October 2008
IMF Country Report No. 08/344

Ghana: 2008 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice 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 the 2008 Article IV consultation with Ghana, the following documents have been released and are included in this package:

- The staff report for the 2008 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on April 8, 2008, 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 June 16, 2008. 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.

- A staff supplement on the joint IMF/World Bank debt sustainability analysis.

- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its June 30, 2008 discussion of the staff report that concluded the Article IV consultation.

- A statement by the Executive Director for Ghana.

The document listed below has been or will be separately released.

Selected Issues Paper

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 2008 Article IV Consultation

Prepared by the Staff Representatives for the 2008 Consultation with Ghana

(In consultation with Other Departments)

Approved by Sharmini Coorey and Adnan Mazarei

June 16, 2008

Discussions: The mission took place in Accra, March 23–April 8, 2008. The staff team comprised Ms. Nagy (head), Mr. Mills, Mr. Hartley, Mr. Alichi (all AFR), Mr. Laxton (RES), Mr. Espejo (PDR), Mr. Bouhga-Hagbe (FAD), and Mr. McIntyre, Resident Representative in Accra. The mission met with Minister of Finance Baah-Wiredu, State Minister Osei, Governor of the Bank of Ghana Acquah, other senior officials, representatives of development partners, business, and trade unions. Mr. Kwakye, Advisor to the Executive Director for Ghana, participated in the policy discussions. The mission worked closely with World Bank staff.

Political setting. Legislative and presidential elections will take place in December 2008.

Fund relations. Policy dialogue between the authorities and staff has remained active since Ghana's completion of its Poverty Reducing Growth Facility (PRGF) arrangement in October 2006, but discussions on a Policy Support Instrument (PSI) have not advanced.

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EXECUTIVE SUMMARY

Ghana's growth has remained strong, fuelled by both the private and public sectors. The private sector has responded positively to macroeconomic stability and structural reforms. But fiscal spending has also increased, reflecting investment to address growth bottlenecks, as well as policy slippages. As a result, the economy is experiencing demand pressures that are causing macroeconomic imbalances and increasing risks to external stability; high twin fiscal and external account deficits have emerged and inflation has risen. GDP growth is set to remain strong at 6½ percent in 2008; inflation is projected to reach 14½ percent by year-end; and international reserves are likely to decline to about 2 months of imports.

Reducing excess demand pressures requires urgent policy adjustments. Postponing them would pose risks to Ghana's macroeconomic and external stability, threatening to undo much of Ghana's remarkable achievements in these areas. In staff's view, the current policy mix may not reduce prevailing vulnerabilities sufficiently.

The authorities and staff agree that fiscal policy needs to carry the brunt of the adjustment. The government has announced its intention to deal with the main weaknesses—high utility subsidies and the rising wage bill; however, implementation has been slow. Staff projects that even with these measures the fiscal deficit will rise to over 10 percent of GDP in 2008 and 2009. Additional fiscal measures are needed; the automatic price adjustments for utilities should be reinstated and coverage extended to all users, while protecting the poor by better-targeted subsidies.

The Bank of Ghana (BoG) has increased its policy rate by a cumulative 350 basis points in response to inflationary pressures and indicated that is ready to raise rates further if needed. Staff noted that, to bring down inflation, the monetary tightening that began in November 2007 should continue. Yet the central bank alone cannot fight inflation, and the effectiveness of monetary policy is being increasingly undermined by loose fiscal policies.

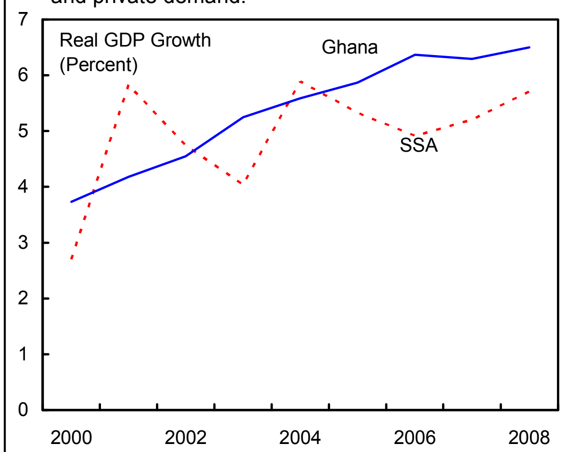
A joint Fund-Bank *external* debt sustainability assessment indicates that Ghana's risks of external debt distress, although still moderate, have increased. Total public debt would rise from 50 percent of GDP in 2007 to about 80 percent of GDP in 2028, implying serious risks to debt sustainability. The authorities agreed that debt sustainability was important but considered that prospects of oil revenue would improve the debt outlook.

Authorities and staff agreed that financial deepening was desirable, but very rapid credit growth to the private sector in recent years raises concerns. The BoG has raised banks' minimum capital requirement and adopted several elements of the more risk-sensitive regulatory framework of Basel II; staff indicated that additional macro prudential measures were needed. Further interest rate increases should also moderate credit expansion.

There was also agreement that, if confirmed, the recent oil discovery could accelerate Ghana's timetable for reaching middle-income status and the millennium development goals, provided it avoids the "oil curse" of weak governance and boom-bust cycles. Ghana's track record on transparency bodes well for governance. The authorities' plans for an appropriate oil management regime should therefore focus on demand management that reflects the country's absorptive capacity and does not crowd out the private sector.

I. The Economic Setting

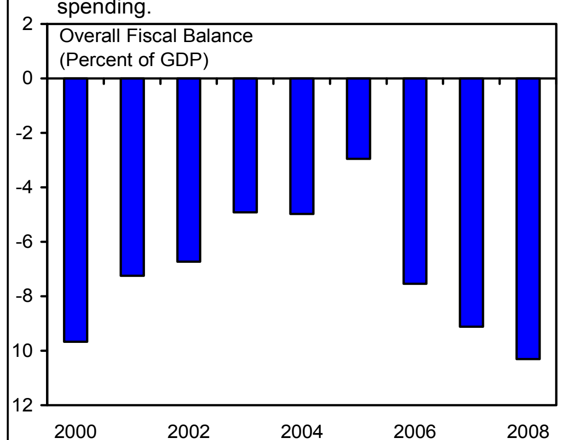
Growth remains strong, bolstered by strong public and private demand.



Sources: Ghanaian authorities and staff estimates and projections.

1. **Growth remained strong in 2007 and in the first months of 2008, but macroeconomic balances have weakened and external vulnerabilities have increased.** Buoyant private sector demand and fiscal expansion have led to a high external current account deficit, pressure on international reserves, and a pickup in inflation. Risks of debt distress are rising: total debt reached 50 percent of GDP at the end of 2007. International commodity price shocks have had a negative impact on inflation, but less so on the external accounts, as Ghana's terms of trade have improved for several years. Moreover, domestic food supplies have been generally good, and Ghana is a (small) net exporter of food. Nevertheless, regional disparities in food supplies and prices are a concern: flood damage in the north has led to localized food shortages and sharp price increases.

Fiscal weakening due to increased utility subsidies, wage bill and energy investment spending.



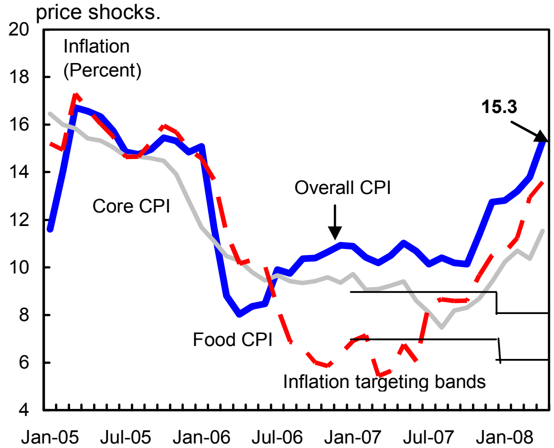
Sources: Ghanaian authorities and staff estimates and projections.

2. **The rise in the fiscal deficit to 9 percent of GDP in 2007 reflected both urgent investment needs and policy slippages with regard to utility pricing and the wage bill.** Necessary emergency investments to address energy supply bottlenecks amounted to 2½ percent of GDP. But the authorities also repeatedly delayed passing on the increase in oil prices to utility consumers, and eventual price increases in May and November 2007, though significant, were not sufficient to bring prices to cost recovery levels as world oil prices continued to rise. The wage bill was higher than budgeted because of hiring outside the centralized budget process and higher than budgeted wage growth. Revenue performance continued to be strong however, except from gold.

3. **Headline inflation accelerated to 15.3 percent in April 2008, as a result of both demand pressures and rising world oil, and to a lesser extent, food prices.** In recent months food price inflation has started to accelerate, although it continues to be below nonfood inflation.

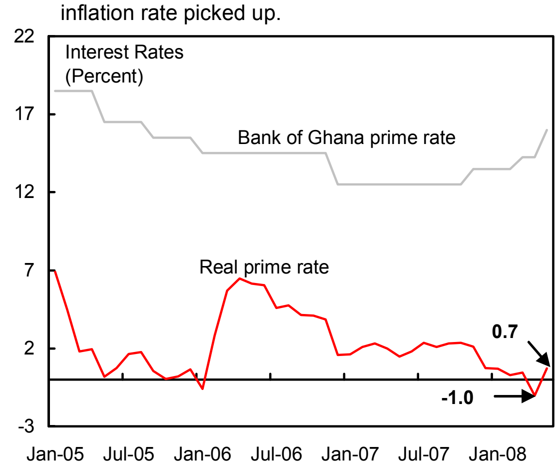
4. **In May 2007 the Bank of Ghana (BoG) announced formal inflation targeting (IT), which staff describe as "IT lite," since exchange rate stability is an important intermediate objective**. Through September 2007, headline inflation stabilized at slightly above 10 percent while core inflation fell to within the inflation target band of 7–9 percent. However, since then both headline and core inflation have diverged from the target path. In response, the BoG has increased its policy rate by a cumulative 350 basis points since November 2007, but the policy rate has remained barely positive in real terms. Money growth remained strong, although the demand for money increased and velocity declined. Reserve money growth exceeded 30 percent for the second year, reflecting some increase in net international reserves, while broad money growth accelerated to about 43 percent, as the money multiplier increased due to the elimination of the secondary reserve requirement in 2006.

The recent disinflationary trend is being reversed, reflecting strong domestic demand and energy price shocks.



Sources: Ghanaian authorities and staff estimates and projections.

Policy interest rates have fallen in real terms as inflation rate picked up.



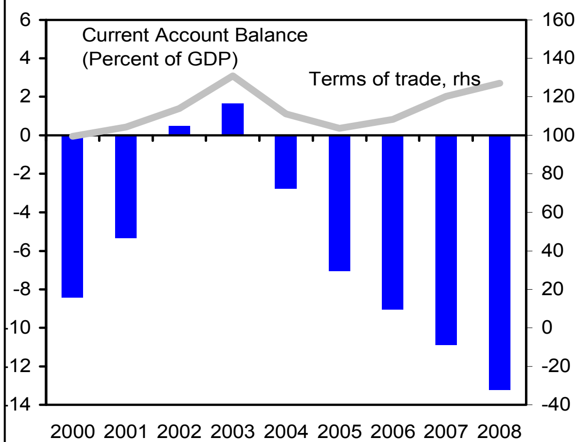
Sources: Ghanaian authorities and staff estimates and projections.

5. **Strong demand pressures have weakened Ghana's external position, put pressure on the exchange rate, and reduced the international reserve coverage**. The trade balance continued to deteriorate as rapid growth of non-oil imports (investment goods and consumption durables) and an increase in the oil bill overshadowed good export performance related to large terms of trade gains (11 percent in 2007 alone) and a significant increase in gold export volumes. As a result, the current account deficit widened from 9 percent of GDP in 2006 to 11 percent in 2007. Strong capital inflows, including from Ghana's first international bond issue of US$750 million in September 2007 and partial liberalization of the capital account, [1] helped increase gross international reserves somewhat,

[1] See the accompanying Selected Issues Paper on capital account liberalization.

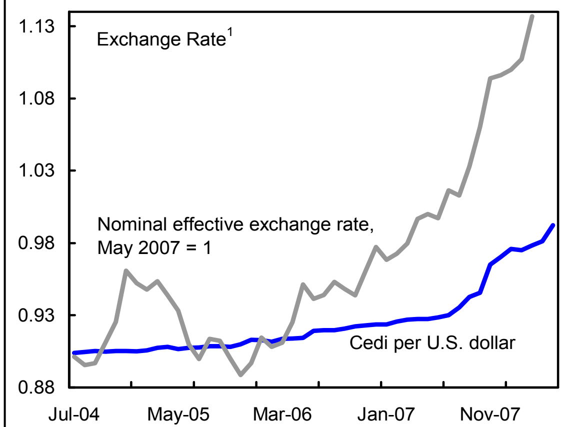
but reserve import coverage dipped to 2.6 months at the end of 2007 in the face of very rapid import growth. These trends continued through the first months of 2008, with international reserves declining and import coverage falling to a precarious level of about 2 months by April 2008. The cedi has depreciated by 7 percent against the dollar year on year ending mid-May 2008.

The external current deficit widened, despite terms of trade gains.



Sources: Ghanaian authorities and staff estimates and projections.

The cedi has depreciated against a weakening dollar.



Sources: Ghanaian authorities and staff estimates and projections.

[1] An increase indicates a depreciation.

6. **Growth in credit to the private sector accelerated to about 60 percent both in 2007 and in the first quarter of 2008.** Part of this is financial deepening in the wake of financial sector reform; a reduction in the reserve requirement and buoyant demand conditions have also played roles, adding to cyclical pressures. Bank profitability has remained generally good; the average risk-weighted capital adequacy ratio (CAR) is at around 15 percent; and all banks conform with the statutory minimum CAR of 10 percent. But worrisome signs have also emerged in recent months. The nonperforming loan ratio and loan loss provisioning have increased and the default rate of households has risen (albeit the level is still low at 1½ percent). Banks' costs have risen due to higher wage costs and a rapid expansion of bank branches outside Accra. The BoG has raised the minimum bank capital requirement, stepped up on-site inspections, and is taking measures to make the regulatory framework more sensitive to risk, including introducing capital requirements for operational risk.

7. **Structural reforms have slowed in some key areas while progressing in others:**

- Public financial management reforms have advanced, but expenditure slippages in 2006–07 have exposed weaknesses in the system. Incomplete payroll automatization has allowed line ministries and decentralized agencies to do significantly more hiring than budgeted.

- Civil service reform has all but stalled. Plans to "right-size" the large civil service have not advanced. Following the passage of the Fair Wages and Salaries Act in 2007, the Fair Wages and Salaries Commission is not expected to make recommendations before 2009.

- In contrast, in other macrocritical areas, financial sector reforms continued, most notably with the introduction of a new National Payments System to expand the delivery of financial services, and debt management is being enhanced.[2] Fiscal decentralization is advancing cautiously, and the authorities are drafting a fiscal decentralization law aimed at improving public sector efficiency.

- The overall business environment has also continued to improve (Figure 1).

8. **Overall, risks to Ghana's external stability have increased significantly over the past year as a result of loosening domestic policies and, to some extent, external price shocks.** Backward looking partial estimates of the equilibrium exchange rate still suggest that the exchange rate is close to equilibrium level, and other indicators, such as market share and cost competitiveness, do not suggest deterioration (Box 1). However, high twin fiscal and external deficits during a global downturn are clearly raising both vulnerabilities and prospects for an overvalued exchange rate.

9. **Ghana's oil reserves, if confirmed, could be significant, placing it somewhere between Chad and Equatorial Guinea**. Major investments could start in 2009, and production in 2011, and government revenues could reach a cumulative US$20 billion over the production period (2012–2030), or about 4–5 percent of GDP per year (Supplement, Appendix I).

II. Discussions with the Authorities

10. **Against this background, the discussions focused on the dual challenge of containing demand pressures and addressing Ghana's development needs:**

- What is the right policy mix for Ghana to address domestic demand pressures? What fiscal measures are feasible on the short run?

- How can Ghana maintain macroeconomic stability while both allowing private sector growth and accommodating its large social and infrastructure needs?

11. How should Ghana enhance its policies and institutional framework to prepare for its transition to an emerging economy and the possibility of an oil era?

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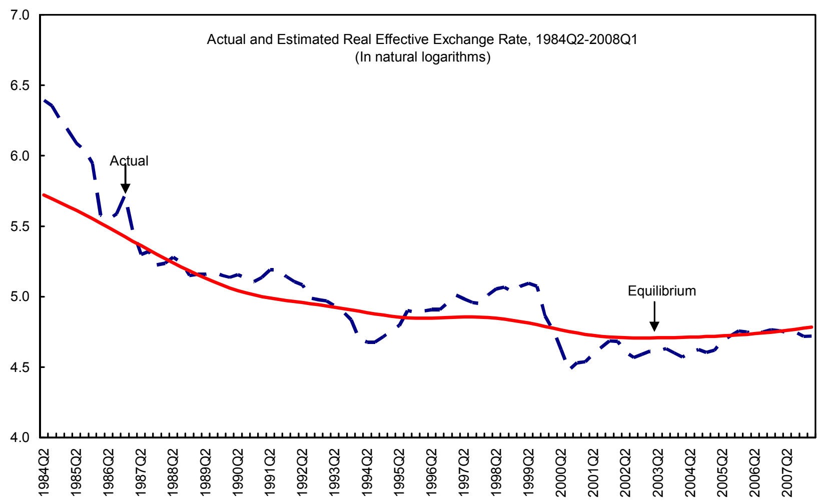
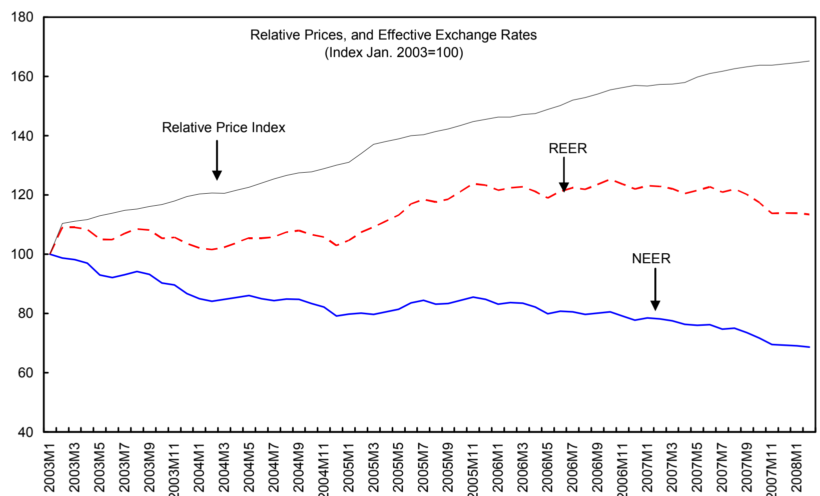
[2] Following the guidance of Executive Directors during last year's Article IV discussions, Ghana is one of the pilots of the Fund's medium-term debt management strategy project.

Box 1. Ghana. Assessment of Ghana's REER

Ghana's real effective exchange rate (REER) seems to have reverted to its long-term equilibrium level consistent with macroeconomic fundamentals.[1] The behavioral equilibrium exchange rate (BEER) approach suggests that the REER is approaching its equilibrium.

- The econometric analysis of behavioral determinants of the equilibrium real effective exchange (BEER) is related to a set of critical factors: relative productivity; the terms of trade, and real interest rates differential vis-à-vis trading partners.
- The backward looking estimates still suggest that the exchange rate is close to its equilibrium level. However, data limitations and structural breaks complicate the analysis.
- Ghana's export performance has been strong not only in traditional commodities (gold, cocoa) but also in non traditional exports (Fig. 1), suggesting that the REER is not overvalued.
- Recently, however, high twin fiscal and external deficits in the context of a global downturn, high oil and food prices, and tightening global credit conditions are raising external vulnerabilities resulting in exchange rate volatility.

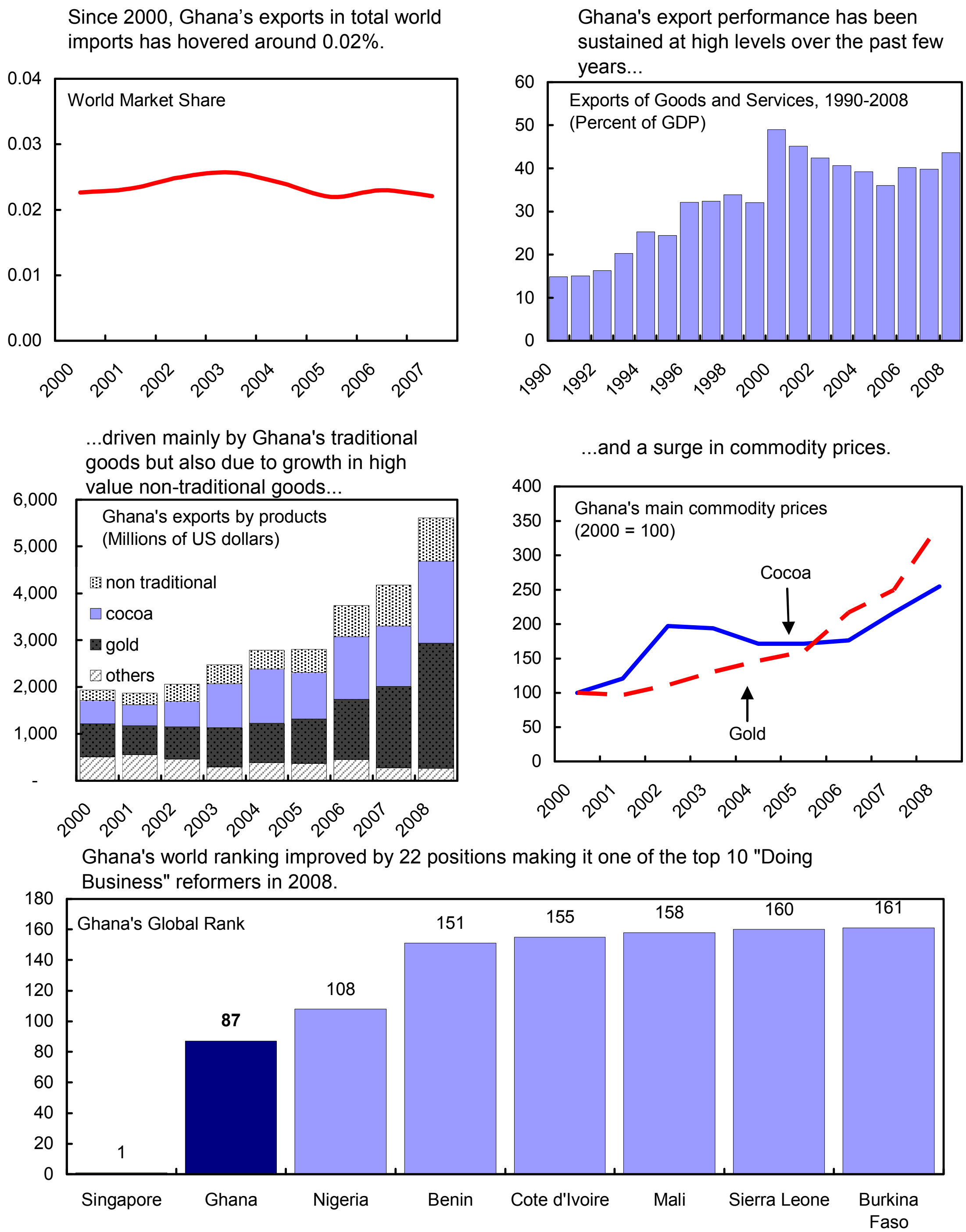




Sources: Bank of Ghana, Fund staff estimates.

[1] The REER assessment update is based on Iossifov, Plamen, Loukoianova, Elena, "Estimation of a Behavioral Equilibrium Exchange Rate Model for Ghana," Working Paper No. 07/155

Figure 1. Ghana: External Competitiveness



Sources: IMF staff estimates, UN Comtrade; "Doing Business 2008, Ghana" World Bank.

A. Medium-term Outlook and Risks

12. **Ghana's medium-term economic prospects depend critically on actions taken this year and next.**

Selected Medium-Term Indicators, 2007–10
(Percent of GDP; unless indicated otherwise)

	2007	2008	2009	2010
Real GDP (percent change)	6.3	6.5	5.8	5.8
Consumer price index (end of period, percent change)	12.7	13.8	10.5	8.0
Overall fiscal balance (including grants)	-9.1	-10.3	-10.7	-9.7
Total government debt	49.8	51.4	56.3	60.3
Domestic debt	26.1	26.6	29.6	31.4
External debt	23.7	24.8	26.7	28.9
Current account balance (including official transfers)	-10.9	-13.2	-12.6	-11.2

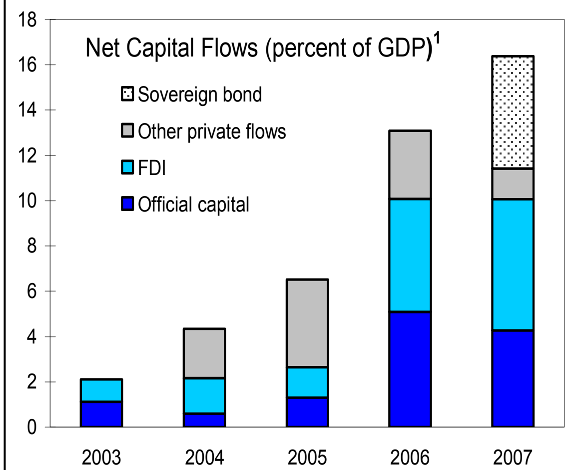
- The staff's baseline scenario assumes an implementation of the government's announced fiscal measures and further monetary tightening in 2008. While crucial, these would still leave the economy in a vulnerable position. If no further fiscal measures are introduced in 2008–09, the fiscal deficit would continue to remain in the neighborhood of 10 percent of GDP over the medium term, growth would slacken, and inflation, while moderating, would still remain well above the authorities' medium-term target of 5 percent. The current account deficit would remain well above 10 percent of GDP, with total public debt rising to 60 percent of GDP in 2010.

- An alternative scenario with additional fiscal adjustment in 2008–09 would lead to higher private sector-led growth and lower inflation over the medium term. This scenario would require that the fiscal deficit fall to around 7 percent of GDP by 2011; subsequently, further declines to about 5 percent would be needed to stabilize public debt at around 45–50 percent of GDP. Budget reforms, particularly eliminating generalized utility price subsidies and reducing the size of civil service, would make it possible to concentrate spending on priority development and infrastructure needs. The external position and debt sustainability would firm up, and risks of debt distress would decrease.

13. **The downside risks to the staff's baseline scenario are significant, heightening the need for tighter policies in 2008–09.** Risks include a pronounced worsening of the global environment, with a deterioration in Ghana's terms of trade (mainly due to oil prices), as well as a sudden stop or reversal in external financing flows, particularly portfolio investment. Although nonresidents' holding of domestic government debt amounts to only about 3 percent of GDP and there is a minimum holding period of one year, a sudden withdrawal of capital, or even just a stop in inflows, would pose some risks to budget financing and ultimately to international reserves (Box 2). Weather-related shocks (drought, flood) also can pose risks, which could be magnified by rising world food prices.

Box 2. How is Ghana's Widening Current Account Deficit Financed?

Ghana has largely financed a rapidly widening current account with official financing and foreign direct investment. These capital flows are less susceptible to market sentiment, creating less vulnerability than sovereign external bonds and other private capital like portfolio flows or bank borrowing. However, these forms of financing are also growing. In particular, portfolio inflows have been rising since the partial liberalization of capital inflows in late 2006. Non-residents are allowed to purchase domestic government securities but with restrictions–minimum maturities of three years and a minimum holding period of one year–designed to reduce vulnerability to a sudden reversals. Limitations on foreign equity purchases have also been lifted, but portfolio inflows are concentrated in government securities; foreigners currently hold 11 percent of government securities (equal to less than 3 percent of GDP).[1]



Sources: National authorities and staff projections.
[1] Excluding errors and omissions.

[1] The data on private capital inflows probably understate gross inflows, and the authorities are working to address weaknesses, in cooperation with Fund staff.

B. Near-term Policies to Reduce Risks to Stability

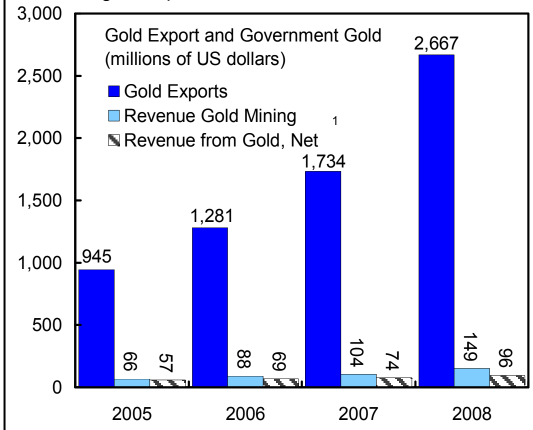
Fiscal policy

14. **The authorities and staff agreed that demand pressures had to be reduced primarily through fiscal adjustment.** To this end, the government announced in April three measures to limit the rise in the deficit:

- **Adjusting utility prices.** A price increase for commercial users to current cost-recovery levels starting in July is projected to reduce associated subsidies by about 1 percent of GDP in 2008 and 2 percent of GDP in 2009. The authorities also stated that cost recovery pricing might be extended to residential users next year, but this needs to be firmed up after the elections; this measure would reduce subsidies by another 2½ percent of GDP in 2009 and 2010 (not included in staff's current projections). Staff urged a return to an automatic price adjustment mechanism to maintain cost recovery pricing and depoliticize the price-setting process. To cushion the impact on poorer households, staff supported strengthening existing targeted utility subsidies. The authorities attributed high production costs and associated subsidies to exogenous shocks (low rainfall, high oil prices, and tight regional gas supply) and considered that electricity production costs could fall in the coming years, making the achievement of full cost recovery easier over the medium term.

- **Increasing the government's disappointingly low revenues from the gold sector.** The result of limited capacity for revenue monitoring and a tax regime that has historically favored gold companies to attract investment. The government has announced its intention to double the rate for the royalties tax in the gold sector; revenues could be also increased by enforcing current tax laws and eliminating administrative loopholes. Possible changes in the tax system would be discussed with investor partners.

The government receives only a small proportion of gold export revenues.



Sources: Ghanaian authorities, and IMF staff estimates.
[1] Net of implicit energy subsidies.

- **Temporarily freezing hiring in the public sector (beyond the automatic absorption of trainees in health and education) to keep the wage bill within the 2008 budget.** The freeze should last until civil service reforms regain momentum (possibly after the elections). The authorities and staff agreed that it will be also be crucial to keep public sector wage increases in 2008 in line with the budget.

15. **Staff agreed that these measures targeted the right areas, but noted that they would not be sufficient to limit the rise in the fiscal deficit from last year's already high level**. Staff projects that even with the planned measures, the fiscal deficit will rise to 10.3 percent of GDP in 2008; without additional measures in 2009, the deficit would further increase to 10.6 percent of GDP. The government therefore needs to prepare additional measures, such as postponing nonessential capital spending.

Monetary and exchange rate policy

16. **The Bank of Ghana noted that the policy interest rate increases since October 2007 were appropriately large; nevertheless, they were ready to raise rates further if needed**. In particular, they pointed out that core inflation had been within the BoG's target range until late 2007 and that they had raised rates when it picked up. Notwithstanding the recent significant policy rate increases, staff believes that monetary policy needs to be tightened further to contain demand pressures. The policy rate in real terms has been barely positive as inflation has accelerated. Staff's model simulations, which are broadly indicative, suggest the need to increase the policy rate further to steer inflation back toward the medium-

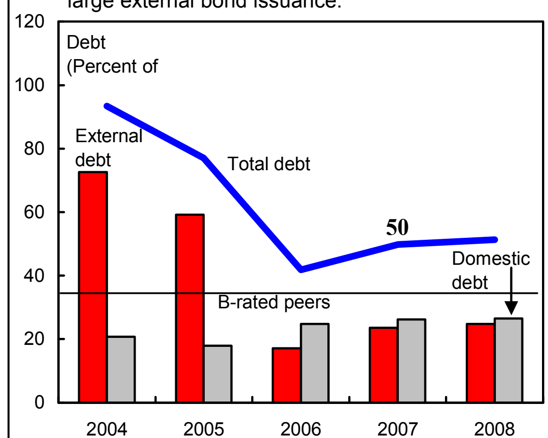
term target of 5 percent, particularly if fiscal policies are not tightened.[3] That said, it is increasingly clear that monetary policy alone cannot fight inflation and its effectiveness is being undermined by expansionary fiscal policies.

17. **Ghana's exchange rate regime is a managed float, with a secondary objective on the exchange rate to support the inflation target.** The exchange rate has become more flexible in response to market pressures and as the foreign exchange market has gradually deepened. Indeed, the BoG's share in total foreign exchange transactions has fallen recently. Staff recommended accelerating this trend and decreasing the high foreign exchange surrender requirements for cocoa and gold and phasing out the BoG practice of supplying foreign exchange to oil importers. The authorities reiterated their long-held view that the exchange rate is flexible and fully market-determined, and that surrender requirements need to be maintained to manage lumpiness in foreign exchange receipts. Given rising current account risks and low reserve levels, there is also a need to increase international reserves gradually; the BoG may need to sterilize part of the resulting increase in liquidity that fuels reserve money growth.

Debt sustainability

18. **The joint Fund-Bank external debt sustainability analysis (DSA) found that risks to Ghana's external debt distress have increased, although they remain moderate (Box 3 and Supplement)**. An analysis of public debt suggests that total debt would rise from 50 percent of GDP in 2007 to above 80 percent over the long term, even with the authorities' fiscal adjustment in 2008. This would be well above the authorities' debt ceiling of 60 percent of GDP announced in the 2008 budget—which staff considers too high for a low income country–or any "debt intolerance" level estimated by a number of emerging market studies (between 25–40 percent of GDP). Also, the median debt level in Ghana's rating category B is about 35 percent of GDP, which is equivalent to about 45 percent or so if account is taken of Ghana's still significant debt concessionality. Staff considers that limiting total debt to about that level would be appropriate and consistent with a low income country DSA assessment of risks to external debt distress of moderate to low. Staff's analysis indicates that limiting Ghana's debt to GDP ratio to about that level

Total public debt increased to close to 50 percent of GDP at the end of 2007 given high fiscal deficits and large external bond issuance.



Sources: Ghanaian authorities and staff estimates and projections.

[3] See a Selected Issues Paper on Inflation Forecast Targeting.

would require reducing the fiscal deficit to an annual average of about 5 percent of GDP in the long term.

Box 3. Joint Debt Sustainability Analysis (DSA) 2008

- **Ghana's risks of external debt distress remain moderate but have increased since the May 2007 DSA**. The baseline scenario incorporates the current macroeconomic framework with higher twin fiscal and current account deficits and information on new borrowing, including the government's US$750 million Eurobond issue in September 2007.

Ghana: Joint DSA 2008 and 2007

Thresholds		Joint DSA 2007			Joint DSA 2008		
		2007	2015	2026	2007	2015	2026
NPV of debt in percent of							
GDP	50	19	24	28	20	31	39
Exports	200	54	79	121	49	89	143
Revenue	300	...	...	...	87	122	152
Debt service in percent of							
Exports	25	4	8	13	5	7	21
Revenue	35	...	...	...	9	9	23

Source: Joint DSA - Supplement to the Staff Report.

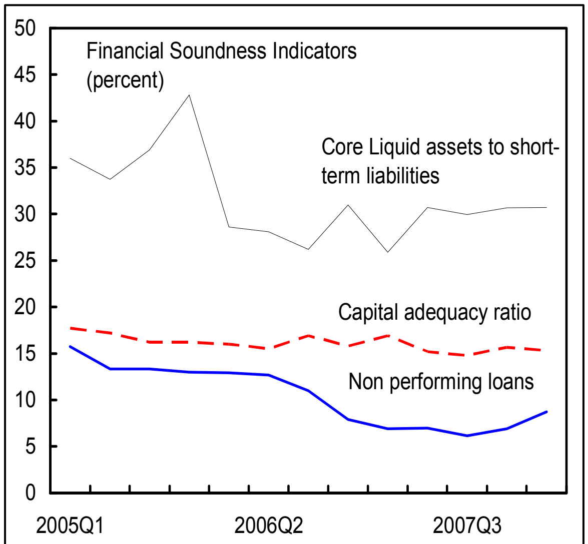
- **Stress tests show that debt burden indicators breach the thresholds in four out of five bound standard stress tests**. Some relevant shocks that breach the thresholds include the impact of a one-time 30 percent depreciation, and contracting government debt on less favorable terms. In addition, a stress test that reduces drastically non-debt creating flows, including current transfers and FDI, increases the NPV of debt-to-GDP ratio close to or above the thresholds for the period 2012-2020.

- **Ghana's total public debt increases in the baseline scenario from about 50 percent of GDP in 2007 to 81 percent of GDP in 2028**, indicating clearly the risks to overall debt sustainability in the absence of additional fiscal adjustment in the short and medium term.

- **As part of an enhanced focus on overall debt sustainability, a comprehensive debt management strategy should be adopted that is consistent with macroeconomic and other policy objectives, and explicitly recognizes relative costs and risks.** The recommendations of a recent Fund-Bank Medium–Term Debt Strategy (MTDS) mission can be useful in this regard.

Financial sector stability

19. **The authorities and staff agreed that financial deepening was desirable given Ghana's low financial intermediation.** However, very rapid credit growth in the past years raises both demand management and regulatory concerns, as a recent worsening in some asset quality indicators imply. The authorities took comfort in the fact that most of the credit expansion was funded by increases in deposits. Joint stress tests by BoG and staff point to some asset concentration risks, but they do not indicate that interest rate increases would pose significant balance sheet risks for systemically important banks. The BoG noted steps taken to further strengthen supervisory capacity, such as increasing off-site supervision and moving towards the more risk-sensitive regulatory framework of Basel II, several elements of which–regulatory capital for operational risk and more extensive disclosure requirements–have alreay been adopted. Staff advised that continued rapid expansion necessitates prudential measures, such as stricter loan-to-value ratios and debt service limits. Also, it will be important to ensure that banks' collateral requirements and underwriting standards are not weakened in the context of the credit boom.



Source: Ghanaian authorities.

C. Anchoring Macroeconomic Policy to Sustain Growth

20. **Discussions also focused on designing a policy framework that can better anchor economic policy and manage both exogenous and policy-induced shocks.**

- **The first element of intended policy anchoring, IT, could benefit from further enhancements in communication and forecasting tools**. The adoption of a formal IT regime in May 2007 has enhanced the transparency of monetary policy; the next priority should be to improve operational transparency. To make market interest rates more responsive to inflationary pressures, the BoG could consider communicating ex ante how it is likely to respond to various supply and demand shocks. As some leading IT regimes have done, the BoG could consider publishing its inflation and interest rate forecasts. Further enhancements to the BoG's modeling and forecasting will also help policy-makers better anticipate trends and policy impacts; Fund staff is providing capacity building support in this area.

- **IT is now being complemented with a fiscal policy anchor.** The authorities are working, with support from the Fund, on a draft Fiscal Responsibility Law (FRL) to improve fiscal discipline and anchor fiscal expectations.

- **Other important structural reforms need to advance:** (i) public financial management improvements are crucial, as expenditure slippages in 2006–07 amply demonstrated. Particular attention is needed to control expenditure commitments; (ii) civil service reform needs to resume in earnest, with the medium-term goals of attracting high- quality labor and reducing total public sector employment, starting with subvented agencies; and (iii) fiscal decentralization can provide efficiency gains, but staff cautioned against allowing significant borrowing by local governments, based on experiences elsewhere of high associated fiscal risks.

21. **The recent major oil discovery, if confirmed, could materially improve Ghana's medium-term prospects and its timetable for reaching the MDGs, while posing new policy challenges.** The authorities and staff agreed that any temptation to start spending future oil revenue could exacerbate current demand pressures. Regarding preparations for the oil era, the authorities have commendably started a national dialogue on the use of future oil revenue, and they have been working on the technical details of an oil revenue and demand management plan, with support from Norway, other development partners, and the Fund. Staff noted that best practice measures for oil management include a well-functioning public financial management (PFM) system and demand management with a medium-term expenditure framework that recognizes absorptive capacity constraints. If oil is declared commercially viable, large capital inflows would take place to finance oil investment, but as much of it would fund imports, its impact on monetary and exchange rate policies would be limited. In contrast, large foreign exchange inflows following the start of oil production at a later stage around 2011 would pose challenges for demand management that will need to be addressed in an appropriate mix of fiscal and monetary-exchange rate policies.

D. Other issues

22. **Policy dialogue between the authorities and staff has remained active since Ghana's completion of its Poverty Reducing Growth Facility (PRGF) arrangement in October 2006.** Discussions on a Policy Support Instrument (PSI) started in the fall of 2007, but they have not advanced.

23. **An interim Economic Partnership Agreement (EPA) with the European Union (EU) signed in December 2007 is likely to have a smaller negative fiscal impact in the near term** (estimated at about 0.5 percent of GDP). The interim EPA allows for 100 percent trade liberalization of Ghanaian exports to the EU, with a transition period for rice and sugar, and the gradual liberalization of 80.5 percent of imports from the EU over 15 years. Some agricultural and processed goods are excluded from the interim EPA to protect Ghana's infant industries and preserve tax revenues.

24. **Macroeconomic data are broadly adequate for surveillance, but the quality and timeliness of the data need to be improved**. Specifically, for a country aspiring to emerging market status and accessing international capital markets, meeting SDDS standards for data production and dissemination should be a priority.

III. Staff Appraisal

25. **Ghana's growth has remained strong, partly fueled by a dynamic private sector response to macroeconomic stability, structural reforms, and an increasingly business-friendly environment**. At the same time, there are still daunting development needs. The combination of strong private sector demand and the fiscal expansion of recent years has led to increasing macroeconomic imbalances, a weakening external position, low levels of international reserves, and a rebound in inflation. Rising risks could undermine Ghana's hard-earned achievements in macroeconomic stability and structural reforms since the early 2000s.

26. **In view of the near term risks, there is an urgent need to pull back from the expansionary fiscal policies of the past two years.** The authorities' announcement of a package of fiscal adjustment measures is a welcome start, but its implementation has been slow and more action is needed. The package appropriately focuses on cost recovery in utility pricing, freezing public sector employment, and taxation of the gold sector. Full and timely implementation is of the essence. To lower the deficit, cost recovery utility pricing should be extended to all users and an automatic utility price adjustment mechanism should be reinstated. At the same time, social safety nets should be provided with better targeted subsidies for poor households. Cuts in nonessential expenditures are also necessary in 2008-09. Without additional adjustment, staff forecasts continuing large fiscal deficits and an associated significant increase in total public debt over the medium term, with increasing risks to external stability and of an overvalued exchange rate.

27. **Fiscal policy should also make room for private sector growth.** Reducing the fiscal deficit gradually and limiting it to 5–6 percent of GDP over the long term would be consistent with the government's objective of private sector-led growth while still allowing it to undertake well-prioritized, growth-enhancing infrastructure projects. It would also help limit total public debt to below 50 percent of GDP, broadly commensurate with Ghana's rating peers (after adjustment for concessionality of debt) and in line with moderate-to-low external debt distress in the context of the low income country DSA framework.

28. **The ongoing monetary tightening is welcome and needs to continue.** The tightening could have started earlier, and further policy rate increases are needed to bring inflation toward its medium term target. It would be also advisable to contain money growth by sterilizing part of the much-needed foreign exchange reserve buildup. Nevertheless, monetary policy alone cannot fight inflation, and its effectiveness is increasingly being undermined by lax fiscal policies.

29. **The monetary policy framework has been enhanced by last year's introduction of an "inflation targeting lite" regime.** With progress in goal transparency, the priority now is to strengthen operational transparency. Enhancements to the BoG's communication strategy would help make the market more responsive to new information about inflationary pressures and enhance the credibility of the IT framework.

30. **Increased exchange rate flexibility will help Ghana to move toward a full-fledged IT regime and better respond to shocks.** The exchange rate regime is managed float. The BoG's role in the foreign exchange market that has influenced market conditions is shrinking as markets gradually develop; steps to phase out foreign exchange surrender requirements and BoG sales of foreign exchange to oil importers would usefully accelerate this process.

31. **Rapid credit growth to the private sector raises regulatory concerns even if part of the expansion reflects welcome financial deepening.** The recent worsening in bank asset quality is a warning sign. The increase in banks' minimum capital requirements and the introduction of a more risk sensitive regulatory framework, in the form of a simplified version of Basel II, are appropriate. Additional regulations to limit potential prudential risks, such as debt service limits, may also need to be introduced and scrutiny over banks' collateral requirements and underwriting standards should be stepped up. Credit growth will also be usefully moderated by the ongoing monetary tightening.

32. **A faster pace of macrocritical structural reforms would make it easier to address Ghana's challenges in its transition to an emerging market economy**. PFM and civil service reforms are particularly critical to make public spending more efficient and flexible.

33. **Oil prospects can materially improve Ghana's medium-term outlook for growth and poverty reduction if it avoids the "oil curse" of rent-seeking and boom-bust cycles.** Ghana's good track record on transparency bodes well for minimizing rent-seeking, and the Ghanaian authorities are to be commended for already having begun a nationwide consultation on the use of oil resources. Building up an effective oil management regime to avoid costly boom-bust cycles will also require good demand management—an area where Ghana's track record since 2006 has weakened.

34. It is proposed that the next Article IV consultation will be held on the standard 12-month cycle.

Table 1. Ghana: Selected Economic and Financial Indicators, 2005–09

	2005	2006	2007 Est.	2008 Proj.	2009 Proj.
	(Annual percentage change; unless otherwise specified)				
National accounts and prices					
Real GDP	5.9	6.4	6.3	6.5	5.8
Real GDP per capita	3.2	3.7	3.6	3.8	3.2
GDP deflator	15.0	12.8	14.4	16.2	10.4
Consumer price index (annual average)	15.1	10.2	10.7	14.3	10.5
Consumer price index (end of period)	14.8	10.9	12.7	13.8	10.5
External sector					
Exports, f.o.b. (percentage change, in US$)	0.7	33.3	11.7	34.4	5.6
Imports, f.o.b. (percentage change, in US$)	24.4	26.3	19.4	28.2	7.9
Export volume	-0.9	15.4	-3.6	10.0	6.3
Import volume	14.2	14.4	14.6	10.8	5.6
Terms of trade	-6.8	4.7	11.1	5.6	-2.8
Nominal effective exchange rate (end of period)	7.1	-8.2	-10.8	…	…
Real effective exchange rate (end of period), (depreciation -)	19.8	-1.0	-2.9	…	…
Cedis (new) per U.S. dollar (end of period)	0.91	0.92	0.97	...	…
Money and credit					
Net domestic assets[1]	5.8	13.4	33.3	28.0	18.9
Credit to the private sector (year on year)	50.6	42.7	60.0	38.7	39.1
Broad money (excluding foreign currency deposits)	13.7	39.4	43.5	30.9	22.2
Velocity (GDP/average broad money)	4.3	3.5	3.0	2.8	2.7
Prime rate (Bank of Ghana; percent; end of period) [2]	15.5	12.5	13.5	16.0	…
	(Percent of GDP; unless otherwise specified)				
Investment and saving					
Gross investment	29.9	30.4	33.7	32.7	32.3
Private [3]	17.9	18.0	19.5	18.7	18.5
Central government	12.0	12.4	14.2	14.0	13.8
Gross national saving	22.8	21.4	22.8	19.5	19.7
Private [3]	12.0	13.5	15.1	14.8	15.1
Central government	10.8	7.8	7.7	4.7	4.6
Government operations					
Total revenue	23.8	21.9	22.5	23.0	23.6
Grants	5.2	5.4	6.0	4.9	3.9
Total expenditure	30.7	34.4	37.0	37.7	38.1
Overall balance (including grants)	-3.0	-7.5	-9.1	-10.3	-10.7
Net domestic financing	-1.7	5.0	1.3	5.5	6.9
Total government debt	77.1	41.9	49.8	51.4	56.3
Domestic debt	17.9	24.8	26.1	26.6	29.6
External debt	59.2	17.1	23.7	24.8	26.7
External sector					
Current account balance (including official transfers)	-7.0	-9.0	-10.9	-13.2	-12.6
Current account balance (excluding official transfers)	-12.4	-12.8	-15.1	-16.6	-16.3
NPV of external debt outstanding	19.9	17.8	19.6	19.6	21.0
percent of exports of goods and services	55.1	45.4	49.2	44.9	48.2
Gross international reserves (millions of US$)	1,951	2,325	2,738	2,474	2,399
months of imports of goods and services	2.8	2.8	2.6	2.2	2.1
Total donor support (millions of US$)	1,087	979	1,171	1,292	1,283
percent of GDP	10.1	7.7	7.7	7.4	6.8
Memorandum items:					
Nominal GDP (billions of GHc)	9.7	11.7	14.2	17.6	20.5

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

[1] Percent of broad money at the beginning of the period.
[2] As of May 19, 2008
[3] Including public enterprises and errors and omissions.

Table 2. Ghana: Balance of Payments, 2005–13

	2005	2006	2007	2008	2009	2010	2011	2012	2013
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
	(Millions of US dollars; unless otherwise specified)								
Balance on Current Account (including grants)	-755	-1,150	-1,652	-2,308	-2,375	-2,271	-2,181	-2,260	-2,407
Trade balance	-2,545	-3,017	-3,894	-4,730	-5,229	-5,341	-5,528	-5,923	-6,436
Exports f.o.b.	2,802	3,737	4,172	5,609	5,924	6,256	6,643	7,040	7,416
Cocoa	908	1,192	1,133	1,566	1,629	1,696	1,765	1,837	1,912
Gold	945	1,281	1,734	2,667	2,846	3,050	3,281	3,510	3,701
Other	949	1,264	1,306	1,376	1,448	1,511	1,596	1,693	1,803
Imports, f.o.b.	-5,347	-6,754	-8,066	-10,339	-11,153	-11,597	-12,171	-12,963	-13,852
Non-oil	-4,218	-5,108	-5,971	-7,106	-7,532	-7,841	-8,225	-8,760	-9,373
Oil	-1,129	-1,646	-2,095	-3,233	-3,621	-3,757	-3,946	-4,203	-4,479
Balance on services and income	-338	-256	-234	-320	-340	-360	-398	-438	-483
Of which: interest payments	-160	-110	-58	-163	-140	-166	-196	-229	-282
Balance on transfers	2,129	2,123	2,476	2,742	3,194	3,430	3,746	4,100	4,511
Private transfers (net)	1,550	1,645	1,834	2,145	2,490	2,643	2,874	3,160	3,488
Official transfers (net)	578	478	642	596	704	787	872	939	1,024
Capital and Financial Account	1,002	1,933	2,365	2,043	2,300	2,562	2,638	2,947	3,344
Capital account (net)	0	3,363	485	0	0	0	0	0	0
Of which: MDRI debt relief 1/	0	3,363	485	0	0	0	0	0	0
Financial Account (net)	309	-2,472	660	736	713	843	851	985	1,202
Medium and Long-term loans									
Inflows	500	501	1,279	821	784	909	934	1,130	1,380
Amortization	-191	-2,973	-619	-84	-71	-66	-83	-145	-178
Private capital	559	1,019	1,061	1,147	1,427	1,559	1,628	1,802	1,982
Short term capital	134	23	159	160	160	160	160	160	160
Errors and omissions	62	-246	-300	0	0	0	0	0	0
Overall balance	309	537	413	-265	-75	291	458	686	937
Financing	-309	-537	-413	265	75	-291	-458	-686	-937
Net international reserves (- increase)	-309	-537	-413	265	75	-291	-458	-686	-937
Memorandum items:									
Current account balance, excl. official transfers (millions of US$)	-1,333	-1,628	-2,294	-2,904	-3,079	-3,058	-3,052	-3,200	-3,431
Current account balance, excl. official transfers (percent of GDP)	-12.4	-12.8	-15.1	-16.6	-16.3	-15.0	-13.8	-13.2	-12.8
Current account balance, incl. official transfers (percent of GDP)	-7.0	-9.0	-10.9	-13.2	-12.6	-11.2	-9.9	-9.3	-9.0
Trade balance (percent of GDP)	-23.7	-23.7	-25.7	-27.1	-27.7	-26.3	-25.0	-24.4	-24.0
Gross international reserves									
In millions of US dollars	1,951	2,325	2,738	2,474	2,399	2,690	3,148	3,834	4,771
In months of imports of goods and services	2.8	2.8	2.6	2.2	2.1	2.2	2.5	2.8	3.3
External debt (percent of GDP)	59.2	17.1	23.7	24.8	26.7	28.9	30.4	31.7	33.2
External debt service paid (in percent of exports of GNFS)	15.3	11.8	5.2	3.2	2.5	2.6	2.9	3.8	4.4
Total donor support (percent of GDP)	10.1	7.7	7.7	7.4	6.8	7.0	6.7	6.2	5.9
of which, official transfers (percent of GDP)	5.4	3.8	4.2	3.4	3.7	3.9	3.9	3.9	3.8

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.

Table 3. Ghana: Summary of Central Government Budgetary Operations, 2005-09 [1]
(In percent of GDP, unless indicated otherwise)

	2005	2006	2007 Est.	2008 Proj.	2008 Budget	2009 Proj.
Total revenue and grants	29.1	27.4	28.6	27.9	28.3	27.6
Revenue	23.8	21.9	22.5	23.0	23.4	23.6
Tax revenue	20.6	19.9	19.9	19.3	19.5	19.8
Direct taxes	6.7	6.2	6.6	6.4	6.4	6.6
Indirect taxes	9.7	9.1	9.2	8.7	8.8	8.8
Trade taxes	4.2	4.6	4.1	4.3	4.3	4.3
Nontax revenue (and rev. measures)	3.2	2.0	2.6	3.7	3.9	3.8
of which 2008 rev. measures				1.7	1.9	1.7
Grants	5.2	5.4	6.0	4.9	4.9	3.9
Total expenditure	30.7	34.4	37.0	37.7	33.1	38.1
Recurrent expenditure	18.7	21.9	22.8	23.7	19.1	24.3
Recurrent Non-interest expenditure	15.1	18.6	19.7	20.8	16.4	21.8
Of which : wages and salaries	8.5	9.7	10.0	9.7	8.9	9.7
goods and services	3.2	3.7	4.0	4.0	3.0	3.7
energy, utility and related subsidies	0.8	2.6	1.6	3.9	1.5	5.2
Of which : Reserve Funds for oil purchases	...	0.8	1.4	3.6	1.4	4.8
Capital expenditure (total)	12.0	12.4	14.2	14.0	14.0	13.8
Of which : domestic	5.9	7.9	9.1	8.3	8.3	8.1
foreign	6.1	4.5	5.1	5.7	5.7	5.7
energy	...	0.3	2.4	2.1	2.1	...
Arrears clearance and VAT refunds	-1.3	-0.5	-0.7	-0.5	-0.5	-0.2
Overall balance	-3.0	-7.5	-9.1	-10.3	-5.3	-10.7
Discrepancy	-0.7	0.1	-0.3	0.0	0.0	0.0
Total financing	2.3	7.7	8.8	10.3	5.3	10.7
Divestiture receipts	0.2	0.0	0.8	0.9	1.6	0.3
Foreign (net)	2.5	1.9	6.1	3.5	2.7	3.1
Exceptional financing (debt relief, bilateral)	1.2	0.8	0.6	0.4	0.4	0.4
Domestic (net)	-1.7	5.0	1.3	5.5	0.5	6.9
Banking system	0.3	0.4	-2.3	2.7	...	3.4
of which Eurobond deposit	0.0	0.0	-3.8	0.0	...	0.0
Non-bank	-2.0	4.5	3.6	2.7	...	3.4
Memorandum items:						
Overall balance (with measures)	...	...	...	-9.0	...	-8.3
Total poverty spending	8.5	10.6	9.3	9.6	9.6	9.7
HIPC and MDRI spending	0.0	2.6	2.7	1.0	1.0	1.0
Tax exemptions		...	1.6	2.0	2.0	1.7
Primary balance	0.7	-4.2	-6.0	-7.4	-2.6	-8.2
Domestic primary balance [2]	1.6	-5.1	-6.9	-6.5	-1.8	-6.5
Total government debt	77.1	41.9	49.8	51.4	46.4	56.3
Domestic debt	17.9	24.8	26.1	26.6	21.7	29.6
external debt	59.2	17.1	23.7	24.8	24.8	26.7
Nominal GDP (millions of GHc)	9,726	11,665	14,182	17,556	17,556	20,498

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

[1] Above-the-line data for domestic recurrent and capital expenditure are presented on a cash basis.

[2] Defined as total revenue plus VAT refunds (negative), less noninterest recurrrent spending and domestic capital expenditure.

Table 4. Ghana: Monetary Survey, 2005–09
(Millions of Ghana cedis, end of period; unless otherwise specified)

	2005	2006	2007			2008	2009
		Prel.	Mar. Act.	June Act.	Dec. Est.	Dec. Proj.	Dec. Proj.
Net foreign assets	1,563	2,185	1,729	1,949	2,522	2,657	2,868
millions of US$	1,716	2,364	1,866	2,099	2,600	2,550	2,535
Net domestic assets	1,484	2,045	2,553	2,576	3,246	4,870	6,307
Domestic credit	3,116	4,010	4,476	4,496	5,313	7,176	9,714
Claims on government (net)	1,326	1,488	1,661	1,418	1,163	1,642	2,336
Claims on non government	1,791	2,522	2,815	3,079	4,150	5,534	7,378
Other items, net (assets+)	-1,633	-1,965	-1,923	-1,921	-2,068	-2,514	-3,700
Broad money (M2+) [1]	3,047	4,230	4,282	4,525	5,767	7,526	9,175
Currency	803	1,020	877	862	1,318	1,669	2,034
Deposits [1]	2,244	3,211	3,406	3,662	4,449	5,858	7,140
Broad money (M2) [2]	2,387	3,328	3,420	3,601	4,774	6,248	7,638
Memorandum items:							
Broad money (M2) (12-month change in percent)	13.7	39.4	39.0	33.7	43.5	30.9	22.2
Reserve money (RM) (12-month change in percent)	11.2	32.3	27.2	29.3	30.6	24.2	20.1
Broad money (M2+) (12-month change in percent)	14.3	38.8	35.9	32.8	36.3	30.5	21.9
Reserve money (RM+) [3] (12-month change in percent)	6.9	36.8	30.0	31.6	32.6	28.5	20.1
Velocity (GDP/average M2+)	3.4	2.8	3.3	3.1	2.5	2.3	2.2
Velocity (GDP/average M2)	4.3	3.5	4.1	3.9	3.0	2.8	2.7
Reserve money multiplier (M2/RM) (12-month change in percent)	2.4	2.5	2.9	2.9	2.7	2.8	2.8
Reserve money multiplier (M2+/RM) (12-month change in percent)	3.0	3.2	3.6	3.7	3.3	3.3	3.4
Reserve money multiplier (M2+/RM+) (12-month change in percent)	2.8	2.8	3.3	3.3	2.9	3.0	3.0
Bank reserves-to-deposits ratio [2]	12.6	13.0	11.8	12.6	12.3	17.1	17.0
Foreign currency deposits to total deposits	29.4	28.1	25.3	25.2	22.3	21.8	21.5
Currency-to-deposits ratio [1]	35.8	31.8	25.7	23.6	29.6	28.5	28.5
Currency/M2+ ratio	26.3	24.1	20.5	19.1	22.9	22.2	22.2
Credit to the private sector [4] (12-month change in percent)	47.8	42.8	54.2	52.5	59.7	38.5	39.1
				(Millions of US$)			
Net international reserves [5]	1,291	1,828	1,493	1,704	2,241	1,977	1,902

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

[1] Including foreign currency deposits.
[2] Excluding foreign currency deposits.
[3] Including foreign currency reserves of deposit money banks with Bank of Ghana.
[4] Credit from deposit money banks to the private sector.
[5] Net international reserves are defined as short-term foreign assets of the BoG, minus short-term external liabilities.

Table 5. Ghana: Bank of Ghana and Deposit Money Banks, 2005–09
(Millions of Ghana cedis, end of period; unless otherwise specified)

	2005	2006 Prel.	2007 Mar. Act.	2007 June Act.	2007 Dec. Est.	2008 Proj.	2009 Proj.
Bank of Ghana							
Net foreign assets	1,300	1,892	1,568	1,775	2,459	2,201	2,305
millions of US$	1,428	2,047	1,691	1,911	2,378	2,113	2,038
Net domestic assets	-286	-550	-384	-542	-708	49	397
Claims on government (net)	504	485	529	373	314	314	314
Claims on deposit money banks [1]	-755	-688	-719	-788	-715	-824	-881
Claims on rest of the economy	-3	-6	-7	-2	-3	-3	-3
Other items, net (assets +)	-32	-341	-187	-125	-304	563	967
Reserve money	1,014	1,341	1,184	1,233	1,751	2,251	2,703
Currency outside banks	803	1,020	877	862	1,318	1,669	2,034
Bank reserves	200	301	300	345	425	782	953
Cash	49	71	55	52	168	222	270
Deposits	151	229	244	293	256	560	682
Nonbank deposits	11	21	7	25	8	8	8
Deposit money banks							
Net foreign assets	264	293	161	174	62	456	563
millions of US$	288	317	175	188	66	437	497
Reserves	200	301	300	345	425	782	953
Net claims on Bank of Ghana [1]	755	688	719	788	715	824	881
Domestic credit	2,615	3,532	3,954	4,126	5,002	6,865	9,403
Claims on government (net)	821	1,003	1,132	1,045	849	1,328	2,022
Claims on non government	1,794	2,529	2,822	3,081	4,154	5,537	7,381
Public enterprises	331	443	550	521	814	926	1,024
Private sector	1,445	2,064	2,252	2,540	3,296	4,566	6,352
Other items, net (assets +)	-1,601	-1,624	-1,735	-1,796	-1,764	-3,077	-4,667
Total deposits	2,233	3,190	3,398	3,638	4,441	5,850	7,132

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

[1] Includes holding of T-bills issued for monetary liquidity purposes, starting January 2003, and Bank of Ghana bills starting September 2004.

Table 6. Ghana: Selected Medium-Term Indicators, 2007–13

	2007 Est.	2008 Proj.	2009 Proj.	2010 Proj.	2011 Proj.	2012 Proj.	2013 Proj.
	(Annual percentage change; unless otherwise specified)						
National accounts and prices							
Real GDP	6.3	6.5	5.8	5.8	6.0	6.8	6.8
Real GDP per capita	3.6	3.8	3.2	3.1	3.3	4.1	4.1
GDP deflator	14.4	16.2	10.4	9.4	8.0	6.5	5.9
Consumer price index (annual average)	10.7	14.3	10.5	9.1	6.9	5.5	5.0
Consumer price index (end of period)	12.7	13.8	10.5	8.0	6.0	5.0	5.0
External sector							
Exports, f.o.b. (percentage change, in US$)	11.7	34.4	5.6	5.6	6.2	6.0	5.3
Imports, f.o.b. (percentage change, in US$)	19.4	28.2	7.9	4.0	4.9	6.5	6.9
Export volume	-3.6	10.0	6.3	6.5	6.2	6.6	6.7
Import volume	14.6	10.8	5.6	4.6	5.1	6.3	6.7
Terms of trade	11.1	5.6	-2.8	-0.3	0.1	-0.7	-1.4
	(Percent of GDP; unless otherwise specified)						
Investment and saving							
Gross investment	33.7	32.7	32.3	31.3	31.2	31.2	30.8
Private [1]	19.5	18.7	18.5	18.5	18.5	18.5	18.5
Central government	14.2	14.0	13.8	12.8	12.7	12.7	12.3
Gross national saving	22.8	19.5	19.7	20.1	21.3	21.9	21.8
Private [1]	15.1	14.8	15.1	15.7	16.5	16.9	16.8
Central government	7.7	4.7	4.6	4.4	4.9	5.0	5.0
Government operations							
Total revenue	22.5	23.0	23.6	24.0	24.7	25.2	25.5
Grants	6.0	4.9	3.9	4.1	4.1	4.0	3.9
Total expenditure	37.0	37.7	38.1	37.6	37.8	37.9	37.8
Overall balance (including grants)	-9.1	-10.3	-10.7	-9.7	-9.1	-9.0	-8.6
Net domestic financing	1.3	5.5	6.9	5.8	5.4	5.0	4.2
Total government debt	49.8	51.4	56.3	60.3	63.3	65.6	67.4
Domestic debt	26.1	26.6	29.6	31.4	32.8	33.9	34.1
External debt	23.7	24.8	26.7	28.9	30.4	31.7	33.2
External sector							
Current account balance (including official transfers)	-10.9	-13.2	-12.6	-11.2	-9.9	-9.3	-9.0
Current account balance (excluding official transfers)	-15.1	-16.6	-16.3	-15.0	-13.8	-13.2	-12.8
NPV of external debt outstanding	19.6	19.6	21.0	22.6	23.8	25.2	27.1
percent of exports of goods and services	49.2	44.9	48.2	52.5	56.6	62.7	70.9
Gross international reserves (end of period, millions of US$)	2,738	2,474	2,399	2,690	3,148	3,834	4,771
months of imports of goods and services	2.6	2.2	2.1	2.2	2.5	2.8	3.3
Total donor support (millions of US$)	1,171	1,486	1,500	1,584	1,598	1,695	1,799
percent of GDP	7.7	6.7	6.2	5.9	5.4	5.2	5.0

Sources: Data provided by Ghanaian authorities; and IMF staff estimates and projections.
Note: The medium-term macroeconomic framework does not include oil prospects due to insufficient data at this stage.
[1] Including public enterprises and errors and omissions.

Table 7. Ghana: Country Profile, Millennium Development Goals, 1990–2004

	1990	1995	2001	2003	2004	2005	2006	2015 Target	Status [1]
1. Eradicate extreme poverty and hunger.[2]									**On track**
Population below US$1 a day (percent)	...	...	...	...	...	...	...	15.0	On track
Poverty gap at US$1 a day (percent)	...	...	...	...	...	...	...	…	On track
Percentage share of income or consumption held by poorest 20 percent	...	...	...	...	...	...	...		
Prevalence of child malnutrition (percent of children under 5)	...	...	...	22.1	...	...	...	…	Off track
Population below minimum level of dietary energy consumption (percent)	...	...	...	…	…	...	...	…	Off track
2. Achieve universal primary education.[3]	...	...	...	...	...	...	...		**On track**
Net primary enrollment ratio (percent of age group)	...	...	56.0	61.8	57.9	65.0	69.5	100.0	On track
Percentage of cohort reaching grade 5 (percent)	...	...	...	...	…	...	...	100.0	
Youth literacy rate (percent of ages 15–24)	...	...	...	...	...	...	...	…	
3. Promote gender equality.[4]	...	...	...	...	...	...	...		**On track**
Ratio of girls to boys in primary education (percent)	...	...	94.1	97.9	94.3	96.2	98.5	100.0	
Ratio of girls to boys in primary and secondary education (percent)	...	...	90.9	93.7	90.6	92.6	93.9	100.0	On track
Ratio of young literate females to males (percent of ages 15–24)	...	...	...	...	...	...	...	100.0	On track
Share of women employed in the nonagricultural sector (percent)	56.5	...	...	...	...	...	...	…	
Proportion of seats held by women in national parliament (percent)	...	...	...	9.0	9.0	10.9	10.9		
4. Reduce child mortality.[5]	...	...	...	...	...	...	...		**Off track**
Under–5 mortality rate (per 1,000)	122.0	110.0	...	...	...	112.0	...	42.0	Off track
Infant mortality rate (per 1,000 live births)	75.0	67.0	...	...	...	68.0	...	…	Off track
Immunization, measles (percent of children under 12 months)	61.0	70.0	81.0	80.0	83.0	83.0	n.a.	…	
5. Improve maternal health.[6]	...	...	...	...	...	...	...		**Off track**
Maternal mortality rate (modeled estimate, per 100,000 live births)	740.0	590.0	...	...	...	...	...	185.0	Off track
Births attended by skilled health staff (percent of total)	...	...	...	47.1	...	...	...	…	
6. Combat HIV/AIDS, malaria, and other diseases.[7]	...	...	...	...	...	...	...		**On track**
Prevalence of HIV, female (percent ages 15–24)	...	...	...	2.2	...	2.3	...	…	On track
Contraceptive prevalence rate (percent of women ages 15–49)	...	...	...	25.2	...	...	...	…	
Number of children orphaned by HIV/AIDS	...	...	140000.0	130000.0	...	170000.0	...	…	
Incidence of tuberculosis (per 100,000 people)	223.0	216.8	209.6	207.3	206.1	205.0	...		
Tuberculosis cases detected under DOTS (percent)	...	15.5	41.0	39.7	36.8	37.5	...	…	
7. Ensure environmental sustainability.[8]	...	...	...	...	...	...	...		**Off track**
Forest area (percent of total land area)	32.7	...	...	...	...	24.2	...	…	
Nationally protected areas (percent of total land area)	14.6	19.6	25.6	27.6	28.6	29.6	30.6	…	
GDP per unit of energy use (PPP $ per kg oil equivalent)	4.7	4.7	4.9	5.1	5.5	...	...	…	
CO2 emissions (metric tons per capita)	0.2	0.3	0.3	0.4	...	...	...	…	
Access to an improved water source (percent of population)	55.0	63.0	...	...	75.0	...	...	82.5	On track
Access to improved sanitation (percent of population)	15.0	16.0	...	...	18.0	...	...	…	
Access to secure tenure (percent of population)	...	...	...	...	...	...	...		
8. Develop a Global Partnership for Development.[9]	...	...	...	...	...	...	...		**On track**
Youth unemployment rate (percent of total labor force ages 15–24)	...	...	n.a.	n.a.	n.a.	n.a.	...	…	
Fixed-line and mobile telephones (per 1,000 people)	2.9	3.9	24.0	51.2	92.7	143.1	…	…	
Personal computers (per 1,000 people)	0.0	1.1	3.4	4.5	5.2	…	…	…	

Sources: World Development Indicators, United Nations site for MDG indicators (http://mdgs.un.org/unsd/mdg/Data.aspx?cr=293); and IMF staff estimates and projections.

Note: In some cases the data are for earlier or later years than those stated.
National specification of individual indicators and targets may differ from

[1] As reported in the Ghana Poverty Reduction Strategy 2006 and the Annual Progress Report (2005).

[2] Targets: Halve, between 1990 and 2015, the proportion of people whose income is less than US$1 a day; halve, between 1990 and 2015, the proportion of people who suffer from hunger.

[3] Target: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

[4] Target: Eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education, no later than 2015.

[5] Target: Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate.

[6] Target: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

[7] Target: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS. Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.

[8] Target: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources. Halve, by 2015, the proportion of people without sustainable access to safe drinking water. By 2020, achieve a significant improvement in the lives of at least 100 million slum dwellers.

[9] Targets: Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system. Address the special needs of the least developed countries. Address the special needs of landlocked countries and small island developing states. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term. In cooperation with developing countries, develop and implement strategies for decent and productive work for youth. In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries. In cooperation with the private sector, make available the benefits of new technologies, especially information and communication.

Table 8. Ghana: Financial Soundness Indicators, 2004-08
(Percent, end of period, unless otherwise specified)

	2004	2005	2006	2007	2008 Q1
Capital adequacy:					
Regulatory capital ratio	13.9	16.2	15.8	14.8	15.4
Regulatory tier 1 capital ratio	17.3	16.2	15.0	13.6	14.1
Asset quality:					
Nonperforming loans to total gross loans	16.3	13.0	7.9	6.4	8.7
Credit to total assets	44.0	48.7	45.0	50.3	51.6
Loan loss provision to total gross loans	13.8	8.5	7.4	5.5	5.9
Earnings and profitability:					
Return on assets, before taxes (average)	5.8	4.6	4.8	3.7	3.6
Return on equity, before taxes (average)	33.7	23.6	39.6	35.8	31.5
Interest margin to gross income	62.9	64.0	51.8	46.1	45.6
Interest spread[1]	20.3	19.3	18.3	18.3	...
Liquidity:					
Core liquid assets to total assets ratio	25.4	20.7	23.5	23.4	21.9
Broad liquid assets to total assets ratio	53.5	47.0	46.3	40.7	39.1
Core liquid assets to short-term liabilities ratio	34.6	42.8	31.4	31.0	29.2
Broad liquid assets to short-term liabilities ratio	72.8	97.4	61.9	54.1	52.0
Exposure to foreign exchange risk:					
Share of foreign currency deposits in total deposits	29.3	26.3	28.1	22.3	...
Share of foreign liabilities in total liabilities	2.8	2.4	4.0	8.1	7.5

Source: Bank of Ghana.
[1] Average lending rate minus average (saving and demand) deposit rate.

Table 9. Ghana: Indicators of External Vulnerability, 2005-2008

	2004	2005	2006	2007	2008 Proj.
Financial indicators					
Public sector debt (percent of GDP)	93.4	77.1	41.9	49.8	51.4
Broad money (percent change, 12-month basis)[1]	26.4	13.7	39.4	43.5	30.9
Private sector credit (percent change, 12-month basis)	21.0	50.6	42.7	60.0	38.7
Treasury bill rate (percent, end of period)[2]	16.4	11.4	9.9	10.3	...
Prime rate (Bank of Ghana, percent, end of period)[2]	19.1	15.5	12.5	13.5	...
External Indicators					
Exports of goods and services (percent change; US$ value)	12.4	11.0	32.3	17.9	26.3
Imports of goods and services (percent change; US$ value)	33.2	23.6	24.8	21.6	24.7
Terms of trade (percent change)	-15.1	-6.8	4.7	11.1	5.6
Current account balance (including official transfers, percent of GDP)	-2.8	-7.0	-9.0	-10.9	-13.2
Current account balance (excluding official transfers, percent of GDP)	-8.8	-12.4	-12.8	-15.1	-16.6
Gross official reserves (millions of US$)[2]	1,816	1,951	2,325	2,738	2,474
Short-term foreign liabilities of BOG (millions of US$)	542	471	226	262	...
Exchange rate (per US dollar; period average)	0.900	0.907	0.917	0.935	...
Real effective exchange rate appreciation (end of period; percent)	-0.6	19.8	-1.0	-2.9	...
Financial market indicators					
Stock market $ index (end of period)[3]	60.0	39.6	43.5	52.8	61.3
Percent change	40.6	-33.9	9.7	21.6	15.9
Fitch foreign currency rating[4]	B	B+	B+	B+	...
Standard and Poor's foreign currency rating[5]	B+	B+	B+	B+	...

Sources: Datastream, Bank of Ghana; and IMF staff estimates.

[1] Excluding foreign currency deposits.
[2] For 2008, as of end-May.
[3] For 2008, as of June 6th.
[4] Positive outlook, reduced to "stable" in February 2008.
[5] Stable outlook, since 2003.

INTERNATIONAL MONETARY FUND
INTERNATIONAL DEVELOPMENT ASSOCIATION

GHANA

Joint IMF and World Bank Debt Sustainability Analysis[1]

Prepared by the staffs of the International Monetary Fund and
the International Development Association

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The external debt sustainability analysis (DSA) indicates that Ghana's external debt dynamics is subject to moderate risk of debt distress, and when taken together with domestic debt developments, the overall assessment suggests that Ghana's debt distress has increased compared to the 2007 DSA.[2] *This results from the recent rapid accumulation of external and domestic public debt contracted on commercial terms, and high current account and fiscal deficits that expose the country to structural vulnerabilities in the event of a reversal of favorable terms of trade.*

Two alternative scenarios are also examined in the Joint DSA. The first alternative scenario combines lower GDP growth but the same level of external borrowing projected under the baseline scenario. This scenario indicates that the risk of debt distress could become high if higher economic growth does not materialize. The second alternative scenario simulates the impact of recent oil discoveries on exports and economic growth. This second alternative scenario indicates that, if oil-related fiscal revenues are used efficiently, the risk of debt distress could become low.

A. Background

1. The debt relief provided by the IMF, the World Bank and the AfDF under the Multilateral Debt Relief Initiative (MDRI) helped reduce Ghana's total public debt to

[1] Prepared by IMF and World Bank staffs in collaboration with the Ghanaian Authorities.

[2] *Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries*.

about 42 percent of GDP in 2006 from 78 percent of GDP in 2005 (Table 1).
[6] Public external debt declined to US$2,177 million at end-2006 (17 percent of GDP) from US$6348 million in 2005 (59 percent of GDP). However, domestic debt increased to US$3,133 million (25 percent of GDP) in 2006 from US$1,997 million in 2005 (19 percent of GDP) on account of financing the rising fiscal deficit by issuing bonds with longer maturities in the domestic market.

Table 1. Ghana: Total Government Debt

	2003	2004	2005	2006	2007
			(In millions of US dollars)		
1. EXTERNAL DEBT	**7,549**	**6,448**	**6,348**	**2,177**	**3,587**
Multilateral Institutions	5,058	5,287	5,565	1,327	1,710
International Development Association (IDA)	3,965	4,012	4,336	803	1,137
International Monetary Fund (IMF)	453	447	424	158	167
African Development Bank Group (AfDB)	501	551	555	141	153
Other	139	277	251	225	254
Official bilateral	2,223	922	602	732	956
Commercial 1/	268	239	180	118	920
2. DOMESTIC DEBT	**1,540**	**1,868**	**1,997**	**3,133**	**3,969**
Banking System	899	1,402	1,755	2,431	2,748
Non-Bank sector	641	466	242	637	785
Non-residents	-	-	-	66	437
3. TOTAL GOVERNMENT DEBT (1 + 2)	**9,089**	**8,315**	**8,345**	**5,311**	**7,556**
			(in percent of GDP)		
Memorandum items					
Government Debt	**119.1**	**93.7**	**77.8**	**41.7**	**49.8**
External debt	99.0	72.6	59.2	17.1	23.7
Domestic debt	20.2	21.0	18.6	24.6	26.2

Source: Ministry of Finance and Bank of Ghana.

1/ Includes a bond placement in September 2007.

[6] *Initiative for Heavily Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiative–Status of Implementation.*

2. **Ghana's public and publicly guaranteed debt increased to about 50 percent of GDP at end-2007** to finance higher public investment, specifically the expansion of the country's electricity generation capacity and the development of the road network. Most of this new debt has been contracted on commercial terms (59 percent) in the international capital market, export credit agencies, and local-currency denominated government bonds. In particular, in September 2007, the authorities placed US$750 million in Eurobonds with a coupon of 8.5 percent at 10-year maturity, which was sold at a spread of 387 basis points over U.S. Treasuries for the equivalent period. The remaining part of the new external public debt has been contracted on concessional terms with multilateral institutions and bilateral official creditors (Table 1).

B. Macroeconomic and Financing Assumptions

3. **The macroeconomic framework takes into consideration the impact of the planned fiscal adjustment on growth in 2008-2009, while it is assumed that the economy will return to sustained growth over the medium term.** The Joint DSA assumes continued macroeconomic stability over the medium term, the fiscal deficit decreases to 7 percent of GDP while access to external financing amounts to an average of 6 percent of GDP. Inflation projections take into consideration increasing oil and food prices in the international market in the short term, and the implementation of tight monetary policy under the central bank's inflation targeting framework (Box 1).

4. **Borrowing assumptions reflect the need to maintain a sizeable public investment program over the medium term**. Based on discussions with the authorities, gross concessional flows are assumed to remain at between 6 and 7 percent of GDP through 2013, while nonconcessional borrowing is expected to gradually increase to 3 percent of GDP over the same period on account of the implementation of the government's public investment program (Table 2). Interest rates reflect current IDA-blend terms for concessional borrowing and market conditions for commercial loans with borrowing rates at about 9 percent.

Box 1: Ghana: Baseline Scenario Macroeconomic Assumptions

Growth. Real GDP growth decelerates to 5.8 percent in 2009-10 due to fiscal adjustment and the impact of higher utility prices on the output of the manufacturing sector. Thereafter, the real GDP grows at an average of 6 percent over the period 2011-2028, driven by steady agricultural performance, stronger activity in the construction sector related to public capital expenditure, and investments in the mining sector.

Inflation. The inflation rate is projected to increase to 13.5 percent in 2008 on account of high oil and food prices and domestic demand pressures. Inflation is expected to decrease gradually to an average of about 9 percent in 2009-10. Over the medium term, and as result of tight monetary policy, inflation is projected to decrease to the long-term central bank target of 5 percent.

The fiscal deficit is assumed to decrease to an average of about 7 percent of GDP over the long-term. The partial elimination of subsidies in the electricity sector would help reduce the fiscal deficit to 7 percent of GDP in the long-term from 10.3 percent of GDP in 2008, while **tax revenue performance** would remain at about 25 percent of GDP due to the continuation of strong tax administration policies over the medium term.

External current account. The current account deficit will gradually decrease from 13.2 percent of GDP to about 9 percent of GDP over the medium term, as oil imports moderate and exports receipts increased due to a sustained growth effort in the cocoa and mining sectors. **The reserve coverage in months of imports** of goods and services (G&S) would gradually increase to 5 months in the long-term from its current level of 2 months of imports.

Exports of goods and services. Exports are projected to grow at an annual rate of 8 percent in the period 2008-15, and thereafter at 6 percent on average until 2028. Projections assume that mineral products and cocoa would continue to be the main Ghanaian exports over the long-term.

Remittances are assumed to reach a peak of about 13 percent of GDP in 2013 and remain at that level over the long term. **Foreign direct investment** is envisaged to average 7 percent of GDP over the projection period reflecting capital flows needed to maintain the production level and competitiveness of the mining sector in the long-term.

Official external grants are assumed to remain constant at about 3 percent of GDP over the long-term, while **concessional loan financing** is projected to decrease to about 1 percent of GDP over the long-term. In addition, it is assumed that **the sovereign bond** issued in September 2007 would be fully repaid in 2017, as originally scheduled.

Table 2. Ghana: Capital Flows (gross), 2008–2013
(In million of US dollars)

	Committed			Projected		
	2008	2009	2010	2011	2012	2013
I. Grants	596	704	787	872	939	1,024
In percent of GDP	3.4	3.7	3.9	3.9	3.9	3.8
II. Concessional borrowing	696	579	638	614	560	560
In percent of GDP	4.0	3.1	3.1	2.8	2.3	2.1
III. Commercial borrowing	125	205	272	320	570	820
In percent of GDP	0.7	1.1	1.3	1.4	2.3	3.1
Total External Financing (I + II + III)	1,417	1,488	1,696	1,806	2,070	2,404
In percent of GDP	8.1	7.9	8.3	8.2	8.5	9.0

Source: Ministry of Finance.

C. Baseline Scenario

The external baseline DSA scenario shows that Ghana is at moderate risk of debt distress. The external and fiscal DSA assume decreasing fiscal deficit due to measures to reduce partially energy subsidies, the continuation of strong tax revenue performance, and macroeconomic stability. These efforts would in turn support the expansion of the private sector and sustain GDP growth over the medium-term.

External debt sustainability

5. **External debt burden indicators are below the thresholds in the baseline scenario, but all indicators steadily increase over the long term.**[7] Ghana's external debt burden indicators remain below the established CPIA-dependent thresholds during the projection period, while these debt indicators increased over the long-term due to moderate GDP and export growth performance. All in all, external debt would increase from about 24 percent of GDP in 2007 to about 40 percent of GDP in 2028 reflecting increasing commercial financing.

[7] The World Bank Country Policy and Institutional Assessment (CPIA) classifies Ghana as a strong performer. The debt burden thresholds for strong policy performers are 200, 50, and 300 for the NPV of debt in percent of exports, GDP, and revenue, respectively. Under the same strong policy classification, thresholds for debt service are 25 and 35 percent of exports and revenue, respectively.

6. **Ghana's risk of debt distress is moderate, as stress tests show that debt burden indicators breach the thresholds in four out of five bound standard stress tests.**[8] The stress tests indicate that some relevant shocks that breach the thresholds include a one-time 30 percent depreciation and contracting government debt in less favorable terms. In addition, a stress test that reduces non-debt creating flows, including current transfers and FDI, to their historical average level minus one standard deviation increases the NPV of debt-to-GDP ratio close to or above the thresholds for the period 2012-2020.[9] The same type of shock would increase the debt service-to-exports ratio above its indicative threshold of 25 percent. The deterioration of these indicators under a non-debt creating shock illustrates the relevance of FDI and remittances to maintaining long term external stability, and the urgency of implementing structural reforms that could help sustain higher economic growth than the one projected in this DSA.

Public debt sustainability

7. **The baseline scenario shows that Ghana's total public debt increases from about 50 percent of GDP in 2007 to 81 percent of GDP in 2028.** This increase in public debt is well above the authorities' reference level of 60 percent of GDP, as indicated in the 2008 Budget Act. The NPV of debt-to-revenue and grants ratio would increase from about 166 percent in 2008 to 281 percent in 2028, as a result of a protracted fiscal adjustment due to high government expenditure in 2008-2014 in spite of strong tax revenue performance.

8. **Sensitivity analysis suggests that maintaining the current fiscal stance would result in a sharp increase across all debt indicators and high fiscal vulnerability**. If the primary balance remains at its projected 2008 level (7.4 percent of GDP), the NPV of debt-to-GDP ratio would triple in a twenty-year period (rising from 46 percent in 2008 to 134 percent in 2028), while the NPV of debt-to-revenue ratio would increase to 464 percent from 166 percent over the same period. In addition, the debt service-to-revenue ratio would increase up to 69 percent in 2028 from 26 percent in 2008, if the primary deficit is maintained at its 2008 level. Overall, stress tests indicate that fiscal adjustment and a prudent debt management and debt policy strategy need to be implemented to preserve debt sustainability in the long-term.

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[8] The *Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries* defines a "moderate risk of debt distress" when: "alternative scenarios or stress tests result in a significant rise in debt-service indicators over the projection period, the nearing or breaching of debt or debt-service thresholds, even though the baseline scenario does not indicate a breach of the relevant thresholds."

[9] The time series on FDI shows a structural permanent increase starting in 2003. As a result of this analysis, the stress test on lower non-debt creating flows was estimated by using an FDI historical average based on 5-year period (2003-2007), rather than the standard 10-year period.

D. Alternative Scenarios

Two alternative scenarios are briefly described in this section. The first scenario illustrates the impact of lower real GDP growth rate if, for instance, the planned increase in public investment are not adequately selected or implemented. The second scenario shows the impact of oil exports on growth and debt sustainability. This second scenario is based on preliminary estimates of crude oil exports with a 90 percent confidence and their likely impact on fiscal revenue.

Alternative scenario: Low-GDP-Growth with Baseline Borrowing

9. **If the actual GDP growth rate is lower than in the baseline scenario, the risk of debt distress would be high**. This alternative scenario illustrates what could happen if borrowing is contracted as projected in the baseline scenario, but GDP growth remains at a low level because low-return projects were selected. Under these circumstances, external debt increases to about 57 percent of GDP in 2028 (compare to 40 percent of GDP in the baseline). This result underscores the importance of having a debt management strategy that is complemented by an institutional framework that elicits the selection of high return public projects with significant impact on productivity and economic growth.

10. **Under this low growth-baseline borrowing scenario, external debt burden indicators breach the indicative policy thresholds under stress tests.** A stress test in which government borrowing is contracted under less favorable financial terms would increase the NPV of external debt-to-GDP ratio to 90 percent in 2028 from 20 percent in 2008 breaching the 50 percent threshold for strong performers. Under the same type of stress test, the NPV of debt-to-exports ratio increases to about 222 percent in 2028 from 45 percent in 2008. Overall, the external DSA in the low-GDP-growth scenario shows a more vulnerable economy to changes in the financing terms for the government.

11. **Sensitivity analysis under the low-GDP-growth scenario indicates that total public debt is significantly vulnerable to a fiscal shock**. If the primary balance remains at its projected 2008 level, the NPV of debt-to-GDP ratio would increase to 131 percent in 2028 from 33 percent in 2008, while the NPV of debt-to-revenue and grants ratio would increase to 447 percent from about 116 percent under the same type of shock. In addition, the debt service-to-revenue ratio would increase up to 107 percent in 2028 from 26 percent in 2008. Overall, stress tests in the low-growth scenario show that fiscal efforts and sound debt management are required to avoid a fast accumulation of total government debt.

OIL SCENARIO[10]

12. **The recent oil discoveries in Ghana would create a new exporting sector that has the potential of guaranteeing much needed additional fiscal resources to achieve MDGs and to finance higher growth**. Preliminary estimates of the oil discoveries indicate that oil reserves could be at about 500 million of barrels, and when they are commercially exploited could generate additional fiscal revenues (including taxes, royalties, and direct participation on production) of about 3 to 4 percent of GDP on average for the next 20- to 30-year period. Thus, oil exports might help finance growth, achieve export diversification, and reach MDGs, if resources are used efficiently.[11]

13. **The oil scenario shows that debt burden indicators improve considerably over the long term.** The main result of the oil export scenario is that the NPV of external-debt-to-GDP ratio converges to about 9 percent of GDP in 2028 and NPV of external-debt-to-export ratio decreases to 34 percent. Oil production would definitely improve the macroeconomic situation in Ghana, as the NPV of total government debt would decrease to about 70 percent of GDP in 2028 (Table 3). All in all, Ghana's risk of debt distress could be classified as low in the oil scenario, as all stress test indicators remain below the indicative debt burden thresholds.

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[10] At present, oil reserves have not yet been declared commercially viable. The IMF and the World Bank are working with a prudent size of oil reserve projection, which, according to oil experts, has a 90 percent confidence of being declared commercially viable. Also, the projections assume that oil revenues are used entirely to retire public debt rather than to finance additional public spending. Other aspects about the oil sector can be found on the annex to this supplement.

[11] Appendix I describes the methodology used to incorporate the oil sector into the macroeconomic framework, oil production assumptions, and its related fiscal impact on revenues and financing needs.

Table 3. Ghana: External Debt Sustainability Indicators under Alternative Scenarios

	Thresholds	2008	2018	2028
		Baseline Scenario		
NPV of Debt to GDP ratio	50	20	35	40
NPV of debt to exports ratio	200	45	109	150
Debt service to exports ratio	25	3	11	23
		Low-GDP-growth Scenario		
NPV of Debt to GDP ratio		20	38	56
NPV of debt to exports ratio		45	122	185
Debt service to exports ratio		3	12	29
		Oil-exporting Scenario		
NPV of Debt to GDP ratio		20	22	9
NPV of debt to exports ratio		45	69	34
Debt service to exports ratio		3	9	7

Source: DSA estimates.

F. Conclusions

14. ***The external DSA indicates that Ghana's external debt dynamics is subject to moderate risk of debt distress, and when taken together with domestic debt developments, the overall assessment suggests that Ghana's debt distress has increased compared to the 2007 DSA.***[12] This results from the recent rapid accumulation of external and domestic public debt contracted on commercial terms, and high current account and fiscal deficits that exposed the country to structural vulnerabilities in the event of a reversal of favorable terms of trade. The alternative scenario of low growth-baseline borrowing also indicates that debt sustainability could deteriorate significantly, if higher economic growth does not materialize. Under an alternative oil scenario and assuming efficient use of additional oil-related fiscal revenues, the risk of debt distress could become low.

[12] *Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries*.

15. **Stress tests applied to total public debt underscore the need of maintaining a sound fiscal policy and the urgency of implementing structural reforms aimed at achieving higher growth and diversification of exports**. While diversifying exports and implementing structural reforms would contribute toward reducing Ghana's external vulnerabilities, these should be complemented by the implementation of prudent debt management and debt strategy policies as well as developing a sound institutional framework for selecting high-return public investment projects. Implementing these policies is critical to help preserve debt sustainability.

Table 1. Ghana: External Debt Sustainability Framework, Baseline Scenario, 2007-2028 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2005	2006	2007			2008	2009	2010	2011	2012	2013	2008-13 Average	2018	2028	2018-28 Average
External debt (nominal) 1/	**59.2**	**17.1**	**23.7**			**24.8**	**26.7**	**28.9**	**30.4**	**31.7**	**33.2**		**38.6**	**39.6**	
o/w public and publicly guaranteed (PPG)	59.2	17.1	23.7			24.8	26.7	28.9	30.4	31.7	33.2		38.6	39.6	
Change in external debt	-13.5	-42.1	6.5			1.1	1.9	2.2	1.5	1.3	1.5		1.2	0.1	
Identified net debt-creating flows	-10.7	-8.3	1.1			5.3	3.7	2.1	0.9	0.0	-0.4		-0.5	-0.7	
Non-interest current account deficit	**4.8**	**5.9**	**9.7**	6.8	4.9	**12.3**	**11.9**	**10.4**	**9.0**	**8.4**	**7.9**	10.0	**7.2**	**5.9**	6.8
Deficit in balance of goods and services	25.7	24.7	26.5			28.2	27.6	25.2	23.3	22.7	22.3		22.4	22.1	
Exports	36.1	40.2	39.8			43.7	43.5	43.0	42.0	40.2	38.2		32.0	26.4	
Imports	61.7	65.0	66.3			71.8	71.1	68.2	65.4	62.9	60.5		54.4	48.6	
Net current transfers (negative = inflow)	-19.8	-16.7	-16.3	-17.6	3.9	-15.7	-16.9	-16.9	-16.9	-16.9	-16.8	-16.7	-16.6	-16.1	-16.5
o/w official	-5.4	-3.8	-4.2			-3.4	-3.7	-3.9	-3.9	-3.9	-3.8		-3.6	-3.1	
Other current account flows (negative = net inflow)	-1.0	-2.2	-0.4			-0.1	1.2	2.1	2.6	2.6	2.4		1.3	-0.1	
Net FDI (negative = inflow)	**-5.2**	**-8.0**	**-7.0**	-6.7	2.9	**-6.6**	**-7.6**	**-7.7**	**-7.4**	**-7.4**	**-7.4**	-7.3	**-7.3**	**-7.2**	-7.3
Endogenous debt dynamics 2/	**-10.3**	**-6.1**	**-1.6**			**-0.4**	**-0.6**	**-0.6**	**-0.7**	**-1.0**	**-0.9**		**-0.3**	**0.5**	
Contribution from nominal interest rate	2.3	3.2	1.2			0.9	0.7	0.8	0.9	0.9	1.0		1.7	2.5	
Contribution from real GDP growth	-3.5	-3.2	-0.9			-1.3	-1.3	-1.4	-1.6	-1.9	-2.0		-2.1	-1.9	
Contribution from price and exchange rate changes	-9.0	-6.1	-1.8			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**-2.8**	**-33.8**	**5.4**			**-4.2**	**-1.8**	**0.2**	**0.6**	**1.3**	**1.9**		**1.6**	**0.8**	
o/w exceptional financing	-3.3	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
NPV of external debt 4/	...	...	19.6			19.6	21.0	22.6	23.8	25.2	27.1		34.9	39.7	
In percent of exports	...	...	49.2			44.9	48.2	52.5	56.6	62.7	70.9		109.1	150.3	
NPV of PPG external debt	**...**	**...**	**19.6**			**19.6**	**21.0**	**22.6**	**23.8**	**25.2**	**27.1**		**34.9**	**38.3**	
In percent of exports	**...**	**...**	**49.2**			**44.9**	**48.2**	**52.5**	**56.6**	**62.7**	**70.9**	56.0	**109.1**	**150.3**	121.5
In percent of government revenues	**...**	**...**	**86.9**			**85.2**	**88.7**	**94.1**	**96.2**	**100.1**	**106.2**	95.1	**136.7**	**153.9**	142.0
Debt service-to-exports ratio (in percent)	**17.0**	**17.5**	**5.2**			**3.2**	**2.5**	**2.6**	**2.9**	**3.8**	**4.4**	3.2	**11.2**	**22.9**	15.6
PPG debt service-to-exports ratio (in percent)	**17.0**	**17.5**	**5.2**			**3.2**	**2.5**	**2.6**	**2.9**	**3.8**	**4.4**	3.2	**11.2**	**22.9**	15.6
PPG debt service-to-revenue ratio (in percent)	**25.7**	**32.1**	**9.1**			**6.0**	**4.6**	**4.6**	**5.0**	**6.0**	**6.7**	5.5	**14.0**	**23.5**	18.0
Total gross financing need (billions of U.S. dollars)	0.6	0.6	0.7			1.2	1.0	0.8	0.6	0.6	0.6		1.5	4.5	
Non-interest current account deficit that stabilizes debt ratio	18.2	47.9	3.2			11.2	10.0	8.2	7.5	7.1	6.4		6.0	5.9	
Key macroeconomic assumptions															
Real GDP growth (in percent)	5.9	6.4	6.3	5.1	0.9	6.5	5.8	5.8	6.0	6.8	6.8	6.3	6.0	5.3	5.7
GDP deflator in US dollar terms (change in percent)	14.1	11.5	12.1	4.4	15.9	8.1	2.2	1.9	2.6	3.0	3.3	3.5	2.7	2.7	2.8
Effective interest rate (percent) 5/	3.8	6.3	8.1	6.1	2.9	4.4	3.1	3.2	3.2	3.3	3.6	3.5	5.0	6.8	5.6
Growth of exports of G&S (US dollar terms, in percent)	11.0	32.3	17.9	10.9	10.9	26.3	7.7	6.6	6.2	5.2	4.7	9.5	6.0	6.4	6.1
Growth of imports of G&S (US dollar terms, in percent)	23.6	24.8	21.6	11.6	15.0	24.7	7.0	3.4	4.2	5.8	6.2	8.5	7.3	7.2	7.2
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	36.0	27.5	26.8	24.0	13.7	7.3	22.5	-6.1	-15.1	-8.5
Aid flows (in billions of US dollars) 7/	0.6	0.7	0.9			0.9	0.9	1.0	1.2	1.3	1.4		2.3	5.3	
o/w Grants	0.6	0.7	0.9			0.8	0.7	0.8	0.9	1.0	1.1		1.6	2.9	
o/w Concessional loans	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			6.6	5.1	5.3	5.1	4.6	4.3	5.2	3.3	2.1	3.0
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			68.5	62.8	61.6	61.4	53.6	47.5	59.3	33.7	21.5	31.2
Memorandum items:															
Nominal GDP (billions of US dollars)	10.7	12.7	15.2			17.4	18.9	20.3	22.1	24.3	26.8		42.6	94.5	
(NPVt-NPVt-1)/GDPt-1 (in percent)						3.0	3.1	3.4	3.3	3.9	4.6	3.6	4.8	3.6	4.0

Source: Staff simulations.

1/ Includes both public and private sector external debt.
2/ Derived as [r - g - r(1+g)]/(1+g+r+gr) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = 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 NPV 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 NPV of new debt).

Table 2. Ghana: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2007-28
(In percent)

	Projections											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	**2018**	2028
NPV of debt-to-GDP ratio												
Baseline	20	21	23	24	25	27	29	31	33	33	**35**	40
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-27 1/	20	14	11	8	7	8	8	10	11	11	**12**	20
A2. New public sector loans on less favorable terms in 2008-27 2/	20	22	25	28	31	34	37	41	44	45	**48**	62
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	20	21	23	25	26	28	30	32	34	34	**36**	41
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	20	24	32	33	34	36	37	38	40	39	**40**	41
B3. US dollar GDP deflator at historical average minus one standard deviation in 2008-09	20	24	30	32	34	36	39	41	44	44	**46**	53
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	20	34	48	48	49	50	50	50	51	49	**49**	44
B5. Combination of B1-B4 using one-half standard deviation shocks	20	29	42	43	44	45	46	48	49	48	**49**	48
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	20	30	32	34	36	38	41	44	47	47	**49**	56
NPV of debt-to-exports ratio												
Baseline	45	48	53	57	63	71	80	89	98	101	**109**	150
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2007-26 1/	45	32	25	20	19	20	23	28	33	33	**38**	76
A2. New public sector loans on less favorable terms in 2007-26 2/	45	51	59	66	77	89	102	116	129	137	**149**	235
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	45	48	53	57	63	71	80	89	98	101	**109**	150
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	45	60	86	90	98	107	117	126	135	137	**145**	179
B3. US dollar GDP deflator at historical average minus one standard deviation in 2008-09	45	48	53	57	63	71	80	89	98	101	**109**	150
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	45	77	111	115	121	130	137	143	149	149	**154**	166
B5. Combination of B1-B4 using one-half standard deviation shocks	45	64	87	91	98	106	115	122	130	132	**138**	164
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	45	48	53	57	63	71	80	89	98	101	**109**	150
NPV of debt-to-revenue ratio												
Baseline	85	89	94	96	100	106	114	122	130	130	**137**	154
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2007-26 1/	85	59	44	34	30	30	33	38	44	43	**48**	77
A2. New public sector loans on less favorable terms in 2007-26 2/	85	94	106	113	122	134	146	159	172	177	**187**	241
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	85	90	97	99	103	110	118	126	134	134	**141**	159
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	85	103	134	134	136	140	146	151	156	154	**159**	160
B3. US dollar GDP deflator at historical average minus one standard deviation in 2008-09	85	102	125	128	133	141	152	162	172	173	**182**	205
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	85	143	199	196	194	195	197	197	198	193	**193**	170
B5. Combination of B1-B4 using one-half standard deviation shocks	85	124	173	172	173	177	182	187	191	188	**192**	186
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	85	126	133	136	142	150	161	173	184	184	**194**	218
(In percent)												
Debt service-to-exports ratio												
Baseline	3	2	3	3	4	4	5	7	8	15	**11**	23
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-27 1/	3	2	2	1	2	2	2	2	3	9	**5**	13
A2. New public sector loans on less favorable terms in 2008-27 2/	3	2	3	3	4	4	5	6	8	14	**10**	31
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	3	2	3	3	4	4	5	7	8	15	**11**	23
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	3	3	3	5	6	7	8	10	12	20	**15**	27
B3. US dollar GDP deflator at historical average minus one standard deviation in 2008-09	3	2	3	3	4	4	5	7	8	15	**11**	23
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	3	2	4	6	7	8	10	13	15	21	**17**	25
B5. Combination of B1-B4 using one-half standard deviation shocks	3	3	3	5	6	6	8	10	12	19	**15**	25
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	3	2	3	3	4	4	5	7	8	15	**11**	23
Debt service-to-revenue ratio												
Baseline	6	5	5	5	6	7	8	9	11	19	**14**	23
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-27 1/	6	5	3	2	3	3	3	3	4	11	**6**	13
A2. New public sector loans on less favorable terms in 2008-27 2/	6	5	5	5	6	6	7	8	10	18	**13**	32
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	6	5	5	5	6	7	8	9	11	20	**14**	24
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	6	5	5	7	8	9	10	13	14	22	**17**	24
B3. US dollar GDP deflator at historical average minus one standard deviation in 2008-09	6	5	6	7	8	9	10	12	15	26	**19**	31
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	6	5	7	10	11	12	15	18	19	27	**21**	26
B5. Combination of B1-B4 using one-half standard deviation shocks	6	5	7	9	10	11	13	16	18	27	**21**	28
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	6	6	7	7	9	9	11	13	16	27	**20**	33
Memorandum item:												
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	36	27	27	24	14	7	3	0	-3	-5	**-6**	-15

Source: Staff projections and simulations.

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.

Table 3. Ghana: Public Sector Debt Sustainability Framework, Baseline Scenario, 2005-2028

(In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2005	2006	2007	Historical Average 5/	Standard Deviation 5/	2008	2009	2010	2011	2012	2013	2008-13 Average	2018	2028	2014-28 Average
Public sector debt 1/	77.1	41.9	49.8			51.4	56.2	60.1	63.1	65.5	67.1		73.9	81.0	
o/w foreign-currency denominated	59.2	17.1	23.7			24.8	26.7	28.9	30.4	31.7	33.2		38.6	39.6	
Change in public sector debt	...	-35.2	7.9			1.5	4.9	3.8	3.0	2.4	1.6		1.1	0.1	
Identified debt-creating flows	...	-5.5	0.5			0.9	4.3	3.3	2.5	2.0	1.3		0.9	0.1	
Primary deficit	-0.7	4.2	6.0	1.9	2.1	7.4	8.2	6.8	6.2	5.9	5.1	6.6	3.3	1.5	2.9
Revenue and grants	29.1	27.4	28.6			27.9	27.6	28.1	28.8	29.2	29.4		29.1	28.9	
of which : grants	5.2	5.4	6.0			4.9	3.9	4.1	4.1	4.0	3.9		3.6	3.1	
Primary (noninterest) expenditure	28.4	31.5	34.6			35.2	35.7	34.9	35.0	35.1	34.5		32.4	30.4	
Automatic debt dynamics	...	-8.9	-4.0			-5.1	-3.2	-3.2	-3.2	-3.5	-3.5		-2.4	-1.4	
Contribution from interest rate/growth differential	...	-4.8	-2.6			-3.8	-3.1	-3.2	-3.1	-3.2	-3.1		-2.1	-1.1	
of which : contribution from average real interest rate	...	-0.2	-0.2			-0.8	-0.3	-0.1	0.3	0.8	1.1		2.0	3.0	
of which : contribution from real GDP growth	...	-4.6	-2.5			-3.0	-2.8	-3.1	-3.4	-4.0	-4.2		-4.1	-4.1	
Contribution from real exchange rate depreciation	...	-4.1	-1.4			-1.3	-0.1	0.0	-0.2	-0.3	-0.4		...	...	
Other identified debt-creating flows	-1.5	-0.8	-1.5			-1.4	-0.7	-0.3	-0.4	-0.4	-0.3		0.0	0.0	
Privatization receipts (negative)	-0.2	0.0	-0.8			-0.9	-0.3	0.0	0.0	0.0	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	
Debt relief (HIPC and other)	-1.2	-0.8	-0.6			-0.4	-0.4	-0.3	-0.4	-0.4	-0.3		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	
Residual, including asset changes	...	-29.7	7.4			0.7	0.6	0.5	0.5	0.4	0.4		0.2	0.0	
NPV of public sector debt	37.8	42.6	45.7			46.2	50.5	53.8	56.4	59.0	61.0		70.2	81.0	
o/w foreign-currency denominated	19.9	17.8	19.6			19.6	21.0	22.6	23.8	25.2	27.1		34.9	39.7	
o/w external	19.9	17.8	19.6			19.6	21.0	22.6	23.8	25.2	27.1		34.9	39.7	
NPV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	...	...	...			19.5	20.4	20.2	20.5	21.1	21.0		21.7	24.9	
NPV of public sector debt-to-revenue and grants ratio (in percent)	130.1	155.6	160.1			165.8	183.1	191.4	195.6	201.9	207.2		240.9	280.7	
NPV of public sector debt-to-revenue ratio (in percent)	158.8	194.2	203.0			200.8	213.7	223.8	228.0	233.9	239.2		275.3	314.3	
o/w external 3/	...	...	86.9			85.2	88.7	94.1	96.2	100.1	106.2		136.7	153.9	
Debt service-to-revenue and grants ratio (in percent) 4/	12.5	12.3	10.9			25.7	23.3	25.2	25.8	27.5	28.6		36.1	48.8	
Debt service-to-revenue ratio (in percent) 4/	15.3	15.4	13.8			31.1	27.2	29.4	30.1	31.9	33.0		41.3	54.6	
Primary deficit that stabilizes the debt-to-GDP ratio	...	39.3	-1.9			5.8	3.3	3.0	3.2	3.5	3.4		2.2	1.4	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	5.9	6.4	6.3	5.1	0.9	6.5	5.8	5.8	6.0	6.8	6.8	6.3	6.0	5.3	5.7
Average nominal interest rate on forex debt (in percent)	...	1.6	5.9	3.7	3.1	4.8	3.4	3.5	3.5	3.5	3.7	3.7	5.2	6.9	5.7
Average real interest rate on domestic currency debt (in percent)	...	4.1	-2.8	0.6	4.9	-5.8	-2.5	-1.8	-0.3	1.1	1.8	-1.3	2.7	2.8	2.6
Real exchange rate depreciation (in percent, + indicates depreciation)	-9.6	-7.5	-8.4	1.1	22.7	-5.7	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	15.0	12.8	14.4	20.1	7.7	16.2	10.4	9.4	8.0	6.5	5.9	9.4	5.0	5.0	5.2
Growth of real primary spending (deflated by GDP deflator, in percent)	2.3	18.3	16.6	10.1	13.6	8.5	7.3	3.3	6.3	7.0	5.0	6.2	4.6	4.6	4.8
Grant element of new external borrowing (in percent)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross 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.

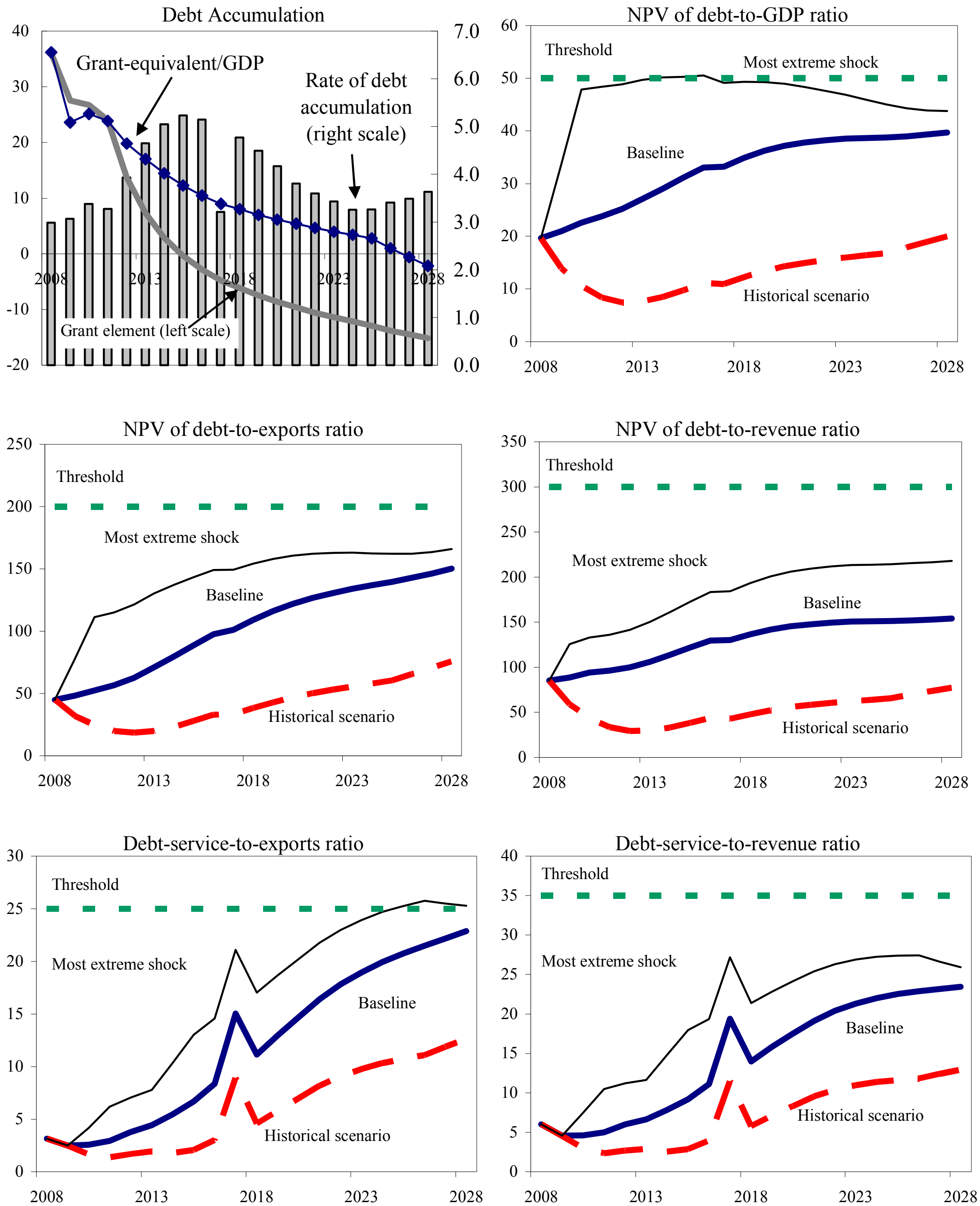
5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 4. Country: Sensitivity Analysis for Key Indicators of Public Debt 2008-2028

		Projections						
	2008	2009	2010	2011	2012	2013	2018	2028
NPV of Debt-to-GDP Ratio								
Baseline	46	51	54	56	59	61	70	81
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	46	45	44	43	44	44	51	68
A2. Primary balance is unchanged from 2008	46	50	54	57	61	65	88	134
A3. Permanently lower GDP growth 1/	46	51	54	57	60	62	74	92
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	46	52	56	60	63	66	78	94
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	46	47	47	50	53	56	66	78
B3. Combination of B1-B2 using one half standard deviation shocks	46	46	46	49	52	54	65	77
B4. One-time 30 percent real depreciation in 2009	46	59	62	64	66	68	79	98
B5. 10 percent of GDP increase in other debt-creating flows in 2009	46	60	63	65	67	69	76	85
NPV of Debt-to-Revenue Ratio 2/								
Baseline	166	183	191	196	202	207	241	281
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	166	163	157	150	149	149	172	232
A2. Primary balance is unchanged from 2008	166	180	191	199	210	222	301	464
A3. Permanently lower GDP growth 1/	166	184	193	197	205	211	253	318
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	166	187	200	207	215	223	267	324
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	166	169	169	175	182	189	226	271
B3. Combination of B1-B2 using one half standard deviation shocks	166	167	165	170	178	184	222	266
B4. One-time 30 percent real depreciation in 2009	166	215	221	222	227	232	272	339
B5. 10 percent of GDP increase in other debt-creating flows in 2009	166	217	223	225	230	233	262	295
Debt Service-to-Revenue Ratio 2/								
Baseline	26	23	25	26	28	29	36	49
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	26	23	18	18	20	21	32	44
A2. Primary balance is unchanged from 2008	26	23	24	26	29	31	44	69
A3. Permanently lower GDP growth 1/	26	23	25	26	28	29	38	54
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	26	24	26	28	29	31	39	54
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	26	23	20	21	25	27	35	47
B3. Combination of B1-B2 using one half standard deviation shocks	26	24	19	19	25	27	35	47
B4. One-time 30 percent real depreciation in 2009	26	24	27	28	30	31	41	57
B5. 10 percent of GDP increase in other debt-creating flows in 2009	26	23	37	30	30	30	37	51

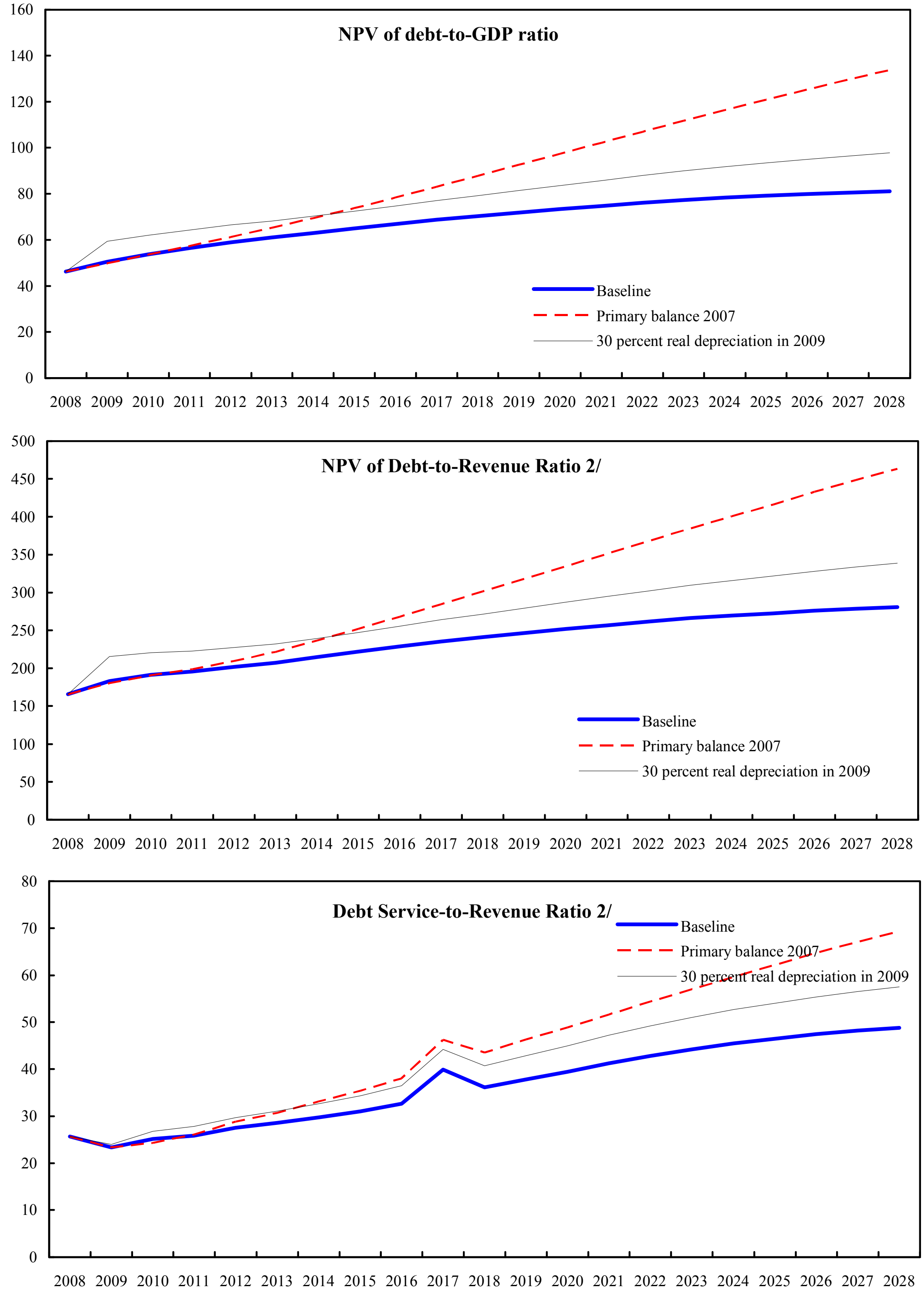
Sources: Country authorities; and Fund staff estimates and projections.
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).
2/ Revenues are defined inclusive of grants.

Figure 1. Ghana: Indicators of Public and Publicly Guaranteed External Debt
Baseline, 2008-2028



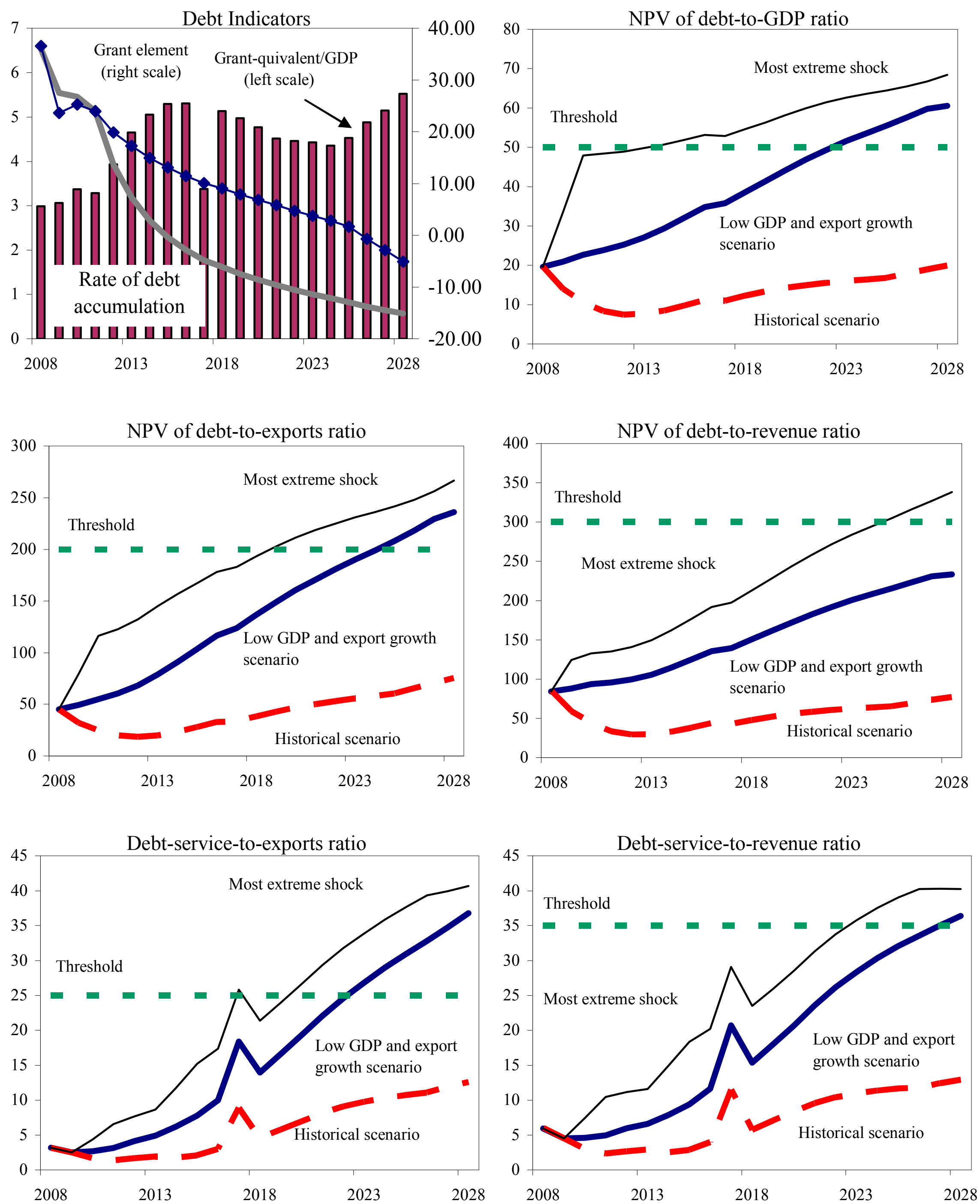
Source: Staff projections and simulations.

Figure 2.Ghana: Indicators of Public Debt Under Alternative Stress Tests, 2008-2028 1/



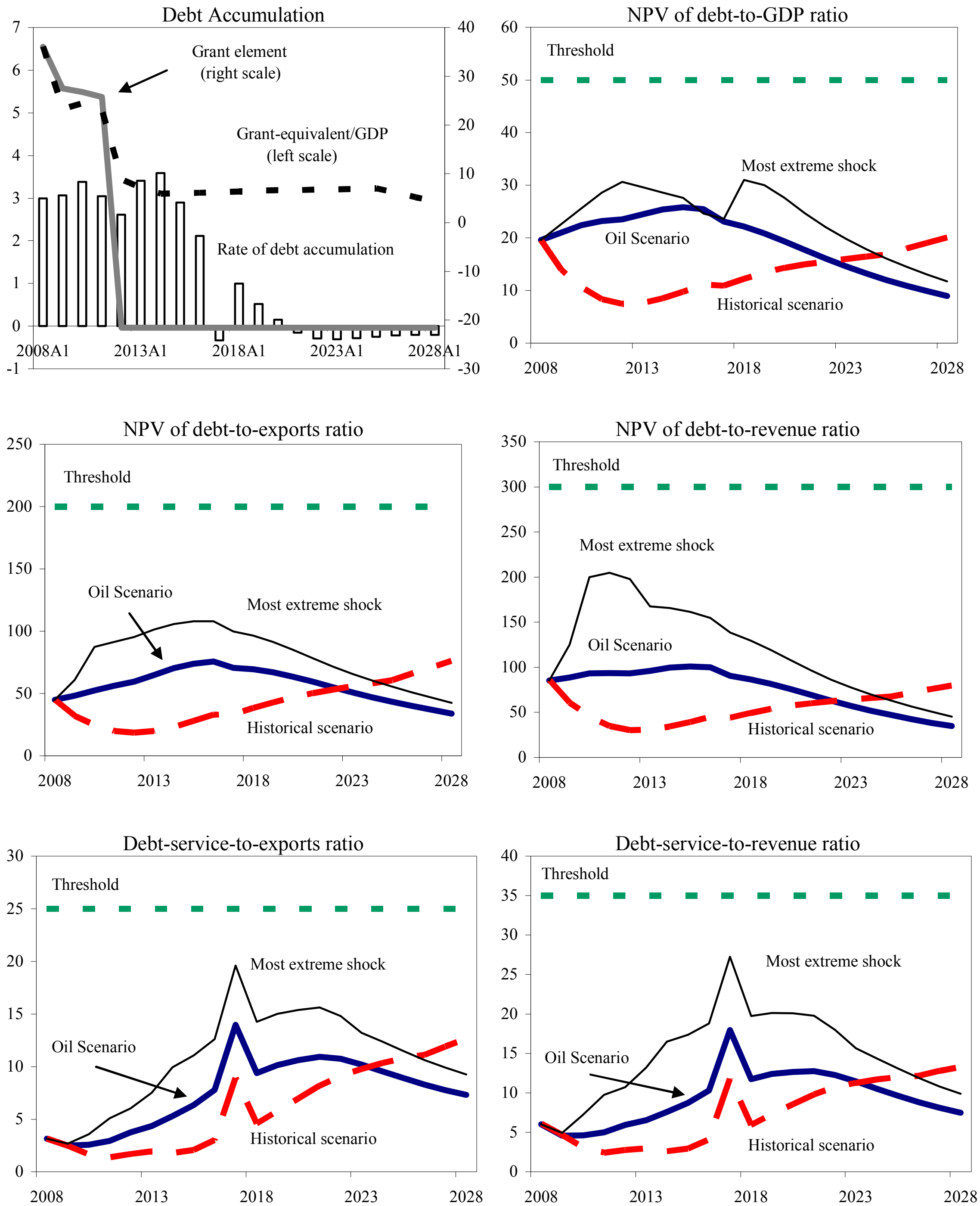
Source: Staff projections and simulations.
1/ Most extreme stress test is test that yields highest ratio in 2018.
2/ Revenue including grants.

Figure 3. Ghana: Indicators of Public and Publicly Guaranteed External Debt
Alternative Low GDP and Export Growth Scenario, 2008-2028



Source: Staff projections and simulations.

Figure 4. Ghana: Indicators of Public and Publicly Guaranteed External Debt
Oil Exporting Scenario, 2008-2028



Source: Staff projections and simulations.

APPENDIX I. GHANA'S PETROLEUM SECTOR: PRELIMINARY MACROECONOMIC IMPACT[1]

Ghana's recent oil discovery, once confirmed, can have a significant positive impact on national income, growth, poverty reduction, and debt sustainability. The exploration and investment is expected to be fully financed by foreign direct investment. Following an initial investment of about US$2.7 billion, production and exports would start in 2011, with a peak in 2013, and a depletion of oil reserves by 2030. Cumulative government revenues would be US$20 billion, or 160 percent of 2008 GDP.

IV. INTRODUCTION

16. **On June 18, 2007, UK-based Tullow Oil announced a significant off-shore oil discovery in Ghana**. The discovery was made by an Anglo-American consortium (Tullow Oil operates with Kosmos Energy and Anadarko Petroleum of the US) in which Ghana's National Petroleum Corporation holds a 10 percent interest.[2]

17. **On May 6 2008, Tullow Oil announced a second oil discovery.** This will probably encourage increased exploration in Ghana, giving further impetus to the investment plans outlined by several foreign companies. The news is likely to result in an upgrade of the current conservative assessment of proven reserves of 170 million barrels to 500–600 million barrel mark. So far, there has been no substantial discovery of an associated gas cap.

Proven Oil Reserves, Selected SSA Countries
(Billions of barrels, as at Jan. 2007)

Equatorial Guinea	1.1
Ghana	**0.170-1.1**
Chad	1.5
Congo, Rep. of	1.6
Gabon	2.0
Angola	8.0
Nigeria	36.2

Sources: BP Statistical Review, Oil and Gas Journal; an

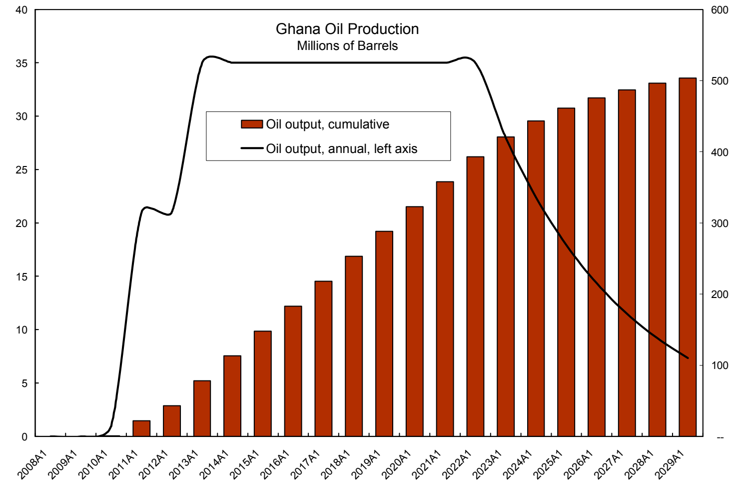
18. **The discovery is yet to be designated commercially viable**, and production may not begin for three to five years. Following a full appraisal, the investment phase can start perhaps in 2009, with an estimated cost of US$2–3 billion. Oil production could start after 2011.

19. **The state oil company, GNPC plays a key role in the sector raising an issue of conflict of interest.** GNPC is not only a producer of petroleum but is also responsible for promotion of exploration and development of Ghana's petroleum resources. Moreover, besides its interest in upstream operations, GNPC also regulates the operations and activities of investors, evaluates potential investors, and takes part in negotiations for petroleum agreements. Monitoring of oil company operations is done through a Joint Management Committee (JMC) which apply sanctions through the Minister for Energy. As concerns are being raised regarding GNPC acting both as a regulator and operator, the government is reviewing the appropriateness of GNPC being both a regulator and one of the regulated bodies.

[1] Prepared by Julien Hartley (IMF).

[2] Currently Ghana produces small quantities of oil, about 700 barrels a day.

V. MAIN ASSUMPTIONS



20. **The main oil production assumptions are derived from the GNPC development plan,** except for the starting date, which we conservatively assume will be in 2011 rather than 2010. Total reserves are assumed about 500 million barrels (currently rated as 90% probable). The first phase would be development of the core area; the initial processing capacity of 60,000 barrels per day would be upgraded later to about 120,000 barrels of oil per day. It is assumed that US$2–3 billion would be spent on field development through 2011 and about US$200 million a year allocated for production costs. Oil prices follow the IMF's WEO projections minus a 10 percent prudential discount through 2014, and they are assumed to remain constant thereafter.

21. **Ghana's existing petroleum regime provides a number of revenue sources for the state**[3]—among them royalties, interest, petroleum income tax, additional oil entitlement, and rental payments. Royalty rates are negotiated; for the blocks operated by Kosmos and Tullow, the rate is 5 percent. The carried interest entitles the government to a share of production after operation costs (including royalties) that have been recovered; GNPC's carried interest is 10 percent. The state has the option to acquire an additional interest within a certain period after an oil discovery is declared commercial, at which point GNPC has to bear its share of development and production costs. The petroleum income tax law sets the income tax rate at 50 percent; but for the current discoveries a 35 percent rate is applied. According to GNPC, petroleum agreements can also stipulate an additional profits tax (the "additional oil entitlement") that would be levied based on the contractor's rate of return to allow the state to capture a share of exceptionally profitable operations.

[3] The main laws are the Ghana National Petroleum Corporation Law PNDCL 64 of 1983 and the Petroleum (Exploration and Production) Law PNDCL 199 of 1987.

Box 1. Ghana: Main Elements of the Oil Regime

1. **Royalties.** A royalty is levied on gross production of oil whether or not the operation is profitable. The assumption is that it will be paid in cash, but it could also be paid in the form of oil.

2. **Carried interest.** The carried interest is levied after royalty and operating costs are deducted. Again, the assumption is that it will be paid in but it could also be paid in the form of oil.

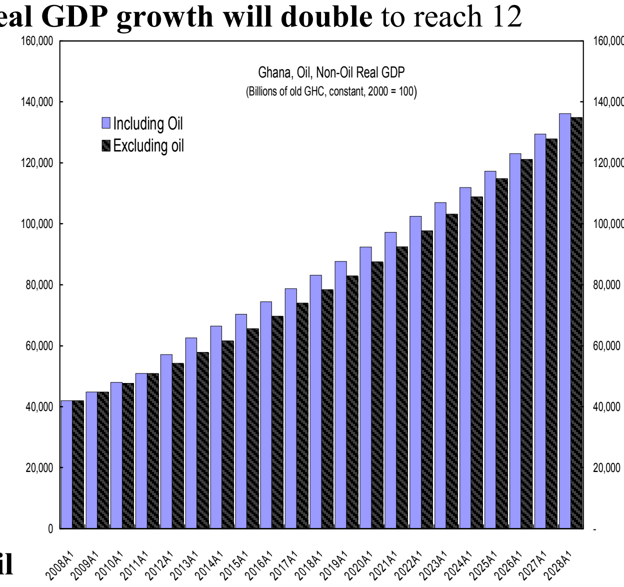
3. **Petroleum income tax**. The marginal tax rate is levied in cash and applied after deduction of royalties (considered a cost of production) and carried interest and after allowing for linear depreciation of capital expenditures over five years.

4. **Use of oil revenue.** Oil revenues can be spent, saved in a stabilization fund or future generation's fund, used to retire debt, distributed to citizens, and any combination of these. In this paper for simplicity it is assumed that revenue is used for debt reduction.

22. **It is assumed that all production is exported** (thus there is no import substitution at this stage) and that all after-tax profits of contractors are transferred offshore as well. Direct investment is assumed to have a 95 percent import and 5 percent local content. The impact on the current account balance in the initial, investment phase is through high imports for investment financed by FDI; when production starts, production is exported and profits are repatriated.

VI. Main Findings

23. **With the start of oil production, real GDP growth will double** to reach 12 percent by 2012, and then will be slightly higher than real GDP growth without oil. This is explained by large investment with 95 percent from imports in the investment phase and then a rapid increase in production and exports, which plateau after two years and begin to decline in 2022. Taking into account the fact that the oil business is highly specialized, spillovers are assumed to be modest. Ghana's cumulative real per capita GDP over the period would be US$1,695 higher than without oil.



24. **The government's share of total oil receipts would be around 30 percent when production starts**, reach 35 percent at the peak of production in 2018, and then gradually decrease to 25 percent as production declines. At the peak oil receipts would reach more than US$1 billion, accounting for more than 10 percent of total budget revenues (excluding grants) or 2 ½ percent of GDP.

Ghana. Government Revenue Take, 2011-2029
(In US$ millions)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Value of oil production	2,136	2,131	3,544	3,544	3,544	3,544	3,544	3,544	3,544	3,544	3,544	3,544	2,835	2,268	1,814	1,452	1,161	929	743
Total government oil revenue	752	723	1,324	1,326	1,352	1,428	1,457	1,485	1,553	1,491	1,491	1,491	1,176	925	723	562	433	330	247
Implied government share (in percent)	35.2	33.9	37.3	37.4	38.1	40.3	41.1	41.9	43.8	42.1	42.1	42.1	41.5	40.8	39.9	38.7	37.3	35.5	33.3
Revenues in percent of GDP	3.1	2.7	4.4	4.0	3.7	3.6	3.4	3.2	3.1	2.8	2.6	2.4	1.8	1.3	0.9	0.7	0.5	0.3	0.2

25. **For simplicity, it is assumed that oil revenues would be fully used to retire debt and thus no additional spending would take place.** As a result, Ghana's total public sector would decrease from 49.8 percent at end-2007 and to 19.2 percent in 2028, as opposed to 55.6 percent under the baseline without oil.

26. **The current account would be affected in the two main phases in a different manner:**

a. **In the investment phase, trade balance** would worsen significantly because of the large imports of capital goods, adding some 9 percent of GDP to the trade deficit in 2010-12. However, since investment is assumed to be fully foreign direct investment (FDI) financed, Ghana's reserve position would improve, inter alia, to the extent of the 5 percent of local content.

b. **In the production and export** phase, the net improvement (oil exports minus profit repatriation) of the current account would reach about an average of 4 percent of GDP per annum. During the peak of production (2013-22) reserves would improve on average by 2.6 months of imports of goods and services.

Ghana. Oil Balance of Payments, 2008-28

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Current account balance	-2,410	-2,753	-2,512	97	-218	1,243	1,039	792	548	274	-26	-352	-687	-1,056	-1,403	-2,614	-3,544	-4,586	-5,120	-6,004	-7,940
Trade Balance (incl. oil)	-4,832	-5,607	-5,582	-3,250	-3,650	-2,593	-3,237	-3,941	-4,660	-5,436	-6,247	-7,120	-8,043	-9,036	-10,077	-11,984	-13,667	-15,523	-16,843	-18,579	-21,437
Exports	5,609	5,924	6,256	9,016	9,408	11,354	11,851	12,386	12,958	13,571	14,226	14,927	15,678	16,481	17,341	17,474	17,830	18,381	19,109	19,996	20,002
of which : oil	0	0	0	2,373	2,368	3,938	3,938	3,938	3,938	3,938	3,938	3,938	3,938	3,938	3,938	3,150	2,520	2,016	1,613	1,290	0
Imports	-10,441	-11,531	-11,839	-12,266	-13,058	-13,947	-15,088	-16,327	-17,619	-19,007	-20,473	-22,047	-23,721	-25,517	-27,418	-29,458	-31,496	-33,904	-35,951	-38,575	-41,440
of which : oil	-3,233	-3,621	-3,757	-3,946	-4,203	-4,479	-4,776	-5,086	-5,408	-5,742	-6,089	-6,448	-6,820	-7,204	-7,593	-7,996	-8,419	-8,866	-9,335	-9,830	-10,251
of which: capital goods for oil industry	-102	-378	-241	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	-95	0	0	0	0	0
Services Balance	-320	-340	-360	-398	-668	-675	-690	-720	-753	-791	-842	-898	-959	-1,025	-1,064	-1,151	-1,244	-1,345	-1,455	-1,573	-1,701
of which: oil profits	0	0	0	0	-231	-192	-156	-132	-108	-86	-74	-63	-52	-42	0	0	0	0	0	0	0
Capital and financial account	2,043	2,300	2,716	2,603	2,386	2,783	3,102	3,240	3,323	2,770	3,522	3,637	3,786	3,956	4,203	4,530	4,908	5,321	5,772	6,243	6,742
of which: FDI in oil industry	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NIR (-increase)	367	453	-204	-2,701	-2,168	-4,026	-4,141	-4,033	-3,871	-3,044	-3,496	-3,285	-3,099	-2,900	-2,800	-1,916	-1,364	-735	-652	-239	1,199
Memorandum items:																					
Current account balance incl off. trans. (%GDP)	-13.8	-14.6	-12.4	0.4	-0.9	4.6	3.5	2.4	1.5	0.7	-0.1	-0.8	-1.4	-1.9	-2.4	-4.1	-5.1	-6.1	-6.3	-6.9	-8.4
GIR, in months of imports of G&S	2.1	1.7	1.8	3.7	5.1	7.5	9.6	11.3	12.7	13.4	14.2	14.7	15.0	15.2	15.1	14.8	14.2	13.6	12.9	12.1	11.7

27. **The impact of oil production on Ghana's external debt sustainability as well as total debt would be clearly positive; for details see an alternative scenario incorporating oil in the joint Fund-Bank DSA**.

28. **Overall, the impact of oil on Ghana's economy under these assumptions would be considerable although not extraordinary.** Growth would pick up relative to the non-oil scenario and cumulative government revenues would reach about US$20 billion, equivalent to percent of 2008 GDP. It should be noted that this outcome is sensitive to a number of assumptions (net oil wealth would be depleted by 2030 and no other wells will come into production; oil prices are constant after 2014 notwithstanding historical volatility of world

oil prices; the fiscal framework is unchanged, etc). More precise estimates on the impact of oil can be made after Ghana’s oil is announced to be commercially viable, with firmer estimates on the size of oil reserves.

INTERNATIONAL MONETARY FUND

GHANA

2008 Article IV Consultations—Informational Annex

Prepared by the Staff Representatives for the 2008 Consultation with Ghana

(In consultation with Other Departments)

Approved by Sharmini Coorey and Adnan Mazarei

June 16, 2008

- **Relations with the Fund.** Describes the financial and capacity building assistance of the Fund for Ghana and provides information on the safeguards assessment and exchange rate system. At end-April 2008, outstanding PRGF loans amounted to SDR 105.45 million (29 percent of quota).
- **IMF-World Bank Relations**. Explains Bank-Fund collaboration and support for Ghana's Growth and Poverty Reduction Strategy, as well as financial relations with the Bank.
- **Statistics Issues**. Describes the availability and quality of macroeconomic statistics, as well as their sufficiency for surveillance.
- **Summary of Tax System.** Describes the main elements of the tax system at end March 2008.

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APPENDIX I. GHANA: RELATIONS WITH THE FUND

(As of April 30, 2008)

I. Membership Status: Joined: September 20, 1957; Article VIII.

II. General Resources Account:	**SDR Million**	**%Quota**
Quota	369.00	100.00
Fund holdings of currency	369.00	100.00
Reserve Position	0.00	0.00
Holdings Exchange Rate		

III. SDR Department:	**SDR Million**	**%Allocation**
Net cumulative allocation	62.98	100.00
Holdings	0.53	0.84

IV. Outstanding Purchases and Loans:	**SDR Million**	**%Quota**
PRGF Arrangements	105.45	28.58

V. Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
PRGF	May 09, 2003	Oct 31, 2006	184.50	184.50
PRGF	May 03, 1999	Nov 30, 2002	228.80	176.22
PRGF	Jun 30, 1995	May 02, 1999	164.40	137.00

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

	Forthcoming				
	2008	2009	2010	2011	2012
Principal				10.54	21.09
Charges/Interest	1.82	2.24	2.24	2.24	2.15
Total	1.82	2.24	2.24	12.76	23.24

[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
I. Commitment of HIPC assistance	
Decision point date	Feb 2002
Assistance committed by all creditors (US$ Million) [1/]	2,186.00
Of which: IMF assistance (US$ million)	112.10
(SDR equivalent in millions)	90.05
Completion point date	Jul 2004
II. 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 [2/]	4.25
Total disbursements	94.30

[1/] 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 can not be added.

[2/] 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.

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

I. MDRI-eligible debt (SDR Million)[1/]	265.39
Financed by: MDRI Trust	220.04
Remaining HIPC resources	45.35

II. Debt Relief by Facility (SDR Million)

	Eligible Debt		
Delivery Date	**GRA**	**PRGF**	**Total**
January 2006	N/A	265.39	265.39

[1/] 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.

Decision point - point at which the IMF and the World Bank determine whether a country qualifies for assistance under the HIPC Initiative and decide on the amount of assistance to be committed.

Interim assistance - amount disbursed to a country during the period between decision and completion points, up to 20 percent annually and 60 percent in total of the assistance committed at the decision point (or 25 percent and 75 percent, respectively, in exceptional circumstances).

Completion point - point at which a country receives the remaining balance of its assistance committed at the decision point, together with an additional disbursement of interest income as defined in footnote 2 above. The timing of the completion point is linked to the implementation of pre-agreed key structural reforms (i.e., floating completion point).

Safeguard Assessment:

As Fund policy requires, the Bank of Ghana was subject to a safeguards assessment with respect to the PRGF arrangement approved on May 9, 2003. The assessment, which was completed on October 15, 2003, made recommendations for addressing specific vulnerabilities in the external audit, financial reporting, internal audit, and internal controls areas. The authorities confirmed that all measures proposed were implemented.

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 April 2008 the average exchange rate for transactions in the interbank market was GH¢1.005 per U.S. dollar.

Article IV Consultation:

On May 9, 2003, the Executive Board concluded the 2003 Article IV Consultation with Ghana (*IMF Country Report 03/133*), endorsed the Ghana Poverty Reduction Strategy as a sound basis for promoting growth and reducing poverty, and approved a three-year PRGF arrangement amounting to SDR 184.5 million (50 percent of quota). On May 18, 2007, the Executive Board concluded the 2006 Article IV Consultation with Ghana (*IMF Country*

Report 07/210) and the third review of the PRGF arrangement (www.imf.org/external/GHA/index.htm).

FSAP Participation:

Ghana participated in the FSAP in 2000–01, and a Financial System Stability Assessment (FSSA) was issued to the Executive Board in 2001. An FSAP update was presented to the Board in December 2003.

Technical Assistance, 2002–May 2008:

Fiscal Affairs Department: *All Ministry of Finance:* peripatetic advisor on establishing a large-taxpayers unit, February 2002–January 2003; review of public expenditure management reforms and assessment of long-term advisor, August 2002 and March 2003; tax peripatetic, May 2003; fiscal ROSC, February 2004; regional advisor on public expenditure management, August 2004–June 2006; evaluation of impact of new pricing mechanism for petroleum products on poor and vulnerable households, January 2005; improve public financial management in Ghana, March-June 2006; enhancing fiscal discipline, May 2008.
International Capital Markets: *Bank of Ghana*: pilot study of access to private capital, May 2003. *Bank of Ghana and Ministry of Finance*: access to international capital markets, November 2004.
Legal Department: *Bank of Ghana:* the remittance market, April–May, 2006.
Monetary and Capital Markets Department: *All Bank of Ghana (with Ministry of Finance)*: accounting and internal audit reform, July 2002, November 2002, and March 2003; foreign exchange market, government securities market, and banking system issues, April 2003; joint FSAP follow-up with the World Bank, June 2003; multitopic technical assistance initiation, November 2004; improving monetary operations, banking supervision, and payment systems, May 2005, Medium-Term Debt Management Strategy (MTDS), March 2008.
Statistics Department: *Bank of Ghana:* money and banking statistics, July 2002, January–February 2004, April 2007, March 2008. *Ghana Statistical Service:* national accounts statistics, September and October 2001; August, November, and December 2002; and May and September 2003; national accounts and prices, March and October 2004, April–May 2005, April–May 2006, and September 2006; government finance statistics, March 2005. *Ministry of Finance and Economic Planning:* government finance statistics, May–June 2006.

Resident Representative:

The Fund has had a Resident Representative office in Accra since June 1985. The current resident representative, Mr. M. Arnold McIntyre assumed the post in August 2006.

APPENDIX II. IMF-WORLD BANK RELATIONS

(As of February 15, 2008)

I. PARTNERSHIP IN GHANA'S DEVELOPMENT STRATEGY

1. Ghana's development objectives are stated in the Ghana Growth and Poverty Reduction Strategy (GPRS II) presented to parliament in October 2005. The objectives of the GPRS are to create an environment favorable to private sector–led growth and sustainable poverty reduction, and to create room within the Government's budget for increased expenditures on education, health, and other priority services. The overarching objective of GPRS II is for Ghana to attain middle-income status by 2015, which entails maintaining annual real GDP growth rates of at least 6 percent. High real GDP growth rates are expected to result in positive social change and improvements in the quality of life for everyone.

2. The Bank and Fund teams are closely coordinating their policy advice to the Ghanaian authorities. There is collaboration in terms of common objectives and joint support for implementation of Ghana's GPRS, through for instance the recently completed joint assessments such as the 2006 Joint Staff Advisory Note (JSAN) of the GPRS II.

3. The GPRS II, and before that the Ghana Poverty Reduction Strategy (GPRS I), created the momentum for a group of development partners (DPs) to align their assistance through a Multi-Donor Budgetary Support (MDBS) agreement with the Government of Ghana (GoG). The GoG and DPs consider the MDBS to be the basis for supporting implementation of GPRS II through the budget. Building on gains made over the last few years, GoG representatives and their development partners (nine bilaterals and four multilaterals, including the World Bank) agreed on February 25, 2005, to work together according to the principles established in "Harmonization and Alignment in Ghana for Aid Effectiveness: a Common Approach for Ghana and its Development Partners." The principles agreed in that document were made operational at the November 2005 Consultative Group Meeting with the adoption of a Harmonization and Aid Effectiveness Action Plan.

4. Building on the GPRS II and the Ghana Harmonization and Aid Effectiveness Action Plan, Ghana's DPs signed a Ghana Joint Assistance Strategy (G-JAS) on March 1, 2007 which was prepared in consultation with Government and civil society, as a response to the formulation of Government priorities set out in the GPRS II. The G-JAS provided the partnership context for the Bank's CAS discussed at the Bank's Board on June 20, 2007.

II. THE WORLD BANK GROUP COUNTRY ASSISTANCE STRATEGY AND PORTFOLIO

5. The Bank Group strategy rests on three overarching objectives: increasing growth, reducing poverty and reducing inequality. To achieve these objectives, the Bank also seeks to deepen its collaboration with other development partners through the MDBS framework, as well as through other partnership programs, such as those existing in sector programs for Health, Education, Energy, Environmental Governance and Natural Resource Management,

Private Sector Development, Public Sector Reform, Public Financial Management and Water and Sanitation. These partnerships also aim to harmonize approaches to the following: preparation of analytical work; joint assessment of fiduciary underpinnings for sector and general budget support; mission management; and program-based assistance.

6. As of February 15, 2008, the World Bank has approved 133 loans, credits and grants for a total of $5.617 billion. The current portfolio consists of 24 operations (including Regional IDA and GEF support), as summarized in the table below, in the areas of infrastructure, health and education, and government services totaling about $1.178 billion with an undisbursed amount of $754 million.

7. For the period covering the Bank's Fiscal Years (FY) 2008 and 2009, the proposed lending program supports the objectives laid out in the CAS through of three development policy operations in (i) agriculture, (ii) environmental governance; (iii) decentralization; (iv) social protection, and (v) the ongoing PRSC series, as well as investment operations in the transport sector, ICT, and results-based management. These operations are subject to discussions with the Government and the availability of IDA resources. A program of analytic work includes a recently-completed country economic memorandum, a forthcoming poverty assessment, and an annual external review of public financial management.

III. IMF-World Bank Collaboration in Specific Areas

8. As noted above, the Bank and Fund teams closely coordinate their policy advice to the Ghanaian authorities, with a common objective of supporting the implementation of Ghana's GPRS.

9. Areas where the Fund leads. The IMF leads the policy dialogue on macroeconomic policies, such as fiscal and monetary policies. The IMF has supported Ghana's poverty reduction efforts through several arrangements under the Poverty Reduction and Growth Facility (PRGF). PRGF reforms have centered on measures to substantially raise revenue to make room for increased poverty-related spending and development needs, strengthen public expenditure management, and use monetary policy to achieve single-digit inflation. The sixth and final review under the PRGF was completed on October 27, 2006.

10. Areas where the Bank leads. The World Bank, along with other development partners, leads the policy dialogue on economic reforms in sectors such as infrastructure, which encompasses energy, roads, and telecommunications, water, and sanitation; urban and local government; agriculture and rural development; human development; and private sector development and public sector reform.

11. Areas of shared responsibility. The IMF and World Bank staffs collaborate closely in supporting the GoG's structural reforms in budgeting, expenditure and financial management, public sector reform and privatization, and in the financial sector. Bank support to governance and public sector management is provided through the ongoing Economic Management Capacity Building project, as well as through the PRSC series.

ANNEX I
Financial Relations with the World Bank Group

(Active Portfolio as of February 15, 2008 in millions of U.S. Dollars)

Project Name	Approval Date	IDA/GEF Commitments	Undisbursed Amount of Active Projects
Trade Gateway and Investment	07/09/1998	50.5	13.0
Road Sector Development	07/26/2001	220.0	9.4
GEF Northern Savanna	03/12/2002	7.6	0.2
Land Administration	07/31/2003	20.5	12.9
Education Sector Project	03/09/2004	78.0	46.3
2nd Urban Environment and Sanitation	04/29/2004	62.0	56.9
Urban Water 1/	07/27/2004	103.0	86.5
Small Towns Water Supply	07/27/2004	36.0	20.7
Community-Based Rural Development	07/29/2004	60.0	16.5
Multisectoral HIV/AIDS program	11/15/2005	20.0	15.5
Economic Management Capacity Building	11/15/2005	35.0	32.1
Micro, Small, and Medium Enterprise Dev't.	01/05/2006	45.0	45.9
e-Ghana	08/01/2006	40.0	40.8
Urban Transport Project	06/21/2007	45.0	44.9
GEF Urban Transport Project	06/21/2007	7.0	6.0
Energy Development and Access	07/26/2007	90.0	94.0
GEF Rural Energy Access	07/26/2007	5.5	5.5
Health Insurance Project	07/03/2007	15.0	15.9
Nutrition and Malaria Control for Child Survival	07/03/2007	25.0	23.4
West Africa Gas Pipeline 2/	11/23/2004	8.0	0.0
Regional HIVAIDS Treatment Project	06/17/2004	59.8	18.3
West Africa Power Pool APL-1 Phase 1	06/30/2005	40.0	36.8
West Africa Power Pool APL-1 Phase 2	06/29/2006	60.0	64.2
West Africa Agricultural Productivity Program	03/29/2007	45.0	48.0
Total		**1,177.9**	**753.7**

Source: World Bank
1/ IDA Grant
2/ IDA partial risk guarantee up to US$50.0 million (of which 25 percent is IDA commitment) to protect commercial parties against sovereign risk.

For additional information, please contact Barbry Keller, Country Officer ((202) 458-5610) or Carlos Cavalcanti, Senior Economist, ((202) 458-9076).

APPENDIX III. GHANA: STATISTICAL ISSUES

1. **Data provided to the Fund are broadly adequate for surveillance purposes, but the quality and timeliness of certain data need to be improved.** There are notable deficiencies in the dissemination of statistical information to the public, as well as in the reporting for Fund publications, although the situation has improved recently with the publication on the Bank of Ghana's Web site of the Monetary Policy Committee Statement, Statistical Releases, and monthly monetary series for 2001–06. Data for publication in the *International Financial Statistics (IFS)* on international transactions were last reported for 2006, and monthly government finances for 1998, and on national accounts for 1997. No monthly or quarterly fiscal or 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 2004. However, these data cover only the cash revenue and expense transactions of the budgetary central government. Also, there have been long delays in the release by the Ghana Statistical Service (GSS) of census and survey results, irregularity in the quarterly statistical digest. The authorities are making efforts to improve the quality and timeliness of economic and financial data through participation in the Fund's General Data Dissemination System (GDDS) and the external sector and government finance statistics modules of the GDDS Project for Anglophone African Countries. GDDS metadata have been posted on the Fund's Dissemination Standards Bulletin Board (DSBB) since July 2005, but need to be updated.

National accounts and prices

2. The IMF's Statistics Department has provided TA on national accounts (NA) over the period 2001 to March 2008. A "bundled" TA mission visited Accra during March 12–26, 2008. The main objectives of this mission were to assist the 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.

3. As a result of a methodological change in the compilation of consumer prices in 1999, both the consumer price index (CPI) and the rate of inflation for the 1999-2001 period may be underestimated. To address problems in the compilation of price statistics and national accounts, a peripatetic advisor was assigned to Ghana during 2001–04. Follow-up technical assistance has been provided under the GDDS project for Anglophone Africa. Work on updating the CPI weights using the fourth Ghana Living Standard Survey (1998/1999) was completed in mid-2006. In March 5–16, 2007 STA assisted the GSS in developing a producer price index (PPI). As planned, the new PPI was released on March 15, 2007.

4. The mission found that the project for rebasing the national accounts series to 2002 was only partly finalized, and that estimates for 2002 to a large extent were based on volume extrapolation from the current base year 1993. Compared to this, the TA mission determined that the 2004 Supply and Use Table (SUT) includes more updated and comprehensive

sources. The mission concluded that the quality of the national accounts estimates are higher in the SUT 2004 than in the rebasing 2002 project, and recommended that 2004 SUT should be the basis for benchmarking the national accounts. The mission also pointed out some minor areas where changes to the estimates should be undertaken. In addition, there are still some concepts and methods that need to be addressed further to insure compliance with the *1993 SNA*.

5. 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 have 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 cover also 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) and which could be carried out on a more frequent basis; and (iv) carry out an agricultural census.

Labor statistics

6. **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.

Public finance

7. **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 are, for example, discrepancies in the data reported by the CAGD and the BOG. Above-the-line data from the CAGD are narrower in institutional coverage than below-the-line BOG data. 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. However, the economic classification is not sufficiently detailed for data to be compiled in accordance with the requirements of *GFSM 2001*. In June 2006 a STA mission proposed classification of transactions in line with international guidelines.

8. **There are also problems of transactional coverage.** The CAGD and the BOG have been missing a substantial part of central government spending, such as donor flows disbursed directly to ministries and those arising from internally generated funds. They have also had difficulties in accounting for expenses paid by extrabudgetary funds. The operations of special funds, such as the SSNIT, 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.

9. **Central government fiscal developments are primarily monitored from below-the-line BOG data.** Above-the-line fiscal aggregates are monitored by a combination of cash-flow data from the BOG and identifiable components of revenue and expenditure provided by the Ministry of Finance and Economic Planning (MOFEP) and the CAGD. The BOG produces revenue, debt service, and domestic financing data. The MOFEP Aid and Debt Management Unit provides external debt data and information on foreign project loan and grant disbursements. The CAGD provides data on noninterest recurrent expenditure and domestically financed capital expenditures. The compilation of a full set of integrated accounts that record stocks and flows for all the subsectors of the general government, in accordance with *GFSM 2001* guidelines, could improve and harmonize the fiscal accounts.

10. **Comprehensive solutions to some of the data problems may have to await full implementation of the new BPEMS system and incorporation of Fund technical advice.** Various missions from FAD have suggested short-term, temporary solutions to alleviate current data quality problems. A long-term advisor from FAD has been working on public expenditure and debt management issues in the Ministry of Finance since August 2001. A joint Bank-Fund mission in 2004 assessed progress on monitoring poverty-related spending through the Heavily Indebted Poor Countries (HIPC) Assessments and Actions Plans; a Fiscal Transparency Report on Observance of Standards and Codes (ROSC) was undertaken in July 2004; and STA provided further technical assistance in March 2005.

11. **The country has elected to participate in the UK Department for International Development (DFID) under the Phase 2 initiative, which is a continuation of the DFID General Data Dissemination System Project for Anglophone Africa.** The purpose of this project is to enhance the capacity of participating countries' statistical systems. The DFID Phase 2 Project will rely on the GDDS framework to introduce improvements in fiscal reporting based on the methodology of the *GFSM 2001.* The Project ends in April 2009 and is expected that two or three missions will be required to complete the GFS module. An STA mission recommended an enhancement of the chart of accounts so as to include financing transactions and additional details on revenue and expense classifications. This mission also assisted the authorities with bridging their data with the *GFSM 2001* framework. It recommended establishing an interagency working group to delineate the general government sector to ensure consistency of coverage amongst all datasets. The mission has also initiated the compilation of data for extrabudgetary and social security funds and

recommended, as a first step, to expand coverage of fiscal data to at least the consolidated central government.

Monetary statistics and international reserves

12. **The 2007 monetary and financial statistics mission found out that although BOG had made significant progress implementing the previous missions' recommendations, further work was needed to improve the methodological soundness of the data.** There were still problems in the application of the residency criterion in the BOG accounting data used as the source to generate monetary statistics, and in the sectorization of the government accounts with other depository corporations (ODCs). The misclassification of central government deposits as public enterprises deposits, and vice versa, distorted key credit and monetary aggregates. The mission assisted BOG to automatically derive the standard forms to report monetary statistics (SRFs) for the central bank (SRF 1SR) and the ODCs (SRF 2SR) to STA, in light of the recommendations of the *Monetary and Financial Statistics Manual*. The BOG currently reports monthly data with a lag of four to six weeks, and data from the ODCs with a lag of eight to ten weeks.

13. **The March 2008 follow-up mission** found that significant progress has been achieved in implementing the key recommendations of the 2007 MFS mission, especially with regard to improvements in the data for the ODCs. In particular, monetary data for September 2007 onward, which are based on the new classification of general government units, indicate that central government deposits at the commercial banks were nearly twice as large as the amounts shown in the unrevised data. Problems related to the introduction of a new financial management information system hampered progress in improving the quality of the central bank's data. The mission agreed with the BoG staff on a plan to expand the coverage of the ODCs to include the savings and loans companies, rural banks, money market mutual funds, and credit unions; and compiled a comprehensive list of the financial corporations operating in Ghana, including the timing and frequency of the data reported to the various regulatory agencies. The mission proposed that the BoG starts compiling the Other Financial Corporations Survey, covering the finance houses and leasing companies, by end-September 2008.

Debt statistics

14. **The responsibility for external debt recording and payment is divided among three agencies**. The 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.

15. An FAD technical assistance mission in 2001 concluded that **the three institutions needed to improve the transparency and accountability of external debt management**. The authorities should (i) develop a single computerized database that is available to all three institutions; (ii) formalize procedures used for settling debt payments (including obtaining debt notification from donors, delegating signing authorities of officials within the relevant organizations, and creating registers tracing the movement of the documents required to effect external debt payment); and (iii) improve the analytical content and timeliness of data, which are not currently reported at regular intervals.

16. 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.

Trade and balance of payments statistics

17. Since 1982 the BOG Research Department has had primary responsibility for the compilation and presentation of the annual and quarterly balance of payments statistics. The main data sources are the Customs Excise and Preventive Service (CEPS), administrative data (government ministries and departments within BOG), commercial banks, and the GSS. In addition, the BOG carries out simple financial surveys on other corporate entities that are involved in transactions with nonresidents. Data are compiled based on the *Balance of Payments Manual, Fifth Edition (BPM5)*.

18. **Currently, the GSS is not publishing timely monthly trade statistics, although the data are available from the 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.

19. **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.

20. **The BOG continues to implement the recommendations of a TA mission on balance of payments statistics in 2000,** including surveys of key establishments. (A survey of shipping companies was introduced in 2004, but the companies at that time were unable to submit the required data). Collaboration among the government agencies responsible for data collection, moreover, has improved. A new immigration form to capture data on travel statistics, in line with the Tourism Satellite Account designed by an interinstitutional committee, was introduced in March 2005. The survey on private capital flows carried out in

2000 was published, and the BOG intends to implement a second phase of the capital flow project. Ghana is also expected to benefit from a DIFID project being implemented by STA on strengthening capacity for balance of payments and international investment position statistics, of which monitoring capital flows is a key component.

GHANA: TABLE OF COMMON INDICATORS REQUIRED FOR SURVEILLANCE
(AS OF JUNE 4, 2008)

	Date of latest observation	Date received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange Rates	March, 2008	April 2008	D	W	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	March 2008	April 2008	M	Q	Q
Reserve/Base Money	March 2008	April 2008	W	Q	I
Broad Money	March 2008	April 2008	M	Q	I
Central Bank Balance Sheet	March 2008	April 2008	M	Q	I
Consolidated Balance Sheet of the Banking System	March 2008	April 2008	M	Q	I
Interest Rates[2]	March 2008	April 2008	W	W	W
Consumer Price Index	March 2008	April 2008	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	March 2008	March 2008	M	M	I
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Dec. 2007	April 2008	M	Q	I
External Current Account Balance	March 2008	April 2008	Q	Q	Q
Exports and Imports of Goods and Services	March 2008	April 2008	Q	Q	I
GDP/GNP	2007	April 2008	A	A	I
Gross External Debt	Dec. 2007	April 2008	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.

APPENDIX IV. GHANA: SUMMARY OF TAX SYSTEM, MARCH 2008

Tax	Nature of Tax	Exemptions and Deductions	Rates
1. Taxes on income and profits			
1.1. Tax on companies 1.11. Internal Revenue Act, 2000 (Act 592) as amended. Internal Revenue Regulations 2001 (LI 1675) and amendments	Domestic and foreign companies operating in Ghana are taxed on taxable income accruing in, derived from, brought into, or received in the country. Taxable income includes net profits; interest, royalties, and rent income of companies formed exclusively for real estate development but exclude dividends from other companies, which are taxed at 10 percent. For domestic subsidiaries of nonresident companies, a further floor for net profits exists in that the subsidiary's share of the consolidated group profits should at least be equal to the subsidiary's share of group turnover.	Exemptions include the income from cocoa farming, income of other agricultural companies during the first five years of operation, income of waste processing companies during the first seven years of operation and the income of some public corporation and bodies. Deductions allowed include expenditures incurred in the production of income, including interest and rent. Losses incurred in farming are offset and carried forward. Since 1995, a loss incurred can be carried forward for the next five years following the year in which the loss was incurred. This provision is restricted to Farming, Mining, Manufacturing businesses that manufacture mainly for exports in 2002. In the 2006 budget, Agro-processing, Tourism and ICT (software) operators were also added. From 2006 Venture Capital	In addition to the basic rate of 25 percent, the following rates also apply: hotel industry - 25 percent; companies listed on Ghana Stock Exchange - 25 percent; companies listing on Ghana Stock Exchange from January 2004 - 22 percent for the 1st three years non-traditional exports - 8 percent; rural banks - 8 percent ; and Financial institutions' income from loans to farming enterprises or leasing companies - 20 percent. From 2004 the following rates apply to agricultural processing companies: companies located in Accra & Tema – 20 percent, Regional capitals except for Tamale, Bolgatanga & Wa – 10 percent. All other locations – 0 percent

Tax	Nature of Tax	Exemptions and Deductions	Rates
1. Taxes on income and profits			
	.	Financing Companies (which meet the eligibility requirement in Act 680) have a 10 year tax holiday on corporate income, dividends earned and capital gains. They are also allowed to carry losses on disposal of shares during the 10 year holiday forward for an additional 5 years.	
		capital allowances on classes of depreciable assets (*Percent*)	
		Computers and data handling equipment 40	
		Transport equipment 30	Valuation of road vehicles for this purpose is limited to GH¢25,000
		Plant & Machinery used in manufacturing 30 Long-term crop planting costs 30 Mining (exploration and capital expenses) 80 /50 a) costs of exploration, development and production rights b) building and structures used for the above c) Plant and machinery used in mining and petroleum operations	a) 80 percent of the cost base of assets in the year of investment b) 5 percent of asset value is added to written down value of preceding period. and depreciated at 50 percent.

Tax	Nature of Tax	Exemptions and Deductions	Rates
		Railroad, shipping, aircraft, utility, office furniture and equipment and any other asset not included in any of the other classes 20 Buildings 10 Intangible assets cost base / Useful life Since 1995, manufacturing companies located outside Accra receive the following rebates: Accra-Tema - no rebate; all other regional capitals - 25 percent of tax liability; and all other places - 50 percent of tax liability. Location incentives do not apply to the Company's income from non-traditional exports. It is applied to the 25% rate.	
1.12 National Reconstruction Levy Act, 2001 (No. 597). As amended by Acts 637 and 648 both of 2003	An additional profit tax is chargeable on pre-income tax profits of companies for 2001 to 2006	Levy is applicable to exempted companies. Rural or Community banks are exempted.	Repealed by Act 728 of 2007

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2 Taxes on individuals 1.21 Income tax Internal Revenue Act, 2000 (Act. 592) as amended Internal Revenue Regulations 2001 (LI 1675) and amendments.	This tax is payable, subject to the deductions and exemptions noted, on income received by, derived from, brought into, or accruing to, persons in Ghana. In addition to wages and salaries, income includes profits, interest receipts, dividends (which are taxed at the source at 10 percent, final tax), royalties, pensions, rental income (which may be taxed at a 10% final tax), and payments in kind (other than dental and medical costs). Standard assessments, now known as quarterly/monthly/daily advance tax payments, are applied to certain categories of small business owners and self-employed professionals in the course of determining their actual liabilities.	Exemptions include the following: (a) income derived from cocoa production; (b) income derived from farming for an initial period of three-ten years; (c) interest paid by resident Financial Institutions; and (d) Pensions and retirement benefits. Additionally, the income of a wide variety of charitable, educational, religious, and research institutions is exempt. Deductions include a married person's allowance of GHȻ30 for those with two or more dependent children), social security contri-butions (not exceeding 17.5 percent of income), Contributions to a Long Term Savings Scheme (not exceeding 17.5 percent of in come) and life insurance premiums (not exceeding 10 percent of the sum assured, or 10 percent of income). A deduction of GHȻ30 per dependent child attending any recognized registered educational institution is	*Taxable income* *Chargeable Income (GH¢)* — *Tax rate (in percent)* First 240 — Nil Next 240 — 5 Next 1,200 — 10 Next 7,920 — 17.5 Over 9,600 — 25 Income of Resident Individual from Employment *Chargeable income* — *Tax rate (in percent)* Up to Minimum wage — 0% Excess of 5% above minimum wage — 2.5%

Tax	Nature of Tax	Exemptions and Deductions	Rates
		provided, up to three children. A disablement relief of 25 percent of income from any business or employment is provided to disabled persons, while person above 60 years of age engaged in either business or emplyment are granted relief amounting to GH₵35. A relief of GH₵100 is granted for training if it is to update the professional, technical or vocational skills of the person.	
		Other deductions include 30 percent of rental income, as well as rates and mortgage interest relating to the property.	This applies where Rent Income is aggregated with other income
1.22 Capital gains taxes Internal Revenue Act, 2000 (Act 592) as amended.	This tax is levied on realized capital gains from the sale of buildings, businesses, and business assets, including goodwill, land, stocks and shares, and other assets determined by the authorities. Realized capital gains are computed as the price received from the asset less the purchase price and allowable deductions. For Non- Residents only gains on assets in Ghana are chargeable, but for residents it covers gains from assets wherever situated.	In addition to deducting the original purchase price of the asset from the realized sum, deductions are allowed for the cost of improvements and alterations. Capital gains arising during a merger, amalgamation, or reorganization of companies are exempt. Capital gains arising out of the disposal of securities of companies listed on the Ghana Stock Exchange are exempt for the first 20 years of the life of the Ghana Stock Exchange. Other gains not chargeable are those on agricultural land situated in Ghana, Trading stock or a Class 1, 2, 3, or 4 depreciable assets.	Tax payable on the assessed capital gain is computed at a flat rate of 10 percent. The rate was reduced to 5% in 2007. Any gain up to GH₵50 is exempt.

Tax	Nature of Tax	Exemptions and Deductions	Rates
2. Social security contributions			
2.1 Social Security Decree, 1973 (N.R.C.D. 127).	All establishments with five or more employees are required to contribute to the Social Security and National Insurance Trust Fund. Contributions are based upon each employee's earnings, with contributions made by both employer and employee. Employees' contributions are withheld at source. Other employees and self-employed persons may enroll on a voluntary basis.	Enterprises with fewer than five employees are exempt.	*Contribution by:* / *Percent of employees' basic pay:* Employer 12.5 Employee 5.0
3 Selective alien employment tax	Repealed in 1994.		
4. Taxes on property			
4.1 Death and gift taxes			
4.11 Gift tax Internal Revenue Act, 2000 (Act 592).	This tax is levied on the recipient of gifts of land, buildings, securities, business or business assets or money according to a graduated rate that increases with the total open market value of gifts received within any 12-month period.	Asset transfers under a will are exempt, as are gifts between spouses and gifts between a parent and child, and other relatives. Gifts to religious bodies and for charitable or educational purposes are also exempt. Allowable deductions include gifts received up to GH₵50 in value in any 12-month period, provided that the total value of gifts received in the last five years does not exceed GH₵50 in value. Where the five-year total exceeds GH₵50, tax is payable on the balance received in the latest year.	Tax is payable according to a scale that increases with the value of gifts received. *Value of gifts (in GH cedis)* / *Rate of tax (percent)* 0 – 50 Nil 50 or more 10

Appendix IV. Ghana: Summary of Tax System, March 2008 (continued)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5. Taxes on goods and services			
5.1 Value-added tax			
5.11 Value Added Tax (VAT) Act, 1998 (Act. 546), as amended (Acts 595, 579, 629, 639 and 671), with repeal of Customs, Excise, and Preventive Service (Management) (Amendment no. 2) Act 1995 (Act 500) and Service Tax Act, 1995 (No. 501) as amended.	Levied on value added, using the invoice-credit method: VAT is levied on domestic sales and imports, with deductions for VAT paid on inputs to production of taxable goods. Input tax credits carried forward for three months after which, at the taxpayer's option, they can be refunded for exporters. Threshold of GH₵10,000 per year for retailers only.	Zero-rated: exports of taxable goods and services. Also, goods shipped as stores on vessels and aircrafts leaving Ghana. Exemptions: animal, agricultural and agrifood products in their natural state (from Ghana and other ECOWAS member countries (e.g., rice, millet, cassava, yam, guinea corn, plantains, vegetables, fruits, nuts, coffee, cocoa, shea butter, maize, sorghum, and meat). Also exempt are: agricultural and fishing inputs specific in the law; industrial and mining equipment; newspapers and books (not paper used in producing these items); petroleum, diesel and kerosene; medical, dental, and hospital services, other than veterinary services; Essential drugs and active ingredients specified for essential drugs educational and training services	12.5 percent. A flat rate of 3% of turnover has been introduced for traders in the informal sector

APPENDIX IV. GHANA: SUMMARY OF TAX SYSTEM, MARCH 2008 (CONTINUED)

Tax	Nature of Tax	Exemptions and Deductions	Rates
		approved by the Ministry of Education; and fully assembled computers imported or procured locally by educational establishments that are approved by the Minister for Education. domestic use of electricity; and compact fluorescent lamps supply of water (excluding bottled , sachet and distilled water); transportation services; rental of property; construction services; financial services such as insurance; issue transfer, receipt of and money dealing; provision of credit but excluding professional advice; and salt and mosquito nets. Musical Instruments.	
5.2 National Health Insurance Levy		This is subject to the same rules and procedures as VAT.	
5.3 Excise taxes			
5.31 Tobacco Customs and Excise Tariff, 1973; Cigarettes (Special Tax) Decree, 1976 (S.M.C.D. 40); Cigarettes Special Tax (Amendment) Decree, 1977 (S.M.C.D. 111); Cigarettes (Special Tax Law), 1983 (P.N.D.C.L. 73); Budget 1985-98.Customs and Excise (Duties and other taxes) (Amendment) 2000, Act 578	Ad valorem excise duties are applied to all tobacco products. (Specific taxes were introduced for these in 2007 but is yet to be implemented)	None.	Tobacco products are taxed at 140 percent of ex-factory price and the VAT rate of 12.5 percent.

	Tax	Nature of Tax	Exemptions and Deductions	Rates
5.32	Spirits and beer Customs and Excise Tariff, 1973; Beer (Special Tax) Decree, 1975 (N.R.C.D. 342); Beer and Stout (Special Tax) (Amendment) Decree, 1977 (S.M.C.D. 110); 1983 (P.N.D.C.L. 72); Budget 1985-96. Customs and Excise (Duties and other taxes) (Amendment) 2000, Act 578.	Ad valorem excise duties are applied to alcoholic beverages. (Specific taxes were introduced for these in 2007 but is yet to be implemented)	None.	Ad valorem rates of excise duty are applied to: mineral and aerated water (20 percent); beer (50 percent); spirits (25 percent); malt (5 percent); and Akpeteshi (20 percent). All alcoholic beverages are also subject to the VAT rate of 12.5 percent.
5.33	Petroleum products Budget 2005. Customs and Excise (Petroleum Taxes and Petroleum-related levies) Act 2005, Act 685.	From February 28, 2001 onwards, specific excise duties no longer apply to petroleum products. However, earmarked levies are still collected.	None.	Ad valorem duty of 15% was charged on ex-refinery price of petroleum products. Effective 2006 specific levies were charged as follows respectively per liter for premium gasoline – 7.18 pesewas, AGO – 9.10, kerosene – 6.4875pesewas, and RFO – 5.2094 pesewas) Specific levies are charged for the road fund (6 pesewas per liter on premium gasoline and gas oil), the debt recovery fund (5 pesewas per liter for premium gasoline, gas oil, AGO and 3.5 pesewas per liter for kerosene and RFO) and for the exploration and energy fund (0.10 pesewas and 0.05 pesewas respectively per liter for

Tax	Nature of Tax	Exemptions and Deductions	Rates
			premium gasoline, gas oil, kerosene, ATK, and RFO). A social Impact Mitigating Levy of 4.4256 pesewas is charged per liter of premium petrol
6. Taxes on international trade			
6.1 Taxes on imports			
6.11 Customs duties Customs and Excise Tariff, 1973 (L.I. 838); Customs and Excise Tariff (Amendment) Regulations, 1976 (L.I. 1080); Customs and Excise Tariff (Amendment) Regulations, 1977 (L.I. 1286); Customs and Excise Tariff (Amendment) (No.2) Regulations, 1983 (L.I. 1291); Customs and Excise Tariff (Amendment) Regulations 1984 (L.I. 1309); Minerals and Mining Law, 1986 (PNDCL, No. 156) CEPS Management Law; 1993 (PNDCL, No. 330); GIPC Act, 1994 (Act No. 478); Budgets 1985-96, Budget 2001.	Duties are levied on most imported goods, generally as ad valorem taxes on the c.i.f. value, except for some petroleum oils under AS code 2710 which attract specific rates.	Exemptions are granted for special purposes. The beneficiaries of the exemptions include (but this is not an exhaustive list) imports of the Volta Aluminum Company Ltd. (VALCO), Volta River Authority, diplomats, and beneficiaries of donations for health and education purposes, as well as plant, machinery and equipment used in mining. Other exempted goods include: (a) items imported for purpose of exhibition at trade fairs; (b) advertising materials; (c) aircraft parts; (d) passengers' baggage and effects not for resale; (e) jute bags imported by COCOBOD; (f) agrochemicals; and (g) Foodstuff of West African	Ghana maintains a common tariff, based on the Harmonized System of Customs Classification. There are four ad valorem rates: 0 percent, 5 percent, 10 percent, and 20 percent. A 1 percent processing fee is applied to goods that are statutorily exempt from import duty (except goods imported by VALCO, VRA, diplomatic missions, British council, head of state, and technical schemes). All zero rated goods not for education; health and agriculture sectors are also liable to a 1percent processing fee. Old age penalties ranging between 2.5% to 50 % is imposed on imported vehicles over ten years

Tax	Nature of Tax	Exemptions and Deductions	Rates
		origin. Some items that are duty free are: (a) agricultural machinery and tractors; (b) banknotes and coins; (c) crude oil; (d) educational material; (e) newsprint; (f) postage stamps; and (g) veterinary drugs; (h) cash registers (I) compact fluorescent bulbs (j) commercial buses with seating capacity of 30 0r more	
6.12 Customs and Excise Tariff, 2000 (Act 574), as amended by the Customs and Excise Tariff, 2001 (Act 594).	Special import tax of 20 percent was introduced in 2000 on 36 selected products. In 2001, some 32 products remained subject to the tax but the rate was reduced to 10 percent. The tax has now been abolished by Act 631.	None.	
6.13 Export Development and Investment Fund Act, 2000 (No. 582).	Export development and investment fund levy. ECOWAS Community Levy on imports originating from third countries.	Petroleum products.	0.5 percent of c.i.f. value.
6.2 Export taxes			
6.21 Cocoa export tax All laws under taxes on international trade have been consolidated into the Customs, Excise and Preventive Service (Management) Law, Part	A tax is levied on the f.o.b. price received by the Ghana Cocoa Marketing Board for all cocoa exported from Ghana.	None.	The cocoa export tax rate is determined by the Minister of Finance. Usually, 100 percent of all proceeds received from cocoa exports after paying producers' costs and COCOBOD's marketing and other costs are transferred to

Tax	Nature of Tax	Exemptions and Deductions	Rates
			the central budget.
III; and Customs and Excise (duty rates and taxes) Law, 1991 (P.N.D.C 262); Budget 1992-01. Customs and Excise (Duties and other taxes) (Amendment) 2000, Act 578; 2001 budget.			A processing fee of 1% of CIF value is charged on goods re-exported fr the central budget.om bonded warehouses
	Destination Inspection fee.		1perent of c.i.f. value.
6.22 Budget 2005	Tax introduced in 2001 budget on curls, logs, (squared and round), and lumber. The tax on curls was taken off by Act 686	None.	0 percent of f.o.b. value on lumber and curls. 20 percent on logs (round or square).
7. Other taxes			
7.1 Stamp duties Stamp Duty Act, 2005 (Act 689) Repealed all earlier stamp duty legislation	Ad valorem or specific rates of tax are levied on a range of legal documents and instruments, including bills of exchange, promissory notes, bills of lading, agreements, conveyances, extracts from registers, and mortgages.	Exemptions include instruments transferring ships, transactions where the government would be liable for the stamp tax, and the transfer of company shares to a Ghanaian citizen.	Duties are both specific and ad valorem, varying with the particular instrument. Examples of rates are: *Category* *Rate* Mineral lease GH₵25 Agreement 50pesewas Mortgages Between 0.25 to 0.5 percent of the amount
7.2 Other taxes not elsewhere classified			
7.21 Taxes on minerals and mining Minerals and Mining Law	The Minerals and Mining Law makes taxable any holder of a mining lease. Tax is also payable on the carry-forward cash balance of an individual	Exemptions include: (a) exemption of staff from payment of income tax relating to furnished	Mining operations: 25 percent. Rate of royalty: 3-12 percent, depending on profitability and

Tax		Nature of Tax	Exemptions and Deductions	Rates
	(P.N.D.C.L. 153); Internal Revenue Act 2000 (Act 592) as amended; and Regulations 2001 (L.I. 1675) as amended.	involved in mining operations. There are no tax holidays. Tax jurisdiction under S.M.C.D. 5 makes persons involved in the industry taxable on income accruing in, derived from, brought into, and received in Ghana for resident companies subject to deductions and exemptions noted.	accommodation at the mine site; (b) personal remittance quota for expatriate personnel free from any tax imposed by any enactment for the transfer of external currency out of Ghana; and (c) exemption from the selective alien employment tax under the Selective Alien Employment Tax Decree (N.R.C.D. 201).	certain operating costs.
7.22	Airport Tax Act, 1963, as amended 2001 (Act. 596).	Payable by every passenger departing from an airport.	None.	Outside Ghana: US$ 50. Inside Ghana: GH¢1.
7.23	Petroleum Income Tax Law 1987 (P.N.D.C.L. 188).	This law covers all persons carrying on petroleum operations and is payable on income from the sale of petroleum less deductions	Deductions allowed: (a) rent; (b) interest paid on loans; (c) repairs of premises used for the business; (d) bad and doubtful debts; (e) contributions to a pension fund approved by the Commissioner where such contributions exceed 25 percent of the employees' remuneration, a 25 percent deduction is allowed; and (f) losses incurred during a previous year of accounting, with the deduction being a sum equal to or less than the amount of such loss.	Petroleum companies: 25 percent*, unless a provision is made in a particular petroleum agreement making alternative arrangements for paying the tax at a different rate, or another tax altogether.
		An additional profit tax is chargeable on the carry-forward cash balance of a year of assessment. The qualifying expenditure governing the	None.	25 percent Current recommended rate of return: 17.5 percent

Tax	Nature of Tax	Exemptions and Deductions	Rates
	determination of capital allowance under this law is deemed to have been incurred during January 1 to December 31, 1984 at a value to be determined by the Ministry of Finance and Economic Planning. The Secretary for Finance and Economic Planning has the responsibility for fixing the rate of return for the operation.		

Source: Ghanaian authorities.
* 2006 budget statement.

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IMF Executive Board Concludes 2008 Article IV Consultation with Ghana

On June 30, 2008, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Ghana .[1]

Background

The Ghanaian economy maintained strong growth of about 6½ percent in 2007 and the first months of 2008. The private sector has responded positively to macroeconomic stability, structural reforms, and an increasingly business-friendly environment. But fiscal spending also increased, leading to excess demand. Supply-side shocks, especially from international fuel prices, have impacted Ghana negatively, although overall, Ghana's terms of trade continued to improve. As a result, fiscal and external account deficits have widened, and inflation has risen.

Recent economic growth in Ghana has been broad-based, and agricultural production has remained good, although floods in the northern region of the country caused some

[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.

localized food shortages and sharp price increases. The fiscal deficit (including grants) continued to rise to 9 percent in 2007, reflecting both investments of about 2½ percent of GDP to address energy bottlenecks and policy slippages with regards to utility pricing and the wage bill. Due to delays in passing on the increase in oil prices to utility consumers, and despite the eventual and significant price increases, utility prices have remained well below cost recovery levels, giving rise to large budget subsidies. The wage bill was higher-than-budgeted because of hiring outside the centralized budget process and higher than budgeted wage growth. Revenue performance continued to be robust, except for the gold sector. The fiscal deficit was financed by both domestic and external borrowing, including Ghana's first external sovereign bond issue and purchases of local currency denominated debt by non-residents. As a result, total public debt reached 50 percent of GDP at the end of 2007, up eight percentage points of GDP from the end of 2006.

Headline inflation reached 16.9 percent at the end of May 2008, driven by domestic demand pressures and rising world oil and, to lesser extent, food prices. Inflation had remained stable around 10 percent from early 2006 to October 2007. Since then, both headline and core (excluding energy and utilities) inflation have been rising sharply, despite increases in the Bank of Ghana's policy rate. These pressures also pushed Ghana's current account deficit (including grants) to 11 percent of GDP in 2007, as continued export growth and terms of trade improvements were more than offset by rapidly rising imports. Nevertheless, strong capital inflows enabled Ghana to increase the level of international reserves, but the import coverage fell to 2.6 months of imports due to rapid import growth. The Cedi depreciated vis-à-vis the U.S. dollar by 7 percent from May 2007 to May 2008.

Structural reforms have advanced in many areas but slowed in others. Financial sector reforms have continued, the debt management system is being upgraded to include a medium-term debt management strategy, and advances are being made in fiscal decentralization. Public Financial Management (PFM) reforms have also continued, but expenditure slippages in 2006 and 2007 have exposed remaining weaknesses. On the other hand, civil service reforms have slowed down.

Executive Board Assessment

Executive Directors noted Ghana's continued strong growth performance and particularly the dynamism of the private sector. They noted the earlier gains in macroeconomic stabilization and debt reduction as well as the structural reforms since the early 2000s that have underpinned this favorable economic performance, and built a strong foundation for achieving Ghana's goals of accelerating progress toward achieving the Millennium Development Goals and attaining middle-income status within a decade.

At the same time, Directors noted that since 2007 the fiscal expansion along with strong private sector demand growth, combined with the recent oil and food price shocks, have led to high fiscal and external current account deficits, rising inflation, and a weakening of the international reserve position. Directors noted that the risks associated with these developments could jeopardize Ghana’s significant and hard-earned achievements earlier in this decade. Directors accordingly urged the authorities to give priority to the near-term policy challenge of pulling back from the recent expansionary fiscal policies. Limiting the fiscal deficit would also support the further “crowding in” of the private sector. Directors welcomed the authorities’ recognition of these challenges, and of the need for policy actions to ensure macroeconomic stability and for macro-critical structural reforms to meet Ghana’s continuing development challenges.

Directors agreed that fiscal policy should carry the brunt of the adjustment. They welcomed the adjustment measures announced by the authorities this year as positive steps. These include moving toward cost recovery in utility pricing starting with high-voltage users, containing the rise in the public sector wage bill by temporarily freezing public sector employment (beyond the automatic absorption of trainees in health and education), and enhancing government revenue from the gold sector. Directors stressed the importance of maintaining the public sector wage bill in line with the budget. They encouraged the authorities to take additional measures, including cutting or postponing nonessential expenditure.

Directors stressed that further fiscal adjustment will be needed over the next few years to support macroeconomic stability, to ensure debt sustainability, and to make room for sustained private sector growth. Key to lowering the deficit will be the establishment of cost-recovery utility pricing for all users and the re-introduction of an automatic utility price adjustment mechanism. These steps should be accompanied by well-targeted utility subsidies for poor households. The wage bill will need to be contained through implementing civil service reform that allows for right-sizing and increasing wages for high-skilled personnel. Directors welcomed the authorities’ recognition that Ghana’s oil production prospects should not weaken the resolve for macroeconomic discipline nor defer essential fiscal reforms.

Directors noted that the recent joint IMF-World Bank external debt sustainability analysis (which excludes the potential impact of the recent oil discovery) points to an increase in the risks of external debt distress, although these risks are still moderate. They underscored the importance of preserving the gains from debt relief. Directors also noted that the oil prospects, once confirmed, can improve the debt dynamics significantly, provided that the resources are used efficiently. A number of Directors encouraged the authorities to adopt a comprehensive debt management framework and to utilize fully Ghana’s concessional financing possibilities that still exist. Directors considered that total public debt should be the main focus for debt sustainability, in light of the rapid rise in domestic debt and the decreasing level of debt concessionality.

Directors noted that inflation has risen as a result of both domestic demand pressures and rising oil, and to a lesser extent, food prices. They supported the Bank of Ghana’s ongoing monetary tightening and noted its readiness to further tighten monetary policy to bring inflation toward its medium-term target. Directors noted that the monetary policy framework has been enhanced by last year's introduction of an inflation targeting regime. Many Directors recognized the challenges in this early stage of implementation and noted that the experience gained would be important in further strengthening the inflation targeting framework. Directors stressed, however, that monetary policy alone cannot fight inflation, and its effectiveness should be enhanced through fiscal consolidation.

Directors welcomed the recent exchange rate flexibility, which has helped the Ghanaian economy to adjust to shocks and has supported the implementation of the inflation targeting regime. They noted the staff's finding that the exchange rate, in real effective terms, appears broadly in line with fundamentals. Directors noted that the level of reserves remains low, and encouraged the authorities to increase it. Several Directors suggested that the authorities consider steps to phase out foreign exchange surrender requirements.

Directors considered that financial deepening is desirable, but the very rapid credit growth to the private sector in recent years calls for enhanced regulation. They welcomed the increase in banks' minimum capital requirements and the introduction of elements of the more risk-sensitive regulatory framework of Basel II, as well as increased on-site supervision. Additional macro-prudential measures will be required if rapid credit growth were to continue.

Directors supported the authorities' intention to enact a fiscal responsibility law, particularly in light of the need to anchor fiscal policy in anticipation of possible oil revenue. Oil prospects can materially improve Ghana's medium-term outlook for growth, debt sustainability, and poverty reduction, if the resources are well managed and used effectively. Directors commended the authorities for having started a broad-based national consultation on Ghana's oil management regime.

Ghana: Selected Economic and Financial Indicators, 2005–09

	2005	2006	2007 Est.	2008 Proj.	2009 Proj.
	(Annual percentage change; unless otherwise specified)				
National accounts and prices					
Real GDP	5.9	6.4	6.3	6.5	5.8
Real GDP per capita	3.2	3.7	3.6	3.8	3.2
GDP deflator	15.0	12.8	14.4	16.2	10.4
Consumer price index (annual average)	15.1	10.2	10.7	14.3	10.5
Consumer price index (end of period)	14.8	10.9	12.7	13.8	10.5
External sector					
Exports, f.o.b. (percentage change, in US$)	0.7	33.3	11.7	34.4	5.6
Imports, f.o.b. (percentage change, in US$)	24.4	26.3	19.4	28.2	7.9
Export volume	-0.9	15.4	-3.6	10.0	6.3
Import volume	14.2	14.4	14.6	10.8	5.6
Terms of trade	-6.8	4.7	11.1	5.6	-2.8
Nominal effective exchange rate (end of period)	7.1	-8.2	-10.8	…	…
Real effective exchange rate (end of period), (depreciation -)	19.8	-1.0	-2.9	…	…
Cedis (new) per U.S. dollar (end of period)	0.91	0.92	0.97	...	…
Money and credit					
Net domestic assets[1]	5.8	13.4	33.3	28.0	18.9
Credit to the private sector (year on year)	50.6	42.7	60.0	38.7	39.1
Broad money (excluding foreign currency deposits)	13.7	39.4	43.5	30.9	22.2
Velocity (GDP/average broad money)	4.3	3.5	3.0	2.8	2.7
Prime rate (Bank of Ghana; percent; end of period) [2]	15.5	12.5	13.5	16.0	…
	(Percent of GDP; unless otherwise specified)				
Investment and saving					
Gross investment	29.9	30.4	33.7	32.7	32.3
Private [3]	17.9	18.0	19.5	18.7	18.5
Central government	12.0	12.4	14.2	14.0	13.8
Gross national saving	22.8	21.4	22.8	19.5	19.7
Private [3]	12.0	13.5	15.1	14.8	15.1
Central government	10.8	7.8	7.7	4.7	4.6
Government operations					
Total revenue	23.8	21.9	22.5	23.0	23.6
Grants	5.2	5.4	6.0	4.9	3.9
Total expenditure	30.7	34.4	37.0	37.7	38.1
Overall balance (including grants)	-3.0	-7.5	-9.1	-10.3	-10.7
Net domestic financing	-1.7	5.0	1.3	5.5	6.9

Total government debt	77.1	41.9	49.8	51.4	56.3
Domestic debt	17.9	24.8	26.1	26.6	29.6
External debt	59.2	17.1	23.7	24.8	26.7
External sector					
Current account balance (including official transfers)	-7.0	-9.0	-10.9	-13.2	-12.6
Current account balance (excluding official transfers)	-12.4	-12.8	-15.1	-16.6	-16.3
NPV of external debt outstanding	19.9	17.8	19.6	19.6	21.0
percent of exports of goods and services	55.1	45.4	49.2	44.9	48.2
Gross international reserves (millions of US$)	1,951	2,325	2,738	2,474	2,399
months of imports of goods and services	2.8	2.8	2.6	2.2	2.1
Total donor support (millions of US$)	1,087	979	1,171	1,292	1,283
percent of GDP	10.1	7.7	7.7	7.4	6.8
Memorandum items:					
Nominal GDP (billions of GHc)	9.7	11.7	14.2	17.6	20.5

Sources: Data provided by Ghanaian authorities; and IMF staff estimates and projections.
1/ Percent of broad money at the beginning of the period.
2/ As of May 19, 2008
3/ Including public enterprises and errors and omissions.

Statement by Mr. Jafar Mojarrad, Executive Director for Ghana

June 30, 2008

The authorities thank staff for the policy advice and technical assistance they have provided them in the past years and for their efforts in putting together the documentation for the 2008 Article IV Consultation. They also thank the Board and management for their continued support and the international community for their financial assistance to Ghana, including debt relief under the enhanced HIPC Initiative and MDRI. Support from development partners has complemented the authorities' strong adjustment and reform policies, allowing Ghana to achieve a remarkable record of growth, macroeconomic stability, and poverty reduction. Recently, however, a combination of internal and external shocks has put considerable strain on public finances and the external position. As a consequence, important economic and financial variables have deviated from their intended paths, although the authorities do not consider these to be major policy slippages. Their response to the shocks has been geared to laying a foundation for long-term growth and macroeconomic sustainability. They are determined to safeguard their hard-won gains and would take the necessary measures to get back on track.

Fiscal performance improved markedly during 2001-06, with significant increase in the revenue effort and declines in the budget deficit and domestic debt. Public financial management (PFM) has improved, as Ghana observed an increasing number of the PFM standards for HIPCs. In 2007, however, fiscal performance was affected by the authorities' response to a crippling energy crisis occasioned by a severe drought that affected the main hydroelectric dam. They spent substantial amounts of money to increase power generation capacity, supported the major energy agencies, and provided subsidies to consumers. These actions were critical to averting a slump in economic activity, laying the foundation for future reliable energy supply, and stemming social tension. The energy crisis resulted in frequent power outages and rationing as the authorities implemented a load-shedding exercise to protect the hydroelectric dam from total collapse. In the circumstance, they were unable to apply the automatic pricing mechanism fully, given the risk of stoking social tensions. The authorities spent considerable effort to establish the pricing mechanism backed by an appropriate regulatory framework and targeted subsidies. They are keen to safeguard the mechanism, which had been working well until the crisis. With some stability now restored to energy supply, the authorities are in a position to phase in the pricing mechanism by first reducing the subsidy to non-residential customers and then extending it to residential customers above some consumption threshold. Restoring cost-recovery pricing would also require improvement in operational efficiency of the utility companies.

The wage bill has been another major area of spending overrun. The excess spending went largely to increased hiring for the key health and education sectors. The authorities admit to ineffective application of hiring policy and the need for more work in that area. They also agree on the need to reinvigorate civil service reform to achieve a right-sized, productive, and well-remunerated work force. Keeping the wage bill under control is essential to avoid crowding out priority social and development spending. The authorities see a need for fiscal adjustment to reduce the deficit and domestic debt to sustainable paths. They admit that more needs to be done to ensure effective control of spending. In this connection, PFM will be further improved within an MTEF. A Fiscal Responsibility Law (FRL) is also being prepared with Fund assistance that would buttress fiscal discipline and anchor policy and expectations.

The authorities successfully engineered inflation downward from 40 percent in 2000 to about 10 percent in September 2007. Since then, inflation has been on an upward trend, reaching 16.9 percent in May 2008. Demand pressures have been a contributory factor, resulting from high monetary growth. But supply-related shocks, in terms of high prices of oil and food together with the significant adjustment of utility tariffs in November 2007, have played a major role. The Bank of Ghana (BoG) has actively responded to the rising inflation by tightening policy and will continue to act as needed to contain demand pressures. Despite the policy tightening, private sector credit growth has remained strong. Staff indicate that the BoG policy rate—currently at 16.5 percent—has been barely positive in real terms, but bank lending rates are up to 30 percent, although this has still not dampened credit demand. The transmission of policy through interest rates may be limited in an environment of financial dearth and would require some period of nurturing. Also, as staff recognize in the Selected Issues (SI) paper, perennial supply shocks present additional challenges to disinflation in a small, open, low-income economy like Ghana. In the circumstance, monetary policy runs the risk of precipitating inflation spiral and short-term output loss. Ghana's IT framework is in a very early stage and experiencing the usual growing pains. Moreover, recent supply shocks have complicated its application. The inflation forecast targeting (IFT) framework proposed by staff in the SI paper that adopts a more flexible, forward-looking, and longer-run approach to inflation targeting could be helpful in dealing with these challenges. It could serve as a transition to a full-fledged IT. In any case, the authorities agree that monetary policy alone cannot shoulder the burden of disinflation and will require close coordination with fiscal policy.

The authorities recognize that greater exchange rate flexibility will support monetary policy as well as the response to shocks. They reiterate that they do not target any particular exchange rate, as the substantial nominal depreciation recently shows. The BoG's intervention in the market is limited to smoothing short-term fluctuations, building a desirable level of reserves, and supplying foreign exchange for oil purchases, given that it maintains surrender requirements for cocoa and gold. The surrender requirements are necessary for the BoG to manage the lopsided flow of foreign exchange into the economy, but it remains open to review this policy as conditions permit. The financial sector is generally sound in terms of capital adequacy, liquidity, and profitability. Rapid credit growth, expansion of the sector, and indications of some worsening of asset quality and asset concentration risks, however, call for vigilance. The authorities are continuing with their financial sector reform agenda, including in the areas of risk-based supervision and recapitalization, which will help address the emerging challenges. They will take on board staff's suggestions towards further improving the financial sector.

Ghana's external position has come under strain recently, with the current account deficit widening along with a decline in reserves. A significant increase in imports has contributed to the worsened situation. Most of the increase in imports was in respect of oil, due to the higher price. Non-oil imports have also gone up, attributable largely to energy-related items. Demand pressures must have contributed to the weakening of the external position, but due recognition should be given to the role of higher oil prices and energy-related imports. Oil will probably continue to exert pressure on the balance of payments and reserves for some time until prices begin to turn downwards. The authorities are concerned about the historically low level of income accruing to Ghana from the mining sector, especially the gold sector that has witnessed considerable boom recently. The problem has been created by the exceptionally generous incentives given as inducement to investors. Thus, while gold accounts for a substantial portion of export receipts, its contribution to the country's reserves and budgetary revenue has been minimal. The authorities intend to correct this anomaly by increasing the rate of royalties tax, enforcing current tax laws, and addressing other administrative loopholes. They also intend to reopen some agreements based on present realities and to introduce changes in the tax system.

The authorities worked hard to gain debt sustainability for Ghana, which they are keen to protect. Recent increase in debt indicators, as indicated by staff's updated DSA, has arisen largely from investments in energy and physical infrastructure. These investments should increase the productive capacity of the economy and its growth potential over the long run. Any deviations from debt sustainability should be seen as temporary; it may have to get worse before it gets better as the investments begin to bear fruit. Without making these critical investments today, the economy will settle down to a low-equilibrium and below-potential growth state that cannot support the desired path of poverty reduction and improvement in living standards. It is in recognition of this long-term prospect that Standard and Poor's affirmed in February its 'B' and 'B+' ratings respectively for Ghana's short-term and long-term sovereign debt. The DSA does not appear to take full account of the economic potential engendered by the investments. It is also noted that the DSA is based on average growth of 6 percent, whereas the authorities estimate that at least 7-8 percent rate of growth will be required to achieve the MDGs and launch Ghana into emerging-market status. This higher growth trajectory would require a reexamination of resource, capacity, and policy needs.

The authorities are delighted about the prospect of Ghana producing oil in commercial quantities in the near future. They do not, however, regard this prospect as a substitute for prudent policies. They do not intend to push the oil agenda too strongly and prefer to be conservative in their assumptions. Although oil production would strengthen the balance of payments and debt outlook, the authorities are not counting on this alone and would continue to follow prudent borrowing policies and debt management. They have been taking several important initiatives to prepare for the oil era to avoid the usual pitfalls associated with the management of a major natural resource. These initiatives include a national dialogue on the use of future revenue and consideration of an oil revenue fund and demand management plan. Contemplated improvements in PFM and the introduction of the FRL will also support these efforts.

The authorities recognize that there is scope for improving the quality and timeliness of economic data. In accord with Ghana's goal of achieving emerging-market status, they attach great importance to meeting SDDS standards for data production and dissemination. They continue to count on Fund technical assistance in this regard.

The authorities are once more grateful for the financial and technical support they continue to receive from the Fund and the rest of the development community. They reaffirm their commitment to sound policies and structural reforms to stay on track and preserve the gains Ghana has made. They realize that they have to be extra vigilant and cautious in this election year. They intend to remain closely engaged with the Fund to continue to benefit from its policy advice. They also assure of policy continuity after the elections as a matter of constitutional guarantee.