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Ghana: 2011 Article IV Consultation and Third and Fourth Reviews Under the Arrangement Under the Extended Credit Facility, Requests for Waiver of Nonobservance of Performance Criteria and Modification of Performance Criteria, and Rephasing of Disbursements—Staff Report; Staff Supplement; Public Information Notice and Press Release on the Executive Board Discussion; and Statement by the Executive Director for Ghana.

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of a combined discussion of the 2011 Article IV consultation with Ghana and Third and Fourth Reviews Under the Arrangement Under the Extended Credit Facility, Requests for Waiver of Nonobservance of Performance Criteria and Modification of Performance Criteria, and Rephasing of Disbursements, the following documents have been released and are included in this package:

- The staff report for the combined 2011 Article IV consultation and Third and Fourth Reviews Under the Arrangement Under the Extended Credit Facility, Requests for Waiver of Nonobservance of Performance Criteria and Modification of Performance Criteria, and Rephasing of Disbursements, prepared by a staff team of the IMF, following discussions that ended on March 1, 2011, with the officials of Ghana on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on May 12, 2011. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- The Joint IMF/World Bank Debt Sustainability Analysis.

- The Informational Annex.

- A Public Information Notice (PIN) and Press Release, summarizing the views of the Executive Board as expressed during its May 25, 2011, discussion of the staff report on issues related to the Article IV consultation and the IMF arrangement, respectively.

- A statement by the Executive Director for Ghana.

The documents listed below have been or will be separately released.

Letter of Intent sent to the IMF by the authorities of Ghana*
Memorandum of Economic and Financial Policies by the authorities of Ghana*
Technical Memorandum of Understanding*
*Also included in Staff Report

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

GHANA

Staff Report for the 2011 Article IV Consultation, Third and Fourth Reviews Under the Arrangement Under the Extended Credit Facility, Requests for Waiver of Nonobservance of Performance Criteria and Modification of Performance Criteria, and Rephasing of Disbursements

Prepared by African Department
(In consultation with other departments)

Approved by Michael Atingi-Ego and Dominique Desruelle

May 12, 2011

ECF arrangement: The Executive Board approved Ghana's three-year ECF arrangement on July 15, 2009, with access of SDR 387.45 million (105 percent of quota). First and second reviews under the arrangement were concluded on June 9, 2010.

Outcome of the 3rd and 4th ECF Reviews: Quantitative performance targets were met throughout 2010 for net international reserves, external arrears, inflation, and new external nonconcessional borrowing. However, the cash deficit and domestic arrears targets were missed for December 2010. Seven of the twelve structural benchmarks applicable since June 2010 were implemented, with the other five partially implemented or delayed. Despite fiscal slippage, the ECF contributed significantly to adjustment and reform achievements. With reinforcement of the fiscal program and a favorable first quarter 2011 outturn, staff recommends completion of the 3rd and 4th reviews.

Discussions: Discussions for the ECF reviews were held in Accra during September 20–October 1 and December 8–16, 2010, and completed with the discussions for the 2011 Article IV consultation during February 16–March 1, 2011. The staff team comprised Messrs. Allum (head), Kovanen, Kpodar, and Lonkeng Ngouana (AFR), and Jarmuzek and Ms. Nkhata (SPR). The mission was supported by Mr. Mitchell (resident representative). Mr. Mojarrad (ED) and Ms. Hagan (advisor to ED) joined the discussions. The missions met with President Atta Mills (December 2010), Vice President Mahama (September 2010), Minister of Finance Duffuor, Bank of Ghana Governor Amissah-Arthur, other senior officials, members of parliament, and representatives of the private sector, academia, civil society organizations, and the donor community. Press releases were issued at the end of the September 2010 and February 2011 missions.

Exchange regime: Ghana maintains a floating exchange rate regime and an exchange system free of restrictions on payments and transfers for current international transactions. Ghana has accepted the obligations of Article VIII, Sections 2, 3, and 4.

Publication: The Ghanaian authorities have consented to publication of this staff report, and their letter of intent and memorandum of economic and financial policies.

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EXECUTIVE SUMMARY

The economy recovered in 2010, expanding by 5½–6 percent after a temporary slowdown in 2009. Exports were buoyant, as were construction and service activities. Inflation has been close to 9 percent since mid-2010, down from over 20 percent in 2009. Developments in Côte d'Ivoire and Libya have had only a limited impact on Ghana's economy, so far.

The start of oil production is projected to underpin 13 percent real GDP growth in 2011. Strong non-oil activity would contribute to 6–7 percent growth in 2012 and beyond. Inflation is projected to remain in single digits, provided fiscal and monetary policies are supportive.

The adjusted target for the cash fiscal deficit was missed by 0.8 percent of GDP in 2010. This was largely due to expenditure overruns, which also contributed to an accumulation of payment arrears equivalent to nearly 2 percent of GDP.

The implementation of structural reforms has been uneven. Debt management was strengthened and the program's external borrowing targets were met. At the same time, progress has lagged in strengthening revenue administration, and expenditure and payroll management.

The government relaunched the fiscal consolidation effort in 2011. The program aims to reduce the deficit to 4½ percent of GDP in 2011 and about 2½ percent of GDP beyond. A portion of Ghana's initial oil revenues is being saved and steps are being taken to strengthen tax collection and expenditure management. Petroleum pump prices were increased to reflect higher costs. A strategy to regularize payment arrears is being developed and a comprehensive database will be established to facilitate monitoring of payment arrears. The March 2011 fiscal data are consistent with achieving the planned full-year fiscal consolidation.

Article IV discussions focused on the conduct of monetary and exchange rate policies in the context of a strong balance of payments. Staff supported Ghana's intention to maintain its inflation targeting and flexible exchange rate regimes; the currency was found to be broadly in line with fundamentals. Monetary policy needs to be alert to upside inflation risks from resumed strong liquidity growth, global commodity price increases, and rising domestic activity.

Significant progress has been made in implementing recommendations of the 2010 FSAP update. Payments to clear domestic arrears and energy sector debts have reduced immediate stability risks and instances of bank undercapitalization have been significantly reduced. But key sources of vulnerability identified by the FSAP remain. Efforts are needed to resolve weak banks, ensure compliance with regulations, improve corporate governance in banks, and strengthen banks' accounting and risk management practices.

Key risks under the program relate to the planned fiscal adjustment. Efforts underway to strengthen expenditure controls will need to be sustained. With rising global commodity prices, domestic energy pricing needs to be kept under close review, to avoid the re-emergence of costly subsidies.

I. INTRODUCTION

1. **Ghana has been implementing adjustment policies under the Extended Credit Facility (ECF) since the July 2009 Article IV consultations**. External adjustment was achieved relatively early in the program, supported by fiscal tightening and currency adjustment during 2009. Buoyant cocoa and gold prices helped Ghana ride out the global financial crisis and, over the past year, financing constraints have eased as nonresident demand for domestic currency bonds re-emerged. The start of oil production in late-2010 has further reinforced the fiscal and external outlook. The emphasis in the remainder of Ghana's ECF-supported adjustment program is on relaunching the fiscal adjustment effort after slippages in 2010, tackling long-standing weaknesses in fiscal institutions, and addressing vulnerabilities that have emerged in the banking sector.

2. **Implementation of the adjustment program has not been straightforward.** The first ECF review was completed with the second review only after additional measures were identified in early-2010 to reinforce that year's budget, and the third review was delayed and is being combined with the fourth review only after policies were agreed to strengthen fiscal policies for 2011 and beyond. Box 1 summarizes Ghana's responsiveness to the 2009 Article IV recommendations.

Box 1. Responses to Fund Advice

Fiscal policy: The 2009 Article IV consultation urged fiscal consolidation through revenue mobilization and expenditure restraint, with steps to control public wage growth and increase power tariffs. Goals for revenue collections and power tariffs were met, but spending ran ahead of plans and the wage bill was increased by a new pay structure. A large part of initial oil revenues is being saved, as recommended in the 2009 Article IV.

Monetary and exchange rate policy: In line with Fund advice, the authorities further tightened monetary policies during 2009 and banking sector surveillance was the focus of the 2010 FSAP update. Currency flexibility was maintained, as advised.

Structural reforms: Structural fiscal reforms were launched in 2009 as recommended, but progressed more slowly in 2010 for diverse reasons.

II. Recent Developments and Program Performance

3. **Growth is recovering, and incomes per capita have been substantially revised.** On rebased national accounts data,[1] the economy is estimated to have expanded by 5½–6 percent in 2010, after a period of slower growth (4.7 percent) in 2009. Growth is being driven by buoyant commodity exports and increased construction and service activities. In the rebased accounts, recent annual growth rates have been revised up by an average of 1 percent, in part reflecting the rapid growth of services that now account for one-half of the economy. The level of incomes has been dramatically revised, increasing by an average of 65 percent for 2006–09, putting Ghana into the lower-middle income country grouping (Figures 1 and 2).

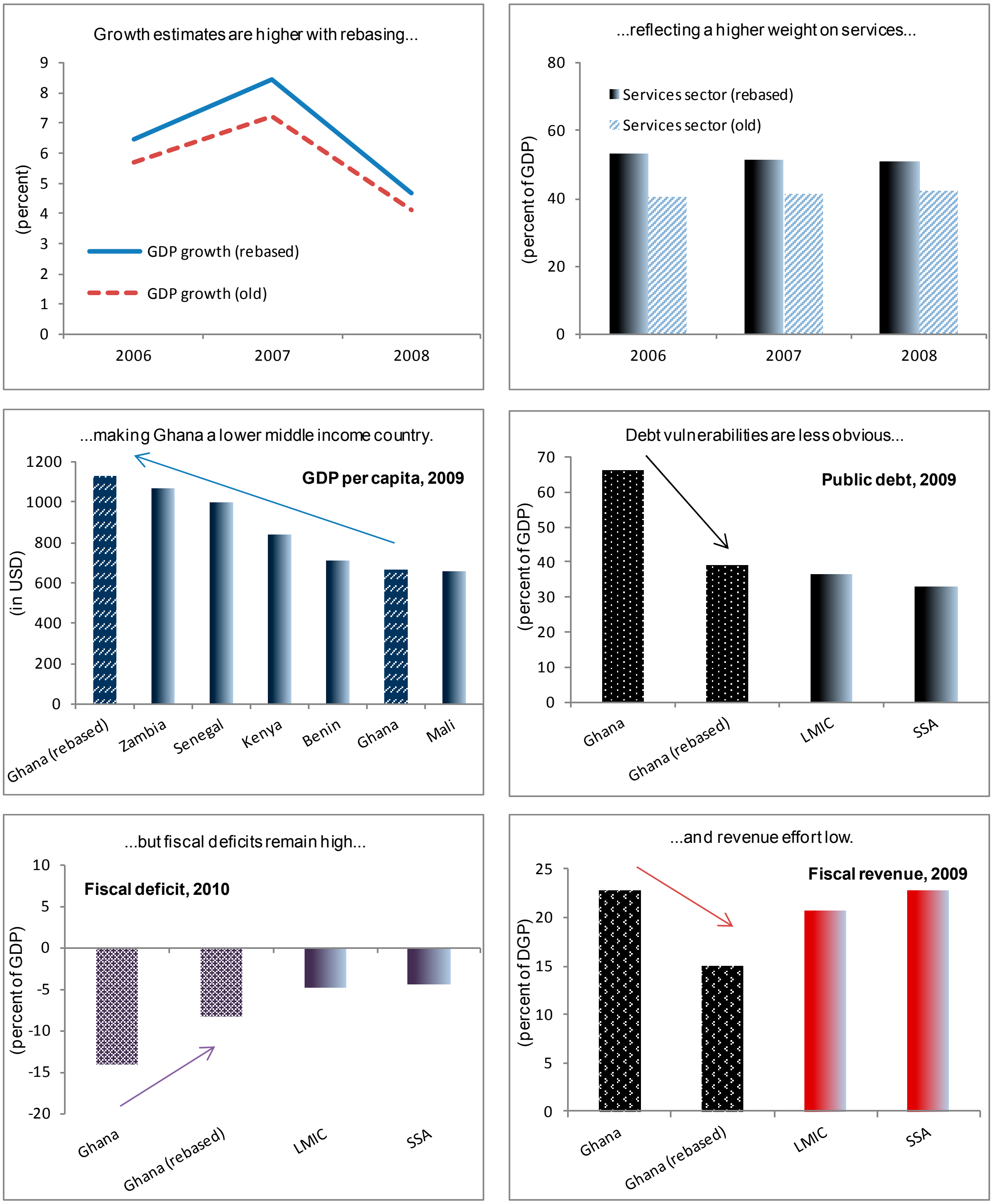
4. **External performance has been favorable**. Total exports grew by US$2 billion in 2010, with cocoa and gold exports benefiting from high global commodity prices. Imports also staged a strong recovery after a decline in 2009, partly reflecting capital goods imports by the oil sector. The current account deficit of 7.2 percent of GDP in 2010 was more than financed by strong capital inflows, including foreign direct investments in the oil sector and bond purchases by nonresident investors. Net international reserve targets were met by wide margins, and gross reserve cover rose to 3.2 months of import cover at end-2010 (Figure 3).

5. **A stable currency has helped the disinflation process**. With a strong balance of payments, the cedi has traded in a relatively narrow range since mid-2009. This, together with the lagged effects of monetary tightening in 2009 and favorable crop yields, contributed to a decline in inflation from a 20 percent annual rate in 2009 to about 9 percent from mid-2010, close to the center of the ECF target band. With inflation remaining higher than in partner countries, the real effective exchange rate appreciated by 6 percent during 2010.

6. **Cash fiscal deficit and domestic financing targets for end-December 2010 were missed.** The fiscal deficit (measured from financing side) exceeded the adjusted program ceilings by 0.8 percent of GDP. Tax revenues exceeded programmed levels, but nontax revenues and grants fell short, and expenditures exceeded program targets, mainly due to higher capital spending. Poverty-reducing expenditure was safeguarded, with indicative targets met throughout the year. The government raised new revenues in an effort to reduce the end-year cash deficit slippage to less than 0.2 percent of GDP, but the incomes were

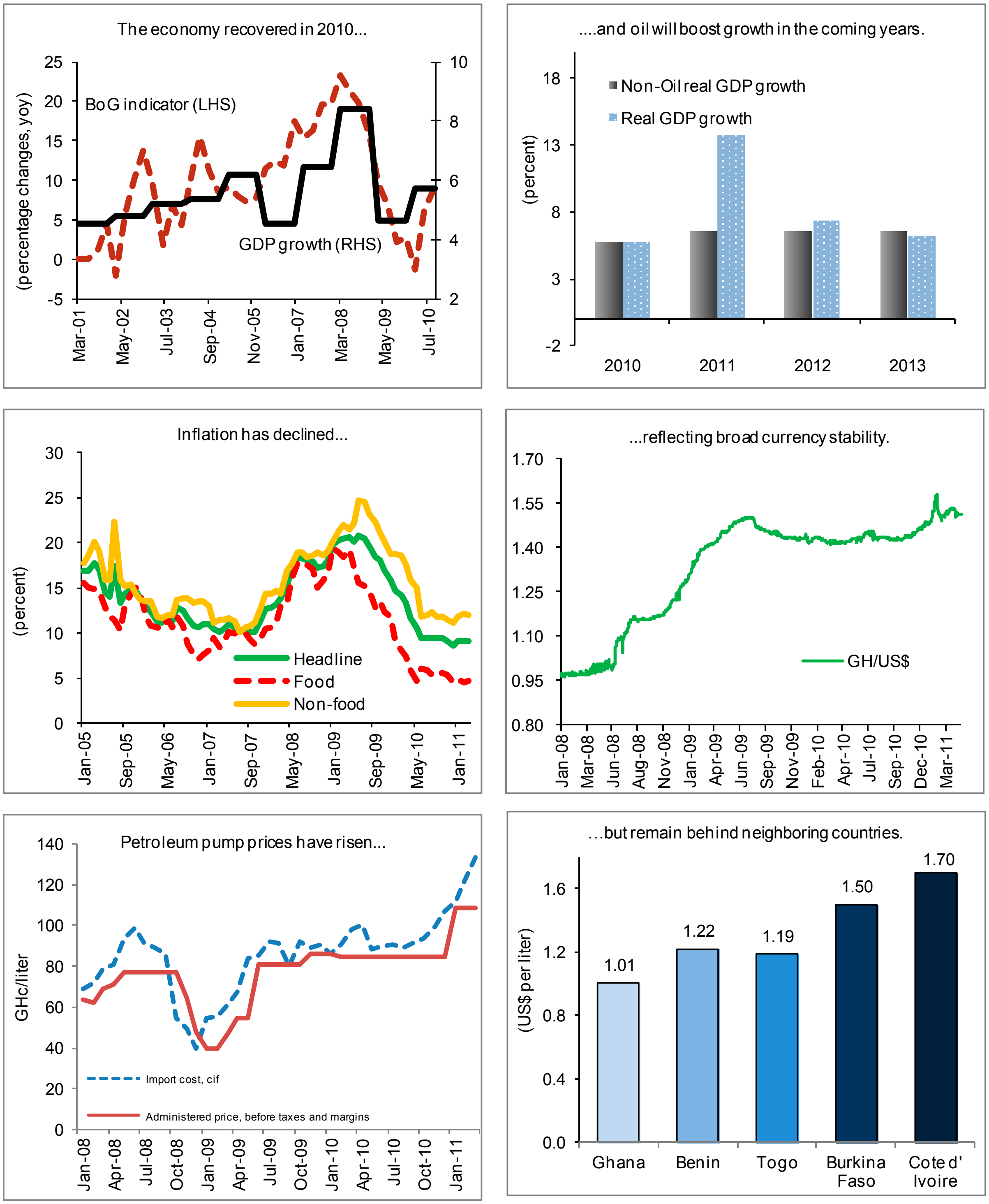
[1] See statistical appendix for details.

Figure 1. Ghana: Rebased National Accounts



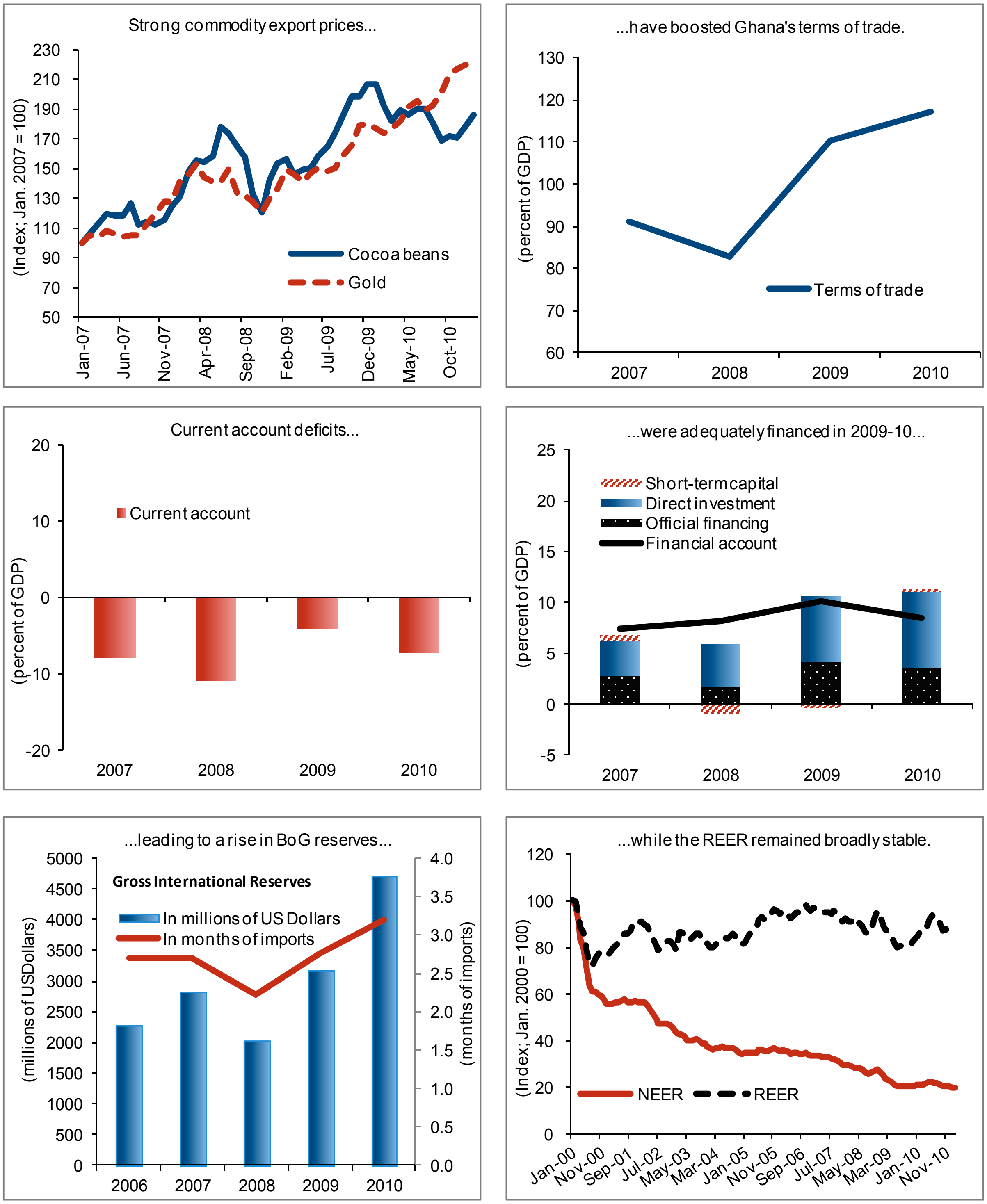
Source: Ghanaian authorities; and IMF staff estimates.

Figure 2. Ghana: Real Sector Indicators, 2001–13



Source: Ghanaian authorities; and IMF staff estimates and projections.

Figure 3. Ghana: External Indicators, 2000–10



Source: Ghanaian authorities; and IMF staff estimates.

realized in January 2011, rather than in December 2010 as planned.[2] The end-year indicative target on net domestic financing of the budget was missed by 0.8 percent of GDP, in part reflecting a slippage of a World Bank loan disbursement ($215 million, or 0.6 percent of GDP) from 2010 into early 2011.

7. **Fiscal pressures also gave rise to expenditure arrears**. On a full-year basis, arrears were accumulated in 2010 in a net amount equivalent to 1.9 percent of GDP, compared to a targeted reduction of 0.2 percent of GDP under the program, breaching the December performance criteria on domestic arrears.[3] The estimated commitment basis fiscal balance, which adjusts the cash deficit for arrears accumulation, rose from 6.4 percent of GDP in 2009 to 8.4 percent of GDP in 2010, exceeding the adjusted program by 2.9 percent of GDP (Figure 4).[4]

8. **Public debt ratios continued to edge higher in 2010**. Total public debt was an estimated 39 percent of GDP at end-2010, up 3 percentage points from 2009. Two-thirds of this increase comprised higher domestic debt. The debt data exclude expenditure arrears and central government liabilities for unpaid SOE debts, estimated at 9 percent of GDP at end-2010.

9. **The monetary policy stance has been unchanged since mid-2010**. With stable inflationary pressures, the Bank of Ghana (BoG) policy rate has been held at 13.5 percent since July 2010, following an easing from 18.5 percent in late-2009. Liquidity growth picked up strongly in 2010, as the strong balance of payments boosted central bank NFA, despite partial sterilization. Reserve money expanded 35 percent in 2010, while broad money rose 46 percent, both well above year-ago outturns. Private sector credit also picked up towards end-2010 (Figure 5).

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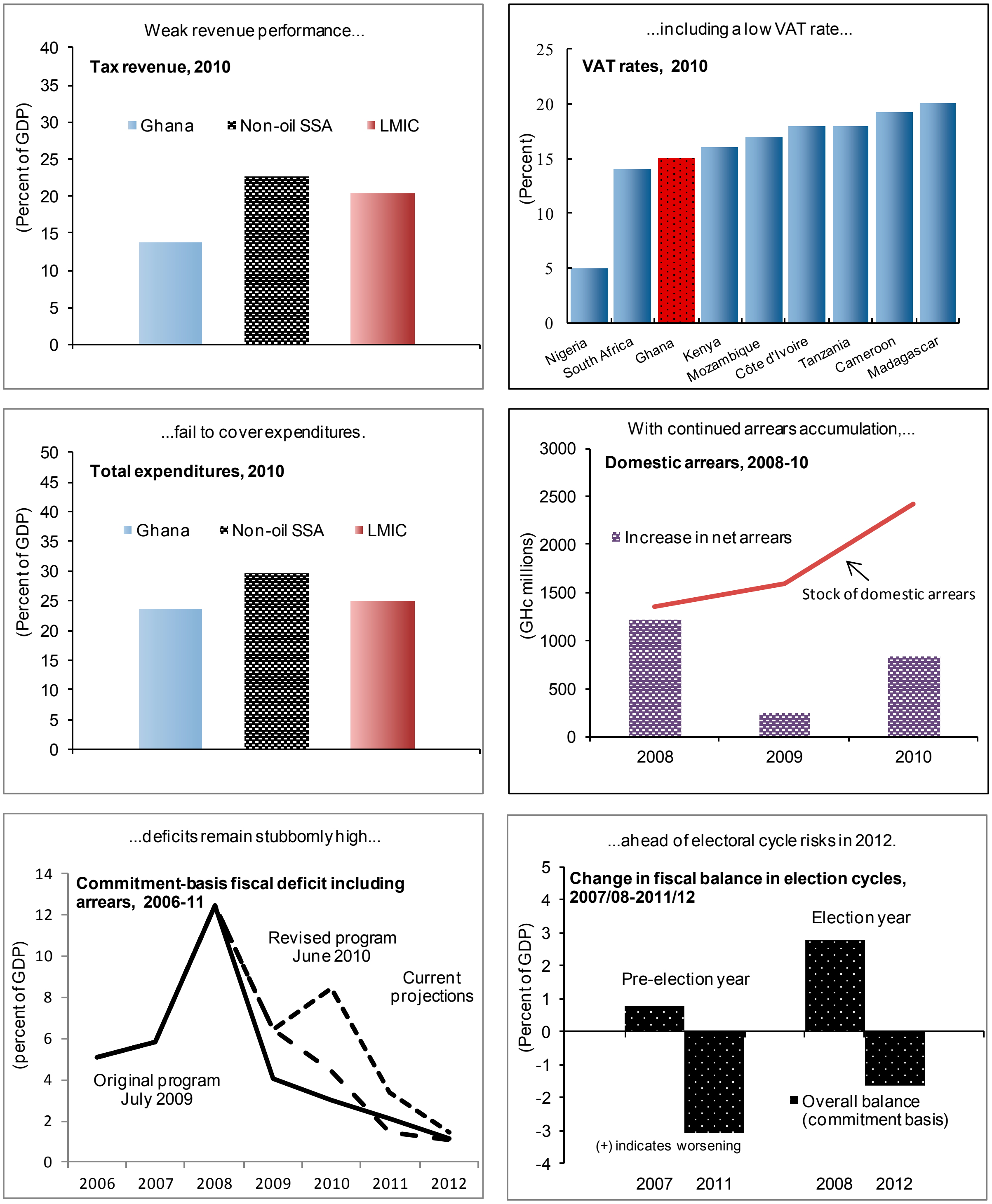
[2] The government sold shares in a gold mining company received in lieu of royalty payments for an amount equivalent to 0.7 percent of GDP.

[3] Settlements of past arrears in 2010 (1.4 percent of GDP) were considerably exceeded by an additional accumulation of arrears (3.3 percent of GDP).

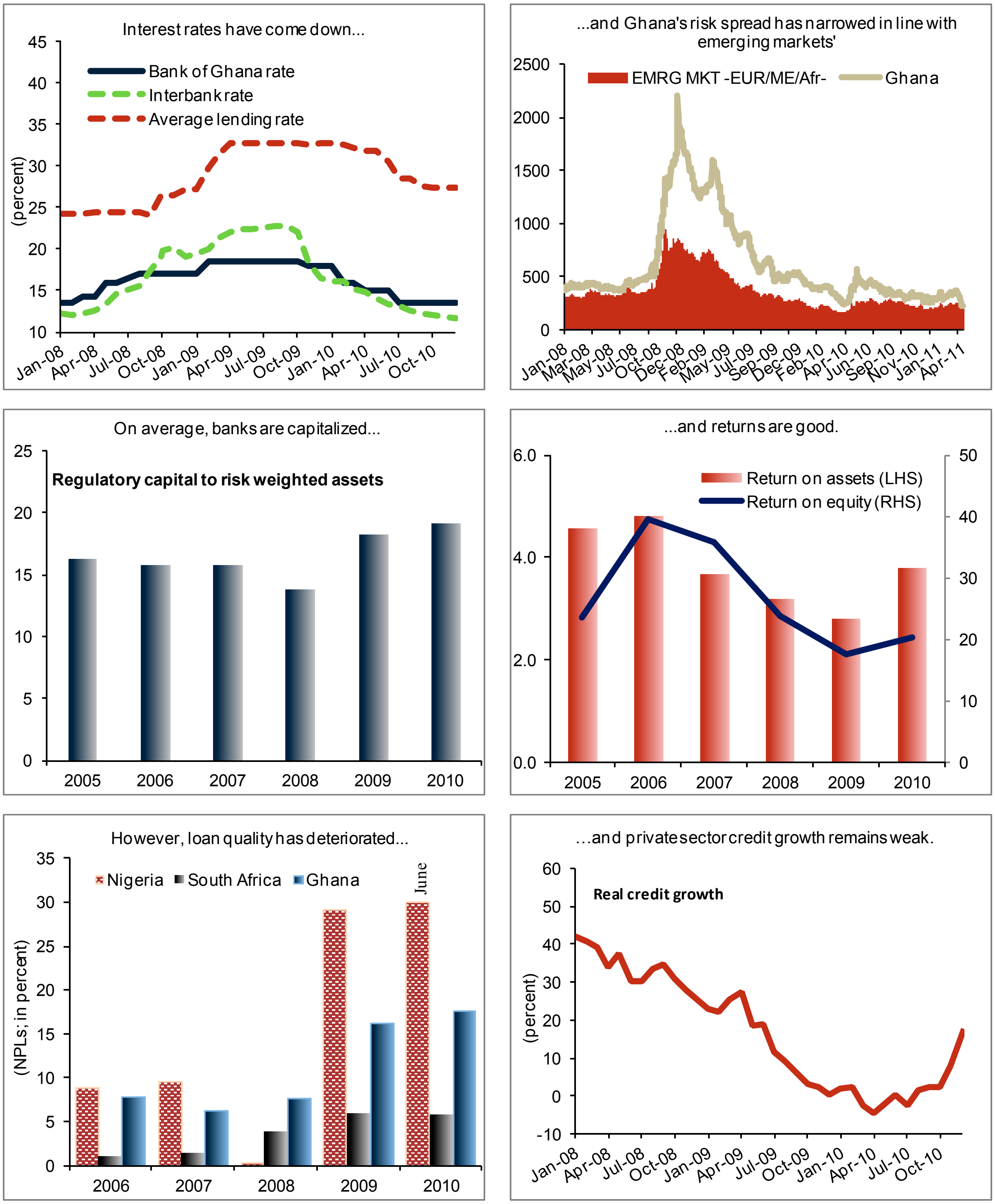
[4] The commitment basis deficit was almost 4 percentage points higher than the *unadjusted* 2010 target, i.e., before adjusting for higher-than-programmed foreign financed capital spending (see TMU adjusters).

Figure 4. Ghana: Fiscal Indicators, 2006–12



Source: Ghanaian authorities; and IMF staff estimates.

Figure 5. Ghana: Financial Indicators, 2005–11



Source: Ghanaian authorities; and IMF staff estimates.

10. **The 2010 FSAP Update found that financial stability risks have heightened since the 2003 FSAP.** While, in the aggregate, the banking system is profitable and liquid with high capital levels, NPL ratios are elevated, in part due to government payment arrears. The 2010 FSAP Update highlighted risks from extensive state involvement in the banking sector and deficiencies in commercial banks' risk management and accounting practices, shortfalls in BoG supervision and systemic risk analysis, and weak enforcement of creditor rights.

11. **Significant progress has been made in implementing the recommendations of the 2010 FSAP Update**. Immediate stability risks have been reduced since mid-2010 by the issue of government bonds to retire TOR exposure to GCB and by payments to partially settle government arrears to contractors. At the same time, the incidence of bank undercapitalization has been addressed, with banks raising capital or merging with stronger banks to comply with the increased statutory minimum capital requirement that became effective at end December 2010. Management of state owned banks has been strengthened to improve corporate governance, and some progress has been made in strengthening micro and macro prudential regulation and supervision. In addition, the Financial Sector Strategic Plan is being updated to integrate the recommendations of the FSAP into a comprehensive reform program. Nevertheless, key sources of vulnerabilities remain and a sustained and comprehensive reform effort is needed to achieve long term financial stability.

12. **Seven of twelve structural benchmarks for the pending ECF reviews were fully implemented** (MEFP, Appendix Table 3). These covered VAT administration and oil and gas revenue management, debt management, power pricing, and public sector reform (subvented agencies and the state oil refinery). A remaining five benchmarks were delayed or partially implemented, covering computerization of payrolls and the broader budget, revenue authority modernization, strengthening of GCB's balance sheet, and a review of tax exemptions and waivers.

III. Policy Discussions and the 2011 Program

A. Growth Prospects

External and growth prospects are favorable, driven by high commodity export prices and the start of oil production. Spillovers from regional conflicts have been manageable, so far.

13. **The medium-term outlook is generally good, assuming that fiscal vulnerabilities are addressed**. Ghana emerged as a new oil producer in late-2010, and yields from the current Jubilee field are projected to stabilize at about 110,000 bpd during 2011–15 (implying annual export earnings of about $4 billion, at current oil prices). If two other fields prove commercially viable, oil production could rise further after 2015, which, together with the commercial exploitation of gas reserves, could imply stronger growth and exports than in the baseline for this report. With non-oil growth in the 6–7 percent range, the start of oil production is projected to boost growth temporarily to the 13 percent range in 2011. Inflation

is projected to edge lower over the medium term, supported by the Bank of Ghana's inflation targeting regime (Text Table 1).

14. **Continued external strength is anticipated**. Current account deficits are projected to narrow over the medium term reflecting the projected fiscal consolidation, rising oil production, and high global commodity prices for gold and cocoa. Gross reserve cover could rise to 6 months of imports by end-2015, providing an increased cushion to manage growing transactions on the capital account.

15. **Risks to growth largely stem from the budget**. Unless arrears are successfully regularized, they would pose risks to corporate liquidity and banking portfolios. Equally, if fiscal imbalances are not addressed, large financing needs could fuel inflation and currency instability; these, in turn, would undermine the business climate and prospects for attracting new investments to diversify Ghana's economic base.

Text Table 1. Medium-Term Economic Prospects, 2010–15

	2010	2011	2012	2013	2014	2015
Real GDP growth (%), of which:	5.7	13.7	7.3	6.1	6.2	6.3
Non-oil economy	5.7	6.5	6.6	6.6	6.7	6.7
Oil production ('000 bpd)	…	84.7	110.0	110.0	110.0	110.0
CPI inflation (%, end-period)	8.6	9.0	8.5	8.0	7.5	7.0
Fiscal balance (cash basis, % of GDP)	-7.7	-4.7	-2.5	-1.9	-2.0	-2.0
Fiscal bal. (commitment basis, % of	-8.4	-3.4	-1.5	-1.0	-2.0	-2.0
GDP)[1/]	38.9	42.8	42.4	42.2	41.1	40.8
Gross public debt (% of GDP)	35.5	39.6	37.2	35.5	33.7	32.2
Net public debt (% of GDP)[2/]	-7.2	-7.5	-5.5	-4.2	-2.4	-2.2
Current account balance (% of GDP)	3.2	3.6	4.0	4.5	5.2	5.5
Gross reserve cover (months of imports)						

[1/] Assuming no further accumulation of new arrears from 2011 and clearance of existing arrears by 2014.
[2/] Net debt declines more significantly than gross debt during 2011-2015 due to the accumulation of savings in an oil stabilization fund and future generations fund.

16. **The government has adopted a new growth and development strategy for 2010-13.** The Ghana Shared Growth and Development Agenda (GSGDA) focuses on support for agriculture, private sector development, infrastructure, human development, and natural resource management. The potential 4-year implementation of the GSGDA has been costed at 67 percent of GDP, with about one-half of this amount unfunded under the medium-term budget. It will be difficult to fill the resource gap from external sources, and even if this were achieved, it would have significant implications for macroeconomic stability and inflation.[5]

[5] In the context of a scaling-up exercise for Ghana that was conducted in 2009, a 4½ percent of GDP per year increase in foreign aid inflows was assumed, roughly half of what is envisioned in the GSGDA. In the analysis the impact of the higher aid inflows was considered manageable.

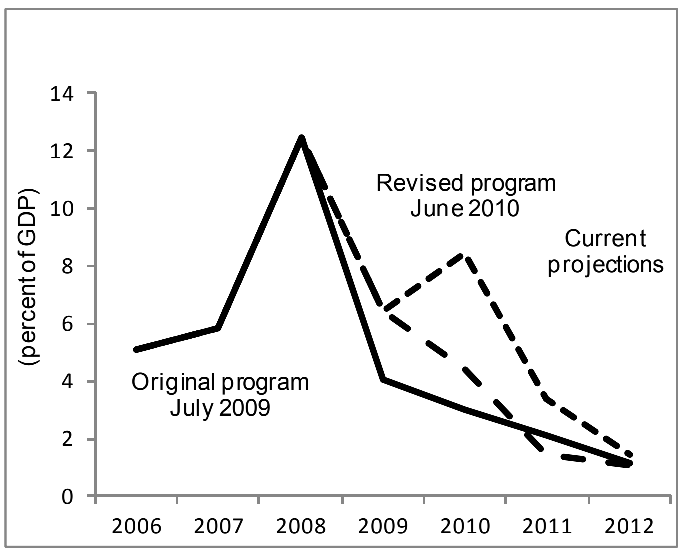
Therefore, prioritization of the GSGDA program will be needed to ensure that the poverty strategy is consistent with sound macroeconomic policies.

B. Fiscal Strategy and Risks

Discussions focused on how to re-launch Ghana's fiscal consolidation program, after a setback in 2010.

17. **The program seeks a substantial fiscal correction in 2011**. The program targets a fiscal correction of 5 percentage points of GDP on a commitment basis in 2011, up from the 3 percentage points envisaged in the last review (Text Figure 1 and Text Table 2). Despite this, both the cash and commitment basis deficits in 2011 would be 2 percentage points of GDP higher than anticipated earlier, owing to the 2010 fiscal slippage (Text Table 1). Box 2 describes how arrears payments are incorporated in the fiscal projections.

Text Figure 1. Deficit Projections, 2009–12
(Commitment-based, including arrears)



Text Table 2. Sources of Fiscal Adjustment in 2011

(Changes from year earlier, in percentages points of GDP)

	2nd ECF review	Revised program	
Reduction in fiscal deficit (commitment basis)	**2.9**	**5.0**	
Increase in revenue collections	**2.5**	**3.5**	
Oil revenues	3.3	2.4	
Non-oil taxation	0.2	1.2	
New tax measures approved in 2011 budget	…	0.2	1/
New tax measures to be implemented by mid-2011	…	0.2	2/
Strengthened revenue administration and other factors	0.2	0.8	
Non-tax revenues	-1.0	-0.1	
Of which: sale of gold shares received in lieu of royalties	...	0.6	
Increase in grants	**-0.3**	**0.2**	
Reduction in expenditures (commitment basis)	**0.7**	**1.4**	
Recurrent expenditures	1.0	-0.2	
Of which: transfers	0.8	-0.4	
Investment expenditures	-0.2	1.6	
Cash budget	-0.2	-0.3	
Reduction in arrears-based spending	…	2.0	3/

1/ Extension of national stabilization levy through 2011

2/ Extension of VAT to financial services, and increased taxation of the self-employed.

3/ Savings achieved by avoiding arrears-financed capital spending.

Box 2. Arrears Regularization in 2010–2013

Payments in 2010–11. Arrears payments are projected to increase from 2.4 percent of GDP in 2010 to 3.6 percent of GDP in 2011, of which 2.3 percent of GDP was paid in the first quarter.

	2010	2011	2012	2013
	(percent of GDP)			
Arrears clearance 1/	1.4	1.6	1.0	0.9
Uncleared checks 2/	…	0.9	…	…
Bonds issued to GCB 3/	1.0	1.1	…	…
Total arrears regularized	2.4	3.6	1.0	0.9

1/ Recorded as fiscal expenditure.

2/ Checks issued but not paid in 2010 (recorded as fiscal discrepancy).

3/ Issue of bonds to GCB to clear TOR overdue loans (recorded as negative financing item).

Payments in 2012–13. Pending agreement on the nature and timing of the planned comprehensive arrears regularization, the fiscal framework includes cash payments in 2012–13 totaling about 2 percent of GDP. This is equivalent to the payment needed to clear all projected remaining government arrears—either in cash or by a bond issue redeemed over a two-year period.

Other potential liabilities. No provision has currently been made for SOE liabilities tentatively estimated at 2.3 percent of GDP in 2011. This amount is an upside risk to the baseline fiscal deficit and debt projections, though these liabilities could be substantially reduced as a result of audits, or by payments by the SOEs themselves.

18. **The government's fiscal adjustment strategy hinges on relatively strong gains from improved tax administration and much more effective spending control**. On the revenue side, oil revenues have been revised down for 2011 since the last review (Text Table 2), but only a small part will be reflected in additional spending, contributing importantly to the 2011 fiscal adjustment. The program also seeks to boost non-oil incomes through new tax measures and a reinforced emphasis on revenue administration (see Section III.C). Non-tax revenues also benefit from gold shares sold in early-2011. Based on much tighter expenditure management (Section III.D), the program seeks sizeable savings in investment outlays, focused on those projects that have previously given rise to expenditure arrears. With an end to arrears-based financing of investment programs in 2011, spending is reduced by a projected two percentage points of GDP on a commitment basis. Savings in recurrent spending are no longer in prospect for 2011, because of an upward revision in transfers due to the social security system.

19. **For 2012–13, the program targets primary surpluses.** With further increases in oil incomes, tight expenditure control, and declining arrears payments, the program aims to reduce the cash basis deficit from 4½ percent of GDP in 2011 to the 2–2½ percent of GDP range in 2012–13, consistent with primary surpluses of about 1 percent of GDP. This would steadily reduce both net and gross public debt levels in relation to GDP (Text Table 1).

20. **Staff highlighted the risks of basing fiscal adjustment plans in large part on strengthened revenue administration and spending control**. The latter, in particular, has underperformed in the past, and reforms are at an early stage. During discussions, the mission urged, instead, a stronger reliance on tax increases, where the fiscal impact was more predictable. In particular, staff saw merit in higher taxation of petroleum products (where taxes are lower than in neighboring countries, and where Ghanaian collections have fallen by 1.5 percentage points of GDP between 2006 and 2010); alternatively, consideration could be given to raising the VAT rate from 15 to 18 percent, in line with many African countries.

21. **The authorities noted that the March 2011 fiscal outturns are consistent with full-year goals for fiscal consolidation**. Accordingly, they did not see a need for substantial new taxes at this stage. Non-oil tax revenues surged 40 percent in the year to the first quarter of 2011, substantially exceeding the 24 percent program target for 2011 as a whole. The strong growth mainly reflected higher customs collections of VAT and trade taxes after tax administration was strengthened. Over the same period, non-interest current expenditure rose by 8.5 percent, well below the provision for 18 percent growth for 2011 as a whole. As a result, the cash basis deficit stood at 1.1 percent of GDP in the first quarter of 2011 (4½ percent annual rate), down from 2.1 percent of GDP in the first quarter of 2010 (8½ percent annual rate).

22. **The government also warned that substantially higher taxes could undermine social cohesion**. The government noted the domestic political realities (the 2008 election

results were close, primary elections are held this summer, and national elections in 2012). Moreover, although Ghana has not been severely affected by rising global food prices, social tensions have been inflamed by higher oil prices, with protests after a 30 percent step increase in petroleum pump prices in January 2011 (from the equivalent of $2.90 to $3.80/gallon). Moreover, conflict in neighboring countries and North Africa has influenced the political and economic debate—though economic spillovers have been limited so far (Box 3).

Box 3. Spillovers from Conflict in Côte d'Ivoire and Libya and Global Developments

Cote d'Ivoire. As of mid-April, more than 11 thousand Ivorian refugees had sought refuge in Ghana, and Ghana is working with the UNHCR to identify funding. Broader economic spillovers from the conflict have been limited. Côte d'Ivoire represents less than one percent of Ghana's total export market, and financial ties are weak. Ghanaian banks have no correspondent relationships with Ivorian banks, and have been largely unaffected by their closure.

Libya. By late-March, more than 16 thousand Ghanaians had been evacuated from Libya. The repatriation could reduce Ghana's remittance earnings, which exceeded 6 percent of GDP in 2010. Support for reintegrating expatriate workers into the Ghanaian economy is being sought from development partners, including humanitarian agencies.

Global developments. Favorable harvests have sheltered Ghana from rising global food prices so far. Ghana's cocoa sector is benefiting from the surge in global cocoa prices, with the increase between December 2010 and February 2011 boosting projected 2011 exports by more than $250 million (0.7 percent of GDP).

23. **The risks to the fiscal program require more quick-acting contingency plans than were in place in 2010**. Accordingly, the government has established an unallocated reserve equivalent to 1 percent of GDP within the expenditure program; this will be the first source of savings, if cuts are needed (MEFP ¶37). The government underlined that further savings could be achieved, as necessary, by delaying or scaling back investment projects. On the revenue front, the government is well advanced in discussions on mining operations that could yield non-tax revenues of 0.3 percent of GDP or more, and anticipates substantial incomes from the transfer of mining and drilling rights during 2011. These revenues have not been included in the baseline fiscal framework, and will be saved as they accrue, to create a further cushion against fiscal shocks.

C. Steps to Improve Tax Collections

Discussions focused on how tax policy and revenue administration could help close the gap between tax collections in Ghana (14 percent of GDP) and peer countries (around 20 percent of GDP).

24. **The government is redoubling efforts to boost Ghana's low tax yields in 2011** (MEFP, ¶20–24). A number of steps were taken in the 2011 budget. The national stabilization levy (a temporary profit tax) was extended through 2011 and the coverage of the communication service tax was extended (combined yield of 0.2 percent of GDP). As supplementary measures, the government will seek parliamentary approval to extend the VAT to fee-based financial services effective from July 2011, based on legislation submitted to parliament in May 2011 (submission is a prior action for the completion of the third and fourth ECF reviews). It is also tightening tax enforcement and raising the presumptive taxation of the self-employed. The VAT extension and enhanced taxation of the self-employed have a combined full-year yield of 0.2 percent of GDP).

25. **Oil windfall earnings in 2011 will largely be saved**. The 2011 budget oil price assumption of $70/bbl for 2011 has been increased to $100/bbl, in line with global trends; this generates a revenue windfall of 1.3 percent of GDP. Consistent with the new Petroleum Revenue Management Bill adopted by Parliament in March 2011, this windfall will largely be saved.[6]

26. **Tax administration is also being reinforced** (MEFP, ¶21–23). Tax exemptions were streamlined in the 2011 budget,[7] customs procedures have been tightened in the wake of reported governance abuses at the port, and a task force has been established to tackle weak tax filing by the self-employed. The 2011 fiscal framework projects that improved tax administration and streamlined exemptions will raise collections by 0.8 percent of GDP in 2011; the authorities are confident that they can exceed this goal. Direct tax collections have risen steadily relative to GDP in recent years, partly reflecting initial computerization, and further gains are projected for 2011 and beyond. Strong growth in customs collections boosted overall tax receipts through March 2011 (para. 21).

27. **Consistent with the government's strategy, staff urged faster progress in modernizing the Ghana Revenue Authority (GRA)**. The authorities noted that the pending deputy commissioner appointments were provisionally assigned in March 2011 (June 2010 benchmark) and had been forwarded for public service ratification (MEFP, ¶20). Establishment of criteria for corporate coverage by the Large Taxpayer Unit (LTU) (June 2010 benchmark) will be completed following the relocation of the LTU in May 2011 (MEFP, ¶22).

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[6] The bill approved by parliament is not yet available; it is being redrafted to include amendments, ahead of presidential signature and publication.

[7] The budget repealed the power of the Ghana Investment Promotion Council (GIPC) to extend tax exemptions and took steps to streamline tax exemptions for real estate developers.

D. Steps to Manage Public Spending

The government is reinforcing expenditure controls to support fiscal consolidation and avoid further domestic arrears.

Expenditure management systems

28. **Spending targets were missed in 2010**. Discussions focused on the need to better manage non-interest spending, which rose 13 percent faster than programmed in 2010, notably in the area of goods and services and investment programs.[8] The government emphasized that much of this pressure (and the associated arrears) related to spending on projects that were launched in the final year of the preceding administration. Moreover, while underlining their determination to reinforce spending discipline, the government noted the widespread view that public spending had helped Ghana weather and subsequently recover from the global financial crisis. Staff noted the importance of a clear message that fiscal stimulus cannot deliver sustained improvements in growth and living standards.

29. **The government sought Fund advice on institutional reforms to ensure effective spending restraint**. A February 2011 TA mission identified systemic weaknesses in spending controls dating back to the mid-1990s, including weak PFM systems and processes, ineffective warrant and release mechanisms, and patchy compliance with commitment controls. The authorities indicated their resolve to adopt the key recommendations of this mission.

30. **The government has already taken steps to better control spending discipline**. After spending pressures were identified as a continuing obstacle to fiscal consolidation in the administration's second year, the president issued in October 2010 a directive to spending units to strictly comply with Ghana's commitment control regime; this was reiterated in the January 2011 budget instructions (MEFP ¶30). The authorities report that this is having an important impact on spending levels. Cash domestic and foreign financed capital spending was up 8 percent on a year earlier in the first quarter of 2011, compared to budgeted spending growth of 11 percent for the full year. The effectiveness of spending discipline will be more clearly established with the first quarterly report on arrears for June 2011 (MEFP ¶34), where the authorities aim at no new arrears, in contrast to the accumulation of arrears to contractors of 1.8 percent of GDP in 2010.

31. **Consistent with the February 2011 TA recommendations, the planning and monitoring of spending is being strengthened.** This involves developing more strategic and realistic expenditure budgets, and reinstating quarterly ceilings for managing spending,

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[8] Measured including expenditure arrears, but excluding higher than programmed foreign financed capital investments.

and warrant and expenditure control mechanisms for adoption within Ghana's Integrated Financial Management Information System (GIFMIS) (MEFP ¶26–28). The GIFMIS roll out to 14 pilot ministries (March 2011 benchmark) was not possible due to financial and technical issues; instead, the system will be rolled out comprehensively to all spending units from January 2012 (MEFP ¶27).

Managing the public wage bill

32. **Ghana's public wage bill has been a source of expenditure pressure**. Between 2007 and 2010, the wage bill rose from 6 to more than 7 percent of GDP, a level higher than in many peer countries. A further rise in the wage bill to 7½ percent of GDP is projected for 2011, as a result of the new "single spine" pay structure. The precise cost of the new pay regime will depend on a service-by-service pay mapping exercise. To prevent any budget overruns, the migration to the new system will be phased to fit within the pay envelope (MEFP, ¶38–40). To ease budget planning, staff urged that public sector pay negotiations be conducted before the start of the budget year, rather than mid-year, as at present.

33. **Better staffing oversight is needed.**[9] The ongoing migration of public agencies to a central payroll database is beginning to provide better oversight of outlays. Comprehensive migration has been delayed by some groups seeking to protect contested allowances, but with renewed high level support the migration is targeted for completion by mid-2011 (MEFP, ¶39). Control of the pension payroll will be strengthened through the introduction of biometric identification technology, to be extended later to the wage payroll subsequent to the audits conducted on the Health and Education Services (MEFP, ¶40). Subvented agencies to be commercialized or liquidated have been identified with independent consultant support, with the list submitted to Cabinet for decision in March 2011 (delayed from the December 2010 benchmark).

Other spending rigidities

34. **A large part of revenues is allocated inflexibly**. In 2010, about 20 percent of tax revenues accrued to statutory funds based on mandatory revenue-sharing rules, while departments retained internally-generated funds for their own use equivalent to a further 11 percent of tax revenues. These procedures can result in resource misallocations. The government took an initial step toward greater flexibility by agreeing with the statutory funds that, starting in 2011, 30 percent of their earmarked revenues would finance social programs that would otherwise have required funding from the budget. Staff recommended that internally generated funds be transferred to the consolidated fund, and departmental operations be financed instead with appropriated resources.

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[9] World Bank analysis suggests that the large real wage increases in recent years were a response to earlier under-compensation, and that the priority is to tackle the size of Ghana's public sector workforce.

E. Tighter Control Over Expenditure Arrears and Debt

Arrears and debt need to move center-stage as key issues of fiscal management.

Arrears management

35. **Staff urged stepped-up efforts toward regularizing expenditure arrears**. Progress has been hampered by a lack of comprehensive data on arrears and clear responsibilities for arrears monitoring and policies within the Ministry of Finance. Following TA advice, responsibility for monitoring the arrears position is being better defined, and a stocktaking exercise and audits (where necessary) will be conducted. This will provide the required information to design later in 2011 a comprehensive strategy for regularizing arrears using a mix of bonds and cash (MEFP ¶36). With a number of priority projects jeopardized by nonpayment, cash payments to settle arrears equivalent to 1.1 percent of GDP were made in early 2011, while a second tranche of public bonds amounting to 1.1 percent of GDP was issued to clear TOR's debts to the Ghana Commercial Bank (GCB).[10]

Debt management

36. **Good progress has been achieved in deepening debt management skills and policies in 2010**. Both 2010 structural benchmarks were met, and commercial borrowing has been tightly managed, with a large loan renegotiated before signature when updated calculations showed that it fell short of the required grant element. Further advances in debt management are planned for the year ahead, including through issuing a second annual debt management strategy (MEFP ¶49).

37. **The updated debt sustainability assessment (DSA) shows lower risks of debt distress than in the scenarios developed a year ago**. External debt indicators are projected to remain well below relevant thresholds, even under adverse shock scenarios (Debt Sustainability Analysis, Supplement 1).[11] This outcome reflects the upward revision to GDP (which affects debt- and debt service to GDP ratios) and lower projections for commercial financing, consistent with the recent cautious pace of such borrowing. The favorable DSA depends critically on sustained fiscal consolidation and continuing robust economic growth.

38. **Rising rollover risks should be monitored closely.** Fiscal financing was eased in 2010 by resumed nonresident purchases of 3-year treasury bonds, in an amount equivalent to nearly 2½ percent of GDP. As a result, the share of domestic debt held by nonresidents rose to 19 percent at end-2010, up from 8 percent a year earlier. Continued reliance on financing at this level carries risks, and consistent with goals to reduce reliance on such

[10] Debt service on these bonds is covered by a levy on petroleum products.

[11] See IMF Country Report No. 10/178, Appendix II.

short-term external funding, the adjustment program is designed to be sustainable with nonresident inflows at half this level or less (Table 2B). This would be broadly offset by increased commercial borrowing, albeit at generally longer maturities. Based on Ghana's improved debt management performance and the more favorable DSA, the program provides for an increase in the untied commercial borrowing ceiling for projects outside the oil and gas sectors from $300 million in 2010 to $500 million annually for 2011–12 (MEFP ¶52).

F. Energy Sector Issues

Progress in adjusting energy prices to market conditions should continue.

39. **The cost-recovery power tariffs established in 2010 are being protected by quarterly tariff reviews**. In the first review, effective March 2011, the regulatory commission authorized a 17 percent average tariff reduction based on cheaper natural gas imports from Nigeria and stepped up hydro production. Staff noted the importance of keeping costs closely under review, and being ready to raise tariffs, as needed.

40. **Petroleum pump prices were raised 30 percent in January 2011 to cost recovery levels after a rise in global prices in late-2010**. Hedging operations conducted since October 2010 have provided protection from global price increases since January. With the benefits of hedging, pump prices can be maintained at current levels through mid-2011. If global prices remain at current levels, a pump price increase of 15 percent or more would be required at that time. The government is determined to ensure that petroleum pricing does not result in a new fiscal burden, and the need for pricing adjustments will be revisited ahead of the next review (MEFP ¶45). Staff recommended smaller and more frequent petroleum pricing adjustments, to avoid large adjustment shocks.

41. **The bulk of TOR's bank liabilities were cleared through public debt issues (paragraph 35).** As a result, it has regained operational independence.[12] Plans to modernize the refinery and strengthen its longer-term commercial viability have been developed and will be shared with the World Bank for its assessment (MEFP ¶46).

G. Monetary, Exchange Rate and Financial Policies

Upside inflation risks will require close attention, and actions to address banking sector vulnerability need to continue.

[12] TOR's financial viability will depend on its future investment needs, and how these would be financed. This will be addressed in the modernization plan.

Monetary and exchange rate policy

42. **Discussions focused on how to manage the monetary implications of Ghana's strong balance of payments.** Although inflationary pressures from rising petroleum prices and strong domestic growth have been offset, so far, by the beneficial impact of broad currency stability, risks are on the upside. Strong capital inflows could also pose a challenge for liquidity and exchange rate management, with implications for price stability. The BoG indicated that policies would continue to aim at keeping inflation within a narrow band around the target rate. Staff recommended that the BoG stand ready to tighten policies, if needed, to counter emerging pricing pressures.

43. **The authorities remain committed to exchange rate flexibility in support of their inflation targeting regime**. In practice, the BoG has taken advantage of balance of payments surpluses to strengthen reserve cover, while maintaining broad currency stability against the dollar. Staff supported the buildup of Ghana's reserve cover, which remains modest, particularly in light of growing portfolio capital flows. The authorities were alert to the liquidity consequences of the projected reserve accumulation, and arrangements to share the cost of sterilization operations with the budget have been developed. Staff recommended that the BoG's systems and tools for exchange market monitoring and intervention be further developed, to reflect the BoG's evolving role at the center of the currency market as portfolio and other capital flows increase. The BoG intends to request TA in these areas.

44. **The staff's analysis suggests that the valuation of Ghana's currency is broadly in line with fundamentals** (Appendix I). This is consistent with the continuing strong growth of non-traditional exports (albeit from a low base). The authorities indicated their commitment to a floating exchange rate policy supportive of the inflation targeting regime. They concurred that currency valuation is not a pressing issue, while underlining the need to keep competitiveness under close review, given tensions between Ghana's recent broad currency stability and its inflation premium over trading partners. Non-price factors were identified as a core challenge for competitiveness. Ghana's business climate out-performs many regional commodity exporting peers, but is not competitive with more successful manufacturing exporters like South Africa.

Financial Sector Issues

45. **The FSAP update and Article IV consultation missions discussed weaknesses in credit intermediation by Ghanaian banks**. Banks' interest rate spreads are wide (as much as 20 percentage points between deposit and lending rates), reflecting high overhead and staffing costs and the current burden of high NPLs. The expansion from 16 to 26 banks between 2000 and 2010 has bid up funding costs rather than reducing loan rates. There are wide variances in credit terms between high and low-tier borrowers, owing to differences in the pricing of credit risk and intense competition for top tier borrowers. Reforms to strengthen institutional and legislative frameworks for insolvency and creditor protection

have been implemented in recent years, including the establishment of a credit reference bureau, but these reforms need to take hold. Due to a weak legal framework and enforcement, banks' accounting practices do not comply with best international standards. Majority state ownership in some banks has also contributed to weak risk management practices, as well as overexposure to certain sectors and borrowers.[13] The authorities see prospects for improved industry performance, as higher minimum capital requirements encourage consolidation.

46. **The BoG is addressing banking sector vulnerabilities drawing on the recommendations of the 2010 FSAP Update mission**. The BoG is strengthening banking supervision, including through coordination on cross-border supervision of banks with other regional central banks, and is taking steps to promote stronger risk management practices in the industry and addressing corporate governance in state banks. A strategy for weak banks is being developed, which would comprise audits of some of the banks to establish their true financial position. The BoG is reviewing the banking laws to enhance its ability to address troubled institutions, and plans to relinquish its ownership interest in two domestic banks where there is a potential conflict of interest with its role as supervisor (MEFP ¶56).[14]

47. **An unresolved issue is the role of the social security trust (SSNIT) within the financial system**. Being a majority shareholder in several banks and a large depositor with others conflicts with its role as a manager of pensions and distorts the operations of the financial system. The authorities recognized the importance of the issue and intend to explore options for an exit strategy for SSNIT as a majority shareholder in financial institutions.

48. **The BoG is strengthening its AML/CFT supervisory framework and capacity.** The recent IMF technical assistance mission identified several areas where further progress is needed, in particular related to the capacity of the Banking Supervision Department and the recently established Anti-money Laundering Office.

IV. Program Design and Financing

A. Program Design

49. **Quantitative targets** through end-June 2012 are presented in Appendix Table 2 of the MEFP. Given the priority of expanding Ghana's tax base, the program includes a new indicative target for non-oil tax revenue collections. Reflecting Ghana's more open capital account and financial market integration, and its strengthened debt management capacity, a

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[13] The state has a controlling interest in five banks accounting for 30 percent of the banking system assets. See the Financial System Stability Assessment (FSSA) report for further details.

[14] In the interim, these banks have been placed in an independent trust.

change from residency to currency criterion (where any borrowing denominated in foreign currency is considered external) has been introduced to better monitor borrowing in foreign currencies under the program (TMU ¶27).

50. **Structural benchmarks** through June 2012 focus on strengthening revenue administration, reinforcing the management of public expenditures, arrears, and debt, establishing pay comparability data, pricing of energy products, and addressing banking sector vulnerability (MEFP; Appendix Table 3).

B. Program Financing

51. **Financing for the 2011 adjustment program includes $215 million of World Bank support**. The World Bank credit was approved in January 2011, informed by an IMF assessment letter. While the government continues to seek concessional resources to accelerate its arrears repayments, the program does not give rise to any fiscal financing gap beyond the disbursed World Bank resources and other funding already included in the fiscal baseline.

52. **Balance of payments financing of about $187 million is provided by the ECF arrangement in 2011, with a further $186 million in 2012**. A proposed change to the phasing of ECF disbursements would back-load resources from the third and fourth reviews to the remaining program period, consistent with Ghana's stronger-than-programmed external performance and revised policy commitments.[15]

V. Staff Appraisal

53. **Although some important gains were achieved in 2010, a valuable opportunity for fiscal adjustment was missed**. Ghana experienced an unusually favorable external environment, including strong terms of trade, good rainfalls, and a recovery of nonresident demand for domestic bonds. This underpinned important achievements: rising growth, increased reserve cover, a currency that held its value, and lower inflation. But a failure to maintain the momentum of fiscal adjustment was a significant setback under the program. Although electricity tariffs were substantially increased to eliminate subsidy burdens and tax revenues met budget goals, the budget proved to be over-reliant on non-tax revenues and the government did not adequately rein in spending pressures. Weak institutions and insufficiently robust policy implementation both played a role.

54. **More robust fiscal management is needed in 2011**. The environment remains supportive, reinforced by the launch of oil production at very favorable prices. This provides

[15] Gross reserve cover at end-2010 was $4.7 billion (3.2 months of import cover), compared to a programmed $3.7 billion (2.9 months of import cover).

a window of opportunity to strengthen non-oil tax collections and expenditure control. A welcome start was made by adjusting petroleum pump prices to avoid new subsidy burdens, and by deciding to save a large part of Ghana's initial oil incomes. Continued decisive implementation of the fiscal program will be needed to restore budget space over the medium term to fund development programs and infrastructure modernization.

55. **Structural reforms should be accelerated**. Fiscal imbalances reflect, in part, institutional weaknesses: inefficient and leaky tax administration; opaque payroll management; an overly large public service; and patchy compliance with commitment controls by spending ministries. Good progress has been made in strengthening debt management practices, and it will be important to move forward more robustly with other elements of the reform agenda.

56. **Clear and transparent management of oil revenues is a priority**. With the petroleum revenue management bill only recently approved by parliament, procedures are still being refined for how to treat oil-related operations in the fiscal accounts and BoG balance sheets. It will be important that incomes, expenditures, and savings associated with oil wealth be transparently and comprehensively recorded for dissemination, analysis, and audit purposes.

57. **Energy pricing remains an area of risk**. With public institutions playing an important role in power production and sourcing petroleum products, pressures to limit pricing pass-through remain strong. The adoption of quarterly power tariff reviews is welcome. For petroleum products, more frequent, smaller pricing adjustments in line with market trends would help depoliticize the pricing process.

58. **Monetary policy implementation will need to remain vigilant**. Rising global commodity prices and strong domestic liquidity expansion present upside risks to inflation, and the BoG should stand ready to tighten policies in support of the inflation target, if needed.

59. **Ghana's flexible exchange rate policy remains appropriate, and the currency's valuation is estimated to be broadly in line with fundamentals**. Sterilized intervention has helped limit the liquidity impact of the strong balance of payments, and the associated reserve buildup provides a cushion to manage the potential risks from portfolio financing flows. The BoG is encouraged to give a high priority to developing its capacity to monitor balance of payments developments and its policies and tools for currency market intervention.

60. **The authorities have made good progress in reducing immediate stability risks in the banking sector, but long term financial stability will require a sustained and comprehensive reform effort.** Priority should be given to updating Ghana's financial sector strategy and to reviewing the current extent of state involvement in the banking industry. A concerted effort is needed to resolve vulnerable institutions, strengthen risk

management in banks, enhance supervisory capacity and enforcement of prudential regulations, as well as strengthen corporate governance, accounting standards, and creditor rights.

61. **Based on Ghana's performance and the strength of the program for 2011–12, staff recommends completion of the third and fourth reviews under the ECF arrangement**. Given steps to strengthen fiscal performance drawing on the lessons from 2010, including new fiscal measures for 2011, reforms to tax administration and expenditure and arrears management, staff supports the requested waiver on the nonobservance of the performance criteria on the net change in domestic arrears and on the overall fiscal balance at end-December 2010. At the same time, there are substantial risks under the program and, to mitigate these risks, the authorities will need to implement the program with much greater determination than in the past.

62. **Staff proposes that the next Article IV consultation take place within 24 months, in accordance with the decision on consultation cycles in program countries**.

Table 1. Ghana: Selected Economic and Financial Indicators, 2007–13 [1]

	2006	2007	2008	2009	2010		2011		2012	2013
					ECF 2nd rev.	Est.	ECF 2nd rev.	Proj.	Proj.	Proj.
	(Annual percentage change; unless otherwise specified)									
National accounts and prices										
Real GDP	4.6	6.5	8.4	4.7	4.5	5.7	20.1	13.7	7.3	6.1
Real GDP (nonoil)	4.6	6.5	8.4	4.7	4.5	5.7	5.6	6.5	6.6	6.6
Real GDP per capita	1.9	3.8	5.7	2.0	1.9	3.1	17.2	10.8	4.6	3.5
GDP deflator	14.7	16.3	20.2	16.7	12.8	14.1	9.0	11.2	8.7	8.6
Consumer price index (annual average)	10.2	10.7	16.5	19.3	10.8	10.7	8.9	8.7	8.7	8.1
Consumer price index (end of period)	10.9	12.7	18.1	16.0	9.5	8.6	8.5	9.0	8.5	8.0
External sector										
Exports, f.o.b. (percentage change, in US$)	33.0	11.9	26.3	10.8	12.2	35.2	48.5	64.6	13.2	6.4
Excluding oil exports	33.0	11.9	26.3	10.8	12.2	35.2	1.1	20.9	10.9	9.8
Imports, f.o.b. (percentage change, in US$)	26.3	19.4	27.3	-21.6	28.0	33.0	19.2	33.4	8.9	6.3
Export volume (excluding oil)	18.7	3.1	16.9	2.6	5.5	13.9	8.0	10.3	11.2	11.3
Import volume	13.9	8.6	6.9	-3.5	20.4	19.3	17.4	16.8	8.3	7.1
Terms of trade	1.0	-1.3	-9.3	33.0	0.0	6.5	-7.8	-4.0	-0.8	-0.7
Nominal effective exchange rate (end of period)	-7.6	-11.3	-11.3	-21.7	…	-0.6	…	…	…	…
Real effective exchange rate (end of period; depreciation -)	0.1	-3.9	1.3	-11.2	…	6.1	…	…	…	…
Cedis (new) per U.S. dollar (end of period)	0.92	1.0	1.2	1.4	…	1.5	…	…	…	…
Money and credit										
Net domestic assets[2]	18.4	27.8	48.3	3.9	14.6	16.2	17.7	14.1	11.3	8.2
Credit to the private sector[2]	25.8	37.1	33.3	12.9	14.2	20.3	18.5	15.4	22.0	15.3
Real private sector credit (% annual changes)	28.6	41.9	25.4	0.5	8.7	17.1	15.5	13.3	22.4	11.1
Broad money (excluding foreign currency deposits)	39.4	43.0	31.2	21.2	22.6	45.7	28.0	20.5	16.3	16.6
Velocity (GDP/average broad money)	5.6	4.9	4.8	4.9	4.8	4.0	4.6	3.9	3.9	3.9
Prime rate (Bank of Ghana; percent; end of period)	12.5	13.5	17.0	18.0	…	13.5	…	…	…	…
	(Percent of GDP)									
Investment and saving										
Gross investment	21.6	22.9	21.5	19.6	20.5	21.8	20.4	20.5	20.6	20.1
Private[3]	21.6	16.6	18.5	17.9	14.2	19.9	14.5	18.7	19.0	18.6
Central government	0.0	3.5	2.9	1.7	6.3	1.9	5.9	1.8	1.6	1.6
Gross national saving	15.5	15.1	12.0	15.6	13.4	14.6	15.3	13.0	15.1	16.0
Private[3]	10.6	10.4	9.2	12.3	9.8	12.1	9.6	7.5	8.3	8.8
Central government	4.9	4.7	2.8	3.3	3.6	2.5	5.7	5.5	6.8	7.2
Foreign savings	6.2	8.0	10.8	4.0	7.1	7.2	5.1	7.5	5.5	4.2
	(Percent of nonoil GDP)									
Government operations										
Total revenue	13.7	13.8	13.3	13.4	15.2	15.0	18.4	18.5	19.8	20.4
Grants	3.4	3.7	2.7	3.0	3.0	2.4	2.8	2.6	1.7	1.7
Total expenditure	21.4	22.7	24.0	20.4	22.4	23.5	22.3	24.1	22.9	23.0
Arrears clearance and VAT refunds	0.5	0.4	0.6	1.8	0.6	1.5	1.7	1.7	1.1	1.1
Overall balance (including grants)	-4.7	-5.6	-8.5	-5.8	-4.7	-7.7	-2.8	-4.7	-2.5	-1.9
Net domestic financing	3.1	0.8	5.7	2.8	3.8	4.8	1.6	3.0	-0.3	0.3
Gross government debt	26.2	31.0	33.6	36.0	38.2	38.9	38.7	42.8	42.4	42.2
Domestic debt	15.5	16.0	17.4	16.6	17.6	18.6	17.9	19.4	18.7	18.7
External debt	10.7	15.0	16.2	19.4	20.5	20.3	20.8	23.4	23.6	23.5
Government debt (net)		23.3	30.1	32.4	…	35.5	…	39.6	37.2	35.5
	(Percent of GDP; unless otherwise specified)									
External sector										
Current account balance (including official transfers)	-6.2	-8.0	-10.8	-4.0	-7.1	-7.2	-5.1	-7.5	-5.5	-4.2
Current account balance (excluding official transfers)	-8.1	-9.6	-13.3	-7.3	-9.6	-9.0	-7.1	-9.4	-6.7	-5.4
NPV of external debt outstanding	11.1	12.2	11.8	15.9	15.2	16.5	13.7	17.8	18.0	17.8
percent of exports of goods and services	…	50.5	47.6	54.4	53.2	54.5	42.8	45.1	47.7	50.0
Gross international reserves (millions of US$)	2,270	2,837	2,036	3,165	3,701	4,725	4,651	5,700	6,671	7,949
months of imports of goods and services	2.7	2.7	2.2	2.8	2.9	3.2	3.6	3.6	4.0	4.5
Total donor support (millions of US$)	3,876	1,412	1,434	1,790	1,515	1,644	1,443	2,066	1,598	1,395
percent of GDP	19.0	5.7	5.0	6.9	5.0	5.3	3.9	5.5	3.7	2.9
Memorandum items:										
Nominal GDP (millions of GHc)	18,705	23,154	30,179	36,867	44,465	44,465	56,226	56,226	65,558	75,545

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

[1] Based on new national accounts rebased to 2006, with the 2nd ECF review ratios adjusted to reflect the new GDP data.

[2] Percent of broad money (including foreign currency deposits) at the beginning of the period.

[3] Including public enterprises and errors and omissions.

Table 2A. Ghana: Summary of Central Government Budgetary Operations, 2007–13

	2007	2008	2009	2010 2nd rev.	2010 Est.	2011 2nd rev.	2011 Proj.	2012 Proj.	2013 Proj.
	(Percent of nonoil GDP, unless otherwise specified)								
Total revenue and grants	17.5	16.0	16.4	18.3	17.4	20.5	21.1	21.5	22.1
Revenue	13.8	13.3	13.4	15.2	15.0	17.8	18.5	19.8	20.4
Oil revenue	…	…	…	…	…	3.3	2.4	3.6	3.3
Nonoil revenue	13.8	13.3	13.4	15.2	15.0	14.5	16.1	16.1	17.1
Tax revenue	13.3	12.9	12.2	13.6	13.8	13.8	14.9	15.6	16.4
Direct taxes	4.1	4.2	4.7	5.4	5.5	5.4	6.1	6.3	6.6
Indirect taxes	6.8	6.4	5.4	5.8	5.7	6.0	6.1	6.5	6.7
Trade taxes	2.5	2.4	2.1	2.4	2.6	2.4	2.7	2.8	3.1
Nontax revenue	0.5	0.4	1.3	1.7	1.2	0.7	1.1	0.5	0.7
Grants	3.7	2.7	3.0	3.0	2.4	2.7	2.6	1.7	1.7
Total expenditure	22.7	24.0	20.4	22.4	23.5	21.6	24.1	22.9	23.0
Recurrent expenditure	13.9	14.8	13.3	16.1	15.7	15.1	16.0	15.6	16.1
Recurrent Non-interest expenditure	12.0	12.6	10.5	13.1	12.4	12.3	12.7	12.4	12.6
Wages and salaries	6.1	6.6	6.7	7.8	7.2	7.7	7.6	7.3	7.5
Goods and services	2.4	2.1	1.7	1.2	2.2	1.2	1.8	1.9	1.9
Transfers	2.6	2.9	1.6	3.3	2.1	2.5	2.5	2.4	2.4
Reserve Fund	0.8	0.9	0.5	0.8	1.1	0.9	0.8	0.8	0.8
Interest costs	1.9	2.3	2.8	3.0	3.2	2.8	3.3	3.2	3.4
domestic	1.4	1.6	2.1	2.3	2.5	2.2	2.7	2.3	2.4
foreign	0.5	0.7	0.7	0.7	0.7	0.6	0.6	1.0	1.1
Capital expenditure (total)	8.7	9.1	7.1	6.3	7.8	6.5	8.2	7.3	7.0
Domestic	5.6	6.1	2.7	3.0	3.3	3.4	3.8	4.8	4.6
Foreign	3.1	3.0	4.4	3.3	4.6	3.1	4.3	2.4	2.3
Arrears clearance	-0.3	-0.5	-1.7	-0.5	-1.4	-1.5	-1.6	-1.0	-0.9
VAT refunds	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Overall balance (after arrears)	-5.6	-8.5	-5.8	-4.7	-7.7	-2.7	-4.7	-2.5	-1.9
Discrepancy	-0.2	0.4	-0.2	0.0	-0.9	0.0	0.9	0.0	0.0
Total financing	5.4	8.9	5.6	4.7	6.7	2.7	5.7	2.5	1.9
Divestiture receipts (net)	0.5	2.3	0.0	-1.0	-1.0	0.0	-1.1	0.0	0.0
Foreign (net)	3.7	0.6	2.6	1.6	2.7	0.9	3.5	2.6	1.4
Exceptional financing (debt relief, bilateral)	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Domestic (net)	0.8	5.7	2.8	3.8	4.8	1.6	3.0	-0.3	0.3
Banking system	-1.4	4.2	2.1	2.2	2.2	0.8	1.4	-1.8	-1.2
Net Transfer to Oil Fund	…	…	…	…	…	…	-0.7	-2.3	-2.3
Other	-1.4	4.2	2.1	2.2	2.2	0.8	2.2	0.5	1.1
Non-bank	2.2	1.6	0.7	1.6	2.6	0.8	1.6	1.6	1.6
of which: non resident purchase of T bills	0.0	1.5	0.1	…	2.4	…	1.2	1.1	0.9
Memorandum items:									
Total poverty spending	5.7	5.2	5.0	4.9	5.4	5.5	5.4	5.4	5.4
Revenue transfers to statutory funds	3.5	3.2	2.0	3.6	2.8	3.6	3.8	3.9	4.0
Tax exemptions	1.0	1.6	0.9	0.5	0.9	0.0	0.5	0.5	0.5
Primary balance	-3.7	-6.2	-3.0	-1.7	-4.4	0.1	-1.4	0.8	1.5
Domestic primary balance	-3.7	-6.2	-3.0	-1.7	-4.4	0.1	-1.4	0.8	1.5
Budget balance (commitment basis)	-5.9	-12.5	-6.4	-4.5	-8.4	-1.5	-3.4	-1.5	-1.0
Outstanding domestic payments arrears[1]	0.6	4.5	4.3	3.0	5.4	1.5	2.4	1.1	0.0
Total government debt (gross)	31.0	33.6	36.0	38.1	38.9	37.4	42.8	42.4	42.2
Domestic debt	16.0	17.4	16.6	17.7	18.6	17.3	19.4	18.7	18.7
External debt	15.0	16.2	19.4	20.5	20.3	20.1	23.4	23.6	23.5
Total government debt (net)	23.3	30.1	32.4	…	35.5	…	39.6	37.2	35.5
Nominal nonoil GDP (millions of GHc)	23,154	30,179	36,867	44,083	44,465	49,492	51,567	59,993	69,931

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

[1] Excludes SOEs' liabilities.

Table 2B. Ghana: Summary of Central Government Budgetary Operations, 2007–13

	2007	2008	2009	2010		2011		2012	2013
				2nd rev.	Est.	2nd rev.	Proj.	Proj.	Proj.
	(Millions of GHc, unless otherwise specified)								
Total revenue and grants	4,052	4,839	6,048	8,057	7,739	10,139	10,875	12,907	15,478
Revenue	3,195	4,019	4,947	6,722	6,659	8,802	9,529	11,865	14,278
Oil revenue	…	…	…	…	…	1,629	1,251	2,188	2,299
Nonoil revenue	3,195	4,019	4,947	6,722	6,659	7,173	8,278	9,678	11,979
Tax revenue	3,082	3,893	4,485	5,993	6,118	6,843	7,697	9,355	11,461
Direct taxes	940	1,253	1,717	2,396	2,454	2,671	3,130	3,767	4,615
Indirect taxes	1,565	1,920	2,006	2,549	2,518	2,961	3,150	3,879	4,712
Trade taxes	577	719	763	1,048	1,146	1,211	1,417	1,709	2,133
Nontax revenue	113	126	461	728	541	330	582	322	518
Grants	857	821	1,101	1,336	1,080	1,338	1,347	1,042	1,200
Total expenditure	5,245	7,229	7,521	9,870	10,461	10,690	12,442	13,730	16,089
Recurrent expenditure	3,228	4,469	4,904	7,081	6,974	7,466	8,228	9,377	11,225
Recurrent Non-interest expenditure	2,788	3,789	3,872	5,758	5,535	6,083	6,540	7,430	8,821
Wages and salaries	1,419	1,988	2,479	3,436	3,183	3,823	3,910	4,394	5,251
Goods and services	565	648	621	516	962	610	952	1,128	1,317
Transfers	612	878	604	1,438	920	1,226	1,274	1,431	1,696
Miscellaneous payments/Reserve Fund	192	275	168	368	471	425	404	478	557
Interest costs	440	679	1,032	1,323	1,439	1,383	1,688	1,946	2,404
domestic	322	482	774	1,035	1,124	1,067	1,372	1,372	1,658
foreign	118	197	259	288	315	316	316	574	745
Capital expenditure (total)	2,017	2,760	2,616	2,789	3,486	3,224	4,214	4,354	4,865
Domestic	1,291	1,844	990	1,321	1,454	1,704	1,981	2,887	3,248
Foreign	726	916	1,627	1,468	2,033	1,520	2,233	1,467	1,617
Arrears clearance	-77	-142	-626	-223	-642	-740	-809	-600	-655
VAT refunds	-23	-26	-31	-42	-45	-49	-53	-68	-83
Overall balance (after arrears)	-1,293	-2,558	-2,131	-2,077	-3,408	-1,340	-2,429	-1,490	-1,349
Discrepancy	-46	133	-69	0	-409	0	489	0	0
Total financing	1,247	2,690	2,062	2,077	3,000	1,340	2,918	1,490	1,349
Divestiture receipts (net)	115	707	6	-440	-445	0	-572	0	0
Foreign (net)	861	171	955	708	1,209	447	1,824	1,538	998
Exceptional financing (debt relief, bilateral)	92	78	59	122	93	118	122	119	118
Domestic (net)	180	1,735	1,042	1,688	2,143	775	1,544	-167	234
Banking system	-324	1,255	767	988	973	387	744	-1,098	-851
Net Transfer to Oil Fund	…	…	…	…	…	…	-375	-1,408	-1,609
Other	-324	1,255	767	988	973	387	1,120	310	758
Non-bank	504	479	275	700	1,170	387	800	931	1,085
of which: non resident purchase of T bills	0	439	44	…	1,081	…	640	651	651
Memorandum items:									
Nominal nonoil GDP (millions of GHc)	23,154	30,179	36,867	44,083	44,465	49,492	51,567	59,993	69,931
Poverty-reducing expenditures	1,318	1,584	1,856	2,177	2,411	2,712	2,797	3,254	3,809
Domestic arrears									
New arrears	142	1,351	866	113	1,472	150	132	0	0
Arrears cleared	77	142	627	223	642	740	1,298	600	655
Arrears outstanding[1]	142	1,351	1,591	1,319	2,421	729	1,254	655	0
Fiscal balance (commitment basis)	-1,359	-3,767	-2,370	-1,967	-3,750	-750	-1,752	-891	-694

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

[1] Excludes SOEs' liabilities.

Table 3. Ghana: Monetary Survey, 2007–13
(Millions of cedis, unless otherwise indicated)

	2007	2008	2009	Dec. 2010		2011				2012	2013
	Dec.	Dec.	Dec.	2nd		Mar	Jun	Sep	Dec	Dec.	Dec.
	Act.	Act.	Act.	rev.	Act.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Bank of Ghana											
Net foreign assets	2,466	1,809	3,261	3,805	5,293	5,220	4,831	4,841	6,568	7,744	10,292
(in millions of U.S. dollars)	2,542	1,485	2,273	2,597	3,591	3,480	3,221	3,227	4,379	5,163	6,440
Net domestic assets, of which:	-716	416	-229	-267	-879	-908	-469	-329	-1,252	-1,559	-3,083
Claims on government (net)	255	1,448	1,355	1,715	1,282	1,328	1,374	1,194	1,014	-205	-1,615
Other items, net (assets +)	-287	-562	-799	-895	-900	-900	-900	-900	-900	-900	-900
Reserve money (RM), of which:	1,751	2,225	3,032	3,538	4,414	4,312	4,362	4,512	5,317	6,185	7,210
Currency outside banks	1,302	1,664	2,084	2,490	2,926	2,686	2,686	2,796	3,481	4,154	4,967
Bank reserves	441	516	872	972	1,315	1,453	1,503	1,543	1,663	1,858	2,070
Monetary survey											
Net foreign assets	2,529	2,064	3,925	4,480	5,806	5,676	5,205	5,174	6,861	7,790	10,079
(in millions of U.S. dollars)	2,606	1,703	2,733	3,058	3,950	3,784	3,470	3,450	4,574	5,194	6,307
Net domestic assets	3,222	5,997	6,308	7,807	7,970	8,101	8,646	9,155	9,919	11,816	13,415
Domestic credit	5,254	8,382	10,149	11,779	12,764	13,225	13,767	14,166	14,750	16,648	18,233
Claims on government (net)	1,104	2,398	3,169	3,946	4,263	4,449	4,635	4,821	5,007	3,910	3,060
Claims on non-government	4,150	5,984	6,979	7,833	8,502	8,776	9,133	9,345	9,744	12,738	15,174
Other items, net (assets +)	-2,036	-2,396	-3,860	-3,972	-4,826	-4,834	-4,833	-4,832	-4,832	-4,832	-4,818
Broad money (M2+)	5,751	8,061	10,233	12,286	13,775	13,777	13,851	14,329	16,780	19,606	23,494
Currency	1,302	1,664	2,084	2,490	2,926	2,396	2,397	2,617	3,481	4,154	4,967
Deposits	4,448	6,397	8,149	9,797	10,850	11,381	11,454	11,712	13,299	15,452	18,527
Domestic currency deposits	3,456	4,581	5,484	6,788	8,101	8,383	8,289	8,437	9,801	11,298	13,045
Foreign currency deposits	993	1,817	2,664	3,009	2,749	2,998	3,165	3,276	3,497	4,154	5,482
(in millions of U.S. dollars)	1,023	1,496	1,865	2,054	1,865	2,025	2,138	2,213	2,332	2,769	3,430
Broad money (M2) [1]	4,758	6,244	7,569	9,278	11,026	10,779	10,686	11,054	13,282	15,452	18,012
Memorandum items:	(Annual percentage change, unless otherwise indicated)										
Broad money (M2)	43.0	31.2	21.2	22.6	45.7	31.7	25.1	25.2	20.5	16.3	16.6
Broad money (M2+)	35.9	40.2	26.9	20.1	34.6	29.0	25.0	25.0	21.8	16.8	19.8
Reserve money (RM)	30.5	27.1	36.3	16.7	45.6	37.5	56.8	43.3	20.5	16.3	16.6
Bank of Ghana NDA; at program exchange rate [2]	…	72	-264	-228	-793	-908	-469	-329	-1252	-1559	-2450
Velocity (non-oil GDP/end-of-period M2)	4.9	4.8	4.9	4.8	4.0	…	…	…	3.9	3.9	3.9
Reserve money multiplier (M2/RM)	2.7	2.8	2.5	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Foreign currency deposits to total deposits	22.3	28.4	32.7	30.7	25.3	26.3	27.6	28.0	26.3	26.9	29.6
Currency-to-deposits	29.3	26.0	25.6	25.4	27.0	23.6	23.4	23.9	26.2	26.9	26.8
Credit to the private sector	59.7	48.2	16.5	19.0	27.1	34.8	35.0	35.1	23.6	32.8	20.0
Real credit to private sector (% changes) [3]	41.6	25.5	0.5	8.7	17.1	24.0	23.9	24.3	13.3	22.4	11.1

Sources: Bank of Ghana, and IMF staff estimates and projections.

[1] Excluding foreign currency deposits.

[2] In millions of cedis. The program exchange rate is GHc 1.45 per U.S. dollar for 2009-10 and GHc 1.50 per U.S. for 2011-12.

[3] Deflated by the Consumer Price Index.

Table 4. Ghana: Balance of Payments, 2007–13

	2007	2008	2009	2010		2011		2012	2013
				2nd rev.	Act.	2nd rev.	Proj.	Proj.	Proj.
	(Millions of US dollars)								
Balance on Current Account (including grants)	-1,970	-3,080	-1,035	-2,164	-2,252	-1,901	-2,804	-2,404	-2,025
Trade balance	-3,894	-4,999	-2,207	-3,747	-2,805	-2,546	-1,284	-836	-870
Exports f.o.b.	4,172	5,270	5,840	6,551	7,898	9,727	12,997	14,710	15,655
Cocoa	1,133	1,487	1,866	2,102	2,156	2,045	2,531	2,661	2,562
Gold	1,734	2,246	2,551	3,017	3,804	3,076	5,001	5,801	6,784
Petroleum	0	0	0	0	0	3,105	3,450	4,122	4,027
Other	1,306	1,536	1,422	1,432	1,939	1,500	2,015	2,126	2,282
Imports, f.o.b.	-8,066	-10,268	-8,046	-10,297	-10,703	-12,272	-14,281	-15,546	-16,525
Non-oil	-5,971	-7,912	-6,557	-8,181	-8,686	-9,953	-11,415	-12,468	-13,319
Oil	-2,095	-2,357	-1,489	-2,117	-2,017	-2,319	-2,866	-3,078	-3,206
Balance on services and income	-307	-756	-1,470	-976	-2,107	-2,456	-4,218	-4,604	-4,542
Of which: interest payments	-91	-172	-157	-157	-189	-162	-199	-267	-314
Balance on transfers	2,231	2,675	2,642	2,558	2,660	3,101	2,698	3,036	3,386
Private transfers (net)	1,834	1,970	1,788	1,789	2,123	2,342	1,963	2,509	2,783
Official transfers (net)	398	704	854	769	537	760	735	527	603
Capital and Financial Account	2,391	2,529	2,269	2,204	3,618	2,716	3,377	3,188	3,303
Capital account (net)	485	0	0	0	0	0	0	0	0
Of which: MDRI debt relief 1/	485	0	0	0	0	0	0	0	0
Financial Account (net)									
Official financing (medium and long-term loans)	686	487	1,086	504	1,096	403	1,707	1,214	833
Inflows	1,305	718	1,246	684	1,274	627	1,931	1,571	1,392
Amortization	-619	-231	-160	-181	-178	-224	-224	-357	-559
Private capital	1,061	2,307	1,543	1,550	2,570	2,063	1,670	1,974	2,270
Divestiture investments	115	900	0	0	0	0	0	0	0
Other FDI	855	1,212	1,678	1,500	2,327	1,983	1,670	1,974	2,220
Suppliers' credits and other	91	196	-135	50	243	80	0	0	50
Short term capital	159	-265	-82	150	107	250	0	0	200
Errors and omissions	-8	-390	-278	0	-155	0	0	0	0
Overall balance	413	-941	1,235	40	1,366	815	573	785	1,278
Financing	-413	941	-1,235	-40	-1,366	-815	-573	-785	-1,278
Exceptional financing	…	…	100	275	75	0	215	0	0
Multilaterals	…	…	50	250	50	0	215	0	0
IDA	…	…	50	250	50	0	215	0	0
Others	…	…	0	0	0	0	0	0	0
Official Bilaterals	…	…	50	25	25	0	0	0	0
Paris Club	…	…	50	25	25	0	0	0	0
Non-Paris Club	…	…	0	0	0	0	0	0	0
Commercial	…	…	0	0	0	0	0	0	0
Net foreign assets	-413	941	-1,335	-315	-1,441	-815	-788	-785	-1,278
Net international reserves (-, incr.)	-413	941	-1,160	-315	-1,441	-815	-788	-785	-1,278
Increase in gross reserves (-)	-567	800	-1,129	-536	-1,565	-950	-975	-971	-1,278
Of which: SDR allocations	0	0	-460	0	0	0	0	0	0
Use of Fund credit	0	0	104	221	124	135	187	186	0
Other NFA changes (increase -)	0	0	-136	0	0	0	0	0	0
Change in long-term foreign liabilities (increae +)	0	0	-174	0	0	0	0	0	0
Memorandum items:									
Current account bal., incl. official transfers (% of GDP)	-8.0	-10.8	-4.0	-7.1	-7.2	-5.1	-7.5	-5.5	-4.2
Current account bal., excl. official transfers (% of GDP)	-9.6	-13.3	-7.3	-9.6	-9.0	-7.1	-9.4	-6.7	-5.4
Trade balance (percent of GDP)	-15.7	-17.5	-8.5	-12.3	-9.0	-6.8	-3.4	-1.9	-1.8
Gross international reserves[2]									
In millions of US dollars	2,837	2,036	3,165	3,701	4,725	4,651	5,700	6,671	7,949
In months of imports of goods and services	2.7	2.2	2.8	2.9	3.2	3.6	3.6	4.0	4.5
External debt (percent of GDP)	14.5	14.1	19.3	20.2	19.7	18.3	21.5	21.6	21.1
External debt service paid (in percent of exports of GNFS)	3.8	5.1	4.6	3.9	3.9	3.2	2.9	3.8	5.0
Total donor support (percent of GDP)	4.1	5.3	7.1	5.0	5.5	3.9	6.2	4.2	3.0
of which, official transfers (percent of GDP)	1.6	2.5	3.3	2.5	1.7	2.0	2.0	1.2	1.2
Terms of trade (1990 = 100)	91	83	110	163	117	150	113	112	111
Change in the Terms of Trade	-1.3	-9.3	33.0	0.0	6.5	-7.8	-4.0	-0.8	-0.7
GDP (US$)	24,758	28,528	25,988	17,886	31,084	23,415	37,481	43,705	48,767

Sources: Bank of Ghana; and IMF staff estimates and projections.

[1] Including MDRI debt relief from the Fund and IDA in 2006, and the African Development Fund in 2007.

[2] SDR allocation of US$453 million in 2009.

[3] After including SDR allocation in 2009

Table 5. Ghana: Financial Soundness Indicators, 2003–10

(Percent, end-of-period, unless otherwise specified)

	2003	2004	2005	2006	2007	2008	2009	2010
Capital adequacy:								
Regulatory capital ratio	9.3	13.9	16.2	15.8	14.8	13.8	18.2	19.1
Regulatory tier 1 capital ratio	6.6	6.4	7.2	15.0	13.6	12.8	17.0	18.6
Asset quality:								
Nonperforming loans to total gross loans	18.3	16.3	13.0	7.9	6.4	7.7	16.2	17.6
Credit to total assets	41.7	44.0	48.7	45.0	50.3	52.3	43.8	40.1
Loan loss provision to total gross loans	15.4	13.8	8.5	7.4	5.5	6.3	11.1	9.4
Loan loss provision to NPLs	0.8	0.8	0.7	0.9	0.9	0.8	0.7	0.5
Earnings and profitability:								
Return on assets, before taxes (average)	6.2	5.8	4.6	4.8	3.7	3.2	2.8	3.8
Return on equity, before taxes (average)	32.7	33.7	23.6	39.6	35.8	23.7	17.5	20.4
Interest margin to gross income	63.2	62.9	64.0	51.8	46.1	41.3	39.4	50.1
Interest spread[1]	23.13	20.3	19.3	18.3	18.3	20.8	17.1	17.4
Liquidity:								
Core liquid assets to total assets ratio	29.0	25.4	20.7	23.5	23.4	25.2	26.3	25.3
Broad liquid assets to total assets ratio	57.0	53.5	47.0	46.3	40.7	39.4	47.2	51.3
Core liquid assets to short-term liabilities ratio	40.8	34.6	42.8	31.4	31.0	33.5	34.5	32.9
Broad liquid assets to short-term liabilities ratio	80.2	72.8	97.4	61.9	54.1	52.4	62.0	66.6
Exposure to foreign exchange risk:								
Share of foreign currency deposits in total deposits	30.8	29.3	26.3	28.1	22.3	28.4	32.7	25.3
Share of foreign liabilities in total liabilities	4.0	2.8	2.4	4.0	8.1	7.0	6.2	4.7

Source: Bank of Ghana.

[1] Average lending rate minus average (saving and demand) deposit rate.

Table 6. Ghana: External Financing Requirements and Sources, 2007–15
(Millions of U.S. dollars)

	2007	2008	2009	2010	IMF Staff Projections 2011	2012	2013	2014	2015
Total requirements	-3,553	-3,215	-3,177	-4,533	-4,738	-4,259	-4,465	-4,711	-4,185
Current account (excl. official transfers)	-2,367	-3,784	-1,888	-2,789	-3,538	-2,931	-2,629	-1,939	-1,929
Debt amortization	-619	-231	-160	-178	-224	-357	-559	-703	-884
Gross reserves accumulation	-567	800	-1,129	-1,565	-975	-971	-1,278	-2,069	-1,372
Total sources	3,553	3,215	3,251	4,581	4,758	4,447	4,465	4,711	4,185
IMF	0	0	104	124	187	186	0	-21	-46
Other IFIs	0	0	100	75	0	0	0	0	0
Capital flows	3,553	3,215	3,047	4,382	4,571	4,261	4,465	4,732	4,230
Foreign direct investment (net)	855	1,212	1,678	2,327	1,670	1,974	2,220	2,406	1,876
Disbursement from official creditors [1]	1,677	1,434	1,790	1,860	2,901	2,286	1,995	2,075	2,191
Other flows[1]	1,021	569	-422	195	0	0	250	252	164

Sources: Ghanaian authorities and IMF staff estimates and projections.

[1] Includes all other net financial flows and errors and omissions.

Table 7. Ghana: Indicators of Capacity to Repay the Fund, 2011-22 [1, 2]

(In millions of SDRs)

YEAR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Projected Payments Based on Existing Drawings											
PRINCIPAL												
ECF Arrangements	7.9	21.1	21.1	21.1	42.8	40.4	29.8	29.8	29.8	8.2	0.0	0.0
Interest/Charges												
PRGT Interest	0.0	0.6	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0
SDR Assesments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDR Charges	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Base Case Total	0.2	0.9	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.3
	Projected Payments Based on Prospective Drawings											
PRINCIPAL												
ECF Arrangements	0.0	0.0	0.0	0.0	0.0	6.0	29.8	47.7	47.7	47.7	41.7	17.9
Interest/Charges												
PRGT Interest	0.0	0.4	0.6	0.6	0.6	0.6	0.6	0.5	0.3	0.2	0.1	0.0
User Case Total	0.0	0.4	0.6	0.6	0.6	0.6	0.6	0.5	0.3	0.2	0.1	0.0
	Projected Payments Based on Existing and Prospective Drawings											
PRINCIPAL												
ECF Arrangements	7.9	21.1	21.1	21.1	42.8	46.3	59.6	77.5	77.5	55.8	41.7	17.9
Interest/Charges												
PRGT Interest	0.0	1.0	1.1	1.1	1.0	0.9	0.8	0.6	0.4	0.2	0.1	0.0
SDR Assesments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDR Charges	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Interest/Charges	0.2	1.3	1.4	1.4	1.3	1.2	1.1	0.9	0.7	0.5	0.4	0.3
Grand Total	8.1	22.4	22.5	22.5	44.1	47.5	60.7	78.4	78.2	56.3	42.1	18.2
	Projected Level of Credit Outstanding Based on Existing Drawings											
PRINCIPAL												
ECF Arrangements	244.1	223.0	201.9	180.8	138.0	97.6	67.8	38.0	8.2	0.0	0.0	0.0
	Projected Level of Credit Outstanding Based on Existing and Prospective											
ECF Arrangements	363.2	461.3	440.2	419.1	376.3	330.0	270.4	192.9	115.4	59.6	17.9	0.0

[1] The current basic rate of charge in the GRA is 1.43% plus 0.00% for burden sharing.

[2] Effective January 7, 2010 interest charges on concessional loans are waived through 12/31/11.

Appendix I. Ghana: Exchange Rate Assessment and Non-Price Competitiveness

1. ***This note is an updated assessment of Ghana's currency valuation and non-price competitiveness****. The exchange rate of the Ghanaian cedi was broadly in line with the country's macroeconomic fundamentals in 2010, an assessment shared by the authorities. Broader measures of business competitiveness based on Ghana's business climate point to the importance of strengthening macroeconomic management and addressing infrastructure bottlenecks*.

I. Exchange Rate Assessment

A. Developments since the 2009 Article IV Assessment

2. **Two years ago, the 2009 Article IV report pointed to "signs of possible modest overvaluation".** This guarded assessment of the cedi's value reflected divergent analytical results: the macroeconomic balance (MB) and external sustainability (ES) approaches pointed to an overvaluation in the 7–12 percent range, whereas the equilibrium real effective exchange rate (EREER) approach, based on econometric estimates that were unstable and potentially unreliable, suggested an undervaluation of 30–40 percent.

3. **The real exchange rate is back at 2009 levels**. The real effective exchange rate depreciated by some 8 percent in 2009, subsequently appreciating in 2010, returning to close to the level examined in the 2009 Article IV (see Appendix Figure A.1). The real appreciation during 2010 has been driven by a combination of higher inflation than in partner countries and broad stability in the nominal effective exchange rate.

B. Approaches used for the 2011 Currency Analysis

Current account-based measures

4. **The macroeconomic balance and external sustainability estimates have been updated**. As in the 2009 Article IV, the MB and ES approaches point to a modest overvaluation, though the scale is smaller on current data (about 2–5 percent). The current account norm using the MB approach is estimated at a deficit of 3 percent of GDP, while the computed NFA-stabilizing current account deficit under the ES approach is calculated at 2 percent of GDP. As the underlying current account deficit is projected at around 6 percent of GDP, this implies the need for a modest depreciation to close the gap. The estimated overvaluation is slightly smaller than in the 2009 exercise due to a stronger medium-term

current account deficit than earlier projected, and due to a stronger real exchange rate elasticity of the trade balance than in the 2009 exercise.[1]

Econometric approaches

5. **An alternative econometric approach was considered for this exercise**. Efforts to develop econometric results that are statistically stable and convincing using the EREER approach have not been successful. As an alternative, the Capital-Enhanced Equilibrium Exchange Rate (CHEER) approach was explored. The CHEER approach is grounded on the idea that current account imbalances must be financed through the capital account (see Juselius (1995); Juselius and McDonald (2004)). It nests the Purchasing Power Parity (PPP) theory (long run equilibrium in the goods market), and the Uncovered Interest parity (UIP) condition (short run equilibrium in the financial market).

6. **The CHEER approach seems appropriate in the case of Ghana for three reasons**: (i) Ghana has witnessed considerable capital inflows over the past few years (see Appendix Figure A.2), reflecting an increasingly open capital account; (ii) the CHEER approach is convenient where country circumstances and policies are changing rapidly, as the use of high frequency data allows estimates to be developed with relatively short data sets;[2] and most importantly (iii) the approach seems to be supported by data, as departures from PPP in Ghana tend to be correlated with real interest rate differentials (see Appendix Figure A.3).

7. **The CHEER specification is estimated by applying a Vector Error Correction (VEC) model to monthly data from January 1995 to December 2010.** Using the Johansen cointegration method, we find a significant and asymmetric influence of domestic and foreign prices on the cedi exchange rate, with the latter playing a stronger role. The exchange rate is also significantly influenced by foreign interest rates, which represent the return on investing abroad; a lower foreign interest rate tends to strengthen the cedi.

[1] The 2009 assessment used a trade elasticity of -0.23 from the CGER whereas this note uses Ghana-specific estimate of -0.68 from Tokarick (2010).

[2] In fact the standard equilibrium approach might have failed to be conclusive because Ghana went through several structural changes over the past few decades that estimations of the standard equilibrium method usually cover.

8. **The CHEER method suggests an overvaluation of less than 5 percent in 2010** (see Appendix Figure A.4). This result points to the same direction as the MB and ES estimates. It suggests that the cedi was slightly more appreciated in 2010 than would have been expected given interest rate differentials and inflation trends.[3] Restricting estimations to historical data up to 2009, the CHEER approach suggests that the cedi was undervalued by some 12 percent in 2008. This is in the same direction, but significantly smaller in magnitude than the standard equilibrium exchange rate approach which was used in the 2009 Article IV report.

Conclusions

9. **Given the analytical margin of uncertainty, the cedi is assessed to be broadly appropriately valued in 2010**. More weight is given (as in the 2009 assessment) to the results from the MB and ES approaches. The small size of the estimated overvaluation on these approaches (2–5 percent) is within the range typically seen as consistent with economic fundamentals. This conclusion was shared by Ghanaian authorities.

II. Non-Price Competitiveness

10. **Ghana's favorable economic outlook is attracting new investments.** With the start of oil production and a generally attractive business climate, Ghana is attracting increasing foreign investment inflows (see Appendix Figure A.2). These developments, while welcome, risk creating inflationary pressures contributing to Dutch disease effects, in which appreciation of the real exchange rate leaves domestic producers uncompetitive. Risks of this nature to competitiveness can be addressed by structural reforms that seek to strengthen the business climate.

Survey-based competitiveness assessments

11. **Ghana compares well to "factor-driven economies"**. According to the *Global Competitiveness Report (GCR) 2010–11,* Ghana matches or out-performs the average "factor-driven economies" on a range of measures, including education, training, labor markets, and infrastructure. The main shortcoming is in terms of its macroeconomic

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[3] The extent of overvaluation is larger when the domestic interest rate is included among the regressors. This is because the Ghanaian T-bill rate has a depreciating impact on the equilibrium exchange rate. There are two potential reasons behind this puzzling result: (i) we use 90 days T-bill rates instead of 3–5 years bond rates—due to data availability—which is likely to distort the UIP condition as foreign investors are not allowed to invest in Ghanaian T-bills, but in bonds of 3-years maturity and beyond; (ii) the coefficient on the domestic T-bill rate may be capturing the Ghanaian risk premium which is missing in the model's specification. The CHEER approach appears promising and will be explored further, particularly as a longer time series on Ghana's sovereign bond yields provides more data on trends in Ghana's risk premium.

environment. This comparison is not very demanding, however, since the GCR sees factor-driven economies as in the first of three stages of economic development.

12. **Ghana's performance is more mixed by the standards of "efficiency-driven economies".** These countries are viewed by the GCR as in the second stage of economic development. Following Ghana's reclassification as a lower-middle income country, this peer group, which includes Namibia, Mauritius, and South-Africa, appears relevant. Ghana matches the peer group average in terms of market efficiency and size, higher education and training, financial development, and technology readiness, but lags behind in the supply of infrastructure, institutional quality, and, again, macroeconomic management.

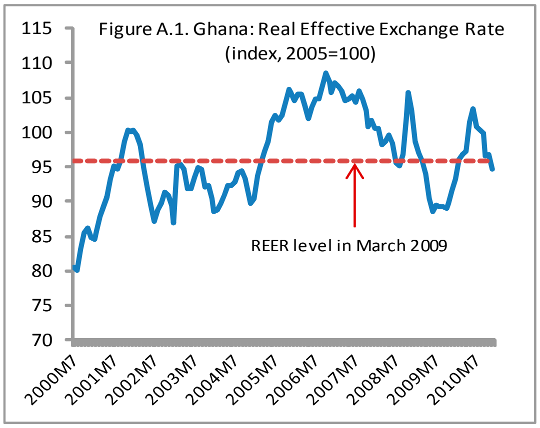
13. **A further perspective is provided by the World Bank's *Doing Business* report.** In a comparison with South Africa (appropriately relatively ambitious peer comparison), Ghana lags in seven out of ten categories (Appendix Figure A.6). Areas in which Ghana lags by large margins include relatively burdensome procedures for starting and shutting down businesses, obtaining construction permits, and filing taxes; access to credit is also more limited. On a positive note, Ghana is cited in *Doing Business 2010–11* as the country most improved in terms of access to credit during 2009–10.

Conclusions

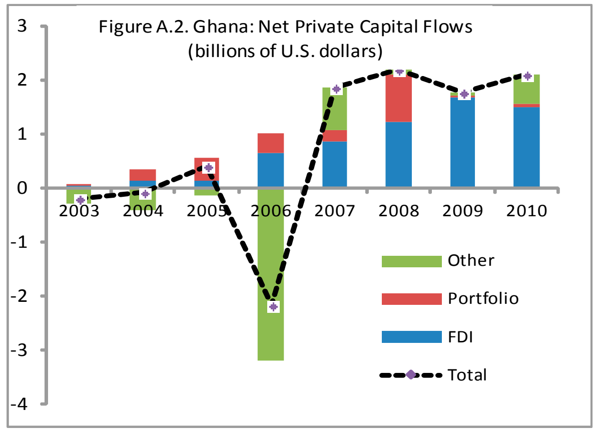
14. **Macroeconomic management, access to financing, and infrastructure quality are seen as leading impediments to business in Ghana**. To some extent, these factors are inter-related. For example, stronger macroeconomic policies that address the problem of expenditure arrears and SOE debts will help reduce non-performing loans in the banking industry and improve access to and the cost of credit. Stronger public expenditure management can also play an important role in better prioritizing infrastructure projects and achieving value for money in these investments. These areas, rather than currency valuation, appear to be the most productive approaches to boosting Ghana's international competitiveness.

Figure A. Ghana: Exchange Rate Assessment and Non-price Competitiveness

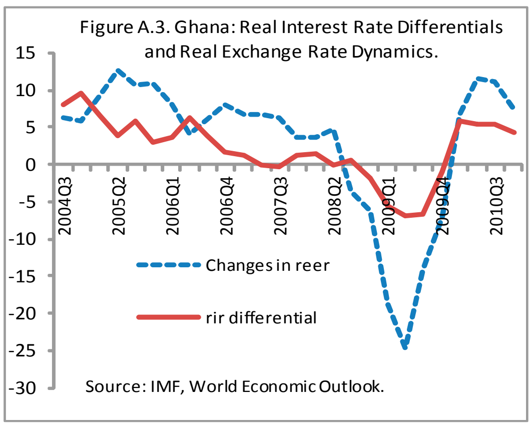
The real exchange rate in 2010 is near its level during the 2009 ArticeI IV consultation...



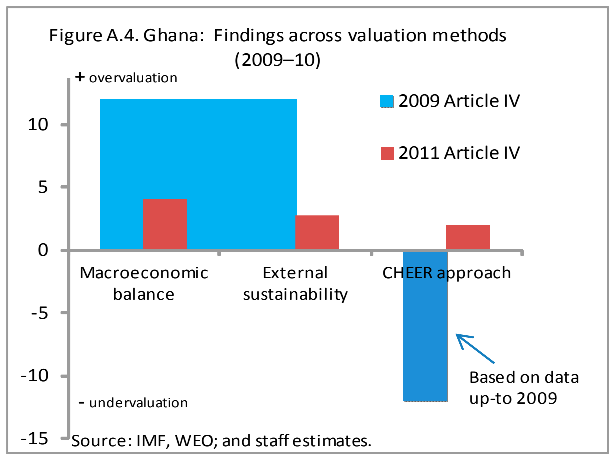
... despite continuing strong capital inflows of which currency carry trade.



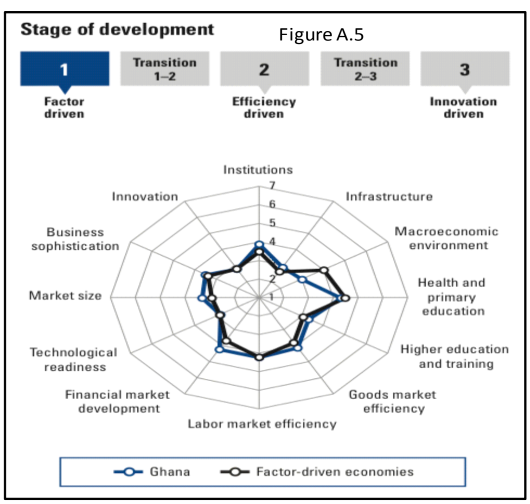
Real appreciation in 2010 is somewhat higher than interest rate differentials...



...and the CHEER approach points to the same direction as the standard MB and ES approaches in 2010.

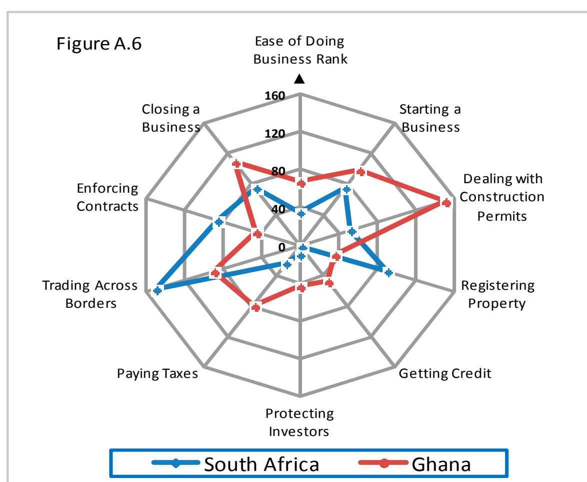


Ghana is generally more competitive[1] than peers "factor-driven economies", but in the area of macroeconomic management...



Source: World Economic Forum, *Global Competitiveness Report 2010–2011*, pp. 166.

...and laggs significantly behind[2] South Africa's business climate.



Source: The World Bank, *Doing Business 2011 database.*

[1] The closer to the edge the more competitive.

[2] The closer to the edge the less competitive.

Selected References

*“*Doing Business (2011) “Making a Difference for entrepreneurs” IFC, *The World Bank*, Washington D.C.

Regional Economic Outlook (2011) “Capital Inflows to Frontier Markets in Sub-Saharan Africa”, African Department, *International Monetary Fund*, Washington D.C.
Juselius, K. (1995)

Juselius, K (1995) “Do Purchasing Power Parity and Uncovered Interest Rate Parity Hold in the Long Run? An Example of Likelihood Inference in a Multivariate Time-Series Model”, *Journal of Econometrics*, Vol. 69, Issue 1, pp. 211–240.

Juselius, K. and MacDonald, R. (2004) “International Parity Relationships between Germany and the United States: A joint Modeling Approach”, No. 2004/08, *Finance Research Unit, Institute of Economics*, University of Copenhagen.

“The Global Competitiveness Report 2010-2011”, *The World Economic Forum*, Geneva, Switzerland, 2010.

Tokarick, Stephen, 2010, “A Method for Calculating Export Supply and Import Demand Elasticities,” IMF Working Paper No. 10/180.

APPENDIX II—LETTER OF INTENT

May 12, 2011

Mr. Dominique Strauss-Kahn
Managing Director
International Monetary Fund
Washington, DC 20431

Dear Mr. Strauss-Kahn:

After a temporary slowdown, buoyant exports and increased construction and service sector activities have helped the economy to recover. Growth is estimated at 6.6 percent this year, up from 4.7 percent in 2009. Fiscal and monetary policy tightening and currency stability have eased inflationary pressures and inflation has remained in single digit level since mid-2010. Medium-term prospects look promising and will be boosted by rising oil production.

Despite good progress in stabilizing the economy, policy implementation faced important challenges. In particular, adjustments to electricity and fuel tariffs to cost-recovery levels were implemented despite strong public resistance. Furthermore, the conflicts in Côte d'Ivoire and Libya are impacting the economy as people have sought refuge in Ghana and more than 16 thousand Ghanaian migrant workers have been evacuated from Libya. Consequently, we anticipate a reduction in Ghana's remittance earnings, an important source of foreign exchange, and an increased burden on public service deliveries.

The attached Memorandum of Economic and Financial Policies (MEFP) reports on Ghana's recent economic developments and implementation of Ghana's economic program under the three-year Extended Credit Facility (ECF), which was approved by the IMF Executive Board on July 15, 2009.

All quantitative performance criteria for end-June 2010 and end-December 2010 were met except those for the net change in the stock of domestic arrears and the overall deficit of the government (missed in end-December). The fiscal deficit target at end-December 2010 was only narrowly missed, and the shortfall would have been just 0.1 percent of GDP if a measure involving the sale of gold company shares received in lieu of royalties had been completed in December 2010, rather than slipping to January 2011. The government views the accumulation of domestic arrears as the central challenge to its fiscal adjustment program. To address the issue, it is improving the monitoring of arrears and conducting a stock-taking exercise to determine the actual size of outstanding arrears. With a number of priority projects being jeopardized by non-payment, the government has settled arrears totaling 2½ percent of GDP in 2010 and further arrears of a similar magnitude in relation to GDP in the first quarter of 2011.

Progress in implementing the program's structural benchmarks was mixed. Debt management policies and performance was strengthened, which contributed to meeting the performance criterion on external borrowing. However, the implementation of several benchmarks was delayed and the government gives importance to implementing them as soon as possible. The ongoing modernization of Ghana's revenue administration that started in 2009 has improved tax collections. Expenditure management is being strengthened with support from Ghana's development partners and efforts are underway to better monitor the public sector wage bill and pension payments.

These and other components of the government's economic stabilization and reform program are described in the MEFP. Based on these policies, the government requests that the IMF's Executive Board grant a waiver for the missed performance criteria on the overall fiscal deficit of the government and on the net change in the stock of domestic arrears for end-December 2010. The government also requests approval of proposed new structural benchmarks for the period through June 2012 and adjustments to June 2011 performance criteria and the establishment of performance criteria through March 2012.

In support of its policies, the government requests that the IMF's Executive Board complete the third and fourth reviews of Ghana's ECF arrangement and approve disbursement of the fourth and fifth tranches of the loan, based on proposed rephasing of disbursements as set forth in the attached schedule to the MEFP. The fifth review is expected to be completed before end-December 2011, and the sixth and seventh reviews are expected to be completed by end-April and end-June, 2012, respectively.

The Government of Ghana will provide such information as the Fund may request in connection with progress in implementing its economic and financial policies. The government believes that the policies set out in this letter are adequate to achieve the objectives of its program, but it will take any further measures that may become appropriate for this purpose. The Government will consult with the Fund on the adoption of these measures, and in advance of revisions to the policies contained in the MEFP, in accordance with the Fund's policies on such consultations. We have no objection to publication of the staff report for the third and fourth reviews under the ECF arrangement, this letter of intent, and the attached memorandum of economic and financial policies and technical memorandum of understanding.

/s/	/s/
Dr. Kwabena Duffuor	Mr. K. B. Amissah-Arthur
Minister of Finance and	Governor
Economic Planning	Bank of Ghana

APPENDIX II—ATTACHMENT I

MEMORANDUM OF ECONOMIC AND FINANCIAL POLICIES, 2011–13

I. RECENT DEVELOPMENTS AND 2010 PROGRAM PERFORMANCE[1]

A. Growth and Inflation in 2010

1. **The economy is recovering from a temporary slowdown in 2009.** After growth of 4.7 percent in 2009, the Government Statistical Service is projecting a 6.6 percent expansion in 2010, underpinned by buoyant commodity exports, construction, and services. Business and consumer confidence have improved with greater macroeconomic stability in Ghana, the global recovery, and Ghana's transition to oil producer status.

2. **Rebased national accounts show Ghana as richer and growing faster than earlier perceived**. In the rebased accounts, income levels and income per capita are almost 70 percent higher than earlier estimates, lifting Ghana into lower-middle income status. The latest growth estimates for 2007–09 are also about 1 percent higher than earlier estimates. Recent growth has been particularly rapid in the service sector, which now accounts for close to half of the overall economy.

3. **Inflation rates have declined**. Annual consumer price inflation has been in single digits since mid-2010, with a year-on-year outturn of 8.6 percent in December 2010, down from 16.0 percent a year earlier. The slower pace of inflation reflects earlier monetary policy tightening, broad exchange rate stability, and favorable crop yields. Inflation is currently at the middle of the inflation target range.

B. Fiscal Performance Through end-2010

4. **The fiscal deficit target was only narrowly missed in 2010**. While revenue collections were broadly as programmed, grant receipts fell short and spending overruns were recorded, notably for recurrent goods and services where the program allocation was very tight. The fiscal deficit (cash basis, measured from financing side) was 6.7 percent of GDP in 2010, compared to 5.6 percent of GDP in 2009, and an adjusted 2010 program target of 5.9 percent of GDP. The government adopted corrective actions as deficit pressures emerged in 2010 to bring the deficit back on track, but the sale of gold company shares received by the government in lieu of royalties slipped into the early days of January 2011, rather than being finalized in 2010, as planned. If this revenue (equivalent to 0.7 percent of

[1] 2010 program performance is summarized in Appendix Table 1.

GDP) had been collected in 2010, the slippage relative to the program target would have been less than 0.2 percent of GDP.

5. **Fiscal pressures continued in respect of domestic arrears**. Arrears were accumulated in 2010 to contractors for investment projects, where spending ran above appropriated levels, and to statutory funds, where fiscal resources were not adequate to make earmarked revenue transfers. As a result, while the program had sought a net reduction in arrears equivalent to 0.2 percent of GDP in 2010, arrears increased, in net terms, by 1.9 percent of GDP. A review of these arrears indicates that the large majority relate to a surge in spending commitments in 2007–08 for projects which are now being completed and invoices submitted. The combined fiscal slippage, taking into account both cash transactions (the cash deficit) and unpaid bills (arrears), was equivalent to 2.6 percent of GDP, and would have been less than 2 percent of GDP, had the additional revenue measure noted above been completed in 2010, as planned.

6. **The domestic financing ceiling was narrowly missed due to delays in revenue and loan financing**. Although foreign credits performed well, net domestic financing of the cash deficit was 0.8 percent of GDP higher than the adjusted program target for end-2010. A substantial portion of this financing was raised by selling Treasury bonds to nonresident investors, which ensured that financing from the domestic banking system was kept below programmed levels. Had the additional revenue effort been completed in 2010, the slippage relative to the adjusted domestic financing ceiling would have been less than 0.2 percent of GDP. Moreover, a World Bank loan disbursement of $215 million had been long-planned for 2010, but was approved only in January 2011. If the Bank financing had been on the original timetable, the NDF targets would have been met. Although public debt rose to an estimated 41½ percent of GDP at end-2010, nonconcessional external borrowing was managed tightly, and remained within program limits.

C. Monetary and Financial Sector Developments

7. **Falling inflation allowed an easing of monetary policy in 2010**. The Bank of Ghana (BoG) has held its policy rate at 13½ percent since July 2010, down from a peak of 18½ percent in mid-2009. Market interest rates responded more than one-to-one to the BoG easing, with interbank rates at end-2010 reduced by 11 percentage points from their 2009 peak, and Treasury bill rates down by 13–16 percentage points on the same basis. Bank lending rates have adjusted by less, remaining well above 25 percent, reflecting a historic pattern of slow adjustment to policy rates as well as the adverse impact of high non-performing loans.

8. **Liquidity conditions also reflect strong reserve accumulation**. With a large rise in net international reserves (exceeding program targets), the BoG's net foreign asset position boosted reserve money growth by 45 percent during 2010; broad money growth was equally

strong. After sluggish private sector credit growth in the first half of 2010 (with declines in real terms), the pace of lending recovered briskly toward year-end.

9. **While nonperforming loans declined by year-end, some banks are still burdened by them**. Banks remain profitable on average, and the industry is generally well capitalized (due, in part, to higher minimum statutory capital requirements). Nonperforming loans were high at 17.6 percent in December 2010, but fell from a peak of 20.0 percent in February.

D. External Sector

10. **External performance was strong in 2010**. Exports rose by $2 billion in 2010, with cocoa and gold exports benefiting from high global commodity prices. This broadly offset a strong recovery in imports after a decline in 2009, leaving the current account deficit broadly unchanged at 6 percent of GDP. This was more than financed by strong capital inflows, including foreign direct investments in the oil sector and bond purchases by nonresident investors. Gross international reserves totaled more than $4.7 billion at end-2010 (3.3 months of import cover).

11. **Currency stability was maintained through 2010**. The cedi traded through the year at a little under GH¢ 1.45 per dollar, with the real effective exchange rate remaining its range over recent years.

II. Macroeconomic Framework

12. **The government's economic program aims at sustained robust growth.** Real GDP growth is projected to exceed 13 percent in 2011, reflecting the start of oil production. Beyond 2011, growth would be 6–7 percent or higher, reflecting strong expansion in the non-oil economy and steady rates of oil extraction. The growth forecast assumes that Ghana's favorable business climate will be preserved and strengthened, while infrastructure bottle-necks will be addressed through targeted public investments and public-private partnerships. Steps to address the problem of government arrears will also strengthen bank balance sheets, contributing to improved credit conditions.

13. **Financial policies will be geared at single-digit inflation**. Under the inflation targeting regime, the target band for inflation is centered on 9 percent at end-2011. A gradual further reduction is assumed for the medium term.

14. **Fiscal deficits will be reduced to levels that can be prudently financed**. The government's goal is to reduce the fiscal deficit to levels that can be comfortably financed without crowding out private sector credit, and with the goal of progressively reducing debt-GDP ratios over the medium term.

15. **With better control over the budget deficit and the start of oil production, current account deficits are projected to narrow over the medium term**. Gross reserve

cover is projected to rise to 3½ months of import cover at end-2011, supporting Ghana's flexible exchange rate regime in the context of an increasing openness to portfolio capital flows.

III. Accelerating Fiscal Consolidation

16. **The key budget priority for 2011 is to accelerate the fiscal consolidation program**. Policies will be informed by experience in 2010. For 2011, the government is resolved to limit the fiscal deficit to 5.7 percent of GDP (cash basis, financing measure). Within this deficit, the government is designing an arrears payment strategy, which would include cash payments to clear arrears of about 2.5 percent of GDP in 2011, while seeking to avoid any new arrears accumulation. Revenue measures have been incorporated in the 2011 budget to strengthen fiscal performance in that year. The debt-to-GDP ratio would reach 46 percent of GDP at end-2011, partly due to the issue of Treasury bonds to settle public enterprise debts to the banking system.

17. **In 2012–13, continued fiscal consolidation would reduce the fiscal deficit to 2½-3 percent of GDP**. This further fiscal adjustment will be driven by rising oil revenues, strengthened revenue administration, and tight expenditure control. Deficits in this range would allow a steady, albeit gradual reduction in the debt-GDP ratio.

18. **As discussed below, the government's fiscal strategy has three pillars:**

- Strengthened revenue mobilization;
- Reinforced expenditure control; and
- A program to regularize arrears and other unmet claims.

A. Strengthened Revenue Mobilization

Background

19. **Ghana's tax revenue base needs to expand**. When the government's adjustment program was launched in mid-2009, tax revenues were estimated as equivalent to 20 percent of GDP. Under the rebased and revised national accounts, Ghana's tax yield is now calculated as 13-14 percent of GDP.

20. **This elevates the priority to be given to strengthening Ghana's tax performance**. The government's economic program sought to combine an increase in tax yields from more efficient revenue administration, new tax measures, and cuts in tax exemptions. Progress is continuing on each front:

- **Modernizing revenue administration is continuing**. A good start was made in establishing the integrated Ghana Revenue Administration (GRA) by end-2009, bringing together the separate customs, VAT, and direct tax services. External support for GRA reforms was put in place by development partners and the World Bank, while the IMF has provided TA and a resident advisor. After appointing the GRA's Commissioner General in March 2010, the process of appointing commissioners and their deputies by end-June 2010 (structural benchmark) lagged; all commissioners were appointed by end-December, while deputies were appointed in early-March 2011 subject to Public Service Commission approval. These delays unfortunately slowed the broader reform effort. The effectiveness of the Large Taxpayer Unit (LTU), including filing compliance, remains to be fully established. The process of developing criteria for coverage of the LTU (June 2010 structural benchmark) and reassigning companies to the LTU is now expected to be completed by June 2011. More broadly, further progress is needed in integrating VAT and direct taxation within the domestic tax department. As a result, tax administration has not yet fully benefited from the modernization that was envisaged with the launch of the GRA.

- **Tax exemptions remain a burden**. Despite efforts to tighten procedures for granting tax exemptions in early-2010, foregone revenues on account of exemptions amounted to 10.8 percent of indirect tax collections in 2010, little different from the 11.8 percent figure for 2009. Due to the heavy work load on revenue administration and tax reform, plans for a comprehensive review of the scope of tax exemptions and discretionary waivers were delayed from September 2009 to September 2010 (revised structural benchmark). This project was partly achieved through completion of a consultant report on import tariff exemptions prepared by end-2010. The review of the status of other exemptions and waivers will be conducted by June 2011 (structural benchmark).

Policy measures

21. **The pace of tax administration reform will be accelerated**. To ensure strong leadership of the GRA's reform program, the confirmation of the appointed deputy commissioners remains a priority. In the year ahead, the focus in GRA will be on effectively integrating VAT and income taxation in a single domestic tax department, and adopting an organizational structure based on taxpayer size. Eleven pilot offices in the Greater Accra area will integrate VAT and direct taxation under single office heads and with common audit processes; this pilot will be launched by end-2011(structural benchmark). With the roll-out of the E-Gov computerization process scheduled for 2011-12, these offices will also move to unified IT systems for VAT and direct tax administration.

22. **As a first step toward its modernization, the large taxpayer unit will be moved to new premises**. The relocation, expected to be completed by end-May 2011, would provide a more transparent, user-friendly tax environment, and will be followed by an update of the criteria for corporate coverage by the LTU. In the next phase of reforms, medium- and small taxpayer offices will be established. Initially, one medium taxpayer office will be established

in Accra to assess business processes. The process of self-assessment for tax purposes will be extended to all medium- and large taxpayers by mid-2012 (structural benchmark).

23. **To focus VAT administration, the turnover threshold for VAT reporting was increased in the 2011 budget from GH¢ 10,000 to GH¢ 90,000** (from about $6,500 to $60,000). Over time, this will focus VAT administration on the 3,000 VAT filers (out of 23,000) who account for over 95 percent of VAT collections. As an interim approach, the 20,000 taxpayers excluded from the core VAT regime are now subject to a new VAT regime with a 3 percent rate (for which refunds cannot be claimed) in addition to a 2 percent income tax rate. GRA plans to develop by mid-2011 plans for a successor small taxpayer regime (structural benchmark), to be adopted in the 2012 budget. This will be based on options identified by a February 2011 Fund TA mission, with taxpayers moving to the income tax regime, and paying taxes based on imputed profits calculated using 2 or 3 rates applied to reported turnover.

24. **Given budget pressures, the government intends to boost non-oil tax collections to GH¢ 7.7 billion in 2011 (14.9 percent of GDP).** The government is confident that this goal (a new indicative target under the program) can be exceeded through the following components of an intensified focus on revenue mobilization:

- **Revenue measures in the 2011 budget**. Collections will benefit from extension through 2011 of the temporary national stabilization levy (corporate profit tax) as well as the extended coverage of the communications service tax;

- **Extension of VAT to fee-based financial services**. As a supplementary budget measure, the government is seeking early parliamentary approval of an extension of VAT to the fee-based incomes of banks and other financial institutions. The required legislation will be submitted to parliament in May 2011 ahead of the completion of the third and fourth ECF reviews (see Appendix Table 3). Based on projected implementation by mid-2011, the yield is estimated at GH¢ 53.6 million in 2011, with a full-year yield of GH¢ 107 million;

- **Taxation of the self employed**. The government has established a task force staffed from the GRA and Ministry of Finance's Tax Policy Unit to tackle a long-standing problem of weak filing compliance by Ghana's self-employed taxpayers. A unique desk for the self-employed will be created, and filing compliance will be checked against professional organizations' registers of accountants, lawyers, consultants, etc. Consideration is being given to establishing a list of professionals in 'good standing" with regard to tax filing; evidence of good standing would then be required for participation in government contract work. The presumptive tax levied on lower-income self-employed (taxi operators, stallholders, etc) is also being reviewed. The current fiscal yield from taxation of the self-employed is GH¢ 60–70 million, and a more dedicated focus and a revised presumptive tax is projected to yield at least an additional GH¢ 30 million in 2011;

- **Streamlined tax exemptions**. In the 2011 budget, the government eliminated the authority of the Ghana Investment Promotion Council (GIPC) to grant tax exemptions, except with the approval of the Minister of Finance. The budget also limited tax exemptions for real estate developers to projects which provide affordable housing in partnership with the Ministry of Water Resources, Works and Housing. The goal is to reduce tax exemptions from the 2010 figure of 11 percent of tax collections.

- **Strengthened revenue administration**. Oversight over tax collections at the Tema port and other key customs locations has been strengthened. This oversight is being reinforced by the required use of computerized valuation systems and other automated procedures that limit administrative discretion. The use of bonded warehouses is also being more closely monitored, following indications that goods admitted duty free for re-export were being released into the domestic market. Following initial steps to strengthen oversight and enforcement, tax yields have already risen sharply. For example, customs collections in the first quarter of 2011 were 65 percent higher than a year earlier. Positive trends are also seen in the area of direct taxation, through the use of technology to improve PAYE compliance.

B. Reinforced Expenditure Control

Background

25. **Further progress is needed in strengthening public expenditure control**. Notwithstanding the launch of a broad-based Public Financial Management Reform Program (PUFMARP) in the mid-1990s, recent experience has highlighted the limited extent of the progress achieved. Weaknesses in procedures for tracking and controlling commitments and associated spending continue to give rise to overruns in the fiscal deficit and to payments arrears. Issues that remain to be addressed include the credibility of budget appropriations, expenditure rigidities, and procedures for within-year expenditure control and cash release. Partly reflecting these problems, Ghana’s outlays on recurrent goods and services in 2010 were 50 percent higher than budgeted, while the sum of paid and unpaid bills (arrears) relating to the discretionary domestic investment budget were almost three times higher than the 2010 budget appropriation.

Status of structural reforms launched in 2009–10

26. **Initial efforts to strengthen public financial management focused on computerizing Ghana’s budget systems**. The former Budget and Public Expenditure Management System (BPEMS) had effectively stalled after being rolled out to 8 pilot

ministries. An implementation strategy for a successor Ghana Integrated Financial Management Information System (GIFMIS) was developed with IMF technical assistance based on a review of existing public financial management processes and guided by the systemic weaknesses identified in the Public Expenditure and Financial Assessment (PEFA) process. The project is being managed under the Steering Committee chaired by a Deputy Minister of Finance, and development partner financing has been identified.

27. **The timetable for rolling out GIFMIS to 14 pilot ministries, departments, and agencies (MDAs) has been updated**. The pilot roll out was scheduled to be completed by March 2011 (structural benchmark), but was delayed pending resolution of conflicts between planned software and existing hardware, and by delays in securing external funding. The revised plan is now to pilot the GIFMIS within the CAGD from July 2011, with a roll out to ministries in January 2012.

28. **In the run up to GIFMIS, parallel efforts have been underway to strengthen cash management and commitment forecasting and control**. Since May 2009, cash management committee meetings have been held on a weekly basis, involving the Ministry of Finance, Controller and Accountant General's Department (CAGD), and BoG. This intensified monitoring of revenues, cash balances, and expenditures has helped in setting quarterly expenditure ceilings and monthly cash limits for spending units. The effectiveness of this cash planning was undermined, however, by weak information about the commitment pipeline and prospective spending claims. To address this gap, the cash management committee, using a module in the existing budget preparation software, has been strengthening data collection on past commitments and contracts for capital expenditure. The requirement for ministries to obtain commencement certificates was also tightened in mid-2010 by removing exemptions from the system extended to a few ministries managing priority programs.

29. **Cash management within the banking system is also being tackled**. To address delays in transferring revenue collections by commercial banks to the government's accounts at the BoG, tax and other payments to government are now credited directly to BoG accounts rather than to commercial banks, except in rural areas. This measure has led to a significant improvement in government cash flows. Steps are also being taken to better utilize the government's cash balances, which extend to 2,500 accounts at the Bank of Ghana with some further accounts in commercial banks. A number of ministerial, departmental, and agency accounts at the BoG have been closed, and remaining accounts are now monitored daily by the BoG to inform the work of the cash management committee. Idle cash balances will be reallocated to finance expenditures, reducing the need for new domestic debt issuance. Over time, the Ministry of Finance and CAGD will gain computer access to monitor these accounts directly.

Steps to further enhance expenditure control

30. **Following discussions with staff during the September 2010 mission on emerging fiscal slippages, the government's commitment to strict expenditure control was** reinforced at the highest level. A presidential memo was sent in October 2010 to all MDAs requiring them to seek authorization from the *Ministry of Finance and Economic Planning* (MoFEP), through Commencement Certificates, before undertaking any capital spending. This message was reiterated by MoFEP in its Budget Implementation Instruction in January 2011. Indications in the opening months of 2011 are that this is having an important impact on the pace of spending.

31. **The government's commitment to expenditure control will be supported by reforms to the budget process**. As highlighted in a recent review by IMF experts, stronger expenditure control requires a range of short and medium-term measures, and spans a number of topics. Within a broadened program to strengthen PEM, the government intends to give the following priority:

- **More strategic and realistic expenditure budgeting**. Under past budgets, ministries submitted unconstrained spending proposals in August, and were required to develop constrained budgets only in October (one month ahead of the budget's submission to parliament). This process provides little incentive or opportunity for ministries to develop realistic, prioritized spending plans. For the 2012 budget, the Cabinet will identify program priorities in April/May 2011. These priorities will be communicated to MDAs with indicative spending ceilings in the July budget preparation guidelines. This process is identified as a structural benchmark under the program.

- **Quarterly expenditure ceilings**. The adoption of monthly cash limits for MDAs (above) has helped cash management by MoFEP at the expense of operational flexibility for MDAs. Given the time required to obtain funds releases (warrants), the monthly cash ceiling provides MDAs with very limited scope to plan and manage their spending and commitments. A return to quarterly expenditure ceilings which will be used as a ceiling for approving commitments will restore this flexibility, and will be backed by high-level political commitment to ensuring that all MDAs respect appropriation ceilings.

- **GIFMIS design**. It is critical that GIFMIS support the strengthened expenditure control targeted above. In this regard, the GIFMIS team will review the warrant (funds release) and expenditure control mechanism, and simplify it for adoption within GIFMIS. The new computerized regime will allow MDAs to record commitments when issued and invoices when received, and not just as funds are available.

C. Regularizing Arrears and Other Claims

Background

32. **The budget continues to experience payments arrears following the intensification of budget imbalances in the run up to the 2008 elections**. As noted above, the stock of budgetary arrears continued to increase in 2010. As a result, outstanding claims in respect of budget arrears and public liabilities for SOE debts were estimated at 9.4 percent of GDP at end-2010. The government gives a high priority to regularizing these claims. A holistic approach is being adopted to tackle the arrears situation, drawing on technical assistance provided by the IMF in early 2011.

Policy measures

33. **Avoiding new arrears**. A first step will be to stem the emergence of new arrears. This will require strengthened expenditure control, as described above.

34. **Monitoring arrears**. Currently, the monitoring of expenditure arrears and other claims is the responsibility of different MoFEP departments. Data tracking is limited (in terms of stocks, payments, and new liabilities) and it is not straightforward to monitor the extent of the arrears situation, or to track new trends. To address this situation, the MoFEP Budget Department has been assigned overall responsibility for building and maintaining a comprehensive database to track the full breadth of stocks and flows of arrears and other claims on a monthly basis (program structural benchmark). Monthly reports will be prepared to facilitate close monitoring, and quarterly reports will be provided to the cabinet, starting in June 2011.

35. **Stock take and audits**. To ensure that the above database is comprehensive and accurate, the recent instruction to MDAs to report all claims as of end-2010 will be reiterated, and MoFEP will instruct MDAs to report potential liabilities of state owned enterprises. Where claims cannot be verified using normal budget validation procedures, an independent audit will be sought; this is expected to be particularly important for the reported liabilities of state-owned enterprises.

36. **Strategy to regularize arrears**. A strategy for regularizing arrears will be developed in the coming months, based on the enhanced claims database discussed in paragraph 34 above. Cash payments will need to be consistent with available fiscal space, and a large part of the existing stock of liabilities will need to be regularized through the issue of special purpose bonds or promissory notes that will spread the payment profile over 2012 and the medium term. The macroeconomic framework is currently consistent with cash payments of no more than GH¢ 1,290 million in 2011, and payments will not exceed this amount, unless an updated fiscal framework based on strengthened fiscal performance is developed with the IMF showing enhanced payment capacity. Priority in making 2011 cash payments is being

given to road contractors (to restart critical highway projects), the health and education funds (where social projects have suffered), and to the district assembly common fund (critical for rural development).

D. Managing the 2011 Budget

37. **The government is determined to strictly enforce its budget plans for 2011**. The budget continues to be subject to important risks. As a result, the government is taking steps to ensure that its fiscal plans are achieved in 2011.

- **Fiscal monitoring is being strengthened**. The government will monitor monthly fiscal developments closely, with a particular focus on areas subject to slippages in 2010, such as recurrent expenditure on goods and services and discretionary domestic investment spending. Adverse deviations from monthly budget projections will be assessed to establish whether additional fiscal adjustment measures need to be adopted. A new indicative target under the program has been established for non-oil revenue collections. The planned monthly monitoring of the arrears situation will also help with expenditure control.

- **New expenditure commitments will be strictly limited**. Additional obligations will be considered only where they are consistent with the government's goals for fiscal consolidation described in this memorandum and letter of intent.

- **Fiscal contingency plans have been identified**. The fiscal framework for 2011 has been designed to ensure that program targets for fiscal correction are achieved. A contingency element equivalent to 1 percent of GDP within the expenditure budget has not been appropriated to spending units. This will be a first source of savings, in the event of fiscal slippages. If these savings are not sufficient, investment programs will be downsized or deferred, where possible. In addition, a number of anticipated revenues have not been included in the budget framework. These include receipts from a gold mining company in lieu of royalty payments currently under negotiation, which is expected to yield at least 0.2 percent of GDP, as well as tax receipts that would accrue in the event of a transfer of oil production rights between Jubilee field investors (which could significantly exceed 1 percent of GDP). Based on trends through March, the government also intends to exceed the program's tax collection targets. As these additional revenues are realized, they will be set aside as a fiscal contingency fund.

IV. Other Structural Fiscal Reforms

A. Public Sector Reform and Payroll Management

38. **Ghana has started to migrate its public workforce onto a new public pay structure, a process that will ensure pay equity and simplify future pay negotiations**. Some previously low-wage employees have seen large pay increases; for others, the impact on salaries will be more limited. The cost of the new pay regime will be determined once the 520,000 public sector employees have been mapped from the old to the new pay structure and after determining the treatment of some former allowances, which will be integrated into base pay. The government has estimated that the cost of completing the migration to the new pay structure at GH¢ 420 million per annum (about 0.8 percent of GDP). The migration of the Education Service has been completed in March 2011, with an estimated full-year cost of GH¢ 300 million. The government will manage the remaining 2011 migration to the single spine within the allocated budget.

39. **The process of migrating all remaining non-security subvented agencies to the Integrated Personnel and Payroll Database (IPPD) remains to be completed** (structural benchmark for September 2009, extended to July 2010). The slippage relative to earlier migration plans was partly due to a push-back from some agencies, difficulties in harmonizing allowance rates within some subvented agencies, and the need to review some agency-specific allowances. As of February 2011, 97 out of 137 subvented agencies have been migrated onto the IPPD. The priority of completing the IPPD migration has been enhanced by the use of this platform for the payroll audit being conducted by an external consultant. Given this, the government plans to complete the migration of all non-security subvented agencies by June 2011. The current stand-alone IPPD database will be integrated and upgraded into the GIFMIS once roll-out of the latter has been completed. Pending this integration, for agencies already on the payroll database, new recruitments are verified by the CAGD on a continuous basis to ensure appropriate budget authorization. As part of the reforms to contain the wage bill, independent consultants were contracted to review which subvented agencies should stay on government subvention, liquidated, partially or fully commercialized. The report recommended that 12 out of the 132 subvented agencies assessed should be closed, 71 should remain on government subvention, while 16 could be partially or fully commercialized. The lack of adequate information prevented the report to make a recommendation on the remaining subvented agencies. The list was submitted to Cabinet for decision in March 2011 (structural benchmark for December 2010).

40. **Efforts are underway to better monitor public wage and pension payments**. The government conducted its own payroll audits of the two largest public employers, the Health Services in 2007, and the Education Services in 2010, eliminating about 2,000 ghost workers in the first and 10,000 in the second. The process of migrating staff to the new computerized single spine pay structure is also helping to confirm staffing numbers. To strengthen controls over payrolls and public pensions, a pilot program will introduce biometric identification

technology. A pilot program covering more than 100,000 public pension recipients is planned for completion by August-September 2011. An initial review of the pension records for this exercise has revealed an implausible number of recipients, confirming scope for savings from cleaning the system. This process will subsequently be extended to all public sector employees.

B. Energy Sector Reforms

41. **The government is committed to cost-recovery pricing of energy products**. Earlier efforts to shelter consumers from increases in global energy costs resulted in large losses to public utility companies that remain a drain on the budget.

Electricity sector

42. **Electricity tariffs were raised to cost-recovery levels in June 2010**. World Bank has reviewed this new tariff structure, including the impact of an August 2010 downward revision in some tariffs. In its assessment, the new tariff structure is consistent with a return to financial viability in the power sector. Quarterly reviews of the tariff structure will be conducted to ensure continuing cost-recovery pricing. Based on access to relatively cheap natural gas as a result of the reopening of the West Africa Gas Pipeline (WAGP) power generation costs are calculated to have fallen; as result, the Public Utilities Regulatory Commission, has calculated that the tariff structure should be reduced by a weighted average of 17 percent, effective March 1, 2011. The cost structure will be reassessed with a view to setting a new tariff effective June 1, 2011.

Refined petroleum products

43. **Petroleum product prices were adjusted in early-January 2011.** Petroleum pump prices were increased by 30 percent to full cost-recovery levels; gasoline prices rose to the equivalent of $3.81/gallon, up from a preceding $2.93/gallon. This increase was sustained notwithstanding widespread protests.

44. **A hedging scheme using call options adopted from October 2010 provides temporary protection against further upward movements in oil prices**. The government has purchased monthly call options that generate revenues in the event of upside shocks to global oil prices; under these conditions, the revenues will be used to cover temporary delays in adjusting domestic petroleum product prices to higher cost-recovery levels. The hedging operations are calculated to cost around GH¢140 million (0.3 percent of GDP) on an annual basis; this cost is included in the budget, and will not be exceeded.

45. **Hedging incomes will provide temporary relief from the global rise in petroleum product prices during 2011**. Following further increases in global oil prices, the prices established for petroleum products in January are no longer at cost recovery level. As

envisaged under the hedging scheme, the accumulated and anticipated revenues accruing from call options will be used to provide temporary relief from higher market prices. Hedging revenues, together with a small windfall income from Ghana's oil export activities, are estimated at 0.3–0.4 percent of GDP. With this support, it is anticipated that petroleum pump prices can be maintained at current levels through at least mid-2011 without the need for a price increase. Closer to that date, the need for an adjustment in pump prices will be assessed, based on trends in global prices, the operations of the hedging scheme, and the broader fiscal situation. The continued appropriateness of petroleum pump prices within this context will be a focus for the next ECF review.

46. **Past under-pricing of petroleum products saddled the Tema Oil Refinery (TOR) with large losses**. As a result of its weak balance sheet, the refinery was idled for a portion of 2010, and a strategy for financial and commercial viability was needed (December 2010 structural benchmark). This was partly achieved by clearing TOR's large overdraft liabilities to GCB through cash payments from the budget and, more importantly, issuance of government bonds to GCB in exchange for its TOR claims. Following these steps, TOR has regained the financial viability to operate in the petroleum market without ongoing government support. Looking further ahead, TOR still has issues of efficiency and competitiveness as well as some long term debt obligations that may need to be refinanced. TOR has developed its own proposals for this commercial modernization. A task force established by the Ministry of Energy is reviewing these plans, and they will be provided to the World Bank for its assessment.

C. Oil Revenue Management

47. **The government remains committed to establishing a transparent framework for managing petroleum and gas revenues**. Drawing on international experience, a draft Petroleum Revenue Management Bill was submitted to parliament in 2010 (structural benchmark) and approved in March 2011. Receipts will be managed through a dedicated Petroleum Account, to be established at the Bank of Ghana, with full fiscal reporting to Parliament and the public, subject to stringent requirements for auditing of account transactions. Quarterly audits of petroleum accounts will be conducted by the BoG, and annual external audits will be carried out by the Auditor General or an auditor contracted by him. Portions of oil revenues will be used to finance budget expenditure; the remainder will be saved in two funds—one for "future generations" and the other for smoothing expenditures in the face of commodity price or production shocks. Consistent with the bill, funds allocated to GNPC for its investments will be incorporated in the budget. The creation of these funds would improve medium term budgetary framework of the country.

D. Public Debt Management

48. **Good progress is being achieved in strengthening the government's debt management framework**. The debt management division is being reorganized with units specialized by functional areas. A head of unit will be identified for each of the four units: domestic debt unit, external debt unit, on-lending and guaranteed unit, risk management and policy analysis unit. With the support of the World Bank, a functional review of the debt management division will be conducted with the objective of identifying skill needs, and ensuring effective coordination of the various units. Monitoring of SOEs' borrowing has been intensified. Quarterly meetings are held with major SOEs to review their operational activity and balance sheets, in order to identify risks of delayed payments or defaults.

49. **Debt management reforms**. A debt management strategy was developed with technical support from the IMF and World Bank, and published on the MoFEP website in December 2010 (structural benchmark). This strategy will help the government better analyze the implications of alternative borrowing options within a coherent framework taking into account the cost and risk implications of various borrowing options. The next version of the strategy, to be developed by end-2011, will take stock of emerging debt management risks and policies to address them. Guidelines have been developed and published for the appraisal and selection of projects financed by nonconcessional external financing (structural benchmark).

50. **In 2010, the government contracted new external loans totaling about $2.8 billion**. These focused on its sectoral priorities in health, agriculture, rural development, highways, and communication. The new loans included a $1.5 billion lending arrangement with a Korean company, providing financing on concessional terms for the construction over five-year period of housing for public sector employees. Commercial external borrowing in 2010 amounted to $329.2 million and was below the ceiling under the ECF arrangement.

51. **Borrowing plans will be tailored to debt sustainability**. Based on the latest debt service indicators calculated using Ghana's rebased national accounts, Ghana's risks of debt distress have declined. Public debt at end-2010 was equivalent to 43 percent of GDP, and new borrowing will be carefully calibrated to levels that can be serviced over the medium term.

52. **In 2011, commercial borrowing will not exceed $800 million**. GNPC envisages a commercial borrowing need of $300 million, in large part to cover its share of investments in the oil and gas sectors. Outside the oil and gas sectors, the government plans to limit new commercial borrowing to $500 million. The process of prioritizing projects is continuing; goals include ensuring that public services have up-to-date equipment, and financing machinery for rural development.

IV. MONETARY, FINANCIAL, AND EXCHANGE RATE ISSUES

A. Monetary and Exchange Rate Policy

53. **Monetary policy will continue to be guided by the Bank of Ghana's inflation targeting regime**. The successful convergence of inflation in 2010 to the BoG target reflected the lagged impact of earlier policy tightening, exchange rate stability, and the impact of favorable crop yields on food prices. Looking forward, the BoG intends to seek a modest further reduction in inflation, with the centre point of the target band reduced from 9½ percent in December 2010 to 9 percent in December 2011.

54. **Policies will be alert to upside inflation risks**. Over the coming year, further disinflation will be complicated by possible domestic spillovers from higher global commodity prices and a gathering momentum of domestic activity. Domestic liquidity also rose strongly in 2010, driven by a balance of payments surplus and reserve build-up. The Bank of Ghana is monitoring conditions closely, and stands ready to tighten monetary policies, as needed, to head off any resurgence in inflationary pressures.

55. **The Bank of Ghana will continue to maintain a flexible exchange rate regime**. Exchange rate policy is designed to support Ghana's inflation target. Over the year ahead, the balance of payments is projected to remain in surplus, reflecting high commodity export prices, the start of oil production, and continuing portfolio capital inflows. Under these circumstances, the Bank of Ghana expects to build further its reserve cover to provide a larger cushion to manage potential external volatility, including in nonresident portfolio investments. Inflationary risks arising from the liquidity impact of reserve accumulation will be mitigated by sterilization actions using domestic paper.

B. Financial Sector Policies

56. **In the financial sector, the priority is to continue with efforts to strengthen banks**. Several specific areas of action are underway or envisaged:

- **TOR debts and Ghana Commercial Bank**. In early 2011, the government provided Ghana Commercial Bank (GCB) with interest-bearing government securities equivalent to GH¢ 570 million (1 percent of GDP) to clear virtually all of TOR's remaining liabilities to GCB. Outstanding is a US$ 50 million (equivalent to GH¢ 75 million) loan to BOG that was extended to GCB and the on-lent to TOR. In the coming months, GCB will submit to the Bank of Ghana an updated business model, covering among other topics its plans for further broadening its customer base and strengthening risk management.

- **Audit of banks**. A group of banks will be selected for independent external audit, including banks considered most at risk from impaired portfolios. External consultants are being selected to help draft the terms of references for these audits, and the audits should be completed by November 2011. The outcome of the audits will inform the strategy for addressing problem institutions.

- **Bank supervision**. Efforts would focus on developing new supervisory guidelines and strengthening the technical capacity of supervisors. The recent hiring of over 40 new staff in the supervision department is aimed to address the imminent succession problem due to retirements. A training program is being developed for these and existing staff, aimed at bringing BoG's supervisory approaches into line with the financial reforms and structural changes in Ghana's banking industry.

- **Central bank resolution powers**. The recent FSAP update identified some gaps in the Bank of Ghana's legal arsenal for resolving troubled institutions. Legal language is being developed, with a view to parliamentary submission by end-March 2012.

- **Bank of Ghana ownership of banks**. As an interim measure to address the potential conflict of interest as supervisor and part-owner of the two banks and to pave way for the disposal of BoG's shareholdings in these two banks, the ownership interests were transferred by a Deed of Transfer to an independent Financial Investment Trust. The Trust is registered with the Registrar of Companies and has an independent Board of Trustees and the returns accruing on the investments are to be used for social projects. A full exit strategy from BoG shareholding in these two banks is being considered, drawing on Fund technical advice.

VI. Other Program Issues

57. **Ghana's Shared Growth and Development Agenda (GSGDA) has been published as an updated poverty reduction strategy for 2010–13**. It emphasizes structural transformation of the Ghanaian economy, based in part on industrialization in the agricultural and natural resource sectors. The cost of meeting the GSGDA's objectives was calculated in close collaboration with affected spending units. The aggregate cost significantly exceeds Ghana's projected fiscal space, and the financing gap will guide efforts to identify additional funding and use public private partnerships to meet infrastructure needs.

VII. Program Design and Monitoring

58. **Program targets and benchmarks.** Quantitative program targets are documented in Appendix Table 2. Structural benchmarks are documented in Appendix Table 3. A few minor modifications have been made to the program design, as described further in the Technical Memorandum of Understanding (TMU):

- **Indicative target on revenue mobilization**. To monitor progress toward the government's goal for boosting tax collections, the ECF arrangement will include a new indicative target for quarterly non-oil tax collections.

- **External nonconcessional borrowing limits**. For greater clarity, the limits on contracting or guaranteeing external nonconcessional debts have been redefined on an annual basis, rather than as before on a cumulative basis from the beginning of the program.

- **Definition of external debt/borrowing**. This covers now any debt/borrowing that is denominated in foreign currency, as oppose to the earlier residency criterion.

- **External arrears** have been more precisely defined in the TMU to clarify coverage and simplify monitoring.

59. **Phasing of disbursements under ECF arrangement**. Total disbursements under the ECF arrangement would be unchanged (Appendix Table 4), though some financing would be deferred from 2010–11 to 2012. This is consistent with Ghana's stronger-than-expected international reserve position.

Appendix Table 1. Ghana: Quantitative Program Targets, March 2010–December 2010

	Mar. 2010				Jun. 2010				Sep. 2010				Dec. 2010			
	Prog.[3]	Adjusted Target	Act.	Target met?	Prog.[2]	Adjusted Target	Act.	Target met?	Prog.[3]	Adjusted Target	Act.	Target met?	Prog.[2]	Adjusted Target	Act.	Target met?
I Quantitative Performance Criteria																
Overall fiscal deficit of the government (ceiling; in millions of cedis)	499	746	956	**Not met**	1,186	1,670	1,575	Met	1,958	2,509	2,611	**Not met**	2,077	2,638	3,000	**Not met**
Increase in net international reserves of the Bank of Ghana (floor; millions of U.S. dollars)[4]	-81	-81	155	Met	-15	-15	200	Met	-98	-98	102	Met	315	315	937	Met
Net change in the stock of domestic arrears (ceiling, in millions of cedis)[5]	…	…	-105	n/a	-55	-55	-134	Met	-83	-83	-25	**Not met**	-110	-110	654	**Not met**
II Continuous Performance Criteria (cumulative from July 15, 2009)																
Non-accumulation of external arrears (ceiling; millions of U.S. dollars)	0	0	0	Met	0	0	0	Met	0	0	0	Met	0	0	0	Met
Contracting or guaranteeing of new medium-to-long-term nonconcessional external debt (ceiling; US$ millions)	300.0	300.0	130.0	**Not met**	649.1	649.1	274.4	Met	649.1	649.1	316.7	Met	649.1	649.1	329.2	Met
Oil and gas sector[6]	300.0	300	0	Met	200.0	200.0	0.0	Met	200.0	200.0	0.0	Met	200.0	200.0	0.0	Met
Fire-fighting equipment	…	…	0	n/a	49.1	49.1	49.1	Met	49.1	49.1	49.1	Met	49.1	49.1	49.1	Met
Ada coastal protection project	…	…	0	n/a	100.0	100.0	83.5	Met	100.0	100.0	83.5	Met	100.0	100.0	83.5	Met
Any sectors[7]	0.0	0	130	**Not met**	300.0	300.0	141.8	Met	300.0	300.0	184.1	Met	300.0	300.0	196.6	Met
III Inflation Consultation																
Twelve-month consumer price inflation (percent)																
Outer band (upper limit)	15.2	15			12.7	12.7			12.5	12.5			12.5	12.5		
Inner band (upper limit)	14.2	14			11.7	11.7			11.5	11.5			11.5	11.5		
Central target rate of inflation	12.2	12.2	13.3	Met	9.7	9.7	9.5	Met	9.5	9.5	9.4	Met	9.5	9.5	8.6	Met
Inner band (lower limit)	10.2	10			7.7	7.7			7.5	7.5			7.5	7.5		
Outer band (lower limit)	9.2	9			6.7	6.7			6.5	6.5			6.5	6.5		
IV Indicative Targets																
Net domestic financing of the government (ceiling, in millions of cedis)	875	877	1,074	**Not met**	1,234	1,242	1,155	Met	1,650	1,725	1,803	**Not met**	1,688	1,768	2,143	**Not met**
Net domestic assets of the Bank of Ghana (ceiling; millions of cedis)[4]	-103	-103	-115	Met	-278	-278	-542	Met	-8	-8	67	**Not met**	50	50	-529	Met
Poverty-reducing budget expenditures (floor; in millions of cedis)	…	…	494	n/a	820	1,109	1,169	Met	1,463	1,463	1,918	Met	2,106	2,106	2,411	Met

Sources: Ghanaian authorities, and IMF staff estimates and projections.
[1] All variables and adjustors to the targets are defined in the Technical Memorandum of Understanding (TMU).
[2] Performance criterion.
[3] Indicative target.
[4] December 2009 target after adjustment for SDR allocation. March 2010 indicative ceiling from the original July 2009 ECF program.
[5] Includes net payments of arrears to statutory fund and contractors as defined in the TMU attached to the Letter of Intent of May 2010.
[6] For the GNPC to finance oil and gas exploration and production projects in Ghana and to acquire equity stakes in companies undertaking oil and gas exploration and production in Ghana.
[7] The non-observance of the March 2010 ceiling for "any sector" was waived at the first/second ECF reviews in June 2010.

Appendix Table 2. Ghana: Quantitative Program Targets, March 2011–June 2012

	2010 Dec. Act.	2011 Mar. Prov.	Jun. 2011 Prog.[2]	Sep. 2011 Prog.[3]	Dec. 2011 Prog.[2]	Mar. 2012 Prog.[2]	Jun. 2012 Prog.[3]
I Quantitative Performance Criteria							
Overall fiscal deficit of the government (ceiling; in millions of cedis)	3,000	560	1800	2,420	2,919	326	733
Increase in net international reserves of the Bank of Ghana (floor; millions of U.S. dollars)	937	-154	-370	-364	788	-105	-275
Net change in the stock of domestic arrears (celing, in millions of cedis)	654	-420	-693	-1,070	-1,167	-288	-403
II Continuous Performance Criteria							
Non-accumulation of external arrears (ceiling; millions of U.S. dollars)	0	0	0	0	0	0	0
Contracting or guaranteeing of new medium-to-long-term nonconcessional external debt (ceiling; US$ millions)[4]	196.6	0.0	800.0	800.0	800.0	500.0	500.0
Oil and gas sector [5]	0.0	0.0	300.0	300.0	300.0	0.0	0.0
Other sectors	196.6	0.0	500.0	500.0	500.0	500.0	500.0
III Inflation Consultation							
Twelve-month consumer price inflation (percent) [6]							
Outer band (upper limit)			12.0	12.0	12.0	11.7	11.7
Inner band (upper limit)			11.0	11.0	11.0	10.7	10.7
Central target rate of inflation	8.6	9.1	9.0	9.0	9.0	8.7	8.7
Inner band (lower limit)			7.0	7.0	7.0	6.7	6.7
Outer band (lower limit)			6.0	6.0	6.0	5.7	5.7
IV Indicative Targets							
Net domestic financing of the government (ceiling, in millions of cedis)	2,143	580	960	1,550	1,545	470	130
Non-oil tax revenue collection (floor, in millions of cedis)	6,046	1625	3450	5,400	7,607	2100	4455
Net domestic assets of the Bank of Ghana (ceiling; millions of cedis)	-529	-166	503	643	-279	-77	-154
Poverty-reducing budget expenditures (floor; in millions of cedis)	2,411		1,100	1,920	2,700	660	1330

Sources: Ghanaian authorities, and IMF staff estimates and projections.

[1] All variables and adjustors to the targets are defined in the Technical Memorandum of Understanding (TMU).

[2] Performance criterion.

[3] Indicative target except for the inflation consultation mechanism.

[4] Measured on an annual basis.

[5] For the GNPC to finance oil and gas exploration and production projects in Ghana and to acquire equity stakes in companies undertaking oil and gas exploration and production in Ghana.

[6] Performance is measured on a continuous basis. The outer and inner bands shown for the last month of each quarter apply throughout the respective quarter.

Appendix Table 3. Ghana: Prior Actions and Structural Benchmarks under the ECF Arrangement, 2010–12[1]
(Shaded benchmarks are covered by the third and fourth ECF reviews)

Measures	Timing	Implementation status	Macroeconomic rationale
1. Tax policy and revenue administration			
● Complete comprehensive reviews of zero-rated VAT items and the nature and scope of tax exemptions and discretionary waivers.	End-Sep. 2009	**Partially implemented**. A review of imports exemptions was prepared with consultant support, and a number of exemptions were eliminated with the 2011 budget. The status of other exemptions and waivers will be reviewed by Dec 2011. (See MEFP, ¶20)	Strengthen revenue mobilization as part of the fiscal consolidation strategy.
● Appoint senior GRA management (commissioners and deputy commissioners) and adopt criteria to ensure that the Large Taxpayer Unit (LTU) covers businesses accounting for at least 70 percent of total tax revenues.	End-Jun. 2010	**Partially implemented**. Senior GRA management appointed with delay by March 2011. Development of criteria for business coverage by the LTU is postponed to June 2011, pending progress in strengthening LTU efficiency. (See MEFP, ¶20)	As above.
● Increase the VAT threshold to no less than GH¢45,000 as the first stage of a phased increase.	End-Dec. 2010	**Implemented**. (See MEFP, ¶23)	As above.
● Submit draft legislation to parliament to extend the VAT to fee-based incomes of banks and other financial institutions.		**Prior action for the completion of the third and fourth ECF reviews** (See MEFP, ¶24)	As above.
● Adopt a tax regime for small business taxpayers for introduction in the 2012 fiscal year.	End-Jun 2011	**New benchmark** (for fifth review). The GRA plans to finalize a tax regime drawing on FAD TA provided in February 2011. (See MEFP, ¶23)	As above.

[1] Includes 2009 benchmarks that have not been implemented.

● Pioneer the integration of VAT and income tax in 11 pilot offices in Greater Accra. Staff will be in common offices, under a single head of office, and with a common audit process.	End-Dec 2011	**New benchmark** (for sixth review). (See MEFP, ¶21)	As above.
● Extend self assessment for tax purposes to all medium and large taxpayers.	End-June 2012	**New benchmark** (for seventh review) (See MEFP, ¶22)	As above.
3. Public expenditure management			
● Roll out GIFMIS to 14 selected pilot MDAs.	End-March 2011	**Delayed**. Roll out to pilots delayed; will be piloted within the CAGD from July 2011 and rolled out to ministries starting January 2012. (See MEFP, ¶27)	Strengthen monitoring and control of budget execution.
● Reintroduce quarterly expenditure ceilings for planning purposes, while retaining the current monthly cash ceiling.	End-October 2011	**New benchmark** (for fifth review). (See MEFP, ¶31)	As above.
● Design and implement a revised 2012 MTEF/budget calendar to allow for a Cabinet discussion in August/September 2011 to frame 2012 budget priorities (across GSGDA goals) and provision of indicative resource ceilings to ministries, departments, and agencies (MDAs) in July 2011.	End-Dec 2011	**New benchmark** (for sixth review). (See MEFP, ¶31)	As above.
4. Arrears management			
● Assign organizational responsibility for maintaining a comprehensive	End-June 2011	**New benchmark** (for fifth review). (See MEFP, ¶34)	To restore credibility to the budget process and address the liquidity

central database of central government arrears and public liabilities in regard of SOE obligations. The responsible unit will compile monthly reports, tracking outstanding liabilities, new claims, and settlements. Quarterly reports on claims to be presented to Cabinet, with a first report by end-June 2011.			problems of contractors, banks, and SOEs associated with domestic arrears and other unpaid fiscal obligations.
● Develop a strategy for regularizing arrears and other liabilities within the medium-term macro-fiscal framework.	End-Sep 2011	**New benchmark** (for sixth review). (See MEFP, ¶36)	As above
5. Public debt management			
● Develop and publish a debt management strategy for Ghana.	End-Dec. 2010	**Implemented**. (See MEFP, ¶49)	To support the achievement of public debt sustainability.
● Develop and submit to Cabinet for approval procedures for appraisal and selection of public investment projects considered for external nonconcessional loans.	End-Dec 2010.	**Implemented**. (See MEFP, ¶49)	As above.
● Publish a second annual debt management strategy.	End-Dec 2011.	**New benchmark** (for sixth review). (See MEFP, ¶49)	
6. Public sector reform and payroll management			
● Migrate to the automated payroll system (IPPD2/3) all remaining non-security subvented agencies.	End-July 2010	**Delayed**. To be completed by end-June 2011. (See MEFP, ¶39.)	To strengthen oversight and control of the high and growing public payroll.

● Submit for cabinet approval list of subvented agencies to be commercialized or liquidated.	End-Dec 2010.	**Implemented.** A roll of subvented agencies to be liquidated or commercialized was completed and submitted to Cabinet for decision in March 2011 (See MEFP, ¶39).	As above.
● Complete pay comparability survey for public and private sectors for a sizeable number of public sector career streams.	End-June 2011.	For fifth review.	As above.
<u>7. Energy sector management</u>			
● Implement additional required increase in electricity tariffs to bring the average tariff to cost recovery levels.	3rd ECF review.	**Implemented**. The World Bank has established in mid-2010 that electricity tariffs were raised to cost recovery level. (See MEFP, ¶42)	To avoid energy sector SOE losses, that have historically posed serious burdens on the budget.
● Develop strategy for restoring financial and commercial viability to Tema Oil Refinery (TOR).	End-Dec 2010.	**Implemented**. TOR has developed its own strategy, which will be provided to the World Bank for review. (see MEFP, ¶46)	As above.
● Submit to parliament legislation establishing rules for oil and gas revenue management, establishing clear rules for the transparent reporting of revenues and spending in the budget, rules governing possible revenue retention by GNPC, and audit requirements.	End-Dec 2010	**Implemented**. (see MEFP, ¶47)	Ensure transparent and prudent management of Ghana's oil incomes.
● Management of petroleum product prices to avoid fiscal subsidies.	End-September 2011	**New benchmark** (for fifth review). (See MEFP, ¶45)	To avoid energy sector SOE losses, that have historically posed serious burdens on the budget.

8. Monetary and financial policy			
● Develop strategy to fully strengthen Ghana Commercial Bank balance sheet.	End-July 2010	**Partially implemented**. GCB's liquidity position has been improved with the repayment of TOR debts. An outstanding debt to BoG, on-lent to TOR, still needs to be repaid (See MEFP, ¶56).	To contribute to continued financial sector stability.
● Conduct an independent audit of remaining problem banks.	End-Nov 2011	**New benchmark** (for fifth review). (See MEFP, ¶56)	As above.
● Develop a strategy for addressing problem banks.	End-Dec 2011	**New benchmark** (for sixth review). (See MEFP, ¶56)	As above.
● Submit for parliamentary approval amendments to the Banking Laws to close regulatory gaps, including with respect to bank resolution options;	End-Mar 2012	**New benchmark** (for sixth review). (See MEFP, ¶56)	As above.

Appendix Table 4. Ghana: Proposed Schedule of Disbursements under the ECF Arrangement, 2009–12 [1]

Amount	Date available	Condition necessary for disbursement
SDR 67.65 million	July 15, 2009	Disbursed on approval of ECF arrangement
SDR 16.00 million	Dec 15, 2009	Observance of the performance criteria for September 30, 2009, and completion of the first review under the arrangement.
SDR 65.50 million	March 15, 2010	Observance of the performance criteria for December 31, 2009, and completion of the second review under the arrangement.
SDR 29.79 million [2]	September 15, 2010	Observance of the performance criteria for June 30, 2010, and completion of the third review under the arrangement.
SDR 29.79 million [2]	March 15, 2011	Observance of the performance criteria for December 31, 2010, and completion of the fourth review under the arrangement.
SDR 59.58 million [3]	September 15, 2011	Observance of the performance criteria for June 30, 2011, and completion of the fifth review under the arrangement.
SDR 59.58 million [3]	March 15, 2012	Observance of the performance criteria for December 31, 2011, and completion of the sixth review under the arrangement.
SDR 59.56 million [3]	June 15, 2012	Observance of the performance criteria for March 31, 2012, and completion of the seventh review under the arrangement.
SDR 387.45 million	Total for the ECF arrangement	

[1] In addition to the generally applicable conditions under the Extended Credit Facility arrangement.
[2] About \$93.3 million for the combined third and fourth ECF reviews, at a projected exchange rate of SDR1 = \$1.566.
[3] About \$93.3 million each loan disbursement, at a projected exchange rate of SDR1 = \$1.566.

APPENDIX II—ATTACHMENT II

TECHNICAL MEMORANDUM OF UNDERSTANDING

Arrangement Under the Extended Credit Facility 2011–12

1. This technical memorandum of understanding (TMU) defines the variables subject to quantitative targets (performance criteria and indicative targets), as specified in the authorities' Letter of Intent (LOI) [date]. It also describes the methods to be used to assess the program performance and the information requirements to ensure adequate monitoring of the targets. The authorities will consult with the Fund before modifying measures contained in this letter, or adopting new measures that would deviate from the goals of the program, and provide the Fund with the necessary information for program monitoring.

2. **Program exchange rate:** The exchange rates for the purpose of the program of the Ghanaian cedi (GH¢) to the U.S. dollar will be GH¢1.5 per US$1, which is calculated as the average of buying and selling exchange rates reported by banks to the Bank of Ghana. The exchange rates to other currencies will be calculated as the average of buying and selling exchange rates against the U.S. dollar.

I. Quantitative Program Indicators

3. For program monitoring purposes, the performance criteria are set for end-June 2011, end-December 2011, and end-March 2012, while indicative targets are set for end-March 2011, end-September 2011, and end-June 2012. Performance criteria, indicative targets, and adjusters are calculated as cumulative flows from the beginning of the calendar year.

4. The **performance criteria** under the arrangement are:

- a ceiling on the overall fiscal deficit of the government, measured in terms of financing;
- a floor on the net international reserves of the Bank of Ghana;
- a ceiling on the net change in the stock of domestic arrears;
- a continuous zero ceiling for the accumulation of new external arrears; and
- a ceiling on the contracting or guaranteeing of new external nonconcessional debt

5. **Indicative targets** are established as:

- a ceiling on the net domestic financing of the government;
- a floor on non-oil tax revenue collection
- a ceiling on the net domestic assets of the Bank of Ghana; and
- a floor on poverty-reducing government expenditures.

6. A **target** is set for the twelve-month rate of consumer price inflation, with triggers on discussions or consultations with the Fund if inflation moves outside specified inner and outer bands.

A. Government

7. **Definition:** The government is defined as comprising the central government, all special funds (including the Education Trust Fund, the Road Fund, the District Assembly Common Fund, and the National Health Insurance Fund), and all subvented and other government agencies that are classified as government in the Bank of Ghana (BoG) Statement of Accounts (SOA). The Social Security and National Insurance Trust (SSNIT) and public enterprises, including Cocobod, are excluded from the definition of government

8. The government's **total tax revenue** includes all revenue collected by the Ghana Revenue Authority (GRA) (direct taxes, indirect taxes, trade taxes) whether they result from past, current, or future obligations. Receipts are recorded on a cash basis.

9. **Oil tax revenue** is defined as the government's net proceeds from the sale of oil, including corporate tax and royalties paid by oil companies, excluding any revenue associated with GNPC's carried interests in oil fields.

10. **Non-oil tax revenue** will be measured as total government tax revenue less oil tax revenue (as defined in paragraph 9).

11. **The fiscal deficit** is measured as total financing extended to the government (as defined in paragraph 7 above), comprising the sum of net foreign borrowing (as defined in paragraph 15 below), net domestic financing (defined in paragraph 14 below), exceptional financing (including HIPC and MDRI relief against loan repayments falling due), and receipts from net divestitures.

12. **Domestic payments arrears** will be measured as the sum of three components. The first component, arrears to the *government's statutory funds*, represents any delay of more than one month in revenue transfers to these statutory fund, relative to the normal payment schedule (typically monthly or quarterly, and defined as a specific percentage of the previous month or quarter's revenue collections).[1] The second component, arrears to *contractors*, is defined as payments in local and foreign currencies that are due and not settled within 30 days after the end of the fiscal year. The third component, wages and pensions arrears, is defined as payments outstanding after the agreed date for payment to staff or the social security fund. In the case of pay awards, arrears are calculated as the amount outstanding at

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[1] Transfers to the statutory funds are scheduled as follows: (i) District Assemblies Common Fund—quarterly, with a one-quarter lag; (ii) Social Security Fund, National Health Fund, Ghana Education Trust Fund, Road Fund, Petroleum-related Fund,—monthly, with a one-month lag.

the date at which the award specifies the first payments should be made. Net changes in the stock of arrears to contractors at end-March 2011 are as defined in the TMU attached to the Letter of Intent of May 13, 2010. Starting at end-June 2011, the net change in the stock of arrears to contractors will be measured at each end-quarter as the accumulation of arrears within the current fiscal year, less amounts settled in the current fiscal year in respect of the claims accumulated in previous fiscal years.

13. **The government will continue to report poverty-related expenditures,** including the use of funds from the enhanced Heavily Indebted Poor Countries (HIPC) Initiative. Budgeted poverty spending for these categories will be taken from each year's final appropriations bill and will include spending financed by the government or donors or from internally generated funds. Actual poverty-related spending will be identified using the last 3 digits of the 15-digit chart of accounts of the CAGD's current NETS and the subcomponent that is financed through HIPC Initiative debt relief. This data will be supplemented with that proportion of transfers to the District Assembly Common Fund, the Ghana Educational Trust Fund, and the Road Fund, which the government considers as poverty-related. Accordingly, actual poverty spending will exclude some donor-supported expenditure not currently captured by the CAGD.

14. **Net domestic financing of government** is defined as the change in net credit to government by the banking system (i.e., the Bank of Ghana plus deposit money banks) plus the net change in holdings of treasury bills and other government securities by the nonbank sector, excluding divestiture receipts. Such credit will also exclude treasury bills issued for open market operation purposes from January 1, 2003 onward (the holdings of which are excluded from the BoG Treasury Department's Debt Registry of central government securities, and the proceeds of which are sterilized in deposits held as other BoG liabilities, as defined in the monetary template provided to the IMF on December 3, 2003).

15. **Net foreign financing of government** is defined as the sum of project and program loans by official donors, commercial external borrowing, minus amortization due.

16. **Outstanding net credit to the government by the Bank of Ghana** comprises the sum of claims on government (SOA codes 0401 and 050101-4), including overdrafts of the government with the BoG, less government deposits (1101 including the main HIPC Initiative receiving account, and 1202) as defined in the monetary template.

17. **Outstanding net credit by deposit money banks** comprises deposit money bank (DMB) holdings of government securities at cost of purchase value, as reported by the BoG Treasury Department's Debt Registry, plus overdrafts less government deposits as reported by DMBs in the revised BSD2 report forms (and defined in the Monetary Template), plus deferred accrued interest on their holdings of inflation-indexed bonds.

18. **Nonbank financing** is the difference between total net cash receipts to the treasury main cash account (issues/redemptions account when it becomes operational) from the

sale/repurchase of government securities, less the corresponding net cash value received from the BoG and DMBs as indicated on the Debt Registry by holder at discount value, plus deferred accrued interest on their holdings of inflation-indexed bonds. For each test date, any adjustment by the BoG to the data reported by individual DMBs, on account of their misclassification of government or for other reasons, will be reported to the Fund.

B. Consultation Mechanism on Inflation

19. **A consultation mechanism adopted for the twelve-month rate of inflation.** Inflation is measured by the headline consumer price index (CPI) published by the Ghana Statistical Services. Quarterly consultation bands are specified in Appendix Tables 1 and 2 attached to the memorandum of economic and financial policies. The bands are defined for each quarter and apply to the three month inflation outturns in each quarter. Appendix Tables 1 and 2 attached to the memorandum of economic and financial policies show the relevant bands for each quarter. Whenever the twelve-month rate of CPI inflation moves outside a specific band, this would trigger a consultation/discussion with the Fund.

20. **Breach of the outer band.** The authorities will complete consultations with the Executive Board of the Fund on the proposed policy response before requesting further disbursements under the program when the observed twelve-month rate of CPI inflation moves outside the outer band as specified for each quarter in Appendix Tables 1 and 2 of the memorandum of economic and financial policies. The authorities will not be able to request any further disbursements under the ECF arrangement if the observed twelve-month rate of CPI inflation moves outside of the outer band until the consultation with the Executive Board has taken place. In line with our accountability principles, we are committed to report to the public the reasons for any breach of the outer bands, and our policy response.

21. **Breach of the inner band.** The authorities will conduct discussions with the Fund staff when the observed twelve-month rate of CPI inflation falls outside the inner band as specified for each quarter in Appendix Tables 1 and 2 of the memorandum of economic and financial policies.

C. Bank of Ghana

22. **Net foreign assets** are defined in the monetary survey as short- and long-term foreign assets minus liabilities of the BoG that are contracted with nonresidents. Short-term foreign assets include: monetary gold (valued at the spot market rate for gold, US$/fine ounce, London), holdings of SDRs, reserve position and HIPC Initiative trust investment in the IMF, the HIPC Initiative Umbrella SDR account (all as reported by the IMF), foreign notes and travelers checks, foreign securities, positive balances with correspondent banks, and other positive short-term or time deposits. Short-term foreign liabilities include foreign currency liabilities contracted by the BoG at original maturities of one year or less (including overdrafts), outstanding liabilities to the IMF, and deposits of international institutions at the

BoG. Long-term foreign assets and liabilities are comprised of: other foreign assets (BoG statement of accounts code 303), investments abroad (a subset of 60201), other long-term liabilities to nonresidents (a subset of 1103), and bilateral payment agreements (305). All values not in U.S. dollars are to be converted to U.S. dollars at the program exchange rate defined in paragraph 2. A more detailed listing of accounts to be included in the measure of net foreign assets is contained in the monetary template referred to in paragraph 14 above.

23. **Net international reserves** of the BoG are defined for program monitoring purposes and in the balance of payments as short-term foreign assets of the BoG, minus short-term external liabilities. To the extent that short-term foreign assets are not fully convertible external assets readily available to and controlled by the BoG (that is, they are pledged or otherwise encumbered external assets, including, but not limited to, the HIPC umbrella SDR account), they will be excluded from the definition of net international reserves. Net international reserves are also defined to include net swap transactions (receivable less payable) and exclude all positive foreign currency deposits at the BoG held by resident deposit money banks, public institutions, nonfinancial public enterprises, other financial institutions, and the private sector. All values not in U.S. dollars are to be converted to U.S. dollars at the program exchange rate defined in paragraph 2. A more detailed listing of accounts to be included in the measure of net international reserves is contained in the monetary template referred to in the paragraph 14 above.

24. **Net domestic assets** of the Bank of Ghana are defined as the difference between reserve money and net foreign assets of the BoG, excluding the HIPC Umbrella SDR account, converted from U.S. dollars to cedis at the program exchange rate.

D. External Debt and Debt Service

25. **For the purposes of this technical memorandum of understanding, the definition of debt is set out in point 9 of the Guidelines on Performance Criteria with Respect to External Debt** (see below). It not only refers to debt, but also to commitments contracted or guaranteed for which value has not been received. The definition of debt is as follows:

> 9 (a) For the purpose of these guidelines, the term "debt" will be understood to mean a current, i.e., not contingent, liability, created under a contractual arrangement through the provision of value in the form of financial and nonfinancial assets (including currency) or services, and which requires the obligor to make one or more payments in the form of assets (including currency) or services, at some future point(s) in time; these payments will discharge the principal and/or interest liabilities incurred under the contract. Debts can take a number of forms, the primary ones being as follows:
>
> > (i) loans, i.e., advances of money to the obligor by the lender made on the basis of an undertaking that the obligor will repay the funds in the future

(including deposits, bonds, debentures, commercial loans and buyers' credits) and temporary exchanges of assets that are equivalent to fully collateralized loans under which the obligor is required to repay the funds, and usually pay interest, by repurchasing the collateral from the buyer in the future (such as repurchase agreements and official swap arrangements);

(ii) suppliers' credits, i.e., contracts where the supplier permits the obligor to defer payments until some time after the date on which the goods are delivered or services are provided; and

(iii) leases, i.e., arrangements under which property is provided which the lessee has the right to use for one or more specified period(s) of time that are usually shorter than the total expected service life of the property, while the lessor retains the title to the property. For the purpose of the guideline, the debt is the present value (at the inception of the lease) of all lease payments expected to be made during the period of the agreement excluding those payments that cover the operation, repair, or maintenance of the property.

(b) Under the definition of debt set out in point 9(a) above, arrears, penalties, and judicially awarded damages arising from the failure to make payment under a contractual obligation that constitutes debt are debt. Failure to make payment on an obligation that is not considered debt under this definition (e.g., payment on delivery) will not give rise to debt.

26. **For the purposes of the ceiling on the contracting or guaranteeing of new non-concessional external debt,** external debt is any debt as defined in paragraph 27, which is denominated in foreign currency, i.e., currency other than Ghanaian cedis (GH¢). Similarly, external borrowing is borrowing denominated in foreign currency.[2]

27. **Nonconcessional medium- and long-term external debt** is defined as external debt contracted or guaranteed by the government (defined in paragraph 7), the BoG, and specific public enterprises (defined in paragraph 31) on nonconcessional terms (see paragraph 34) and denominated in foreign currencies, with an original maturity of more than one year, provided that debt maturing within one year which has been extended beyond one year from its original date, pursuant to the contract which allows for maturity extension, would be considered medium to long term. Medium- and long-term external debt and its concessionality will be reported by the Aid and Debt Management Unit of the Ministry of Finance and Economic Planning, and will be measured in U.S. dollars at current exchange rates.

28. **For the purpose of the ceiling on the accumulation of external payment arrears,** external payment arrears will accrue when undisputed payments such as interest or amortization on debts of the government (as defined in paragraph 7) to non-residents are not made within the terms of the contract.

E. Ceiling on the Contracting or Guaranteeing of New Nonconcessional External Debt

29. A ceiling applies to the contracting and guaranteeing of new medium-to-long term nonconcessional external debt by the government and the BoG, and the following public enterprises: (i) Tema Oil Refinery; (ii) Ghana National Petroleum Corporation; (iii) Bulk Oil Storage and Transport Corporation; (iv) Volta River Authority; and (v) Electricity Company of Ghana. The ceiling applies to debt and commitments contracted or guaranteed for which value has not yet been received.

30. The ceiling on the contracting or guaranteeing of new nonconcessional external debt (US$800 million) comprises the following two subceilings: (i) A subceiling for the maximum amount of nonconcessional external debt in the oil and gas sector that can be contracted or guaranteed for oil and gas exploration and production projects in Ghana and to acquire equity stakes in companies undertaking oil and gas exploration and production in Ghana

[2] (A) The term “debt” has the meaning set forth in point No. 9 of the Guidelines on Performance Criteria with Respect to Foreign Debt (see paragraph 25). This includes overdrafts on accounts with correspondent banks. (B) Excluded from this performance criterion are normal import-related credits, pre-export financing credits of public enterprises, cocoa loans collateralized by cocoa contracts, and individual leases with a value of less than US$100,000.

(US$300 million); and (ii) A subceiling for the maximum amount of nonconcessional external debt that can be contracted or guaranteed in any sector other than the oil and gas sector (US$500 million).

31. Excluded from the ceiling are (i) the use of Fund resources; and (ii) lending from the World Bank, the African Development Bank, and the International Fund for Agricultural Development.

32. For program purposes, a debt is concessional if it includes a grant element of at least 35 percent, calculated as follows: the grant element of a debt is the difference between the net present value (NPV) of debt and its nominal value, expressed as a percentage of the nominal value of the debt. The NPV of debt at the time of its contracting is calculated by discounting the future stream of payments of debt service due on this debt. The discount rates used for this purpose are the currency specific commercial interest reference rates (CIRRs), published by the Organization for Economic Cooperation Development (OECD). For debt with a maturity of at least 15 years, the ten-year-average CIRR will be used to calculate the NPV of debt and, hence, its grant element. For debt with a maturity of less than 15 years, the six-month average CIRR will be used. To both the ten-year and six-month averages, the same margins for differing repayment periods as those used by the OECD would continue to be added (0.75 percent for repayment periods of less than 15 years, 1 percent for 15 to 19 years, 1.15 percent for 20 to 29 years, and 1.25 percent for 30 years or more). Loans provided by a private entity will not be considered concessional unless accompanied by a grant or grant element provided by a foreign official entity, such as both components constitute an integrated financing package with a combined grant element equal to at least 35 percent.

F. Adjustors to the Program Targets

33. Program's quantitative targets are subject to the following adjustors:

Overall fiscal deficit of the government

34. The deficit ceilings for 2011–12 will be adjusted for excesses and shortfalls in loans and grants as defined below, relative to the program assumptions in the table below. The fiscal deficit will be adjusted:

(i) Upward (or downward) for the full amount of any **excess (or shortfall) in concessional project loans**. Thus, foreign-financed investment projects, which are not under the short-term control of the government, would be unconstrained, varying in line with project loan financing.[3]

[3] No adjuster is needed for project grants, as shortfalls/excesses in project grants are precisely offset by shortfalls/excesses in foreign-financed capital spending, leaving the fiscal deficit unaffected.

(ii) Downward by 50 percent of any **shortfall in concessional program loans**[4] of GH¢150 million or less, and downward by the full amount of any shortfall beyond this amount. Thus, for shortfalls of up to GH¢150 million in external loans, the government would have the option of balancing cuts in expenditures with resort to additional domestic financing. The possible resort to additional domestic financing from this adjuster is effectively capped at GH¢75 million, limiting potential crowding-out of private sector credit;

(iii) Upward for the full amount of any **excess in concessional program loans**, where these are used to repay outstanding domestic arrears at a more rapid pace than programmed.[5]

(iv) Upward by 50 percent of any **shortfall in program grants** of GH¢150 million or less, with no adjustment for any shortfall beyond this amount. As with adjuster (ii), this gives the option of balancing cuts in spending with additional resort to domestic financing. The latter is capped, again, at GH¢75 million;[6]

(v) Downward by the full amount of any **excess of program grants**, less any use of program grants to repay outstanding domestic arrears at a more rapid pace than programmed; and

Budget Financing Assumptions, 2011–12

(GH¢ millions, cumulative from the start of the calendar year)

	2011 Mar[2/]	2011 Jun	2011 Sep	2011 Dec	2012 Mar	2012 Jun
Program/budget grants	123	199	248	291	84	195
Program/budget loans[1/]	327	360	539	575	14	352
Project loans[1/]	304	684	1038	1422	226	492

[1/]Concessional financing.
[2/]Preliminary estimates.

Net international reserves of the Bank of Ghana

35. For the net international reserve (NIR) floors will be adjusted upward for any excess of budget grants and loans relative to the program baseline (see paragraph 25), except where this financing is used to repay outstanding domestic arrears at a more rapid pace than programmed.

[4] Program grants and loans are also referred to as budget grants and loans.
[5] Adjusters (iv) and (v) ensure that higher than programmed budget support (grants or loans) are used to repay domestic expenditure arrears as a first priority.
[6] The combined scope for additional domestic financing from adjusters (ii) and (iii) is thus GH¢150 million.

Net domestic financing of the government

36. The ceiling on net domestic financing (NDF) will be adjusted upward by 50 percent of any shortfall in concessional program loans and grants relative to the program (see paragraph 37), up to a maximum adjustment of GH¢75 million for shortfalls in each of program loans and grants (and a maximum combined adjustment of GH¢150 million). For higher than programmed loans and grants, the ceiling will be adjusted downward by the full amount, except where these loans or grants are used to repay outstanding domestic arrears at a more rapid pace than programmed. The ceiling will also be adjusted upward by the full amount for a reduction in net arrears paid through bond issuance.

F. Provision of Data to the Fund

37. Data with respect to the variables subject to performance criteria and indicative targets will be provided to Fund staff on a monthly basis with a lag of no more than eight weeks (except for select data for which the reporting lag is explicitly specified in Table 1). The authorities will transmit promptly to Fund staff any data revisions. For any information (and data) that is (are) relevant for assessing performance against program objectives but is (are) not specifically defined in this memorandum, the authorities will consult with Fund staff.

Table 1. Ghana: Data to be Reported to the IMF

Item	Periodicity
Fiscal data (to be provided by the MOFEP)	
Central budget operations for revenues, expenditures and financing, including clearance of arrears.	Monthly, within six weeks of the end of each month.
Divestiture receipts received by the budget (in cedis and foreign exchange, net of divestiture transactions costs).	Monthly, within six weeks of the end of each month.
The stock of domestic payments arrears by sub-category (as defined in para. 9 of the MEFP)	Quarterly, within six weeks of the end of each quarter
Monetary data (to be provided by the BOG)	
Net domestic assets and net international reserves of the BOG.	Monthly, within two weeks of the end of each month.
Detailed balance sheet of the monetary authorities.	Monthly, within four weeks of the end of each month.
Monetary survey detailing the consolidated balance sheet of commercial banks using the new BSD2 Report Form.	Monthly, within six weeks of the end of each month.
Summary position of government committed and uncommitted accounts at BOG, as well as total financing from BOG. Accompanying table showing composition of other receipts and other expenditure.	Monthly, within four weeks of the end of each month.
Composition of banking system and nonbanking system net claims on government.	Monthly, within four weeks of the end of each month.
Debt registry showing structure and holders of domestic government debt, at face value and at discount. Similar table showing holders of treasury bills for open market operations.	Monthly, within four weeks of the end of each month.
Balance of Payments (to be provided by the BOG)	
Export and import data on value, volume, and unit values, by major categories and other major balance of payments variables.	Quarterly, with a maximum lag of two months.
Foreign exchange cash flow.	Monthly, within four weeks of the end of the month.

Table 1. Ghana: Data to be Reported to the IMF (concluded)

External debt and foreign assistance data (to be provided by MOFEP)	
Information on the concessionality of all new external loans contracted by the government or with a government guarantee.	Quarterly, within four weeks of the end of each quarter.
For the coming quarter: (i) total debt service due by creditor, (ii) amount of HIPC Initiative relief on each transaction, and (iii) debt service paid and the transfers to the HIPC Initiative account by creditor for the previous month. Report should cover government and government-guaranteed debt (as defined in this document).	Quarterly within four weeks of the end of each quarter.
External debt and external debt service incurred by enterprises with government ownership above 50 percent, even if loans have not been explicitly guaranteed by the government.	Quarterly, within three weeks of the end of each quarter.
Short-term liabilities to nonresidents (maturity in one year or less), including overdraft positions and debt owed or guaranteed by the government or the BoG. Data on the BoG short-term liabilities to nonresident commercial banks on accounts 1201 plus 301 plus Crown Agent).	Quarterly, within three weeks of the end of each quarter.
Disbursements of grants and loans by creditor	Quarterly, within four weeks of the end of each quarter.
Other data (to be provided by GSS)	
Overall consumer price index.	Monthly, within two weeks of the end of each month.
National accounts by sector of production, in nominal and real terms.	Annual, within three months of the end of each year (switching to quarterly when they become available).
Electricity pricing (to be provided by the Ministry of Energy) Data on the tariff structure and the cost of producing electricity.	Quarterly, within four weeks of the end of each quarter.
Petroleum pricing (to be provided by the Ministry of Energy)	
(i) a breakdown of costs, including the ex-refinery price, duties, levies, and margins, for each of the individual petroleum products; and	Bi-weekly, within two days of the completion of the pricing review.
(ii) the indicative maximum price approved in the bi-weekly review of petroleum pricing for each of the individual petroleum products.	See above.
(iii) commitments to subsidize oil marketing companies in respect of losses incurred due to administrative prices that fall below cost-recovery levels.	Monthly, within four weeks of the end of each month.
(iv) the cumulative unused balance from the petroleum price hedging operations available to subsidize petroleum products.	See above.

INTERNATIONAL DEVELOPMENT ASSOCIATION
INTERNATIONAL MONETARY FUND

GHANA

Joint IMF and World Bank Debt Sustainability Analysis

Prepared by the staffs of
the International Monetary Fund and the World Bank

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Given risks to the fiscal outlook and the potential external spillovers of a less favorable fiscal outcome, Ghana's risk of external debt distress is assessed to remain at a moderate level, unchanged from the 2010 debt sustainability assessment. However, Ghana's debt burden indicators have improved since the June 2010 assessment. External debt burden indicators are projected to remain well below their respective indicative thresholds, provided that the programmed fiscal consolidation is achieved and external public sector borrowing is restrained. At the same time, overall public sector debt is projected to increase moderately in relation to GDP over the long term. If the planned fiscal consolidation is achieved without a substantial further debt build-up, an improved rating of low risk of debt distress could be considered in a future assessment.

I. BACKGROUND

1. **This debt sustainability analysis (DSA) was prepared jointly by the staffs of the World Bank and IMF, based on debt data provided by the Ghanaian authorities**. It updates the June 2010 debt sustainability assessment prepared by IMF staff for the combined first and second reviews under the Extended Credit facility (ECF).[1]

Recent debt developments

2. **Public debt at end-2010 was higher than in the 2010 DSA (Text Table 1).** Total public debt at end-year was an estimated 39 percent of GDP, 1 percentage points higher than

[1] Appendix II, IMF Country Report No. 10/178, June 2010.

projected in the 2010 DSA.[2] This reflected a larger-than-programmed fiscal deficit and associated increases in domestic financing.

Text Table 1. Debt Outturns, 2010 (in percent of GDP)

	2010 DSA 1/		2011 DSA	
	2009 Est.	2010 Proj.	2009 Act.	2010 Est.
Total external debt	24.5	27.5	28.1	27.8
Public sector 2/	19.4	20.3	19.4	20.3
Private sector	5.1	7.2	8.7	7.5
Public debt 3/	35.9	37.8	36.0	38.9
Of which: public domestic debt	16.5	17.5	16.6	18.6

1/ Rebased using revised national accounts.
2/ Public and publicly guaranteed external sector debt.
3/ Domestic and external public debt.

3. **The government continued to accumulate domestic payment arrears in 2010.** At end-year, the outstanding stock of arrears and public liabilities in respect of SEO debts was estimated at 9 percent of GDP, which was not reflected in the public debt data. About one-third of these liabilities will be cleared in 2011 through a 2-to-1 mix of cash payments and bond issues. This element of arrears therefore adds to the debt balance at end-2011. The residual arrears balance is assumed to be regularized through cash outlays or bond issues in 2012–13, adding to the debt burden over this period. The authorities' program includes policies to avoid the reoccurrence of arrears.

4. **Ghana's external debt stock has risen substantially since its MDRI debt relief.** External debt totaled US$6.1 billion at end-2010, up from US$2.1 billion in 2006 after debt relief under the Multilateral Debt Reduction Initiative (MDRI).[3] The increase largely reflects borrowing from bilateral and multilateral institutions, including under the IMF ECF program. Non-concessional borrowing includes Ghana first sovereign bond issued in 2007 (US$750 million, maturing in 2017); subsequently, commercial borrowing has been at a more modest pace (Text Table 2).[4]

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[2] Data for state-owned enterprises are not available while private sector debt data are inherently weak. The data also exclude the outstanding stock of domestic payment arrears, which is discussed further below.

[3] It has doubled as a percentage of GDP during this period.

[4] Non-resident holdings of government securities issued in the local currency are part of domestic public debt.

Text Table 2. Total Public Debt, 2004-10

	2004	2005	2006	2007	2008	2009	2010
	(In millions of U.S. dollars)						
1. External debt	**6,448**	**6,348**	**2,177**	**3,586**	**4,035**	**5,008**	**6,111**
Multilateral Institutions	5,287	5,565	1,327	1,710	2,028	2,462	2,971
IMF	447	424	158	167	163	270	388
IDA	4,012	4,336	803	1,137	1,320	1,536	1,789
AfDB	551	555	141	153	230	271	422
Other	277	251	225	254	315	385	372
Official bilateral	960	636	760	978	1,168	1,687	2,112
Non-concessional[1]	201	147	90	898	839	859	1,028
2. Domestic debt	**1,830**	**1,927**	**3,133**	**3,821**	**4,315**	**4,273**	**5,618**
Banking system	1,385	1,684	2,431	2,599	2,677	2,974	3,589
Non-bank sector	444	242	637	1,222	1,277	960	968
Non-residents	0	0	66	0	361	339	1,062
Other[2]	0	0	0	0	0	0	0
3. Total public debt (1 + 2)	**8,277**	**8,275**	**5,310**	**7,407**	**8,350**	**9,280**	**11,729**
Memorandum items							
Total public debt[3]	**58.0**	**48.4**	**26.2**	**31.0**	**33.6**	**36.0**	**38.9**
External debt	45.2	37.2	10.7	15.0	16.2	19.4	20.3
Domestic debt	12.8	11.3	15.5	16.0	17.4	16.6	18.6

Sources: Ministry of Finance and Bank of Ghana.

[1] Includes a bond placement in September 2007.

[2] Includes Jubilee bond and other standard credits.

[3] In percent of GDP.

Box 1: Rebasing of National Accounts

Rebased national accounts for 2006–09 were adopted in November 2010. The revisions included improved data sources, a change in the base year from 1993 to 2006, and updated compilation methodologies (the 1993 system of national accounts, and the latest version of the industrial classification standards, ISIC version 4).

Under the new data, national incomes have been revised up by an average of 65 percent during 2006–09, while the average real growth rate for these years is about one percentage point higher than earlier estimated. On the rebased data, the gross national income per capita is estimated to have reached US$1,240 in 2010 (using Atlas method), making Ghana a lower middle income country.

The updated accounts reflect better the sectoral composition of economic activity, and capture more effectively service sector and informal activities. The revised data highlight the increasing importance of the service sector, which accounts for about one-half of the economy and explains in part the faster growth rate in the sample period (particularly in the information/communication and financial services).

II. ASSUMPTIONS UNDERLYING THE DSA

Baseline macroeconomic assumptions

5. **The current DSA macroeconomic assumptions are broadly in line with the 2010 exercise** (Text Table 3 and Box 2). Key differences between the 2010 and 2011 exercises are a somewhat weaker initial fiscal position and changes in the assumptions regarding the mix of external borrowing (concessional vs. non-concessional) and the terms of financing. The projected real interest rate on public debt would be lower by about 0.5 percent per annum. It reflects a downward revision of interest payments on existing external borrowing, which more than offsets a higher projected interest rate on domestic debt. The rebased nominal GDP also affects a number of debt ratios.

6. **The DSA depends importantly on successful fiscal consolidation in 2011–12**. The primary fiscal balance is assumed to be close to zero during 2010–15, which will require a fiscal correction of about 4 percentage points of GDP from 2010 levels (Text Table 3).

Text Table 3. Key Macroeconomic Assumptions

	2009	2010	2010-15	2016-30
Real growth [1]	(annual percentage change)			
DSA - 2010	3.5	4.5	7.8	4.9
DSA - 2011	4.7	5.7	7.6	4.9
Level of nominal GDP	(in U.S. dollar millions; end of period)			
DSA - 2010	16,654	15,513	32,959	100,389
DSA - 2011	25,988	31,084	58,620	195,920
Inflation (GDP deflator)	(annual percentage change)			
DSA - 2010	20.7	12.8	7.3	6.1
DSA - 2011	16.7	14.1	10.2	7.1
Real interest rate (foreign debt) [2]	(percent)			
DSA - 2010	2.1	3.7	3.5	3.2
DSA - 2011	2.8	2.8	1.4	2.4
Real interest rate (domestic debt) [3]	(percent)			
DSA - 2010	-4.9	3.7	3.6	1.4
DSA - 2011	-1.7	3.8	4.1	2.3
Current account balance [4]	(in percent of GDP)			
DSA - 2010	-3.1	-7.3	-4.7	-3.9
DSA - 2011	-4.0	-7.2	-4.8	-3.9
Primary fiscal balance [4]	(in percent of non-oil GDP)			
DSA - 2010	-3.0	-1.8	0.2	0.0
DSA - 2011	-3.0	-4.4	-0.2	-0.1

Sources: Ghanaian authorities and IMF staff estimates and projections.

[1] Rebased national accounts for 2011 DSA.

[2] Nominal rate is deflated by U.S. inflation rate.

[3] Nominal interest rate is deflated by GDP deflator.

[4] The 2010 DSA ratios adjusted to correspond to rebased GDP levels.

Box 2: Baseline Macroeconomic Assumptions

Real GDP growth: After a slowing of growth to below 5 percent in 2009, growth recovered to an estimated 5.7 percent in 2010. It is projected to accelerate to 13.7 percent in 2011, boosted by rising oil production and robust expansion of the non-oil economy. Over 2012–31, non-oil growth is cautiously projected to average 5–6 percent.

Inflation: Consumer price inflation slowed to 8.6 percent by end 2010, helped by tighter monetary policy and slowing demand, after exceeding 20 percent in 2009. Over the medium term, with supportive fiscal and monetary policies, inflation is expected to converge to the middle single digit range.

Government balances: Following the widening of the primary deficit to 4.4 percent of nonoil GDP in 2010, a balanced primary position is assumed over the long term. This reflects a significant increase in revenue mobilization of up to 5 percent of GDP (partly due to oil production) as well as a small decline in expenditures in relation to nonoil GDP over the medium-to-long term. Within the overall expenditure budget, there is an assumed emphasis on growth-oriented infrastructure investments. Foreign grant receipts are projected to fall significantly (relative to nonoil GDP) over the projection period as Ghana benefits from oil income.

Current account balance: Ghana's external balances have benefitted from strong cocoa and gold export prices in recent years. In the medium-to-long term, the current account deficit is projected to narrow to around 3–4 percent of GDP. Exports are projected to peak at 34–35 percent of GDP in 2011, boosted by commodity exports. After that, declining oil exports are partly offset by rising non-mineral exports, leaving exports at 30–31 percent of GDP over the medium-to-long term. Imports are projected to stabilize around 35–36 percent of GDP, comprising equipments for new oil fields as well as projected government infrastructure investment projects. The current account balance is projected at slightly under 4 percent of GDP over the long term, broadly in line with the current account norm produced by the macroeconomic balance approach.

Financing flows: In the capital account, non-debt creating inflows (largely comprising foreign direct investment) averaged 6.3 percent of GDP in 2010, largely reflecting oil and gas sector investments. Under the baseline which assumes that oil extraction is limited to the Jubilee 1 field, oil-related investments are projected to decelerate, with foreign direct investment stabilizing at around to 3–4 percent of GDP over the medium-to-long run, in line with the average for Sub-Saharan African countries. Official financing is assumed to remain broadly stable at around 3 percent of GDP per annum, while financing is projected to become increasingly non-concessional over the medium-to-long term, and is expected to represent 85–90 percent of total official borrowing by the end of the projection period. The shift would be consistent with Ghana's improving wealth and lower middle-income status.

Commercial borrowing: The projected rise in commercial borrowing is more modest than in last year's DSA, and is consistent with Ghana's prudent pace of external borrowing in 2010 (roughly 0.7 percent of GDP) and its continuing intention to rely on concessional financing where possible (Text Table 4). Non-concessional borrowing is projected to gradually rise as a share of external official financing and average 2 percent of GDP during 2016-30, compared to 3 percent of rebased GDP in the 2010 DSA. Furthermore, the DSA assumes that the ECF program limits on contracting non-concessional external debt will be fully utilized during 2011–12, leading to an upturn in commercial disbursements. There is some downside potential to this assumption, given that the ECF borrowing limit was not fully utilized in 2011.

Text Table 4. Official Borrowing (in US$ millions)

	2010	2011	2012	2013	2014	2015
Disbursements:						
Concessional loans	1,106	1,518	1,259	792	715	715
Non-concessional loans	216	648	500	600	700	826
(percent of GDP)	*0.7*	*1.7*	*1.1*	*1.2*	*1.3*	*1.4*
Total	1,322	2,166	1,759	1,392	1,415	1,541
Memorandum item:						
Non-concessional loans contracted [1]	329	800	500	600	700	800

Sources: Ghanaian authorities and IMF staff estimates and projections.

[1] Consistent with 2011-12 ECF program limits.

III. External DSA

Baseline scenario

7. **Under the baseline scenario, Ghana's debt indicators are well below the relevant indicative debt distress thresholds**. The projected level and composition of external debt is associated with only a small deterioration in the various debt burden indicators, with all remaining well below their respective thresholds (Text Table 5, Tables 1 and 2, and Figure 1).[5] The baseline external debt burden trajectories are more favorable than in the 2010 DSA, reflecting the more conservative assumptions regarding external borrowing on non-concessional terms (see last paragraph, Box 2) and rebased GDP data.[6]

[5] These thresholds are applicable to public and publicly guaranteed (PPG) external debt. External debt stock is measured on gross basis.

[6] The peak in Figure 1 relates to the repayment of the 2007 sovereign bond. Non-concessional external borrowing is assumed to have a ten-year maturity, with four years grace, and an average interest rate of 8 percent per annum.

Text Table 5. Indicators of External Debt Vulnerabilities (Baseline)

	2015	2020	2030
PV of debt-to -GDP ratio			
2010 DSA	26.0	23.3	18.2
2011 DSA	18.3	20.9	22.8
Threshold	*50*	*50*	*50*
PV of debt-to-exports ratio			
2010 DSA	104.5	107.2	86.7
2011 DSA	51.9	65.6	72.3
Threshold	*200*	*200*	*200*
PV of debt-to-revenue ratio			
2010 DSA	150.6	144.5	118.7
2011 DSA	92.4	113.4	131.4
Threshold	*300*	*300*	*300*
Debt service-to-exports ratio			
2010 DSA	10.1	17.8	15.5
2011 DSA	2.8	5.9	8.3
Threshold	*25*	*25*	*25*
Debt service-to-revenue ratio			
2010 DSA	14.5	24.0	21.2
2011 DSA	5.1	10.2	15.2
Threshold	*35*	*35*	*35*

Standard stress tests

8. **Standard stress tests show limited risks of debt distress as all indicators remain well below their thresholds under most extreme scenarios**. Keeping key variables at their historical levels only increases debt burden indicators marginally.[7] However, using historical averages does not account for the impact of the start of oil production in 2010–11, which will increase exports and GDP levels. A permanently higher nominal interest rate on new external borrowing has a limited impact on debt burden indicators.[8]

9. **The bound tests show the effects of transitory shocks.** In all cases, the debt burden indicators remain well below their indicative thresholds. The strongest impact on the debt-

[7] In the historical scenario, key variables kept at their 2001–10 levels are output growth, inflation (measured by GDP deflator and valued at U.S. dollar terms), non-interest current account balance as a percent of GDP, and non-debt creating external (FDI) financing flows.

[8] The standard stress test assumes that the interest rate on new borrowing is two percentage points higher than in the baseline scenario. Even with a larger increase of 4 percentage points, debt indicators remain well below the indicative thresholds.

to-GDP, debt-to-revenue, and debt service-to-revenue ratios arises from a 30 percent depreciation of the Ghanaian cedi in 2012. For the debt-to-exports and debt service-to-exports ratios, a shock to net non-debt creating flows is most significant.

Customized stress tests

10. **A range of customized stress tests were conducted to assess Ghana's resilience to country-specific shocks**. Ghana's has become increasingly reliant on non-resident purchases of domestic currency bonds, but the outstanding stock remains modest in relation to GDP. If these debts were treated as foreign debts for assessment purposes, external debt and debt service ratios would increase slightly, but overall debt sustainability would not be significantly impacted. As noted above, significantly higher costs of external borrowing can also be sustained without breaching the debt sustainability thresholds.

11. **An alternative scenario was developed to explore the implications of an increase in commercial borrowing.** It was assumed that external commercial borrowing would be 2 percent of GDP annually higher that in the baseline scenario (raising commercial borrowing to 5 percent of GDP in 2031). Debt-to-GDP and debt-service ratios are projected to increase significantly relative to the baseline, but remain below their relevant thresholds (Text Table 6 on the following page). The less favorable debt indicators highlight the risks of increased use of commercial borrowing, while suggesting some room for maneuver relative to the baseline.

12. **Ghana is potentially vulnerable to higher than projected current account deficits**. This could reflect lower export revenues, higher import costs, or a deterioration in the outlook for foreign direct investment. With a non-interest current account deficit averaging 6.6 percent of GDP during 2017–31 (compared to a baseline projection of 3.0 percent of GDP, and a historic average of 4.2 percent of GDP), the larger financing needs would lead to a steady rise in debt and debt service indicators toward the threshold levels by the end of the projections period.

13. **These vulnerabilities could emerge if the assumed fiscal consolidation is not achieved**. A customized scenario has been developed to assess potential spillovers to external debt sustainability from a serious shortfall in fiscal consolidation (see Table 2, Customized scenario A3; and Figure 1). This scenario assumes that public sector finances under-perform and lead to a deterioration in the non-oil fiscal balance. Higher spending is projected to result in higher imports by 3 percentage points of GDP, which is sustained through the projection period. The fiscal situation is further aggravated by the projected shortfall in oil incomes associated with a halving in global oil prices. With lower public saving, there will be a need for higher external financing, which would result in a steady

deterioration in debt- and debt service ratios (Figure 1, Customized scenario).[9] In this scenario, all debt indicators and the debt-service-to-revenue ratio would breach their indicative thresholds, while the debt service-to-export ratio could stay below its indicative threshold.

Text Table 6. Impact of High Sovereign Market Financing

	2015	2020	2031
PV of external debt-to -GDP ratio			
Baseline	18.3	20.9	22.9
Higher nonconcessional external borrowing	28.4	34.9	36.3
Threshold	*50*	*50*	*50*
PV of external debt-to-exports ratio			
Baseline	51.9	65.6	72.8
Higher nonconcessional external borrowing	80.7	109.7	115.2
Threshold	*200*	*200*	*200*
PV of external debt-to-revenue ratio			
Baseline	92.4	113.4	132.4
Higher nonconcessional external borrowing	143.7	189.7	209.4
Threshold	*300*	*300*	*300*
External debt service-to-exports ratio			
Baseline	2.8	5.9	8.5
Higher nonconcessional external borrowing	4.3	11.6	14.4
Threshold	*25*	*25*	*25*
External debt service-to-revenue ratio			
Baseline	5.1	10.2	15.5
Higher nonconcessional external borrowing	7.6	20.1	26.2
Threshold	*35*	*35*	*35*
PV of public debt-to -GDP ratio			
Baseline	29.2	36.7	42.1
Higher nonconcessional external borrowing	39.3	50.7	55.5
PV of public debt-to-revenue ratio			
Baseline	137.6	192.2	240.3
Higher nonconcessional external borrowing	185.5	265.8	316.4
Public debt service-to-revenue ratio			
Baseline	25.5	39.3	52.8
Higher nonconcessional external borrowing	25.5	44.4	58.7

[9] The scenario assumes that the external current account deficit would be 3 percent of GDP higher that in the baseline. This results from a combination of lower export revenues (owing to lower global oil prices; net of oil imports), and higher imports by the government.

IV. PUBLIC SECTOR DSA

Baseline scenario

14. **The baseline shows a slow increase in overall public debt relative to GDP over the projection horizon**. Until 2015, public debt-GDP ratio is projected to fall, benefitting from primary fiscal surpluses in the next few years, and bottom out at 34 percent of GDP.[10] With the fading of primary surpluses in the subsequent years, public debt ratios are projected to gradually rise and the debt stock would reach 41 percent of GDP at the end of the projection period (Text Table 7, Table 3 and 4, and Figure 2).[11]

15. **Debt service cost to revenues rises due to higher external borrowing at commercial terms (Text Table 7).** With the assumed increase in external borrowing at commercial terms over the projection period, the average maturity of external debt would become shorter (see para. 7) and the rollover of external debt would become more frequent. The amortization of external public debt also increases as a share of total debt service costs (reaching 70 percent by 2031, when a large portion of external borrowing is at commercial terms).

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[10] Primary surplus is projected to reach 1.4 percent of GDP in 2013 and narrow during the subsequent years. After 2018 the primary position is projected to remain broadly balanced (Table 3).

[11] Public debt is measured on net basis. The accumulation of oil assets to the government, starting in 2011, will reduce public sector debt to GDP ratios in Table 3.

Text Table 7. Indicators of Public Debt Vulnerabilities (Baseline)

	2015	2020	2030
PV of debt-to -GDP ratio			
2010 DSA	36.5	29.5	25.3
2011 DSA	29.2	36.7	42.3
PV of debt-to-revenue ratio			
2010 DSA	211.9	182.6	165.5
2011 DSA	137.6	192.2	240.9
Debt service-to-revenue ratio			
2010 DSA	23.8	35.4	38.9
2011 DSA	25.5	39.3	52.2

16. **Fiscal consolidation is key to public debt sustainability.** In the 2010 DSA, the debt-to-GDP ratio was projected to decline during the forecast period, to about 25 percent of rebased GDP. However, debt projections over a long duration are sensitive to variations in the underlying macroeconomic assumptions.

17. **Overall public debt dynamics remain sensitive to assumptions regarding growth and fiscal consolidation** (Figure 2). Under the status quo scenario in which the primary deficit remains at the projected 2011 levels totaling 1.3 percent of GDP (rather than shifting to surplus until 2017 and remaining balanced thereafter), the debt-GDP ratio increases by about 20 percent of GDP by 2031, relative to the baseline, to around 63 percent of GDP (Table 4, test A2). Similarly, debt dynamics are sensitive to growth rates; a one-third of one percentage point reduction in average growth over 2011–31 increases the projected debt-to-GDP ratio by 12 percentage points by 2031 (Table 4, test A3).

18. **Although public debt levels are projected to increase over the coming decades, growth in domestic savings will help meet these financing needs**. Ghana's financial savings base is small relative to other lower middle-income countries but expanding steadily (as measured, for example, by the M2-GDP ratio). Projected growth in domestic savings over the projection period appears to be adequate to sustain higher levels of debt in relation to GDP.

V. Debt Management Capacity

19. **Improvements in debt management capacity are under way.** Ghana' policies and institutions, as measured by the World Bank's Country Policy and Institutional Assessment (CPIA), averaged 3.89 over the period 2007–2009, placing it as a "strong performer." Efforts to strengthen Ghana's debt management capacity include publication of a debt management strategy in December 2010 together with improvements in analyzing alternative borrowing

options and their cost and risk implications in a coherent framework. Guidelines have also been prepared and published to help in project selection and appraisal. Consistent with the ECF program limits for nonconcessional borrowing, borrowing plans of the key state-owned enterprises are being monitored closely. Better monitoring will also help to eliminate the data gap related to SOEs debts . Furthermore, the debt management division has been reorganized with units specialized by functional areas, and training is provided to staff on monitoring and risk-management techniques. Plans are being prepared to monitor domestic debt flows more closely.

VI. Conclusions

20. **The baseline DSA is more favorable than a year ago**. The improvements in debt burden trajectories reflect more moderate external borrowing assumptions as well as upward revisions to the national accounts. As a result, the trajectories of all external debt burden indicators remain well within their respective thresholds, while overall public debt ratios increase only modestly over the projections period.

21. **Risks of debt distress are assessed to remain moderate, in line with the 2010 DSA.** If the planned fiscal consolidation is achieved without a substantial further debt build-up, an improved rating of low risk of debt distress could be considered at a future date.

22. **Successful fiscal consolidation will be essential for achieving the projected debt outcomes**. The customized scenario highlights possible spillovers from deteriorating public finances to the external sector that could lead to higher debt distress.

23. **Robust growth is also important**. Without sustained strong growth, debt and debt service ratios are likely to be higher as shown by some of the stress tests undertaken in the context of public debt. This is an important consideration for the use of commercial financing to fund new project investments. If these investments do not deliver a high economic return, Ghana's debt vulnerabilities could increase significantly.

24. **Continuing improvements should be sought also in debt management capacity**. Good progress made during 2010 should be carried forward in the periods ahead, particularly given Ghana's growing access to market financing. Although Ghana has some flexibility in managing its borrowing at commercial terms, it will be essential that new debts are managed carefully, including extending the maturity of external commercial debt so that the rollover of this debt remains manageable.

Table 1: External Debt Sustainability Framework, Baseline Scenario, 2008-31 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 0	Standard Deviation 0	Projections									
	2008	2009	2010			2011	2012	2013	2014	2015	2016	2011-2016 Average	2021	2031	2017-2031 Average
External debt (nominal) 1/	24.0	28.1	27.8	48.6	29.5	27.9	27.7	28.0	27.9	27.8	28.4	28.0	27.3	24.1	26.2
o/w public and publicly guaranteed (PPG)	16.2	19.4	20.3	38.9	27.3	21.7	22.3	23.1	23.4	23.5	24.3	23.1	24.2	22.4	23.5
Change in external debt	0.2	4.2	-0.3	-9.7	12.8	0.2	-0.3	0.3	-0.1	-0.1	0.6	0.1	-0.3	-0.3	-0.3
Identified net debt-creating flows	3.4	-0.1	-3.5	-5.6	8.5	-0.1	-0.8	-1.9	-3.7	-2.6	-1.6	-1.8	-0.9	-1.0	-0.4
Non-interest current account deficit	10.2	3.4	6.6	4.2	3.4	7.0	5.1	3.7	1.9	1.6	2.0	3.5	2.7	2.2	3.0
Deficit in balance of goods and services	19.3	13.0	14.1	13.9	3.3	7.8	6.1	5.5	4.2	4.3	5.4	5.5	8.1	8.2	8.6
Exports	24.8	29.3	30.3	26.9	3.2	39.5	37.7	35.7	35.3	35.3	34.6	36.3	31.5	31.5	31.8
Imports	44.0	42.3	44.4	40.8	3.6	47.3	43.8	41.2	39.5	39.5	40.0	41.9	39.6	39.7	40.4
Net current transfers (negative = inflow)	-9.4	-10.2	-8.6	-10.2	1.3	-7.2	-6.9	-6.9	-7.0	-6.9	-6.7	-6.9	-6.1	-5.7	-6.0
o/w official	-2.5	-3.3	-1.7	-2.5	0.7	-2.0	-1.2	-1.2	-1.2	-1.1	-0.9	-1.3	-0.4	-0.1	-0.3
Other current account flows (negative = net inflow)	0.3	0.6	1.1	0.5	0.3	6.4	6.0	5.1	4.6	4.2	3.3	4.9	0.8	-0.3	0.5
Net FDI (negative = inflow)	-4.2	-6.5	-6.1	-2.7	2.3	-4.5	-4.5	-4.6	-4.5	-3.2	-3.2	-4.1	-3.2	-3.2	-3.2
Endogenous debt dynamics 2/	-2.5	3.0	-4.0	-7.1	7.7	-2.7	-1.3	-1.0	-1.0	-1.0	-0.5	-1.3	-0.4	0.0	-0.3
Contribution from nominal interest rate	0.6	0.6	0.6	0.8	0.4	0.5	0.4	0.5	0.6	0.6	0.7	0.5	0.9	1.2	1.0
Contribution from real GDP growth	-1.7	-1.2	-1.3	-2.6	1.5	-3.1	-1.8	-1.5	-1.6	-1.6	-1.2	-1.8	-1.3	-1.2	-1.2
Contribution from price and exchange rate changes	-1.4	3.6	-3.3	-5.3	7.3	…	…	…	…	…	…	…	…	…	…
Residual (3-4) 3/	-3.3	4.2	3.2	-4.1	12.2	0.3	0.5	2.3	3.6	2.5	2.2	1.9	0.6	0.7	0.1
o/w exceptional financing	-0.2	-0.2	-0.2	-3.5	5.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
PV of external debt 4/	...	...	19.6	19.6	…	20.6	21.0	21.7	22.2	22.6	23.5	21.9	24.4	24.7	24.4
In percent of exports	...	...	64.7	64.7	…	52.1	55.6	60.9	62.8	63.9	67.9	60.5	77.3	78.3	76.6
PV of PPG external debt	...	...	12.1	12.1	…	14.3	15.6	16.8	17.6	18.3	19.4	17.0	21.2	22.9	21.6
In percent of exports	...	...	39.8	39.8	…	36.3	41.4	47.1	49.9	51.9	56.0	47.1	67.2	72.8	68.1
In percent of government revenues	...	...	80.6	80.6	…	84.5	86.3	88.9	91.0	92.4	96.6	90.0	116.5	132.4	120.6
Debt service-to-exports ratio (in percent)	12.2	11.1	9.2	29.5	20.1	5.3	4.7	5.3	5.2	5.2	5.8	5.3	8.4	9.6	8.7
PPG debt service-to-exports ratio (in percent)	6.0	5.3	4.4	22.6	19.9	2.2	1.9	2.6	2.6	2.8	3.5	2.6	6.4	8.5	7.0
PPG debt service-to-revenue ratio (in percent)	11.2	11.6	8.9	44.8	37.7	5.0	3.9	4.9	4.8	5.1	6.0	5.0	11.1	15.5	12.5
Total gross financing need (Millions of U.S. dollars)	2561	48	1030	1920	1424	1744	1034	496	-437	131	517	581	1941	4417	3382
Non-interest current account deficit that stabilizes debt ratio	10.1	-0.8	7.0	13.9	11.8	6.8	5.4	3.3	2.0	1.7	1.4	3.4	3.0	2.5	3.3
Key macroeconomic assumptions															
Real GDP growth (in percent)	8.4	4.7	5.7	5.6	1.2	13.7	7.3	6.1	6.2	6.3	4.4	7.4	4.9	5.3	5.0
GDP deflator in US dollar terms (change in percent)	6.3	-13.0	13.1	10.1	11.0	6.1	8.7	5.1	3.2	3.1	2.0	4.7	3.0	4.3	3.4
Effective interest rate (percent) 5/	2.9	2.4	2.6	1.9	0.6	2.1	1.7	1.9	2.2	2.4	2.7	2.2	3.4	5.3	4.0
Growth of exports of G&S (US dollar terms, in percent)	17.8	7.6	23.8	14.8	9.1	57.0	11.5	5.5	8.4	9.7	4.5	16.1	7.0	9.8	7.9
Growth of imports of G&S (US dollar terms, in percent)	24.9	-12.6	25.6	16.1	14.7	28.4	8.0	4.9	5.1	9.8	7.8	10.7	8.5	7.9	8.5
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	15.5	11.9	6.3	3.1	0.7	-0.1	6.2	-8.5	-19.4	-11.9
Government revenues (excluding grants, in percent of GDP)	13.3	13.4	15.0	13.5	0.9	16.9	18.1	18.9	19.3	19.8	20.1	18.9	18.2	17.3	18.0
Aid flows (in Millions of US dollars) 7/	776	776	755	590	243	1450	988	970	1029	1018	916	1062	730	612	676
o/w Grants	776	776	755	590	243	898	695	775	829	818	716	788	530	412	476
o/w Concessional loans	0.3	0.2	0.2	0.2	0.1	552	293	195	200	200	200	273	200	200	200
Grant-equivalent financing (in percent of GDP) 8/	...	...	...	…	…	3.3	2.1	1.8	1.6	1.4	1.1	1.9	0.3	-0.5	0.1
Grant-equivalent financing (in percent of external financing) 8/	...	...	...	…	…	40.2	36.9	39.8	38.9	35.2	29.5	36.7	10.0	-12.9	2.5
Memorandum items:															
Nominal GDP (Millions of US dollars)	28528	25988	31084	19005	8424	37481	43705	48767	53460	58620	62479	50752	89846	215157	124664
Nominal dollar GDP growth	15.2	-8.9	19.6	16.3	11.8	20.6	16.6	11.6	9.6	9.7	6.6	12.4	8.0	9.8	8.6
PV of PPG external debt (in Millions of US dollars)			3642	…	…	5370	6823	7947	9138	10446	11823	8591	18715	48536	26937
Gross remittances (Millions of US dollars)	…	…	…	…	…	…	…	…	…	…	…		…	…	
PV of PPG external debt (in percent of GDP + remittances)	...	...	12.1	…	…	14.3	15.6	16.8	17.6	18.3	19.4	…	21.2	22.9	21.6
PV of PPG external debt (in percent of exports + remittances)	...	...	39.8	…	…	36.3	41.4	47.1	49.9	51.9	56.0	…	67.2	72.8	68.1
Debt service of PPG external debt (in percent of exports + remittances)	...	...	4.4	…	…	2.2	1.9	2.6	2.6	2.8	3.5	…	6.4	8.5	7.0

Sources: Ghanaian authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.
2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.
3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
4/ Assumes that PV of private sector debt is equivalent to its face value.
5/ Current-year interest payments divided by previous period debt stock.
6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.
7/ Defined as grants, concessional loans, and debt relief.
8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

Table 2.Ghana: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2011-2031
(In percent)

	Projections							
	2011	2012	2013	2014	2015	2016	**2021**	2031
PV of debt-to GDP ratio								
Baseline	14.3	15.6	16.8	17.6	18.3	19.4	**21.2**	22.9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	14.3	16.7	19.4	23.8	26.5	28.4	**30.2**	23.3
A2. New public sector loans on less favorable terms in 2011-2031 2	14.3	16.6	17.8	19.1	20.4	22.0	**26.0**	31.1
A3. Customized scenario	14.3	17.1	19.5	22.2	25.0	28.7	**46.1**	62.9
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	14.3	15.6	16.6	17.7	18.4	19.5	**21.4**	23.2
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	14.3	15.6	16.2	17.0	17.7	18.8	**20.7**	22.4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	14.3	17.1	19.0	19.9	20.7	22.0	**24.1**	26.0
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	14.3	18.1	21.2	21.8	22.3	23.3	**23.7**	22.9
B5. Combination of B1-B4 using one-half standard deviation shocks	14.3	17.2	17.4	18.4	19.2	20.4	**22.2**	23.9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	14.3	21.6	22.5	23.6	24.6	26.1	**28.6**	30.9
PV of debt-to-exports ratio								
Baseline	36.3	41.4	47.1	49.9	51.9	56.0	**67.2**	72.8
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	36.3	44.2	54.5	67.5	75.3	82.3	**95.8**	73.9
A2. New public sector loans on less favorable terms in 2011-2031 2	36.3	44.0	49.9	54.2	57.7	63.8	**82.6**	98.7
A3. Customized scenario	36.3	44.1	53.5	62.0	70.3	83.2	**152.4**	207.7
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	36.3	41.4	45.7	48.4	50.4	54.6	**65.7**	71.0
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	36.3	41.4	45.3	49.3	51.3	55.6	**67.0**	72.6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	36.3	41.4	45.7	48.4	50.4	54.6	**65.7**	71.0
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	36.3	48.0	59.5	61.7	63.1	67.3	**75.2**	72.8
B5. Combination of B1-B4 using one-half standard deviation shocks	36.3	43.9	44.2	46.0	47.9	51.8	**62.1**	66.8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	36.3	41.4	45.7	48.4	50.4	54.6	**65.7**	71.0
PV of debt-to-revenue ratio								
Baseline	84.5	86.3	88.9	91.0	92.4	96.6	**116.5**	132.4
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	84.5	92.2	102.8	123.1	134.1	141.8	**166.0**	134.3
A2. New public sector loans on less favorable terms in 2011-2031 2	84.5	91.8	94.1	98.9	102.8	109.9	**143.2**	179.4
A3. Customized scenario	84.5	94.3	103.0	114.7	126.2	143.0	**253.6**	362.8
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	84.5	86.3	87.7	91.4	93.0	97.4	**117.9**	133.6
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	84.5	86.3	85.7	87.8	89.4	93.7	**113.6**	129.1
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	84.5	94.6	100.3	102.8	104.6	109.5	**132.6**	150.3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	84.5	100.1	112.2	112.6	112.5	116.0	**130.3**	132.4
B5. Combination of B1-B4 using one-half standard deviation shocks	84.5	95.0	92.1	95.4	97.0	101.5	**122.2**	138.0
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	84.5	119.2	119.1	122.0	124.1	130.0	**157.4**	178.4

Table 2.Ghana: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2011-2031 (continued)
(In percent)

Debt service-to-exports ratio

Baseline	2.2	1.9	2.6	2.6	2.8	3.5	**6.4**	8.5
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	2.2	1.9	2.6	2.9	3.5	4.1	**7.3**	6.7
A2. New public sector loans on less favorable terms in 2011-2031 2	2.2	1.9	2.4	2.5	2.8	3.1	**6.1**	12.4
A3. Customized scenario	2.2	1.8	2.7	3.0	3.5	4.5	**11.6**	21.3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	2.2	1.9	2.6	2.6	2.8	3.5	**6.4**	8.5
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	2.2	1.9	2.6	2.7	2.9	3.5	**6.5**	8.7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	2.2	1.9	2.6	2.6	2.8	3.5	**6.4**	8.5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	2.2	1.9	2.9	3.3	3.5	4.1	**7.7**	8.8
B5. Combination of B1-B4 using one-half standard deviation shocks	2.2	1.9	2.6	2.5	2.7	3.3	**6.1**	8.0
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	2.2	1.9	2.6	2.6	2.8	3.5	**6.4**	8.5

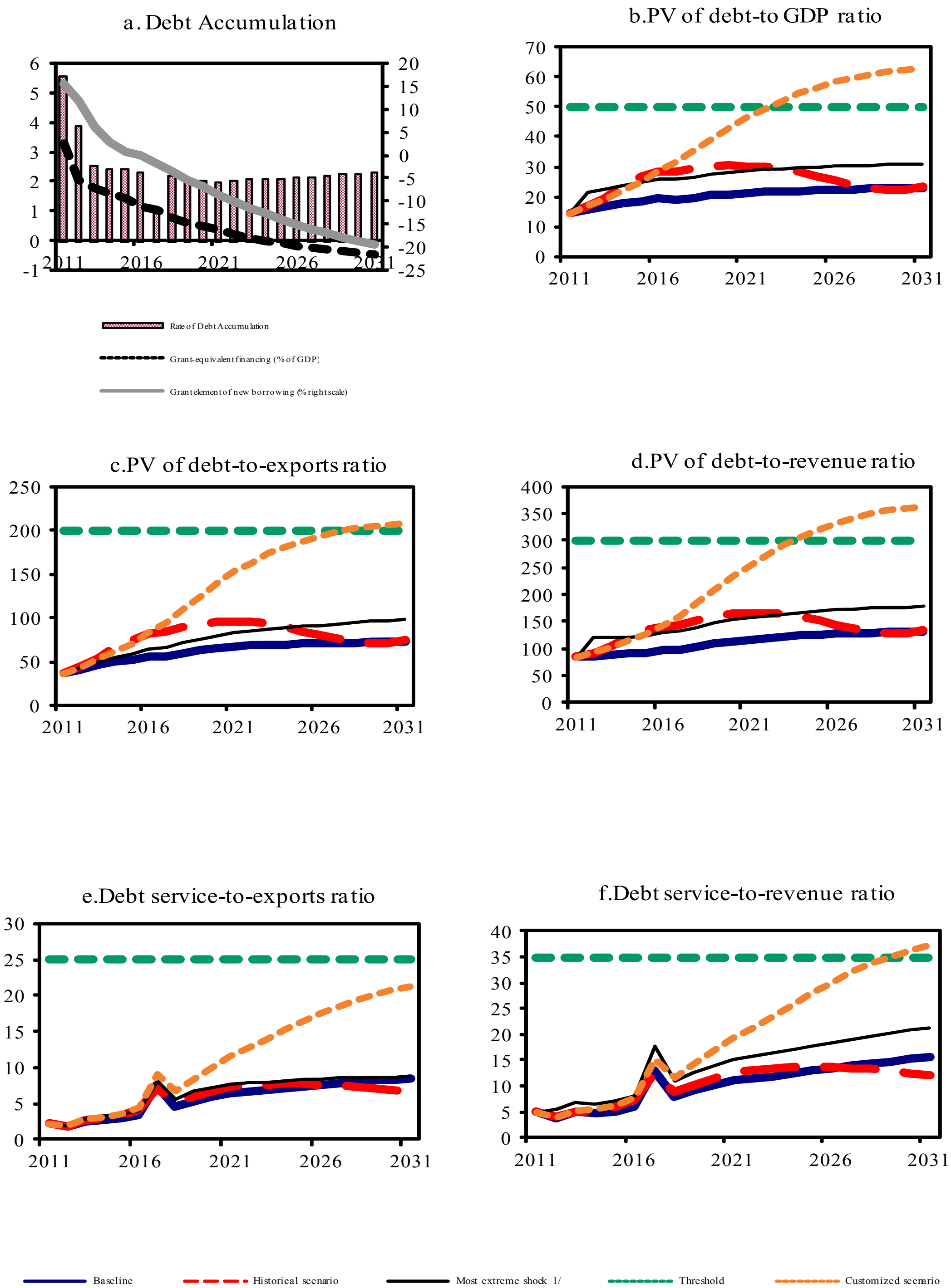
Debt service-to-revenue ratio

Baseline	5.0	3.9	4.9	4.8	5.1	6.0	**11.1**	15.5
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	5.0	3.9	5.0	5.2	6.2	7.2	**12.7**	12.3
A2. New public sector loans on less favorable terms in 2011-2031 2	5.0	3.9	4.5	4.6	5.0	5.3	**10.5**	22.5
A3. Customized scenario	5.0	3.9	5.3	5.6	6.3	7.7	**19.2**	37.2
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	5.0	3.9	5.0	5.0	5.2	6.2	**11.5**	16.0
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	5.0	3.9	4.9	4.8	5.0	6.0	**11.0**	15.4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	5.0	4.3	5.7	5.6	5.9	7.0	**12.9**	17.9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	5.0	3.9	5.5	6.0	6.2	7.1	**13.4**	16.0
B5. Combination of B1-B4 using one-half standard deviation shocks	5.0	4.1	5.4	5.2	5.5	6.4	**11.9**	16.5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	5.0	5.4	6.8	6.6	7.0	8.3	**15.3**	21.3
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	-14.7	-14.7	-14.7	-14.7	-14.7	-14.7	**-14.7**	-14.7

Sources: Ghanaian authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 1: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2011-31 1/



Sources: Ghanaian authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2021. In figure b. it corresponds to a Customized scenario shock; in c. to a Customized scenario shock; in d. to a Customized scenario shock; in e. to a Customized scenario shock and in figure f. to a Customized scenario shock

Table 3: Public Sector Debt Sustainability Framework, Baseline Scenario, 2008-31
(In percent of GDP, unless otherwise indicated)

	Actual			Average	Standard Deviation	Estimate	Projections								
	2008	2009	2010			2011	2012	2013	2014	2015	2016	2011-16 Average	2021	2031	2017-31 Average
Public sector debt 1/	33.6	36.0	38.9	54.8	27.5	39.5	39.5	40.4	35.0	34.4	35.4	37.4	40.8	41.5	40.9
o/w foreign-currency denominated	16.2	19.4	20.3	38.9	27.3	21.7	22.3	23.1	23.4	23.5	24.3	23.1	24.2	22.4	23.5
Change in public sector debt	2.5	2.4	2.9	-8.8	12.2	0.6	0.0	1.0	-5.5	-0.6	1.0	-0.6	0.8	-0.5	0.4
Identified debt-creating flows	1.6	1.7	2.7	-7.5	9.3	-2.8	-4.0	-2.8	-3.5	-3.2	-1.7	-3.0	-1.1	-1.4	-1.3
Primary deficit	6.2	3.0	4.4	2.2	2.2	1.3	-0.7	-1.4	-1.3	-1.2	-0.6	-0.6	0.2	0.2	0.2
Revenue and grants	16.0	16.4	17.4	16.7	1.5	19.3	19.7	20.5	20.9	21.2	21.2	20.5	18.8	17.5	18.4
of which: grants	2.7	3.0	2.4	3.2	1.0	2.4	1.6	1.6	1.6	1.4	1.1	1.6	0.6	0.2	0.5
Primary (noninterest) expenditure	22.3	19.4	21.8	19.0	2.5	20.7	19.0	19.1	19.6	20.0	20.6	19.8	19.0	17.7	18.6
Automatic debt dynamics	-2.1	-1.1	-2.5	-9.2	7.8	-4.9	-3.1	-1.3	-2.0	-1.9	-0.9	-2.4	-1.3	-1.6	-1.4
Contribution from interest rate/growth differential	-3.0	-1.3	-0.8	-3.6	2.0	-3.6	-1.8	-1.2	-1.6	-1.6	-0.8	-1.8	-1.0	-1.0	-1.0
of which: contribution from average real interest rate	-0.6	0.2	1.1	-0.4	0.9	1.1	0.9	1.1	0.7	0.5	0.7	0.8	0.9	1.1	0.9
of which: contribution from real GDP growth	-2.4	-1.5	-2.0	-3.2	1.5	-4.7	-2.7	-2.3	-2.4	-2.1	-1.5	-2.6	-1.9	-2.1	-1.9
Contribution from real exchange rate depreciation	0.9	0.3	-1.6	-5.6	6.0	-1.3	-1.4	-0.1	-0.4	-0.3	-0.1	-0.6	...	...	-0.3
Other identified debt-creating flows	-2.6	-0.2	0.7	-0.6	0.9	0.8	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Privatization receipts (negative)	-2.3	0.0	1.0	-0.3	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Debt relief (HIPC and other)	-0.3	-0.2	-0.3	-0.3	0.3	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual, including asset changes	1.0	0.6	0.2	-1.3	7.7	3.4	4.0	3.8	-2.0	2.6	2.7	2.4	1.9	0.9	1.7
Other Sustainability Indicators															
PV of public sector debt	17.4	16.6	30.7	16.9	5.6	32.1	32.8	34.1	29.2	29.2	30.5	31.3	37.9	42.1	39.0
o/w foreign-currency denominated	0.0	0.0	12.1	1.3	4.0	14.3	15.6	16.8	17.6	18.3	19.4	17.0	21.2	22.9	21.6
o/w external	...	...	12.1	...	...	14.3	15.6	16.8	17.6	18.3	19.4	17.0	21.2	22.9	21.6
PV of contingent liabilities (not included in public sector debt)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gross financing need 2/	11.5	9.2	10.8	12.5	4.4	10.0	8.1	7.7	7.8	8.0	9.1	8.5	13.4	14.7	13.7
PV of public sector debt-to-revenue and grants ratio (in percent)	108.3	100.9	176.4	92.6	46.4	166.1	166.4	166.6	139.7	137.6	143.9	153.4	201.8	240.3	213.0
PV of public sector debt-to-revenue ratio (in percent)	130.4	123.4	205.0	111.8	52.8	189.5	181.1	180.6	151.0	147.3	152.1	166.9	208.3	242.9	218.1
o/w external 3/	...	...	80.6	80.6		84.5	86.3	88.9	91.0	92.4	96.6	90.0	116.5	132.4	120.6
Debt service-to-revenue and grants ratio (in percent) 4/	13.9	16.4	16.9	43.4	30.6	26.0	25.4	26.2	25.6	25.5	27.3	26.0	41.8	52.8	45.1
Debt service-to-revenue ratio (in percent) 4/	16.8	20.1	19.6	53.9	38.2	29.7	27.6	28.4	27.7	27.3	28.9	28.3	43.1	53.4	46.1
Primary deficit that stabilizes the debt-to-GDP ratio	3.7	0.6	1.5	1.9	1.6	0.7	-0.7	-2.4	4.2	-0.6	-1.7	-0.1	-0.6	0.7	-0.3
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	8.4	4.7	5.7	5.6	1.2	13.7	7.3	6.1	6.2	6.3	4.4	7.4	4.9	5.3	5.0
Average nominal interest rate on forex debt (in percent)	4.6	3.8	3.7	2.5	1.3	2.9	2.2	2.4	2.6	2.9	3.1	2.7	3.9	5.7	4.4
Average real interest rate on domestic debt (in percent)	-6.0	-1.7	3.8	-1.4	4.9	4.8	4.7	5.7	3.2	2.4	3.4	4.0	2.6	1.5	2.2
Real exchange rate depreciation (in percent, + indicates depreciation)	6.4	1.7	-8.7	-8.5	7.6	-7.4	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	20.2	16.7	14.1	20.9	7.2	11.2	8.7	8.6	9.6	9.0	7.3	9.1	6.6	7.9	7.2
Growth of real primary spending (deflated by GDP deflator, in percent)	0.1	-0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	15.5	11.9	6.3	3.1	0.7	-0.1	6.2	-8.5	-19.4	...

Sources: Ghanaian authorities; and staff estimates and projections.

1/ Public sector comprise central government. The concept of net debt is used.

2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

3/ Revenues excluding grants.

4/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.

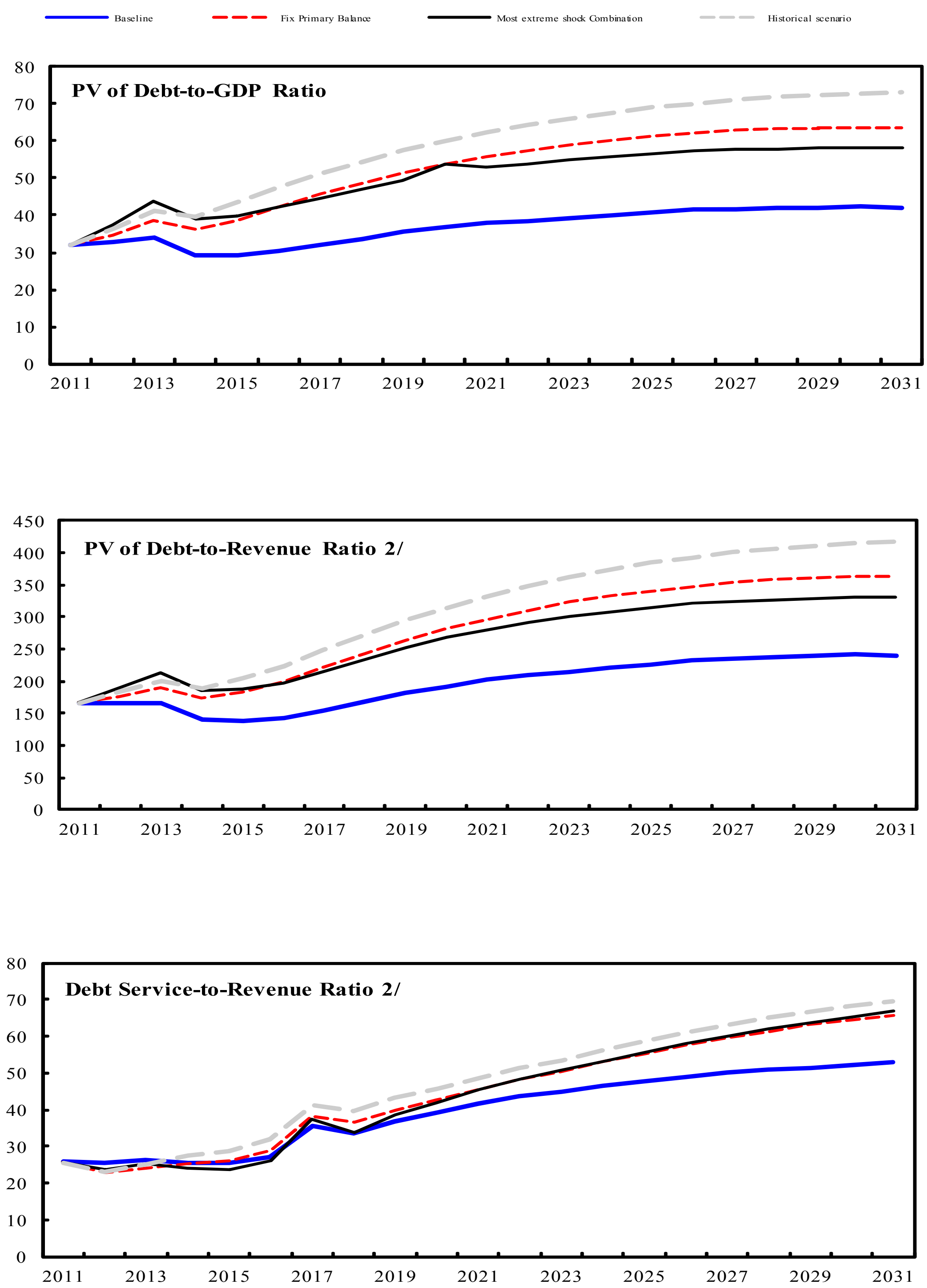
5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 4.Ghana: Sensitivity Analysis for Key Indicators of Public Debt 2011-2031

	Projections							
	2011	2012	2013	2014	2015	2016	2021	2031
PV of Debt-to-GDP Ratio								
Baseline	32.1	32.8	34.1	29.2	29.2	30.5	37.9	42.1
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	32.1	36.2	41.3	39.7	43.5	47.5	62.3	72.9
A2. Primary balance is unchanged from 2011	32.1	34.8	38.8	36.2	38.7	42.4	55.8	63.7
A3. Permanently lower GDP growth 1/	32.1	32.9	34.4	29.5	30.2	32.3	43.4	54.0
A4. Alternative Scenario :[Costumize, enter title]	32.1	32.7	34.7	31.1	33.7	36.7	48.3	55.8
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-2013	32.1	34.2	37.0	32.5	33.8	36.5	49.2	57.7
B2. Primary balance is at historical average minus one standard deviations in 2012-2013	32.1	37.8	44.8	39.4	39.3	41.0	48.3	49.5
B3. Combination of B1-B2 using one half standard deviation shocks	32.1	37.5	43.9	39.0	39.7	42.1	52.8	58.0
B4. One-time 30 percent real depreciation in 2012	32.1	38.2	39.3	34.2	34.6	36.6	46.9	55.7
B5. 10 percent of GDP increase in other debt-creating flows in 2012	32.1	42.8	43.8	38.4	38.4	40.0	47.5	48.9
PV of Debt-to-Revenue Ratio 2/								
Baseline	166.1	166.4	166.6	139.7	137.6	143.9	201.8	240.3
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	166.1	183.8	201.5	189.9	204.7	223.9	332.3	416.5
A2. Primary balance is unchanged from 2011	166.1	176.6	189.1	173.1	182.8	199.8	297.2	363.2
A3. Permanently lower GDP growth 1/	166.1	167.0	167.8	141.2	142.3	152.3	231.1	308.2
A4. Alternative Scenario :[Costumize, enter title]	166.1	130.0	137.9	122.9	132.5	143.5	187.8	213.5
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-2013	166.1	173.3	179.9	155.2	158.8	171.7	261.8	328.9
B2. Primary balance is at historical average minus one standard deviations in 2012-2013	166.1	192.2	218.7	188.5	185.6	193.1	257.5	282.5
B3. Combination of B1-B2 using one half standard deviation shocks	166.1	190.2	213.8	186.4	187.1	198.2	280.9	330.8
B4. One-time 30 percent real depreciation in 2012	166.1	193.8	191.9	163.6	163.1	172.5	249.9	318.1
B5. 10 percent of GDP increase in other debt-creating flows in 2012	166.1	217.2	213.8	183.8	181.0	188.5	252.8	279.3
Debt Service-to-Revenue Ratio 2/								
Baseline	26.0	25.4	26.2	25.6	25.5	27.3	41.8	52.8
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	25.6	23.3	25.0	27.4	28.8	32.0	48.6	69.6
A2. Primary balance is unchanged from 2011	25.6	22.9	24.2	25.3	26.1	29.1	45.6	65.6
A3. Permanently lower GDP growth 1/	25.6	23.0	23.5	22.0	21.3	23.3	40.3	60.4
A4. Alternative Scenario :[Costumize, enter title]	25.6	19.4	25.4	22.3	24.2	25.8	38.0	62.3
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012-2013	25.6	23.5	24.6	23.7	23.4	25.8	43.6	62.7
B2. Primary balance is at historical average minus one standard deviations in 2012-2013	25.6	22.9	25.3	30.2	30.3	28.2	41.0	57.7
B3. Combination of B1-B2 using one half standard deviation shocks	25.6	23.4	25.7	29.2	29.5	28.9	44.2	63.4
B4. One-time 30 percent real depreciation in 2012	25.6	23.7	25.4	24.0	23.6	26.1	45.7	67.1
B5. 10 percent of GDP increase in other debt-creating flows in 2012	25.6	22.9	27.2	33.9	26.0	27.7	40.6	57.2

Sources: Ghanaian authorities; and staff estimates and projections.
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.
2/ Revenues are defined inclusive of grants.

Figure 2: Indicators of Public Debt Under Alternative Scenarios, 2011-2031 1/



Sources: Ghanaian authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2021.
2/ Revenues are defined inclusive of grants.

INTERNATIONAL MONETARY FUND

GHANA

Staff Report for the 2011 Article IV Consultation, Third and Fourth Reviews Under the Arrangement Under the Extended Credit Facility, Requests for Waiver of Nonobservance of Performance Criteria and Modification of Performance Criteria and Rephasing of Disbursements

Informational Annex

Prepared by the African Department

May 12, 2011

Contents

APPENDIX I. RELATIONS WITH THE FUND
(As of March 31, 2011)

I. Membership Status: Joined 09/20/1957; Article VIII

II. General Resources Account:	**SDR Million**	**% Quota**
Quota	369.0	100.0
Fund holdings of currency	369.0	100.0
Reserve position in Fund	0.0	0.0

III. SDR Department:	**SDR Million**	**% Allocation**
Net cumulative allocation	353.87	100.00
Holdings	288.62	81.56

IV. Outstanding Purchases and Loans:	**SDR Million**	**% Quota**
PRGF Arrangements	251.97	68.28

V. Latest Financial Arrangements:

Type	Approval Date	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
ECF/PRGF	07/15/2009	07/14/2012	387.45	149.15
ECF/PRGF	05/09/2003	10/31/2006	184.5	184.50
ECF/PRGF	05/03/1999	11/30/2002	228.8	176.22

VI. Projected Payments to the Fund[1]
(SDR million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2011	2012	2013	2014	2015
Principal	7.91	21.09	21.09	21.09	42.77
Charges/interest	0.23	0.90	0.84	0.79	0.72
Total	8.13	21.99	21.93	21.88	43.49

[1] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

VII. Implementation of HIPC Initiative:

	Enhanced Framework
A. Commitment of HIPC assistance	
Decision point date	Feb 2002
Assistance committed by all creditors (US$ million)[2]	2,186.0
Of which: IMF assistance (US$ million)	112.1
(SDR equivalent in millions)	90.05
Completion point date	July 2004
B. Disbursement of IMF assistance (SDR million)	
Assistance disbursed to the member	90.05
Interim assistance	25.06
Completion point balance	64.99
Additional disbursement of interest income[3]	4.25
Total disbursements	94.30

VIII. Implementation of Multilateral Debt Relief Initiative (MDRI):

A. MDRI-eligible debt (SDR million)[4]	265.39
Financed by MDRI Trust	220.04
Remaining HIPC resources	45.35

B. Debt relief by Facility (SDR million)

	Eligible Debt		
Delivery date	GRA	PRGF	Total
January 2006	n/a	265.39	265.39

IX. Safeguards Assessment

Under the Fund's safeguards assessment policy, the Bank of Ghana (BoG) has been subject to an update assessment with respect to a new PRGF arrangement approved July 15, 2009; the assessment, completed on December 2, 2009, followed an initial safeguards assessment from

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[2] Assistance committed under the original framework is expressed in net present value (NPV) terms at the completion point, and assistance committed under the enhanced framework is expressed in NPV terms at the decision point. Hence these two amounts ca not be added.

[3] Under the enhanced framework, an additional disbursement is made at the completion point corresponding to interest income earned on the amount committed at the decision point but not disbursed during the interim period.

[4] The MDRI provides 100 percent debt relief to eligible member countries that qualified for the assistance. Grant assistance from the MDRI Trust and HIPC resources provide debt relief to cover the full stock of debt owed to the Fund as of end-2004 that remains outstanding at the time the member qualifies for such debt relief.

October 2003. The update assessment found that while the safeguards framework of the BoG has been strengthened in several areas since then, new risks in governance oversight emerged with the removal of the former Board in January 2009, and a delay, due to a legal challenge, in the start of the successor Board. Pending the resumption of Board activities some interim measures have been introduced to provide an independent oversight mechanism. These include the introduction of an Advisory Panel comprised of three outside members responsible for the external and internal audit and controls systems. In March 2010, the authorities have advised staff that a new Board has been appointed. They have also either committed to or implemented all measures proposed by staff.

X. Exchange Rate Arrangement

On February 2, 1994, Ghana accepted obligations under Article VIII, Sections 2(*a*), 3, and 4, of the Fund's Articles of Agreement. The exchange rate regime is classified as a managed float with no pre-determined path. The system is free of restrictions on payments and transfers for current international transactions. At the end of March 2011, the average exchange rate for transactions in the interbank market was GH¢1.50 per U.S. dollar.

XI. Article IV Consultation

The 2009 Article IV consultation discussions were held in Accra during May 11–22, 2009. The staff report (Country Report No. 09/256) was discussed by the Executive Board on July 15, 2009 and is posted on the IMF website.

XII. FSAP Participation

Ghana participated in the FSAP in 2000–01. FSAP update was completed in December 2003 and May 2011.

XIII. Technical Assistance

Subject	Department	Date
Advise on establishing large taxpayers unit	FAD	2002/03
Review of public expenditure management reforms	FAD	2002/03
Tax policy	FAD	May 2003
Fiscal ROSC	FAD	Feb. 2004
Regional advisor on public expenditure management	FAD	2004/06
Assessment of petroleum pricing mechanism	FAD	Jan. 2005
Public financial management (PFM)	FAD	Mar.-Jun. 2006
Public financial management (PFM)	FAD	Feb. 2010

Enhancing fiscal discipline	FAD	May 2008
Revenue administration	FAD	Jan. 2009
Tax policy	FAD	Apr. 2009
Revenue administration	FAD	Apr. 2009
		Mar. 2010
Fiscal regime for natural resources	FAD	Jun. 2009
Tax administration	FAD	Mar. 2010
Expenditure Control and Arrears	FAD	Jan.-Feb. 2011
Small taxpayer regime	FAD	Feb. 2011
Accounting and internal audit reform	MFD	Jul.-Nov. 2002
		Mar. 2003
Foreign exchange market, government securities market, and banking system issues	MFD	Apr. 2003
Joint FSAP follow-up with World Bank	MFD	Jun. 2003
Multitopic technical assistance initiation	MFD	Nov. 2004
Improving monetary operations, banking supervision and payment systems	MFD	Nov. 2004
Medium-term debt management strategy	MCM	Mar. 2008
Banking supervision	MCM	Dec. 2009
Review options for resolution of the weak state-owned banks	MCM	Apr.-May. 2011
Problem Bank Resolution	MCM	Mar.-Apr. 2011
Money and banking statistics	STA	Jul. 2002
		Jan.-Feb. 2004
		Apr. 2007
		Mar. 2008
		Apr.-May 2009
National accounts statistics	STA	Sep./Oct. 2001
		Aug.-Dec. 2002
		Sep. 2003
		Feb. 2009
National accounts and prices	STA	Mar. 2004
		Oct. 2004
		Apr.-May 2005
		Apr.-May 2006
		Sep. 2006
		Apr. 2011
Government finance statistics	STA	Mar. 2005
		May-Jun. 2006
		May-Jun. 2009
Balance of payments statistic	STA	Feb. 2009

		Apr.-May 2010
Pilot study of access to private capital markets	ICM	May 2003
		Nov. 2004
The remittance market	LEG	Apr.-May 2006
Fiscal law: review of tax laws	LEG	Jan. 2011
AML/CFT structures and tools	LEG	Feb.-Mar. 2011

XIV. Resident Representative

The Fund has had a Resident Representative office in Accra since June 1985. The current resident representative is Mr. Wayne Mitchell who assumed the post in August 2009.

APPENDIX II. GHANA—JOINT WORLD BANK-IMF WORK PROGRAM, 2011–12

Title	Products	Provisional timing of mission	Expected delivery date
A. Mutual information on relevant work programs			
Bank work program in next 12 months	1. Poverty assessment		May 2011
	2. Public expenditure review		March 2011
	3. PRSC 7		February 2011
IMF work program in next 12 months	1. Fifth ECF review/2012 budget discussions	September 2011	December 2011
	2. Sixth ECF review	February 2012	April 2012
B. Requests for work program inputs			
Fund request to Bank	1. Assessment of progress with civil service reform		Continuous
	2. Assessment of energy sector recovery strategy, including whether power tariffs structure provides for full cost recovery		Continuous
Bank request to IMF	1. Regular updates of performance under Fund-supported program		Continuous
	2. Regular updates of macroeconomic projections		Continuous
C. Agreement on joint products and missions			
Joint products in next 12 months	JSAN		September 2011

APPENDIX III. GHANA: STATISTICAL ISSUES

I. Assessment of Data Adequacy for Surveillance
General: Data provision has some shortcomings, but is broadly adequate for surveillance. The quality and timeliness of certain data need to be improved. There are notable deficiencies in the dissemination of statistical information to the public, although the situation has improved recently with the publication on the Bank of Ghana's (BOG) website of the Monetary Policy Committee Statement, Statistical Releases, and monthly monetary series for 2001–10.
National Accounts: The IMF's Statistics Department (STA) has provided TA on national accounts (NA) since 2001. A "bundled" TA mission visited Accra during March 12–26, 2008, with a follow-up mission in February 2009. The main objectives of these missions were to assist the Ghana Statistical Service (GSS) in (a) developing a plan to adopt the *System of National Accounts 1993* (*1993 SNA*); (b) rebasing the national accounts—currently dating from 1993; and (c) ensuring that plans are in place for a comprehensive data collection program to improve the source data. Improving the source data by creating a statistical system built on a regular survey program is a priority for increasing accuracy and reliability. In this regard the following areas require action: (i) design and building a business register that has a minimum of information on output values, if possible input values, and the number of employees. The 2003 National Industrial Census 2004/2 (NIC) serves as a good starting point, but must be maintained and extended to also cover service industries; (ii) create a national statistical system containing regular business surveys for manufacturing, construction, transport and communication, and other service industries (surveys on retail trade and NPISH are urgently needed); (iii) create a system for annual household surveys that is less comprehensive than the current Living Standards Survey (round 5) 2005/06 (GLSS) which could be carried out on a more frequent basis; and (iv) carry out an agricultural census. The February 2009 mission also pointed out some minor areas where changes to the estimates should be undertaken. There are still some concepts and methods that need to be addressed to insure compliance with the *1993 SNA*. Incorporation of new data sources and rebasing of the national accounts to 2006, led to a significant upward revision of estimates of GDP, which were published in November 2010. Ghana is one of the countries participating in the National Accounts Module of the Enhanced Data Dissemination Initiative (EDDI) supported by the United Kingdom Department for International Development (DFID). The first mission under this project, which aims to develop and improve quarterly national accounts estimates, took place in September 2010. The mission reviewed existing methodology, made recommendations for methodological improvements to and provided training on the quarterly national accounts. It is expected that quarterly estimates in current prices and volume terms based on the new annual estimates will be published in October 2011.

Labor statistics: The scarcity of labor statistics is a cause for concern. Labor statistics are almost nonexistent, although some wage indicators are available from the Social Security National Insurance Trust (SSNIT). The Ministry of Employment has been receiving technical assistance from the United Nations Development Program and the International Labor Organization in the design and compilation of labor statistics.
Government finance statistics: Steps have been taken to improve fiscal data. The Controller Accountant General Department (CAGD) currently compiles monthly budget implementation reports, and the data are available within six weeks, although some factors undermine their reliability. There is a need for comprehensive and timely reconciliation of monthly treasury data with bank accounts. To address these shortcomings, the government has formed a committee to define the nature of "broad" and "narrow" government; moved to a system of immediate booking for "direct debits" and more frequent reporting of government account balances; and is implementing a new automated Budget and Public Expenditure Management System (BPEMS). The BPEMS covers ministries, departments, and agencies. Several GFS missions worked with the authorities to improve the economic classification of data in accordance with the requirements of *GFSM 2001*. In 2009, an STA mission also provided guidance on the compilation of a partial financial balance sheet for budgetary central government, and proposed that information on debt stocks that is available on a monthly basis be reported for the inclusion in the *International Financial Statistics (IFS)*. The coverage of transactions is uneven. There are also difficulties in accounting for expenses paid by extrabudgetary funds. The operations of special funds, such as the SSNIT (currently regarded as a public financial corporation by the authorities), the Ghana Education Trust Fund (GETF) and the District Assemblies Common Fund (DACF), are not yet covered in the fiscal accounts. Although the majority of local government expenses are directly met from budgetary accounts, the revenue of local governments and related spending, and transactions financed from the DACF are not yet covered. Extending the coverage of fiscal data to general government is strongly encouraged. Comprehensive solutions to some of the data problems may have to await full implementation of the BPEMS system and incorporation of Fund technical advice. Various missions from FAD have suggested short-term temporary solutions to alleviate current data quality problems.
Monetary and financial statistics: While BOG had made significant progress on implementing the previous missions' recommendations on monetary and financial statistics, continued efforts are needed to improve the methodological soundness of the data. The April-May 2009 mission concluded that the implementation of earlier advice was uneven. While substantial progress was made in strengthening the source data for the BOG and expanding institutional coverage of the ODCs to include rural banks and savings and loans companies, the progress in improving data collection and compilation from the OFCs

had been slow. To enhance coordination among financial regulatory agencies and improve data collection on the OFCs, the authorities agreed to establish an inter-agency committee. The mission helped the BOG to implement the SRFs and expand the institutional coverage (see above).

Debt statistics: The responsibility for external debt recording and payment is divided among three agencies. The Ministry of Finance and Economic Planning (MOFEP), through its Aid and Debt Management Unit (ADMU), maintains the external debt database. It is responsible for recording debt payment obligations, issuing payment requests, and tracking HIPC debt relief. The CAGD confirms the legality of the payment and authorizes the release of public funds. It is responsible for accounting for debt payments and rendering reports to parliament. The BOG as the payment agent for the government verifies payments made to ADMU and CAGD.

To enable systematic comparison of the budget, the balance of payments and the BOG cash-flow data, the authorities should clearly identify the government subsectors for which data are reported and prepare a clear classification of financing, outstanding debt, and guarantees issued.

Balance of payments Statistics: The Balance of Payments Office (BPO) of the Research Department of the BOG is responsible for the compilation and dissemination of balance of payments data for Ghana. Ghana participates in the external sector module of EDDI. and has benefited extensively from technical assistance in developing and undertaking enterprise surveys of cross-border financial flows and stocks (Foreign Private Capital Flows (FPCF) surveys) with a view to improve the quality of balance of payments statistics and develop IIP statistics.

In May 2010, an STA mission complemented the EDDI efforts by undertaking a comprehensive assessment of institutional arrangements, data sources, methodology, compilation, and dissemination practices for the overall BOP statistics, and advising on areas for further improvement. The mission also provided technical advice on the compilation of IIP statistics. Despite the progress achieved in improving the data sources and compilation techniques, substantial work is still needed to (i) strengthen existing, and develop new data sources to improve the accuracy and reliability of the current and capital account, and (ii) achieve an adequate use of the existing data sources for the financial account. The mission urged the BPO to work towards closing major remaining data gaps by making the International Transactions Reporting System (ITRS) a reliable data source to the extent possible, and use it, for the time being, at its full potential and as a cost-efficient way to receive information for the current, capital, and financial account. With the results of the FPCF, the BPO, in principle, has all building blocks available for compiling IIP statistics. The next mission will take place in FY 2012.

Trade statistics

Currently, the GSS is not publishing timely monthly trade statistics, although the data are available from the Customs, Excise, and Preventive Service (CEPS). The staff has recommended that the GSS collaborate with the CEPS to process customs data within six weeks and with the Ministry of Trade and Industry (MOT) and the BOG to identify and reduce discrepancies in trade statistics and to ensure that imports into bonded warehouses are not double-counted. Data collection procedures of the CEPS need to be improved, and there is also room for improving trade volume data collected by the CEPS through customs invoices, which would help the GSS to extract meaningful import and export unit values. The May 2010 STA mission found that BPO treats goods that are temporarily imported into Ghana without passing the customs authorities (i.e. not yet captured by customs) and then sold to enterprises in the free zone as exports. This treatment would imply that free trade zones are treated as located outside the Ghanaian economic territory, which should not be the case.

Fund staff has recommended that the GSS produce export unit values for major export commodities, such as gold and cocoa. A high coverage of the country's export bundle can be obtained from just three major exports—cocoa, gold, and unwrought aluminum. In contrast, deflation of imports is likely to require an iterative procedure to strike a balance between coverage of the index and its stability, owing to the heterogeneity of the basket.

II. Data Standards and Quality	
Participant in the General Data Dissemination System (GDDS) since July 20, 2005.	
III. Reporting to STA (Optional)	
STA found some major issues in the March 2010 data for the Central Bank and the February 2010 data for the ODCs that the authorities submitted in April 2010 for publication in the *IFS.* For this reason, STA thoroughly reviewed the entire mapping of source data to the SRFs and several misclassifications were fixed. As a result, the updating of the *IFS* page for Ghana was resumed in March 2011 after a long delay. The latest data published in the *IFS* are for December 2010. Data for publication in the *IFS* on international transactions were last reported for 2009, quarterly government finances for March 2010, and national accounts for 1997. No quarterly balance of payments data are currently reported for publication in the *IFS*. The latest available data reported for publication in the *Government Finance Statistics Yearbook (GFSY)* are for 2009. However, these data cover only the cash revenue and expense transactions of the budgetary central government.	

GHANA: TABLE OF COMMON INDICATORS REQUIRED FOR SURVEILLANCE
(AS OF APRIL 22, 2011)

	Date of latest observation	Date received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange Rates	Apr 2011	Apr 2011	D	W	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	Feb 2011	Apr 2011	M	M	Q
Reserve/Base Money	Feb 2011	Apr 2011	W	M	I
Broad Money	Feb 2011	Apr 2011	M	M	I
Central Bank Balance Sheet	Feb 2011	Apr 2011	M	M	I
Consolidated Balance Sheet of the Banking System	Feb 2011	Apr 2011	M	M	I
Interest Rates[2]	Feb 2011	Apr 2011	M	M	M
Consumer Price Index	Mar 2011	Apr 2011	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – general government[4]	NA	NA	NA	NA	NA
Revenue, Expenditure, Balance and Composition of Financing[3] – central government	Feb 2011	Mar 2011	M	M	I
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Dec. 2010	Feb 2011	M	Q	I
External Current Account Balance	Dec 2010	Feb 2011	Q	Q	Q
Exports and Imports of Goods and Services	Dec 2010	Feb 2011	Q	Q	I
GDP/GNP	2009	Nov 2010	A	A	I
Gross External Debt	Dec 2010	Feb 2011	M	I	A
International Investment Position[7]	NA	NA	NA	NA	NA

[1]Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extrabudgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).
[7] Includes external gross financial assets and liability positions vis-à-vis non residents.

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL RELATIONS DEPARTMENT

Public Information Notice (PIN) No. 11/70
FOR IMMEDIATE RELEASE
June 2, 2011

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes Article IV Consultation with Ghana

On May 25, 2011, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Ghana.[1]

Background

Ghana's economy grew by 7.7 percent in 2010, after a temporary slowdown in 2009, reflecting continued buoyancy of commodity exports as well as stronger construction and service sector activities. Spillovers from instability in Côte d'Ivoire have been limited. The rebasing of Ghana's national accounts in 2010 showed the country as having a higher income level and growing faster than earlier recorded. With an upward revision to per capita incomes of about 70 percent, Ghana moved into the lower-middle income country grouping.

The fiscal deficit rose to 7.7 percent of GDP in 2010, compared to 5.8 percent of GDP in 2009. While tax revenue collections were broadly in line with the budget, non-tax revenues and grants fell short of targets and capital spending was larger than anticipated. Spending commitments discovered in 2010 also led to the accumulation of payment arrears, equivalent to 1.9 percent of GDP. The combined fiscal slippage in

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

relation to the 2010 program, taking into account both cash transactions (the fiscal deficit) and unpaid bills (arrears), was equivalent to 2.6 percent of GDP.

External performance was strong in 2010. Exports grew by $2 billion, with cocoa and gold benefiting from high global prices. While imports staged a strong recovery after a decline in 2009, the current account deficit of 7.2 percent of GDP in 2010 was more than financed by strong capital inflows, including direct investments in the oil sector and Treasury bond purchases by nonresidents. Gross reserve cover rose to 3.2 months of import cover at end-2010.

Reflecting the strong balance of payments, the cedi has traded in a relatively narrow range against the U.S. dollar since mid-2009. This currency stability, combined with the lagged effects of earlier monetary tightening, contributed to a decline in inflation from around 20 percent in 2009 to close to 9 percent since mid-2010. Favorable harvests have sheltered Ghana from rising global food prices so far.

The Bank of Ghana’s policy interest rate which had been kept at 13.5 percent since July 2010 was reduced by 50 basis points in May, reflecting the stability of inflation in recent months, the continuing strength of the cedi, and a slight slowing of credit growth in early 2011. Despite a partial sterilization of Ghana’s balance of payments surpluses, reserve money grew by 35 percent in 2010 and broad money by 46 percent, considerably more rapidly than in 2009. Private sector credit also picked up towards end-2010.

The mid-2010 Financial Sector Assessment Program (FSAP) Update found that financial stability risks have heightened since the 2003 FSAP. While, in the aggregate, the banking system is profitable and liquid with high capital levels, nonperforming loan ratios are elevated, in part due to government payment arrears. Risks also relate to extensive state involvement in the banking sector, shortcomings in commercial banks’ risk management and accounting practices, gaps in supervision and systemic risk analysis, and weak enforcement of creditor rights. Immediate stability risks have been reduced since mid-2010 by clearance of substantial government arrears and state enterprise debts. The incidence of bank undercapitalization has also declined, with banks raising capital or merging with stronger banks, and progress has been made in strengthening regulation and supervision. Nevertheless, key sources of vulnerabilities remain and a sustained and comprehensive reform effort is needed to achieve long term financial stability.

Executive Board Assessment

Executive Directors welcomed Ghana's strong growth and favorable medium-term outlook, underpinned by high commodity export prices, the start of oil production, and strong non-oil activity. International reserves have increased, the currency remains stable, and inflation has declined to single digits. To maintain the growth momentum and to meet the country's development objectives, Directors stressed the need to address Ghana's fiscal vulnerabilities and further advance the structural reform agenda.

Directors regretted that fiscal consolidation goals were not achieved in 2010, reflecting in part the delays in fiscal reforms. Going forward, they emphasized the importance of stronger fiscal management and called for rigorous implementation of the authorities' plan to reduce the cash deficit and avoid further domestic arrears. They highlighted that this would require improved expenditure control, a prudent roll out of the new pay structure, and determined efforts to boost tax collections in relation to GDP. Directors urged the authorities to take additional measures to strengthen the budget, should the need arise.

Directors stressed the importance of maintaining the momentum of structural fiscal reforms, notably for tax administration, payroll management, and expenditure control. While welcoming the improvement in Ghana's debt sustainability outlook, they underscored the need for continued improvements in debt management and prudent borrowing strategies.

Directors welcomed the recent approval of an oil revenue management bill, as well as the authorities' intention to ensure that oil-related incomes, expenditures and savings be transparently and comprehensively recorded for dissemination, analysis, and audit purposes.

Directors observed that cost-recovery pricing of energy products is crucial for sound fiscal management. They welcomed the recent sizable adjustment of domestic petroleum product prices and encouraged the authorities to closely monitor developments in this area to ensure that domestic prices remain in line with market trends. Directors welcomed the move to quarterly cost-based reviews of electricity tariffs.

Directors concurred that monetary policy implementation should remain alert to inflationary pressures. Should circumstances warrant, the Bank of Ghana (BoG) should stand ready to tighten policies in support of the inflation target. Directors noted the assessment that the exchange rate is broadly in line with fundamentals, and welcomed the authorities' intention to sustain this through a flexible exchange rate regime. They supported the BoG's plans to further strengthen its monitoring of the balance of payments as well as its tools and policies for foreign exchange market intervention.

Directors noted that banks are profitable and liquid with high capital. They welcomed the steps taken by the authorities to address stability risks in the banking sector identified by the recent Financial Stability Assessment Program Update. They agreed that stronger measures will be necessary to tackle the elevated non performing loans. Further progress needs to be made to resolve vulnerable institutions, strengthen risk management in banks, enhance banking supervision, and enforce prudential regulation.

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case.

Ghana: Selected Economic and Financial Indicators, 2007–10[1]

	2007	2008	2009	2010
	Act.	Act.	Act.	Est.
	(Annual percentage change; unless otherwise specified)			
National accounts and prices				
Real GDP [2]	6.5	8.4	4.0	7.7
Real GDP per capita	3.8	5.7	1.3	5.1
GDP deflator	16.3	20.2	16.7	14.1
Consumer price index (annual average)	10.7	16.5	19.3	10.7
External sector				
Exports, f.o.b. (percentage change, in US$)	11.9	26.3	10.8	35.2
Imports, f.o.b. (percentage change, in US$)	19.4	27.3	-21.6	33.0
Export volume (excluding oil)	3.1	16.9	2.6	13.9
Import volume	8.6	6.9	-3.5	19.3
Terms of trade	-1.3	-9.3	33.0	6.5
Real effective exchange rate (end of period; depreciation -)	-3.9	1.3	-11.2	6.1
Money and credit				
Net domestic assets [3]	27.8	48.3	3.9	16.2
Credit to the private sector [3]	37.1	33.3	12.9	20.3
Broad money (excluding foreign currency deposits)	43.0	31.2	21.2	45.7
	(Percent of GDP) [4]			
Government operations				
Total revenue	13.8	13.3	13.4	15.0
Grants	3.7	2.7	3.0	2.4
Total expenditure	22.7	24.0	20.4	23.5
Arrears clearance and VAT refunds	0.4	0.6	1.8	1.5
Overall balance (including grants)	-5.6	-8.5	-5.8	-7.7
Net domestic financing	0.8	5.7	2.8	4.8
Gross government debt	31.0	33.6	36.0	38.9
Domestic debt	16.0	17.4	16.6	18.6
External debt	15.0	16.2	19.4	20.3
Government debt (net)	23.3	30.1	32.4	35.5
	(Percent of GDP; unless otherwise specified) [4]			
External sector				
Current account balance (including official transfers)	-8.0	-10.8	-4.0	-7.2
Gross international reserves (millions of US$)	2,837	2,036	3,165	4,725
months of imports of goods and services	2.7	2.2	2.8	3.2

Sources: Data provided by Ghanaian authorities; and IMF staff estimates and projections.
[1] Based on new national accounts rebased to 2006.
[2] The 2009 and 2010 real GDP growth figures are official data published after the Article IV documents were finalized.
[3] Percent of broad money (including foreign currency deposits) at the beginning of the period.
[4] Based on GDP estimates for 2009 and 2010 available at the time the Article IV documents were finalized.

INTERNATIONAL MONETARY FUND
EXTERNAL RELATIONS DEPARTMENT

Press Release No. 11/200
FOR IMMEDIATE RELEASE
May 27, 2011

International Monetary Fund
Washington, D.C. 20431 USA

IMF Executive Board Completes Third and Fourth Reviews Under ECF Arrangement with Ghana and Approves US$94.3 Million Disbursement

The Executive Board of the International Monetary Fund (IMF) completed on May 25 the third and fourth reviews of Ghana's performance under the economic program supported by the Extended Credit Facility (ECF). The completion of the reviews will enable an immediate disbursement of an amount equivalent to SDR 59.58 million (about US$94.3 million), bringing total disbursements under the arrangement to SDR 208.73million (about US$330.3 million).

In completing the reviews, the Board also approved a waiver for the non-observance of the end-December 2010 performance criteria on the overall fiscal deficit and on the net change in the stock of domestic arrears. The Board also approved a rephasing of disbursements.

The three-year ECF arrangement was approved on July 15, 2009, with access of SDR 387.45 million (about US$613.1 million or 105 percent of quota).

Following the Executive Board's discussion on Ghana, Mr. Naoyuki Shinohara, Deputy Managing Director and Acting Chair issued the following statement:

"Ghana's economy rebounded in 2010, with strong growth and external performance. International reserves increased, the currency remained broadly stable, and inflation declined to single digits. Fiscal performance, however, deteriorated with a rise in the cash deficit and accumulation of domestic arrears.

"The authorities' 2011 economic program focuses appropriately on restoring the momentum of fiscal consolidation. The budget target for this year is ambitious and will require that a portion of Ghana's initial oil production revenues be saved. Contingencies identified by the authorities will be important to ensure that the 2011 fiscal goals can be achieved.

"Structural fiscal reforms should be accelerated. Priorities are to reinforce tax administration under a revamped Ghana Revenue Authority, strengthen expenditure monitoring and control including through a new budget management system, and regularize Ghana's domestic payments arrears. Adopting transparent procedures for oil revenue management, as stipulated in the Petroleum Management Act, will also be important.

"The adoption of quarterly electricity tariff reviews is an important step towards addressing risks to the budget from energy pricing. For domestic petroleum products, it will be important to avoid losses to the budget when protection provided by hedging ends.

"Ghana faces inflation risks from rising global commodity prices, robust domestic growth, and rapid liquidity expansion. The Bank of Ghana should stand ready to tighten monetary conditions, as needed. A further build up in reserve cover would be appropriate within a flexible exchange rate regime.

"Steps have been taken to address immediate vulnerabilities in the banking system. However, further steps are needed to review the appropriate extent of state involvement in the banking industry, strengthen risk management by banks, enhance supervisory capacity, enforce prudential regulations, and strengthen corporate governance, accounting standards, and creditor rights," Mr. Shinohara said.

Statement by Jafar Mojarrad, Executive Director for Ghana and Alberta Hagan, Alternate Executive Director May 25, 2011

We would like to convey the Ghanaian authorities' gratitude to the Executive Board and management for their continued support. Our authorities also express appreciation to the staff team headed by Mr. Peter Allum for the candid and constructive dialogue under the three-year Extended Credit Facility and during the Article IV discussions. They also thank the IMF and World Bank staffs for the useful FSAP Update.

Ghana's performance improved in 2010. Growth has rebounded, driven by high commodity exports, good rainfalls, and sustained non-oil activity. Revised estimates by the Ghana Statistical Service show economic growth of 7.7 percent in 2010. Inflation continually declined from 20.7 percent in June 2009 to 8.6 percent at end-December 2010. Developments in the external sector were also favorable, with exports growing by more than a third, the current account deficit being financed mainly by foreign direct investment and official capital flows, reserves increasing significantly to the equivalent of 3.2 months of imports, and the currency stabilizing, reflecting business confidence.

The authorities are resolutely implementing the ECF-supported program, carrying out challenging reforms and promptly taking corrective actions in few areas where progress has been slower than expected. All performance criteria for end-June and end-December 2010 were met, except those for the overall fiscal deficit, which was missed by a small margin, and the stock of domestic arrears at end-December. Structural reform implementation was satisfactory in many areas, as outlined in the Memorandum of Economic and Financial Policies (MEFP). The authorities request waivers of the missed performance criteria and completion of the third and fourth reviews under the ECF.

Ghana's growth story has changed dramatically. The rebasing of national accounts in 2010 revealed that overall growth and per capita income were growing much faster than estimated earlier, thereby moving Ghana to a lower-middle income country status, with per capita GDP estimated at US$1343 in 2010. Oil production began in late 2010, at about 40,000 bpd, and is expected to peak at about 115,000 bpd by August this year. Together with continued strength of non-oil activity, real GDP growth is projected to accelerate to 14 percent in 2011 and to average close to 8.0 percent a year in 2012-13, which should place the economy on a higher growth trajectory while achieving the MDGs—the overarching goal of the Ghana Shared Growth and Development Agenda, 2010–13.

Fiscal Policy

Despite some spending overruns, the cash fiscal deficit in 2010 was missed by only a small margin (0.8 percent of GDP), as a result of the corrective measures taken by the authorities. Moreover, the revenue from the sale of gold company shares (0.7 percent of

GDP), which was planned for end-December 2010, slipped into January 2011. Had this operation taken place as planned, the fiscal target would have been missed by less than 0.2 percent of GDP. However, while outstanding arrears as of end-2009 were partially settled in 2010, new arrears, mainly linked to a surge in spending commitments during 2007-08, were identified in 2010, so that the stock of arrears increased instead of declining. Domestic borrowing also exceeded the program indicative target, reflecting a delay in a World Bank loan disbursement

Looking forward, fiscal consolidation remains a top priority. While the program's targeted fiscal correction of 5 percentage points of GDP in 2011 (on a commitment basis) is very ambitious by any standard, especially given Ghana's sustainable debt position, the authorities are determined to achieve this target and to reduce the deficit further to 2½ - 3 percent of GDP in 2012-13, regularize all arrears, and use part of oil revenue to build fiscal savings. In doing so, they will place greater weight on revenue mobilization and expenditure control while preserving growth-enhancing spending on infrastructure and social programs. The March 2011 fiscal outturn is indicative of the good progress being made in fiscal consolidation, including in reducing domestic arrears.

The 2011 Budget features strong revenue measures, and additional measures are being developed. These include, in particular, raising the withholding tax rate and threshold, extending the communication service tax to the entire industry, raising the airport and vehicle income tax rates, and extending the national stabilization levy through 2011. The Budget also introduces monthly rather than quarterly payments of mining royalties, discontinues the practice of two-year warehousing of imports before taxation and of deferred payments of VAT, and reduces the scope for tax exemptions. Additional tax measures are being developed, including imposing VAT on fee-based services of banks and other financial institutions and on the sale of new properties by estate development firms; raising property tax rates; and negotiating more beneficial agreements with mining companies.

The authorities are also strengthening revenue administration, as highlighted in the MEFP. Progress is being made with setting up the Ghana Revenue Authority (GRA) as an integrated revenue authority; the Large Taxpayer Office is being restructured in line with Fund TA recommendations; and the VAT threshold has been raised and a flat 3 percent VAT rate established for the 20,000 taxpayers that fall below the new threshold.

The recently-approved Petroleum Revenue Management Act provides a transparent framework for the collection, allocation, and management of petroleum revenue for the benefit of all Ghanaians. The Act provides for the opening of a Petroleum Holding Fund—a transit account at the central bank—to receive all upstream petroleum revenues which will be used in part for budget support, and the remainder saved in two accounts, one for smoothing expenditures in the face of shocks, and the other as an endowment for future generations.

The authorities, including at the highest level, have reaffirmed their strong commitment to enhance expenditure management and control. Wide ranging measures will be deployed to this effect, as detailed in the MEFP, encompassing reform of the budget process, upgrading the computerization and infrastructure of expenditure management and control, and strengthening cash management. In addition, a new public service pay policy, the single spine pay, has been adopted to help streamline the public sector payroll. So far, 60 percent of public service employees have been migrated onto the new system, with the remainder to be migrated in line with budget appropriations.

The authorities recognize the challenges associated with arrears accumulation, which complicates fiscal management and poses risks to the banking sector. They are committed to arrears control and elimination and are developing a comprehensive strategy to address the issue. This strategy includes developing an elaborate database to capture government contractual obligations; ascertain the validity of claims and potential liabilities of state owned enterprises (SOEs); and regularize arrears through cash payments and the issue of special purpose bonds in line with the program targets. Moreover, ongoing measures to prevent arrears accumulation include strengthening planning and expenditure controls (for example, all spending units are required to obtain commencement certificates from the Ministry of Finance before embarking upon any capital spending), monthly monitoring of arrears, and improved cash management. The authorities intend to draw on the recommendations of the recent Fund TA in implementing their strategy. They have accelerated arrears payment, and by end-March this year, a substantial part of the arrears owed to contractors and statutory funds were settled.

Monetary, Exchange Rate, and Financial Sector Policies

The primary objective of monetary policy remains price stability. Inflation-targeting continues to be the main framework for monetary policy, with liquidity management implemented using market-based instruments. Substantial gains have been made in containing inflation. However, the authorities are aware of potential risks stemming from the strong balance of payments position and buoyant domestic activity. Thus, they remain vigilant and stand ready to take preemptive measures using the full range of monetary policy instruments to curb inflationary pressures, as needed, while mindful of the growth objective.

The authorities' remain committed to a floating exchange rate regime and are attentive to current account sustainability and competitiveness. They consider external competitiveness important in light of the start of oil production and increased investor interest which could stoke appreciation pressures and hurt non-oil exports and domestic production. While agreeing with staff assessment that the valuation of Ghana's currency is broadly in line with fundamentals, they are also of the view that addressing non-price factors is key to strengthening competitiveness. They will continue to build foreign reserves as a buffer against external shocks.

The FSSA recognizes the significant development of Ghana's financial system and the important progress made by the authorities in strengthening regulatory and supervisory framework and financial infrastructures, with the aim of enhancing financial stability. It also finds that the banking sector is liquid, profitable, and highly capitalized. The authorities share many of the conclusions of the FSAP Update, even though they do not share staff's assessment that all state banks perform poorly. This notwithstanding, they have made significant progress in implementing the recommendations and have incorporated them into their comprehensive reform program.

The authorities remain strongly committed to strengthen supervision and closely engaged with banks to increase banking sector resilience and further reduce NPLs. In addition to measures taken to enhance capacity of the Supervision Department of the BOG, and to enable timely assessment of the industry as a whole, consolidated monthly banking industry reports and quarterly financial stability reports are being prepared. Furthermore, the authorities undertake bimonthly stress testing of the banking industry while banks are required to do same monthly. A Financial Stability Department to provide supportive systemic risk analysis has been established. The AML/CFT framework is being strengthened following the establishment of the Financial Intelligence Center and the Anti-Money Laundering Office.

The setting up of asset recovery companies, increased use of Commercial and Fast Track courts, more rigorous monitoring of loan portfolios, and intensified supervision are helping lower NPLs, even though the impact of these measures will take time. Measures being taken to reduce banks' exposure to SOEs and settle government arrears have reduced associated risks. In addition, good progress has been made towards bridging gaps in bank resolution and crisis management frameworks, in cross-border supervision, as well as in improving banks' corporate governance and risk management. The authorities will consider carefully available options for establishing a deposit insurance scheme in line with best international practices.

Debt Sustainability and Competitiveness

Our authorities' affirmed commitment to fiscal consolidation, their determination to observe the program limits on nonconcessional borrowing and restrict such borrowing to high-priority and high-return projects, together with continued prudent public debt management would preserve public debt sustainability. To this end, the recent restructuring of Tema Oil Refinery and the clearing of its outstanding liability through public debt issuance has reduced this source of contingent liabilities.

Our authorities are also forging ahead with structural reforms aimed at improving the economy's competitiveness. The reforms target enhancing institutional capacity and market efficiency, accelerating procedures for business starting and closing and tax filing, and further deepening the financial system. The reforms are also directed towards infrastructure development, raising the quality of education and the quantum of highly trained manpower, as well as improving access to technology.

Conclusion

After a temporary economic slowdown in 2009 and the unanticipated cost of the political conflicts in Côte d'Ivoire and Libya, which has been well managed, our Ghanaian authorities are moving ahead with their development agenda. The main focus of this agenda is to expand opportunities for inclusive long-term growth and poverty reduction, through prudent macroeconomic policies supported by structural reforms. Our authorities value their engagement with the Fund in their quest for prosperity, and are grateful for continued Fund support.