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## **GHANA'S ECONOMY AT HALF CENTURY: An Overview of Stability, Growth and Poverty**

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**Ghana's Economy at Half Century:  
An Overview of Stability, Growth and Poverty\***

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**Abstract**

As Ghana enters its second half century, we are faced with a paradox. Despite a solid transition to democracy in the political situation, despite recorded recovery in the last fifteen years from the economic malaise of the two decades preceding, and despite reductions in measured poverty, there is widespread perception of failure of the economic and political system in delivering improving living standards to the population. This essay introduces a volume of papers that call for a deeper examination of the macro level data on growth and on poverty. A sectoral and regional disaggregation reveals weaknesses in the levels and composition of private investment, in the generation of employment, in sectoral diversification, and in the distribution of the benefits of growth. At the same time, the push for decentralization and for better allocation, monitoring and implementation of public expenditure has raised more questions than it has answered. These are the challenges that Ghana faces if it is to fulfill the bright promise of its independence in 1957. The papers in this volume set out an analytical agenda that we hope will help in laying the ground work for the path that the nation's policy makers will have to steer on the road to 2057.

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\*Introduction to a forthcoming volume, Ernest Aryeetey and Ravi Kanbur (editors), *The Economy of Ghana: Analytical Perspectives on Stability, Growth and Poverty*, James Currey. The papers were selected from those presented at the "Ghana at the Half Century" conference organized by the Institute of Statistical, Social and Economic Research, University of Ghana, and Cornell University. We are grateful to USAID for financial support through its SAGA project.

## 1. Introduction

Ghana will see its first half century as an independent nation in 2007. The early promise of democracy combined with economic and social development that hailed the new era in 1957 led to disappointments in the first three decades. While democracy has now been restored, with the peaceful transfer of one civilian administration to another in 2001, and while there has been some recovery from the earlier economic collapse, the challenge of economic and social transformation looms large.

Indeed, the last two decades have seen steady and significant economic growth in spite of considerable instability in macroeconomic performance and a growing dependence on aid and other foreign inflows. An average of 4.9% GDP growth and a per capita GDP growth of about 2.9% have been recorded for the best part of that period. While the growth performance may not be exceptional this has been significantly above average by African standards. In their study of the “Drivers of Change” in Ghana, Booth et al. (2004) identify economic liberalisation in the 1980s and political liberalisation in the 1990s as the key factors behind the fairly decent growth performance. It is important to observe that since 2001, the macroeconomic policy situation has improved considerably, and the environment is less subject to policy reversals and deviations from agreed policies

But the relationship between economic growth and the most important social concern, poverty, has been unclear. The perception is that the number of people living below the poverty line has not changed in tandem. Thus, despite the sustained per capita growth accompanied by some measured reduction in income poverty, levels of poverty remain high. The reduction in income poverty has been fairly reasonable and the changes in the non-income dimensions are not insignificant. But there are indications also that there have been significant movements in and out of poverty and the perception that poverty is worsening prevails strongly (Oduro et al. 2004). Most important, the ability of the economy to generate employment has definitely not been strengthened after economic reforms in which private investments have hardly been significant. In the final analysis, the perception that social conditions have not improved significantly in twenty years is quite strong.

Related to the issue of growth and poverty is the question of structural change throughout this period. In the policy discussions of the last few years there has been the question of how an economy that has been able to achieve fairly decent growth rates over a long period remains unable to sustain that achievement with acceptable changes in its structure. It is not clear that this is simply a consequence of the chosen macroeconomic policies and their implementation, even though these clearly have contributed to the situation. There is the growing view that the absence of structural change is the result of there being no clear direct effort to achieve such change (Aryeetey and McKay 2004). And the absence of the commitment to this change is considered to be largely political (Killick 2000, 2005).

The political transformation that Ghana has experienced, resulting in the historic transfer of power from one elected government to another, is definitely significant. While governance issues are still considered to be problematic, there is increasing openness in the discussion of economic policy. This is reflected by the institution of the annual national economic

dialogue and the growing participation of civil society in policy discussions<sup>1</sup>. Like economic reforms, the process of democratisation has been encouraged by donor agencies and governments. There is always the danger of having a political reform process that is dominated by external influences. But we recognize the fact that there have been some domestic influences also. Indeed the need for democratic institutions and the process for achieving them have been both demand driven and highly popular (Booth et al. 2004). In effect powerful domestic concerns played useful roles alongside the external pressures in assisting the process of change.

Analyses of the economy's more recent performance indicate that despite the relative macroeconomic stability achieved, private investment has not responded to this, employment has contracted, and agricultural performance outside of cocoa and key export crops has been poor (ISSER 2004). Many studies have identified a number of key areas that need to be addressed. These include (i) discipline in control of the fiscal deficit through effective public expenditure management; (ii) the development of an efficient and competitive financial sector which can meet the needs of a developing private sector (iii) enhanced effectiveness of public service delivery; and (iv) policies to transform the agricultural sector, beginning with the land tenure question. All of these involve difficult political choices and institutional reform (Booth et al.. 2004).

The problem with the fiscal deficit and its management has attracted considerable attention from analysts over the years. The central issue has been the trade-off between fiscal deficits and growth. Reducing the fiscal deficit has often been seen to be important in enabling lower inflation and interest rates, and more real exchange rate stability. And these are all important for private sector production and investment. It is important that the stability of these key variables is perceived to be permanent and institutionalized in order to have beneficial macroeconomic impacts. When the credibility of government, in terms of maintaining an appropriate fiscal stance is judged to be very weak, particularly given the influence of elections on levels of public spending, this poses a problem for reform. It is still not clear if Ghana is out of the woods despite more impressive fiscal balances since 2001. Indeed improvements have often been due to larger than expected external inflows, and lately some improvements in revenue collection. Thus, in 2004 there was a higher than expected outturn for receipts. Total receipts, including donor grants, foreign loans and HIPC relief for 2004 amounted to ¢28,736.8 billion, which was about ¢3,883.7 billion above the budget projection of ¢24,853.1 billion. Domestic resources made up 67.1% of this figure with donor assistance contributing the remaining 32.9%. Disbursements and external grants reached a record level of ¢4,940.3 billion, equivalent to 6.2% of GDP in 2004. (See Table 1.1)

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<sup>1</sup> In May 2001, a workshop organized by the Institute of Statistical, Social and Economic Research, University of Ghana and Cornell University led to the issue of a memorandum on "Economic Growth, Macroeconomic Stability and Poverty Reduction" by 40 independent economists as input for the National Economic Dialogue for that year.

**Table 1.1: Performance of the Ghanaian Economy, 2003-2004**  
**Selected Economic Indicators**

<i>Indicator</i>	2003	2004	2004	<i>Diffe- rence</i>	<i>Diffe- rence</i>
(% unless otherwise stated)	Actual (C1)	Target (C2)	Actual (C3)	C3-C1	C3-C2
<b>National GDP</b>					
Nominal GDP (¢ billion)	65,262	77,620	79,803.7	14,541.70	2,183.70
Real GDP Growth	5.2	5.2	5.8	0.60	0.60
Real Per Capita GDP Growth	2.5		2.7	0.2	
<b>Sectoral Growth Rates</b>					
Agriculture	6.1	6.0	7.5	1.40	1.50
Industry	5.1	5.2	5.1	0.00	-0.10
Services	4.7	4.7	4.7	0.00	0.00
<b>Fiscal Indicators</b>					
Domestic Revenue/GDP	21.4	22.4	23.8	2.40	1.40
Domestic Expenditure/GDP	18.8	20.7	23.7	4.90	3.00
Tax Revenue/GDP	19.6	20.9	21.8	2.20	0.90
Primary Balance/GDP	2.5	1.7	0.7	-1.80	-1.00
Overall Balance/GDP	-3.4	-1.7	-3.2	0.20	-1.50
Net Domestic Financing/GDP	-0.004	-2.2	0.5	0.50	2.70
<b>Monetary/Financial Indicators</b>					
Broad Money Supply Growth	35.6		26.0	-9.60	
Reserve Money Growth	28.2		18.77	-9.43	
M2+/GDP	0.3		0.34	0.04	
Inflation (Year-on-Year)	23.6	10	11.8	-11.80	1.80
Inflation (Yearly Average)	26.7	17	12.6	-14.10	-4.40
<b>Interest Rates</b>					
Demand Deposits (Annual Av.)	8.5		7.50	-1.00	
Savings Deposits (Annual Av.)	11.1		9.50	-1.60	
Time Deposits (Annual Av.)	14.3		13.25	-1.05	
Lending Rates (Annual Av.)	34.9		28.75	-6.15	
91-Day Bills (End Period)	18.7		17.0	-1.70	
Lending Rates (End Period)	32.8		28.75	-4.05	
<b>Depreciation (¢/\$)</b>					
Inter-Bank Rate	8,852.30		9,051.26	198.96	
Forex Bureau Rate	9,130.43		9,222.73	92.30	
<b>External Sector Indicators (\$ Millions)</b>					
Merchandise Exports	2063.9	2314.0	2297.1	487.50	2,784.60
Merchandise Imports	2705.1	3168.1	2969.3	-7,266.60	-4,297.30
Trade Balance	-641.2	-854.1	-672.2	-840.40	-1,512.60
Current Account	15.6	-130.9	40.8	-276.50	-235.70
Balance of Payments	39.8	-76.9	367.3	-367.30	0.00
Gross International Reserves (GIR)	601.2	811.0	1425.6	16,306.40	17,732.00
GIR in Months of Imports	2.5	2.2	3.9	-0.10	3.80
Net International Reserves	130.86	130.0	657.7	196.00	984.54

Source: Bank of Ghana and Budget Statements

The financial sector and what it can do in order to generate investment by the private sector has also been the subject of considerable study over the years (Aryeetey 1996). The reforms in the sector have not led to significant restructuring, thus leaving the sector incapable of leading private sector development. While the problems of the sector are partially related to the fiscal problems already mentioned, there are also indications that the inability to develop more innovative and competitive approaches to dealing with demand for financial services is another major obstacle. What is crucial is for the sector to respond to the changing environment in order to make a more meaningful impact on growth and development.

Dissatisfaction with public service delivery has been at the core of assessments made by many donor agencies on the difficulties of the Ghanaian economy (Aryeetey and Peretz 2005). That explains the frequent calls by donors for public sector reform, which they consider to be a key requirement for raising the growth rate. While such a reform is generally politically sensitive, the expected poverty impact, as more poor people benefit from improved service delivery and better public expenditure management, is judged to be immense. Previous attempts at civil service reform are judged to have been largely unsuccessful due to lack of political support [Booth et al. (2004)]. It is clear however that in the absence of major public sector reform the constraints on private sector development will remain. But in the absence of private sector investment and also financial sector development there appears to be little scope for significant employment creation.

Structural transformation is closely associated with agriculture and its relationship to the more modern sectors. Various studies have illustrated the low productivity associated with Ghanaian agriculture and provided explanations for this (Seini and Nyanteng 2000). Aside from the technological problems that have been linked to the little application of capital in agricultural production, there are the issues of land tenure arrangements which do not provide adequate incentive for injecting capital into agriculture and other structural and institutional problems. There is the general perception that the political transformation that has been observed in Ghana has not necessarily facilitated the development of institutions that make structural transformation feasible. The politics behind winning elections is not necessarily one that promotes efficiency in public service delivery and supports difficult land tenure reforms.

As policy makers have struggled to identify the most practical ways of bringing about improvements in policy and its implementation, so also has it become necessary to encourage researchers to provide information on the state of the economy and views on what policies and institutional developments would be most appropriate for tackling the problems identified. This essay is an introduction to a volume of papers that seek to achieve this objective. Based on these papers and on the literature in general, it provides an overview of economic stability, growth and poverty in Ghana as the nation enters its second half century.

## 2. Growth and Macroeconomic Performance

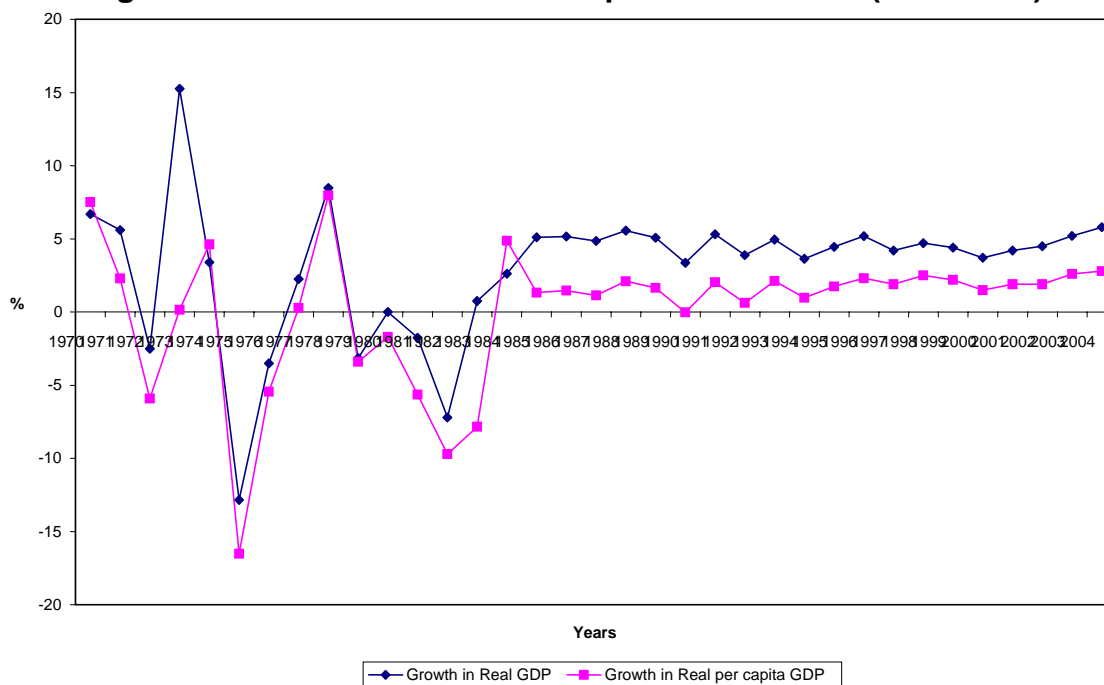
As seen earlier, macroeconomic conditions in Ghana have been relatively stable since 2001, even if somewhat mixed for a number of indicators. This stability contrasts quite a bit with performance in the decade before it. In 2004, two of the five 'key macroeconomic targets' were met, namely real GDP growth and gross international reserves. The targets set for the domestic primary balance, inflation and the overall budget deficit were not achieved. But more important is the fact, that to a very large extent the performance is still driven largely by external factors. In that sense, not much has changed after almost five decades of independence.

### *The Growth Record*

Fig.1.1 shows how growth rate appears to have settled around the 5% level for two decades with some improvement in 2004 at 5.8%. As in the past few years, the growth has been led by the agriculture sector which grew by 7.5% in 2004 compared to 6.1% in 2003. The sector contributed 46.7% of overall 2004 growth which may be compared to 41.4% in 2003. Cocoa was the driving force in the sector's growth with a 29.9% increase in the sub-sector. The industrial sector grew by 5.1% contributing 22.1% to overall growth in 2004. The highest growth in the industrial sector came from construction which experienced a 6.6% growth, having risen from 6.1% in 2003. The services sector grew by 4.7%, contributing 24.3% to overall growth.

But there is a sometimes traumatic history to the growth story. We have suggested that over the past two decades Ghana's fairly decent growth performance has compared favourably with that in many other sub-Saharan African countries. This has been achieved in an environment that was often unstable and which then impacted on households in a manner that was different from expected. Aryeetey and Fosu (2005) present that growth experience. The growth record shows considerable unevenness, particularly in the 1970s. With a reasonably high GDP growth in the 1950s and early 1960s, the Ghanaian economy began to experience a slowdown in GDP growth in 1964. Growth was turbulent during much of the period after the mid-1960s and only began to stabilise by 1984. There have been several years of negative growth and these were often years that saw changes in government and often with explosive policy changes or reversals. The lowest ever growth of -14% was experienced in 1975, coinciding with the oil-price shock, as well as a policy reversal from a market-oriented stance to an inward-looking protectionist regime. The period of turbulence, however, also had positive growth episodes, with the highest peak rate reaching 9% in 1970 and 1978.

**Fig. 1.1 Real GDP and Real Per Capita GDP Growth (1970-2004)**



The significance of policy regimes to the growth performance has depended, to a large extent, on how those policies led to the infusion of new capital into the economy. Significant growth was recorded in the early 1960s under import-substitution policies so long as the state could find the resources to invest. In the 1980s, the liberal reform programme or Economic Recovery Programme (ERP), with major support from the International Monetary Fund (IMF) and the World Bank, was intended to halt the downward economic spiral. Starting in 1986, the second phase of reform saw ERP being supplemented with the Structural Adjustment Programme (SAP), geared toward correcting a number of structural imbalances in order to engender a sustained healthy economic growth. The economy definitely responded positively to ERP/SAP soon after inception. It recovered from its negative growth rate of about 5% in 1983 to a hefty positive rate of 8% in 1984. The favourable growth has continued since that time, with relatively little variance, even if there was a slight slowdown in the rate of growth since the mid 1990s, and a little faster growth since 2001.

The growth record, based on *per capita* income, is similar to that of the GDP. Indeed *per capita* GDP growth closely tracks that of GDP, suggesting that population growth has been rather stable, though the larger gap between them since the 1980s suggests an acceleration of population growth over this period.

Sustained economic growth would normally be accompanied by major structural transformation of the economy. The current and historical pattern of the Ghanaian economy portrays hardly any structural changes. This is also supported by the analysis of Killick (2000) and of Round and Powell (2000). The structure of the economy in the 1990s

indicated a shift in dominance from agriculture to services, with little change in the share of industry.

### *Growth in an Unstable Environment*

Aryeetey and Fosu (2005) offer explanations about why the measured growth in Ghana often raised questions in the minds of the people. They do this by showing that most of the growth has been driven by public investments of questionable productivity, the returns on which have been sometimes misallocated. Aryeetey and Tarp (2000) had earlier argued that the growth of the 1980s came about as a result of the expansion of capital application, largely as a consequence of increased aid inflows, which was similar to the expansion that occurred in the 1960s financed largely through accumulated reserves from the 1950s. In both cases the increased use of capital was not accompanied by significant improvements in total factor productivity. In both instances, the injection of capital came after long periods of relatively high capital depreciation. Again in both instances, the initial high growth rates could not be sustained into the medium-term because the policies were not anchored in appropriate all-embracing development frameworks. The first attempt sought to deny the market its place while the second attempt was with weakened state structures that were unable to deliver outcomes in a timely and adequate manner.

Aryeetey and Fosu (2005) utilize the growth accounting results presented in O'Connell and Ndulu (2000) for the decomposition of *per capita* growth in Ghana during 1960-97 which showed that during the entire 1960-97 period, output per worker declined by 0.12%. At the same time, growth in factor accumulation, measured by physical capital per worker, accounted for 0.52%, and education per worker for 0.50%; however, this positive contribution by physical and human capital was more than offset by the negative contribution of total factor productivity (TFP), measured as the residual, of 1.15%. Thus, overall, the slow rate of *per capita* income growth in Ghana over 1960-1997 seems to be largely attributed to productivity rather than to production inputs.

It would appear that in the last two decades, the most unstable macroeconomic environment was in the 1990s and this is reflected by the discussions of Youngblood and Franklin (2005). They note that despite the modest but steady economic growth throughout the 1990's, the monetary, exchange rate and fiscal policies were inconsistent with one another. The fundamental problem, they argue, was the failure of the government to rein in spending and bring deficits down to levels that could be comfortably financed. Many public sector expenditures, including Bank of Ghana's quasi-fiscal activities and the operations of state-owned enterprises occurred outside the purview of central government, as public sector expenditures averaged nearly 27% of GDP for 1990-2000 while revenue from all sources averaged only 20%. Instead of running a much smaller primary deficit to be consistent with the exchange rate policy adopted in late 1997, Youngblood and Franklin (2005) argue that government continuously run large deficits that had to be financed by printing money, borrowing domestically, and borrowing externally. According to them excessive reliance on the first two sources resulted in bouts of inflation, exchange rate depreciation, and high nominal and real interest rates.

The inconsistency between monetary and fiscal policies reached its peak in 1997 with the decision to adopt the exchange rate as the nominal anchor without the fiscal restraint needed to support such a policy. The result was a speculative assault and a real depreciation of such a magnitude (174% nominal, 106% real) that Ghana was forced to seek relief under the HIPC program. Youngblood and Franklin (2005) argue that policy makers should have seen the risks that were increasing the likelihood of a speculative assault considering the availability of extensive economic literature.

Ghana exhibited many of the risk factors that were present in these crises: a weak financial system overexposed to foreign liabilities (e.g. borrowing to service external debt); constraints on the central bank's ability to respond to shocks and defend its policies; and a monetary policy that was inconsistent with the fiscal realities. The monetary and exchange rate policies of the BOG had created large and persistent deviations from interest rate parity that resulted in abnormally high returns to holders of domestic T-bills. These returns were so high that they could not possibly be expected to last. Ultimately, Youngblood and Franklin (2005) explain that market forces, especially in the foreign exchange market, accounted for the adjustments.

Interest in the macro environment that has fostered the growth experiences described is strong and varied in terms of focus. Using Ghana as a case study, Kyereme (2005) examines the determinants of per person real output growth (a measure of economic growth), exchange rate volatility, and price inflation--and their interactions and implications for economic development--using vector auto regression models. He argues that while inflation leads to a weakening cedi, a declining cedi may only in part cause inflation because physical and human capital constraints (and sub-optimal levels of complementary investments in infrastructure, research and development, etc.) hamper real output growth, as dynamic interrelationships between output and inflation are mostly insignificant. Hence, effective management of macroeconomic policies that relax the input constraints through time can lead to real output responding robustly to price and monetary shocks.

Arguing that in the long run, money's role exceeds that of price, Kyereme (2005) suggests that as Ghana's economy modernizes financially, access to bank credit must be improved (e.g. via innovative micro-finance schemes) for the majority rural population, most of whom rely on the informal sector for scarce credit at very high interest rates such that policies to combat inflation must restrain excessive money supply growth. Kyereme concludes that fiscal discipline and macroeconomic policies which boost per person real output growth can dampen inflation and strengthen the cedi.

Considering that the foreign exchange market is one that has seen considerable volatility, its effects on trade are certainly important. Agbola (2005) traces and examines the impact of devaluation on the trade balance of Ghana from the 1970s to 2002 using the Johansen MLE multivariate co-integration procedure as well as the Stock-Watson dynamic OLS model (DOLS) to determine the relations between key determinants of Ghana's trade balance. In view of the fact that very few studies have assessed the impact of devaluation on Ghana's economy in recent times, Agbola argues from the premise that devaluation will

not succeed in improving Ghana's trade balance. Aside from serving as the death knell of most governments in post-colonial Ghana, his empirical results suggest that devaluation does not improve the trade balance of Ghana in the long run as the response in the trade balance to movements in the exchange rate appear to be characterised by an M-curve phenomenon. Specifically, the results indicate that trade balance and the key determinants are non-stationary in levels; the Johansen MLE multivariate co-integration procedure suggests that Ghana's trade balance and key determinants were cointegrated, and thus share a long-run equilibrium relationship. The Stock-Watson dynamic OLS (DOLS) modeling shows that the key determinants of Ghana's trade balance are real domestic and foreign income, domestic and foreign interest rates, nominal exchange rate, and real foreign money supply. Lastly the results of this study indicate that devaluation of the cedi worsens the trade balance in the long run. To offset these problems, Agbola suggests the imposition of restrictions on less essential imports and foreign exchange movements, cutting back on government spending, and a deregulation of the labour market.

### 3. Sectoral Developments

The dominance of the agricultural sector in the economy of Ghana ensures that nearly 40% of GDP and 50% of all employment are derived from the sector. Agriculture's growth rate lagged behind the other sectors in most of the reform years, however, and this was largely due to inefficient farming practices, a strong dependence on rain-fed agriculture and poor transport and distribution channels. This trend however saw some reversal in 2003 when agriculture once again became the fastest growing sector.

**Table 1.2: Sectoral Distribution of Real GDP (Period Averages (%))**

Sector	1970-75	1976-82	1983-86	1987-90	1991-95	1995-2000
Agriculture	52	51	52	46	42	39.5
Industry	19	17	12	14	14	27.5
Services	29	32	36	40	44	33

Source: Calculated from Ghana Statistical Services data in *Quarterly Digest of Statistics*, various issues, ISSER (2002).

The declining share of agriculture after 1983 did not necessarily signal structural change in the economy. (See Table 1.2). Much of the change observed in the data coincided with a poorly documented national accounts rebasing exercise in 1994, and so may be exaggerated. We also note that much of the increase in services was drawn from the relatively lower-order service sectors, notably wholesale and retail trade, and also restaurants and hotels. Again, while the shares of mining and construction in GDP have increased over the last decade, manufacturing has not done the same.

**Table 1.3: GDP by Sector at 1993 Constant Prices, 1997–2004 (% of Total)**

<i>Item</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
<b>Agriculture of which:</b>	<b>36.7</b>	<b>36.5</b>	<b>36</b>	<b>35.9</b>	<b>35.9</b>	<b>36.1</b>	<b>36.7</b>
Agriculture and Livestock	24.9	25	24.3	24.5	24.70	24.7	24.6
Cocoa Production and Marketing	3.6	3.4	3.5	3.3	3.27	3.5	4.2
Forestry and Logging	3.2	3.3	3.5	3.6	3.58	3.6	3.6
Fishing	5	4.9	4.6	4.5	4.35	4.4	4.3
<b>Industry of which:</b>	<b>25.1</b>	<b>25.2</b>	<b>25.2</b>	<b>24.9</b>	<b>24.9</b>	<b>24.9</b>	<b>24.7</b>
Mining and Quarrying	5.8	5.7	5.6	5.3	5.25	5.2	5.2
Manufacturing	9.1	9.2	9.2	9.1	9.15	9.1	9.0
Electricity and Water	2.5	2.6	2.8	2.89	2.56	2.5	2.5
Construction	7.7	7.8	7.9	7.9	7.96	8.0	8.1
<b>Services of which:</b>	<b>29</b>	<b>29</b>	<b>29.7</b>	<b>29.9</b>	<b>30</b>	<b>29.8</b>	<b>29.5</b>
Transport, Storage and Communication	4.6	4.7	4.8	4.8	4.87	4.9	4.9
Wholesale & Retail Trade, Restaurants and Hotels	6.7	6.8	6.8	7	6.96	7.0	6.9
Finance, Insurance, Real Estate and Business	4.2	4.2	4.3	4.4	4.33	4.3	4.3
Government Services	10.8	10.7	11.0	11.0	11.00	10.8	10.7
Community, Social and Personal Services	1.8	1.8	1.9	1.9	1.93	1.9	1.9
Producers of Private Non–Profit Services	0.9	0.9	0.9	0.9	0.89	0.9	0.9
<b>Sub Total</b>	<b>90.8</b>	<b>90.8</b>	<b>90.9</b>	<b>90.7</b>	<b>90.7</b>	<b>90.9</b>	<b>90.9</b>
Indirect Taxes	9.2	9.2	9.2	9.3	9.27	9.1	9.1
<b>GDP in Purchaser’s Value</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100.0</b>	<b>100</b>

*Source:* Bank of Ghana *Statistical Bulletin*

The external trade sector has only seen marginal changes in many years. The composition of exports was hardly changed, until very recently. Since the mid-eighties, trade as a share of GDP has increased sharply due to more liberal trade and exchange rate policies, the rehabilitation of cocoa and gold production, and an increase in the share of non-traditional exports in the total. These non-traditional exports are mostly agricultural or processed agricultural products, including pineapples, yams, wood products, cocoa products, canned tuna and oil palm products.

Considering that manufacturing remains the weakest link in Ghana’s economic growth it is not surprising that considerable attention is paid to the behaviour of firms in a difficult macroeconomic environment. This is analyzed in this volume by Wolf and Sarpong (2005). They proceed from the hypothesis that firms that are successful exporters will invest more and that firms that invest more are more likely to export, such that a strong relationship between export performance and investment behaviour at the firm level is expected to complement market access in diversifying Ghana’s exports. To test this proposition for Ghana, Wolf and Sarpong (2005) use probit regressions, a simultaneous equation model on a 2003 survey of a stratified sample of 100 enterprises in Ghana to analyse the factors that

influence the investment and exporting behaviour of firms. They also investigate the different factors that influence the investment and export decisions in different sectors. The results of the study present a mixed bag of findings. Contrary to the initial hypothesis, no significant positive relationship is established between exporting and investment. They explain the negative relationship that they observe with difficult access to capital. On the other hand they find that younger firms, larger firms and more efficient firms are more likely to invest and more likely to export.

The issue of finance for development is definitely important in the campaign to change economic structure. According to Buchs and Mathisen (2005), a competitive banking system is a prerequisite for ensuring that banks operate as credible forces for financial intermediation, channeling savings into investment and thereby fostering higher economic growth. They argue that the structure, as well as the other market characteristics, constitute an indirect barrier to entry into the Ghanaian banking system and thereby shield the large profits of bank. Buchs and Mathisen present an overview of Ghana's banking sector in which the three largest banks account for 55% of the total assets of the banking system. Despite the tightening of monetary policy in 2001, domestic credit to the private sector remained at around 10% of GDP which is regarded as low, even by African standards. In contrast, Ghanaian banks' pretax returns on assets and equity are rated among the highest in Africa (6.1% in 2002).

By applying panel data to variables derived from the Panzer and Rosse (1987) analytical framework; Buchs and Mathisen (2005) find evidence of a non-competitive (monopolistic competition) market structure in the Ghanaian banking system that hampers financial intermediation. They identified the following factors as key obstacles to competition: persistent financing of government needs to the detriment of the private sector; high investment cost; barriers to competition on interest revenues; and losses on the loan portfolio. The key recommendations that they make to improve financial intermediation include achieving effective fiscal adjustments and a rigorous enforcement of creditor rights by addressing institutional lapses in financial regulations and judicial reviews of Ghana's legal structures.

A different approach to discussing the financial sector, but which leads to similar ideas about how to make the sector more effective is provided by Steel and Andah (2005). In analysing and assessing how policy, legal and the regulatory framework for the sector have affected and been influenced by the development of rural and micro finance institutions (RMFIs) in Ghana, particularly in terms of the range of institutions and products available, their financial performance and outreach, Steel and Andah argue that the adoption of business rules on different tier basis reflects Bank of Ghana's growing understanding of MFIs and NBFIs. Steel and Andah (2005) discuss the extent to which a flexible regulatory environment can encourage innovation, while a diversity of RMFIs and products can serve different market niches not reached by commercial banks. They also consider the point at which special legislation may be needed; whether to facilitate commercialization and sustainability of the rural and micro finance (RMF) industry or to protect deposits and ensure the stability of the financial system. However, while Ghana's approach has fostered a wide range of both formal and informal RMFIs, it has not as yet been very successful in

achieving strong financial performance, significant scale, and true commercialization of microfinance. Steel and Andah (2005) observe that maintaining the different tier system requires substantial investment in the Apex Bank, in supervision and training and in strengthening the capacity to make good use of the liquidity being released. In sum, the biggest hurdle lies in finding the right balance between ease of entry for greater outreach, prudential regulations to enhance sustainability and monitoring capacity.

The poor reach of financial services is further highlighted in a contribution on savings by Quartey and Blankson (2005). They discuss the issue of poor mobilization of resources in an unstable environment and argue that despite the reform, including financial sector liberalization, Ghana still experiences low savings. They attribute this to a combination of micro and macroeconomic, as well as political factors. Noting that very few studies have been conducted into savings behavior in Ghana (most concentrating on aggregate savings with hardly any on households), Quartey and Blankson use data from the Ghana Living Standard Surveys (GLSS III and IV) to argue from the standpoint that macro-financial policies have no significant effect on household savings in Ghana. They further use a descriptive approach to discuss broad developments in domestic saving and monetary policies while they employ a logit regression analysis to estimate the coefficients of the determinants of household domestic savings and to compare the marginal effects of two time spans precisely 1991/92 and 1998/99. Generally, Quartey and Blankson conclude that macro-financial sector policies pursued between 1991/92 and 1998/99 did not have appreciable effects on household savings. Secondly, young persons and the aged on average had higher savings balances than the working population, contrary to the life cycle hypothesis. Interestingly, while people living in own houses saved less than those living in rented accommodation, the study also confirmed that households with a higher average propensity to consume save less. Lastly, the fact that the average propensity to consume has increased in Ghana after years of financial sector liberalization is seen to confirm the ineffectual nature of macro-financial sector policies over the years.

#### **4. Poverty and Social Development**

The extent and depth of poverty are generally to be seen as outcomes of the absence of effort to change the structure of the economy over several decades (Aryeetey and McKay 2004). The absence of change has left Ghana quite dependent on its resource endowments mainly and with that has come the associated vulnerability. The rigid economic structure with a rapidly growing population may be expected to create problems for any economy, thus leading to poverty among the population.

There is currently a lot of data on poverty and inequality in Ghana after several surveys over the last two decades. Thus conventional administrative data has been supplemented with survey data and qualitative or participatory assessments of poverty. Some of the important qualitative sources are the participatory poverty assessment carried out in several rural and urban communities in 1994/95 (Norton et al., 1995) and the Ghana *Voices of the Poor* study (Kunfaa, 1999).

What both the qualitative and quantitative assessments indicate is a large number of people that are poor and deprived. There are some important patterns to poverty in Ghana, mainly by geographic location, with the worst cases of deprivation in the northern savannah region compared to the south. The GLSS data of 1998/99 showed that 42.2% of all households in Ghana in the lowest income quintile were located in the rural savannah, even though this area accounted for only 20.6% of total population. In the 1992-98 period Aryeetey and McKay (2004) report that the headcount income poverty fell from 51.7% of the population to 39.5%, with strong geographic and other patterns. Inequality as measured by the Gini coefficient increased slightly over the same period. (See Table 1.4).

The overall rate of poverty reduction over the period suggests a growth elasticity of poverty incidence of 0.98, a figure which is comparable to other African countries (Christiaensen et al., 2003). But there are pockets in southern Ghana with high levels of poverty and deprivation, particularly in the Central Region. The Ghana poverty map (Coulombe 2005) also shows important variations within localities, so that less poor districts within the very poor northern regions and a number of poor districts in coastal areas in the south have comparable poverty levels. The data shows a strong urban-rural differential in poverty indicators, with deprivation being substantially higher in rural areas. Poverty also has important gender dimensions, with most indicators showing that women face higher levels of deprivation compared to men, and levels of income poverty are higher among households with higher dependency ratios. Landlessness, historically not a major problem in Ghana, has become an increasingly important issue underlying poverty and insecurity in peri-urban areas (Government of Ghana, 2003). Few of the poor work in non-agricultural wage employment, with the large majority working in small-scale agriculture. The majority of the latter produce food crops, though there are also significant numbers producing cocoa and other export crops that are poor.

**Table 1.4: Summary Information on Changes in Income Poverty and Inequality at the National Level**

	1991/92	1998/99	Changes, 1991/92 to 1998/99
Average value of income standard of living measure (from survey; millions of cedis per person per year, constant prices)	1.44	1.78	3.1% p.a.
Change in real consumption per capita (national accounts)			2.9% p.a.
Gini coefficient	0.373	0.388	
Poverty headcount index (per cent)	51.7	39.5	-12.2
Growth elasticity of poverty headcount index			0.98

Source: Aryeetey and McKay 2004

In the Coulombe (2005) presentation of the poverty map (this volume), he discusses extensively the methodology and documents the numerous advantages that both the Ghana Census 2000 and the Ghana Living Standards Survey (GLSS IV) provide to policy makers and users in developing poverty profiles and maps at district and sub-district levels in

Ghana. The methodology takes advantage of detailed information found in the survey and the exhaustive coverage of the census which makes it possible to compute standard errors of the different poverty estimates and therefore conveys a notion of reliability of estimates arrived at. Significantly, researchers could easily use it with some fair degree of accuracy to determine the relationship between poverty distribution in Ghana and different socio-economic outcomes.

Appiah-Kubi, Oduro and Senadza (2005) provide a poverty profile of Ghana using mainly GLSS IV data and estimate the incidence of vulnerability in Ghana using a cross-sectional approach. With various conceptualizations of vulnerability, the authors argue that Ghanaian households and individuals vulnerable to poverty include both poor and non-poor, and are estimated to be 49.5 % of the total population in 1998/99. They suggest the need for further investigation, both quantitative and qualitative, of poverty dynamics in Ghana to provide information for more rigorous analysis. They advocate the use of public policy to provide a stable macroeconomic policy framework within which agents operate and provide safety nets (welfare enhancing) for households and individuals experiencing shock (vulnerability) to fall on for recovery. In this light, they regard the Ghana Poverty Reduction Strategy (GPRS) as well intentioned to address the plight of the vulnerable and excluded but suggest that it falls short on providing assistance to food crop farmers to enhance their production. A major step forward will be to take measures to enable food crop farmers cope with the perennial long dry season.

The practical link between macroeconomic policies and poverty may be looked at through the lens of inflation and how it affects the poor. The chapter by McKay and Sowa (2005) contends that given the extent to which the vast majority of households in Ghana rely on the market for their purchase of key commodities including food (52% of household income), inflation, which has averaged 25% per annum since 1983, is clearly important to both poor and non-poor persons. Whether or not it hits the poor harder depends on whether they are less able to hedge themselves against inflation compared to wealthier groups; and on whether they face a higher rate of inflation. The authors made the assertion that although the large majority of households in Ghana do not have ready access to conventional means of hedging against inflation through savings and investments, there is no evidence yet that they face a systematically higher – or lower – inflation rate than the non-poor. They also suggest that at the broad commodity category level, consumption baskets in Ghana are remarkably uniform across income groups. There are some important differences in the composition of the consumption basket at the individual commodity level. The initial calculations suggest that the choice of weighting method for computing inflation rates makes a difference. In the few cases considered, the authors conclude that there is no evidence to suggest that the poor face a systematically higher (or lower) inflation rate than the non-poor. They finally observe that in rural Ghana consumption from own production is important for many households and this provides them with some insurance against inflation as such transactions do not involve the exchange of money.

There is considerable discussion about whether government programmes to tackle poverty actually reach the poor. Tsekpo and Jebuni (2005) explore the relationship between budget implementation and poverty reduction and observe that transfers to the local government

sector show sensitivity to the poverty reduction agenda of central government. This is in spite of the fact that some budgetary allocations, commonly referred to as the District Assemblies Common Fund (DACF), are not necessarily directed at 'targeted' poor groups. There are further targeting problems as some programmes of the Ghana Poverty Reduction Strategy (GPRS) benefit wealthier commercial farmers more than they do poor subsistence farmers. Even where the GPRS targets the poor, there are sometimes no funds for project implementation. Tsekpo and Jebuni also question the reliability of data which suggests a shift in spending from administration to capital expenditure since a reclassification of expenditure items might have disguised the true picture. They point out however that data from the CWIQ 2003 survey results might be more useful in establishing that budgetary allocations may be moving increasingly in favour of the poor.

When the poor fail to secure access to public services, there is a higher likelihood that they will adopt survival techniques that may sometimes be costly to society. Self-medication is one such technique and has been reported to be on the increase and leading to major problems. Van den Boom et al. (2005) that the high prevalence of self-medication in Ghana (50%) may be attributed to distance from health facilities and doctors, (one in every four Ghanaians lives beyond a 15-km radius of a doctor) and high cost of seeing a doctor (\$10 compared to \$1.5 for self-medication). With a current doctor/population ratio of 1:16,000 (denominator reduces to 11,000 when private doctors are included), the simulated utilization patterns of the authors indicate possible demand of an additional 15-20% of doctors, which may further worsen the burden on conventional healthcare and pose a huge challenge. An option proposed is to improve the quality of self medication through certification and training of chemical sellers, traditional healers, unsupervised druggists and medicine peddlers. Van den Boom et al. (2005) suggest the exploration of innovative ways to encourage private contributions to augment Ghana's heavily subsidised health sector and thereby reduce self-medication.

## **5. The State, Institutions and Socio-Economic Development**

If we defined the state as "a set of institutions that possess the means of legitimate coercion, exercised over a defined territory and its population, known as society", then the role that each institution plays in bringing more rapid development to that society should be paramount.

The state's role in development is changing throughout the world, with an increasing focus on effectiveness. The factors that influence the state's effectiveness vary from place to place and similar structures may lead to different outcomes. But the fact that the state is central to the development process remains largely unchallenged. Economic and political reforms are redefining the role of the state, but the process often remains *ad hoc* in poor countries, including Ghana.

The use of policy as a tool for delivering the state's development output is challenged by the limitations of the state and its institutional capacities. Public policy must recognize this and adapt accordingly. The history of failed or failing states prior to reform in many

countries prompted change, which itself is being questioned for possibly having gone too far.

In trying to offer explanations for why two decades of reform have not dealt adequately with the problems of macroeconomic stability, Aryeetey and Fosu (2005) argue that the problems could be attributed to the continuing presence of institutional constraints in the mobilization of resources and their allocation. The state and its institutions had been weakened by the many years of neglect, and the reforms did not deal adequately with those problems. While political instability may have been contained, this was achieved at some economic cost. Weak governments are more likely to experience slippages in macroeconomic programs, as has been seen with vote-buying public expenditures in the last decade. Corruption and other institutional inadequacies increase the transaction cost for all economic endeavours, and this is seen clearly in Ghana. The end result was that policy reform slowed down in the 1990s and growth stagnated, although at a higher level than in most countries. The question then became what it would take for growth to accelerate once again and to be sustained. The answer from Aryeetey and Fosu is to continue with new programs to strengthen the institutions that will support market reforms, mindful of complementarities in the public and private roles in bringing about investment and making such investment productive.

Killick (2005) provides another angle to the discussion of the role of the state and institutions. He argues that the economic achievements of the 1980s and 1990s were “substantial and sufficient to refute any suggestion that existing inflexibilities make it impossible to achieve change”. But he observes major weaknesses and suggests that greater flexibility would have brought more rapid gains. The first reason he provides for the continuing difficulties is that the state sector remains large beyond its competence. He illustrates with the difficulties associated with the management of the budget. Killick sees the weaknesses of the civil service and the difficulty in reforming also as major obstacles better growth rates. He maintains that successive governments have not been able to strengthen the public service and its ability to deliver on development promises because of the neo-patrimonial model of politics. He does not see democracy as the panacea, as “the logic of competitive politics remains unfavourable to decisive action on public service reform”.

Killick suggests that many of the most important constraints on faster economic progress in Ghana go well beyond the confines of economics and require attention to improvements in political and social structures. Improvements in the democratic environment should be utilized to reform and strengthen the public service. He calls for major reductions in the economic role of the state in view of the fact that the state has not shown an ability to deliver services and development in a sustained manner.

We recognize the growing perception in Ghana that in order to reinvigorate state institutions with proper incentives, there must be effective rules and regulations, as indeed there should be greater competition for the state as well as increased citizen voice and partnership (Aryeetey 2005). The strengthened public sector will ensure in order to achieve poverty reduction that did not compromise growth poverty reduction is anchored within a clear macroeconomic framework. In recognizing the productivity problems facing the

economy and society, human resource development institutions will have to respond to the changing demand for skills, without losing sight of the need to make the entire society literate. Monitoring mechanisms for public expenditures must be developed and strengthened to ensure that such expenditures reach their targets and generate the expected outputs. This requires that decentralization should lead to a more open system of governance and empower districts to generate additional resources from within.

In assessing the impact of the impact of decentralization on poverty reduction Asante and Ayee (2005) argue that poverty reduction was central to the decentralization programme in Ghana from its inception as various initiatives such as Programme of Action to Mitigate the Social Costs of Adjustment (PAMSCAD) in 1987, the Productivity and Income Generation Fund in 1996 and lately the Highly Indebted Poor Countries (HIPC) Funds in 2002 and the Ghana Poverty Reduction Strategy (GPRS) in 2003 formed part of the decentralization programme. Rather, Asante and Ayee note that it is the poor implementation (function of decentralization) of the above poverty initiatives that accounts for a low impact of decentralization on poverty reduction. Moreover, even though the paper found that decentralization has an impact on poverty reduction, this impact is dependent on certain variables. It is not sufficient just to look at any decentralization type, such as political decentralization, in isolation, when assessing the impact of decentralization on poverty reduction. Political, administrative and fiscal decentralization need to be considered simultaneously and the sequencing and pace of the different types of decentralization seem to play an important role. Asante and Ayee recommend an efficient local government that effectively combines strategies of political empowerment, resource mobilization and enhanced service delivery; addressing institutional bottlenecks that inhibit coordination between central and local government; and lastly renewed political commitment by government to fully decentralize irrespective of its political, technical risks and trade offs.

## **6. Conclusion**

As Ghana enters its second half century, we are faced with a paradox. Despite a solid transition to democracy in the political situation, despite recorded recovery in the last fifteen years from the economic malaise of the two decades preceding, and despite reductions in measured poverty, there is widespread perception of failure of the economic and political system in delivering improving living standards to the population. We have argued in this essay that policy makers and analysts have to confront this perception and examine it. The papers in this volume call for a deeper examination of the macro level data on growth and on poverty. A sectoral and regional disaggregation reveals weaknesses in the levels and composition of private investment, in the generation of employment, in sectoral diversification, and in the distribution of the benefits of growth. Income poverty has declined, but inequality has increased in various dimensions. At the same time, the push for decentralization and for better allocation, monitoring and implementation of public expenditure has raised more questions than it has answered. These are the challenges that Ghana faces if it is to fulfill the bright promise of its independence in 1957. The papers in this volume set out an analytical agenda that we hope will help in laying the ground work for the path that the nation's policy makers will have to steer on the road to 2057.

## References

Agbola, Frank W. (2005), "Ghana's Exchange Rate Reform and its Impact on Balance of Trade." Forthcoming in Aryeetey and Kanbur (eds.).

Appiah-Kubi, Kojo, abena Oduro and Bernadin Sendanza (2005), "Understanding Poverty in Ghana: Risk and Vulnerability." Forthcoming in Aryeetey and Kanbur (eds.).

Aryeetey, E. (1996). "The Formal Financial Sector in Ghana After the Reforms. Working Paper 86, London.

Aryeetey, E. and D. Peretz (2005), "Monitoring Donor and IFI Support Behind Country-Owned Poverty Reduction Strategies in Ghana." Forthcoming in Aryeetey and Kanbur (eds.).

Aryeetey, Ernest and Augustin Fosu (2005), "Economic Growth in Ghana: 1960—2000." Forthcoming in Aryeetey and Kanbur (eds.).

Aryeetey, Ernest and Ravi Kanbur (eds.) (Forthcoming), *The Economy of Ghana: Analytical Perspectives on Stability, Growth and Poverty*. James Currey.

Aryeetey, E. and J. Harrigan (2000), "Macroeconomic and Sectoral Developments since 1970" in *Economic Reforms in Ghana, The Miracle and The Mirage*, edited by E. Aryeetey,

Aryeetey, Ernest and Andrew McKay (2004), "Operationalising Pro- Poor Growth" A Country Case Study on Ghana .A joint initiative of AFD, BMZ (GTZ, KfW Development Bank), DFID, and the World Bank

Aryeetey E, and F. Tarp (2000), "Structural Adjustment & After: Which Way Forward?" in *Economic Reforms in Ghana, The Miracle and The Mirage*, edited by E. Aryeetey, J. Harrigan and M. Nissanke, James Currey and Woeli Publishers, Oxford

Asante, Felix A. and Joseph R. A. Ayee (2005), "Decentralization and Poverty Reduction." Forthcoming in Aryeetey and Kanbur (eds.).

Booth, David, Richard Crook, E. Gyimah-Boadi, Tony Killick and Robin Luckham, with Nana Boateng (2004), *Drivers of Change in Ghana: Overview Report*, Final Draft, 25 May 2004, London: ODI and Accra: CDD.

Buchs, Thierry and Johan Mathiesen (2005), "Banking Competition and Efficiency in Ghana." Forthcoming in Aryeetey and Kanbur (eds.).

Christiaensen, L., L. Demery, and S. Paternostro (2003), "Macro and Micro Perspectives of Growth and Poverty in Africa", *World Bank Economic Review*, 17: 317-347.

Coulombe, Harold (2005), Ghana Census-Based Poverty Map: District and Sub-District Level Results.” Forthcoming in Aryeetey and Kanbur (eds.).

Government of Ghana (2003), *Ghana Poverty Reduction Strategy 2003-2005: An Agenda for Growth and Prosperity* Vol.1 Accra: Ghana Publishing Corporation, Assembly Press

Gyimah-Brempong, Kwabena and Elizabeth N. Appiah (2005), “Technical Efficiency in Ghanaian Secondary Education.” Forthcoming in Aryeetey and Kanbur (eds.).

ISSER (2004) *The State of the Ghanaian Economy Report 2003*, University of Ghana, Legon: Institute of Statistical, Social and Economic Research.

Killick, T. (2000), “Fragile Still: The Structure of Ghana’s Economy 1960-94”, in *Economic Reforms in Ghana, The Miracle and The Mirage*, edited by E. Aryeetey, J. Harrigan and M. Nissanke, James Currey and Woeli Publishers, Oxford, 2000

Killick, Tony (2005), “What Drives Change in Ghana?” Forthcoming in Aryeetey and Kanbur (eds.).

Kunfaa, E.Y. (1999), “Consultations With The Poor: Ghana Country Synthesis Report”, CEDEP, Kumasi, July.

Kyreme, Stephen (2005), “Effects of Exchange Rate Volatility and Changes in Macroeconomic Fundamentals on Economic Growth in Ghana.” Forthcoming in Aryeetey and Kanbur (eds.).

McKay, Andy and Nii Kwaku Sowa (2005), “Does Inflation in Ghana Hit the Poor Harder?” Forthcoming in Aryeetey and Kanbur (eds.).

Norton, A., E. Bortei-Doku Aryeetey, D. Korboe and D.K.T. Dogbe (1995), “Poverty Assessment in Ghana using Qualitative and Participatory Research Methods”, PSP Discussion Paper No. 83, World Bank, Washington D.C.

O’Connell, S. and B. Ndulu (2000), “Africa’s Growth Experience: A Focus on the Sources of Growth” Mimeo, AERC, Nairobi.

Oduro, A et.al (2004), “Understanding Poverty in Ghana: Risk and Vulnerability” Mimeo, Institute of Statistical, Social and Economic Research, University of Ghana, Le-gon

Quartey, Peter and Theresa Blankson (2005), “Household Savings in Ghana: Does Policy Matter?” Forthcoming in Aryeetey and Kanbur (eds.).

Panzer, L and J. Rosse (1987), “Testing for Monopoly Equilibrium”, *The Journal of Industrial Economics*, Vol.35, No.4, pp.443-456.

Round, J. and M. Powell (2000), "Structure and Linkage in the Economy of Ghana: A SAM Approach" in *Economic Reforms in Ghana, The Miracle and The Mirage*, edited by E. Aryeetey, J. Harrigan and M. Nissanke, James Currey and Woeli Publishers, Oxford

Nyanteng, V. and A.W. Seini (2000), "Agricultural Policy and the Impact on Growth and Productivity 1970-95" in *Economic Reforms in Ghana, The Miracle and The Mirage*, edited by E. Aryeetey, J. Harrigan and M. Nissanke, James Currey and Woeli Publishers, Oxford

Steel, William F. and David O. Andah, "Rural and Micro Finance Regulation in Ghana: Implications for Development of the Industry." Forthcoming in Aryeetey and Kanbur (eds.).

Tsekpo, Anthony and Charles D. Jebuni (2005), "Budget Implementation and Poverty Reduction in Ghana." Forthcoming in Aryeetey and Kanbur (eds.).

Van den Boom, N.N. Nsowah-Nuamah and G.B. Overbosch (2005), "Health Care Provision and Self-Medication in Ghana." Forthcoming in Aryeetey and Kanbur (eds.).

Wolf, Susanna and Daniel B. Sarpong (2005), "Export Performance and Investment Behavior of Firms in Ghana."

Youngblood, Charles E. and David I. Franklin (2005), "Persistent Public Sector Deficits and Macroeconomic Instability in Ghana." Forthcoming in Aryeetey and Kanbur (eds.).

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