixed picture. Even though interest rates were controlled for most of the period (until 1991), which would suggest that credit rationing effects were important, the availability of credit was not found to have a statistically significant influence on private investment. In contrast, real interest rates were statistically significant, which would suggest that the shift from highly negative to less negative real interest rates during the ERP would have had some dampening effect on private investors. It appears that the surge in private credit during 1984–86 (see next section) reflected, to a considerable extent, reintermediation of flows that had previously shifted to informal credit markets as a result of severe financial repression, rather than an effective increase in available credit. To some extent, the expansion of recorded credit during this period was also the result of a major broadening of the coverage of the monetary accounts.

External factors do not appear to have had a major impact on the private investment. Income effects

Other work, however, suggests that credit availability was a determinant of investment in Ghana. Survey evidence—for example, Steel and Webster (1991)—found that private entrepreneurs were strongly rationed in their access to credit, and Islam and Wetzel (1994) found a significant role for credit in an estimated investment equation. In general, however, caution is required in interpreting the econometric results on interest rate and credit effects, because of the impact of shifts in financial flows between informal and formal markets in response to changes in policy regimes.
Investment and Output During Adjustment


Composition of Expenditure
(Average annual percentage change
in constant prices)

- Real domestic absorption
  (consumption plus gross investment)
- Real exports, goods and nonfactor services
- Real imports, goods and nonfactor services

Output Gap
(In percent of trend output)

Sources: Ghanaian authorities; and IMF staff estimates.
1 Measured as the deviation between actual and estimated trend output.

Investment and Output During Adjustment

stemming from export price fluctuations influenced
the path of investment only to a small degree—possibly through effects on profitability, or by tightening or easing foreign exchange constraints on import of capital goods.

Other evidence suggests that a number of factors that could not be adequately captured in the estimated investment equation may have dampened private investment. Although there was a considerable improvement in the macroeconomic environment under the ERP, a significant degree of uncertainty and financial instability still remained and probably held back the recovery in private investment. Private investors may have taken a wait-and-see attitude in the face of the shift to a starkly different policy regime under the ERP, repeated policy and regulatory adjustments during the early years of the ERP, and fear of a return to earlier arbitrary policy actions, such as the confiscation of bank deposits in 1982 (see Aryeetey (1993a and b)). The persistence of high inflation, by creating uncertainties about future policies and financial returns, as well as obscuring relative price movements, may also have dampened private investment behavior throughout the ERP. Structural distortions and delays in addressing the problems of the financial and public enterprise sectors also appear to have been important influences delaying the recovery in private investment.

Mix of Stabilization Policies

This section examines the impact of stabilization policies on economic activity in Ghana during the ERP. Two important conclusions emerge from the analysis. First, financial policies did not squeeze domestic demand in the early part of the ERP; rather, they supported the strong recovery in output and domestic demand. In the later years of the ERP, financial policies were more restrained, but even then they did not exert a significant contractionary impact on economic activity. Second, expenditure-switching policies, which included a massive exchange rate correction, trade reform, and major domestic price realignments from the onset of the ERP, were successful in providing a strong stimulus to domestic output. Of course, one would not attribute the recovery in economic activity solely to macroeconomic policies—a renewal of external financing (largely in support of domestic policies) and positive exogenous shocks also contributed to the strength of the recovery in the first phase of the ERP.21

The process of stabilization and adjustment often involves some contraction in aggregate demand—which may delay or dampen a recovery in output and investment—until the positive impact of expenditure-switching policies on supply takes hold. Ghana, however, does not appear to fit this mold. While a measure of the output gap (the deviation between actual and an estimated potential or trend output) shows output below trend during 1983–86, this was a carryover from the earlier crisis years (Chart 3-6).22 The recovery began immediately in 1983 and the output gap disappeared quickly through strong output growth. Moreover, real domestic absorption rose during the early years of adjustment. Import volumes also grew rapidly during this period, suggesting that neither were imports being unduly compressed by a contractionary squeeze on domestic demand nor were they acting

21In addition, part of the measured recovery likely reflected a shift in economic activity from informal to formal markets.

22Trend output is estimated by applying a Hodrick-Prescott filter to actual GDP. This univariate filter eliminates short cycles from the data on actual output in estimating trend GDP.
as a constraint on the recovery of economic activity (Chart 3-6); rather, the additional external financing that accompanied the adoption of the ERP appears to have helped ease a severe squeeze on imported inputs.

Fiscal policy supported the recovery of output and investment during the first phase of adjustment, through its effect on aggregate demand. A simple measure of the impact of fiscal policy on aggregate demand is given by the fiscal impulse (Table 3-4, and Chart 3-7). On average, the fiscal impulse was small during 1983–91. During the first phase of adjustment, when output was below trend, the fiscal impulse was mildly positive, and in the second adjustment phase it turned slightly contractionary when the output gap was positive. By contrast, in 1992–93, fiscal policy provided a strong expansionary stimulus that fueled inflationary pressures.

In broad terms, monetary policy appears to have accommodated the strong expansion in output after 1983, but at the cost of inflation that remained stubbornly high. Three indicators of monetary conditions are examined in order to assess the influence of monetary policy on the expansion of domestic demand, but interpreting all of them is complicated by the transition from a period of severe financial repression. One indicator is the level of real money

<table>
<thead>
<tr>
<th>Table 3-4. Ghana: Central Government Budget Operations, 1983–93</th>
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</thead>
<tbody>
<tr>
<td>Total revenue and grants</td>
</tr>
<tr>
<td>Tax revenue</td>
</tr>
<tr>
<td>Direct taxes</td>
</tr>
<tr>
<td>Taxes on domestic goods and services</td>
</tr>
<tr>
<td>Taxes on international trade</td>
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<tr>
<td>Nontax revenue</td>
</tr>
<tr>
<td>Grants</td>
</tr>
<tr>
<td>Total expenditure and net lending</td>
</tr>
<tr>
<td>Of which:</td>
</tr>
<tr>
<td>Current expenditure</td>
</tr>
<tr>
<td>Capital expenditure</td>
</tr>
<tr>
<td>Narrow deficit</td>
</tr>
<tr>
<td>Broad Definition</td>
</tr>
<tr>
<td>Total revenue and grants</td>
</tr>
<tr>
<td>Of which:</td>
</tr>
<tr>
<td>Grants</td>
</tr>
<tr>
<td>Total expenditure and net lending</td>
</tr>
<tr>
<td>Of which:</td>
</tr>
<tr>
<td>Capital expenditure</td>
</tr>
<tr>
<td>Overall deficit</td>
</tr>
<tr>
<td>Memorandum items:</td>
</tr>
<tr>
<td>Output gap</td>
</tr>
<tr>
<td>Fiscal impulse</td>
</tr>
</tbody>
</table>

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

1Includes capital expenditure financed by direct project grants and loans.
2Includes external project grants. These data are subject to a certain degree of estimation error.
3Includes capital expenditure financed through external project grants and loans.
4Calculated as a deviation of actual output from potential output (calculated using the Hodrick-Prescott filter).
5Calculated as a deviation of actual output from the Hodrick-Prescott filter.

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“Sorry—the quality of the source document is insufficient to render this image into text.”
at the foreign exchange auctions, it is likely that a considerable share of imports, particularly consumer goods, were financed through the parallel market. For this reason the relative price of tradables and nontradables in the consumer price index basket of goods may be a more accurate measure of the real exchange rate than the REER—at least for consumer goods. With respect to exports, an important measure of production incentives, particularly for cocoa, is the ratio of producer to world prices and the ratio of export prices to domestic consumer prices; cocoa producer prices continued to be administered during the ERP. All these measures of the real exchange rate show a sharp increase in incentives for the domestic production of tradable goods during the first adjustment phase, which was largely sustained during the second phase of adjustment (Charts 3-9 and 3-10).27

Imports and exports responded quickly to the expenditure-switching policies (exchange rate, trade reform, and domestic price adjustments). Ghana succeeded in making gains in its share of export markets and in reducing the intensity of imports compared with past trends, the volume of imports nevertheless rose sharply, reflecting the strong recovery of output and the increased availability of financing. The impact of these policies also appears to have strengthened, on average, during the second phase of the ERP. In particular, the volume of merchandise ex-

27Neither of these indicators of competitiveness focuses on developments in costs and therefore would not necessarily accurately reflect movements in profitability.

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ports increased substantially throughout 1983–93 (Chart 3-11).

**Policy Credibility and Sustainability**

One possible explanation for the sluggish response of private investment and saving to the ERP was that policies were initially perceived to be unsustainable or lacking in credibility. One clear signal of such a potential problem was the failure of inflation to fall below a level of about 30 percent for a sustained period. This section considers two questions related to the credibility of financial policies. First, was the magnitude of the fiscal deficit reduction consistent with the objective of reducing inflation and a shift to positive real interest rates on public domestic debt? Second, why was inflation persistently high?

Private sector assessments of the sustainability of fiscal policy can have an important influence on the response of private investment and savings. An important aspect of this assessment is the effect of fiscal policy on the public debt burden. Chart 3-12 presents the results of some debt dynamics calculations for Ghana, based on the intertemporal budget constraint for the public sector. The actual primary fiscal balance at different stages of the adjustment process is compared with two notions of a “sustainable” balance: (1) the primary balance that would keep the public debt-to-GDP ratio constant at its current level, assuming that the current rate of inflation (and hence seigniorage) and the current interest rate on domestic debt (and hence the extent of financial repression) are maintained in the future (indicated as the base scenario); (2) the primary balance that would keep the public debt-to-GDP ratio constant at its current level in a context of low inflation and no financial repression (indicated as the alternative scenario). This latter measure is a more comprehensive indicator of fiscal sustainability, since it pro-

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28Bruno and Easterly (1994) found evidence, using a panel regression analysis (including Ghana), that inflation in the 40 percent a year range over a prolonged period has strong negative growth effects.

29Using the approach described in Anand and van Wijnbergen (1989), the budget constraint can be described as $b = (r-n) + d + s$, where $b$ represents the public sector debt-to-GDP ratio, $d$ is the primary deficit as a share of GDP, $s$ is seigniorage revenues (including the inflation tax) as a share of GDP, $r$ represents the average real interest rate on debt, and $n$ is the real GDP growth rate. Since the aim of the exercise is to assess whether fiscal policy was judged to be sustainable at the time, rather than with the benefit of hindsight, the debt calculations are based on a three-year moving average of actual interest rates and growth rates and assume, for the purpose of each year’s estimate, that the real exchange rate is expected to be constant. The estimate of “low-inflation” seigniorage is derived from a quadratic function linking seigniorage to inflation that was estimated by Easterly and others (1993) on the basis of cross-country data and assumes an annual inflation rate of 5 percent.
vides a measure of the deficit reduction that is needed to make fiscal policy consistent with other important goals of an adjustment strategy, namely low inflation and efficient financial intermediation.

The convergence of the two measures of sustainability beginning in the late 1980s reflects the progress made in diminishing the degree of financial repression and in reducing inflation to some degree.

The results indicate that fiscal policy was on a sustainable path, in the sense defined above, between 1984 and 1991, even when it is assumed that the negative real yields on domestic debt and high levels of seigniorage revenue would not be available as sources of financing in the future.30 During 1992–93, the expansionary stance of fiscal policy shifted the primary balance to an unsustainable position—in the sense that it implied continued increases in the debt-to-GDP ratio. As to the composition of the fiscal adjustment, increased outlays on health, education, and infrastructure rehabilitation were also positive aspects.

The fundamental factor underlying inflation inertia, after the initial sharp fall in inflation in 1984–85, was the absence of an effective nominal anchor.31 Uncertainties about the appropriate equilibrium level of the exchange rate and the low level of reserves prevailed against the use of a nominal exchange rate anchor at the time the ERP was adopted. Moreover, credit and incomes policies, which had been expected to bring down inflation further, proved to be insufficient. In the event, monetary policy accommodated inflationary pressures, at times from cost-push factors, and may have contributed to keeping inflationary expectations high.

The limited effectiveness of incomes policies in reducing the cost-push factors on inflation is reflected in the substantial rise of nominal wages under the ERP. During 1983–88, significant increases in nominal wages were granted in the public sector in order to reverse the severe compression in real wage levels prior to the ERP and to improve the quality of the civil service. From the perspective of efficient public administration, this reversal was necessary, but, the large increases (on average 64 percent a year or 28 percent in real terms) put upward pressure on the price level directly through their impact on demand, and indirectly through their demonstration effect on private (formal) sector wages (Chart 3-13) and on inflationary expectations. In 1989–91, nominal wages in the public sector increased more closely in line with inflation, but in 1992 the civil service was granted a wage rise of 80 percent.

The rapid growth of broad money, which was consistently higher than the rate of inflation by a large margin during 1983–89, was due primarily to the large expansion of credit to the public sector during 1983–86 and to the rapid increase in the net foreign assets of the banking system during 1987–88 (in part reflecting high levels of external concessional assistance, which was only partially sterilized).32 During

30 Another notion of sustainability would require also that the primary balance be consistent with maintaining the debt-to-GDP ratio constant in the event that no further concessional external financing was received. For example, if all external financing (including grants) was assumed to be on market terms, the additional interest payments in 1993 would have been equivalent to about 1/4 percentage points of GDP.

31 A more detailed discussion of the factors determining inflation is contained in Kapur and others (1991).

32 The significant change in the macroeconomic regime during this period probably led to significant shifts in the demand for money. This complicates the task of clearly assessing the stance of monetary policy.
1989–91, broad money growth declined, as the Government made net repayments to the banking system. Monetary control started to become more effective in the post-ERP period following the introduction of open market operations at market-determined yields. However, in 1992–93, the large increase in the fiscal deficit fueled a resurgence in monetary expansion.

**External Financing**

Ghana’s substantial and sustained reform effort attracted significant inflows of capital, including large amounts of concessional assistance, and the path of output and investment during the ERP was not unduly constrained by an inadequate level of external financing. During the first phase of adjustment (1983–86), net external financing flows (net capital inflows plus official transfers) provided scope for strong growth in import volumes—averaging 13.5 percent a year—which reversed the import starvation that occurred in 1982–83.\(^3\) At the same time, sizable repayments of arrears were made and relations with creditors were normalized. In the second adjustment phase (1987–91) net external financing increased sharply, more than doubling from US$176 million a year during 1983–86 to US$472 million in 1987–91; for the most part this reflected a rise in net official inflows, especially transfers (Table 3–5). In the face of a large and persistent decline in the terms of trade, these inflows allowed Ghana to avoid a sharp contraction in domestic absorption, which could have dampened the recovery in output and investment. However, the significant increase in external inflows, which was larger than

**Table 3-5. Ghana: Balance of Payments, 1983–91**

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</thead>
<tbody>
<tr>
<td>(Millions of U.S. dollars)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports, f.o.b.</td>
<td>439.1</td>
<td>566.7</td>
<td>623.2</td>
<td>749.4</td>
<td>824.0</td>
<td>881.0</td>
<td>808.3</td>
<td>896.6</td>
<td>998.0</td>
</tr>
<tr>
<td>Imports, f.o.b.</td>
<td>499.7</td>
<td>616.0</td>
<td>671.3</td>
<td>733.5</td>
<td>933.8</td>
<td>990.9</td>
<td>1,006.0</td>
<td>1,050.5</td>
<td>1,318.7</td>
</tr>
<tr>
<td>Trade balance</td>
<td>-60.6</td>
<td>-49.3</td>
<td>-39.0</td>
<td>15.9</td>
<td>-109.8</td>
<td>-110.0</td>
<td>-197.7</td>
<td>-308.4</td>
<td>-320.7</td>
</tr>
<tr>
<td>Services (net)</td>
<td>-186.0</td>
<td>-229.2</td>
<td>-254.4</td>
<td>-290.9</td>
<td>-315.9</td>
<td>-326.8</td>
<td>-318.8</td>
<td>-325.5</td>
<td>-352.5</td>
</tr>
<tr>
<td>Private unrequited transfers (net)</td>
<td>16.6</td>
<td>73.5</td>
<td>31.9</td>
<td>72.1</td>
<td>201.6</td>
<td>72.4</td>
<td>202.1</td>
<td>201.9</td>
<td>219.5</td>
</tr>
<tr>
<td>Official unrequited transfers (net)</td>
<td>72.4</td>
<td>129.7</td>
<td>104.6</td>
<td>118.2</td>
<td>122.2</td>
<td>174.9</td>
<td>219.4</td>
<td>213.8</td>
<td>202.4</td>
</tr>
<tr>
<td>Current account balance</td>
<td>-157.6</td>
<td>-75.3</td>
<td>-156.9</td>
<td>-84.7</td>
<td>-101.9</td>
<td>-89.5</td>
<td>-95.0</td>
<td>-218.2</td>
<td>-251.3</td>
</tr>
<tr>
<td>Capital account</td>
<td>102.0</td>
<td>93.3</td>
<td>62.4</td>
<td>20.0</td>
<td>255.0</td>
<td>217.8</td>
<td>222.4</td>
<td>284.3</td>
<td>391.5</td>
</tr>
<tr>
<td>Official capital (net)</td>
<td>27.7</td>
<td>186.7</td>
<td>32.1</td>
<td>123.1</td>
<td>217.9</td>
<td>187.2</td>
<td>192.0</td>
<td>290.4</td>
<td>356.6</td>
</tr>
<tr>
<td>Private capital (net)</td>
<td>13.4</td>
<td>-8.7</td>
<td>5.8</td>
<td>7.0</td>
<td>1.7</td>
<td>4.0</td>
<td>11.7</td>
<td>52.8</td>
<td>19.1</td>
</tr>
<tr>
<td>Short-term capital</td>
<td>60.9</td>
<td>-84.7</td>
<td>24.5</td>
<td>-110.1</td>
<td>35.4</td>
<td>26.6</td>
<td>187.3</td>
<td>-59.2</td>
<td>15.8</td>
</tr>
<tr>
<td>Errors and omissions</td>
<td>-187.4</td>
<td>19.2</td>
<td>-21.0</td>
<td>7.9</td>
<td>-14.6</td>
<td>-3.8</td>
<td>—</td>
<td>52.0</td>
<td>31.0</td>
</tr>
<tr>
<td>Overall balance</td>
<td>-243.0</td>
<td>37.2</td>
<td>-115.5</td>
<td>-56.7</td>
<td>138.5</td>
<td>124.6</td>
<td>127.4</td>
<td>117.8</td>
<td>171.2</td>
</tr>
<tr>
<td>Financing</td>
<td>243.0</td>
<td>-37.2</td>
<td>115.5</td>
<td>56.8</td>
<td>-137.9</td>
<td>-126.2</td>
<td>-127.4</td>
<td>-117.8</td>
<td>-171.2</td>
</tr>
<tr>
<td>Change in net foreign assets</td>
<td>241.9</td>
<td>-26.9</td>
<td>107.7</td>
<td>66.2</td>
<td>-131.4</td>
<td>-124.8</td>
<td>-142.2</td>
<td>-86.4</td>
<td>-147.5</td>
</tr>
<tr>
<td>IMF transactions (net)</td>
<td>258.7</td>
<td>213.7</td>
<td>122.0</td>
<td>16.1</td>
<td>-25.2</td>
<td>-45.5</td>
<td>4.4</td>
<td>-47.7</td>
<td>82.2</td>
</tr>
<tr>
<td>Change in arrears (reduction)</td>
<td>-33.7</td>
<td>-207.8</td>
<td>-56.7</td>
<td>-3.7</td>
<td>-71.6</td>
<td>-34.8</td>
<td>-47.7</td>
<td>-17.3</td>
<td>—</td>
</tr>
<tr>
<td>Other reserves (increase)</td>
<td>16.9</td>
<td>-32.8</td>
<td>42.4</td>
<td>53.7</td>
<td>-34.6</td>
<td>-44.5</td>
<td>-98.9</td>
<td>-38.7</td>
<td>-229.7</td>
</tr>
<tr>
<td>Bilateral payments agreements</td>
<td>1.1</td>
<td>-10.3</td>
<td>7.8</td>
<td>-9.4</td>
<td>-6.5</td>
<td>-1.4</td>
<td>14.8</td>
<td>-14.1</td>
<td>-23.7</td>
</tr>
</tbody>
</table>

| (In percent of GDP) | | | | | | | | | |
| Current account deficit (–) | -0.8 | -1.0 | -2.5 | -1.5 | -2.1 | -1.7 | -1.8 | -3.5 | -3.6 |
| Including official transfers | -1.1 | -2.7 | -4.1 | -3.5 | -4.6 | -5.1 | -6.0 | -6.9 | -6.5 |
| Excluding official transfers | | | | | | | | | |

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

\(^3\)During the course of the ERP, net private transfers also grew strongly. During 1983–86, earlier small outflows were reversed (average annual inward transfers amounted to US$31 million) and by 1987–91 annual average inflows of US$208 million (equivalent to about 3.5 percent of GDP) were recorded.
expected, also complicated efforts to restrict the growth of broad money (Younger (1992)).

Throughout the adjustment period, Ghana avoided recourse to multilateral debt relief, which enabled it to enjoy access to new credits, many on concessional terms. As a result, the external debt-to-GDP ratio rose rapidly from 9 percent in the preadjustment period to 77 percent in 1993, although liquidity and solvency indicators of external debt sustainability indicate that the debt burden has been manageable. The debt-service ratio declined rapidly during the second phase of adjustment, falling from about 63 percent in 1987–88 to 29 percent in 1992–94, while the net present value of debt relative to exports at the end of 1993 was 225 percent, which may be regarded as a sustainable level.

Structural Impediments to Investment and Output Growth

Structural policies can influence growth by improving efficiency and resource allocation and by expanding the capital stock, including human resources. Ghana’s policies to decontrol prices and liberalize the exchange and trade regimes early in the ERP led to significant efficiency gains and a dramatic improvement in growth rates as compared with the pre-ERP period. However, the implementation of other supporting structural policies lagged with the result that resources were hindered from moving to and within the tradable goods sector. Reform policies for the financial, parastatal, and agricultural sectors were implemented at only a gradual pace, while a concerted effort to strengthen directly the role of the private sector, through such policies as privatization, revisions to the regulatory framework for investment, and tax reforms, was initiated only toward the end of the ERP.

Private Sector Development

While prices were deregulated and economic activity was generally exposed to market forces during the ERP period, the public sector retained a dominant role in the allocation of resources—directly through government spending and indirectly through public enterprise activities. Moreover, the complex legal and regulatory framework took several years to dismantle. Only in 1991 did the Government create an advisory group to identify constraints on the private sector and pave the way to revisions in the regulatory framework. A fully liberalized investment code was not introduced until 1994, when a range of issues relating to business licensing, foreign ownership, technology transfer, and tax incentives was finally addressed. Despite these improvements, property rights in Ghana, particularly relating to landownership, are still governed by arcane regulations. Private investment initiative was also dampened during the ERP by heavy corporate taxation. Meaningful tax reforms were only introduced in 1991 (see below).

During the ERP the private sector also faced barriers to entry in major sectors of the economy where parastatal monopolies operated, most notably in cocoa marketing, banking and insurance, and the utilities, including energy and telecommunications. Privatization in these sectors was slow, and foreign direct investment in Ghana remained limited. This was in part due to cumbersome procedures that faced investors; those were not streamlined until 1994 when revisions to the investment code allowed foreign participation in the Ghana stock exchange. Since then there has been a marked increase in foreign direct investment, particularly in the mining sector.

A clear lesson from the experience of high-performance economies is that a strong response by the private sector (both foreign and domestic) was built on a business-friendly environment (World Bank (1993)). By contrast the private sector in Ghana received mixed signals during the ERP as liberalization policies were not fully complemented by an institutional framework conducive to promoting free competition. Thus the current strategy of the Government is to implement structural reforms aimed at sending an unequivocal signal about the central role of the private sector in the economy.

Financial Intermediation

In the period immediately before the ERP, public confidence in the banking system was badly shaken by decisions taken in 1979 and 1982 to confiscate private deposits as part of currency conversion exercises. As a result, banks found it increasingly difficult to mobilize deposits. Confidence in the banking system was only gradually restored and currency-to-deposit ratios remained high for most of the ERP period. The financial system was highly repressed by interest rate controls, credit rationing, and quasifiscal lending by the Central Bank in the form of support to the commercial banks. Although real interest rates rose substantially, they continued to be negative, and thus financial intermediation through the banking system improved only gradually. Small scale enterprises continued to seek much of their financing outside the banking system in informal markets. Moreover, the weak financial state of the parastatal sector resulted in an accumulation of nonperforming assets in the banking system.

34During the ERP, on average almost 40 percent of credit was absorbed by the parastatal sector (including the Cocoa Board).
Interest rates were progressively decontrolled between 1988–91, and the Government took over a large part of the nonperforming portfolios of commercial banks in 1990. However, to help improve profitability, the banks increased their spreads, which already reflected the oligopolistic nature of the financial system.33 Stringent prudential regulations put in place under the financial reforms have also made banks cautious with regard to their lending attitude despite their excess reserves at the Central Bank. Credit controls were only removed in 1991; during most of the ERP period the available credit was not efficiently allocated.

Although some financial deepening occurred in Ghana, financial markets were still relatively underdeveloped during the ERP.34 Even in the post-ERP period, financial intermediation still generated little medium-term or development financing for start-up capital. Small-scale businesses, particularly in farming communities, faced high interest rates in informal credit markets, reflecting the lack of depth in rural finance institutions. A stock exchange was started in 1990, but by 1994 shares of only 17 companies were traded.

Ghana’s experience was similar to that of other ESAF countries in that fundamental reforms to address distressed financial institutions could not be introduced early in the adjustment period because the financial system itself was dominated by the public sector, and because the reforms could not precede parastatal sector reforms. The financial restructuring of distressed banks late in the ERP was made possible after hard budget constraints were imposed on the public sector. To complete the reform process, Ghana has recently embarked on a strategy to increase the competitiveness of the banking system through privatization of the major publicly owned banks as part of a more comprehensive privatization strategy.

**Public Sector Management**

**Quality of Fiscal Adjustment**

Improved fiscal discipline was critical for successful stabilization policies during the ERP. However, the “quality” of fiscal adjustment cannot be easily measured as changes in taxes, expenditures, and the regulatory framework are transmitted through a variety of channels. Progress was made in rationalizing the tax system, improving tax administration, and broadening the tax base. Other policies such as the price and exchange system liberalization also contributed to increasing the share in total revenue of consumption-based taxes (Table 3-4). Expenditure

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Table 3-6. Ghana: Selected Monetary and Financial Indicators, 1983–94

<table>
<thead>
<tr>
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<tr>
<td>Reserve money</td>
<td>43.3</td>
<td>58.9</td>
<td>23.3</td>
<td>—</td>
<td>89.2</td>
<td>4.9</td>
<td>73.8</td>
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<tr>
<td>Broad money (M2)</td>
<td>37.0</td>
<td>53.7</td>
<td>26.9</td>
<td>19.9</td>
<td>52.9</td>
<td>27.4</td>
<td>46.0</td>
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<td><strong>Monetary ratios:</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Broad money (M2)/GDP</td>
<td>11.9</td>
<td>16.9</td>
<td>16.9</td>
<td>13.2</td>
<td>17.3</td>
<td>16.8</td>
<td>18.7</td>
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<td>Financial savings/GDP</td>
<td>5.2</td>
<td>6.3</td>
<td>10.3</td>
<td>9.4</td>
<td>11.3</td>
<td>11.1</td>
<td>11.5</td>
</tr>
<tr>
<td>Currency outside banks/M2</td>
<td>47.3</td>
<td>36.1</td>
<td>34.5</td>
<td>26.5</td>
<td>35.3</td>
<td>32.5</td>
<td>38.1</td>
</tr>
<tr>
<td>Currency/total deposits</td>
<td>89.6</td>
<td>56.6</td>
<td>52.7</td>
<td>36.0</td>
<td>54.6</td>
<td>51.0</td>
<td>62.0</td>
</tr>
<tr>
<td>Velocity (GDP/End-period M2)</td>
<td>8.8</td>
<td>5.9</td>
<td>5.9</td>
<td>7.6</td>
<td>5.8</td>
<td>6.0</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Interest rates:</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discount rate on 91-day treasury bills</td>
<td>...</td>
<td>...</td>
<td>20.0</td>
<td>20.0</td>
<td>25.4</td>
<td>32.0</td>
<td>29.5</td>
</tr>
<tr>
<td>Bank of Ghana’s rediscount rate</td>
<td>...</td>
<td>...</td>
<td>26.0</td>
<td>20.0</td>
<td>30.0</td>
<td>35.0</td>
<td>33.0</td>
</tr>
<tr>
<td><strong>Ghana Stock Exchange:</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of shares offered</td>
<td>—</td>
<td>—</td>
<td>4.2</td>
<td>3.4</td>
<td>4.2</td>
<td>73.9</td>
<td></td>
</tr>
<tr>
<td>(In billions of cedis)</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>(In percent of GDP)</td>
<td>—</td>
<td>—</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>1.4</td>
<td></td>
</tr>
</tbody>
</table>

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

**Notes:**

1. Includes savings and time deposits.

2. The banking system was, and remains, dominated by three large banks and nine smaller banks.

3. The ratio of broad money to GDP improved from 11.3 percent in 1983 to 13.5 percent in 1991 and reached 18.7 percent by 1994 (Table 3-6). This is still lower than in other comparator countries.
priorities were redirected toward basic education, social services, and infrastructure, while subsidies to the parastatal sector were eliminated.

With regard to tax policy, heavy reliance on income-based taxes continued until the late 1980s. Only since 1988 has visible progress been made toward shedding distortionary taxation and broadening the tax base. Since then, the share of direct taxation in total tax revenue has been reduced sharply mainly owing to a reduced share of corporate income taxes. This change, in part, resulted from an introduction of an investment code in 1985, which lowered tax rates (from 55 to 45 percent) and offered provisions for accelerated depreciation, as well as import duty exemptions. However, its effectiveness was limited by the complex provisions on incentives and because of wide differentials in tax rates across sectors. Furthermore, capital gains taxes and withholding taxes on dividends remained high until 1991. Only then were these taxes reduced, with corporate tax rates further lowered to 35 percent for most sectors. Corporate tax rates were thus unified with the top marginal rate on personal income taxes that were also reduced in 1991. During most of the ERP, the system of direct taxes was not actively supportive of private sector investment. An earlier introduction of meaningful tax reforms would have been more conducive to a better private sector investment response (see above).

Furthermore, higher producer prices for cocoa would have likely brought a much stronger response in cocoa exports if it had been possible to lower cocoa taxation earlier in the ERP (see above). However, the need for a reliable source of revenue precluded such action. During the ERP the tax base expanded, reflecting higher reliance on indirect taxes from import duties, sales taxes, and excises on petroleum products. Accordingly, the reduced dependence on cocoa taxes (as their share dropped from 29 percent of total revenue in 1983 to 10 percent by 1991) created scope for reducing cocoa taxation in the post-adjustment period.

Capital expenditure rose from negligible levels in 1983 to an average of over 5 percent of GDP during the second phase of the ERP. Over half of these capital expenditures were funded directly through donor project aid. Many of these expenditures were dedicated to the rehabilitation of infrastructure. The composition of current expenditure put priority on health and education, which rose from 25 percent in 1983 to 34 percent of expenditures in 1991, while reducing transfers and subsidies. Although there is no direct evidence about the effectiveness of these expenditures, long-run growth studies and Ghana's relatively poor initial endowment of human capital (at least in terms of primary school enrollment rates) suggest that expenditures during the ERP were likely to have been growth enhancing.

In the post-ERP period, however, the structure of the budget expenditures was adversely affected by a rise in wage-related expenditures and an increase in domestic interest payments. For Ghana to be able to afford maintaining or increasing the level of social expenditures over the next few years, the wage bill will need to be contained and a stringent public expenditure management policy implemented to enhance efficiency in resource allocation.

Public Enterprise Reform and Privatization

Ghana's strategy in the pre-ERP period was to rely heavily on state-owned enterprises (SOEs) as a vehicle for economic development. During the first phase of the ERP, little effort was made to reduce the size of the SOE sector. Instead, Ghana's reform strategy aimed to expose SOEs to competitive market forces as a means of stimulating their management to seek ways to improve their financial position through cost-cutting measures. Access to budget subsidies was discouraged, and controls on input and output prices were removed. However, most SOEs remained financially weak and overstaffed, and inefficiencies in their operations in key sectors constituted a drain on the budget and a drag on the economy.

In the second phase of the ERP, the Government's strategy for parastatal sector reform became more active. The State Enterprise Commission (SEC) was created in 1987 to manage a group of 20–24 core or priority enterprises, which would remain in state ownership, while 32 SOEs were targeted for divestment and the status of the remainder was made subject to a review. By the end of the ERP the financial positions of the core enterprises had improved as a result of performance contracts monitored by the SEC, under which SOEs faced borrowing limits, and none of them was receiving direct government transfers. Sixty-three minor SOEs were either sold or liquidated, and a similar number were identified for divestment (Table 3-7). Nonetheless, slow progress in parastatal reforms and privatization policy during the ERP was a critical factor holding back private and foreign investment. A decade after the inception of the ERP, major sectors in Ghana’s economy were...
still dominated by SOEs, including cocoa, transport, telecommunications, the utilities, education, and services sectors. The SOE sector was still a major employer, but contributed little in terms of corporate income taxes.

Ghana's experience with parastatal sector reforms during the ERP shows that success in implementing hard budget constraints on the SOEs without privatization may not be sufficient, because enterprises tend to undermine financial discipline by using a variety of channels that are usually less transparent, such as making excessive severance awards. Performance contracts have had some success in eliminating enterprise operating losses, but some enterprises still remained uncommitted to long-term profit maximizing behavior, as they devoted few resources to capital replenishment. Such contracts are only second best when compared with privatization.

The Government therefore started to strengthen its stance on privatization after 1992. A milestone decision was taken when the Government divested its shares in seven of the most profitable enterprises through flotations on the Ghana Stock Exchange in 1993–94, and sold half of its shares in the Ashanti Goldfields.41 The divestiture list has been expanded to over 100 enterprises, including the major publicly owned banks, and steps are under way to fully deregulate the cocoa and petroleum trading sectors. Accelerating the divestiture program is currently the centerpiece in the Government's structural reforms.

Agricultural Sector Policies

In the pre-ERP period, Ghana favored industry and taxed agriculture heavily, and by the early 1980s, the level of cocoa production had slumped to less than one third its level in 1965. This was clearly a major impediment to growth. Several studies of that period have shown that, in comparison with other developing countries, Ghana's sectoral tax/incentive regime was characterized by an "extreme" level of bias in favor of sectors other than agriculture during 1958–76.42 Agricultural pricing policies led to huge income transfers out of agriculture, in favor of government (net revenues), urban consumers (lower food prices), and industry (cheap raw materials and other inputs). The effects of this intervention were considerable.43 Schiff and Valdes (1995) provided clear evidence that the level of taxation on agriculture was inversely related to agricultural and total economic growth; and that higher producer prices were also associated with increased investment and a reduction in labor outmigration.

The ERP introduced several agricultural reforms to correct these distortions. In the first phase (1983–86), exchange rate adjustments and government-administered increases in the producer price of cocoa were undertaken to improve profitability and reduce implicit taxation. The second phase (1987–91) was more structural in focus where, in addition to increases in producer prices, attempts were made to restructure the Cocoa Board's crop marketing and financial operations and to increase public investment in the sector.

Ghana's agricultural performance during the ERP and the post-ERP period was less than satisfactory (Chart 3-14). In the 1980s, agricultural output grew at an average rate of 2.7 percent—considerably less than the developing country average of 3.9 percent (World Bank (1993)). This disappointing record represented a drag on overall economic growth. In addition, stagna-

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41Based on cross-country comparisons, it was estimated that for that period if agricultural GDP in Ghana had a value of 100 under total price intervention, then it would have reached 240 in the absence of such interventions (Schiff and Valdes (1995)).

42Stryker (1991), and Schiff and Valdes (1995).
This unfavorable price environment is likely to have dampened overall economic growth through the multiplier effect on dependent sectors, notably marketing, transport, and agro-industry.

Strong evidence has been compiled that indicates that Ghanaian farmers are responsive to changes in price incentives; indeed, during the ERP period cocoa production rebounded sharply as producer prices were increased (Chart 3-10). However, there is also evidence that farm incomes did not keep up with inflation during the ERP period, in part reflecting the decline in world cocoa prices, and consequently there was a significant deterioration in the agricultural terms of trade (Sarris and Shams, 1991). This unfavorable price environment is likely to have limited the supply response of the agricultural sector during the ERP period.

In addition, agricultural activity appears to have been constrained by extremely high transactions costs in the form of institutional and infrastructural weaknesses. Limited storage facilities, transportation and infrastructural bottlenecks, such as poor feeder roads, and lack of access to wider markets raised marketing costs, deterred new investments, and dampened output response. The persistence of high transaction costs also explains the low propensity among traditional Ghanaian farmers to make new investments and the unwillingness of subsistence farmers to enter the market economy.46

The key shortcoming of Ghana’s agricultural reform strategy has been that where the Government could and should have played a more active role, as in upgrading the infrastructure of rural and urban markets and providing agricultural extension services and support to farmers, it did not, and where it should have relinquished its role, as in marketing, distribution, and the state enterprise sector in general, it did not move fast enough. These shortcomings undermined the impact of the other key aspect of agricultural reform: price reform.47

Lessons from the experience of high-growth Asian countries indicate that the initial impetus to growth came from agriculture. Substantial increases in value added in primary agriculture and agro-based industry generated the necessary export surpluses that were then used to finance the shift to manufacturing and manufactured exports (World Bank (1994)). During the ERP, Ghana was unable to achieve a similar agriculture-led growth path. To alleviate the impediments to its agricultural growth, Ghana’s current strategy centers on moving aggressively toward the full deregulation of the cocoa sector and on adopting structural reforms aimed at removing the infrastructural bottlenecks, improving rural credit availability, and eliminating distortive taxation of agriculture.48

Exchange and Trade Reforms

A key element of the ERP was the reform of the exchange and trade system, where controls were widespread and distortions large. Before 1983, the trade and exchange system suffered from foreign exchange and trade distortions.

46The World Bank (1993b) noted that it was not clear to what extent the lack of rural finance may have been an impediment to investment and growth—even if credit were available, few farmers would have entered the credit system.

47See Leechor (1994). Lessons from the experience of other countries confirm that producers are unlikely to respond strongly to a price increase given by marketing boards, when faced with inadequate infrastructure to efficiently market and transport inputs and outputs, or with insufficient financial resources (Schiff and Valdes (1995)).

48It was only recently (1992–93) that some concrete steps were undertaken to introduce a significant private sector presence in agricultural activity: processing and storage capacity and input supply were privatized, and marketing of cotton, palm oil, coffee, and peanuts liberalized. Private companies have also been granted the right to purchase cocoa in competition with the Cocoa Board and are currently purchasing 25 percent of the crop.

49The bulk of exports went through state-owned monopolies: cocoa beans and products, coffee, and palm kernels could only be exported through the Cocoa Board; timber and related products through the Timber Marketing Board; and diamonds through the Diamond Marketing Corporation. These accounted for 69 percent of exports in 1982. For a detailed analysis of the effects of exchange and trade distortions, see Leith (1974).
In many respects, exchange and trade reform under the ERP followed many of the lessons on "best practices" that have emerged from the experience of developing countries. An important feature of the reforms was that substantial measures were introduced up front in a coordinated manner: a significant reduction in the level and dispersion of average tariff rates and the elimination of quantitative restrictions were accompanied by a major correction in the exchange rate. At the same time, controls on most domestic prices were abolished and the remaining administered prices were managed flexibly, ensuring that domestic prices reflected movements in world prices of traded goods. Moreover, reform was sustained, with considerable further action in subsequent years.

In 1983, the existing tariff system was replaced by a predominantly uniform tariff structure, with a duty rate of 30 percent. Although the uniform tariff rate was subsequently replaced by a more discriminatory four-tiered cascading structure in 1986, rates in each tier were steadily lowered over the course of the ERP period. Overall, a significant reduction in average effective export and import tax rates was achieved (Chart 3-15). Also, in 1985, virtually all quantitative restrictions on imports were eliminated. After the initial large devaluations of the cedi, the focus on exchange reform shifted in 1986 to moving to a flexible market-determined exchange rate regime, leading to a unification of the foreign exchange market by 1990.

The large-scale reduction of distortions in the trade and exchange system clearly improved the efficiency of resource allocation and thus had a positive impact on long-term growth in Ghana. Econometric estimates of private investment behavior and empirical studies of the long-term determinants of growth suggest that the elimination of the parallel market exchange rate premium had strong positive effects on investment and output growth. Also, trade reform contributed to a substantial increase in the openness of the Ghanaian economy: the share of exports of goods and services in GDP grew from less than 2 percent in 1982 to about 17 percent by 1987; for imports, the share rose from 2 percent to 19 percent. However, the private sector in Ghana might have been more successful in taking advantage of liberalization if other supporting structural reforms—particularly in the public enterprise sector—had kept pace. Also, some industries that were previously protected found it difficult to adjust costs quickly and compete with imports.

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An Interministerial Committee allocated all foreign exchange for imports through the import licensing scheme.

The tariff system consisted of three ad valorem rates, with rates in the range of 25–30 percent applicable to most non-oil imports. However, effective tax rates were much higher for a wide range of imports: a special tax of 10 percent applied to imports financed outside the foreign exchange allocation system and additional domestic excise taxes and specific import duties applied to certain imported goods and services (e.g., alcohol, consumer durables, and plane tickets). On the export side, duties and levies ranging from 5 percent to 100 percent were applied to timber, gold, and net cocoa proceeds. These include textiles and garments, leather products, and processed foods and beverages.
Labor Market Policies

Ghana has a segmented labor market. Agriculture, which employs some 60 percent of the labor force, accounts for the bulk of the informal sector, and in this sector wages are largely market determined.57 Most of the rigidity in wages and employment practices lies within the formal sector, where the public sector still accounts for over two thirds of employment. Labor unions have a powerful presence in the formal and the public sectors.

The Government has been the largest employer in the formal sector, and wage and employment practices in the public sector have had a significant impact on the overall functioning of the formal labor market. During the ERP period, compensation levels in the public sector rose sharply in real terms, although, at least for the civil service, this represented a decompensation from very low real wage levels (Chart 3-13). The levels of pay and employment in the state enterprises were not governed by profit-maximizing considerations and wage increases typically exceeded productivity growth, although these costs were passed on to the consumer as many of the enterprises were monopolies (Commander and Estrada (1992)). Moreover, collective bargaining agreements in the state enterprise sector generally yielded more generous provisions for retirement, redundancy, and other nonwage benefits than in the private sector (Davis (1991)). In many cases, SOEs agreed to large severance awards, which were well in excess of their abilities to fund. To a large extent, high levels of labor compensation and restrictive labor practices were the result of pressure from labor unions, and this led to wage awards in the private sector leapfrogging with those in the public sector. These factors restricted labor mobility, and limited the extent to which employment levels and wages could adjust to reflect changing market conditions. The competitiveness and profitability of private sector activity tended to suffer as a result of the cost-push impact of generous pay awards in the public sector. This became particularly more pronounced in the post-ERP period following an 80 percent wage award in the run-up to multiparty elections in 1992. During the first phase of the ERP, government wage policy was motivated by the need to reverse the real decline of wages in the pre-ERP period, and large nominal wage increases were awarded to the civil service. However, in the second phase, significant efforts were made to restructure the size of the civil service. Efforts were made to link wage increases to productivity and allow differentials to widen across grade levels and occupations. There was some progress, albeit slow, but the restructuring process was interrupted in 1992 by the large wage increase. Also, although retrenchment from the core civil service was about 15 percent (or 45,000), yet on a net basis overall reduction in government employment was negligible because employment in the subvented agencies, particularly in the education services, increased over the ERP period.

Repeated attempts during the ERP were made to reduce the size of employment in the SOE sector but with limited success in most cases. This mainly reflected institutional rigidities involving the legal framework for retrenchment, industrial relations, and arbitration on severance awards (Davis (1991)). For example, in order to cut employment in the Cocoa Board—the largest single employer outside the Government—a special Reorganization and Indemnity Law had to be passed in 1985. Subsequently, the Cocoa Board was able to reduce its labor force by about 40 percent during the ERP. Overall, by the end of the ERP, employment in SOEs was estimated to have been reduced by 15 percent.58

The most visible impediments to the divestiture of SOEs on terms favorable to their successful restructuring under private sector ownership were (1) large, underfunded liabilities for the retirement benefits of continuing workers that in many cases exceeded the net worth of the enterprise; and (2) provisions in collective bargaining agreements for pay, allowances, and benefits that exceeded the financial ability of the enterprise to meet.59

The Government has recently initiated legislation to resolve the rigidities in industrial relations as a first step in creating a credible incomes policy consistent with enhancing competitiveness, employment, and growth. In the meantime, the current civil service reform program aims at achieving tangible efficiency gains by restructuring the core civil service and the subvented agencies with the aim of contracting out those services that can best be performed by the private sector.

Social Policies and Poverty Alleviation

During the ERP period Ghana made sizable gains in reducing poverty.60 Between 1988 and 1992, there was a reduction in the incidence of poverty from 37 percent of population to 32 percent. The re-

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57 Information on the labor market and employment in Ghana is very limited and the database is weak.
58 It is estimated that in 1991 the size of the civil service (including subvented agencies) was around 300,000 and employment at nonfinancial SOEs was about 244,000, of which the Cocoa Board employed 42,000.
59 A notable exception has been the Cocoa Board, which was able to reduce its staff by a further 30,000 in 1993-94, with more retrenchments planned. However, retrenchment costs were borne by the government budget.
production was most pronounced in rural areas, where the concentration of poverty is highest. Poverty incidence there declined from 42 percent of population to 34 percent. Therefore, a major achievement of the ERP was that growth in income and expenditures was relatively broad based, and did not come at the expense of a deterioration in income distribution.61

Apart from growth and improvement in income distribution, another factor that contributed to poverty alleviation in Ghana was the persistent effort by the Government throughout the adjustment period to sustain public expenditures for education and health (Chart 3-16). There was an expansion in social expenditures as a share of GDP, and human capital indicators have improved markedly as a result. Primary and secondary school enrollment rose, infant mortality rates declined, malnutrition among children was cut in half, and average life expectancy increased over the ERP period (Table 3-8). With donor assistance, Ghana implemented for a limited time a program of investment in social services directly targeted to vulnerable groups.62

Although Ghana is currently above the sub-Saharan average in some of the key social indicators, it still lags behind the group of low-income countries, particularly in primary school enrollment rates. Ghana also lags behind in primary education when compared with the fast-growing Asian economies in their early stages of rapid growth. Ghana’s current literacy level is 60 percent, while most of the Asian economies had already achieved near universal literacy prior to accelerated growth.

World Bank studies indicate that at current rates of growth, the average poor in Ghana will need 15 years to get out of poverty; more critically, the absolute poor would require 30-40 years to cross the “poverty line.” To achieve a permanent increase in standards of living, Ghana’s economy will therefore have to accelerate growth beyond 5 percent.

To pursue a strategy aimed at accelerated growth, Ghana placed emphasis on policies targeted at human resource development and poverty reduction.63 The strategy emphasized that to be able to implement effective human resource development programs, budgetary resources would have to be spent efficiently and judiciously in the health and education sectors, while expenditures on unproductive outlays would need to be pruned. Furthermore, as discussed earlier, policies aimed at accelerating growth in agriculture would probably have the most direct impact on poverty reduction as rural incomes improve.

**Conclusions**

Ghana achieved a significant measure of success in overcoming deep-seated macroeconomic and structural imbalances during the period of adjustment, 1983–91. Ghana’s economy responded well to adjustment policies, and was therefore able to achieve a strong and uninterrupted recovery in output. However, the recovery in the rates of private investment and saving was uneven. These rates remain at relatively low levels in comparison with high-growth economies. Thus Ghana’s potential for reaching an accelerated growth path was constrained by the limitations of the private sector response.

The swift and strong recovery in output illustrates how the mix of financial policies was supportive of growth. Fiscal and monetary policies did not

61Despite the slow growth in agricultural output, household income surveys indicate that rural poverty improved because a modest increase in real income from food and export crops was supplemented by nonfarm incomes of household members engaged in informal sector activities such as trading.

62Program of action to mitigate the social costs of adjustment (PAMSCAD). In the post-ERP period this program was replaced by a more decentralized system where decisions on expenditure management were delegated to the district level to allow for better targeting of beneficiaries.

squeezes demand which, together with strong expenditure-switching policies, were successful in providing the stimulus needed to support a strong recovery in output growth, without a pause, as well as successful external adjustment. The high level of slack and distortions in the economy at the outset of the ERP provided the scope for a sharp rise in output during the initial adjustment phase, following the implementation of stabilization policies and early liberalization of prices and reform of the exchange and trade system. However, the improvement in growth was sustained beyond the early years of the ERP, notwithstanding a marked deterioration in the terms of trade during the second phase of adjustment. In this context, the mix of policies owed much to the renewed inflows of concessional external financing. Restoration of fiscal discipline throughout the ERP played a central role in stabilization of the economy and helped in the recovery of government saving and investment.

The experience of Ghana illustrates the importance of overcoming the private sector’s perceptions of uncertainty and macroeconomic instability, particularly in the form of relatively high and volatile inflation, in order to elicit a strong response of investment and saving. To some extent, time was re-

### Table 3-8. Ghana: Selected Social Indicators, 1970–92

<table>
<thead>
<tr>
<th>Human Capital Indicators</th>
<th>Latest Year 1970–75</th>
<th>Latest Estimate 1990–92</th>
<th>Last Year Sub-Saharan Africa</th>
<th>Low-income countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant mortality (Per thousand live births)</td>
<td>107</td>
<td>98</td>
<td>81</td>
<td>99</td>
</tr>
<tr>
<td>Under-5 mortality (Per thousand live births)</td>
<td>...</td>
<td>...</td>
<td>129</td>
<td>169</td>
</tr>
<tr>
<td>Life expectancy (Years)</td>
<td>50</td>
<td>52</td>
<td>56</td>
<td>52</td>
</tr>
<tr>
<td>Immunization (Percent of age group)</td>
<td>...</td>
<td>...</td>
<td>39</td>
<td>54</td>
</tr>
<tr>
<td>Education (Percent of age group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net primary enrollment ratios</td>
<td>71</td>
<td>76</td>
<td>77</td>
<td>66</td>
</tr>
<tr>
<td>Female</td>
<td>62</td>
<td>66</td>
<td>69</td>
<td>62</td>
</tr>
<tr>
<td>Net secondary enrollment ratios</td>
<td>37</td>
<td>40</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>31</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>Pupil-teacher ratio primary</td>
<td>30</td>
<td>23</td>
<td>29</td>
<td>39</td>
</tr>
<tr>
<td>Literacy (Percent of population age 15+)</td>
<td>30</td>
<td>32</td>
<td>60</td>
<td>49</td>
</tr>
</tbody>
</table>

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<thead>
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</thead>
<tbody>
<tr>
<td>Poverty profile by area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>34.2</td>
<td>33.2</td>
<td>27.4</td>
<td>26.5</td>
<td>8.1</td>
<td>6.8</td>
<td>25.3</td>
</tr>
<tr>
<td>Accra</td>
<td>8.3</td>
<td>8.2</td>
<td>8.5</td>
<td>23.0</td>
<td>1.7</td>
<td>5.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Other urban</td>
<td>25.9</td>
<td>25.0</td>
<td>33.4</td>
<td>27.7</td>
<td>10.1</td>
<td>7.1</td>
<td>23.4</td>
</tr>
<tr>
<td>Rural</td>
<td>65.8</td>
<td>66.8</td>
<td>41.9</td>
<td>33.9</td>
<td>13.8</td>
<td>8.7</td>
<td>74.7</td>
</tr>
<tr>
<td>National</td>
<td>100.0</td>
<td>100.0</td>
<td>36.9</td>
<td>31.5</td>
<td>11.9</td>
<td>8.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Poverty profile by rural economic group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm household1</td>
<td>74.9</td>
<td>67.3</td>
<td>42.8</td>
<td>36.3</td>
<td>14.0</td>
<td>9.7</td>
<td>76.5</td>
</tr>
<tr>
<td>Cocoa farmers2</td>
<td>2.3</td>
<td>11.8</td>
<td>42.7</td>
<td>32.0</td>
<td>14.0</td>
<td>8.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Non-cocoa farmers</td>
<td>72.6</td>
<td>55.5</td>
<td>42.8</td>
<td>37.2</td>
<td>14.0</td>
<td>9.8</td>
<td>74.2</td>
</tr>
<tr>
<td>Non-farm household</td>
<td>25.1</td>
<td>32.8</td>
<td>39.8</td>
<td>29.1</td>
<td>13.3</td>
<td>7.1</td>
<td>23.5</td>
</tr>
</tbody>
</table>


1Based on the Ghana Living Standards Surveys (conducted in 1987/88, 1988/89, and 1991/92), the “poverty line” is defined at $128.404 (or US$294) in constant 1992 prices representing average annual expenditure per person that is two-thirds the mean per capita income of households surveyed. The average poor in percent of population are those with income just below that income level.

2The absolute poor in percent of population are those that earn significantly less than the income level defined by the “poverty line”—i.e., those earning at most half of the mean average household income (World Bank, 1995).

3Farm households are defined as those households where more than 50 percent of total income was derived from farming activities.

4Cocoa farm households are defined as those where more than 50 percent of crop revenue was derived from cocoa.
quired to establish a sound track record in order to
dispel the lingering effects of past mismanagement.
However, a more decisive reduction of inflation to
much lower levels could have restored private sector
confidence sooner. This would have required firmer
monetary policies at an earlier stage. However, mon­
etary control was to some extent impeded by struc­
tural factors such as the relatively large credit de­
mand by the public sector, the limited range of
financial instruments, and the considerable uncer­
tainty about the underlying behavior of money de­
mand aggregates during the economy’s transition
from severe financial repression.

Major structural reforms were only introduced
late in the ERP period. Thus, the private sector re­
ceived mixed signals, as the price and exchange and
trade liberalization policies were implemented while
the public sector continued to play a dominant role
in major segments of the economy. Within the finan­
cial sector, the combination of high inflation, contin­
ued, albeit milder, financial repression, and weak­
nesses in the banking system discouraged saving and
financial intermediation. An earlier start to financial
sector reforms would have made the task of mon­
etary management easier. Furthermore, an earlier re­
turn to positive real interest levels would have en­
couraged more efficient financial deepening and
possibly a higher rate of savings. Parastatal sector
reforms emphasized measures to instill an element
of financial discipline and to control losses but did
not go far enough with regard to privatization. Ear­
lier privatization efforts could have created a more
competitive environment with a greater opportunity
for private sector involvement in economic activity.
Indeed, concerted efforts aimed directly at strength­
ening the role of the private sector, such as reforms
to the regulatory framework for investment and tax
reforms, were initiated only toward the end of the
adjustment period. Such reforms could also have
been started earlier.

Ghana’s agriculture, which was severely distorted
in the pre-ERP period, proved to be responsive to
higher producer prices. However, Ghana’s experi­
eence illustrates that price reforms alone were not
enough, as agriculture, which is still the mainstay of
the economy, grew only modestly. Earlier deregula­
tion of cocoa marketing and rechanneling the public
resources to the more efficient provision of support
services could have unlocked the potential for agri­
culture to be a growth center, as was the case in
high-performing economies.

During the adjustment period Ghana’s economic
growth was accompanied by a measurable reduction
in poverty levels. A steady improvement in the pro­
vision of essential social services was associated
with that outcome. Nonetheless, literacy and primary
education levels are still below par when compared
with those in high-performing economies prior to
their accelerated growth. To achieve the sustained
and accelerated long-term growth required to allevi­
ate poverty, Ghana would need to maintain a stable
macroeconomic environment conducive to private
sector growth, and to make efficient investments to
upgrade its infrastructure and human capital.