

# Global Financial Crisis Discussion Series

## Paper 5: Ghana

---

**Charles Godfred Ackah, Ellen Bortei-Dorku  
Aryeetey and Ernest Aryeetey**

# Global Financial Crisis Discussion Series Paper 5: Ghana<sup>1</sup>

Charles Godfred Ackah, Ellen Bortei-Dorku Aryeetey  
and Ernest Aryeetey

May 2009

Overseas Development Institute  
111 Westminster Bridge Road  
London SE1 7JD

---

<sup>1</sup> This study was prepared by researchers at the Institute of Statistical, Social and Economic Research (ISSER) at the University of Ghana. Professor Ernest Aryeetey is also Director of ISSER and Dr Ellen Bortei-Dorku Aryeetey is also Acting Director of the Centre for Social Policy Studies, University of Ghana. Dr Charles Godfred Ackah is the corresponding author: [cackah@isser.ug.edu.gh](mailto:cackah@isser.ug.edu.gh). This study is part of a wider research project coordinated by the Overseas Development Institute (ODI) London and supported by the UK Department for International Development (DFID) and the Dutch Ministry of Foreign Affairs, but it does not necessarily reflect their views.

# Contents

Figures and tables	iii
Acronyms	iv
Abstract	v
1. Introduction	1
2. The global financial crisis and shocks at the national level	4
2.1 Pre-crisis macroeconomic performance	4
2.2 Identifying the country-specific shock	6
3. Understanding possible growth and development effects	18
4. Scope for and constraints to policy responses	23
5. Conclusions and policy recommendations	25
References	27
Annex 1: Statistical tables	29

## Figures and tables

Figure 1: Real GDP growth rate and inflation, 1974-2009 (%)	4
Figure 2: Summary of current account, 2003-2007 (US\$m)	6
Figure 3: GSE all share index, 2007 and 2008	8
Figure 4: Ease of doing business in Ghana	9
Figure 5: FDI, 2006-2008 (US\$ million)	10
Figure 6: International tourist arrivals, 2000-2008	11
Figure 7: International tourist receipts per arrival, 2001-2008 (US\$)	11
Figure 8: Private inward transfers through banks, 2007-2008 (US\$ million)	12
Figure 9: Export receipts (fob), 2007 and 2008 (GH¢ million)	13
Figure 10: Cocoa price (£ sterling/tonne), 2007 and 2008	15
Figure 11: Gold price (US\$/ounce), 2007 and 2008	15
Figure 12: Trends in aid flows, 1960-2006	16
Figure 13: Aid modality, 2003-2011 (US\$ million)	16
Figure 14: Aid flows, 2003-2011 (US\$m)	17
Figure 15: Share of grant/loan, 2003-2011 (%)	17
Table 1: Value of Ghana's exports by major destination, 2002-2007 (US\$m)	14
Table 2: Sectoral contributions to national output, 2003-2007 (% of total)	18
Table 3: Real sector developments, 2005-2009	18
Table 4: Projected macroeconomic indicators, 2004-2015	21

## Acronyms

BoG	Bank of Ghana
CEM	Country Economic Memorandum
CEPS	Customs Excise and Preventive Service
CGE	Computable General Equilibrium
DMB	Deposit Money Bank
ETI	Ecobank Transnational Incorporated
EU	European Union
FDI	Foreign Direct Investment
FINSAP	Financial Sector Adjustment Programme
fob	Free on Board
GCB	Ghana Commercial Bank
GDP	Gross Domestic Product
GIPC	Ghana Investment Promotion Centre
GoG	Government of Ghana
GNAS	Ghana National Accounting Standards
GNI	Gross National Income
GPRS	Ghana Poverty Reduction Strategy
GSE	Ghana Stock Exchange
GT	Ghana Telecom
HIPC	Heavily Indebted Poor Countries Initiative
ICT	Information and Communication Technology
IFFE	International Futures and Funds Exchange
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IPSAS	International Public Sector Accounting Standards
ISSER	Institute of Statistical, Social and Economic Research
LEAP	Livelihood and Empowerment Against Poverty
MAMS	Maquette for MDG Simulations
MDBS	Multi-donor Budget Support
MDG	Millennium Development Goal
MDRI	Multilateral Debt Relief Initiative
MFN	Most-favoured Nation
NDC	National Democratic Congress
NGO	Non-governmental Organisation
NPL	Non-performing Loan
NPP	New Patriotic Party
ODA	Official Development Assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
RoA	Return on Assets
RoE	Return on Equity
SAM	Social Accounting Matrix
UK	United Kingdom
US	United States
WEO	World Economic Outlook (IMF)

## Abstract

The current financial crisis, following so closely the 2007-2008 food and fuel price shocks, and the expected slowdown of global growth have come at a moment when Ghana is considered more vulnerable than it has been in the recent past. The spike in global food and crude oil prices in 2007-2008 has raised the country's current account deficits to worrisome levels. Moreover, inflation is high and rising, and the government's fiscal position has deteriorated, both for cyclical reasons and because government spending has increased to alleviate the adverse impact of higher commodity prices. This study analyses the nature and extent of the impact of the crisis and identifies the specific channels of transmission, policy implications and possible policy responses. Ghana, having been integrated into the global economy, is not being spared the impact of the financial crisis. Just like other developing countries in the region, the country is becoming increasingly vulnerable, as its current account, fiscal deficit, exchange rate, inflation and debt indicators worsen. The financial crisis is expected to exacerbate an already vulnerable situation and possibly erode the gains of the past decade of strong economic performance.

# 1. Introduction

Barely a year ago, Ghana embarked on the second leg of its centenary of independence and democracy, announcing bold objectives that included an accelerated gross domestic product (GDP) growth rate of 8% in 2009 and 10% before 2015 and achievement of middle-income status of US\$1000 dollars per capita by 2015. In the five decades since her independence from British rule in 1957, Ghana has gone through different cycles of growth, marked by poor economic performance and military coup d'états through to the 1980s. National economic policies during this period were often devoid of market principles, and characterised by frequent price and income controls. At best, the economy muddled through, with low productivity, high and volatile prices, an overvalued currency and high interest rates. Under such an unfavourable investment climate, growth was abysmal. The return to multiparty democracy and constitutional rule in the early 1990s marked the beginning of an unprecedented economic and political stabilisation process. Together with high commodity prices (especially for gold and cocoa) and a set of important market reforms, an enabling environment for the private sector growth began to emerge.

Under such improved macroeconomic and political conditions, Ghana has been enjoying a period of relatively strong economic performance over the past few years. The past 20 years have seen real GDP growing at a steady state of about 5% per year. The period after 2003 was particularly spectacular, with GDP growth rates averaging about 5.9% annually over the past five years, from 2003 to 2007. This is certainly an encouraging improvement on the 1970s, when economic growth was either negative or stagnating (see Figure 1). The impressive performance in recent years is attributable principally to relative macroeconomic stability and reform, substantial inflows of external financing and debt relief and rising prices for primary commodities. In fact, the economy could have performed even better in the past two years but the effect of the huge hikes in crude oil prices and the energy shocks experienced meant that growth increased very marginally, by 0.1 percentage points, from 2006 to 2007. The growth target of 6.5% for 2007 was missed owing to these negative shocks. But if these shocks inflicted significant negative impacts on the economy, then the effects of the unfolding global financial crisis could be even direr.

The world economy is undoubtedly in serious turmoil, with a deepening global credit crisis, which started in 2007 and became full blown by the second half of 2008, just at the heels of two major shocks between 2007 and 2008: an upward spiral in food and fuel prices. These shocks have led to very shaky consumer confidence and a slowdown in private investments, especially in developed economies, resulting in a downturn in the world economy in 2008. According to the International Monetary Fund (IMF) World Economic Outlook (WEO) update for 2008, world economic growth is estimated to have been 3.4% in 2008, down from 5.2% in 2007.<sup>2</sup> While it is true that the advanced economies have been the hardest hit by the crisis, with a growth rate projected to decline from 2.7% in 2007 to about 1.0% in 2008, developing economies have not been spared. Growth in developing economies, including emerging economies, is estimated at 6.3% for 2008, down from the realised growth rate of 8.3% in 2007.

Africa was initially believed by many pundits to be somehow insulated from the global financial crisis, because of the relatively limited level of integration of most African financial markets with global financial markets. However, the continent has witnessed some adverse effects, evidenced in a slowdown in the rate of growth from 6.2% in 2007 to an estimated 5.2% in 2008. As the global financial crisis continues to deepen, world output growth prospects, particularly for 2009 and 2010, have been downgraded at least a few times already in the past few months. World output growth is projected to be just 0.5% in 2009, down from 3.4% in 2008, as recessionary pressures intensify in the global economy. Similarly, emerging and developing economies are projected to grow by 3.3% in 2009, down from 6.3% in 2008. For developed economies, output growth is expected to contract in 2009 by 2.0%. This would

---

<sup>2</sup> See <http://www.imf.org/external/pubs/ft/weo/2008/02/index.htm>.

be the first annual contraction since World War II. This is expected to decrease the volume of world trade in 2009, leading to a decline in exports from developing economies.

The current financial crisis, following so closely the 2007-2008 food and fuel price shocks, and the expected slowdown in global growth have come at a moment when Ghana is considered more vulnerable than it has been in the recent past. Higher food and crude oil prices in 2007-2008 raised the country's current account deficits to worrisome levels. The escalation of crude oil prices on the world market raised production costs for oil-importing countries such as Ghana, resulting in high and rising inflation (about 18.1% at the end of December 2008), intensifying anxiety among the poor, who lack adequate safety nets to cope with inflationary pressures.<sup>3</sup> The government's fiscal position has also deteriorated (the budget deficit stood at about 12% of GDP), both for cyclical reasons and because government spending has increased to alleviate the adverse impact of higher food and fuel prices. Gross international reserves reduced to the equivalence of 1.8 months of import cover for goods and services, from the benchmark of three months of import cover. The grim picture painted above has resulted in a situation in which the World Bank has categorised Ghana as among the countries considered 'highly exposed' to the global financial crisis, with economic growth expected to be lower in 2008-2009 compared with 2004-2007.

In his presentation of the 2009 budget statement to Parliament in March 2009, Ghana's Finance Minister frankly acknowledged that the severe credit crunch, alongside the recent global energy and food price hikes, resulted in expenditure over-commitments by ministries, departments and agencies in 2008. He confessed that the 'implication of the domestic and external state of affairs ... is that 2009 will be very challenging for the new NDC [National Democratic Congress] administration' (GoG, 2009). However, the Minister intimated that the government is committed to its pledge of providing improved social services to uphold the living conditions and dignity of the citizenry.<sup>4</sup>

The effects of the current crisis on developing countries may arise from a number of channels. The first-round effects are expected to occur in financial sectors and then spread to the real sectors of the affected countries. The financial sector effects include those arising via channels such as stock markets, banking sectors and foreign direct investment (FDI). The real sector impact could be propagated through effects on remittances, trade and aid.

Although a number of studies have begun to emerge on the impact (or possible impact) of the crisis on the global economy and the economies of advanced countries, very little empirical work has been produced about the implications of the crisis for developing countries, in particular sub-Saharan African countries. This is probably a result of the fact that many commentators believed that Africa would be relatively insulated against the worst effects of the global crisis. However, it is now clear that many African countries are starting to feel the effects of the current financial turmoil, the worst of its kind since the Great Depression of the 1930s. This realisation has stimulated a great deal of concern about whether developing countries are actually immune to the unfolding crisis, and under what circumstances it may actually hurt them. Surprisingly, despite the general concerns being expressed in many quarters, very little work has been done on the actual impacts of the financial crisis on developing countries. This paper attempts to fill some of the knowledge gaps by providing an assessment of the impacts, direct and indirect, as well as the immediate and medium-term effects on the Ghanaian economy. It does this by first examining whether there has been any shock at the national level attributable to the financial crisis (Section 2) and then by discussing in detail each of the

---

<sup>3</sup> Crude oil prices started 2008 at about US\$90 per barrel (average price in January) but the international price of crude oil continued to soar until it hit a record high of \$147 per barrel in July 2008. In response to the world slowdown, prices started to ease during the latter part of 2008, falling below an average of \$50 by December 2008. Ghana is currently an oil importer, and should ordinarily be happy about the sharp drop in oil prices. But the country also expects to begin exporting crude oil in 2010, and officials have made a number of macroeconomic projections into the future based on optimistic revenue expectations driven by high oil prices.

<sup>4</sup> The policy thrust of the 2009 budget is to reduce the current 13% budget deficit to sustainable levels, to improve the exchange rate regime and to work towards the attainment of single digit inflation. The main strategies to be used will include enforcement of fiscal discipline, substantial reduction in unproductive recurrent expenditures and improvement in revenue mobilisation.

potential channels through which the effects could occur, discussing the possible growth and development effects (Section 3). Section 4 discusses policy implications and responses.

It is important to raise a preliminary caveat: throughout this report, we endeavour to provide empirical evidence in support of any claims about the effects (or potential effects) of the financial crisis, but analyses are difficult owing to the problem of attribution (to what extent are the effects caused by the global crisis, and to what extent are the effects a result of existing structural and emerging weaknesses in the Ghanaian economy, such as ongoing balance of payments pressures and external debt servicing constraints, among other macroeconomic concerns?) Since empirical evidence is still patchy, we are sometimes compelled to settle for anecdotal evidence, in which case the matter is clearer.

## 2. The global financial crisis and shocks at the national level

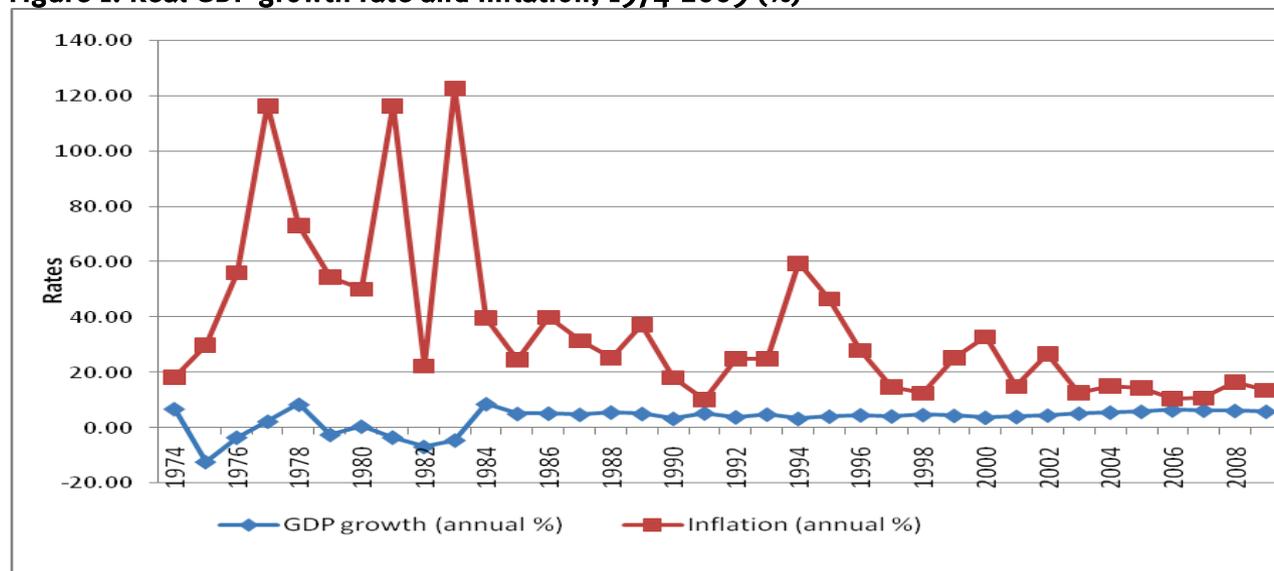
This section examines whether global transmission mechanisms of the financial crisis are already visible in Ghana. To put the analyses in their proper perspective, the first task will be to present a review of the macroeconomic policies and performance that prevailed in Ghana before the onset of the financial crisis. This includes the conduct of both monetary and fiscal policies.

### 2.1 Pre-crisis macroeconomic performance

#### 2.1.1 Real sector developments

Figure 1 shows real GDP growth rate and inflation in Ghana from 1974 to 2008 and projections for 2009. It depicts two distinct periods of economic growth: i) a 30-year period of instability after independence, with growth averaging about 1% per year; and ii) starting from the late-1980s, a period of relatively stable growth of about 5% per year. This more recent performance has been attributed principally to enhanced political and macroeconomic stability, substantial inflows of external financing, rising prices for primary commodities and debt relief. In addition to its mediocre economic performance over the previous two decades (1974-1994), the Ghanaian macroeconomic environment was less favourable to investors until recently. Inflation has ranged from about 10% to about 120%. Differential rates began to appear in the late 1970s, as productivity declined and the government resorted to increased monetisation to finance budget deficits. However, inflation has generally declined since 1995, from a level of about 45% to about 10.5% in 2007. Despite global growth decelerations, headline inflation has risen around the world to the highest rates since the late 1990s, on the back of the surge in fuel and food prices. In Ghana, inflation for end-2008 was about 18.1% and it has been rising since the start of 2009.

**Figure 1: Real GDP growth rate and inflation, 1974-2009 (%)**



*Note:* Rates for 2008 are provisional whereas 2009 rates are projections; the inflation rate for end-December 2008 was 18.1%.

*Source:* World Development Indicators CD-ROM (2008); GoG (2009).

#### 2.1.2 Fiscal developments

The level of domestic savings is an important indicator of a country's ability to generate and sustain economic growth. Yet, despite improvements in Ghana's macroeconomic environment, the response of gross domestic savings has been poor. By 2005, gross domestic savings were at a very low level, of about 3.4% of GDP, compared with a 1995 level of about 11.6%.

In the past, the burden of fiscal instability dominated the conduct of fiscal policies in Ghana. The main challenges were the persistent high level of fiscal deficits, low mobilisation of domestic resources, unpredictability of the flow of foreign resources, unsustainable debt levels and poor prioritisation of spending. Excessive or unsustainable fiscal deficits have impacts on aggregate demand and on financial markets. Deficits indicate that the public sector is absorbing resources in excess of current revenue levels, and could end up contributing to the problem of balance of payments. In financial markets, excessive fiscal deficits result in high borrowing, drive interest rates upward, crowd out private sector borrowers and eventually slow the country's economic activity. Government fiscal deficits could significantly influence the current account balance level.

From 2000, the primary fiscal policy objective of the government was to reduce and stabilise domestic debt and improve the overall balance in terms of GDP. Indeed, from 2000-2005, there was a gradual improvement in the overall budget balance. The low levels of fiscal deficit have been attributed to several factors, such as economic expansion, improvement in revenue collection, debt relief from the Heavily Indebted Poor Countries (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI) and tight fiscal policies. However, from 2006-2007, the gains made over the past years were rapidly eroded as a result of the oil price hikes and the energy crises. Indeed, provisional fiscal data for 2008 indicate that fiscal policy during the year was expansionary. While revenue outcome was robust, in line with the strong momentum in economic activity during the year, expenditures exceeded budget estimates during the year by wide margins, resulting in a worsened fiscal balance (excluding divestiture), equivalent to 14.9% of GDP, up from 8.4 % in 2007 and compared with a budget estimate of 5.7% of GDP.

On the debt front, the indicators show that, although total debt stock has increased since 2000, debt stock as a percentage of GDP has seen a steady decline. In 2000, debt stock was 189% of total GDP, falling to about 52% in 2007, below the established budgetary ceiling of 60% of GDP. In fact, external debt and domestic debt both declined over these years. This has been a result mainly of the debt write-offs, first under the HIPC initiative and more recently under the MDRI. However, provisional data for 2008 indicate that the public debt situation began to deteriorate again during the year; the stock of total public debt stood at US\$7918.1 million (55.9% of GDP), up from \$7411.7 million in 2007. With the exchange rate depreciation and reported sudden withdrawal of foreign capital from the economy, this may not augur well for Ghana as a result of the substantial foreign currency-denominated debts. Businesses may contract or even collapse if they hold similar debts.

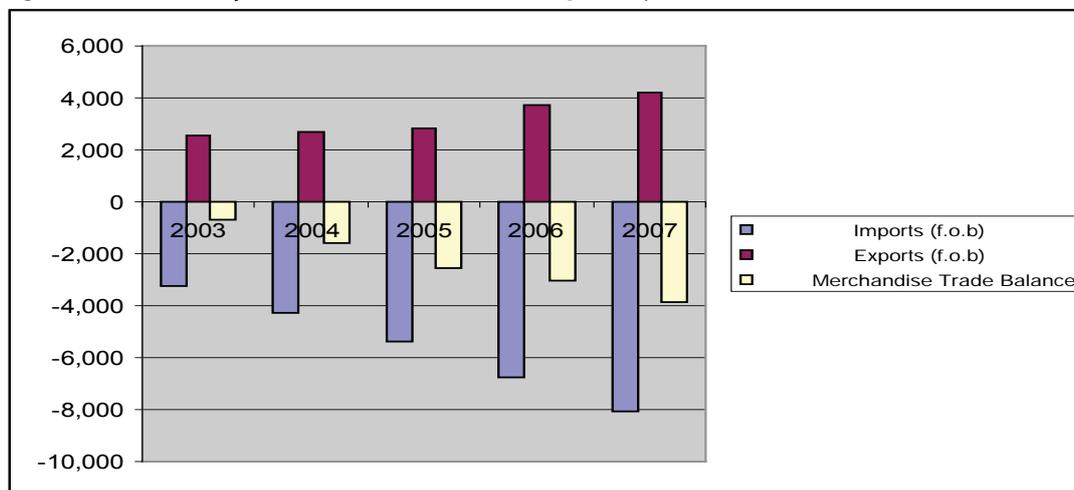
### **2.1.3 External sector developments**

Ghana's trade policy objectives since the turn of the millennium have been, among other things, to become increasingly involved in regional and global markets, to diversify and strengthen the country's export base and to promote agricultural processing. Buoyed by rising exports, FDI, foreign aid and debt cancellation, the government's external sector policy has been focused mainly on building up international reserves to levels that can sufficiently cushion the economy against external shocks.

Ghana's relationship with the rest of the world, as measured by the share of exports in GDP and the average tariff, shows that the country has liberalised its trade regime quite significantly over the past decade. Evidence for this can be found in lower average tariffs and, perhaps more significantly, in increases in trade (exports + imports) as a share of GDP (82% in 2007). In 2007, the average applied most-favoured nation (MFN) tariff was 12.7%, down from 14.7% in 2000. For Ghana (and for many other African countries), trade liberalisation since the 1990s has often involved reductions in the average tariff and reduction or elimination of non-tariff barriers to imports. The most immediate effect is to reduce the domestic price of imports and, by extension, to make it easier to import. As a result, imports have tended to grow faster than exports following liberalisation, imposing adjustment costs, as jobs are lost in import-competing sectors faster than they are created in export sectors, and widening the trade deficit and thus constraining growth.

Since recording a surplus in 2004, there has been a worsening in the current account position, owing to the increased deficits in merchandise trade and services. Merchandise exports increased in value from US\$2562.4 million in 2003 to \$4194.7 million in 2007, but merchandise imports rose even faster, from \$3232.8 million in 2003 to \$8073.57 million in 2007. Hence, the trade deficit worsened in 2007, reaching a value of \$3878.9 million, an increase of 478% over the 2003 value of \$670.4 million (Figure 2).

**Figure 2: Summary of current account, 2003-2007 (US\$m)**



Source: BoG (2009a).

Ghana's 'export problem' is not simply the general dependence on primary commodity exports, but rather the heavy dependence on a narrow range of primary commodities. Ghana's trade is relatively concentrated, in both commodities and markets. Primary products, largely gold and cocoa, account for most exports. Ghana's exports have mainly been unprocessed agricultural products and commodities such as cocoa, gold and other minerals. The major export commodities continued to be minerals, cocoa and timber, which together accounted for about three-quarters of total export revenue in 2007.

## 2.2 Identifying the country-specific shock

The current financial crisis, following so closely the 2007-2008 food and fuel price shocks, and the expected slowdown of global growth have come at a moment when Ghana is considered more vulnerable than it has been in the recent past. The spike in global food and crude oil prices in 2007-2008 has raised the country's current account deficits to worrisome levels. Moreover, inflation is high and rising, and government's fiscal position has deteriorated, both for cyclical reasons and because government spending has increased to alleviate the adverse impact of higher commodity prices. Although the key monetary policy objective for 2008 was directed at reducing the end period inflation to 7.0% in 2008, and further down to 4-6% by end-2009, the general level of prices has been on the ascendancy since the beginning of the year. Inflation at the end of June 2008 stood at 17.5% (against 10.7% in June 2007), reaching 19.8% in January 2009 and accelerating further to 20.34% in February 2009, the highest in more than four years. Moreover, the international reserve target of at least three months' import cover set in the 2008 budget was missed, with reserve cover falling to 1.8 months of imports for goods and services. The ratio of gross public debt to GDP declined from 142.6% in 2001 to 41.4% in 2006 under the dual impact of the HIPC initiative and the MDRI. Unfortunately, the ratio has since 2007 risen to 52.1% (as recorded in December 2008) as result of renewed borrowing on non-concessional terms (GoG, 2009). Exchange rate volatility has also increased with realignments of the major currencies. These developments present new challenges for the new NDC government of President Atta Mills. The imminent macroeconomic pressures are evident from the depressing growth projections in the 2009 budget statement. The economy is projected to grow at 5.9% in 2009, down from the provisional estimate of 6.2% recorded in 2008 and the 6.3% registered in 2007. In fact, the IMF WEO for 2008 projects an even lower growth rate of 4.0%.

The effects of the current crisis on developing countries can arise from a number of channels. The first-round effects are expected to occur in the financial sectors and then spread to the real sectors of the affected countries. The financial sector effects include those arising via channels such as stock markets and banking sectors. The real sector impact could be propagated through effects on remittances, trade, FDI and aid flows. The direct impact of the crisis on developing countries will be stronger for countries with a higher degree of financial integration. For Ghana, this channel has played a relatively limited role so far, although injuries are starting to become visible. But the financial channel will be reinforced by the indirect second-round effects, through possible reductions in trade, remittances, FDI and aid.

### **2.2.1 Banking sector**

Up till now, the direct impact of the crisis on the banking system has remained rather modest. The reason for this is evident in the banking system's little exposure to complex financial instruments and its reliance on abundant low-cost domestic deposits and liquidity. However, the industry's financial soundness indicators are beginning to show signs of contagion. The Bank of Ghana's credit conditions survey, conducted in December 2008, showed a further general tightening of credit conditions for enterprises in the fourth quarter of 2008 (BoG, 2009a). Banks have a favourable but more selective credit stance towards households. Credit to households for mortgages was much tighter because of rising cost of funds and preference for shorter maturities. Lenders reported that they had reduced the availability of credit to households for house purchases in the three months to December 2008. As in the third quarter survey, concerns about the economic outlook and cost of funds were reported to have been factors contributing to this tightening. Also contributing to the net tightening of credit to households for consumer credit and other lending are expectations regarding general economic activity and risk related to the current performance of banks' 50 largest borrowers.

According to the Bank of Ghana (BoG), the possible direct links to the global financial crisis for Ghanaian banks remain their exposure to counterparties in the form of nostro balances and placements with some of the affected banks abroad. Deposit money banks' (DMBs') nostro balances at the end of December 2008 were 55.46% of the net worth of banks, an increase on the 48.12% in 2007. Similarly, placements constituted 26.0% of net worth of banks compared with 23.9% in September 2008, but the central bank is of the view that these exposures are not a cause for worry, since they are within the internationally acceptable prudential limits, the only concern being that these placements, nostro balances and borrowings are overly concentrated with a few international banks and thus require close monitoring.

Other key performance indicators showing some erosion of the banking system in the face of the global financial crisis include the growth of total assets, loan quality, capital adequacy and profitability. According to the BoG, growth of total assets of the banking industry was 37.2% as of December 2008, down from 50.4% for the same period in 2007. Loans and advances recorded a 42.7% growth over 2008, a slowdown from the 67.9% growth recorded a year earlier. The quality of the banks' aggregated loan book deteriorated marginally. Impaired assets increased over the year on account of some increase in substandard and doubtful loans. The loan loss provisions to gross loans ratio and the non-performing loans (NPL) net of provisions to capital ratio also deteriorated over the quarter, from 7.6% in September 2008 to 7.7% in December 2008. The industry's capital adequacy ratio, as measured by the ratio of regulatory capital to risk-weighted assets, edged down to 13.8% as of December 2008, from 14.8% in December 2007, albeit remaining above the required minimum of 10.0%. Lastly, earning indicators continue to weaken, as return on assets (RoA) and equity (RoE) worsened from the December 2007 positions of 3.7% and 25.8%, respectively, to 3.2% and 23.7% in December 2008.

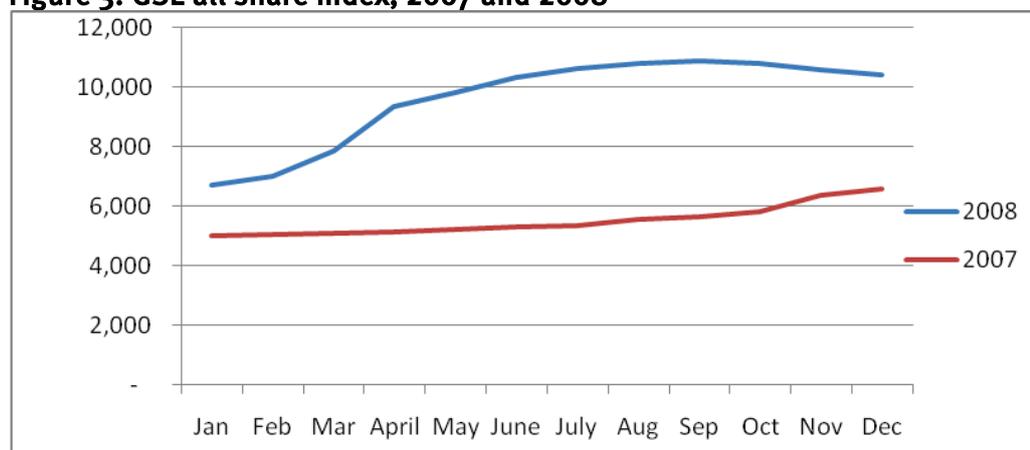
With huge current account and fiscal deficits, rising inflation and a weakening currency, the BoG's Monetary Policy Committee was forced to maintain a tight monetary policy stance to steer inflationary expectations towards the now elusive single-digit path. In its July 2008 sitting, the MPC raised the prime rate from 16% to 17%, before increasing it further in February 2009 to 18.5%, most likely in an attempt to keep offering high yields to investors.

### 2.2.2 Stock market developments

Global financial markets experienced incredible volatility during the third quarter of 2008, highlighted by the dramatic changes within the financial industry. Stocks were weak across the board for the quarter, led lower by developed and emerging markets, which were threatened by signs of weakness in global demand. Ghana's equity market has also taken a beating, with the Ghana Stock Exchange (GSE) all share index, considered one of the best performers in the world in 2008, plummeting more than 11% since the beginning of 2009.<sup>5</sup>

A critical look at the equity market shows that the country's stock market began to falter in the second half of 2008. By the end of 2008, the GSE all share index closed at 10,431.6 points, from the previous year's close of 6599.8 points, gaining 58.1%. However, these year-on-year comparisons are misleading. While the period since the second half of last year to date is too short to establish a clear-cut trend, it is quite apparent that the GSE may have contracted the global infection in the last quarter of 2008. Market activity on the GSE was quite vigorous in the year through Q3. The all share index closed in Q3 2008 with a return of 65.02% (or 33.20% in dollar terms), compared with a gain of 13.4% (or 8.86% in dollar terms) over the same period in 2007. However, beginning from October 2008, amid a growing perception of investor anxiety, the GSE began to show signs of contraction and contagion from the global stock market developments, with the benchmark measure of performance worsening into 2009 to close at 9247.17 points on Tuesday 31 March 2009 (Figure 3). Change for the year to date stood at about -11.35%. Market capitalisation also declined, to GH¢18,073.76 million, from a figure of ₵91,857.28 million in 2005. Traded volumes have also been falling since the beginning of the year, closing at 196,800 shares. Anecdotal evidence indicates that there is a greater propensity to sell, with little demand, leading to falling prices. It is reported that one of the biggest and latter-day entrants on the exchange, Ecobank Transnational Incorporated (ETI), suffered a price loss of about ₵0.02 at ₵0.42.<sup>6</sup>

**Figure 3: GSE all share index, 2007 and 2008**



Source: Based on data obtained from the GSE.

In 2007, Ghana became the first African country outside South Africa to issue a Eurobond. Ghana raised US\$750 million from its maiden sovereign bond issued on the international capital markets. However, Reuters in January 2008 reported that Ghana had postponed plans for a US\$300 million seven-year bond owing to poor global market conditions. This could be one of the initial signs of the negative effects of the financial crisis on the Ghanaian economy.<sup>7</sup>

### 2.2.3 Exchange rate developments and inflation

The Ghanaian cedi lost considerable ground against all the major currencies from the second quarter of 2008. The BoG attributes this turn of events partly to the realignments of the major international currencies, a surge in demand for foreign exchange to meet higher oil bills and food prices and

<sup>5</sup> See [www.africagoodnews.com/trade-and-investment/ghana-stock-exchange-to-go-electronic-at-end-of-march.html](http://www.africagoodnews.com/trade-and-investment/ghana-stock-exchange-to-go-electronic-at-end-of-march.html).

<sup>6</sup> See [www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=145843](http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=145843).

<sup>7</sup> See <http://in.reuters.com/article/asiaCompanyAndMarkets/idINLS40896920090128?sp=true>.

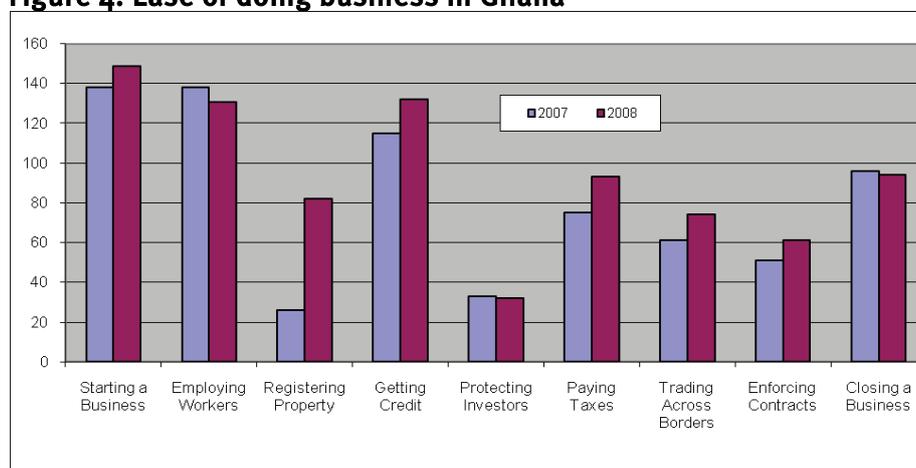
servicing of external debts. On the inter-bank market, the Ghanaian cedi was steady during the Q1 of 2008. However, in Q2 it weakened sharply, and by the end of the first half it had depreciated by 6.0%, 4.6% and 11.7% against the US dollar, the pound sterling and the euro, respectively. On an annual basis, the Ghanaian cedi depreciated by 20.1% and 16.3% against the US dollar and the euro, respectively (GoG, 2009).

#### 2.2.4 Foreign direct investment

The crisis is now having a negative impact on FDI in Ghana. Ghana won the award for ‘Best Investment Climate’ in the Commonwealth Business Council African Business Awards 2008, signifying that Ghana is making great strides towards becoming the pre-eminent destination for investment in Africa. Since 2005, Ghana has proudly featured in the top 90 countries in the world in which to do business (GIPC, 2008). Ghana also featured among the ‘Global Top 10 Reformers’ according to the World Bank’s Doing Business 2008 (Figure 4). The improved investment climate has resulted in unprecedented levels of FDI, creating more employment opportunities in the economy; the services, manufacturing and general trading sectors have been the major beneficiaries.

However, there are recent reports of a growing perception that Ghana’s investment climate risks are growing, resulting in visible trends of accelerating capital outflows. A recent article explained that the observed trend of increasing capital outflows may be attributed to an increase in capital repatriation by overseas operators in Ghana, compelled to move money out of frontier markets to restructure the risk profile of their portfolios, to strengthen their balance sheets or to take advantage of collapsing asset prices.<sup>8</sup> The authors point to anecdotal evidence of growing non-viability affecting other sectors, such as fruit juice processing, cocoa processing, timber trade, information and communication technology (ICT) service providers and ceramic manufacturing, believed to be attributable to the worsening investment climate. This has implications for Ghana’s efforts towards diversification and structural transformation, and requires urgent policy attention.

**Figure 4: Ease of doing business in Ghana**

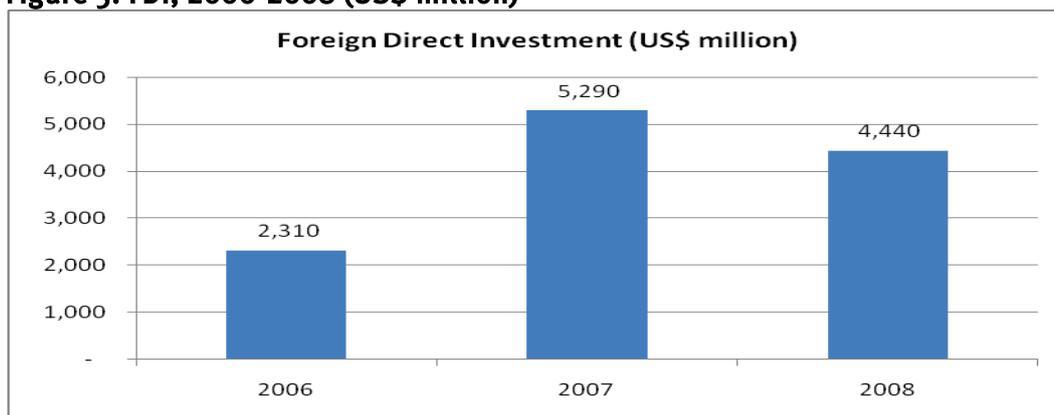


Source: World Bank (2008).

Figure 5 and Table A1 in the Annex indicate that FDI inflows have been affected by the credit crunch. FDI more than doubled from 2006 to 2007, from about US\$2.3 billion to \$5.3 billion. However, between 2007 and end-December 2008, FDI had declined by 16%, to about \$4.4 billion.

8 See [www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=159574](http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=159574).

**Figure 5: FDI, 2006-2008 (US\$ million)**



*Source:* Authors' calculations using data from GIPC (2008).

An interview with the Ghana Investment Promotion Centre (GIPC) confirmed that investments are coming in smaller units than anticipated. GIPC expects a decline of FDI in 2009 as a result of the slowdown in investment, owing to the global crisis and the fact that most of the major investments are coming from the US and UK as well as from Canada, India and China.

When asked about policy responses, GIPC indicated that efforts are being made to improve incentives and benefits for investors compared with what pertains in other regions of the world. These include:

- Bettering the Ghana offer, i.e. improving incentives and benefits to investors compared with what pertains in other regions of the world;
- Projecting other sectors critical to the growth of the economy, e.g. health, education, tourism, mining, etc.; and
- Giving investment incentives to certain critical areas of investment.

Table A1 in the Annex also indicates that more new investments (321) were made in 2007 than in 2008 (305), creating more jobs in 2007 (33,787) than in 2008 (30,056).<sup>9</sup> Indeed, between the third and fourth quarter of 2008, FDI inflows declined by about 500%, from US\$1.2 billion to \$0.2 billion. This is the within-year between-quarter comparison. FDI inflows increased to a very high level in Q3 before plunging dramatically to the lowest level in Q4. The third quarter of 2008 was when the New Patriotic Party (NPP) government controversially sold a 70% stake in the state-owned telecommunications company, Ghana Telecom (GT), to Vodafone International Holdings BV for about \$900 million. With the price of crude oil hovering around \$130 per barrel, and faced with declining proceeds from cocoa, some commentators believed that the sale of GT to Vodafone was critical at the time in order to inject some stimulus into the economy.

### **2.2.5 Tourism**

Tourism is an important growth driver for economies such as Ghana, with international tourism receipts (constituting about 20% of total exports) being an important source of revenue for the fiscal budget. Tourism has economic potential far beyond its current performance. It is estimated that, with strong support from government, tourism can become a lead foreign exchange earner and an economic engine for wealth creation, employment generation and poverty reduction within a short time.

The full effect of the financial crisis on Ghana's tourism remains to be seen for 2009, since international tourism reservations are normally made and paid in full at least a few months in advance. Therefore, the financial crisis that started in late 2008 has yet to take effect. However, the growth rate of tourist receipts from international arrivals to Ghana had already slowed down in 2008 compared with 2007, with expenditure per arrival declining in 2008 (Figure 7). While international tourist arrivals

<sup>9</sup> In all, 78 projects were registered within the quarter, with 22 going to the service sector, 18 to general trading, 13 to manufacturing and seven to building and construction.

increased by about 16% between 2007 and 2008 (Figure 6), receipts per arrival decreased by about 12%, from about US\$2000 in 2007 to about \$1770 in 2008.<sup>10</sup>

**Figure 6: International tourist arrivals, 2000-2008**



Source: Authors' calculations using data from Ghana Immigration Service.

**Figure 7: International tourist receipts per arrival, 2001-2008 (US\$)**



Source: Authors' calculations using data from Ghana Statistical Service.

### 2.2.6 Migration and remittance flows

Total private inward transfers received by non-governmental organisations (NGOs), embassies, service providers, individuals, etc. appear not to have been affected by the global credit crunch, although on a month-on-month basis October 2008 and November 2008 receipts fell short of the corresponding 2007 receipts – which might be a first indication of the global financial crisis affecting remittances (Figure 8). In spite of the crisis, total private inward transfers increased by 26.8% to US\$8.75 billion in 2008, from \$6.90 billion in 2007.

While transfers received by NGOs, embassies, service providers, etc. are important, and play a key role in economic growth, individual remittances, the money sent home by migrants to their families, are even more crucial. Remittances play an important role for households in Ghana, constituting about 5% of household income on average, but higher for receiving households. In a recent study by Adams et al. (2008), using the most recent Living Standards Survey, the authors show that, for observed expenditures, households receiving international remittances have the highest mean per capita expenditure and the lowest observed poverty on average of all the household groups. Moreover, the

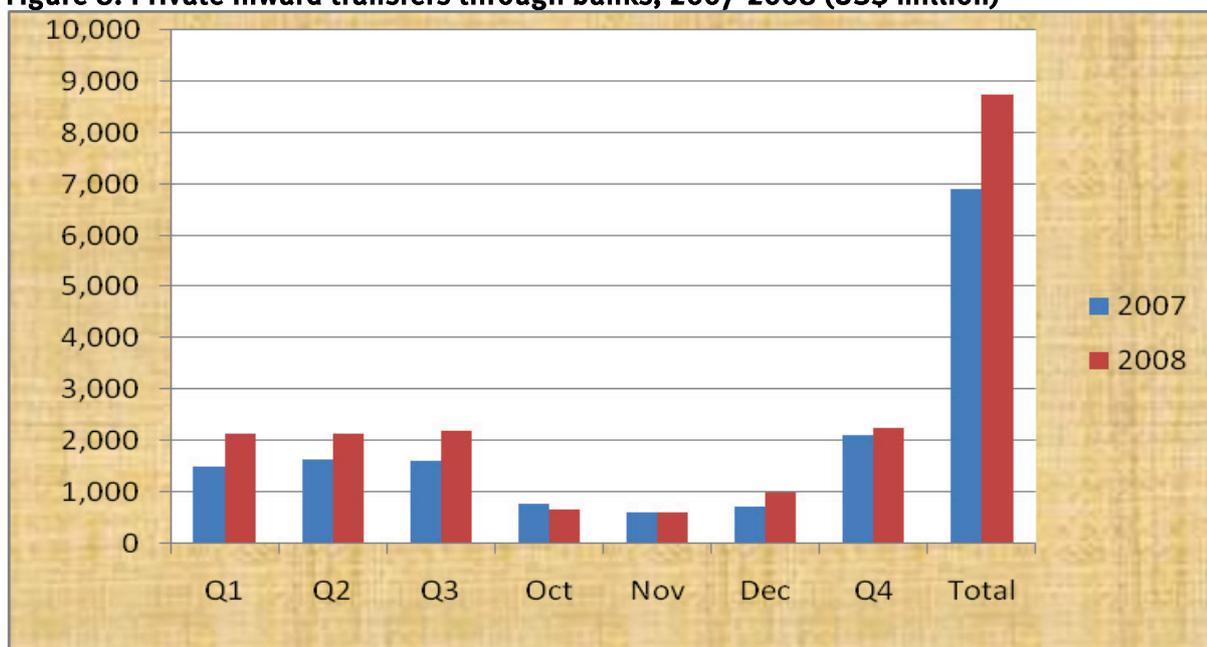
<sup>10</sup> We did not observe any perceptible shifts in origins of tourists. About 31.5%, 11.6% and 8.8% of tourists in 2008 were Ghanaians, Nigerians and Americans, respectively.

economic status of this group of households improves even further with the receipt of remittances. Comparing their predicted poverty values with counterfactual poverty values, the study finds that, for households with international remittances, their receipt reduces the poverty headcount of this group of households by 88.1%, and the poverty gap by 90%, although the receipt of international remittances also increases inequality: the Gini coefficient rises by 17.4%.

It is important to note that of the total private inward transfers received in 2008, only about 19% (US\$1.68 billion) accrued to individuals and households, compared with 22.4% in 2007. In fact, anecdotal evidence indicates that remittances to individuals grew in the first two quarters of 2008 compared with 2007, but fell in the last two quarters, perhaps an indication of the global credit crunch affecting the Ghanaian diaspora.

An interview with the International Banking Division of the Ghana Commercial Bank (GCB), operators of a money transfer business named Money Gram, confirmed the anecdotal evidence. According to the GCB, remittances peaked in 2007, owing partly to more confidence in the economy and also to increased economic activity – consumption, investment projects (real estate) and general trading. For example, account-related products at the bank grew by more than 40% in 2007. However, the bank was quick to note that the impact of the crisis on remittances is being felt already, as remittances seem to have taken a downward trend in 2008. For instance, data from the bank demonstrate that the trend for 2008 showed steady growth from January up to October, when it peaked, and then it started to decline from November and is still declining. Remittances through Money Gram increased from about US\$4.8 million in January 2008 and peaked at about \$8 million in October 2008, before declining to \$6.8 million in January 2009 and further to \$6 million in February 2009.

**Figure 8: Private inward transfers through banks, 2007-2008 (US\$ million)**



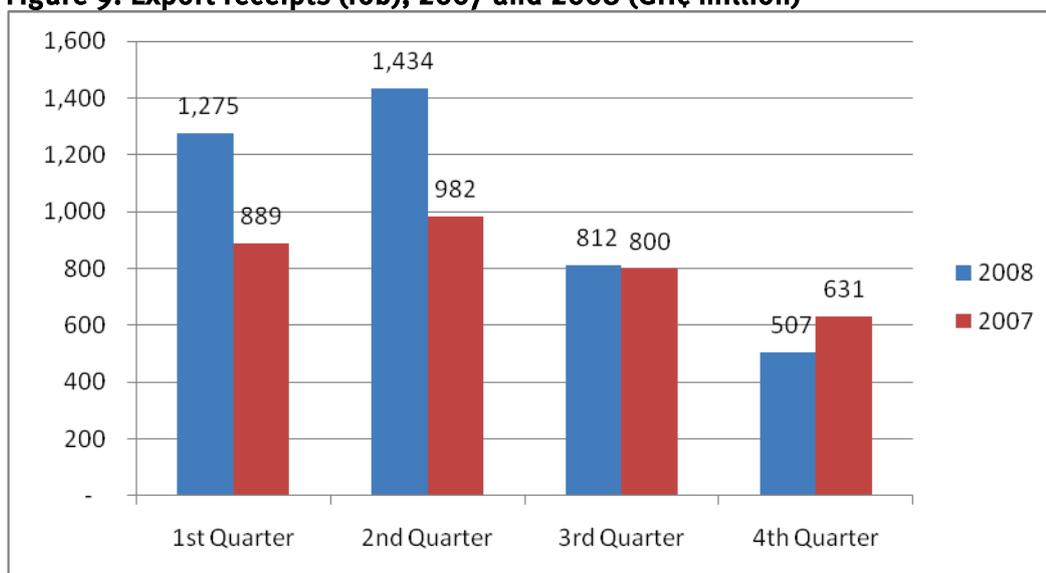
Source: BoG (2009b).

### 2.2.7 International trade flows

Total export receipts free on board (fob) rose by almost 22% in 2008 to GH¢4028 million, from ¢3303 million in 2007. This growth was an improvement on the 13% growth in export receipts recorded between 2006 and 2007. There are, however, observable patterns in Ghana’s export receipts; export receipts peak in the second quarter and then take a downward trend into the fourth quarter. It is noticeable that the declines in export receipts between the second and fourth quarters were larger in 2008 than in 2007 (Figure 9). We started 2008 with a great deal of buoyancy in the export sector, climaxing at about ¢1.4 billion in the second quarter of the year. However, starting from the third

quarter, it appears that the effects of the credit crunch had begun to bite, resulting in export receipts dropping below the 2007 figures in the fourth quarter.

**Figure 9: Export receipts (fob), 2007 and 2008 (GH¢ million)**



*Note:* December 2008 data are provisional.

*Source:* Authors' calculations based on data obtained from the Ghana Statistical Service.

### 2.2.8 Structural dependence in exports

The structure of Ghana's trade has remained pretty much the same since independence. Ghana's exports are dominated by (and export intensities are highest in) the primary sector, in particular cocoa (35%), mining (20%) and forestry (10%). The two primary destinations for Ghana's exports as of June 2007 were the Netherlands (11.4%) and the UK (10.2%) (Table 1). These two countries were also the top two destinations in 2006, with the Netherlands absorbing 11.3% and the UK 8.7%. Thus, together, these two countries increased their uptake of Ghana's exports from 20% in 2006 to 21.6%, as of June 2007.

Ghana's major trading partners remained somewhat unchanged in 2008. South Africa maintained its very strong performance as a country of destination for Ghana's exports (mainly gold). Europe maintained its position as a major market for Ghana's exports (mainly cocoa and other non-traditional exports) in 2008; the US lost considerable market share in Ghana's exports and ended up being eliminated from Ghana's top five export destinations. Among European countries, the UK, the Netherlands and France are the most popular markets.

**Table 1: Value of Ghana's exports by major destination, 2002-2007 (US\$m)**

	2002	2003	2004	2005	2006	2007*
UK	164.2	212.8	227.0	196.1	246.2	159.7
	(9.9)	(10.7)	(9.9)	(8.3)	(8.7)	(10.2)
Nigeria	80.3	20.4	26.5	33.7	41.6	27.4
	(4.8)	(1.0)	(1.2)	(1.4)	(1.5)	(1.8)
US	116.9	84.9	145.3	157.6	190.6	92.3
	(7.0)	(4.3)	(6.4)	(6.7)	(6.7)	(5.9)
Germany	109.3	123.6	103.1	105.1	109.2	72.0
	(6.6)	(6.2)	(4.5)	(4.4)	(3.8)	(4.6)
Spain	60.6	75.0	65.3	58.0	161.7	46.7
	(3.6)	(3.8)	(2.9)	(2.5)	(5.7)	(3.0)
Japan	62.9	104.5	95.4	70.4	73.0	55.5
	(3.8)	(5.3)	(4.2)	(3.0)	(2.6)	(3.6)
Netherlands	246.9	224.9	279.2	295.8	320.6	178.2
	(14.9)	(11.3)	(12.2)	(12.5)	(11.3)	(11.4)
France	96.5	151.0	155.6	133.4	125.1	81.0
	(5.8)	(7.6)	(6.8)	(5.6)	(4.4)	(5.2)
Belgium	73.6	71.4	106.9	136.1	146.6	77.4
	(4.4)	(3.6)	(4.7)	(5.8)	(5.2)	(5.0)
Italy	69.1	91.6	81.6	87.2	80.5	38.6
	(4.2)	(4.6)	(3.6)	(3.7)	(2.8)	(2.5)
Others	581.8	826.5	998.6	1090.5	1345.5	730.7
	(35.0)	(41.6)	(43.7)	(46.1)	(47.4)	(46.9)
Total	1662.0	1986.6	2284.5	2363.9	2840.6	1559.5
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

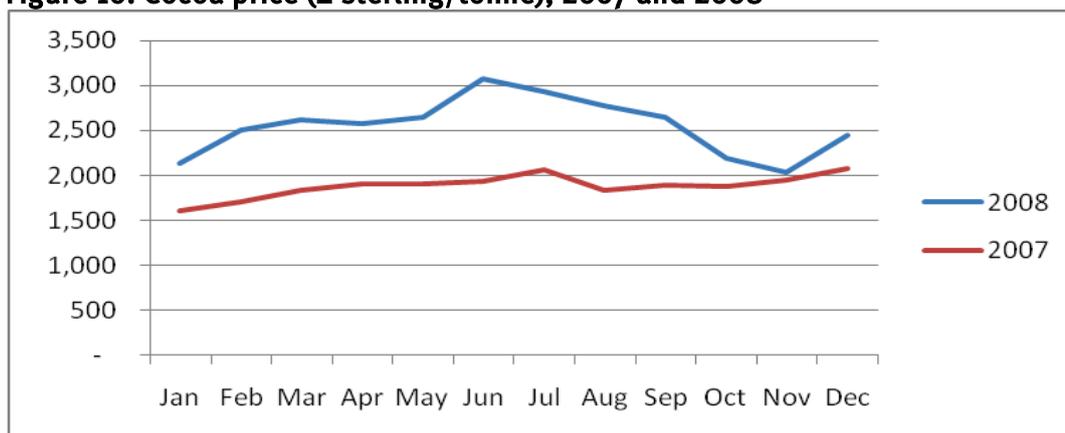
Notes: \* Up to second quarter of 2007. Figures in parenthesis show the percentage share of the country in Ghana's imports. Shares may not add up to 100 owing to rounding.

Source: ISSER (2007).

### 2.2.9 Terms of trade shocks

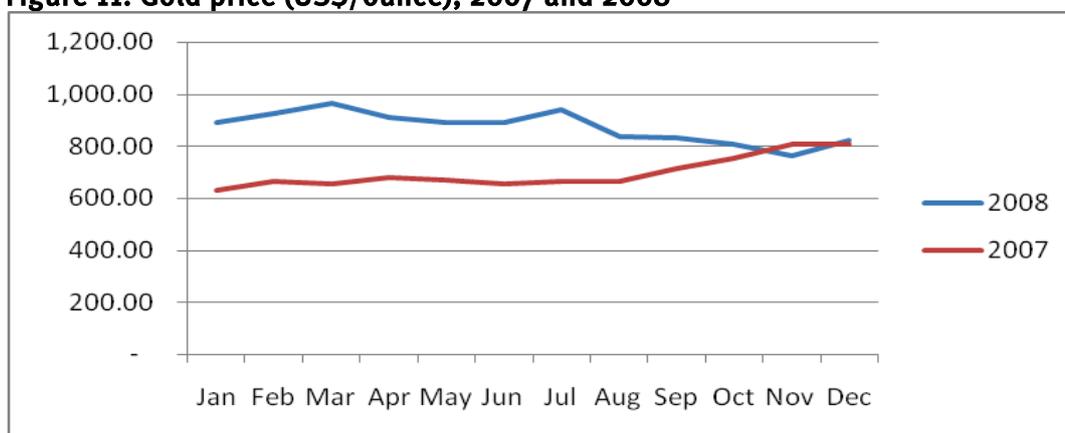
There have been observable shifts in terms of trade, and continuous realignments of currencies in the international markets continue to impact on the Ghanaian economy. At present, Ghana seems to be on the positive side of the terms of trade shift, as crude oil prices continue to fall and gold and cocoa prices continue to hold relatively firm (Figures 10 and 11). But available commodity price estimates from the World Bank indicate that negative effects are expected in 2009-2010. On the London International Futures and Funds Exchange (IFFE), the monthly average price of cocoa increased from £2175 in January 2008 to £3071 in June 2008. From this period onwards, the price took a downward trend, reaching £2034 in November before surging again to reach £2445 by the end of December 2008. However, one can observe from Figures 10 and 11 that there was some weakening in the prices of Ghana's two major export commodities between June and November 2008 before recovery in December. Similarly, gold prices peaked at about US\$1000 per ounce in March 2008 before taking a tumble to about \$800 per ounce in November 2008, after which the prices have since held steady.

**Figure 10: Cocoa price (£ sterling/tonne), 2007 and 2008**



Source: Authors' calculations based on data obtained from the Bank of Ghana.

**Figure 11: Gold price (US\$/ounce), 2007 and 2008**



Source: Authors' calculations based on data obtained from the Bank of Ghana.

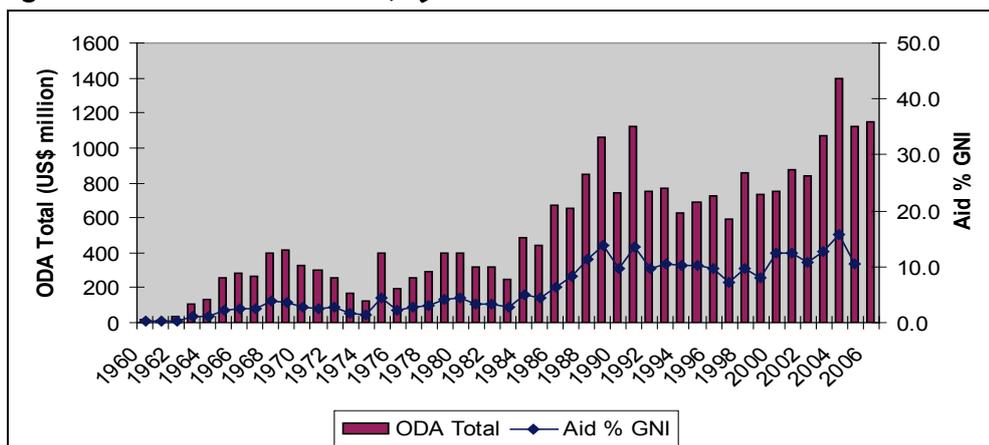
### 2.2.10 Aid flows

As with many resource-scarce economies, foreign aid has been a major source of external finance for Ghana for quite some time. It accounts for over 50% of Ghana's development budget and about 12% of gross national income (GNI). Since 2000, Ghana has been receiving high levels of aid in support of the country's poverty reduction strategy (GPRS I and II) to achieve middle-income status by 2015 and to fulfil the Millennium Development Goals (MDGs). As a show of confidence in Ghana's development policy, the country has been the beneficiary of substantial debt relief and scaling-up of official development assistance (ODA), resulting in significant reductions in the country's stock of debt and an increase in ODA from about US\$824 million in 2003 to about \$1797 million in 2008, constituting about 10% of GNI (Figure 12). Between 2003 and 2009, Ghana's development partners have contributed around \$300 million a year to the budget in the form of grants and concessional loans. This is usually done through multi-donor budget support (MDBS), amounting to about 5% of the budget. For the 2009 budget, development partners have already pledged \$380 million. In total, aid flows are expected to exhibit a pro-cyclical nature in 2009, reaching about \$2 billion, the highest since the turn of the millennium.

To date, there are no visible signs that the crisis has affected aid commitments for 2009, but it is possible that future disbursements and new commitments could be difficult. Empirical works show that total aid disbursements are positively correlated with donors' output (Pallage and Robe, 2001). Hence, given the severity of the slowdown in growth in developed economies, a potential reduction in bilateral aid flows to Ghana is not unlikely. Moreover, because external assistance in grants and loans is appropriately included ex ante in the central government budget, any volatilities or non-disbursements could inflict severe hardship on the public purse.

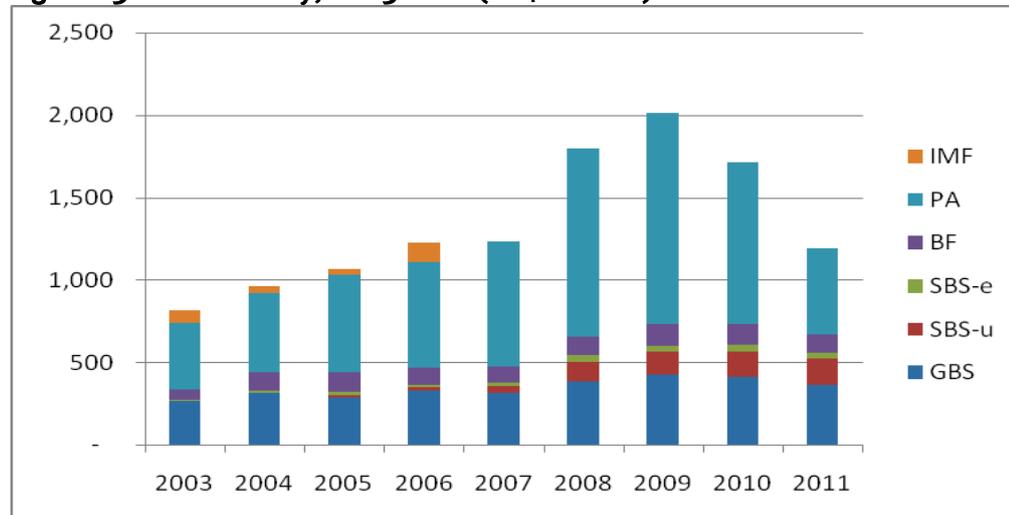
The government has already indicated a higher financing gap in the 2009 budget statement. The gap, which is expected to be financed through domestic borrowing and foreign resources, has increased from 33.0% in 2008 to a projected figure of 39.4% in 2009. However, since Ghana's development partners are among those countries seriously affected by the credit crisis, we expect foreign budgetary support to be adversely affected if the crisis continues to deepen into 2010, compounding the difficulty of accessing foreign resources in 2009. One option would be for government to increase domestic borrowing, especially in the second half of 2009, when the execution of the budget intensifies. But excessive domestic borrowing can crowd out the private sector and could further slow down growth in 2009.

**Figure 12: Trends in aid flows, 1960-2006**



Source: Whitefield and Jones (2009).

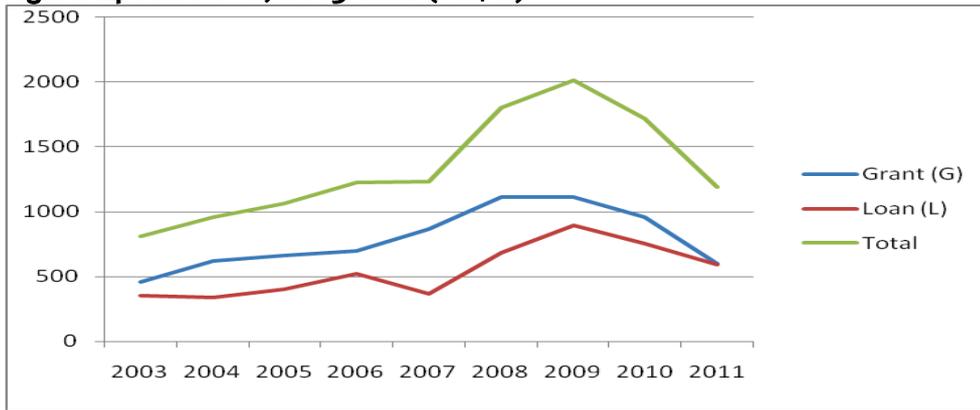
**Figure 13: Aid modality, 2003-2011 (US\$ million)**



Note: Actual disbursements 2003-2007; projected disbursements 2008-2011.

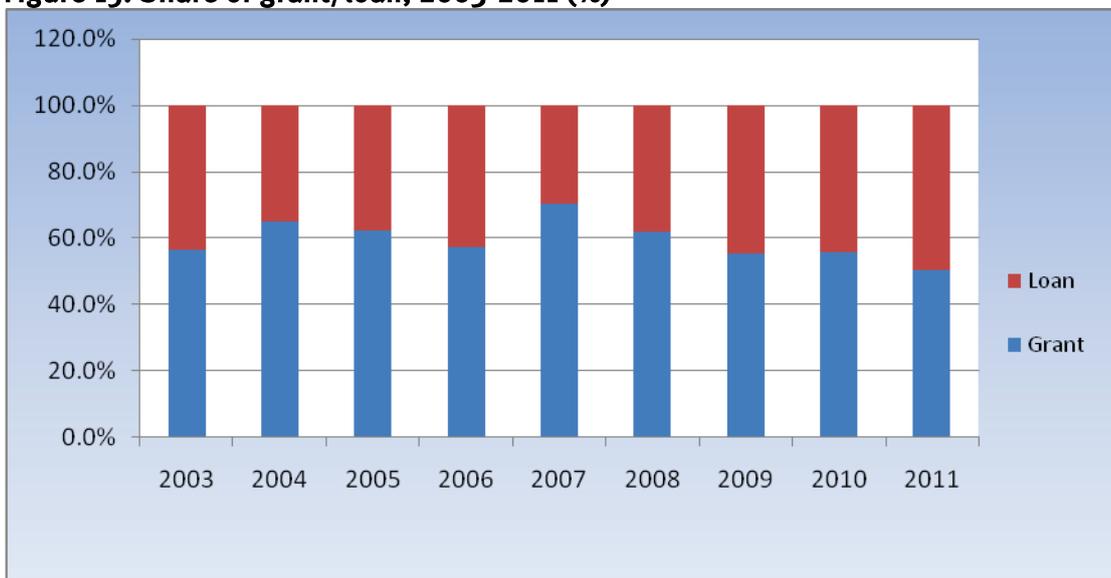
Source: Authors' calculations based on data obtained from the World Bank.

**Figure 14: Aid flows, 2003-2011 (US\$m)**



Source: Authors' calculations based on data obtained from the World Bank.

**Figure 15: Share of grant/loan, 2003-2011 (%)**



Note: Actual disbursements 2003-2007; projected disbursements 2008-2011.

Source: Authors' calculations based on data obtained from the World Bank.

### 3. Understanding possible growth and development effects

While Ghana's growth rates in recent years are enviable by any standard, the structure of the economy has not changed substantially from what pertained at independence. Although the services and industrial sectors account for the increase in the overall growth rate, the agriculture sector has continued to be the mainstay of the Ghanaian economy, contributing over one-third of GDP, over three-quarters of total export revenue and over half of employment. The sector's contribution to GDP fell to 34.7% in 2007 from 35.8% in 2006, but it still maintained the lead (Table 2). Despite the remarkable growth rates seen in the services sector, its contribution to overall GDP has not improved over the past five years. The services sector's contribution to national output increased marginally from a 30% share in 2006 to 30.5% in 2007.

**Table 2: Sectoral contributions to national output, 2003-2007 (% of total)**

Year	Agriculture	Industry	Services
2003	36.1	24.9	29.8
2004	36.7	24.7	29.5
2005	37.0	24.7	29.4
2006	35.8	24.7	29.4
2007	34.7	26.1	30.5
<b>Average (2002-2007)</b>	<b>36.1</b>	<b>25.0</b>	<b>29.7</b>

Source: GoG (2008).

Table 3 presents the performance of the real sector of the economy since 2005 and projections for 2009. It shows that no one sector dominates in terms of explaining the downward trend of GDP growth and its prospects. The agriculture sector, the largest among the three sectors in the national accounts, is the only sector projected to register an increase in its growth rate, from an estimated 4.9% to 5.7%. Within the agriculture sector, the cocoa sub-sector and forestry and logging were significant to the overall sector performance, but both are projected to decline from a growth rate of 5% in 2007 to 3.5% in 2009, the lowest growth forecast for any sub-sector.

**Table 3: Real sector developments, 2005-2009**

	2005	2006	2007	2008 estimates	2008 provisional	2009 projected
<b>1. Agriculture</b>	4.1	4.5	4.3	5.0	4.9	5.7
Agriculture and livestock	3.3	3.5	4.0	5.5	5.5	6.5
Cocoa production and marketing	13.2	2.0	6.5	4.0	5.0	3.5
Forestry and logging	5.6	2.6	2.5	3.0	5.5	3.5
Fishing	-1.2	15.0	5.0	5.0	3.0	5.0
<b>2. Industry</b>	7.7	9.5	7.4	9.8	8.3	5.9
Mining and quarrying	6.3	13.3	30.0	7.9	2.0	5.5
Manufacturing	5.0	4.2	-2.3	4.0	4.0	4.0
Electricity and water	12.4	24.2	-15	22.1	16.3	5.0
Construction	10.0	8.2	11.0	13.0	14.0	8.0
<b>3. Services</b>	6.9	6.5	8.2	7.3	6.9	6.6
Transport, storage and communication	7.9	7.2	6.0	8.0	10.0	7.0
Wholesale and retail trade, restaurants and hotels	10.0	7.5	10.0	10.0	7.0	7.0
Finance, insurance, real estate and business services	7.6	7.6	15.0	13.0	13.0	10.0
Government services	5.0	5.7	6.0	2.7	2.7	5.0
Community, social and personal services	4.3	4.2	5.0	6.0	4.5	4.5
Producers of private non-profit services	3.6	4.0	5.0	6.0	5.0	4.0
<b>4. GDP</b>	5.9	6.4	6.3	7.0	6.2	5.9

Source: GoG (2009).

Unlike the agriculture sector, industry and services are projected to slow down in growth between 2008 and 2009, from 8.3-5.9% and 10.0-7.0%, respectively. The industrial sector grew at 8.3% compared with a target of 9.8% in 2008. With the exception of construction, which exceeded the growth target of 13%, all the industrial sub-sector components registered lower than projected outturns. The mining and quarrying sub-sector registered a significant decline in growth rate, from 20% in 2007 to 2% in 2008 (GoG, 2009).

The services sector grew by 6.9% compared with 10% in 2007. Wholesale and retail trade and finance, insurance, real estate and business services, as well as transport, storage and communications, have all been significant drivers of growth in the sector. However, with the exception of the finance sub-sector, all the others registered declines in their growth rates between 2007 and the 2008 provisional rates, with most of the sub-sectors projected to decline further in 2009.

One way of conceptualising the possible growth and development effects of the crisis is to disaggregate output into its four main components and examine how the channels of transmission already outlined may impact each of the components of GDP. The overall output of the economy by definition comprises four components: i) private investment; ii) private consumption; iii) net exports; and iv) government spending. Therefore, to achieve average accelerated growth, one needs to consider the prospect for accelerating growth in some combinations of these four components.

A growth accounting exercise and sectoral analyses of Ghana's growth conducted by the World Bank (2007) suggests that Ghana's recent growth is broad based across all three major sectors. The study also reveals the recent contribution of productivity to growth. Ghana's growth in the entire 1970-2005 period was dominated by domestic absorption (consumption and investment), although exports began to play an important role in the 1990s. Between 1991 and 1996, Ghana was able to take advantage of favourable terms of trade, with exports contributing close to 30% of GDP growth, the highest contribution since 1970. The report notes, however, that in the most recent years, the exceptional growth performance was dominated by government consumption and investments. Specifically, Ghana's export contribution to overall growth is only 12%, compared with about 40% for rapidly growing comparator countries like Botswana, Malaysia and Mauritius. For the most recent five-year period, 2001-2005, Ghana's export contribution to total GDP growth was only 6%. Government spending and investment accounted for 40% of growth and private consumption for the remainder.

A careful review of the largest strand of the empirical endogenous growth literature leads to a number of variables as determinants of economic growth. The variables that have received the most attention in the academic literature and in policy circles include: i) transitional convergence variables (e.g. initial level of real per capita GDP); ii) structural policy variables (e.g. education or human capital formation in general; a well-functioning financial system; international trade openness; the availability of public services and infrastructure); iii) macroeconomic stabilisation policy variables (e.g. lack of price stability or inflation; cyclical volatility of GDP; systemic banking crises; cyclical volatility of GDP; external imbalances and the risk of balance of payments crises); and iv) external conditions (e.g. terms of trade shocks) (see Loayza and Soto, undated). To the extent that the above growth determinants can be affected by the crisis through the channels of transmission already identified in this paper, one can immediately infer that Ghana's economic growth is likely to be affected by the financial crisis.

First, Ghana is a small, open economy, with exports accounting for approximately 40% of GDP in recent years. Yet, despite a great deal of policy rhetoric and general policy pronouncements, very little diversification has taken place since independence in 1957. Ghana's exports by commodity have not diversified significantly since the 1970s. Cocoa, gold, and timber combined still account for the largest share (70%) of total commodity exports. As a result, Ghana's economy remains vulnerable to commodity price shocks (World Bank, 2007). For example, the World Bank (2007) study indicates that, between 1998 and 2000, when cocoa prices dropped by almost 50%, although remaining positive, real GDP growth decelerated by 20%. The results of the study are confirmed by Ndulu and O'Connell (2008), who note that one distinct characteristic of African growth is its persistent volatility, mainly as a result of lack of structural diversification and dependence on a narrow range of primary commodities, which

mean that, during periods of global commodity price shocks, many countries are found wanting. Variability in commodity prices is the primary cause of instability in African export earnings, a major disincentive to investment.

Moreover, traditional export crops have played an important role in the development of many African countries by generating foreign exchange earnings, government revenues and household incomes. Meanwhile, a commodity-exporting country like Ghana is expected to face significant deterioration in prices of export commodities, and this is already noticeable in cocoa and other non-traditional export prices, putting pressure on external accounts and government finances. Export growth is also likely to be constrained by weaker external demand, particularly from the US and European Union (EU), and tighter financial conditions. Hence, significant reductions in exports owing to the crisis will not only affect level of openness and terms of trade but also significantly impact the fiscal purse of the government and households that depend on exports. The benefits of a strong export sector are pretty obvious. Successful exporting firms are a major source of decent jobs and productivity. For small economies, and Ghana is small in this sense, export expansion can be a key driver of growth. Countries that achieve high export growth rates also achieve high economic growth, whereas it is rare for a small economy to achieve high economic growth without export growth. The implication is that the decline in export revenues resulting from the financial crisis will put downward pressure on economic growth.

We have already noted that government spending and investment accounted for 40% of growth in the past five years, whereas private consumption accounted for about 54%. Hence, to the extent that the crisis is already affecting private consumption through declines in remittances, a slowdown in credit to the private sector and a general worsening of macroeconomic stability through the effects on interest rates, exchange rates, inflation, balance of payment difficulties and shaken consumer confidence, economic growth is likely to be affected as well.

In addition, high levels of investment are necessary for strong and enduring growth (see World Bank, 1993; 2007). Increasing overall consumption of domestically produced goods will promote faster economic growth, all other things being equal. While there is the need to be mindful of the dilemma of increasing the fiscal deficit, increasing government spending, specifically on public investment, but even government expenditure on social sectors, is good for growth. Meanwhile, we know that almost all the major sources of external finance (export revenue, ODA, revenue from export/import duties, etc.) for the government are being affected by the crisis, thereby constraining growth through effects on government spending (including on education, health and social protection) and investment.

In a recent assessment of the economy, the World Bank (2007) identified the main growth constraints to be infrastructure gaps (particularly in energy, water, ICT and some areas of transport), low agricultural productivity and the investment climate, as well as the need to sustain macroeconomic stability. It recommends closing infrastructure gaps, improving human capital and removing obstacles to competition as part of policy reforms needed to engender accelerated and shared growth. The Bank used the MAMS (Maquette for MDG Simulations) – a dynamic, computable general equilibrium (CGE) model of the Ghanaian economy developed in the context of the 2007 Ghana Country Economic Memorandum (CEM) – to explore the implications of three different medium-term growth scenarios: i) a baseline scenario based on the continuation of the current trends, policies and aid levels; ii) an accelerated growth scenario that is predicated on removing infrastructure bottlenecks and improving efficiency and is domestically financed; and iii) a full, key MDG achievement scenario that assumes significant scaling-up of donor aid. The baseline for long-term growth simulations for 2004-2015 was year 2004, for which detailed data and a social accounting matrix (SAM) were available.

The implications of the growth projections means that Ghana faces favourable medium-term growth prospects if it addresses its growth constraints – infrastructure gaps, productivity, investment climate – and if it sustains macro stability by maintaining prudent fiscal policy and improving public sector efficiency and capacity. Under a realistic baseline scenario – which presupposes continued improvement in the overall policy environment and the rapid resolution of the energy crisis – the real GDP growth rate is expected to average about 6.9% annually through 2015 (Table 4), while the

population grows at 2.6% per year, resulting in an impressive 4.2% annual improvement in per capita income. This growth pattern would require dynamic export growth and further diversification into non-traditional products. At these levels of growth, the Bank estimates that the poverty MDG would be achieved in 2008-2009 and, by 2015, Ghana could achieve a very low poverty rate of only 12%.

**Table 4: Projected macroeconomic indicators, 2004-2015**

	Levels (US\$ billions)			Growth (%)	Growth (%)
	2004	2015		Avg. (2004-2015)	Avg. (2004-2015)
		Baseline growth scenario	Accelerated growth scenario	A - B	A - C
	A	B	C		
Real GDP at market prices	7.99	16.59	17.44	6.9	7.4
Private consumption	6.34	14.23	14.44	7.6	7.8
Government consumption	0.97	1.78	1.80	5.7	5.7
Private investment	1.28	2.89	2.98	7.7	8.0
Public investment	0.99	1.82	2.35	5.7	8.2
Exports	3.23	6.53	7.06	6.6	7.4
Imports	4.82	10.66	11.18	7.5	7.9
Real GDP per capita (US\$ '000)	0.37	0.58	0.61	4.2	4.7
Real exchange rate (local currency units per US\$)	1.00	0.97	0.99	-0.3	-0.1
Trade to GDP (%)	100.8	103.6	104.6		
Investment to GDP (%)	28.4	28.4	30.6		
Private	16.0	17.4	17.1		
Public	12.4	11.0	13.5		
External debt to GDP (%)	55.5	28.0	27.1		
External debt service to exports (%)	2.9	1.5	1.4		

*Source:* World Bank (2007) and authors' conversion from old Ghana cedi into US\$, using an exchange rate of US\$1 to GH¢10,000.

On the other hand, the Bank believes that, assuming Ghana manages to close its infrastructure gaps and ensure further gains in productivity, more accelerated growth and poverty reduction could be possible. Under such a scenario, growth could accelerate to about 7.4% per year, but this would require additional funding of about US\$350 million per year in all four major infrastructure sectors, over and above the GPRS II level of spending of about \$380 million per year.

Empirical studies have emphasised the importance of inward FDI in host countries. The jury is still out on direction of causality between FDI and growth, but evidence suggests that causality runs from FDI to economic growth. FDI is believed to promote capital formation in the host country by augmenting the supply of funds for investment. FDI can also stimulate domestic savings and investment when foreign firms source inputs locally or supply intermediate inputs to local firms. Furthermore, many firm-level studies have identified FDI as a strong determinant of export, causing the developing country to increase its foreign exchange earnings. But FDI does not only bring in much-needed capital; it also generates employment and contributes to economic growth, as it provides access to advanced technologies and spillovers (see section 2 on job opportunities created by FDI in Ghana).

A number of firm-level, industry-level and cross-country studies provide ample evidence that well-functioning financial systems promote long-run growth. Studies show that financial markets (including banks and stock markets) facilitate risk diversification by trading, risk pooling and hedging financial instruments (see Loayza and Soto, undated). Financial markets also help identify profitable investment projects and mobilise savings to them. Osei (2005) finds that economic growth in Ghana for the period

1991-2003 was linked to the performance of Ghana's stock market. Employing a vector auto-regressive model based on quarterly observations for the period, he finds that stock market development predicts economic growth in Ghana. The impact of the crisis on the GSE and the banking sector therefore has implications for the growth prospects of the nation. Many other studies have made similar conclusions about the effect of financial development on growth; more liquid markets can create long-term investment and thereby enhance economic growth through lower transaction costs (see for example Bencivenga et al., 1995; Levine and Zervos, 1996; 1998; Rajan and Zingales, 1998).

## 4. Scope for and constraints to policy responses

Concerns about the effect of the global financial crisis on poverty, in particular the effects on vulnerable groups, have heightened on the back of the recent hikes in food and fuel prices that unleashed hardship on many poor households across the developing world. Of particular concern is the impact on the poor and the threat the crisis poses to the world's ability to achieve the MDGs, in particular, eradicating extreme poverty and hunger by 2015.

Many governments have undertaken measures to minimise the impacts of the crisis, including setting up special monitoring units, providing fiscal stimulus packages, strengthening financial sector regulations, revising budget expenditures, expansionary monetary policies, foreign exchange controls and targeting assistance to key sectors. In an attempt to soften the impact of the global food and fuel crisis on the purchasing power of the average Ghanaian, the government Ghana to introduce mitigation measures (i.e. the government was to spend about GH¢150 million to cushion tax payers) in May 2008. In this plan, the government called for the removal of import duties on rice, wheat, yellow maize and crude vegetables for soap and food manufacture. Other items covered by the waiver were fertilisers and agricultural inputs. This measure called for the amendment of the Customs Excise and Preventive Service (CEPS) Duty and Other Taxes Act.

In addition, the excise duty and debt recovery levy on premix oil were also removed to assist fishing communities to increase their output. The government also reduced excise duty and debt recovery levy on gas oil, kerosene and marine gas oil. This was expected to reduce the high cost of transportation imposed by the rising oil prices.

Support for the production cost of electricity was also increased by the government so as to bring relief to domestic consumers. The government further decided to grant subsidies on fertiliser and to ensure effective distribution to farmers to assure a good harvest, so as to reduce the impact of the rising food prices. In addition, the previous government cut budget items 2-4 by half in July 2008. With respect to government directives, the Petroleum Taxes and Related Levies Amendment Act 2008 (Act 756) came into effect on 23 May 2008. Under the new Act, excise duty on gas oil has been reduced from 9.1000 pesewas per litre to 6.2000 pesewas; kerosene from 6.4875 pesewas per litre to 4.5375; marine gas oil from 6.4945 pesewas per litre to 3.9945 pesewas; and premix fuel from 5.1456 pesewas per litre to zero. The Debt Recovery Levy on petroleum products was also reviewed, with gas oil and marine gas oil attracting 2.50 pesewas per litre, down from 5.00 pesewas, while with all levies kerosene and premix fuel have been removed.

The Livelihood and Empowerment Against Poverty (LEAP) programme introduced by the past government is a component of the National Social Protection Strategy. LEAP targets orphans and vulnerable children through their caregivers, the aged (above 65 years and without subsistence or support) and persons with severe disabilities without productive capacities. LEAP provides cost-effective conditional and unconditional subsistence grants on a graduated payment scale of approximately GH¢8.00 to ¢15.00 per month to targeted extremely poor households. During the past food crisis, LEAP was used as an emergency programme, with an additional US\$20 million from the World Bank to help households in the flood-affected areas in the north. By the end of 2008, LEAP had reached out to over 8000 households across 54 districts on regular LEAP, and an additional 15,000 households were supported under the emergency programme. The new government has pledged to maintain and actually expand the programme to 35,000 households in 2009, from about 23,000 households in 2008.

Efforts are also being made by the new government to maintain or even improve levels of social protection and poverty reduction expenditures in Ghana (see Table A1.2 in Annex 1). Measures include cash transfers, provision of free education (capitation grant and school feeding programme) and healthcare. The government has earmarked an amount out of the 2009 budget for education and

health expenditure to provide free textbooks and uniforms for school children. Specifically, as part of measures to enable Ghana to deal with the crisis, the government has promised in the 2009 budget to:

- Provide about 1.6 million pupils in public basic schools in deprived communities with school uniforms;
- Increase the capitation grant by 50% from GH¢3.00 to ¢4.50 and provide free exercise books to every pupil in all public basic schools;
- Rationalise government expenditure by cutting down on wasteful expenditures, including those on official foreign travel, workshops and conferences;
- Enforce the Foreign Exchange Act in terms of monitoring and reporting. Ghana adopted the International Financial Reporting Standards (IFRS) to replace the Ghana National Accounting Standards (GNAS) in January 2007. The adoption of the IFRS was expected to make Ghana compliant with global standards of financial reporting in order to promote investor confidence in Ghana. The new standards are applicable to companies whose securities are held by the public, banks and insurance companies. Private businesses and state-owned enterprises were also expected to apply IFRS to enhance public confidence in their financial reporting. However, small and medium-sized enterprises, as well as ministries, departments and agencies in the public sector, were expected to continue to use the GNAS until 1 January 2009, when the IFRS and the International Public Sector Accounting Standards (IPSAS) become mandatory;<sup>11</sup>
- Review mining, oil and forestry firms' agreements to curb excessive repatriation. This is probably aimed at stabilising the local currency;
- Consolidate the existing 27 ministries into 24 in order to rationalise government expenditure;<sup>12</sup> and
- Review petroleum taxes, with the aim of reducing domestic petroleum prices.

To be able to keep its expansionary fiscal policies, the government also intends to increase total revenue from GH¢4.80 billion in 2008 to ¢5.94 billion in 2009, 24% above the 2008 outturn. Tax revenue is also projected to increase by 19.0% in 2009, despite expected shocks to export revenue. The level of tax revenue, however, depends not only on tax policy and the revenue administration system, but also on overall economic activity. Hence, the government's revenue targets could be affected if growth really slows down as a result of the global financial crisis.

---

<sup>11</sup> See [www.lawfieldsconsulting.com/Docs/2006\\_Q4\\_Business\\_Law\\_Bulletin.pdf](http://www.lawfieldsconsulting.com/Docs/2006_Q4_Business_Law_Bulletin.pdf).

<sup>12</sup> While the intentions of government are good, we are not told the estimated savings to the nation to be accrued from the proposed cost-cutting measures, including the proposed reduction of ministerial or senior civil servant travels by half.

## 5. Conclusions and policy recommendations

Ghana, having been integrated into the global economy, is not being spared the impact of the financial crisis. Just like other developing countries in the region, the country is becoming increasingly vulnerable, as its current account, fiscal deficit, exchange rate, inflation and debt indicators worsen. The financial crisis is expected to exacerbate an already vulnerable situation and possibly erode the gains of the past decade of strong economic performance. This study analyses the nature and extent of the impact of the crisis and identifies the specific channels of transmission, policy implications and possible policy responses.

Ghana has made significant progress over the past 15 years and it will really be a shame if all the achievements are allowed to be swept away by this crisis. Despite high oil and food prices, real GDP growth has increased steadily over the past five years. However, the economy is still fragile. Ghana's per capita GDP is about US\$500 (or \$1400 in purchasing power parity), and has not changed much since independence in 1957. Incomes are also becoming very unequal, and this poses a threat to the gains made over the past 15 years.

Looking ahead, the long-term growth prospects for Ghana seem favourable, although recent developments in the domestic and world economies cloud the near-term prospects for the country. On the one hand, recent remarkable economic achievements risk being wiped off by threats of macroeconomic instability; on the other, the widely held expectations of recessionary tendencies in developed and emerging economies are likely to result in weaker demand growth for Ghana's exports, with possible negative terms of trade implications. In addition, Ghana's reliance on developed markets, particularly the EU, for its exports is not expected to change substantially in the short to medium term, which could accentuate the adverse effects of lower import demand from developed countries.

Whether Ghana can mitigate the effects of the crisis depends on the ability to use monetary and fiscal policy to avoid being pro-cyclical and to cushion the effects of the crisis. For the moment, it appears that there is policy inconsistency between the fiscal authorities and the central bank, which is targeting single-digit inflation. Given the present precarious fiscal stance, it does not seem to us that the government has the capacity to undertake countercyclical fiscal policy without running into financial constraints and/or external constraints. Moreover, the institutional capacity to execute any large-scale social protection plan or cash transfer programme is lacking. The government may need some support from development partners to improve and enhance the whole social protection infrastructure.

It is now a critical time to increase and sustain adequate levels of investment, especially in infrastructure (including social infrastructure), although Ghana's capacity to do so is severely constrained (see World Bank, 2007). Pre-existing resource constraints are being exacerbated by the worsening macroeconomic balances and credit crunch.

As the backbone of the economy, agriculture must receive special attention again. As China's example illustrates, improving agricultural productivity is a crucial part of any successful development strategy. Although part of the reason for neglect has been external (for example, periods of low and declining international commodity prices, unfair Organisation for Economic Co-operation and Development (OECD) farm policies and low ODA to the sector), the stunted growth of the sector stems largely from ill-defined government interventions and low levels of budgetary allocations to the sector for a very long time. Times are hard, but government should be wary of the temptation to follow protectionist tendencies and agitations for such interventions during periods of crisis.

The bottom line is that small-scale farmers will continue to need some assistance, but help must be smart, selective and effective. Serious reform of the agriculture sector must begin with the nation's land policy. Efforts must be made to strengthen individual land rights, even if this means compensating

traditional chiefs, and to create a regulated market for lands, while providing incentives for individuals to optimise value from land use. Successful farmers can then be assisted to expand into larger (and possibly mechanised) farms.

Government must also make efforts to assist the manufacturing sector and address the sector's challenges in pursuit of structural transformation and diversification. In the recent Association of Ghana Industries' Survey of Chief Executive Officers, an assessment of the challenges facing the industry, the following were listed as the most serious constraints limiting opportunities to create jobs:

- Access to credit;
- Inadequate and interrupted supply of energy (including electricity);
- High cost of starting or maintaining a business;
- Dearth of a skilful workforce; and
- Unfair open trade policies.

We suggest that the government tackle these issues with urgency, particularly the issue of access to and high cost of credit, but also the issue of unfair competition from cheap imports and other unfair trade policies.

The benefits of a well-functioning and properly regulated financial system are now well known, and the financial intermediary industry in Ghana provides another testament to that truth. The inception of financial sector reforms (the Financial Sector Adjustment Programme – FINSAP) in the late 1980s marked the turning point in Ghana's banking history. The Ghanaian banking industry over the past two decades (since the inception of FINSAP), and especially over the past five years, has undergone significant structural changes, which have impacted positively with regard to firm conduct, increased competition and innovative products. A number of microfinance institutions have entered the industry, providing loans to small-scale enterprises and individuals in both the formal and informal sectors of the economy. As of the end of 2007, there were 24 banks, up from 11 in 1989. Credit to the private sector has increased but, in spite of all the developments in the sector, financial services still remain beyond the reach of millions of Ghanaians, in particular small and medium-sized enterprises.

One reason for this limited access to credit for small businesses and the poor is the general risk involved in doing business in Ghana. It is feared that, in the face of the current crisis and the heightened intensity of risk and loan defaults, banks will resort to the ultra-conservative lending practices of the past. The Credit Reporting Act (Act 726), signed into law in April 2007 but yet to be implemented, will help reduce informational asymmetries. We urge the government to quickly operationalise the Act to make it easier for financial institutions to be able to discern the good risk from the bad risk borrower.

One of the major problems facing Ghana is how to diversify the economic structure and increase exports. Appropriate domestic policies are necessary to reduce the varied constraints on supply response, to increase transport and marketing efficiency and to encourage investment. To benefit from trade, and to channel these benefits into helping reduce poverty, Ghana needs to embark on a new paradigm of inclusive growth, based on modernisation and diversification of the structures of the economy. There is also a need to increase the flexibility and efficiency of resource use in order to accelerate growth and strengthen international competitiveness, even though the government's ability to do so could be constrained by the crisis, as global growth slows and demand for many non-traditional exports falters.

Finally, government must sustain macroeconomic reforms to make the economy more resilient, and strengthen domestic resource mobilisation to support domestic investment as external support weakens.

## References

- Adams, R.H., A. Cuecuecha and J. Page (2008) *The Impact of Remittances on Poverty and Inequality in Ghana*. Policy Research Working Paper 4732. Washington, DC: World Bank.
- Bank of Ghana (2009a) 'Financial Stability Report 5(1/2009)'. Accra, Ghana: BoG.
- Bank of Ghana (2009b) 'External Sector Developments: Monetary Policy Report 4 (1/2009)'. Accra, Ghana: BoG.
- Bencivenga, V.R., B.D. Smith and R.M. Starr (1995) *Equity Markets, Transaction Costs, and Capital Accumulation*. Policy Research Working Paper Series 1456, Washington, DC: World Bank
- Barro, R. J. (1996) 'Democracy and Growth'. *Journal of Economic Growth* 1(1): 1-27.
- Bencivenga, V.R. and B.D. Smith (1991) 'Financial Intermediation and Endogenous Growth'. *Review of Economic Studies* 58(2): 195-209.
- Bourguignon, F. (2002) *The Distributional Effects of Growth: Case Studies vs. Cross-Country Regressions*. Working Paper 2002-233. Paris, France: Delta.
- Dollar D. and A. Kraay (2002) 'Growth Is Good for the Poor'. *Journal of Economic Growth* 7(3): 195-225.
- Dercon, S. (2004) 'Growth and Shocks: Evidence from Rural Ethiopia'. *Journal of Development Economics* 74(2): 309-329.
- Easterly, W. (1999) 'Life during Growth'. *Journal of Economic Growth* 4(3): 239-276.
- Fafchamps, M. (2003) *Rural Poverty, Risk and Development*. Cheltenham: Edward Elgar.
- Ghana Investment Promotion Centre (2008) 'Third Quarter 2008 Investment Report (1 July to 30 September 2008)'. *Quarterly Update* 4(3), October.
- Gibbon, P. (1996) 'Structural Adjustment and Structural Change in Sub-Saharan Africa: Some Provisional Conclusions'. *Development and Change* 27(4): 751-784.
- Government of Ghana (2008) 'The Budget Statement and Economic Policy'. Accra, Ghana: GoG. April.
- Government of Ghana (2009) 'The Budget Statement and Economic Policy'. Accra, Ghana: Government of Ghana. March.
- International Monetary Fund (2008a) 'Food and Fuel Prices – Recent Developments, Macroeconomic Impact, and Policy Responses'. [www.imf.org/external/pp/longres.aspx?id=4266](http://www.imf.org/external/pp/longres.aspx?id=4266).
- International Monetary Fund (2008b) 'Food and Fuel Prices – Recent Developments, Macroeconomic Impact and Policy Responses, An Update'. [www.imf.org/external/np/pp/eng/2008/091908.pdf](http://www.imf.org/external/np/pp/eng/2008/091908.pdf).
- Institute of Statistical, Social and Economic Research (2007) *The State of the Ghanaian Economy in 2007*. Accra, Ghana: ISSER, University of Ghana, Legon.
- Killick, T. (1995) *IMF Programmes in Developing Countries*. New York: Routledge.
- Levine, R. and S. Zervos (1996) 'Stock Market Development and Long-Run Growth'. *World Bank Economic Review* 10(2): 323-339.
- Levine, R. and S. Zervos (1998) 'Stock Markets, Banks, and Economic Growth'. *American Economic Review* 88 (3): 537-58.
- Loayza, N. and R. Soto (undated) 'The Sources of Economic Growth: An Overview'. Unpublished manuscript.
- Ndikumana, L. (2008) 'Can Macroeconomic Policy Stimulate Private Investment in South Africa? New Insights from Aggregate and Manufacturing Sector-level Evidence'. *Journal of International Development* 20(7): 869-887.
- Ndulu, B. and S. O'Connell (2008) 'Policy Plus: African Growth Performance', in B. Ndulu, S. O'Connell, R. Bates, P. Collier and C. Soludo (eds) *The Political Economy of Economic Growth in Africa 1960-2000, Vol. 1*. Cambridge, UK: CUP.
- Newbold, P., S. Pfaffenzeller and A. Rayner (2005) 'How Well are Long-run Commodity Price Series Characterised by Trend Components?' *Journal of International Development* 17(4): 479-494.
- Osei, V. (2005) *Does the Stock Market Matter in Ghana? A Granger-Causality Analysis*. Working Paper WP/BOG-2005/13. Accra, Ghana: BoG.
- Pallage, S. and M.A. Robe (2001) 'Foreign Aid and the Business Cycle'. *Review of International Economics* 9 (4): 641-672.

- Rajan, R.G. and L. Zingales (1998) 'Financial Dependence and Growth'. *American Economic Review* 88(3): 559-86.
- Whitefield, L. and E. Jones (2009) 'Breaking out of Aid Dependence? Economic and Political Ownership', in L. Whitefield, and E. Jones (eds) *The Politics of Aid: African Strategies in Dealing with Donors*. New York: OUP.
- World Bank (1993) *The East Asian Miracle: Economic Growth and Public Policy*. New York: OUP.
- World Bank (2007) *Ghana Country Economic Memorandum Report*. Accra, Ghana: World Bank.
- World Bank (2008) *Doing Business: Country Profile for Ghana*. Washington, DC: World Bank.

## Annex 1: Statistical tables

**Table A1.1: Foreign direct investment, 2007-2008**

	2007				Total	2008				Total
	Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4	
No. of new projects	57	95	80	89	321	92	53	82	78	305
Estimated employment, of which	2082	5449	10,248	16,008	33,787	9707	4900	4631	10818	30,056
1. Ghanaians	1818	4634	n/a	15,526	21,978	9085	4670	4151	10,022	27928
2. Expatriates	264	813	n/a	482	1559	622	230	480	796	2128
New investments (US\$m), of which	307	359	957	1200	2822	461	943	1380	410	3193
1. Reinvestment, i.e. capital goods imported (US\$m)	300	346	925	1080	2651	443	935	407	392	2177
2. Equity transfers for new projects (US\$m)	7	12	32	155	206	18	8	972	18	1016
Estimated value of new projects (US\$m), of which	37	79	190	5300	5606	3033	58	1580	216	4887
FDI component (US\$m)	24	69	187	5290	5570	2987	53	1200	200	4440

Note: N/a = not available.

Source: Authors' calculations using data from GIPC Quarterly Update (2007 and 2008).

**Table A1.2: Poverty reduction expenditure by sub-sector (GH¢ millions) (GoG only)**

Variable	2008 planned Jan-Dec	2008 actual Jan-Dec	2009* planned Jan-Dec
Total government expenditure	5465.91	7103.28	7205.41
Total poverty reduction expenditure	1341.54	1584.28	1856.58
Total poverty reduction expenditure to government expenditure	24.54%	22.30%	25.77%
Education sector expenditure	1142.33	1546.35	1255.07
Basic educational expenditure	716.35	748.45	840.53
Basic educational expenditure/total government expenditure	62.71%	48.40%	66.97%
Health sector expenditure	547.03	583.99	588.05
Primary healthcare expenditure	267.27	286.05	343.85
Primary healthcare expenditure/total health sector expenditure	48.86%	48.98%	58.47%
Other** poverty expenditure	206.94	314.25	416.79

Note: \* Projected expenditures. \*\* Other poverty includes: social welfare, governance, drainage, human rights, public safety, HIV/AIDS, vocational/employable skills, road safety, local government support unit, environmental protection and disaster management.

Source: GoG (2009).