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CHAD

2012 ARTICLE IV CONSULTATION

March 2013

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 2012 Article IV consultation with Chad, the following documents have been released and are included in this package:

- **Staff Report** for the 2012 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on September 27, 2012, with the officials of Chad on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 30, 2012. 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.
- **Informational Annex** prepared by the IMF.
- **Debt Sustainability Analysis** prepared by the staffs of the IMF and the World Bank.
- **Public Information Notice** (PIN) summarizing the views of the Executive Board.

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CHAD

STAFF REPORT FOR THE 2012 ARTICLE IV CONSULTATION

November 30, 2012

KEY ISSUES

Prospects: In the near term, growth will be stimulated by public investments in infrastructure, bringing on stream new oil developments, and by the recovery of agriculture from the 2011 drought. In the medium term, oil production is expected to rise from 120,000 barrels per day (bpd) in 2011 to about 180,000 bpd in 2015–17, with a corresponding increase in exports and government revenues. However, absent further oil discoveries, proven reserves will be exhausted in twenty years. This highlights the need for diversifying exports and improving the business climate for the non-oil sector.

Oil dependence: Oil accounts for over 70 percent of fiscal revenues, 90 percent of exports of goods, and 35 percent of GDP. As a result, Chad is vulnerable to revenue losses in case of an oil revenue drop. This underscores the need for a savings buffer.

Food security: The 2011 drought exposed more than one million Chadians to severe food shortages, prompting international humanitarian assistance. This experience underscored the need for a national strategy to strengthen resilience to shocks. The cost of ensuring food security should be evaluated and provided for in the budget.

Fiscal policy: In 2011, budget discipline improved, allowing for setting aside some resources as a savings buffer. These gains were short-lived. In 2012, budget discipline weakened and fiscal policy became expansionary. To achieve sustainability, fiscal policy should aim at a gradual tightening of the non-oil primary deficit to build a savings buffer against an oil revenue shock, and smooth the transition to the post-oil era.

Debt sustainability: The external public debt-to-GDP ratio rose from 25 percent in 2010 to 26½ percent in 2011, and will likely rise further over the medium term, reflecting the expected borrowing under the $2 billion (18 percent of 2012 GDP) Master Facility Agreement signed in 2011. To mitigate the associated risk of debt distress, foreign debt-financed investment spending should be paced, taking into account absorptive capacity constraints and the anticipated decline in oil revenues over the long term.

Approved By
Mauro Mecagni and Dhaneshwar Ghura

Discussions took place in N'Djamena from September 11–27, 2012. The staff team comprised Messrs. Wieczorek (head), Fahlberg, Nachega (all AFR), Ms. Teodoru (SEC), and Mr. Topeur (resident economist)

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I. INTRODUCTION

1. **Despite the tensions across the Sahel region, Chad's security situation has been improving**. Episodes of ethnic strife along the Chad-Libya border are still occasionally reported and developments in Mali and Nigeria point to elevated security threats. However, peace with Sudan holds and the pockets of the 2008 rebellion are reported to have disappeared.

2. **Nonetheless, because of past armed conflicts, the 2011 drought, and the recent floods, many residents are in need of humanitarian assistance**. Hundreds of thousands displaced by armed conflicts in Chad and in the neighboring countries live on a nearly permanent basis within Chad's borders.[1] The 2011 drought exposed over one million people to severe food insecurity. The floods of 2012, the full impact of which is yet to be assessed, affected 700,000 people and damaged a significant share of crops.

3. **Recent political developments were marked by personnel changes among high-level civilian and military ranks and a prolonged strike by public sector employees**. In the first half of 2012, high-profile arrests and dismissals, mainly in response to allegations of corruption, led to the replacement of several cabinet members and senior government officials. In late July, public sector employees went on strike demanding large wage increases (100 percent over three years). So far, the government has resisted these demands. However, protests resumed in late October.

II. RECENT ECONOMIC DEVELOPMENTS

Economic performance in 2011–12 has been marked by coming on stream of several large industrial projects. A severe drought provoked a decline in agricultural production, causing a food security crisis and a sharp increase in inflation in late 2011. Some needed fiscal consolidation was achieved in 2011 but was largely reversed in 2012.

4. **Growth slowed in 2011 and inflation accelerated at year's end, while the balance-of-payments strengthened**. After a strong recovery in 2010, real GDP growth slowed to 1.7 percent in 2011 as oil production resumed its downward trend and agricultural production

[1] According to the UNHCR, there are more than 300,000 refugees from the Darfur province of Sudan and from the CAR and over 100,000 internally displaced persons, including returnees from Libya, living in Chad.

was affected by the drought in the Sahel region. The drought also pushed up the prices of food and the overall consumer price inflation accelerated to about 11 percent (year-on-year) at year's end. Helped by the high international prices of crude oil and the completion of several large, foreign-financed industrial projects, the overall balance of payments posted a surplus.

5. **The non-oil primary deficit (NOPD) declined in 2011 and the overall fiscal balance swung from a deficit to a small surplus leaving room for private sector credit expansion**. The NOPD was reduced from 31.2 percent of non-oil GDP in 2010 to 28.1 percent in 2011 as a result of lower security and investment spending. This reduction, although short of the original budget target (18.6 percent of non-oil GDP), was a positive development (Box 1). Helped by soaring oil prices, the overall fiscal balance (commitment basis, excluding grants) shifted from a double-digit deficit in 2010 to a small surplus in 2011. Broad money grew by 12 percent, in parallel with the non-oil nominal GDP. Credit to the economy increased by about 19 percent.

Box 1. Chad: The Implementation of the 2011 Article IV Recommendations

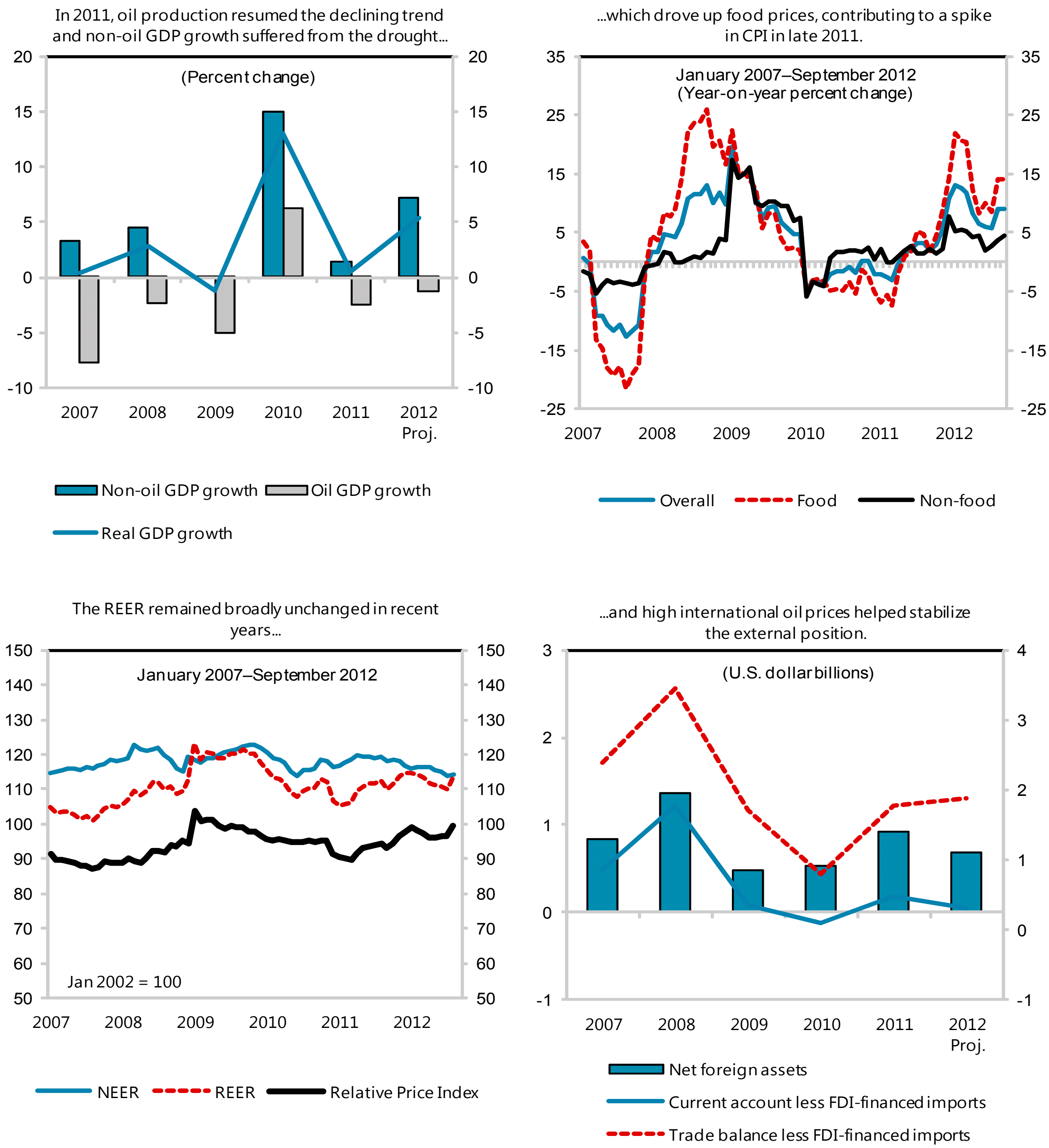
Fiscal policy and sustainability: Staff called for a supplementary budget aiming to contain the non-oil primary deficit to about 26 percent of non-oil GDP in 2011, as a step toward attaining a sustainable fiscal position over the medium term. The authorities adopted a supplementary budget with an NOPD target significantly higher than recommended by staff. Some effort was made to reduce the NOPD relative to the 2010 outturn; however, in 2012, fiscal policy reverted to an expansionary stance.

Public financial management (PFM): Priority measures recommended in this area included: (i) restricting the use of emergency spending procedures (DAO); (ii) eliminating payments to government suppliers in excess of budget allocations; and (iii) observing the public procurement code. Staff also recommended focusing PFM reforms on harmonizing local practices with the new Economic and Monetary Community of Central Africa (CEMAC) guidelines. The recourse to DAOs diminished in 2011, but increased again in 2012, leading to a surge in extra-budgetary spending. No significant progress has been made in other areas.

Policy environment for new enterprises: Staff advised the authorities to ensure that the newly created public enterprises and enterprises partly owned by the state (notably, the oil refinery) operate on a commercial basis and are financially viable. The authorities continue to interfere with pricing decisions of these enterprises, leading to losses and increasingly costly subsidies from the budget.

Strengthening financial sector stability and development: The 2011 FSAP proposed measures to ensure financial sector stability (Box 7). The authorities recapitalized two state-owned banks and a third state-owned bank is being restructured. There was no progress on other recommendations related to cash flow and public debt management, access to credit, the legal and judicial framework, and the pension sector.

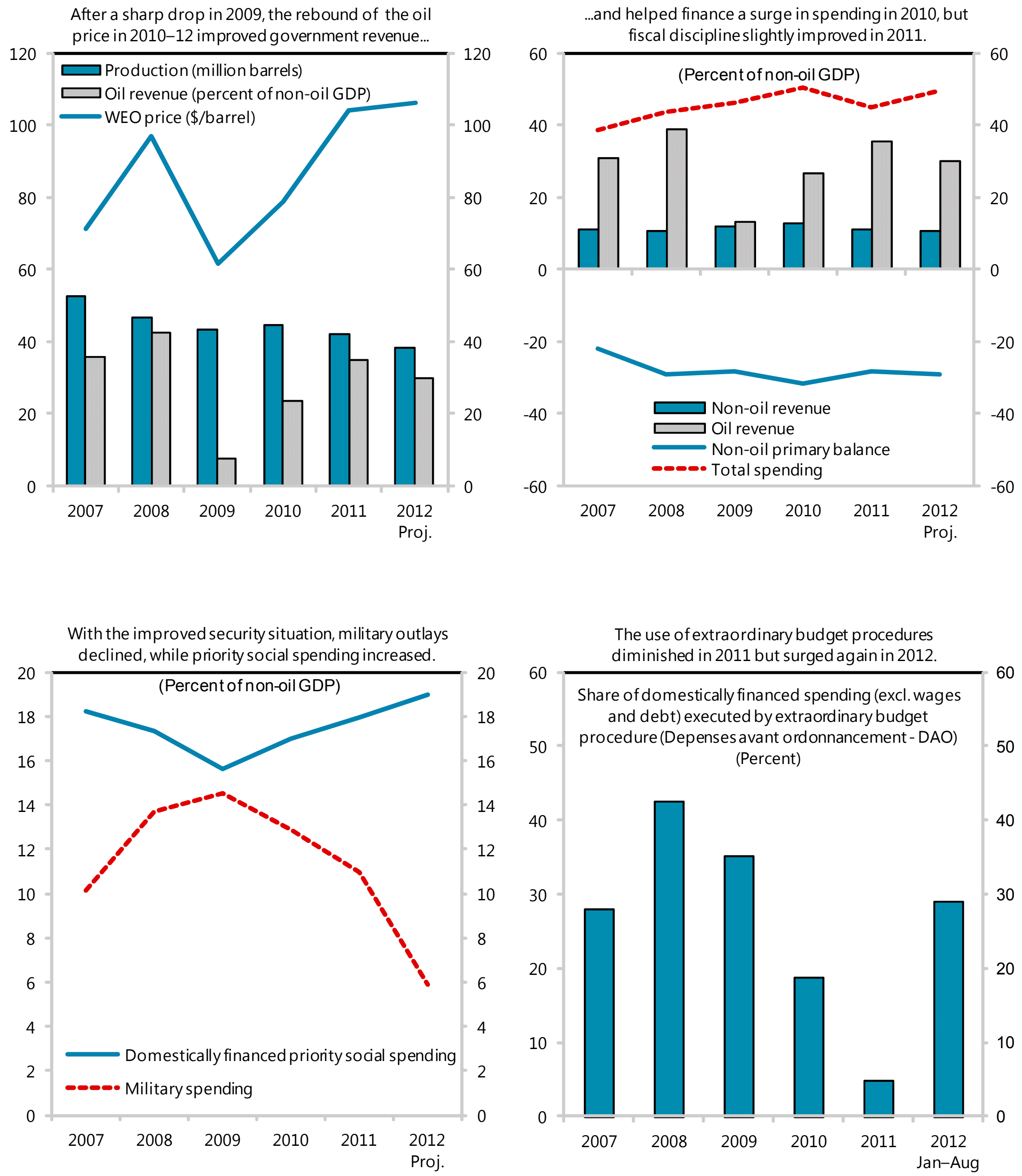
Figure 1. Chad: Recent Economic Developments, 2007–2012[1]



[1] Unless otherwise indicated.

Sources: Chadian authorities; and IMF staff estimates.

Figure 2. Chad: Impact of Oil Production on Fiscal Policy and Public Financial Management, 2007–2012[1]



[1] Unless otherwise indicated.

Sources: Chadian authorities; and IMF staff estimates.

6. **In 2012, economic activity is estimated to have rebounded**. Real GDP growth of 5.4 percent is driven by the coming on stream of several industrial projects, including the impact of a full year of operation of the Djermaya oil refinery, which started production in mid-2011, and the opening of the Baoré cement plant. Favorable weather conditions spurred a recovery in agricultural output, which should yield an increase in the main crops, if the effects of the recent floods are contained. Oil production is expected to stabilize following the first full year of production at the oil field operated by the China National Petroleum Corporation (CNPC). Oil production and exports by the Exxon-led consortium are expected to continue their downward trend. As the food crisis receded, inflation started to decline. Food prices are expected to ease in the last quarter, as new crops reach the market, and inflation to drop to about 6 percent at year's end.

Food security

7. **The 2011 drought and the recent floods prompted the authorities to define a national strategy to strengthen the resilience of the Chadian economy to weather shocks**. A new approach, developed in collaboration with international partners (including FAO and WFP), focuses on improving water management, warehouse capacity, and information systems (Box 2).

Box 2. Chad: Food Security and the Path to Resilience

Chad is highly sensitive to food production shocks due to natural disasters. The 2011 drought caused a 50 percent drop in cereal production (to 1.6 million tons), leaving the country in need of 455,000 tons. It also led to the drying up of pastures and drinking-water for livestock. As a result, 2.5 million Chadians became exposed to food insecurity (based on the WFP definition) starting in late 2011 until mid-2012, and 1.2 million, mainly in the Sahel zone, faced severe food insecurity (Annex I). In mid-2012, the weather shifted to the other extreme, with floods covering seven percent of farm-land and affecting 700,000 people in thirteen of Chad's twenty-two regions.

Multiple sources of funding and logistic support were mobilized to alleviate food shortages. In December 2011, the government declared a drought-related emergency and made a call to the international community for aid. The international community donated $386.2 million in food assistance. (The biggest contributors were the United States and the European Union). The government mobilized CFAF 8.8 billion ($17.4 million) to distribute food to the regions in need. As of September 2012, the government allocated CFAF 1 billion ($2.0 million) for flood victims.

Recent weather shocks have prompted the government to broaden its food security efforts from emergency response to strengthening the resilience of the Chadian economy to such shocks. Many projects aiming to build resilience to the extremes in weather are underway to improve irrigation and water management, warehouse capacity and information systems for the government, development partners, and farmers.

Fiscal performance in 2012

8. **The 2012 budget aimed at a significant fiscal consolidation, consistent with the path toward the medium-term sustainability**. The 2012 budget envisaged an NOPD below 20 percent of non-oil GDP, as recommended during the 2011 Article IV consultation. However, the budget lacked sufficient provisions to achieve its objectives. In particular, it underestimated problems with revenue collection (mainly due to the proliferation of arbitrary exemptions and weaknesses in customs administration) and recurrent spending pressures that had led to a significant overrun in 2011. These included a larger-than-budgeted-for energy bill (mainly, fuel subsidies for electricity generation), subsidies for other public enterprises, and spending on security and investment. Contingent provisions, notably, to deal with the food security crisis, also proved insufficient.[2]

9. **As a result, a large fiscal slippage was registered in the first eight months of 2012**. Non-oil revenue collection through August was three percent lower than the amount registered in January–August 2011. At the same time, the domestically-financed non-interest expenditure (commitment basis) through August was by seven percent higher than in January–August 2011, including nearly six percent of non-oil GDP in extra-budgetary spending, mainly on investment and purchases of goods and services. This performance was not consistent with the intended fiscal consolidation and signaled that the annual budget NOPD target was beyond reach.

10. **The more relaxed fiscal stance was confirmed in a 2012 supplementary budget, adopted in October**. The revised NOPD target is 28.1 percent of non-oil GDP (compared with 19.7 percent in the original 2012 budget). The overall deficit could reach 8 percent of non-oil GDP (compared with a small surplus in 2011). Supplementary budget appropriations cover mostly subsidies for the electricity company and other public enterprises, security spending, and large unidentified "centralized expenditure", to be financed by drawing down deposits at the BEAC.

11. **Even the revised NOPD target is subject to risks**. The supplementary budget may underestimate (by about 1 percent of non-oil GDP) a likely non-oil revenue shortfall. Additional

[2] During the discussions on a possible staff-monitored program in April 2012, it was estimated that, to accommodate these budgetary pressures, the NOPD would need to be relaxed to at least 23 percent of non-oil GDP (Box 3).

spending may arise from wage pressures and subsidies to state-owned enterprises. Absent a major adjustment in the final quarter of the year, the NOPD could exceed 29 percent of non-oil GDP.

Box 3. Chad: 2012 Discussions on a Staff-Monitored Program

The authorities initiated discussions on a staff-monitored program to lay down a track record for an ECF program in 2013.[1] These discussions proved inconclusive as the authorities decided to implement the Master Facility Agreement (MFA) signed with the Eximbank of China in August 2011 (see below).

Improved fiscal performance in 2011 created the basis for discussions on a staff-monitored program (SMP), which were held at the margins of the 2012 Spring Meetings. The proposed SMP (covering April-December 2012) aimed at an NOPD target of 23 percent of non-oil GDP in 2012. It included several measures to improve PFM: (i) reconciliation of the net government position vis-à-vis the banking system prepared by the public treasury with the position calculated by the BEAC; (ii) preparation of the monthly treasury cash-flow plan; (iii) provision of data on all contracts related to external investment projects; and (iv) compilation and centralization of data on public external and domestic debt.

Discussions on an SMP could not make progress. The MFA with the Eximbank of China is not compatible with standard IMF program requirements and, more broadly, with the HIPC Initiative objectives. The MFA ($2 billion, or 18 percent of the 2012 GDP) is problematic for several reasons: (i) the borrowing terms fall short of the standard concessionality requirement; (ii) collateralization of payment obligations subordinates other creditors, violates the existing negative pledge clauses (e.g., in the World Bank debt instruments), and contravenes the reserve surrender requirements under the BEAC law; and (iii) the disbursement of the MFA, especially over a short period, would nearly double the external debt of Chad and significantly raise the risk of debt distress, making it incompatible with debt sustainability objectives. The non-concessionality of the MFA and its impact on debt sustainability are also seen by other creditors (e.g., the Paris Club and the African Development Bank) as an obstacle to Chad's achieving debt relief under the HIPC Initiative. Despite these concerns, the authorities informed staff in late June that all conditions for the MFA to become effective had been met and that they intended to implement the MFA. This position was confirmed during the Article IV mission in September.

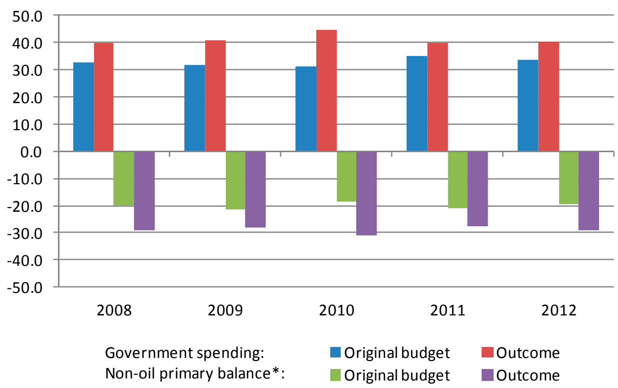
1 Given the track record previously accrued by Chad under the PRGF, after reaching the decision point in May 2001, at least six months of satisfactory performance under an ECF would be required to reach the HIPC completion point, provided that all the other HIPC triggers are met, which was the case several years ago; however, a recent assessment indicates that there was some back-tracking on several triggers, notably in the area of health-the implementation status of the HIPC is currently being reviewed by the World Bank staff. Also, a full year of a successful implementation of a poverty reduction strategy (PRS) would be required; the new PRS is under preparation.

III. PUBLIC FINANCIAL MANAGEMENT

Budget overruns were induced by weak treasury management and the repeated use of emergency spending procedures. PFM reforms stalled. Subsidies to public enterprises surged, and the policy framework for public enterprises remains a challenge.

12. **Inadequate preparation of the budget and its bypassing with the frequent use of emergency procedures were the primary causes of fiscal slippages**. The authorities repeatedly resorted to the procedures allowing spending without prior budget authorization (*dépenses avant ordonnancement*–DAOs). In January–August, 2012, DAOs reached CFAF 185 billion (compared with CFAF 128 billion for the 2011 full year), equivalent to nearly 30 percent of all domestically financed spending (excluding wages and debt service). Investment and spending on goods and services accounted for the bulk of the DAOs.

Figure 3. Chad: Budgets vs. Outcomes, 2008–2012
(Percent of non-oil GDP)



Sources: Chadian authorities; and IMF staff estimates.

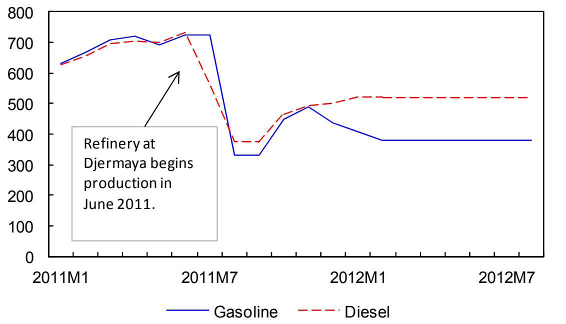
13. **PFM reforms stalled**. The authorities started streamlining the treasury operations by closing nonessential government accounts and broadening the reach of the treasury single account. However, in June 2012, an in-depth review of treasury reforms showed that most of the intended measures had not been implemented. As a result, the introduction of the treasury cash flow plan was postponed until 2013. Also, the authorities backtracked on their intentions to improve the procurement system, which largely relies on non-competitive bids. Finally, no progress was made on budget transparency; the authorities have yet to submit to parliament the report on past budget execution (*Loi de règlement*), delayed now for many years.

Subsidization policy toward public enterprises

14. **Subsidies to public enterprises are widespread, have increased markedly in 2012, and represent a major drain on the budget**. Preliminary estimates suggest that subsidies for public enterprises rose from 3.4 percent of non-oil GDP (8.8 percent of domestic non-wage primary spending) in 2011 to 4.8 percent of non-oil GDP (12.1 percent of domestic non-wage primary spending) in 2012. In addition to the traditional recipients of subsidies, such as the electricity and water companies and the cotton parastatal, the list of subsidized enterprises now includes new companies, such as the cement plant, the oil refinery, the tractor assembly plant, and the fruit juice company. All these companies sell their products and services at prices significantly below cost recovery levels.

15. **The petroleum pricing policy remains a challenge for Chad's industrialization strategy and a source of vulnerability for the budget**. After the opening of the oil refinery in mid-2011, the ex-refinery prices were fixed at well below the cost recovery level, and the retail prices of the petroleum products were reduced by about 50 percent. This policy has since evolved, allowing the refinery to close the price-cost gap, especially with respect to diesel fuel (the most widely consumed petroleum product in Chad). Nevertheless, subsidization of gasoline continues, and is encouraging smuggling (e.g., at the pump, gasoline is 30 percent cheaper in Chad than in Cameroon and 50 percent cheaper than in the Central African Republic). IMF technical assistance recommended, among other things, finding an export outlet for the refinery excess production and allowing it to increase its capacity use (current level is about 20 percent) (Box 4).

Figure 4. Chad: Domestic Gasoline and Diesel Retail Prices, January 2011– August 2012
(CFAF)



Sources: Chadian authorities.

Box 4. Chad: The Djermaya Oil Refinery—Issues in Petroleum Taxation and Pricing

An FAD technical assistance mission visited Chad in May 2012 to assess petroleum sector revenue management and to provide FARI model-based cash flow projections for the oil refinery. The refinery started production in June 2011 with a processing capacity of 1 million tons per year. It is owned by the *Société de Raffinage de N'Djaména* (SRN) SA, a joint-venture company between CNPC (60 percent) and the Chad government (40 percent) via the state-owned oil company (SNH). The main findings were as follows:

- **Economic viability of the refinery**. Despite its relatively small size, the refinery is economically viable. This is due in part to high international oil prices but also to the fact that Chad is a landlocked country and importing fuel is very expensive. Under the current outlook, the integrated (oil production and refining) operation has the potential to generate revenues for the government and profits for the private operator.

- **The importance of finding export markets**. The sustainability of this operation depends heavily on exporting a significant share of the production to neighboring markets (Nigeria, Cameroon and the CAR).

- **Scope for limited retail price subsidies**. The scope for selling refined products on the domestic market at a discount, relative to the international prices, and still generating profits for the private operator as well as revenue for the government also depends crucially on exporting a significant share of the refinery's production.

16. **Agriculture is also a large recipient of subsidies**. These include price subsidies for fertilizers, direct support for microfinance, and for the mechanization of agriculture (with the use of the locally assembled tractors). Moreover, transformation enterprises (e.g., in textiles and fruit processing) are also receiving subsidies.

Authorities' views

17. **The authorities recognize that PFM problems affect budget execution**. They see the need to improve budget preparation, to strengthen its credibility, and to eliminate repeated extra-budgetary spending. PFM reforms are viewed as important but lack of technical capacity is impeding their implementation.

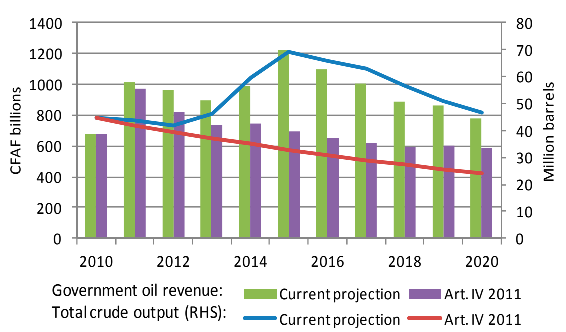
18. **The authorities acknowledge that continued subsidization of public enterprises is problematic**. Adjustments to retail prices of cement and petroleum products are being considered. The authorities also agree that finding an export outlet for the excess production of the refinery would help improve its financial performance. In view of the exceptionally high electricity tariffs in Chad, they consider important to maintain, or even increase, electricity subsidies. They expect planned investments in power generation and distribution to improve the financial situation of the energy sector. The authorities intend to re-focus the support for agriculture in the context of the strategy to increase resilience of the Chadian economy to weather shocks.

IV. MEDIUM-TERM OUTLOOK

The expected significant increase in oil production in the next few years relaxes somewhat the sustainability constraints. However, building a savings buffer to mitigate the impact of oil price volatility and to smooth government spending remains important.

19. **Prospects of new oil production coming on stream are central to the medium term outlook**. Based on information from CNPC, Exxon, and Griffiths (a small Canadian operator), oil production is expected to increase from 120,000 bpd in 2011 to a peak of nearly 190,000 bpd in 2015; however, absent significant new oil developments, oil production would start diminishing already in 2016. Staff estimates that government revenues from oil will rise to about 30 percent of non-oil GDP in 2015 and will fall gradually to about 20 percent of non-oil GDP by 2017, owing to the projected drop in international

Figure 5. Chad: Crude Oil Output and Government Oil Revenue Projections, 2010–20



Sources: Chadian authorities; and IMF staff estimates.

oil prices and the expected reversion of oil production to a downward trend.[3]

20. **Public investments in infrastructures and an increase in cotton production are key drivers for non-oil growth over the medium-term**. The recent restructuring of Cotontchad is expected to lead to a recovery in cotton output to its historical levels, and to an increase in non-oil exports. However, the rehabilitation of the cotton industry is unlikely to compensate for the trend decline in oil production. Other non-oil exports must be developed to ensure external sustainability (Box 5).

21. **Prospects for additional oil revenue offer a considerably larger fiscal space over the medium term**. With the new developments coming on stream and higher international oil prices, oil revenue over the medium term (2013–17) is now projected to be $5 billion higher than projected last year, of which $4 billion is expected to come from new oil developments. This suggests that the desirable medium-term NOPD path could be somewhat more relaxed than recommended in the 2011 Article IV consultation.

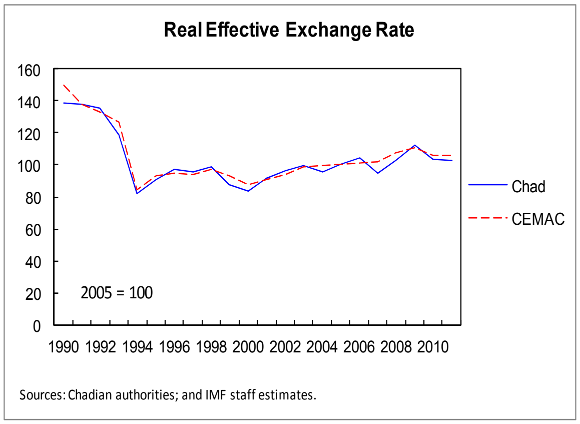
22. **Despite this improved outlook, Chad continues to be vulnerable to volatile oil revenues**. Oil accounts for more than 70 percent of fiscal revenues, about 90 percent of total exports of goods, and 35 percent of GDP. Government revenue from oil (including corporate income tax) is more volatile than oil prices and export receipts. Most notably, a 50 percent drop in international oil prices in 2009 entailed a nearly 75 percent drop in government oil revenues. A significant drop in oil prices may also stifle the development of new oil projects and lead to a production cutback by the incumbent producers, presenting the authorities with the need for a sharp fiscal adjustment. Oil production and revenue transfers are also subject to uncertainty.[4]

[3] These estimates are preliminary and should be verified and confirmed by an in-depth analysis of the production and cost recovery profile of these new oil fields.

[4] The revenue uncertainty is partly related to moving in early 2012 from collecting oil royalties in cash toward collecting them in kind and to contracts with new oil producers being of different type (the contract with Griffiths is based on production sharing, while contracts with the Exxon-led consortium and the CNPC are of tax/royalty kind).

Box 5. Chad: Exchange Rate and External Competitiveness Assessment

Chad's external competitiveness is heavily influenced by a number of exogenous factors, including oil prices and the euro/US dollar exchange rate. Competitiveness is also affected by a narrow domestic non-oil production base, significant natural barriers to trade, and weak institutions.



In recent years, Chad's real effective exchange rate (REER) has been tracking closely the CEMAC's gradually appreciating REER, with minor deviations reflecting mainly fluctuations in Chad's inflation path compared to the region's average. Thus, staff's assessment of CEMAC's external sustainability and non-oil REER also applies to Chad, suggesting that, under current policies, Chad's REER is broadly in line with fundamentals (SM/12/122).

This is confirmed by applying various CGER methodologies for Chad, placing its non-oil REER at 1-5 percentage points above the norm.[1] Using the modified methodology, based on Bems/de Carvalho Filho (2009), Chad's non-oil REER is overvalued by about 4–5 percent, slightly below the REER in the CEMAC area as a whole. The test relies on a current account norm derived from the assumption that oil wealth is used for smoothing intertemporal consumption. Both norms disregard investment expenditure, which accentuates estimated overvaluation if the medium-term current account is heavily influenced by public investment (as is the case in Chad), even if the investment is sound.

Chad's strong oil-export driven external position projected over the medium term may result in further appreciation of its REER. Given the diminishing oil resource base in the long term, a prolonged continuation of this trend would be harmful to Chad's competitiveness. Chad's fragile domestic production base, including for the traditional export products, and high capital and productivity-adjusted labor costs in other sectors, suggest that a real depreciation would help diversify its export production. However, given Chad's membership in the currency union, competitiveness should be enhanced mainly through measures to improve the business environment and appropriate aggregate demand management (notably, fiscal policy).

[1] For the methodological underpinning, refer to Lee et al. (2008), *Exchange Rate Assessments: CGER Methodologies*, IMF Occasional Paper 261; and Bems and de Carvalho Filho (2009), *Exchange Rate Assessments: Methodologies for Oil Exporting Countries*, IMF Working Paper No. 09/281.

23. **Mitigating the risks of a sudden drop in oil revenues remains central to a prudent medium-term fiscal strategy** (Annex II). The recommended strategy aims at (i) smoothing expenditure over the medium term; (ii) saving part of the oil revenue to create a financial buffer of at least 15 percent of non-oil GDP by 2017 (from a very low level at end-2012, given the expected draw-down of deposits implied by the execution of the revised 2012 budget) ; (iii) implementing tax reforms and other measures to improve the business environment and help diversify revenue sources away from oil; and (iv) keeping the investment program and subsidies manageable, given absorptive capacity and fiscal sustainability constraints, and the need to ensure sufficient resources for social spending programs. To achieve these objectives, the recommended adjustment over the

medium term would be anchored on a reduction of the NOPD to 14–15 percent of non-oil GDP by 2017. This adjustment is critical to achieving sustainability as it would ensure that, over time, the authorities would have at their disposal a cushion sufficient to absorb the impact of a negative oil price shock similar to that experienced in 2009 for at least one year (i.e., sufficient time to adjust if the shock proves durable). The proposed adjustment would also help reduce the public debt-to-GDP ratio from about 36 percent at end-2011 to about 32 percent by 2017. To this effect, it is also assumed that the disbursement of the external project loans over the medium term is paced to ensure long-term debt sustainability.[5]

24. **The recommended medium-term adjustment is feasible, and remains consistent with the intermediate financing constraints**. Since new oil developments are not expected to yield a large increase in government revenue until 2015, the budget will be subject to a relatively tight financing constraint in 2013–14, calling for a stepwise tightening of the NOPD by 3–4 percentage points of non-oil GDP per year (starting with a reduction of the NOPD to 25 percent of non-oil GDP in 2013).[6] This adjustment could be achieved by (i) implementing measures to increase non-oil revenue, including the elimination of the arbitrary tax and customs duty exemptions, measures to improve revenue administration, and incentives for private companies to leave the informal sector; and (ii) a reduction in subsidies and grants (mainly in subsidies for public enterprises and exceptional security transfers) and in the domestically-financed investment spending (to be largely offset by the additional foreign-financed investment spending under the MFA).

Authorities' views

25. **The authorities count on the additional oil revenues to provide financing for investment in infrastructure and creation of new enterprises, in particular, in the energy**

[5] The staff medium-term framework represents a normative (prudent) scenario and is also presented in the DSA under an alternative scenario to determine conditions under which the MFA could be consistent with debt sustainability. The DSA baseline scenario assumes that the MFA remains non-concessional and is disbursed over a shorter period (five years), reflecting staff's best understanding of the authorities' policy intentions. In addition, the authorities' policy intentions would entail somewhat higher growth over the medium term.

[6] In November, the authorities submitted to parliament a project of the 2013 budget with an NOPD target of 25 percent of non-oil GDP. However, this target is predicated on a significant increase in non-oil revenue.

sector. They emphasize the upside potential of the new oil developments and are of the view that fiscal consolidation over the medium term would not be necessary. They also are not convinced of the need to build a savings cushion. They appreciated Fund's assistance in developing capacity for oil revenue projections and expressed interest in further cooperation with Fund staff in this area.

V. DEBT SUSTAINABILITY

Additional oil revenues are expected to strengthen Chad's debt servicing capacity and to allow for more external borrowing (e.g., to finance public investment); however, the updated debt sustainability analysis (DSA) shows that the $2 billion MFA exceeds the available space for new borrowing and, if implemented on current terms, entails a high risk of debt distress.

26. **Overall public debt has been increasing rapidly in recent years**. The public debt-to-GDP ratio increased from just over 30 percent at end-2010 to about 36 percent at end-2011. This was mainly due to a rapid increase in domestic public debt and non-concessional government-guaranteed external debt to finance government stakes in new enterprises (e.g., the Djermaya oil refinery and the Baoré cement plant). Public external debt is projected to increase over the medium term, reflecting the expected disbursement under the MFA to finance the construction of a new airport for N'Djamena and several other projects in transport infrastructure and in the energy sector. The borrowing terms under the MFA are commercial and its repayment secured through the collateralization of oil export receipts.[7]

27. **Implementing the MFA in its current form is inconsistent with debt sustainability objectives**. The updated DSA shows that the MFA entails a high risk of debt distress. This conclusion holds even if the growth impact of the associated projects is taken into account and the fiscal position is assumed to be adjusted to establish collateral required under the MFA. An alternative scenario shows that all sustainability thresholds would be observed if the implementation of the MFA was phased in over ten years and the terms of the MFA and of the subsequent borrowing were sufficiently concessional. Nevertheless, even in that case, Chad would continue to face a moderate risk of debt distress, due to the low level of non-oil tax revenue and exports and its exposure to oil

[7] The financial terms of the MFA include an interest rate of 1.5 percent and a risk fee of 4.0 percent (on top of the interest rate). The tenor of each loan is not to exceed 20 years, including the grace period of five years. Overall, the implied grant element is 1.8 percent. For detailed description of the MFA, see *Staff Report for the 2012 Article IV Consultation—Debt Sustainability Analysis*, ¶3.

price volatility. The DSA also shows that, absent further large oil discoveries, the ambitious investment plans based on foreign borrowing over and above the 2011 MFA—such as the construction of a trans-Chadian railway—would not be consistent with debt sustainability.

Authorities' views

28. **The authorities downplay the debt sustainability concerns arising from the MFA**. They consider that new oil developments will generate a cash flow sufficient to meet debt obligations under the MFA, which are secured by oil export receipts. They also point out that if the DSA were conducted with the use of the revised national accounts, the PV of debt-to-GDP ratios would be lower, indicating a higher space for additional borrowing than implied by staff projections.[8] The authorities also believe that the contemplated investments will have significant positive economic externalities and a higher impact on non-oil growth.

VI. BUSINESS CLIMATE

Poor business climate continues to constrain private sector development in Chad. The shared awareness of the problem between the local business community and the authorities is promising but the task ahead appears daunting.

29. **Chad's business climate is widely perceived as unfavorable to the development of the private sector**. The IFC ranks Chad 184th among 185 countries classified in its *Doing Business 2013* report, with particularly low marks for starting a business, resolving insolvency, and paying taxes. Transparency International's 2011 Corruption Perception Index ranks Chad 168th out of a total of 183 countries. The 2011 Mo Ibrahim index, which summarizes the assessment of governance performance in 53 African countries, puts Chad at the 52nd place.

30. **Most private enterprises in Chad operate informally, except a handful of multinationals linked mainly to the oil sector**. Local private sector includes small and medium-sized enterprises, operating at the fringes of the economy, as well as large enterprises,

[8] The authorities have produced new estimates for 2005–11 consistent with the 1993 System of National Accounts, with actual data for 2005 and 2006, based on the 2005 input-output structure of the economy. The new GDP estimates are 15–20 percent higher than the presently used figures (1995 basis), primarily due to a large increase in the tertiary sector, reflecting broader coverage of activities and inclusion of estimates for the informal sector. Staff encouraged the publication of the new national accounts by the National Institute of Statistics (INSEED). Staff plans to adopt the new GDP estimates once they are put in use by the ministry of finance and the central bank.

particularly in commerce or construction, many of them living off public contracts, but eluding taxation. Formal private companies operate in a few niches of the economy, including telecoms, sugar refining, or tobacco processing.

31. **Since 2011, several initiatives have been undertaken to improve the business climate**. The National Council of Employers of Chad (CNPT) has published a White Book, which identifies the key obstacles to private sector development. These are: (i) lack of confidence in the rule of law; (ii) inefficiency and unfairness in the application of the fiscal regime; and (iii) structural weaknesses, including shortages and the high cost of energy, underdevelopment of finance and telecommunications, and scarcity of qualified labor. The White Book also proposes a detailed reform program for the improvement of the business climate (Box 6). Some efforts in this regard were already made by the National Investment and Export Agency (ANIE), including the opening of a "one-stop window" to facilitate the creation of new enterprises.

Box 6. Chad: The White Book of the CNPT—Selected Suggestions

The White Book of the CNPT takes stock of the measures that would help private sector develop its potential. These include:

Legal environment:
- Ensure business security (legal and judicial) which is a prerequisite to investment
- Adopt more precise laws against abusive attribution of damages
- Engage in arbitration before any legal proceedings under the OHADA system
- Provide training for judges on the CIMA (Inter African Conference for the Insurance Market) Code
- Adopt an anti-corruption law

Tax and customs:
- Update the current General Tax Code by integrating different finance acts
- Develop a Fiscal Procedural Code and a Taxpayer Code
- Establish a regular publishing of fiscal laws and as well as tax and customs schedules
- Strengthen the rigor in revenue collection to reduce undue solicitation
- Professionalize customs services and eliminate the pseudo-official customs brigades
- Reduce the minimum presumptive tax and broaden its crediting beyond the corporate income tax
- Create tax incentives to make staying in the informal sector unattractive

Travel, logistics, and telecommunication:
- Lower taxes on airplane tickets to 5 percent from the current average of 40 percent
- Improve access to other sea ports (Cotonou, Port Sudan, etc.,) to create competition for Douala
- Enable the use of the fiber optic connection by all licensed telecom operators
- Foster the use of 3G technology to allow easy access to high-speed internet
- Foster training in telecom and information and communication technologies (ICT)

Human capital:
- Create an engineering school in electromechanical engineering, petroleum, and mining
- Ensure adequate social infrastructure for a skilled and healthy workforce to reduce labor costs

Authorities' views

32. **The authorities have a more positive view of the business climate**. They note that insufficient information on Chad and the opportunities it offers is a factor in its unfavorable scores and a deterrent to private investment. To bridge this information gap, the ANIE has been asked to increase media outreach and other promotion activities. Following the endorsement of the CNPT's White Book at the highest political level, the authorities intend to consult further with the private sector with a view to coining a consensus on a reform agenda.

VII. FINANCIAL SECTOR

Financial sector conditions have improved since the 2011 FSAP, owing to the recapitalization of state-owned banks, strong growth of several private banks, and technological innovations, including mobile banking and the increased use of other modern means of payments. Nevertheless, private sector access to financial services remains difficult, and the large exposure of the banking system to the government represents a major risk.

33. **The health of the financial sector has improved with the recapitalization of the state-owned banks**.[9] As a result, the ratio of regulatory capital to risk-weighted assets increased from 6.7 percent to 19.7 percent. In addition, most banks in need of rehabilitation have developed actions plans required by COBAC and fully endorsed by the 2011 FSAP; however, most other FSAP recommendations, related, among others, to cash flow and public debt management, the legal and judicial framework, and pension sector, have not been implemented (Box 7).

34. **Despite the strong growth of deposits in private banks (including two transnational sub-Saharan African banks), financial intermediation remains low**. At end-2011, the ratios of broad money and private sector credit to non-oil GDP were about 23.5 percent and just above 10 percent of non-oil GDP, respectively.[10] Also, other indicators show a very low level of financial intermediation: fewer than 25 depositors per 1000 adults (compared to 200 for SSA), fewer than 3 borrowers per 1000 adults (compared to 50 for SSA), and less than 1 bank branch per 1000km^2

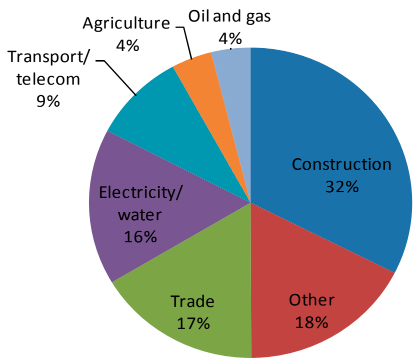
[9] The cost of bank recapitalization to the budget was about ¼ percent of non-oil GDP.

[10] Private deposits accounted for about a half of broad money. All bank deposits (including government deposits) were below 15 percent of non-oil GDP, in either case, significantly below the average for sub-Saharan Africa.

Box 7. Chad: Main Findings and Recommendations of the 2011 FSAP	
Recommendations:	**Follow-up:**
Banking sector stability. ***Finding*: two banks have a negative equity.** ***Recommendation*: the government should recap**italize the banks and prepare a viable business plan. *Priority/Timeframe*: High/Immediate.	Two of the three state banks have been recapitalized with public and foreign capital, and action plans for development of their bank activities have been prepared. The third state bank is being restructured with the state selling the majority of its share to the future acquiring foreign investor.
Cash flow and public debt management. *Finding*: Poor government cash flows management leads to financial vulnerabilities. *Recommendation*: the government should establish, under the leadership of the Ministry of Finance, with active participation of the BEAC and line ministries, a treasury committee to monitor the government's cash position. *Priority/Timeframe*: High/Immediate.	A committee, created to monitor the net government position (NPG) vis-à-vis the banking system, recommended to include 45 additional accounts to the NPG. It confirmed closure of 201 government accounts that were inactive, while 7 others were closed and their balances transferred to the Treasury account. The treasury cash flow plan has not yet been elaborated and cash management remains limited to the daily assessment of the availability of funds.
Access to financial services. *Finding*: Access to services is constrained by the lack of adequate information on borrowers. *Recommendation*: The BEAC should develop an adequate credit reporting system and the government should encourage the use of the accounting system by businesses. *Priority/Timeframe*: High/Medium term.	The BEAC is actively trying to reduce delays in updating financial information on borrowers in the credit registry and is encouraging banks to accelerate their reporting of data at the BEAC. More needs to be done to encourage the use of the accounting system by businesses.
Legal and judicial framework. *Finding*: The business community has no confidence in the judicial system. *Recommendation*: The government should establish a credible inspector's general office to investigate and prosecute the corruption in the justice system and introduce arbitration and mediation for dispute settlement outside courts. *Priority/Timeframe*: High/Near term.	Application of banking regulation and commercial laws is hampered by a lack of capacity and limited expertise of officials in resolving commercial disputes. Thus, the government still needs to establish a credible inspector's general office, favoring impartiality, independence, and effectiveness in the legal and judicial system. Banks are often condemned unfairly and abusively, which in some cases results in confiscation of their accounts at the BEAC. A law limiting such abusive practices is being developed.
Pension sector. *Findings*: The National Retirement Fund (*Caisse Nationale des Retraites du Tchad* or CNRT) has been technically bankrupt for 20 years. The national Social Security Fund (*Caisse Nationale de Sécurité Sociale* or CNPS) has an overall surplus that could be used to increase the purchasing power of pensioners and maintain the financial viability of the pension system. *Recommendation*: The government should repay its debts to both funds and remain current on its future obligations (Ministry of Finance). An actuarial study should be conducted to help establish the long-term financial viability of the system (Ministry of Labor). *Priority/Timeframe*: High/Near term.	The government has not yet paid its debts to the two funds, and an actuarial study to establish the long-term financial viability of the system has not yet been undertaken.

35. **Credit is expensive and resources for long-term financing are scarce, while banks' exposure to the public sector remains a major risk**. The government and some large enterprises (mostly foreign-owned) receive credit at 7–8 percent (barely positive in real terms), while small private entrepreneurs and individuals face much higher interest rates (12–14 percent and 15–20 percent, respectively). Demand deposits account for 85 percent of all deposits, which makes it more difficult for banks to lend long-term. Most lending is in the form of short-term loans (60 percent of bank assets have a maturity of less than a month and 70 percent less than a year). Distribution of bank lending among various economic activities is skewed toward construction and the energy sector (both mostly funded from public sources or heavily dependent on government subsidies) and commerce. The oil and gas sector, which contributes the largest share of GDP, accounts for only 4 percent of bank credit, as international oil companies rely on offshore sources of funding. The concentration of bank lending on government and its suppliers, which was identified by the 2011 FSAP as a key risk, continues to expose the banking system.[11]

Figure 6. Chad: Sectoral Distribution of Lending, April 2012



Sources: BEAC/COBAC.

36. **Inadequate infrastructure (electricity and telecommunication) and legal system are key impediments to financial deepening**.[12] The development of mobile banking should help increase access to financial services. However, banks continue to be reluctant to offer credit, even against legally recognized collateral, because of difficulties in exercising legal guarantees. In this regard, Chadian bankers emphasize the importance of (i) strengthening the legal and judicial framework, to ensure fair treatment of lenders in legal disputes; and (ii) improving the land tenure system and developing a reliable cadastre, to increase the collateral pool. Finally, the development of the

[11] The 2011 FSAP determined that (as of March 2011) about 70–80 percent of gross loans were extended to the public sector, with the government being, directly or indirectly (through government suppliers, contract holders, or public servants), the only significant banking client. Based on the information provided by individual banks during the recent Article IV mission, it appears that this exposure has not changed significantly. The stress test performed by the 2011 FSAP revealed that public debt service distress would have major consequences for bank capitalization.

[12] Some progress has been made in the development of telecommunications infrastructure with the placement of the international fiber optic connection. Its extension would enable banks to reach the population outside N'Djamena.

Islamic banking, so far non-existent in Chad, is seen as a way to increase financial intermediation by tapping the savings of Chad's large Muslim population.

Authorities' views

37. **The authorities are satisfied with the steps taken to improve the condition of state-owned banks and do not see the large banks' exposure to the government as a problem**. Instead, they see the government as a reliable client of the banking system and as a major source of liquidity and income for banks. However, they acknowledge that more could have been done to shore up the finances of the pension system, to strengthen the credit registry, and to improve the legal and judicial framework.

38. **The authorities emphasized that several initiatives are under way to deepen financial intermediation**. A strategy for improving access of small and medium-sized enterprises to credit and lowering their borrowing cost is being validated by the government. A new approach is being developed to ensure reimbursement of loans to microfinance institutions, while limiting the involvement of the government funds. The authorities also intend to give a new role to the state-owned development bank by turning it into a mortgage bank.

VIII. STAFF APPRAISAL

39. **The improved security situation, strong oil revenue receipts, and prospects for additional oil production coming on stream over the next few years create a unique opportunity for Chad to address its development and poverty reduction needs**. To capitalize on these favorable circumstances, Chad needs a medium-term strategy for transforming the oil windfall into a source of sustainable growth for the non-oil economy, putting in place a market-oriented policy framework for the new enterprises, and introducing public financial management reforms to optimize the use of additional oil resources.

40. **Chad's vulnerability to weather shocks came to the fore in the context of the 2011 drought and recent floods**. Staff welcomes the broadening of the policy focus from the emergency response toward building resilience. To this effect, the cost of implementing the contemplated policies to address food security should be properly evaluated and provided for in the budget, including sufficient appropriations for the replenishment of buffer stocks and the implementation of a multi-pronged strategy to strengthen Chad's resilience to weather shocks.

41. **The relatively good fiscal performance registered in 2011 helped steer the economy toward medium-term sustainability; however, weaker fiscal discipline in 2012 reignited concerns about the course of fiscal policy**. The 2012 supplementary budget deviates from a sustainable path. The envisaged expansion of the deficit also entails a draw-down of the deposits at the BEAC and thus delays the realization of financial savings to protect Chad against the risk of a downward shift in international oil prices.

42. **The authorities should uphold the central role of the budget as a fiscal policy instrument and press ahead with PFM reforms**. Currently, the budget does not accurately reflect the government's economic policies and the continued recourse to extra-budgetary spending undermines the implementation of stated budget objectives. The lack of progress on PFM reforms entails unnecessary costs. To remedy these shortcomings, the authorities should follow through on the implementation of their PFM reform agenda. These reforms should be accompanied by the strengthening of institutional, technical, and human capacities of the Ministry of Finance and Budget (MFB) and the harmonization of local practices with the new directives of the CEMAC.[13]

43. **The early experience with the new public enterprises underscores the importance of putting in place an appropriate market-oriented policy framework for these companies**. The authorities' intention to reduce subsidies for public enterprises is welcome. However, to ensure that these enterprises contribute to the development of a modern industrial fabric in Chad, they should have a degree of freedom in price setting consistent with cost recovery. And, a regulatory framework for healthy competition should be established in the sectors susceptible to monopolistic practices. For the oil refinery, it remains crucial to find an export outlet for its excess production to increase its capacity utilization and improve its financial condition.

44. **Public (domestic and external) debt level remains manageable for the time being, but the authorities' intention to scale up foreign debt-financed public investment entails an elevated risk of debt distress**. The authorities are encouraged to calibrate their public investment policy, taking into account Chad's debt service capacity and its high vulnerability to oil price shocks. Being a low income country, Chad should seek highly concessional terms for its external loans. The

[13] CEMAC members are expected to complete the transposition at the national level of the new CEMAC directives of public financial management by December 31, 2013.

authorities are encouraged to seek to resolve the incompatibility between the MFA and debt sustainability objectives.

45. **The 2013 budget should be anchored on the objective of medium-term fiscal sustainability, taking into account the need to build a precautionary savings cushion**. Given the firm expectation of a significant increase in oil revenue from the new oil projects coming on stream in the near term, staff currently recommends an NOPD path that is less constraining compared with the path in the 2011 Article IV consultation. Nevertheless, starting with 2013 and over the medium term, a gradual tightening of the NOPD would be required to offset the expected decline in oil revenues over the long term. This gradual tightening would generate savings, primarily, to serve as a cushion against an oil revenue shock, but also to help smooth the transition to the post-oil era.

46. **The publication of the White Book by the CNPT is an important step toward improving Chad's business climate**. The authorities are encouraged to work closely with the business community to further the agenda outlined in the White Book, in particular by improving the legal environment for private enterprises, making tax policy more business-friendly, professionalizing tax and customs administration, and developing the key elements of infrastructure.

47. **The recapitalization of state-owned banks improved financial stability indicators but the concentrated exposure of banks to the public sector remains a source of risk**. In the short term, to mitigate this risk, banks are encouraged to continue holding capital buffers in excess of the required minimum 8 percent. Looking forward, a durable solution to this problem would come from greater private sector participation, which should be encouraged, including by setting incentives for informal sector enterprises to migrate to the formal sector. Further, the strengthening of the centralized credit registry would help contain credit risk, and the implementation of the anti-money laundering framework would help strengthen governance.

48. **Staff recommends that the next Article IV consultation with Chad be held on the regular 12-month consultation cycle, in accordance with the decision on Article IV consultation cycles**.

Table 1. Chad: Selected Economic and Financial Indicators, 2009–2017

	2009	2010	2011		2012		2013	2014	2015	2016	2017
			Art. IV[1]	Est.	Art. IV[1]	Proj.	Projections				
			(Annual percentage change, unless otherwise indicated)								
Real economy											
GDP at constant prices	-1.2	13.0	3.1	0.5	7.4	5.4	7.7	10.5	8.2	3.4	3.5
Oil GDP	-5.1	6.4	-1.8	-2.5	10.4	-1.3	11.3	27.3	14.8	-4.6	-4.1
Non-oil GDP	0.0	15.0	3.6	1.4	6.0	7.1	6.8	6.3	6.2	5.9	5.7
Consumer price index (period average)	-2.1	-2.1	2.0	1.9	5.0	8.2	3.0	3.0	3.0	3.0	3.0
Consumer price index (end of period)	4.7	-2.2	…	10.8	…	6.0	3.0	3.0	3.0	3.0	3.0
Oil prices											
WEO (US$/barrel)[2]	61.8	79.0	106.3	104.0	105.3	106.2	105.1	100.6	96.4	92.8	88.9
Chadian price (US$/barrel)[3]	55.5	73.6	99.8	97.7	98.8	103.7	100.1	92.6	88.4	84.8	82.4
Oil production (millions of barrels)	43.6	44.7	44.2	43.6	46.8	42.0	46.3	59.4	69.1	65.7	62.8
Exchange rate FCFA per US$ (period average)	471.0	494.4	459.9	471.4	458.8	…	…	…	…	…	…
Money and credit[4]											
Net foreign assets	-80.2	13.5	42.1	25.4	25.1	-16.9	9.3	14.4	31.2	25.2	21.6
Net domestic assets	81.3	13.2	-29.4	-13.2	-16.0	27.6	0.1	-5.4	-22.3	-16.5	-13.1
Of which : net claims on central government	72.5	8.7	-33.1	-19.2	-19.6	10.0	-11.0	-13.6	-30.6	-25.1	-20.9
Of which : credit to private sector	5.5	8.4	3.7	7.8	3.6	6.8	6.9	6.7	6.9	7.1	7.3
Broad money	1.1	26.8	12.7	12.2	9.1	10.8	9.4	9.0	8.9	8.7	8.5
Income velocity (non-oil GDP/broad money)	4.5	4.3	4.3	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3
External sector (valued in CFA francs)											
Exports of goods and services, f.o.b.	-27.5	20.7	29.0	20.2	-3.6	1.2	-1.6	13.1	13.7	-7.8	-5.9
Imports of goods and services, f.o.b.	20.5	16.1	-13.9	9.4	-27.3	-0.4	-0.8	3.2	-1.6	-0.8	-3.7
Export volume	-7.9	-3.0	1.0	-3.9	-3.4	-8.7	-9.7	-5.1	-4.0	-4.3	-4.1
Import volume	27.5	18.8	-10.2	7.5	-21.7	-0.3	-0.6	3.4	-1.7	-1.2	-4.5
Overall balance of payments (percent of GDP)	-10.6	-4.2	5.5	3.4	3.6	-2.1	0.4	0.9	3.1	2.7	2.4
Current account balance, including official transfers (percent of GDP)	-18.3	-3.5	-23.9	-1.0	-16.9	-1.1	-3.3	0.7	5.4	3.1	2.2
Terms of trade	-44.9	30.6	24.0	22.9	0.2	10.9	9.3	19.4	18.2	-4.1	-2.7
External debt (in percent of GDP)	23.0	25.0	23.8	26.4	23.8	27.6	26.8	25.2	24.3	25.5	26.1
NPV of external debt (percent of exports of goods and services)	39.7	48.1	38.4	56.7	41.7	58.9	61.5	57.2	52.6	59.3	65.3
			(Percent of non-oil GDP, unless otherwise indicated)								
Government finance											
Revenue	25.2	38.7	44.0	46.5	38.0	40.3	36.2	37.3	41.3	36.6	33.2
Of which : non-oil	12.0	12.5	10.6	11.0	11.7	10.4	10.9	11.6	12.2	12.5	12.8
Expenditure	46.1	49.9	42.1	44.9	36.1	49.5	44.6	41.9	38.9	35.8	34.6
Current	29.7	29.6	25.0	25.8	20.1	25.6	23.6	23.0	21.8	19.4	19.2
Capital	16.5	20.2	17.2	19.2	16.0	23.9	21.0	18.8	17.1	16.4	15.3
Non-oil primary balance (commitment basis, excl. grants)[5]	-28.1	-31.2	-26.2	-28.1	-19.2	-29.2	-25.0	-21.6	-18.5	-15.5	-14.5
Overall fiscal balance (excl. grants, commitments basis)	-20.9	-11.2	1.8	1.6	1.9	-9.2	-8.4	-4.5	2.3	0.8	-1.4
Overall fiscal balance (excl. grants, cash basis)	-20.8	-9.3	3.9	-2.3	0.7	-6.9	-8.6	-4.6	2.3	0.7	-1.3
Total debt (in percent of GDP)[6]	30.5	30.5	29.5	35.9	27.9	35.4	36.4	34.3	31.7	32.1	32.2
Of which : domestic debt[6]	7.5	5.5	5.7	9.5	4.1	7.8	9.6	9.1	7.4	6.7	6.1
Memorandum items:											
Nominal GDP (in billions of CFA francs)[7]	3,344	4,230	4,476	4,970	4,537	5,625	6,171	7,004	7,686	7,768	7,954
Of which: non-oil GDP	2,138	2,584	2,912	2,859	3,128	3,224	3,527	3,845	4,186	4,551	4,940
Nominal GDP (in billions of US$)[7]	7.1	8.6	9.7	10.5	9.9	10.9	11.7	13.2	14.4	14.5	14.8
Of which: non-oil GDP	4.5	5.2	6.3	6.1	6.8	6.2	6.7	7.2	7.8	8.5	9.2

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

[1] IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

[2] WEO 2012 Summer Production.

[3] Chadian oil price is WEO price minus quality discount.

[4] Changes as a percent of broad money stock at the beginning of period.

[5] Defined as the total revenue excluding grants and oil revenue, minus total expenditure excluding net interest payments and foreign-financed investment.

[6] Central government, including government-guaranteed debt.

[7] GDP using National Accounts, base year 1995.

Table 2. Chad: GDP Per Sector, 2009–2017

(Annual percentage change, unless otherwise indicated)

		2009	2010	2011		2012		2013	2014	2015	2016	2017
	Weight[1]			Art. IV[2]	Est.	Art. IV[2]	Proj.	Projections				
Primary sector	41	-6.0	19.7	-4.8	-9.7	4.8	1.5	8.4	19.2	12.3	-1.8	-1.4
Agriculture	9	-11.5	85.0	-15.4	-30.6	5.1	11.9	6.0	5.9	5.2	4.8	4.4
Food crops	8	-8.3	85.3	-16.3	-32.7	5.0	11.4	4.8	4.7	4.0	4.0	4.0
Industrial crops	0	-51.2	78.0	7.3	20.1	7.4	18.0	21.0	19.0	17.0	12.0	8.0
Livestock	9	-1.8	1.5	2.5	2.5	2.3	2.3	3.0	3.0	3.0	3.0	3.0
Forestry and Fishing	2	5.8	7.0	2.5	2.5	2.3	2.3	2.9	3.0	3.0	3.0	3.0
Oil and Gas Extraction	22	-6.3	2.7	-1.1	-1.1	5.8	-3.8	10.3	28.3	16.2	-4.9	-4.4
Secondary sector	11	1.4	4.6	25.1	14.0	20.5	10.6	9.8	8.9	8.2	6.6	5.5
Manufacturing (non petroleum)	2	-0.3	0.2	13.5	22.1	15.1	19.8	23.1	20.9	18.7	13.2	8.8
Of which : cotton processing	2	-9.7	-10.5	20.0	22.1	33.0	17.6	42.9	42.9	42.9	3.3	3.3
Handicrafts	1	-33.8	-49.6	60.9	27.5	27.3	5.4	5.0	4.8	4.8	4.8	4.6
Utilities	5	5.0	5.3	10.8	10.8	7.2	12.1	10.0	9.3	9.3	7.3	7.0
Construction	1	8.7	14.5	14.4	14.4	38.5	11.8	6.5	4.1	1.7	0.8	1.9
Of which : oil related	3	3.4	12.4	-2.1	1.5	1.0	20.3	5.8	1.2	-3.8	-6.7	-4.5
Refinery	…	…	…	…	…	…	71.5	52.0	43.7	4.3	3.9	2.4
Tertiary sector	44	2.8	8.8	7.0	7.0	5.2	6.7	7.2	6.4	6.4	6.4	6.4
Commerce, transport	21	-0.6	16.6	6.9	6.9	5.0	5.6	6.7	6.6	6.6	6.6	6.6
Commerce	18	-0.5	17.7	4.9	4.9	4.5	4.5	5.8	5.8	5.8	5.8	5.8
Transport	2.6	-1.6	8.9	21.5	21.5	8.0	12.3	11.7	10.7	10.7	10.7	10.7
General government	15.5	11.7	0.2	5.5	5.5	5.2	5.0	5.0	5.0	5.0	5.0	5.0
Other	8.1	-3.3	5.7	-7.3	10.4	6.0	13.0	12.1	8.0	8.0	8.0	8.0
Total GDP	100.0	-1.2	13.0	3.1	0.5	7.4	5.4	7.7	10.5	8.2	3.4	3.5
Oil GDP (including investment)	23	-5.1	6.4	-1.8	-2.5	10.4	-1.3	11.3	27.3	14.8	-4.6	-4.1
Non-oil GDP	77	0.0	15.0	3.6	1.4	6.0	7.1	6.8	6.3	6.2	5.9	5.7

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

[1] Share of 2009 GDP.

[2] IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

Table 3a. Chad: Fiscal Operations of the Central Government, 2009–2017

(Billions of CFA francs, unless otherwise indicated)

	2009	2010	2011		2012			2013	2014	2015	2016	2017
			Art. IV[1]	Est.	Art. IV[1]	LFR[2]	Proj.	Projections				
Revenue	540	1,000	1,280	1,331	1,189	1,328	1,298	1,277	1,436	1,727	1,666	1,639
Oil	284	676	973	1,017	823	963	963	892	989	1,218	1,096	1,005
Non-oil	256	324	308	314	366	365	335	385	447	509	570	634
Tax	239	313	288	296	336	338	309	360	417	473	519	569
Non-tax	16	11	19	18	30	27	27	25	30	36	51	65
Expenditure	987	1,289	1,227	1,284	1,129	1,604	1,595	1,574	1,610	1,630	1,628	1,707
Current	634	766	727	736	628	813	825	834	885	913	881	951
Wages and salaries	201	216	263	250	299	283	283	310	335	360	391	425
Goods and services	110	111	79	87	153	147	147	159	173	188	205	222
Transfers and subsidies	302	411	362	364	156	348	348	317	323	307	228	247
Interest	21	29	23	35	19	34	46	47	54	58	57	56
Domestic	5	14	13	25	9	17	17	20	26	27	24	21
External	16	16	10	10	10	17	29	27	29	31	33	36
Investment	353	522	500	548	500	792	770	740	725	717	747	757
Domestically financed	242	392	368	416	344	499	499	476	442	419	432	425
Foreign financed	111	130	132	132	156	293	271	264	282	298	315	332
Overall balance (excl. grants, commitment)	-447	-288	54	46	60	-276	-296	-297	-173	97	38	-68
Non-oil primary balance (excl. grants, commitment)[3]	-601	-805	-764	-804	-600	-912	-942	-882	-832	-774	-707	-717
Change in arrears[4]	-83	-159	-142	-166	-202	…	-50	-124	-119	-117	-114	-108
Float[5]	85	142	202	50	163	…	124	119	117	114	108	112
Errors and omissions	2	64	…	3	…	…	…	…	…	…	…	…
Overall balance (excl. grants, cash)	-444.1	-240.6	113	-66	22	…	-222	-302	-175	94	32	-65
Financing	444	241	-113	66	-22	…	222	302	175	-94	-32	65
Domestic financing	327	60	-212	-22	-146	…	-15	113	-28	-310	-262	-221
Bank financing	328	50	-198	-110	-132	…	67	-82	-112	-273	-245	-221
Central Bank (BEAC)	327	49	-190	-106	-148	…	92	-50	-88	-263	-235	-211
Deposits	211	-23	-145	-100	-105	…	117	-27	-65	-242	-214	-190
Advances (net)	120	76	-42	0	-42	…	-21	-21	-21	-21	-21	-21
IMF (reimbursement)	-4	-4	-4	-5	-2	…	-4	-2	-2	-1	0	0
Commercial banks	0	0	-7	-5	16	…	-25	-32	-24	-10	-10	-10
Non-bank financing (net)	-1	0	-14	88	-14	…	-82	195	83	-36	-18	0
Privatization	1	10	0	1	0	…	0	0	0	0	0	0
Foreign financing	117	181	98	88	124	…	237	190	204	215	231	286
Grants	115	69	80	91	108	…	103	104	117	127	137	148
Budget support	35	0	0	0	0	…	0	0	0	0	0	0
Project grants	80	69	80	91	108	…	103	104	117	127	137	148
Loans (net)	1	112	18	-3	16	…	134	86	87	88	93	138
Disbursements	30	157	51	41	61	…	168	160	165	171	177	184
Budget borrowings	0	141	0	0	0	…	0	0	0	0	0	0
Project loans	59	61	85	41	61	…	168	160	165	171	177	184
Amortization	-29	-45	-33	-44	-32	…	-34	-74	-79	-83	-84	-46
Memorandum items:												
Non-oil GDP	2,138	2,584	2,912	2,859	3,128	3,245	3,224	3,527	3,845	4,186	4,551	4,940
Bank deposits (mostly BEAC)	82	105	250	205	354	…	88	115	180	422	636	826
(Months of domestically-financed spending)	1.1	1.1	2.7	2.1	4.4	…	0.8	1.1	1.6	3.8	5.8	7.2
BEAC statutory advances	142	166	166	209	167	…	188	167	146	125	104	83

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

[1]IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

[2]Supplementary budget.

[3]Total revenue, less grants and oil revenue, minus total expenditures, less net interest payments and foreign financed investment.

[4]Before 2013, clearance of arrears, in excess of float, accrued in prior fiscal years. From 2013 forward, equal to prior fiscal year's float.

[5]Difference between committed and cash expenditure.

Table 3b. Chad: Integrated Financial Balance Sheet of the Central Government, 2009–2017[1]

(Billions of CFA francs, unless otherwise indicated)

	2009	2010	2011		2012			2013	2014	2015	2016	2017
			Art. IV[2]	Est.	Art. IV[2]	LFR[3]	Proj.	Projections				
Revenue	655	1,069	1,361	1,422	1,297	1,431	1,402	1,380	1,553	1,854	1,803	1,787
Taxes	433	781	1,002	1,055	940	972	943	1,004	1,092	1,326	1,286	1,270
Of which : income tax related to oil activities	194	469	714	759	604	634	634	645	675	853	766	702
Grants	115	69	80	91	108	103	103	104	117	127	137	148
Other revenue	107	219	278	276	249	356	356	272	344	401	380	368
Of which : interest	1	0	0	0	12	0	0	4	6	9	21	32
Of which : rent (oil revenue)	90	208	259	258	219	329	329	247	315	365	329	304
Expenditure	987	1,289	1,227	1,284	1,129	1,604	1,595	1,574	1,610	1,630	1,628	1,707
Expense	634	766	727	736	628	813	825	834	885	913	881	951
Compensation of employees	201	216	263	250	299	283	283	310	335	360	391	425
Use of goods and services	110	111	79	87	153	147	147	159	173	188	205	222
Interest	21	29	23	35	19	34	46	47	54	58	57	56
To nonresidents	16	16	10	10	10	17	29	27	29	31	33	36
To residents other than general government	5	14	13	25	9	17	17	20	26	27	24	21
Subsidies	66	115	125	98	64	154	154	129	102	96	55	59
Grants	44	76	83	65	42	103	103	86	68	64	36	40
Other expense	193	220	154	201	50	91	91	102	154	147	137	148
Net acquisition of nonfinancial assets	353	522	500	548	500	792	770	740	725	717	747	757
Domestically financed	242	392	368	416	344	499	499	476	442	419	432	425
Foreign financed	111	130	132	132	156	293	271	264	282	298	315	332
Net lending/borrowing	-332	-220	134	137	168	-173	-193	-193	-57	224	175	80
Primary non-oil net lending/ borrowing [4]	-596	-867	-815	-845	-648	-1,102	-1,110	-1,038	-991	-936	-863	-869
Financial assets	-213	13	145	100	105	…	-117	27	65	242	214	190
Domestic	-213	13	145	100	105	…	-117	27	65	242	214	190
Currency and deposits ("+" = buildup)	-212	23	145	100	105	…	-117	27	65	242	214	190
BEAC	-211	23	145	100	105	…	-117	27	65	242	214	190
Commercial banks	-1	0	0	0	0	…	0	0	0	0	0	0
Equity and investment fund shares	-1	-10	0	-1	0	…	0	0	0	0	0	0
Foreign	0	0	0	0	0	…	0	0	0	0	0	0
Liabilities	117	169	11	-41	-64	…	76	221	122	17	38	110
Domestic	116	56	-7	-38	-80	…	-58	135	35	-71	-55	-27
Currency and deposits	0	0	0	0	0	…	0	0	0	0	0	0
Loans	114	73	-67	78	-41	…	-132	140	37	-68	-49	-31
Of which : BEAC	116	72	-46	-5	-44	…	-25	-23	-22	-22	-21	-21
Of which : commercial banks	0	0	-7	-5	16	…	-25	-32	-24	-10	-10	-10
Other accounts payable	1	-17	60	-115	-39	…	74	-5	-2	-3	-6	4
Foreign	1	112	18	-3	16	…	134	86	87	88	93	138
Loans	1	112	18	-3	16	…	134	86	87	88	93	138
Statistical discrepancies	-2	-64	0	-3	0	…	0	0	0	0	0	0
Memorandum items:												
Non-oil GDP	2,138	2,584	2,912	2,859	3128	3,245	3,224	3,527	3,845	4,186	4,551	4,940
Oil revenue	284	676	973	1,017	823	963	963	892	989	1,218	1,096	1,005
Non-oil revenue	371	393	388	405	474	365	335	385	447	509	570	634
Deposits in banks (mostly BEAC)	82	105	250	205	354	…	88	115	180	422	636	826
(Months of domestically financed spending)	1.1	1.1	2.7	2.1	4.4	…	0.8	1.1	1.6	3.8	5.8	7.2

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

[1] Presentation of fiscal table according to *Government Finance Statistics Manual 2001* .

[2] IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

[3] Supplementary budget.

[4] Total revenue, less oil rent and income tax related to oil activities, minus total expenditure, less interest payments.

Table 4a. Chad: Fiscal Operations of the Central Government, 2009–2017

(Percent of non-oil GDP, unless otherwise indicated)

	2009	2010	2011		2012			2013	2014	2015	2016	2017
			Art. IV[1]	Est.	Art. IV[1]	LFR[2]	Proj.	Projections				
Revenue	25.2	38.7	44.0	46.5	38.0	40.9	40.3	36.2	37.3	41.3	36.6	33.2
Oil	13.3	26.2	33.4	35.6	26.3	29.7	29.9	25.3	25.7	29.1	24.1	20.4
Non-oil	12.0	12.5	10.6	11.0	11.7	11.2	10.4	10.9	11.6	12.2	12.5	12.8
Tax	11.2	12.1	9.9	10.4	10.7	10.4	9.6	10.2	10.9	11.3	11.4	11.5
Non-tax	0.8	0.4	0.7	0.6	1.0	0.8	0.8	0.7	0.8	0.9	1.1	1.3
Expenditure	46.1	49.9	42.1	44.9	36.1	49.4	49.5	44.6	41.9	38.9	35.8	34.6
Current	29.7	29.6	25.0	25.8	20.1	25.1	25.6	23.6	23.0	21.8	19.4	19.2
Wages and salaries	9.4	8.3	9.0	8.8	9.6	8.7	8.8	8.8	8.7	8.6	8.6	8.6
Goods and services	5.2	4.3	2.7	3.0	4.9	4.5	4.6	4.5	4.5	4.5	4.5	4.5
Transfers and subsidies	14.1	15.9	12.4	12.7	5.0	10.7	10.8	9.0	8.4	7.3	5.0	5.0
Interest	1.0	1.1	0.8	1.2	0.6	1.1	1.4	1.3	1.4	1.4	1.3	1.1
Domestic	0.2	0.5	0.4	0.9	0.3	0.5	0.5	0.6	0.7	0.6	0.5	0.4
External	0.7	0.6	0.4	0.4	0.3	0.5	0.9	0.8	0.7	0.7	0.7	0.7
Investment	16.5	20.2	17.2	19.2	16.0	24.4	23.9	21.0	18.8	17.1	16.4	15.3
Domestically financed	11.3	15.2	12.6	14.6	11.0	15.4	15.5	13.5	11.5	10.0	9.5	8.6
Foreign financed	5.2	5.0	4.5	4.6	5.0	9.0	8.4	7.5	7.3	7.1	6.9	6.7
Overall balance (excl. grants, commitment)	-20.9	-11.2	1.8	1.6	1.9	-8.5	-9.2	-8.4	-4.5	2.3	0.8	-1.4
Non-oil primary balance (excl. grants, commitment)[3]	-28.1	-31.2	-26.2	-28.1	-19.2	-28.1	-29.2	-25.0	-21.6	-18.5	-15.5	-14.5
Change in arrears[4]	-3.9	-6.2	-4.9	-5.8	-6.5	…	-1.6	-3.5	-3.1	-2.8	-2.5	-2.2
Float[5]	4.0	5.5	6.9	1.8	5.2	…	3.9	3.4	3.1	2.7	2.4	2.3
Errors and omissions	0.1	2.5	…	0.1	…	…	…	…	…	…	…	…
Overall balance (excl. grants, cash)	-20.8	-9.3	3.9	-2.3	0.7	…	-6.9	-8.6	-4.6	2.3	0.7	-1.3
Financing	20.8	9.3	-3.9	2.3	-0.7	…	6.9	8.6	4.6	-2.3	-0.7	1.3
Domestic financing	15.3	2.3	-7.3	-0.8	-4.7	…	-0.5	3.2	-0.7	-7.4	-5.8	-4.5
Bank financing	15.3	1.9	-6.8	-3.9	-4.2	…	2.1	-2.3	-2.9	-6.5	-5.4	-4.5
Central Bank (BEAC)	15.3	1.9	-6.5	-3.7	-4.7	…	2.9	-1.4	-2.3	-6.3	-5.2	-4.3
Deposits	9.9	-0.9	-5.0	-3.5	-3.3	…	3.6	-0.8	-1.7	-5.8	-4.7	-3.9
Advances (net)	5.6	2.9	-1.4	0.0	-1.3	…	-0.6	-0.6	-0.5	-0.5	-0.5	-0.4
IMF (reimbursement)	-0.2	-0.1	-0.1	-0.2	-0.1	…	-0.1	-0.1	0.0	0.0	0.0	0.0
Commercial banks	0.0	0.0	-0.3	-0.2	0.5	…	-0.8	-0.9	-0.6	-0.2	-0.2	-0.2
Non-bank financing (net)	-0.1	0.0	-0.5	3.1	-0.5	…	-2.6	5.5	2.2	-0.9	-0.4	0.0
Privatization	0.0	0.4	0.0	0.0	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Foreign financing	5.5	7.0	3.4	3.1	4.0	…	7.4	5.4	5.3	5.1	5.1	5.8
Grants	5.4	2.7	2.8	3.2	3.5	…	3.2	2.9	3.0	3.0	3.0	3.0
Budget support	1.6	0.0	0.0	0.0	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Project grants	3.8	2.7	2.8	3.2	3.5	…	3.2	2.9	3.0	3.0	3.0	3.0
Loans (net)	0.1	4.3	0.6	-0.1	0.5	…	4.2	2.4	2.3	2.1	2.0	2.8
Disbursements	1.4	6.1	1.8	1.4	2.0	…	5.2	4.5	4.3	4.1	3.9	3.7
Budget borrowings	0.0	5.5	0.0	0.0	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Project loans	2.8	2.4	2.9	1.4	2.0	…	5.2	4.5	4.3	4.1	3.9	3.7
Amortization	-1.4	-1.7	-1.1	-1.5	-1.0	…	-1.0	-2.1	-2.1	-2.0	-1.8	-0.9
Memorandum items:												
Non-oil GDP	2,138	2,584	2,912	2,859	3,128	3,245	3,224	3,527	3,845	4,186	4,551	4,940
Bank deposits (mostly BEAC)	3.8	4.1	8.6	7.2	11.3	…	2.7	3.3	4.7	10.1	14.0	16.7
(In months of domestically-financed spending)	1.1	1.1	2.7	2.1	4.4	…	0.8	1.1	1.6	3.8	5.8	7.2
BEAC statutory advances	6.6	6.4	5.7	7.3	5.3	…	5.8	4.7	3.8	3.0	2.3	1.7

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

[1]IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

[2]Supplementary budget.

[3]Total revenue, less grants and oil revenue, minus total expenditures, less net interest payments and foreign financed investment.

[4]Before 2013, clearance of arrears, in excess of float, accrued in prior fiscal years. From 2013 forward, equal to prior fiscal year's float.

[5]Difference between committed and cash expenditure.

Table 4b. Chad: Integrated Financial Balance Sheet of the Central Government, 2009–2017[1]

(Percent of non-oil GDP, unless otherwise indicated)

	2009	2010	2011		2012			2013	2014	2015	2016	2017
			Art. IV[2]	Est.	Art. IV[2]	LFR[3]	Proj.	Projections				
Revenue	30.6	41.4	46.7	49.7	41.5	44.1	43.5	39.1	40.4	44.3	39.6	36.2
Taxes	20.3	30.2	34.4	36.9	30.0	30.0	29.2	28.5	28.4	31.7	28.2	25.7
Of which : income tax related to oil activities	9.1	18.1	24.5	26.5	19.3	19.5	19.7	18.3	17.5	20.4	16.8	14.2
Grants	5.4	2.7	2.8	3.2	3.5	3.2	3.2	2.9	3.0	3.0	3.0	3.0
Other revenue	5.0	8.5	9.5	9.6	8.0	11.0	11.0	7.7	8.9	9.6	8.4	7.5
Of which : interest	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.1	0.2	0.5	0.6
Of which : rent (oil revenue)	4.2	8.0	8.9	9.0	7.0	10.1	10.2	7.0	8.2	8.7	7.2	6.1
Expenditure	46.1	49.9	42.1	44.9	36.1	49.4	49.5	44.6	41.9	38.9	35.8	34.6
Expense	29.7	29.7	25.0	25.8	20.1	25.1	25.6	23.6	23.0	21.8	19.4	19.2
Compensation of employees	9.4	8.3	9.0	8.8	9.6	8.7	8.8	8.8	8.7	8.6	8.6	8.6
Use of goods and services	5.2	4.3	2.7	3.0	4.9	4.5	4.6	4.5	4.5	4.5	4.5	4.5
Interest	1.0	1.1	0.8	1.2	0.6	1.1	1.4	1.3	1.4	1.4	1.3	1.1
To nonresidents	0.7	0.6	0.4	0.4	0.3	0.5	0.9	0.8	0.7	0.7	0.7	0.7
To residents other than general government	0.2	0.5	0.4	0.9	0.3	0.5	0.5	0.6	0.7	0.6	0.5	0.4
Subsidies	3.1	4.4	1.1	3.4	2.0	4.7	4.8	3.7	2.6	2.3	1.2	1.2
Grants	2.0	3.0	6.1	2.3	1.4	3.2	3.2	2.4	1.8	1.5	0.8	0.8
Other expense	9.0	8.5	5.3	7.0	1.6	2.8	2.8	2.9	4.0	3.5	3.0	3.0
Net acquisition of nonfinancial assets	16.5	20.2	17.2	19.2	16.0	24.4	23.9	21.0	18.8	17.1	16.4	15.3
Domestically financed	11.3	15.2	12.6	14.6	11.0	15.4	15.5	13.5	11.5	10.0	9.5	8.6
Foreign financed	5.2	5.0	4.5	4.6	5.0	9.0	8.4	7.5	7.3	7.1	6.9	6.7
Net lending/ borrowing	-15.5	-8.5	4.6	4.8	5.4	-5.3	-6.0	-5.5	-1.5	5.4	3.9	1.6
Primary non-oil net lending/ borrowing [4]	-27.9	-33.5	-28.0	-29.5	-20.7	-34.0	-34.4	-29.4	-25.8	-22.4	-19.0	-17.6
Financial assets	-10.0	0.5	5.0	3.5	3.3	…	-3.6	0.8	1.7	5.8	4.7	3.9
Domestic	-10.0	0.5	5.0	3.5	3.3	…	-3.6	0.8	1.7	5.8	4.7	3.9
Currency and deposits ("+" = buildup)	-9.9	0.9	5.0	3.5	3.3	…	-3.6	0.8	1.7	5.8	4.7	3.9
BEAC	-9.9	0.9	5.0	3.5	3.3	…	-3.6	0.8	1.7	5.8	4.7	3.9
Commercial banks	0.0	0.0	0.0	0.0	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Equity and investment fund shares	0.0	-0.4	0.0	0.0	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Foreign	0.0	0.0	0.0	0.0	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Liabilities	5.5	6.5	0.4	-1.4	-2.0	…	2.4	6.3	3.2	0.4	0.8	2.2
Domestic	5.4	2.2	-0.3	-1.3	-2.6	…	-1.8	3.8	0.9	-1.7	-1.2	-0.5
Currency and deposits	0.0	0.0	0.0	0.0	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Loans	5.3	2.8	-2.3	2.7	-1.3	…	-4.1	4.0	1.0	-1.6	-1.1	-0.6
Of which : BEAC	5.4	2.8	-1.6	-0.2	-1.4	…	-0.8	-0.7	-0.6	-0.5	-0.5	-0.4
Of which : commercial banks	0.0	0.0	-0.3	-0.2	0.5	…	-0.8	-0.9	-0.6	-0.2	-0.2	-0.2
Other accounts payable	0.1	-0.6	2.1	-4.0	-1.2	…	2.3	-0.1	0.0	-0.1	-0.1	0.1
Foreign	0.1	4.3	0.6	-0.1	0.5	…	4.2	2.4	2.3	2.1	2.0	2.8
Loans	0.1	4.3	0.6	-0.1	0.5	…	4.2	2.4	2.3	2.1	2.0	2.8
Statistical discrepancies	-0.1	-2.5	0.0	-0.1	0.0	…	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:												
Non-oil GDP	2,138	2,584	2,912	2,859	3128	3,245	3,224	3,527	3,845	4,186	4,551	4,940
Oil revenue	13.3	26.2	33.4	35.6	26.3	29.7	29.9	25.3	25.7	29.1	24.1	20.4
Non-oil revenue	17.4	15.2	13.3	14.2	15.2	11.2	10.4	10.9	11.6	12.2	12.5	12.8
Deposits in banks (mostly BEAC)	3.8	4.1	8.6	7.2	11.3	…	2.7	3.3	4.7	10.1	14.0	16.7
(Months of domestically financed spending)	1.1	1.1	2.7	2.1	4.4	…	0.8	1.1	1.6	3.8	5.8	7.2

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

[1] Presentation of fiscal table according to *Government Finance Statistics Manual 2001* .

[2] IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

[3] Supplementary budget.

[4] Total revenue, less oil rent and income tax related to oil activities, minus total expenditure, less interest payments.

Table 5. Chad: Balance of Payments, 2009–2017

(Billions of CFA francs, unless otherwise indicated)

	2009	2010	2011		2012		2013	2014	2015	2016	2017
	Est.		Art. IV[1]	Est.	Art. IV[1]	Proj.	Projections				
Current account	-137	-213	-1,069	-48	-767	-63	-204	49	416	243	174
Trade balance, incl. oil sector	374	569	430	760	611	805	693	907	1,304	1,016	921
Exports, f.o.b.	1,320	1,752	2,153	2,032	2,016	2,279	2,291	2,623	3,021	2,778	2,608
Of which : oil	1,153	1,602	1,929	1,836	1,790	2,058	2,048	2,348	2,707	2,453	2,267
Imports, f.o.b.	-946	-1,183	-1,723	-1,272	-1,405	-1,474	-1,599	-1,716	-1,716	-1,762	-1,688
Services (net)	-672	-923	-1,369	-928	-1,201	-950	-859	-831	-797	-738	-719
Income (net)	-182	-176	-467	-148	-534	-392	-334	-336	-414	-371	-378
Transfers (net)	344	317	338	268	358	474	295	309	323	336	350
Official (net)	35	22	26	17	28	20	22	24	27	29	32
Private (net)	309	294	312	251	329	454	273	285	296	307	318
Financial and capital account	-98	-30	1,313	145	932	-54	232	16	-174	-30	16
Capital transfers	49	59	80	85	108	100	100	113	123	134	145
Foreign direct investment	177	155	875	133	561	92	165	-112	-150	-64	-54
Other medium and long term investment	27	65	9	99	7	124	76	77	79	84	128
Public sector	36	74	18	108	16	134	86	87	88	93	138
Private sector	-9	-9	-9	-9	-9	-10	-10	-10	-10	-10	-10
Short-term capital	-351	-309	349	-172	255	-370	-110	-62	-227	-184	-202
Errors and omisions	-116	249	…	72	…	…	…	…	…	…	…
Overall balance	-350	5	244	169	165	-117	27	65	242	214	190
Financing	350	-5	-244	-169	-165	117	-27	-65	-242	-214	-190
Net foreign assets (BEAC)	350	-5	-244	-169	-165	117	-27	-65	-242	-214	-190
Memorandum items:											
Gross official reserves (imputed reserves, billions of U.S. dollars)	0.6	0.6	5.8	1.0	0.8	1.2	1.0	1.1	1.2	1.6	2.0
(Months of imports of goods and services)	1.6	1.5	2.4	2.3	3.7	3.0	2.4	2.5	2.8	4.0	5.0
(Idem, excluding oil sector imports)	1.9	1.8	0.8	2.8	1.1	4.0	3.3	3.4	3.7	5.0	6.0

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

[1] IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

Table 6. Chad: Monetary Survey, 2009–2013

(Billions of CFA francs)

	2009	2010	2011		2012		2013
			Art. IV[1]	Est.	Art. IV[1]	Proj.	Proj.
Net foreign assets	238.3	302.7	586.1	455.7	754.9	341.6	411.2
Central bank	227.4	262.0	538.2	430.5	703.1	313.4	340.7
Commercial banks	10.9	40.7	47.9	25.2	51.8	28.2	70.6
Net domestic assets	237.8	300.5	86.8	221.1	-20.5	408.1	409.0
Domestic credit	267.7	349.0	178.7	280.6	71.3	393.9	363.7
Claims on the government (net)	63.6	105.1	-87.3	-10.6	-219.0	56.8	-25.4
Treasury (net)	110.8	141.9	-25.0	-3.4	-159.9	61.9	-24.1
Banking sector	72.5	133.6	-30.9	-9.3	-162.6	58.0	-24.1
Central bank	88.0	154.1	-3.1	20.0	-151.1	112.3	62.0
Commercial banks	-16.2	-21.1	-28.4	-29.9	-12.0	-54.8	-86.7
CCP	0.8	0.6	0.6	0.6	0.6	0.6	0.6
Fund position	38.3	8.3	5.9	5.9	2.7	3.8	0.0
Other non-treasury	-47.2	-36.8	-62.3	-7.2	-59.1	-5.1	-5.1
Credit to the economy	204.1	243.9	266.0	291.2	290.3	337.1	389.1
Other items (net)	-29.9	-48.5	-91.8	-59.5	-91.8	14.2	45.3
Money and quasi money	475.9	603.2	672.9	676.8	734.4	749.7	820.2
Currency outside banks	280.1	333.9	363.8	356.2	395.2	394.6	410.1
Demand deposits	162.7	230.8	240.7	269.7	262.1	298.7	335.0
Time and savings deposits	33.1	35.3	68.4	50.9	77.1	56.4	75.1
Memorandum items:							
Broad money (annual percentage change)	1.1	26.8	12.7	12.2	9.1	10.8	9.4
Credit to the economy (annual percentage change)	14.6	19.5	9.1	19.4	9.1	15.8	15.4
Credit to the economy (percent of GDP)	6.1	5.8	5.9	5.9	6.4	6.0	6.3
Credit to the economy (percent of non-oil GDP)	9.5	9.4	9.1	10.2	9.3	10.5	11.0
Velocity (non-oil GDP)	4.5	4.3	4.3	4.2	4.3	4.3	4.3
Velocity (total GDP)	7.0	7.0	6.7	7.3	6.2	7.5	7.5
Net claims on the government (flows)	341.2	41.5	-197.8	-115.7	-131.7	67.4	-82.2

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

[1] IMF Country Report No. 11/302; Chad-Staff Report for the 2011 Article IV Consultation.

Table 7. Chad: Financial Soundness Indicators, 2007–2011

	2007	2008	2009	2010	2011
Capital adequacy					
Regulatory capital / Risk-weighted assets	11.1	13.3	12.1	6.7	19.7
Asset quality					
Gross nonperforming loans/Gross banking loans	11.2	8.0	10.4	12.1	9.8
Provisions / Nonperforming loans	84.4	70.2	64.6	73.5	75.6
Net nonperforming loans/Gross banking loans	1.7	2.4	3.7	3.2	2.4
Profitability					
Return on assets	2.7	3.9	1.3	3.7	2.4
Return on equity	26.3	36.4	11.4	39.4	11.7
Liquidity					
Liquid assets / Total assets	28.3	19.6	17.9	18.2	29.9
Liquid assets / Demand deposits	66.3	82.4	85.2	73.8	75.2
Banks' ratings (number of banks rated)					
Solid or Good	6	4	4	3	5
Fragile	0	1	1	1	2
Critical	0	1	1	2	0
Not rated	1	1	2	2	1
Total	7	7	8	8	8

Sources: BEAC/COBAC.

Table 8. Chad: Millennium Development Goals, 1990–2011[1]

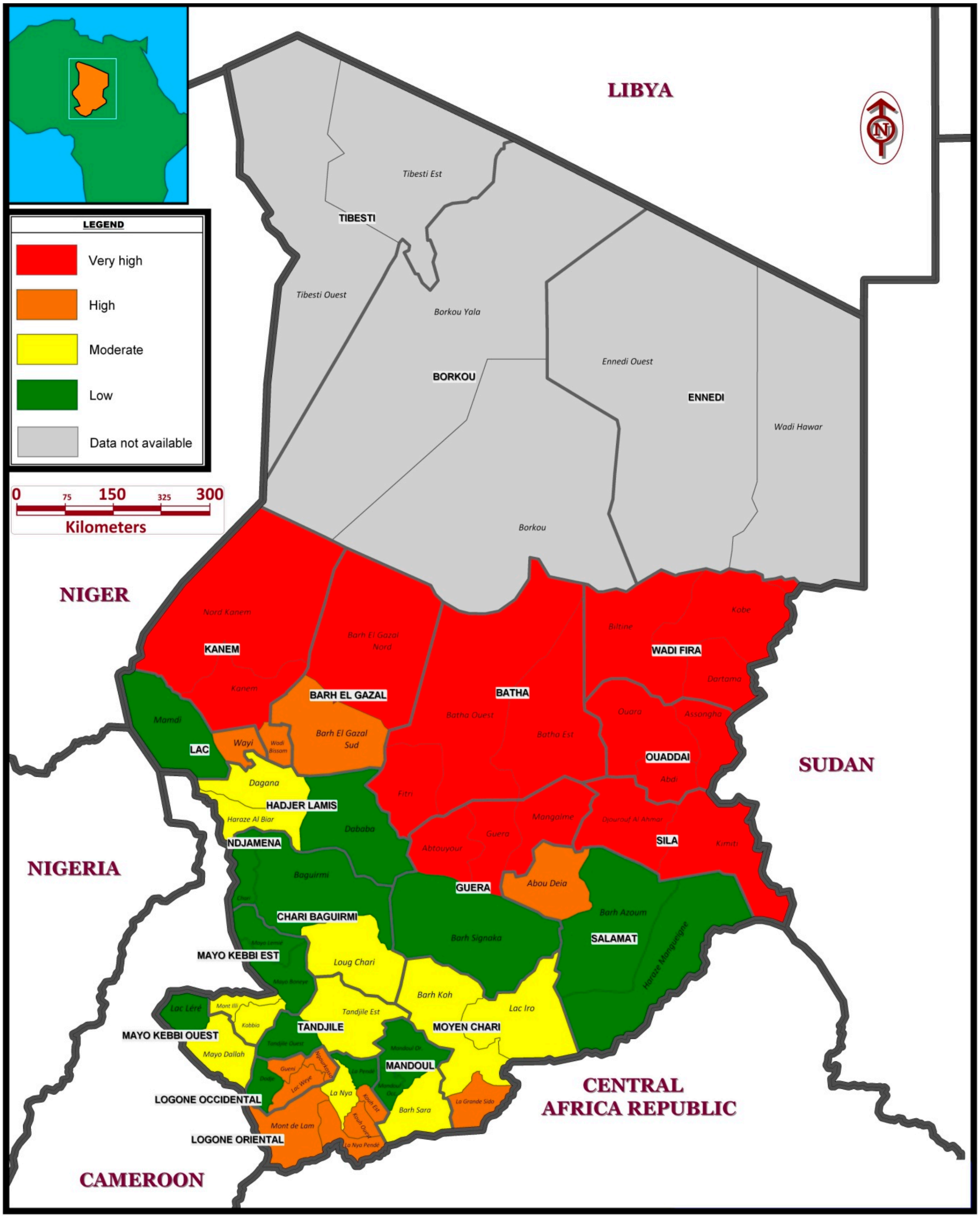
	1990	1995	2000	2005	2011	2011 SSA
Goal 1: Eradicate extreme poverty and hunger						
Employment to population ratio, 15+, total (%)	*66.8*	67.0	66.7	66.6	*66.7*	*39.1*
Employment to population ratio, ages 15–24, total (%)	*49.3*	49.2	49.1	49.2	*49.1*	*13.0*
Income share held by lowest 20%	…	…	…	*6.3*	…	*2.7*
Malnutrition prevalence, weight for age (% of children under 5)	…	*34.3*	29.4	*33.9*	…	…
Poverty gap at $1.25 a day (PPP) (%)	…	…	…	*25.6*	*16.5* [2]	*2.3*
Poverty headcount ratio at $1.25 a day (PPP) (% of population)	…	…	…	*61.9*	*46.7* [2]	*13.8*
Vulnerable employment, total (% of total employment)	…	*93.7*	…	…	…	*10.1*
Goal 2: Achieve universal primary education						
Literacy rate, youth female (% of females ages 15–24)	…	*9.0*	23.2	*30.8*	*39.0*	…
Literacy rate, youth male (% of males ages 15–24)	…	*26.2*	55.7	*53.7*	*53.5*	…
Persistence to last grade of primary, total (% of cohort)	25.5	20.9	46.9	30.1	*27.8*	…
Primary completion rate, total (% of relevant age group)	16.5	14.4	22.9	32.4	*34.5*	…
Total enrollment, primary (% net)	…	*38.5*	54.6	*62.5*	…	*90.0*
Goal 3: Promote gender equality and empower women						
Proportion of seats held by women in national parliaments (%)	…	*17.0*	2.0	6.5	12.8	44.5
Ratio of female to male primary enrollment (%)	43.8	48.3	61.1	67.5	*72.9*	*95.8*
Ratio of female to male secondary enrollment (%)	21.9	23.5	28.4	34.5	*42.1*	*105.0*
Ratio of female to male tertiary enrollment (%)	…	*14.9*	17.5	6.4	*17.4*	…
Share of women employed in the nonagricultural sector (% of total nonagricultural employment)	3.8	…	…	…	…	*45.1*
Goal 4: Reduce child mortality						
Immunization, measles (% of children ages 12–23 months)	32.0	26.0	28.0	32.0	*46.0*	*65.0*
Mortality rate, infant (per 1,000 live births)	113.0	109.0	105.0	101.0	97.1	34.6
Mortality rate, under-5 (per 1,000)	208.0	198.0	189.0	180.0	169.0	46.7
Goal 5: Improve maternal health						
Adolescent fertility rate (births per 1,000 women ages 15–19)	…	…	191.0	175.0	*149.0*	*53.9*
Births attended by skilled health staff (% of total)	…	*15.0*	16.3	*14.4*	*22.7*	…
Contraceptive prevalence (% of women ages 15–49)	…	*4.1*	7.9	*2.8*	*4.8*	…
Maternal mortality ratio (modeled estimate, per 100,000 live births)	920.0	1000.0	1100.0	1100.0	*1100.0*	*300.0*
Pregnant women receiving prenatal care (%)	…	*23.4*	41.6	*38.9*	*53.1*	…
Unmet need for contraception (% of married women ages 15–49)	…	*9.7*	…	*20.7*	…	…
Goal 6: Combat HIV/AIDS, malaria, and other diseases						
Children with fever receiving antimalarial drugs (% of children under age 5 with fever)	…	…	53.0	*53.0*	*35.7*	…
Condom use, population ages 15-24, female (% of females ages 15–24)	…	…	…	*2.4*	…	…
Condom use, population ages 15–24, male (% of males ages 15–24)	…	…	…	*18.4*	…	…
Incidence of tuberculosis (per 100,000 people)	125.0	181.0	262.0	315.0	*276.0*	*981.0*
Prevalence of HIV, female (% ages 15–24)	…	…	…	…	*2.5*	*13.6*
Prevalence of HIV, male (% ages 15–24)	…	…	…	…	*1.0*	*4.5*
Prevalence of HIV, total (% of population ages 15–49)	1.1	2.1	3.0	3.5	*3.4*	*17.8*
Tuberculosis case detection rate (%, all forms)	34.0	25.0	*25.0*	20.0	*31.0*	*72.0*
	…	…	…	…	…	
Goal 7: Ensure environmental sustainability	…	…	…	…	…	
Forest area (% of land area)	10.4	…	9.8	9.5	*9.2*	*4.7*
Improved sanitation facilities (% of population with access)	8.0	9.0	10.0	12.0	*13.0*	*79.0*
Improved water source (% of population with access)	39.0	42.0	45.0	48.0	*51.0*	*91.0*
Marine protected areas (% of total surface area)	…	…	…	…	…	*6.5*
Goal 8: Develop a global partnership for development						
Internet users (per 100 people)	0.0	*0.0*	0.0	0.4	1.9	20.9
Mobile cellular subscriptions (per 100 people)	0.0	0.0	0.1	2.2	31.8	127.0
Telephone lines (per 100 people)	0.1	0.1	0.1	0.1	0.3	8.2

Source: World Development Indicators database (The World Bank).

[1]Figures in italics refer to periods other than those specified.

[2]Based on the preliminary household survey issued in October 2012, using the poverty threshold defined as 2,400 kcal per day (the minimum daily calorie requirement). Using this definiton, the corresponding values for poverty gap and poverty headcount ratio in 2003/2004 were 21.6% and 55%, respectively.

ANNEX I. CHAD: LEVEL OF VULNERABILITY TO FOOD INSECURITY—DECEMBER 2011



Source: World Food Programme.

ANNEX II. CHAD: RISK ASSESSMENT MATRIX

Nature/Sources of Main Risks	Likelihood of realization in the Next Three Years	Expected Impact on Economy if Risk is Realized
A crisis-induced substantial decline in global oil prices	***Staff assessment: Medium*** Spillovers from the Eurozone crisis could lower global growth, affecting commodity and oil prices. Independently, the softening of growth in Asia may also provoke a decline in the demand from oil.	***Staff assessment: High*** Chad is highly dependent on oil, which accounts for more than 70 percent of fiscal revenues, about 90 percent of total exports of goods, and 35 percent of nominal GDP. Fiscal and external balances would deteriorate. The government has currently insufficient fiscal buffers.
A deterioration of the security situation, including through regional spillovers from Niger and Mali	***Staff assessment: Medium*** The domestic security situation remains fragile. The possibility of a renewed insurgency cannot be ignored.	***Staff assessment: High*** It could cause: (i) political instability; (ii) displacement of population and increased need for humanitarian aid; and (iii) increased security-related government expenditures.
A deepening of the food security crisis across the Sahel region	***Staff assessment: Medium*** In Chad, agricultural production is expected to rebound in 2012 and policies to build resilience should help prevent a food crisis on a scale seen last year; however, the Sahel region is vulnerable to recurrent droughts and other natural disasters (e.g., cricket infestation).	***Staff assessment: High*** It could affect Chad's most vulnerable population through a mixture of high food prices, mounting malnutrition and relative isolation. The ensuing fiscal needs could be high.
An intensification of strikes and social demands	***Staff assessment: Medium*** The social situation remains tense. A public sector employees’ strike over wage increases was initiated in early July before being suspended in September without any resolution. In late October, actions resumed in other forms, including intermittent renewable three-day strikes.	***Staff assessment: Medium*** Protracted social tension may lead to unrest. The accommodation (a 25 percent wage increase has been rumored in the press) could lead to (i) weakening of the fiscal stance; (ii) demands for higher wages in the private sector; and (iv) deterioration of the competitiveness and lower non-oil growth potential.

INTERNATIONAL MONETARY FUND

CHAD

STAFF REPORT FOR THE 2012 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

November 30, 2012

Approved By
Marcelo Giugale and Jeffrey Lewis (IDA), Mauro Mecagni and Dhaneshwar Ghura (IMF)

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

Chad's public domestic and external debt indicators have worsened since 2010 and the large amount of non-concessional borrowing contracted in 2011 entails a high risk of debt distress. The assumptions underpinning the debt sustainability analysis (DSA) have been revised from last year to reflect significant increases in projected oil production, prices, and related government revenues, and higher external borrowing. The latter reflects mainly the expected implementation of the $2 billion non-concessional Master Facility Agreement (MFA) signed with the Eximbank of China in August 2011. The updated baseline scenario shows that, if the MFA is implemented in its current form, all prudential thresholds will be breached within the projection horizon. An alternative scenario shows that all prudential thresholds would be observed if: (i) the MFA were concessional (with a grant element of 35 percent); (ii) it was implemented over ten years (instead of five); and (iii) other external borrowing was drawn mainly from concessional sources and its amount remained moderate.

BACKGROUND

Recent Developments in Public External Debt

1. **Chad's external public debt burden indicators improved considerably in 2001–09, thanks to the strong oil-driven growth and low borrowing from abroad**. Nonetheless, the drop in international oil prices in 2009 pushed the external public debt-to-GDP ratio from about 20 percent in 2008 to 23 percent in 2009, revealing Chad's vulnerability to a negative oil price shock.

2. **In 2010–11, the authorities borrowed abroad on non-concessional terms and external (public and publicly guaranteed) debt increased**.[1] As a result, the rate of debt accumulation (the year-to-year change in present value (PV) of debt relative to previous year's GDP) spiked between 2009 and 2010–11, in part due to the low grant element of new borrowing (both from Libya and China). Because of a higher-than-anticipated recourse to external borrowing (including guaranteed debt) and despite a better-than-anticipated overall fiscal situation (a surplus of 1.6 percent of non-oil GDP), helped by the record-high oil revenues, the external public debt-to-GDP ratio exceeded 26 percent at end-2011 (compared to 24 percent anticipated in the 2011 DSA).

3. **In August 2011, the authorities signed a Master Facility Agreement with the Eximbank of China (MFA)**. The MFA is an umbrella contract for individual facilities that would be activated to finance eligible projects for a total amount of up to $2 billion (or 18 percent of the 2012 GDP) over a five-year period. Projects to be funded under the MFA include: (i) a new international airport for N'Djamena; (ii) a gas power plant (100 MW); (iii) construction of 400–500 km of roads; (iv) a two-lane road bridge near N'Djamena; (v) cultivation of 20,000 ha of agricultural land; and (vi) a cement plant (with a capacity of 600,000 tons per year). The financial terms of the MFA are non-concessional. The borrowing terms include: (i) an interest rate of 1.5 percent; (ii) a risk fee of 4.0 percent (a top up of the interest rate); (iii) a management fee (upfront) of 0.6 percent on each individual facility; (iv) a commitment fee of 0.4 percent levied on the unutilized portion of each individual facility; (v) the limit on the tenor of each facility not to exceed 20 years; and (vi) a grace period of five years. The payment obligations under the MFA are collateralized on oil export receipts. Thus, the signing of the MFA is significantly affecting the baseline scenario which was retained by staffs in the 2011 DSA.

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[1] Among others, the authorities took a $300 million loan from the Libyan Foreign Bank, which was disbursed over 2010-11 and guaranteed about $600 million of debts disbursed in 2010–11, comprising the loan to finance the 40 percent share by the state oil company (SHT) in the oil refinery built by the China National Petroleum Corporation (CNPC), and a loan to finance state shares in the Baoré cement factory.

Text Table 1. Chad: External Debt Stock at Year-End, 2001–2011
(Billions of CFA francs)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 Est.
Total	794.7	786.6	736.9	797.2	898.9	896.2	794.0	782.3	781.8	1,066.8	1317.1
(percent of GDP)	63.4	56.8	46.3	34.2	29.0	27.2	23.6	20.9	23.4	25.2	26.4
Multilateral	678.1	687.7	652.5	715.3	810.2	805.5	718.6	706.6	677.7	757.7	742.2
IMF	65.3	67.3	57.0	47.7	47.5	37.4	25.4	19.0	12.9	8.3	5.2
World Bank/IDA	380.6	398.3	394.0	444.5	507.8	486.1	453.4	422.0	402.7	439.5	422.3
African Development Fund/Bank	182.8	169.8	159.9	168.5	179.8	205.8	173.7	182.4	185.5	208.7	210.2
EIB	3.9	7.9	7.3	13.0	13.0	12.4	9.9	9.8	8.7	9.4	10.0
Others	45.5	44.4	34.2	41.6	62.0	63.8	56.2	73.4	67.9	91.8	94.4
Bilateral	116.2	98.6	84.1	81.9	88.8	90.7	75.4	75.7	104.1	244.9	270.6
Paris Club official debt	30.2	25.8	24.0	25.2	24.3	23.2	23.6	19.2	16.6	32.0	16.1
Non-Paris Club official debt	86.1	72.7	60.1	56.7	64.4	67.5	51.8	56.5	87.5	212.9	254.5
of which: China, People's Republic	28.6	25.4	22.0	13.6	15.4	13.9	-	3.5	20.4	23.2	43.8
Libya	-	-	-	-	-	-	-	-	-	96.2	144.2
India	-	-	-	-	-	11.3	14.8	22.7	21.4	22.9	22.3
State-Guaranteed	-	-	-	-	-	-	-	-	-	64.3	304.4

Sources: World Bank, Chadian authorities, selected creditors and staff estimates.

The end-2011 external public debt stocks are estimated by staff based on World Bank Debt Reporting System (DRS) end-2010 debt stock, Chad's debt management office's estimates of 2011 disbursements and amortization, and Ministry of Economy and Planning estimates of 2011 project loan disbursements. The official external debt stock data underestimate the actual level of external debt. Most notably, the debt registry captures the loan from Libya but not the associated debt service, and it does not capture the loans from China for the state's stakes in the joint-venture refinery and in the Baoré cement factory, and other government-guaranteed debt. Also, project loan disbursements are recognized only after a long lag. Both text tables have discrepancies with corresponding fiscal or balance of payments flow estimates, giving rise to residuals in the sustainability analyses.

Status of Implementation of Debt Relief Initiatives

4. **Poor macroeconomic policy performance prevented Chad from reaching the completion point under the Enhanced Heavily Indebted Poor Countries (HIPC) Initiative**. Chad reached the Decision Point under the Enhanced HIPC Initiative in May 2001. Its inability to meet agreed fiscal targets and to implement a program under the IMF's Poverty Reduction and Growth Facility (PRGF) was a principal obstacle to debt relief. The 2005 PRGF arrangement expired in 2008 without any reviews being concluded. Subsequent efforts to resume the path toward debt relief with the support of IMF Staff-Monitored Programs (SMPs) were also hindered by fiscal slippages and, more recently, by the decision to borrow externally in large amounts and on non-concessional terms. Furthermore, Chad has not shown a satisfactory implementation record under the poverty reduction strategy and progress towards other completion point triggers[2] has either been slow or inconsistent (with early gains followed by backsliding).

[2] For a description of completion point triggers, see Chad, Decision Point Document for the Enhanced Heavily Indebted Poor Countries (HIPC) Initiative, May 4, 2001, pp. 29–31.

5. **Meeting the conditions for debt relief under the Enhanced HIPC Initiative and the Multilateral Debt Relief Initiative (MDRI) would help reduce external debt in half (in nominal terms)**. MDRI relief would cover the full stock of debt owed to three multilateral creditors (IDA, IMF, and the African Development Fund (AfDF)). In nominal terms, this could total over $1 billion and would imply a reduction in debt service of about $40 million per year, for about 30 years.[3]

Recent Developments in Public Domestic Debt

6. **The stock of public domestic debt has grown, mainly as a result of drawing on central bank statutory advances and the sale of over CFAF 100 billion of five-year savings bonds**. Chad's domestic debt is estimated at about CFAF 474.1 billion (9½ percent of GDP) at end-2011. The stock of public domestic debt includes central bank statutory advances (*avances statutaires*); rescheduled debt (*dettes conventionnées*); legal payment obligations (*engagements juridiques*); and two public bond issues. In addition, CFAF 56.4 billion represent estimated short-term treasury arrears.[4] In July 2011, the authorities completed a sale of over CFAF 100 billion of five year savings bonds with a 6 percent coupon.[5]

Text Table 2. Chad: Public Domestic Debt Stock at Year-End, 2006–2011
(Billions of CFA francs)

	2006	2007	2008	2009	2010	2011
Total	122.3	123.1	142.7	238.5	286.9	474.1
(Percent of GDP)	3.7	3.7	3.8	7.1	6.8	9.5
Central Bank Statutory Advances	-	17.0	21.6	141.6	208.6	216.9
Rescheduled debts	71.8	48.6	56.8	58.2	67.9	52.9
Treasury arrears [1]	24.8	26.1	41.1	25.7	3.1	56.4
Legal commitments	13.2	12.5	10.8	10.1	4.6	21.2
Standing payment orders	11.5	18.1	11.5	2.1	1.8	3.1
National Savings Bond	0.9	0.9	0.9	0.9	0.9	2.6
2011 Savings Bond	-	-	-	-	-	121.0

Source: Chadian authorities.
[1] The 2011 stock is estimated based on data at end-March 2012.

[3] Since the last remaining portion of Chad's debt owed to the IMF eligible for MDRI debt relief is due in July 2013, the IMF would provide no debt relief under the MDRI if the completion point was delayed beyond that time.

[4] The authorities made a significant effort to reduce domestic payment arrears in 2010, but payment arrears appear to have resurged in 2011.

[5] Sixty three percent of the issue was purchased by Chadian residents. Banks, local and regional, purchased two-thirds of the issue. With accrued interest, the stock of this public bond is estimated at CFAF 121 billion at end-December 2011.

Debt Burden Thresholds under the Debt Sustainability Framework

7. **For the purpose of defining debt burden thresholds under the Debt Sustainability Framework (DSF), Chad is a weak policy performer**. Chad's rating on the World Bank's Country Policy and Institutional Assessment (CPIA) is 2.48 on average for 2007–2011 (on a scale from 1 to 6), down from 2.88 in 2005 to 2.43 in 2011.

Text Table 3. External Public Debt Burden Thresholds for "Weak Policy Performers" Under the Debt Sustainability Framework

Present value of external debt in percent of	
GDP	30
Exports	100
Revenue	200
External debt service in percent of	
Exports	15
Revenue	18

Source: 2012 IDA Country Performance ratings (methodology and results).

DSA ASSUMPTIONS

8. **Oil production and revenue:** Chad's medium- and long-term macroeconomic outlook is characterized by a temporary sharp increase in oil production in 2014–17 and a steady decline of oil production over the subsequent fifteen-year projection period (Box 1).[6]

- Oil production is expected to rise from 120,000 bpd in 2011 to about 180,000 bpd in 2015–17. This second oil boom will likely be temporary; proven reserves in the new fields are much smaller than that in the original Doba basin and will also likely be nearly exhausted around 2030. Hence, oil production and exports are projected to decline steadily to negligible levels beyond 2030.

[6] Oil production at the Doba oilfield (exploited by the Exxon-led consortium) started in 2003, reached its peak of 63 million barrels in 2005 and, absent other oil developments, will decline with annual output projected to become negligible beyond 2030. In 2011, oil production began at a second oil field, Bongor, operated by the CNPC (only one-third the size of the Doba field). At present, Bongor produces crude oil at a rate of about 15,000 barrels per day, as feedstock for the oil refinery, resulting in a near complete substitution of petroleum product imports. Exports of crude oil from Bongor are expected to start within a year and reach 60,000 bpd in 2014. Oil from another smaller operator (Griffiths, Canada) is expected to come on stream shortly thereafter.

- Chad's oil trades below the WEO reference price, reflecting a quality discount and transport cost.[7] For the medium term (five-year horizon) the price of Chadian oil is assumed to drop from $103.7 per barrel (all discounts included) in 2012 to about $83.6 per barrel in 2016–17, in line with the trend projected in the IMF's World Economic Outlook (WEO). From 2018 onward, the price is assumed to increase 3 percent per year in U.S. dollar terms (consistent with the assumption used by the IMF in long-term projections for other sub-Saharan African countries).

9. **Fiscal policy:** The analysis assumes a buildup of financial savings in the medium term and a sustained fiscal adjustment throughout the entire projection in transition to the post-oil era. The increase in oil production is expected to lead to about $4 billion more in oil revenues for the government by 2017 than projected in the 2011 Article IV report, helping to maintain oil revenues above 25 percent of non-oil GDP until 2016. This would be sufficient to generate savings of about $2 billion by 2019, if the non-oil primary deficit (NOPD) is reduced from about 29 percent of non-oil GDP in 2012 to below 10 percent of non-oil GDP by 2019. Over the longer term, it is assumed that dwindling oil revenues will be offset by a steady decline of total government primary spending from 27 percent of GDP in 2012 to 18 percent in 2032 and the primary balance will be adjusted gradually to reach a small surplus by 2032. This sustained process of adjustment is expected to be achieved mainly by: (i) increasing non-oil revenues (from about 10 percent of non-oil GDP at present to over 15 percent of non-oil GDP by 2032); (ii) reducing total investment outlays from over 20 percent of non-oil GDP to below 10 percent of non-oil GDP; and (iii) cutting recurrent spending, notably, by eliminating exceptional security transfers and subsidies to public enterprises (at present, jointly accounting for about 9 percent of non-oil GDP).

10. **The DSA analysis is conducted in two stages reflecting different external financing assumptions**. First, a **baseline (current policies) scenario** reflects the stated intentions of the authorities to implement the MFA on current terms, and therefore assumes that the full amount ($2 billion) is disbursed within a five-year (2012–17) horizon. The baseline scenario also features continuation of the borrowing policy on non-concessional terms beyond the medium term, with gross disbursement of about 3½ percent of GDP per year (approximately the same level as projected for the MFA implementation period). Second, the analysis aims at determining the conditions under which the implementation of MFA would be consistent with debt sustainability. This **alternative (prudent) scenario** is consistent with the medium-term fiscal framework recommended by staff and presented in the staff report.

[7] The discount was fairly constant (about $6.50) until recently when it dropped to about $2.50 due to the disruption of oil exports from South Sudan, which increased the demand for (a very similar) Chadian oil. This discount is expected to rebound over the near term to its normal level.

Box 1. Macroeconomic Assumptions, 2012–2032

Baseline Scenario:

Real GDP growth is driven by a sharp growth of oil production in the next five years and a steady decline in oil production over the following fifteen years. Large foreign-financed investments (see below) are assumed to raise **non-oil GDP growth** in the medium term (6.5 percent in 2013–17). Beyond that, non-oil GDP growth is assumed to stabilize at about 5.0 percent in the long term. **Inflation** is assumed to stabilize at 3 percent, consistent with the CEMAC convergence criterion. The **external current account** will turn into a significant surplus in 2014–17, with the increase in oil exports and the drop in imports related to the development of the new oil fields. With the decline in oil exports, the external current account is projected to turn into a deficit.

	2011	2012	2013	2014	2015	2016	2017	2011–17 Avg.	2018–32 Avg.
Real GDP growth (percent per year)	0.5	5.4	7.9	10.7	8.4	3.6	3.7	5.7	3.4
Oil	-2.5	-1.3	11.3	27.3	14.8	-4.6	-4.1	5.8	-9.6
Non-oil	1.4	7.1	7.1	6.6	6.5	6.2	6.0	5.8	4.8
Consumer price inflation (percent per year)	1.9	5.5	3.0	3.0	3.0	3.0	3.0	3.2	3.0
External current account balance (percent of GDP)	-1.0	-1.2	-3.9	0.1	4.8	2.4	1.7	0.4	-4.3
				(In percent of non-oil GDP)					
Government revenue and grants	49.3	43.1	38.9	40.1	43.9	39.0	35.5	41.4	23.4
Of which: oil revenue	35.3	29.6	25.0	25.4	28.7	23.8	20.1	26.8	6.4
Of which: grants	3.2	3.2	3.0	2.8	2.6	2.4	2.3	2.8	1.5
Government expenditure (commitment basis)	44.6	49.1	47.8	44.9	41.9	38.6	35.2	43.1	27.8
Overall fiscal balance (incl. grants; cash basis)	-2.4	-6.9	-11.9	-7.6	-0.7	-2.1	-1.9	-4.8	-4.2
Non-oil primary fiscal bal. (excl. grants; commitment basis)	-27.9	-29.0	-25.0	-21.6	-18.5	-15.5	-14.5	-21.7	-4.8
Memorandum items:									
Government deposits (in percent of non-oil GDP)	11.3	3.3	8.9	13.5	17.4	20.6	21.6	13.8	9.7
Chadian crude oil price (US$/barrel)	97.7	103.7	100.1	92.6	88.4	84.8	82.4	92.8	98.1

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

The **fiscal outlook** features an increase in oil revenues in the medium term and their decline in the long term. The authorities are assumed to reduce the NOPD to about 15 percent of non-oil GDP by 2017, and to generate savings up to $2 billion, needed as collateral for the MFA.

External financing: (i) a $2 billion MFA with the Eximbank of China on non-concessional terms and its implementation over 2012–17 (investments under the MFA are assumed to raise the non-oil GDP growth up by about one percentage point during the MFA implementation phase and by about 0.5 percentage point beyond 2017); (ii) external project financing (grants and loans) of 5.5 percent of non-oil GDP on average per year beyond 2017. Grants (mainly for social programs) are assumed to stay constant in real terms and will decline to about 1 percent of non-oil GDP by 2030. Loans are assumed to be increasingly from non-traditional (non-Paris Club) creditors, resulting in a decline of the average grant element of borrowing. In the absence of an IMF arrangement, HIPC and MDRI debt relief for which Chad is eligible are not taken into account.

Domestic financing: reimbursements of BEAC statutory advances by 2022 (as per the newly revised agreement) and the 2011 savings bond (*Emprunt obligataire)* by 2016. Additional domestic debt is assumed to be issued to meet the residual financing needs during the period when a portion of oil revenue is being set aside as collateral for the MFA. As a result, gross domestic debt rises from 9.5 percent of GDP in 2012 to about 11.5 percent in 2017.

Alternative Scenario:

Growth and **inflation** profile is broadly the same, with some differences in the first ten years reflecting mainly the implementation of the MFA over ten years (instead of five). The **fiscal outlook** features the same degree of consolidation over the medium term in NOPD terms (a maximum feasible rate of 2–3 percent of GDP per year). **External financing** assumptions: (i) MFA with no collateral requirement and on concessional terms (grant element of 35 percent); (ii) borrowing beyond MFA is also assumed to be on concessional terms with borrowing scaled back to approximately a half of the amount projected under the baseline. Since savings are not assumed to be related to the collateral requirements under the MFA, financing needs are met with lower additional domestic borrowing, such that gross **domestic debt** is projected to decline to 6 percent of GDP by 2017.

EXTERNAL DEBT DSA

Baseline (Current Policies) Scenario

11. **The evolution of external debt is driven by the large volume of project loans, including the MFA**. Going forward, new borrowing is expected to be dominated by non-concessional project financing, mainly from commercial or non-Paris Club official sources. This is predicated on the assumption that, absent a substantial improvement in macroeconomic and public financial management performance, traditional donors (multilaterals and Paris Club) will likely continue to provide roughly the same very low amount of concessional loans (compared to other SSA countries), mainly for humanitarian and development projects. During the period of MFA implementation, the average concessionality of new borrowing (assuming a discount rate of 3 percent) would turn negative and stay so through the projection period (Figure 1a).

12. **The comparison of the current baseline scenario with the baseline featured in the 2011 DSA reveals large differences reflecting a significant change in Chad's borrowing policy** (Figures 5–7). This change was anticipated by staffs in the 2011 DSA. It was presented in a customized alternative scenario featuring large non-concessional borrowing for public investment projects and drawing attention to the need for proper assessment of their consequences for debt sustainability. The signing of the MFA confirmed the importance of the risks anticipated by staffs in 2011.

13. **Under the baseline scenario, all external indebtedness indicators exceed their critical thresholds, indicating a high risk of debt distress**. The present value of external public and publicly-guaranteed debt exceeds the 30 percent of GDP threshold starting in 2016 through the end of the projection horizon (Figure 1b). With the projected steady decline in oil exports beyond the 2013–16 horizon, the PV of debt and debt service is expected to rise relative to exports, with the former projected to exceed the critical threshold starting in 2018, and the latter in 2026. Both indicators would remain above thresholds through the end of the projection period (Figures 1c and 1e). Similarly, the PV of debt and debt service in percent of revenues exceed their respective thresholds in 2022 and 2025, respectively (Figures 1d and 1f).

Stress Tests

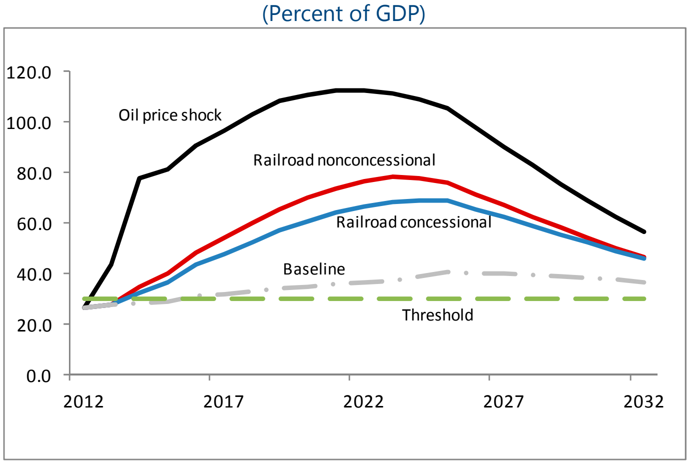
14. **Under the shock scenario assuming that key macroeconomic variables will remain at their ten-year average values, the debt burden indicators would quickly breach the sustainability thresholds**. This suggests that if the authorities were to incur current account deficits far higher than foreign direct investment (FDI) inflows in the oil sector (e.g., as they did in 2010, when they ran down their official foreign exchange

reserves), all three PV-based indicators would quickly breach the applicable thresholds by very high margins (Historical Scenario in Figure 1b, c, d; and Scenario A1 in Table 3b).

15. **Chad's external debt burden indicators are also highly sensitive to a negative shock to exports (e.g., an oil price shock)**. Across all indicative debt burden thresholds, the most extreme shock is a drop in export growth in 2013–14 (i.e., proportional to a two-standard-deviation lower oil price) (Most extreme shock in Figure 1 and B2 Bound Test in Table 3b); debt would be on a path breaching all indicative debt burden thresholds.

16. **Finally, a customized stress test shows that borrowing for other contemplated large capital projects (beyond the 2011 MFA) would increase even further the risk of debt distress**. In addition to the $2 billion MFA (signed in August 2011), the authorities have signed a letter of intent with a Chinese contractor for construction of an extensive railroad connection ($7 billion) linking through Chad the Cameroon and Sudan networks. A customized analysis by staff shows that if the railway project started in 2014 and was implemented over the next 10 years in addition to the projects covered in the 2011 MFA, and with no reduction in the baseline level of spending and borrowing, the PV of debt-to-GDP path would breach the 30 percent threshold in 2014 and peak in 2023 at 78 percent, implying a significantly increased risk of debt distress (Figure 1g). All critical thresholds would be breached under the usual commercial terms (5.5 percent interest rate, 5 years grace period, 20 years maturity) and also under the most concessional terms (36 percent grant element; 1.5 percent interest rate, 5 years grace period, 20 years maturity).

Figure 1g. Chad: Present Value of Public and Publicly-Guaranteed External Debt
(Percent of GDP)



Sources: Chadian authorities; and staff estimates and projections.

Alternative (Prudent) Scenario

This scenario is tailored to preserve debt sustainability. To this effect, it is assumed that $2 billion under the MFA would be disbursed over ten years, starting in late 2012. The MFA is assumed to be concessional, with a grant element of 35 percent. The analysis shows that the projected decline in exports beyond the medium term is the most stringent constraint on Chad's capacity to borrow. To make room for the disbursements under the MFA and, at the same time, ensure that the PV of debt-to-exports ratio remains below 100 percent, other borrowing would need to be scaled back to about one-third of the amount assumed in the baseline scenario even if the grant element of new borrowing is about 20 percent (Figure 3a). With this constraint satisfied, all other indicators remain below their critical thresholds. However, even in that case, shock scenarios point to a moderate risk of debt distress, which must be mitigated by prudent fiscal policy, and by maintaining an adequate savings cushion to ensure debt service capacity in case of a sudden loss of oil revenue.

PUBLIC DEBT DSA

17. **The consideration of domestic debt does not alter fundamentally the assessment of Chad's debt sustainability**. Given the moderate size of Chad's domestic debt, the baseline adjustment in the non-oil primary balance, and expected oil revenues, the public debt indicators are driven mainly by the external debt component, indicating a high risk of debt distress. The domestic debt component would increase from 9.5 percent of GDP in 2011 to 16.1 percent of GDP in 2032, reflecting the increased residual financing needs, as the portion of oil revenues used as collateral is not available for budget financing. Altogether, the public debt stock increases gradually from about 36 percent of GDP in 2011–12 to 53 percent of GDP in 2032.

18. **Stress tests confirm that the current fiscal stance is not sustainable**. Even with ample oil revenues, and assuming that financing could be secured, the resulting debt path would increase steeply, leading to an unmanageable debt and debt-service burden (Fixed Primary Balance Scenario in Figure 2). A temporary shock to real GDP growth in 2013-2014 would also impair public debt sustainability (Most Extreme Shock in Figure 2 and Bound Test B1 in Table 2a).

THE AUTHORITIES' VIEWS

19. **The authorities expressed interest in debt relief through the HIPC process**. They urged consideration of Chad's special post-conflict circumstances, the importance of public investment in infrastructure to long-term growth, and the need for debt relief to create fiscal space for additional development spending (including foreign-financed). At the same time, the authorities are determined to pursue an accelerated development strategy financed through foreign borrowing on non-concessional terms and secured through oil receipts.

20. **The authorities downplay concerns about the debt sustainability implications of the MFA**. They consider that new oil developments will generate a cash flow sufficient to meet debt obligations under the MFA. The authorities also believe that the contemplated investments will have significant positive economic externalities that would help sustain non-oil growth at a level higher than 5 percent per annum assumed in the DSA projections. The authorities intend to pursue their own debt sustainability analysis, with consultants, to assess the fiscal space for debt-financed public investment.

DEBT DISTRESS CLASSIFICATION AND CONCLUSIONS

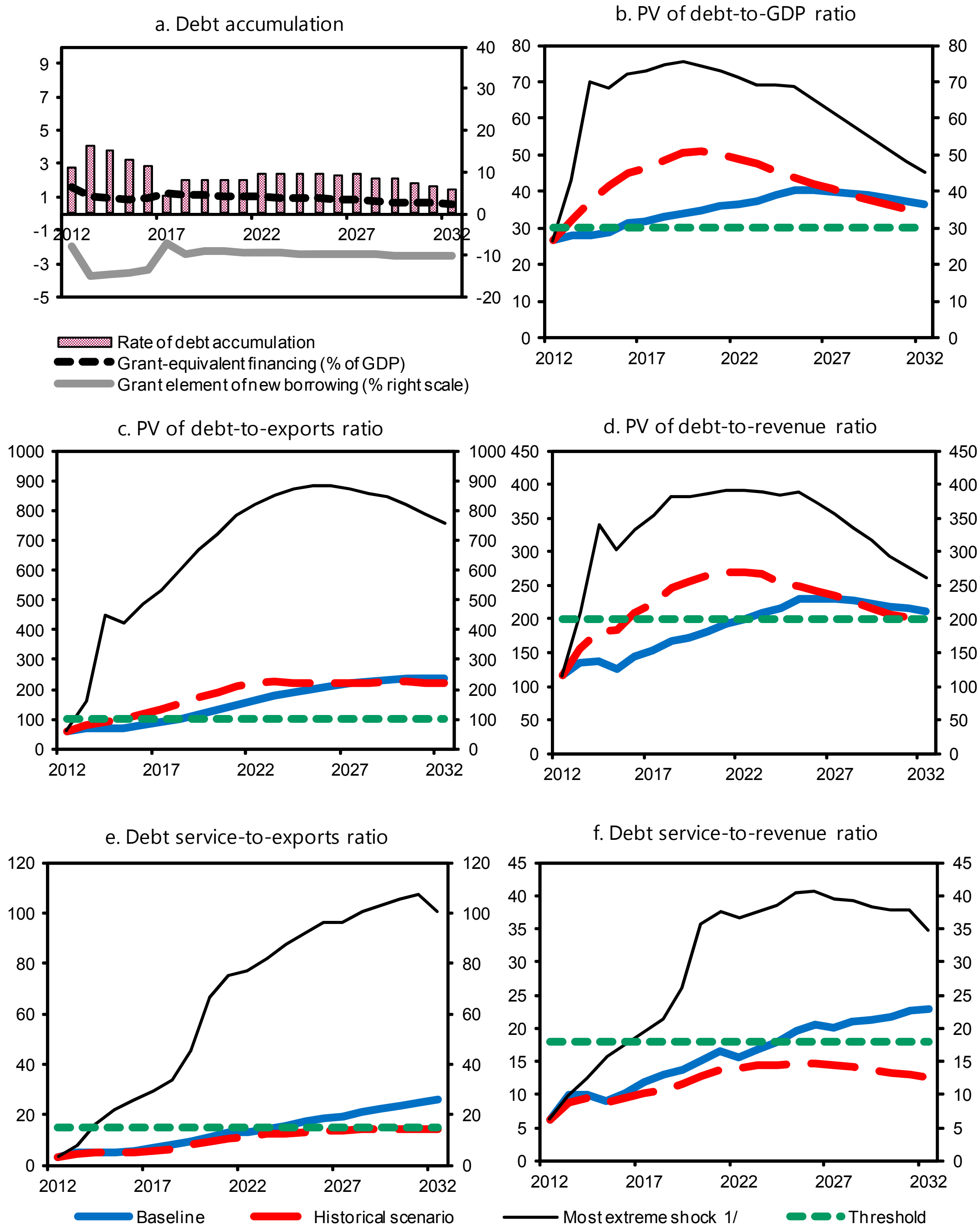
21. **In staff's assessment, despite improved oil production and revenue prospects in the next few years, Chad faces a high risk of debt distress**. The DSA suggests that under the baseline (current policies) scenario Chad's overall public and external debt dynamics are not sustainable. This is due to the significant increase in public external debt over the medium term, reflecting the implementation of the MFA on non-concessional terms and continuation with large amounts of non-concessional borrowing for other public investment projects. In this scenario, all public and publicly-guaranteed external debt and debt service indicators breach the critical thresholds. This conclusion holds even if the hypothetical growth impact of the associated projects is taken into account and the underlying fiscal position is assumed to be adjusted to help set aside funds needed to collateralize the disbursements under the MFA.

22. **An alternative (prudent) scenario shows that all indicative thresholds would be observed if the MFA were implemented over ten years and on concessional terms.** However, to make room for the MFA, all other borrowing would also need to be mostly concessional and its amount scaled back to about a half of the amount projected in the baseline scenario. Even in this case, the DSA underscores Chad's sensitivity to shocks, especially an oil price shock, and stress test results remain a source of concern.

23. **Progress toward the HIPC completion point (including the improvement in the CPIA score) would substantially reduce Chad's debt vulnerabilities**. However, given the current weak record for fiscal policy implementation and the non-concessional nature of the MFA with the Eximbank of China, prospects for re-embarking on the path to debt relief under the HIPC process are remote.

Baseline Scenario

Figure 1. Chad: Indicators of Public and Publicly Guaranteed External Debt Under Alternatives Scenarios, 2012–2032 [1]

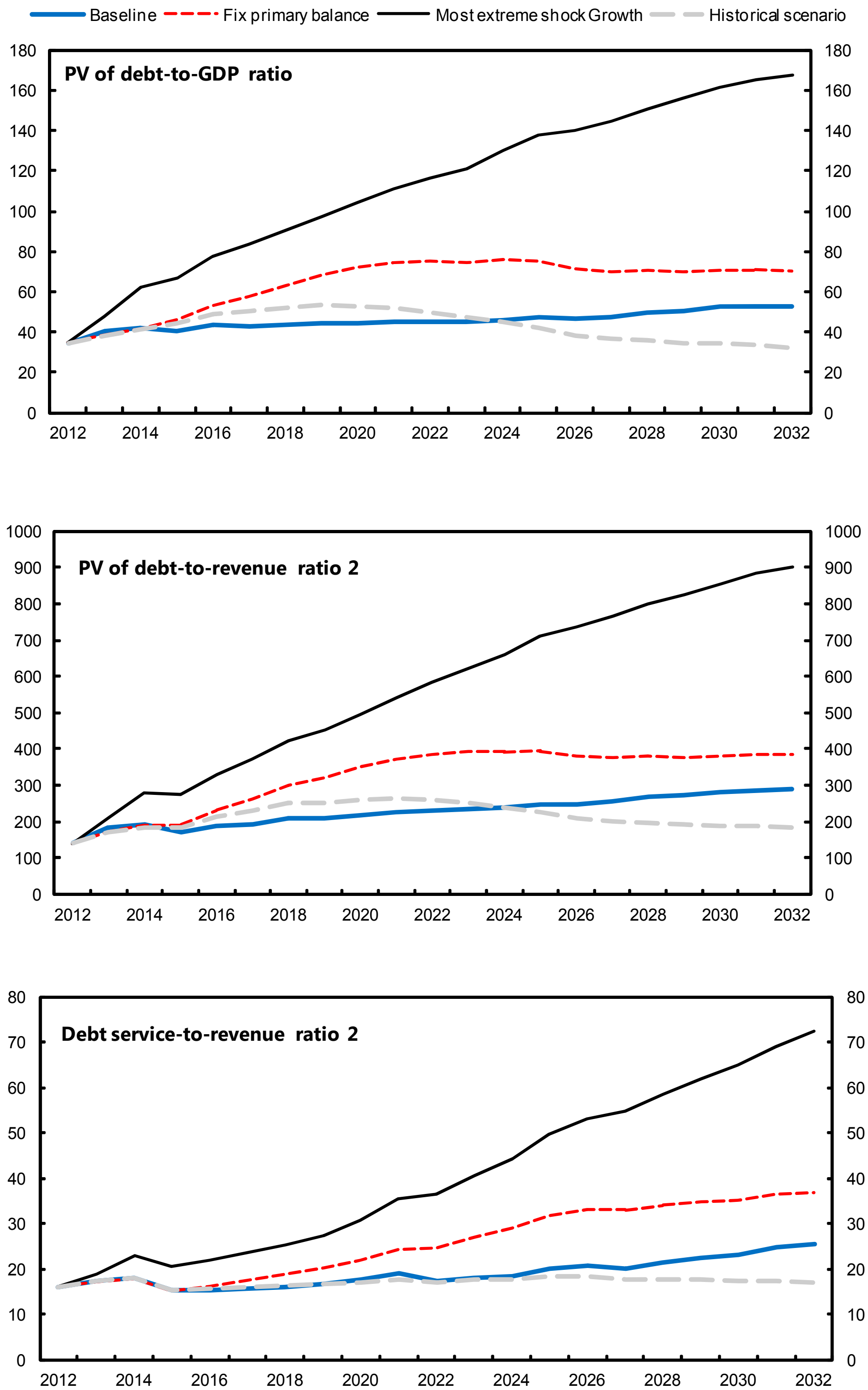


Sources: Country authorities; and staff estimates and projections.

[1] The most extreme stress test is the test that yields the highest ratio in 2022. In figure b. it corresponds to an Exports shock; in c. to an Exports shock; in d. to an Exports shock; in e. to an Exports shock and in figure f. to an Exports shock

Baseline Scenario

Figure 2. Chad: Indicators of Public Debt Under Alternative Scenarios, 2012–2032 [1]



Sources: Country authorities; and staff estimates and projections.
[1] The most extreme stress test is the test that yields the highest ratio in 2022.
[2] Revenue is defined inclusive of grants.

Baseline Scenario

Table 1. Chad: Public Sector Debt Sustainability Framework, Baseline Scenario, 2009–2032

(Percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2009	2010	2011	Average [5]	Standard Deviation [5]	2012	2013	2014	2015	2016	2017	2012–17 Average	2022	2032	2018–32 Average
Public sector debt [1]	30.5	32.8	35.9			35.6	41.0	42.2	40.4	42.6	42.5		44.8	52.8	
Of which: foreign-currency denominated	23.0	25.2	26.4			27.4	28.2	27.9	28.2	30.6	31.2		36.5	36.7	
Change in public sector debt	7.0	2.4	3.1			-0.4	5.5	1.2	-1.8	2.2	-0.1		0.0	-0.4	
Identified debt-creating flows	11.1	0.5	-7.7			0.8	2.0	-2.1	-4.7	-0.6	-1.1		1.3	0.9	
Primary deficit	9.4	4.7	-3.2	1.4	4.9	2.2	3.8	1.2	-2.7	-2.0	-2.0	0.1	1.4	2.2	2.
Revenue and grants	19.6	25.3	28.5			24.8	22.3	22.1	24.0	23.0	22.2		19.6	18.3	
Of which: grants	3.5	1.6	1.8			1.8	1.7	1.5	1.4	1.4	1.4		1.3	1.0	
Primary (noninterest) expenditure	29.0	29.9	25.3			27.0	26.2	23.3	21.4	21.0	20.2		21.0	20.5	
Automatic debt dynamics	1.7	-4.0	-4.5			-1.4	-1.9	-3.3	-2.0	1.4	0.9		-0.1	-1.3	
Contribution from interest rate/growth differential	-3.4	-6.8	-3.5			-5.1	-2.5	-3.5	-2.3	1.1	0.5		-0.1	-1.3	
Of which: contribution from average real interest rate	-3.2	-3.2	-3.3			-3.3	0.1	0.5	1.0	2.5	2.1		1.3	1.0	
Of which: contribution from real GDP growth	-0.2	-3.5	-0.2			-1.8	-2.6	-4.0	-3.3	-1.4	-1.5		-1.4	-2.3	
Contribution from real exchange rate depreciation	5.1	2.8	-1.0			3.7	0.6	0.2	0.2	0.2	0.3		...	...	
Other identified debt-creating flows	0.0	-0.2	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	-0.2	0.0			0.0	0.0	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)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	-4.1	1.9	10.8			-1.1	3.5	3.3	2.9	2.8	1.0		-1.3	-1.3	
Other sustainability indicators															
PV of public sector debt	...	...	34.8			34.7	40.8	42.4	40.9	43.3	43.0		44.9	52.6	
Of which: foreign-currency denominated	...	...	25.3			26.5	28.0	28.1	28.7	31.3	31.7		36.7	36.4	
Of which: external	...	...	25.3			26.5	28.0	28.1	28.7	31.3	31.7		36.7	36.4	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need [2]	12.4	6.2	-2.2			6.2	7.7	5.2	1.0	1.5	1.5		4.8	6.8	
PV of public sector debt-to-revenue and grants ratio (percent)	...	...	122.3			140.0	182.5	191.8	170.0	188.2	194.3		229.4	287.5	
PV of public sector debt-to-revenue ratio (percent)	...	...	130.7			151.1	197.5	206.0	180.7	200.7	207.6		246.3	303.5	
Of which: external [3]	...	...	95.1			115.6	135.7	136.6	126.8	145.0	153.1		200.9	210.4	
Debt service-to-revenue and grants ratio (percent) [4]	8.8	4.1	3.6			16.2	17.2	18.1	15.4	15.4	15.6		17.4	25.4	
Debt service-to-revenue ratio (percent) [4]	10.7	4.4	3.9			17.5	18.7	19.4	16.4	16.4	16.7		18.7	26.8	
Primary deficit that stabilizes the debt-to-GDP ratio	2.4	2.3	-6.3			2.6	-1.6	0.0	-0.8	-4.2	-1.9		1.4	2.5	
Key macroeconomic and fiscal assumptions															
Real GDP growth (percent)	0.9	13.0	0.5	7.9	10.7	5.4	7.9	10.7	8.4	3.6	3.7	6.6	3.3	4.5	3.
Average nominal interest rate on forex debt (percent)	1.4	1.0	2.2	1.2	0.4	3.5	3.5	3.7	3.9	4.1	4.2	3.8	4.2	4.2	4.
Average real interest rate on domestic debt (percent)	19.0	-5.8	...	2.6	11.3	-2.4	3.2	2.2	3.3	7.1	5.7	3.2	3.3	2.2	3.
Real exchange rate depreciation (percent, + indicates depreciation)	30.0	15.9	-4.4	-2.9	14.7	16.9	...	...	...	...	...	...	...	...	.
Inflation rate (GDP deflator, percent)	-11.4	11.9	17.5	7.3	9.8	7.4	1.8	2.5	1.3	-2.3	-1.1	1.6	1.2	2.3	1.
Growth of real primary spending (deflated by GDP deflator, percent)	0.3	0.2	-0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.
Grant element of new external borrowing (percent)	...	...	...	...	...	-7.8	-15.1	-14.6	-14.3	-13.6	-7.1	-12.1	-9.4	-10.0	.

Sources: Country authorities; and 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] Revenue 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.

Baseline Scenario

Table 2. Chad: Sensitivity Analysis for Key Indicators of Public Debt, 2012–2032

	Projections							
	2012	2013	2014	2015	2016	2017	2022	2032
PV of debt-to-GDP ratio								
Baseline	35	41	42	41	43	43	45	53
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	35	38	41	45	49	51	50	33
A2. Primary balance is unchanged from 2012	35	39	42	46	53	58	75	70
A3. Permanently lower GDP growth [1]	35	42	46	47	53	57	89	203
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviation in 2013-2014	35	48	63	67	77	84	116	167
B2. Primary balance is at historical average minus one standard deviation in 2013-2014	35	44	51	49	51	51	54	60
B3. Combination of B1-B2 using one-half standard deviation shocks	35	43	51	52	59	62	79	110
B4. One-time 30 percent real depreciation in 2013	35	52	53	51	55	55	60	74
B5. 10 percent of GDP increase in other debt-creating flows in 2013	35	52	53	51	54	53	56	63
PV of debt-to-revenue Ratio [2]								
Baseline	140	183	192	170	188	194	229	287
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	140	170	185	185	213	230	259	183
A2. Primary balance is unchanged from 2012	140	174	189	191	232	262	384	383
A3. Permanently lower GDP growth [1]	140	189	207	194	229	254	446	1079
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviation in 2013-2014	140	213	278	275	330	371	582	902
B2. Primary balance is at historical average minus one standard deviation in 2013-2014	140	195	230	203	224	232	274	331
B3. Combination of B1-B2 using one-half standard deviation shocks	140	190	227	216	253	277	402	595
B4. One-time 30 percent real depreciation in 2013	140	233	241	214	238	248	306	405
B5. 10 percent of GDP increase in other debt-creating flows in 2013	140	234	240	212	233	241	285	342
Debt service-to-revenue ratio [2]								
Baseline	16	17	18	15	15	16	17	25
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	16	17	18	15	16	16	17	17
A2. Primary balance is unchanged from 2012	16	17	18	15	16	18	25	37
A3. Permanently lower GDP growth [1]	16	18	19	17	17	18	28	78
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviation in 2013-2014	16	19	23	21	22	23	37	72
B2. Primary balance is at historical average minus one standard deviation in 2013-2014	16	17	19	17	17	17	21	30
B3. Combination of B1-B2 using one-half standard deviation shocks	16	18	20	18	18	19	26	49
B4. One-time 30 percent real depreciation in 2013	16	19	22	19	20	21	27	45
B5. 10 percent of GDP increase in other debt-creating flows in 2013	16	17	20	17	17	17	22	31

Sources: Country authorities; and staff estimates and projections.

[1] Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

[2] Revenues are defined inclusive of grants.

Baseline Scenario

Table 3a. Chad: External Debt Sustainability Framework, Baseline Scenario, 2009–2032 [1]

(Percent of GDP, unless otherwise indicated)

	Actual			Historical [6] Average	Standard [6] Deviation	Projections									
	2009	2010	2011			2012	2013	2014	2015	2016	2017	2012–2017 Average	2022	2032	2018–2032 Average
External debt (nominal) [1]	**23.0**	**25.2**	**26.4**			**27.4**	**28.2**	**27.9**	**28.2**	**30.6**	**31.2**		**36.5**	**36.7**	
Of which: public and publicly guaranteed (PPG)	23.0	25.2	26.4			27.4	28.2	27.9	28.2	30.6	31.2		36.5	36.7	
Change in external debt	2.1	2.2	1.2			1.0	0.9	-0.3	0.3	2.4	0.6		0.8	-1.0	
Identified net debt-creating flows	-1.5	4.6	-6.5			-1.8	-0.7	-1.2	-1.1	0.1	0.3		2.2	2.5	
Non-interest current account deficit	**10.0**	**31.1**	**0.5**	**21.4**	**30.1**	**0.3**	**3.1**	**-1.0**	**-5.8**	**-3.5**	**-2.9**		**3.4**	**3.4**	2.8
Deficit in balance of goods and services	11.9	30.7	3.4			2.6	3.2	-0.7	-6.2	-3.2	-2.5		6.2	7.1	
Exports	44.1	45.0	44.7			43.9	40.2	40.2	41.7	38.2	35.2		22.3	15.4	
Imports	56.0	75.6	48.0			46.5	43.4	39.5	35.5	35.0	32.7		28.5	22.5	
Net current transfers (negative = inflow)	-7.3	-7.5	-5.4	-5.4	1.2	-8.4	-4.8	-4.4	-4.2	-4.3	-4.4		-4.5	-3.8	-4.3
Of which: official	-1.0	-0.5	-0.3			-0.3	-0.4	-0.3	-0.3	-0.4	-0.4		-0.5	-0.7	
Other current account flows (negative = net inflow)	5.4	7.9	2.5			6.1	4.7	4.1	4.6	4.0	4.0		1.7	0.2	
Net FDI (negative = inflow)	**-15.6**	**-22.7**	**-2.7**	**-14.6**	**14.2**	**-1.6**	**-2.7**	**1.6**	**5.8**	**3.5**	**3.1**		**-1.6**	**-0.9**	-0.9
Endogenous debt dynamics [2]	**4.2**	**-3.7**	**-4.4**			**-0.5**	**-1.1**	**-1.8**	**-1.1**	**0.2**	**0.1**		**0.3**	**-0.1**	
Contribution from nominal interest rate	0.4	0.2	0.5			0.9	0.9	0.9	1.0	1.2	1.2		1.5	1.5	
Contribution from real GDP growth	-0.2	-2.5	-0.1			-1.4	-2.0	-2.7	-2.1	-1.0	-1.1		-1.1	-1.6	
Contribution from price and exchange rate changes	4.0	-1.4	-4.7			...	...	...	...	...	...		...	...	
Residual (3-4) [3]	**3.6**	**-2.4**	**7.7**			**2.8**	**1.6**	**0.9**	**1.4**	**2.3**	**0.3**		**-1.3**	**-3.5**	
Of which: exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt [4]	...	...	25.3			26.5	28.0	28.1	28.7	31.3	31.7		36.7	36.4	
Percent of exports	...	...	56.7			60.5	69.7	70.1	68.7	81.9	90.1		164.1	236.3	
PV of PPG external debt	**...**	**...**	**25.3**			**26.5**	**28.0**	**28.1**	**28.7**	**31.3**	**31.7**		**36.7**	**36.4**	
Percent of exports	**...**	**...**	**56.7**			**60.5**	**69.7**	**70.1**	**68.7**	**81.9**	**90.1**		**164.1**	**236.3**	
Percent of government revenues	**...**	**...**	**95.1**			**115.6**	**135.7**	**136.6**	**126.8**	**145.0**	**153.1**		**200.9**	**210.4**	
Debt service-to-exports ratio (percent)	**2.1**	**1.6**	**2.3**			**3.3**	**5.1**	**5.1**	**5.0**	**5.8**	**6.9**		**12.8**	**25.9**	
PPG debt service-to-exports ratio (percent)	**2.1**	**1.6**	**2.3**			**3.3**	**5.1**	**5.1**	**5.0**	**5.8**	**6.9**		**12.8**	**25.9**	
PPG debt service-to-revenue ratio (percent)	**5.7**	**3.1**	**3.9**			**6.3**	**10.0**	**9.9**	**9.1**	**10.3**	**11.8**		**15.7**	**23.0**	
Total gross financing need (billions of U.S. dollars)	-0.3	0.8	-0.1			0.0	0.3	0.3	0.3	0.3	0.4		0.8	1.9	
Non-interest current account deficit that stabilizes debt ratio	7.9	28.8	-0.7			-0.6	2.2	-0.7	-6.0	-5.9	-3.6		2.6	4.4	
Key macroeconomic assumptions															
Real GDP growth (percent)	0.9	13.0	0.5	7.9	10.7	5.4	7.9	10.7	8.4	3.6	3.7	6.6	3.3	4.5	3.4
GDP deflator in US dollar terms (change in percent)	-16.1	6.6	23.2	12.3	12.1	-2.3	-0.4	2.2	0.8	-2.7	-1.7	-0.7	1.2	2.3	1.3
Effective interest rate (percent) [5]	1.4	1.0	2.2	1.2	0.4	3.5	3.5	3.7	3.9	4.1	4.2	3.8	4.2	4.2	4.2
Growth of exports of G&S (U.S. dollar terms, percent)	-30.9	23.0	22.9	49.8	84.1	1.2	-1.6	13.1	13.7	-7.8	-5.9	2.1	-2.7	4.5	-0.9
Growth of imports of G&S (U.S. dollar terms, percent)	-1.5	62.8	-21.4	27.6	53.5	-0.3	0.3	3.0	-1.6	-0.8	-4.7	-0.7	2.2	4.3	2.1
Grant element of new public sector borrowing (percent)	...	...	...	...	...	-7.8	-15.1	-14.6	-14.3	-13.6	-7.1	-12.1	-9.4	-10.0	-9.6
Government revenue (excluding grants, percent of GDP)	16.1	23.6	26.6			23.0	20.6	20.6	22.6	21.6	20.7		18.2	17.3	18.1
Aid flows (billions of U.S. dollars) [7]	0.3	0.3	0.3			0.2	0.2	0.2	0.2	0.2	0.2		0.3	0.3	
Of which: Grants	0.2	0.1	0.2			0.2	0.2	0.2	0.2	0.2	0.2		0.2	0.3	
Of which: Concessional loans	0.1	0.1	0.1			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Grant-equivalent financing (percent of GDP) [8]	...	...	...			1.6	1.0	0.9	0.9	0.9	1.2		1.0	0.6	0.9
Grant-equivalent financing (percent of external financing) [8]	...	...	...			32.1	16.7	16.7	17.4	18.2	32.5		19.5	11.7	17.0
Memorandum items:															
Nominal GDP (billions of U.S. dollars)	7.1	8.6	10.6			10.9	11.7	13.3	14.5	14.6	14.9		17.4	29.6	
Nominal dollar GDP growth	-15.4	20.5	23.8			3.0	7.4	13.2	9.3	0.7	2.0	5.9	4.5	6.9	4.7
PV of PPG external debt (billions of U.S. dollars)			2.5			2.8	3.3	3.7	4.2	4.6	4.7		6.4	10.8	
(PVt-PVt-1)/GDPt-1 (percent)						2.8	4.1	3.8	3.2	2.8	1.1	3.0	2.4	1.5	2.1
Gross workers' remittances (billions of U.S. dollars)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of PPG external debt (percent of GDP + remittances)	...	...	25.3			26.5	28.0	28.1	28.7	31.3	31.7		36.7	36.4	
PV of PPG external debt (percent of exports + remittances)	...	...	56.7			60.5	69.7	70.1	68.7	81.9	90.1		164.1	236.3	
Debt service of PPG external debt (percent of exports + remittances)	...	...	2.3			3.3	5.1	5.1	5.0	5.8	6.9		12.8	25.9	

Sources: Country authorities; and staff estimates and projections.

[1] Includes both public and private sector external debt.

[2] Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

[3] Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate chan

[4] Assumes that PV of private sector debt is equivalent to its face value.

[5] Current-year interest payments divided by previous period debt stock.

[6] Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

[7] Defined as grants, concessional loans, and debt relief.

[8] Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

Baseline Scenario

Table 3b. Chad: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2012–2032

(Percent)

	Projections							
	2012	2013	2014	2015	2016	2017	**2022**	2032
PV of debt-to GDP ratio								
Baseline	27	28	28	29	31	32	**37**	36
A. Alternative scenarios								
A1. Key variables at their historical averages in 2012–2032 [1]	27	32	37	42	45	46	**49**	34
A2. New public sector loans on less favorable terms in 2012–2032 2	27	29	30	31	34	36	**45**	52
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	27	31	35	36	39	40	**46**	46
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	27	43	70	68	72	73	**71**	45
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	27	28	28	29	32	32	**37**	37
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	27	31	29	30	32	33	**37**	36
B5. Combination of B1-B4 using one-half standard deviation shocks	27	18	7	8	10	10	**19**	32
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	27	40	40	41	45	45	**52**	52
PV of debt-to-exports ratio								
Baseline	61	70	70	69	82	90	**164**	236
A. Alternative scenarios								
A1. Key variables at their historical averages in 2012–2032 [1]	61	80	93	100	118	131	**220**	221
A2. New public sector loans on less favorable terms in 2012–2032 2	61	72	74	74	90	101	**201**	338
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	61	70	70	69	82	90	**164**	236
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	61	161	449	422	486	535	**821**	758
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	61	70	70	69	82	90	**164**	236
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	61	78	73	71	84	93	**167**	237
B5. Combination of B1-B4 using one-half standard deviation shocks	61	41	15	19	25	28	**81**	197
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	61	70	70	69	82	90	**164**	236
PV of debt-to-revenue ratio								
Baseline	116	136	137	127	145	153	**201**	210
A. Alternative scenarios								
A1. Key variables at their historical averages in 2012–2032 [1]	116	157	181	184	209	223	**269**	197
A2. New public sector loans on less favorable terms in 2012–2032 [2]	116	139	144	137	159	171	**246**	301
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	116	150	172	160	183	193	**253**	265
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	116	209	340	302	334	353	**391**	262
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	116	135	138	128	147	155	**203**	213
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	116	151	141	131	149	158	**204**	211
B5. Combination of B1-B4 using one-half standard deviation shocks	116	85	32	37	48	50	**105**	187
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	116	194	195	181	207	219	**287**	300

Baseline Scenario

Table 3b. Chad: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2012–2032 (continued)

(Percent)

Debt service-to-exports ratio								
Baseline	3	5	5	5	6	7	**13**	26
A. Alternative scenarios								
A1. Key variables at their historical averages in 2012–2032 [1]	3	5	5	5	5	6	**11**	14
A2. New public sector loans on less favorable terms in 2012–2032 [2]	3	5	5	5	6	7	**15**	35
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	3	5	5	5	6	7	**13**	26
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	3	8	16	22	25	29	**77**	101
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	3	5	5	5	6	7	**13**	26
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	3	5	5	5	6	7	**13**	26
B5. Combination of B1-B4 using one-half standard deviation shocks	3	5	4	3	4	4	**4**	19
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	3	5	5	5	6	7	**13**	26
Debt service-to-revenue ratio								
Baseline	6	10	10	9	10	12	**16**	23
A. Alternative scenarios								
A1. Key variables at their historical averages in 2012–2032 [1]	6	9	9	9	9	10	**14**	13
A2. New public sector loans on less favorable terms in 2012–2032 [2]	6	10	9	9	10	12	**19**	31
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	6	11	13	12	13	15	**20**	29
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	6	10	12	16	18	19	**37**	35
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	6	10	10	9	10	12	**16**	23
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	6	10	10	9	10	12	**16**	23
B5. Combination of B1-B4 using one-half standard deviation shocks	6	10	8	6	7	8	**5**	18
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	6	14	14	13	15	17	**22**	33
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) [6]	-14	-14	-14	-14	-14	-14	**-14**	-14

Sources: Country authorities; and staff estimates and projections.

[1] Variables include real GDP growth, growth of GDP deflator (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).

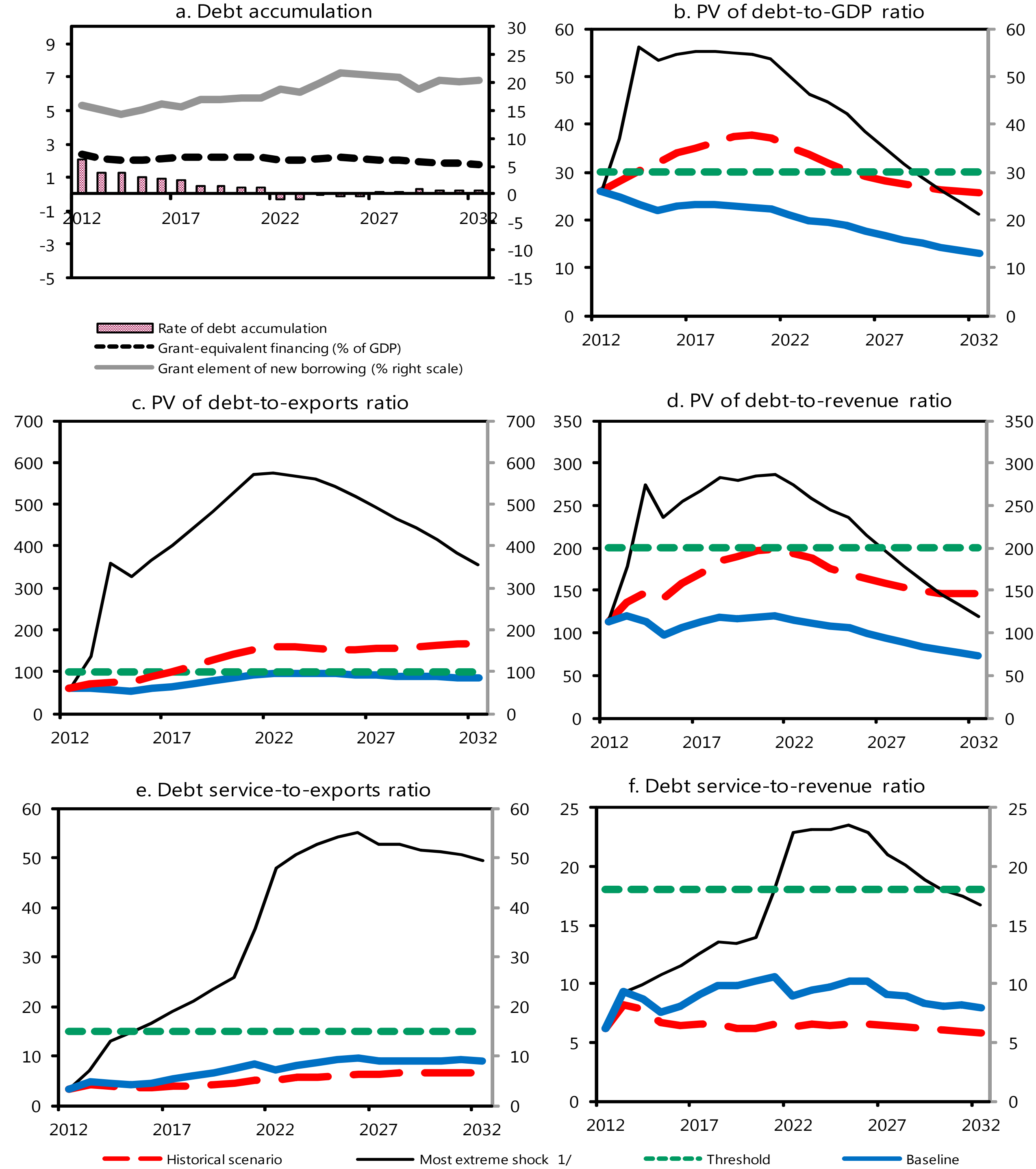
[4] Includes official and private transfers and FDI.

[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.

Alternative Scenario

Figure 3. Chad: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2012–2032 [1]

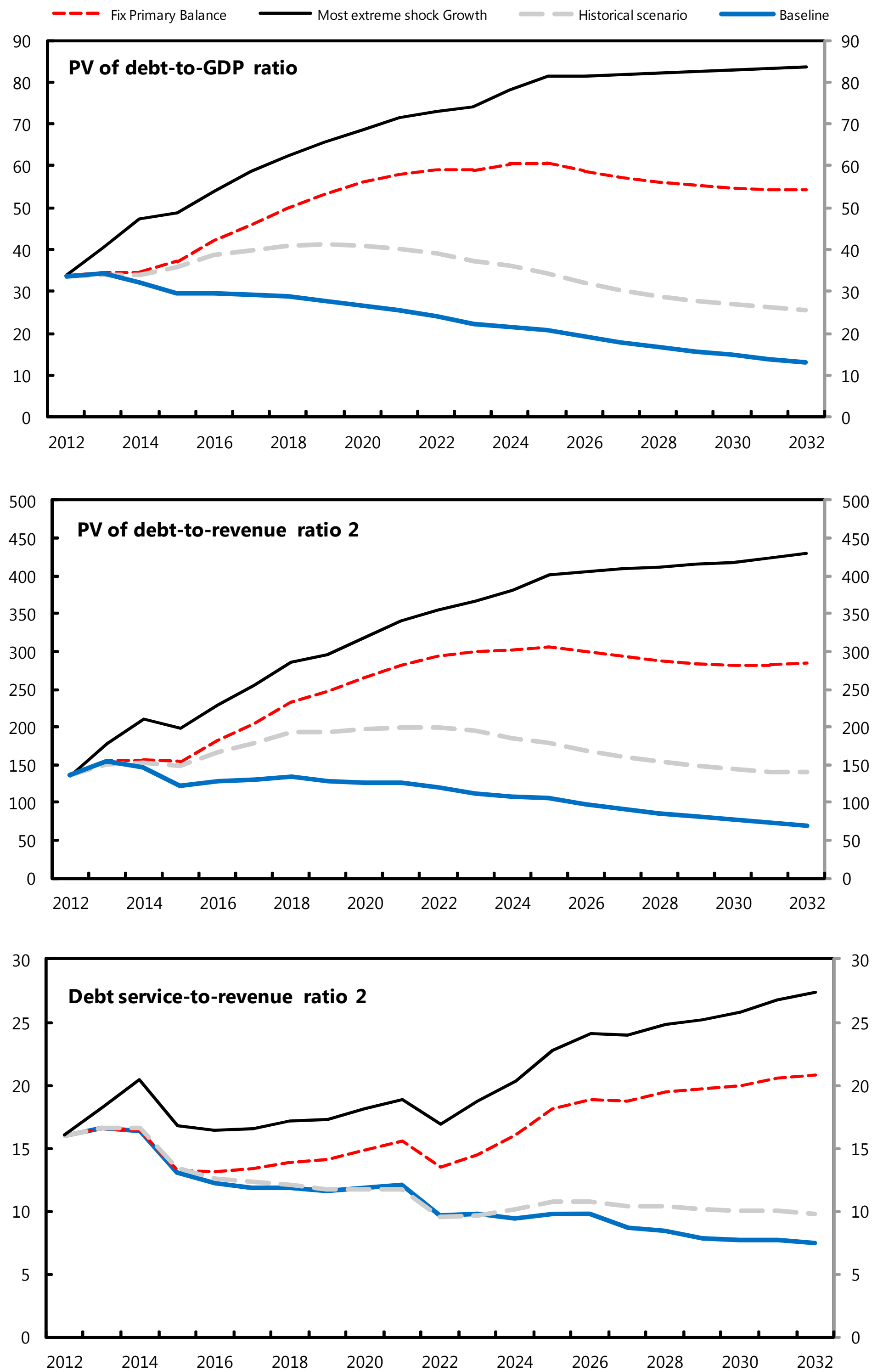


Sources: Country authorities; and staff estimates and projections.

[1] The most extreme stress test is the test that yields the highest ratio in 2022. In figure b. it corresponds to an Exports shock; in c. to an Exports shock; in d. to an Exports shock; in e. to an Exports shock and in figure f. to an Exports shock.

Alternative Scenario

Figure 4. Chad: Indicators of Public Debt Under Alternative Scenarios, 2012–2032 [1]



Sources: Country authorities; and staff estimates and projections.

[1] The most extreme stress test is the test that yields the highest ratio in 2022.

[2] Revenue is defined inclusive of grants.

Alternative Scenario

Table 4a. Chad: Public Sector Debt Sustainability Framework, Baseline Scenario, 2009–2032

(Percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2009	2010	2011	Average [5]	Standard Deviation [5]	2012	2013	2014	2015	2016	2017	2012–17 Average	2022	2032	2018–32 Average
Public sector debt [1]	30.5	32.8	35.9			35.4	36.4	34.3	31.7	32.1	32.2		27.5	16.7	
Of which: foreign-currency denominated	23.0	25.2	26.4			27.6	26.8	25.2	24.3	25.5	26.1		24.7	16.3	
Change in public sector debt	7.0	2.4	3.1			-0.5	1.0	-2.1	-2.6	0.4	0.1		-1.9	-0.7	
Identified debt-creating flows	11.1	0.5	-7.7			0.9	0.0	-3.4	-5.9	-2.5	-1.7		-2.1	-1.3	
Primary deficit	9.4	4.7	-3.2	1.4	4.9	2.2	2.1	-0.3	-3.9	-3.3	-2.0	-0.9	-1.5	-0.5	-0.5
Revenue and grants	19.6	25.3	28.5			24.9	22.4	22.2	24.1	23.2	22.5		20.1	19.1	
Of which: grants	3.5	1.6	1.8			1.8	1.7	1.7	1.7	1.8	1.9		1.8	1.4	
Primary (noninterest) expenditure	29.0	29.9	25.3			27.1	24.4	21.9	20.2	20.0	20.5		18.6	18.6	
Automatic debt dynamics	1.7	-4.0	-4.5			-1.3	-2.0	-3.2	-1.9	0.8	0.3		-0.6	-0.8	
Contribution from interest rate/growth differential	-3.4	-6.8	-3.5			-5.0	-2.6	-3.3	-2.1	0.6	0.1		-0.6	-0.8	
Of which: contribution from average real interest rate	-3.2	-3.2	-3.3			-3.2	-0.1	0.1	0.5	1.6	1.2		0.3	-0.1	
Of which: contribution from real GDP growth	-0.2	-3.5	-0.2			-1.8	-2.5	-3.5	-2.6	-1.0	-1.1		-0.9	-0.7	
Contribution from real exchange rate depreciation	5.1	2.8	-1.0			3.7	0.6	0.2	0.2	0.2	0.2		...	...	
Other identified debt-creating-flows	0.0	-0.2	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	-0.2	0.0			0.0	0.0	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)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	-4.1	1.9	10.8			-1.4	1.0	1.3	3.3	2.9	1.8		0.2	0.6	
Other sustainability indicators															
PV of public sector debt	...	...	34.8			33.8	34.5	32.3	29.5	29.5	29.3		23.9	13.3	
Of which: foreign-currency denominated	...	...	25.3			26.0	24.9	23.1	22.1	22.8	23.2		21.1	12.9	
Of which: external	...	...	25.3			26.0	24.9	23.1	22.1	22.8	23.2		21.1	12.9	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need [2]	12.4	6.2	-2.2			6.2	5.8	3.4	-0.8	-0.4	0.7		0.4	0.9	
PV of public sector debt-to-revenue and grants ratio (percent)	...	...	122.3			135.5	154.3	145.5	122.3	127.2	130.4		119.0	69.6	
PV of public sector debt-to-revenue ratio (percent)	...	...	130.7			146.3	166.8	157.3	131.3	137.7	142.2		131.1	75.3	
Of which: external [3]	...	...	95.1			112.5	120.2	112.7	98.3	106.6	112.7		115.4	73.1	
Debt service-to-revenue and grants ratio (percent) [4]	8.8	4.1	3.6			16.0	16.6	16.4	13.0	12.2	11.8		9.6	7.4	
Debt service-to-revenue ratio (percent) [4]	10.7	4.4	3.9			17.3	17.9	17.7	14.0	13.2	12.9		10.6	8.0	
Primary deficit that stabilizes the debt-to-GDP ratio	2.4	2.3	-6.3			2.7	1.0	1.8	-1.4	-3.6	-2.1		0.4	0.2	
Key macroeconomic and fiscal assumptions															
Real GDP growth (percent)	0.9	13.0	0.5	7.9	10.7	5.4	7.7	10.5	8.2	3.4	3.5	6.4	3.2	4.5	3.4
Average nominal interest rate on forex debt (percent)	1.4	1.0	2.2	1.2	0.4	3.3	2.9	2.8	2.7	2.7	2.7	2.8	2.1	1.8	2.0
Average real interest rate on domestic debt (percent)	19.0	-5.8	...	2.6	11.3	-1.9	3.1	2.1	3.3	7.1	5.7	3.2	3.3	2.1	3.2
Real exchange rate depreciation (percent, + indicates depreciation)	30.0	15.9	-4.4	-2.9	14.7	16.9	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, percent)	-11.4	11.9	17.5	7.3	9.8	6.9	1.9	2.7	1.5	-2.2	-1.1	1.6	1.2	2.4	1.3
Growth of real primary spending (deflated by GDP deflator, percent)	0.3	0.2	-0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Grant element of new external borrowing (percent)	...	...	...	...	...	16.0	15.2	14.4	15.1	16.2	15.5	15.4	18.9	20.3	...

Sources: Country authorities; and 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] Revenue 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.

Alternative Scenario

Table 5a. Chad: Sensitivity Analysis for Key Indicators of Public Debt, 2012–2032

	Projections							
	2012	2013	2014	2015	2016	2017	2022	2032
PV of debt-to-GDP ratio								
Baseline	34	35	32	30	30	29	24	13
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	34	34	34	36	39	40	39	26
A2. Primary balance is unchanged from 2012	34	35	35	37	42	46	59	54
A3. Permanently lower GDP growth [1]	34	36	35	34	37	39	54	108
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviation in 2013–2014	34	40	47	49	54	59	73	84
B2. Primary balance is at historical average minus one standard deviation in 2013–2014	34	38	41	38	38	38	33	20
B3. Combination of B1-B2 using one-half standard deviation shocks	34	38	42	41	44	46	50	50
B4. One-time 30 percent real depreciation in 2013	34	45	42	38	38	38	32	20
B5. 10 percent of GDP increase in other debt-creating-flows in 2013	34	43	40	37	37	37	32	19
PV of debt-to-revenue ratio [2]								
Baseline	136	154	145	122	127	130	119	70
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	136	151	153	149	167	178	198	140
A2. Primary balance is unchanged from 2012	136	155	156	154	182	204	293	285
A3. Permanently lower GDP growth [1]	136	159	157	140	157	174	265	541
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviation in 2013–2014	136	178	210	199	228	255	355	430
B2. Primary balance is at historical average minus one standard deviation in 2013–2014	136	171	187	158	165	170	162	102
B3. Combination of B1-B2 using one-half standard deviation shocks	136	168	186	168	186	201	247	260
B4. One-time 30 percent real depreciation in 2013	136	201	187	158	164	169	160	103
B5. 10 percent of GDP increase in other debt-creating-flows in 2013	136	194	182	154	161	165	157	98
Debt service-to-revenue ratio [2]								
Baseline	16	17	16	13	12	12	10	7
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	16	17	17	13	13	12	9	10
A2. Primary balance is unchanged from 2012	16	17	16	13	13	13	13	21
A3. Permanently lower GDP growth [1]	16	17	17	14	14	14	14	29
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviation in 2013–2014	16	18	20	17	16	16	17	27
B2. Primary balance is at historical average minus one standard deviation in 2013–2014	16	17	17	14	13	13	11	10
B3. Combination of B1-B2 using one-half standard deviation shocks	16	17	18	15	15	14	14	18
B4. One-time 30 percent real depreciation in 2013	16	18	20	16	16	16	14	13
B5. 10 percent of GDP increase in other debt-creating-flows in 2013	16	17	17	14	13	13	13	10

Sources: Country authorities; and staff estimates and projections.

[1] Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

[2] Revenue is defined inclusive of grants.

Alternative Scenario

Table 6a. Chad: External Debt Sustainability Framework, Baseline Scenario, 2009–2032 [1]

(Percent of GDP, unless otherwise indicated)

	Actual			Historical [6] Average	Standard [6] Deviation	Projections									
	2009	2010	2011			2012	2013	2014	2015	2016	2017	2012–2017 Average	2022	2032	2018–2032 Average
External debt (nominal) [1]	**23.0**	**25.2**	**26.4**			**27.6**	**26.8**	**25.2**	**24.3**	**25.5**	**26.1**		**24.7**	**16.3**	
Of which: public and publicly guaranteed (PPG)	23.0	25.2	26.4			27.6	26.8	25.2	24.3	25.5	26.1		24.7	16.3	
Change in external debt	2.1	2.2	1.2			1.2	-0.8	-1.6	-0.8	1.1	0.7		-1.3	-0.6	
Identified net debt-creating-flows	-1.5	4.6	-6.5			-1.9	-1.3	-1.6	-0.8	-0.7	0.2		1.1	2.0	
Non-interest current account deficit	**10.0**	**31.1**	**0.5**	**21.4**	**30.1**	**0.3**	**2.6**	**-1.4**	**-6.0**	**-3.8**	**-2.9**		**3.0**	**3.3**	2.6
Deficit in balance of goods and services	11.9	30.7	3.4			2.6	2.7	-1.1	-6.6	-3.6	-2.5		5.8	6.8	
Exports	44.1	45.0	44.7			44.1	40.4	40.4	42.0	38.5	35.5		22.4	15.4	
Imports	56.0	75.6	48.0			46.7	43.1	39.3	35.4	34.9	33.0		28.2	22.2	
Net current transfers (negative = inflow)	-7.3	-7.5	-5.4	-5.4	1.2	-8.4	-4.8	-4.4	-4.2	-4.3	-4.4		-4.5	-3.8	-4.3
Of which: official	-1.0	-0.5	-0.3			-0.4	-0.4	-0.3	-0.3	-0.4	-0.4		-0.5	-0.7	
Other current account flows (negative = net inflow)	5.4	7.9	2.5			6.1	4.7	4.1	4.8	4.1	4.1		1.7	0.2	
Net FDI (negative = inflow)	**-15.6**	**-22.7**	**-2.7**	**-14.6**	**14.2**	**-1.6**	**-2.7**	**1.6**	**6.5**	**3.2**	**3.2**		**-1.6**	**-0.9**	-0.9
Endogenous debt dynamics [2]	**4.2**	**-3.7**	**-4.4**			**-0.5**	**-1.2**	**-1.8**	**-1.3**	**-0.2**	**-0.2**		**-0.3**	**-0.4**	
Contribution from nominal interest rate	0.4	0.2	0.5			0.9	0.7	0.7	0.6	0.7	0.7		0.5	0.3	
Contribution from real GDP growth	-0.2	-2.5	-0.1			-1.4	-2.0	-2.5	-1.9	-0.8	-0.9		-0.8	-0.7	
Contribution from price and exchange rate changes	4.0	-1.4	-4.7			...	...	...	...	...	...		...	...	
Residual (3-4) [3]	**3.6**	**-2.4**	**7.7**			**3.0**	**0.5**	**0.0**	**-0.1**	**1.9**	**0.5**		**-2.4**	**-2.6**	
Of which: exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt [4]	...	...	25.3			26.0	24.9	23.1	22.1	22.8	23.2		21.1	12.9	
Percent of exports	...	...	56.7			58.9	61.5	57.2	52.6	59.3	65.4		94.0	83.8	
PV of PPG external debt	**...**	**...**	**25.3**			**26.0**	**24.9**	**23.1**	**22.1**	**22.8**	**23.2**		**21.1**	**12.9**	
Percent of exports	**...**	**...**	**56.7**			**58.9**	**61.5**	**57.2**	**52.6**	**59.3**	**65.4**		**94.0**	**83.8**	
Percent of government revenues	**...**	**...**	**95.1**			**112.5**	**120.2**	**112.7**	**98.3**	**106.6**	**112.7**		**115.4**	**73.1**	
Debt service-to-exports ratio (percent)	**2.1**	**1.6**	**2.3**			**3.2**	**4.8**	**4.4**	**4.0**	**4.5**	**5.3**		**7.3**	**9.1**	
PPG debt service-to-exports ratio (percent)	**2.1**	**1.6**	**2.3**			**3.2**	**4.8**	**4.4**	**4.0**	**4.5**	**5.3**		**7.3**	**9.1**	
PPG debt service-to-revenue ratio (percent)	**5.7**	**3.1**	**3.9**			**6.1**	**9.3**	**8.7**	**7.6**	**8.1**	**9.1**		**8.9**	**7.9**	
Total gross financing need (billions of U.S. dollars)	-0.3	0.8	-0.1			0.0	0.2	0.3	0.3	0.2	0.3		0.5	1.1	
Non-interest current account deficit that stabilizes debt ratio	7.9	28.8	-0.7			-0.9	3.4	0.3	-5.2	-4.9	-3.5		4.3	3.9	
Key macroeconomic assumptions															
Real GDP growth (percent)	0.9	13.0	0.5	7.9	10.7	5.4	7.7	10.5	8.2	3.4	3.5	6.4	3.2	4.5	3.4
GDP deflator in U.S. dollar terms (change in percent)	-16.1	6.6	23.2	12.3	12.1	-2.7	-0.3	2.4	1.0	-2.6	-1.5	-0.6	1.2	2.4	1.3
Effective interest rate (percent) [5]	1.4	1.0	2.2	1.2	0.4	3.3	2.9	2.8	2.7	2.7	2.7	2.8	2.1	1.8	2.0
Growth of exports of G&S (U.S. dollar terms, percent)	-30.9	23.0	22.9	49.8	84.1	1.2	-1.6	13.1	13.7	-7.8	-5.9	2.1	-2.7	4.5	-0.9
Growth of imports of G&S (U.S. dollar terms, percent)	-1.5	62.8	-21.4	27.6	53.5	-0.4	-0.8	3.2	-1.6	-0.8	-3.7	-0.7	1.2	4.4	2.1
Grant element of new public sector borrowing (percent)	...	...	...	...	...	16.0	15.2	14.4	15.1	16.2	15.5	15.4	18.9	20.3	19.4
Government revenue (excluding grants, percent of GDP)	16.1	23.6	26.6			23.1	20.7	20.5	22.5	21.4	20.6		18.3	17.6	18.3
Aid flows (billions of U.S. dollars) [7]	0.3	0.3	0.3			0.2	0.2	0.2	0.3	0.3	0.3		0.4	0.6	
of which: Grants	0.2	0.1	0.2			0.2	0.2	0.2	0.2	0.3	0.3		0.3	0.4	
of which: Concessional loans	0.1	0.1	0.1			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.2	
Grant-equivalent financing (percent of GDP) [8]	...	...	...			2.3	2.1	2.0	2.0	2.2	2.2		2.0	1.8	2.1
Grant-equivalent financing (percent of external financing) [8]	...	...	...			46.7	47.0	47.7	50.0	52.2	52.6		73.3	58.4	61.9
Memorandum items:															
Nominal GDP (billions of US dollars)	7.1	8.6	10.6			10.9	11.7	13.2	14.4	14.5	14.8		17.3	29.7	
Nominal dollar GDP growth	-15.4	20.5	23.8			2.5	7.3	13.1	9.3	0.6	2.0	5.8	4.5	7.0	4.8
PV of PPG external debt (billions of US dollars)			2.5			2.8	2.9	3.0	3.2	3.3	3.4		3.6	3.8	
(PVt-PVt-1)/GDPt-1 (percent)						2.1	1.2	1.3	1.0	0.9	0.8	1.2	-0.3	0.3	0.1
Gross workers' remittances (billions of US dollars)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of PPG external debt (percent of GDP + remittances)	...	...	25.3			26.0	24.9	23.1	22.1	22.8	23.2		21.1	12.9	
PV of PPG external debt (percent of exports + remittances)	...	...	56.7			58.9	61.5	57.2	52.6	59.3	65.4		94.0	83.8	
Debt service of PPG external debt (percent of exports + remittances)	...	...	2.3			3.2	4.8	4.4	4.0	4.5	5.3		7.3	9.1	

Sources: Country authorities; and staff estimates and projections.

[1] Includes both public and private sector external debt.

[2] Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

[3] Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

[4] Assumes that PV of private sector debt is equivalent to its face value.

[5] Current-year interest payments divided by previous period debt stock.

[6] Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

[7] Defined as grants, concessional loans, and debt relief.

[8] Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

Alternative Scenario

Table 6b. Chad: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2012–2032

(Percent)

	Projections							
	2012	2013	2014	2015	2016	2017	**2022**	2032
PV of debt-to GDP ratio								
Baseline	26	25	23	22	23	23	**21**	13
A. Alternative scenarios								
A1. Key variables at their historical averages in 20122–2032 [1]	26	28	30	32	34	35	**35**	26
A2. New public sector loans on less favorable terms in 20122–2032 [2]	26	26	24	24	25	26	**26**	22
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	26	27	29	28	29	29	**26**	16
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	26	37	56	53	55	55	**50**	21
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	26	25	23	22	23	24	**21**	13
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	26	27	24	23	24	24	**22**	13
B5. Combination of B1-B4 using one-half standard deviation shocks	26	17	6	6	7	7	**6**	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	26	36	33	32	33	33	**30**	18
PV of debt-to-exports ratio								
Baseline	59	62	57	53	59	65	**94**	84
A. Alternative scenarios								
A1. Key variables at their historical averages in 20122–2032 [1]	59	70	75	76	89	99	**158**	167
A2. New public sector loans on less favorable terms in 20122–2032 [2]	59	63	60	57	66	74	**118**	146
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	59	61	57	52	59	65	**94**	84
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	59	137	358	326	365	400	**573**	354
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	59	61	57	52	59	65	**94**	84
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	59	68	59	54	61	68	**97**	84
B5. Combination of B1-B4 using one-half standard deviation shocks	59	38	14	14	16	18	**27**	54
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	59	61	57	52	59	65	**94**	84
PV of debt-to-revenue ratio								
Baseline	113	120	113	98	107	113	**115**	73
A. Alternative scenarios								
A1. Key variables at their historical averages in 20122–2032 [1]	113	136	148	142	159	170	**194**	146
A2. New public sector loans on less favorable terms in 20122–2032 [2]	113	123	119	106	118	127	**145**	127
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	113	133	142	123	134	141	**145**	92
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	113	178	274	237	255	268	**273**	120
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	113	119	114	100	108	114	**117**	74
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	113	133	117	102	110	116	**119**	74
B5. Combination of B1-B4 using one-half standard deviation shocks	113	81	30	28	31	33	**35**	50
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	113	172	161	140	152	161	**165**	104

Alternative Scenario

Table 6b. Chad: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2012–2032 (continued)

(Percent)

				Debt service-to-exports ratio				
Baseline	3	5	4	4	5	5	**7**	9
A. Alternative scenarios								
A1. Key variables at their historical averages in 20122–2032 [1]	3	4	4	4	4	4	**5**	7
A2. New public sector loans on less favorable terms in 20122–2032 [2]	3	5	4	4	4	5	**9**	12
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	3	5	4	4	5	5	**7**	9
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	3	7	13	15	16	19	**48**	49
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	3	5	4	4	5	5	**7**	9
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	3	5	5	4	5	5	**8**	9
B5. Combination of B1-B4 using one-half standard deviation shocks	3	4	4	3	3	4	**1**	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	3	5	4	4	5	5	**7**	9
				Debt service-to-revenue ratio				
Baseline	6	9	9	8	8	9	**9**	8
A. Alternative scenarios								
A1. Key variables at their historical averages in 20122–2032 [1]	6	8	8	7	6	7	**6**	6
A2. New public sector loans on less favorable terms in 20122–2032 [2]	6	9	8	7	8	9	**11**	10
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2013–2014	6	10	11	10	10	11	**11**	10
B2. Export value growth at historical average minus one standard deviation in 2013–2014 [3]	6	9	10	11	11	13	**23**	17
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2013–2014	6	9	9	8	8	9	**9**	8
B4. Net non-debt-creating flows at historical average minus one standard deviation in 2013–2014 [4]	6	9	9	8	8	9	**9**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	6	9	8	6	6	7	**2**	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2013 [5]	6	13	12	11	12	13	**13**	11
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) [6]	10	10	10	10	10	10	**10**	10

Sources: Country authorities; and staff estimates and projections.

[1] Variables include real GDP growth, growth of GDP deflator (U.S. dollar terms), non-interest current account in percent of GDP, and non-debt-creating flows.

[2] Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.

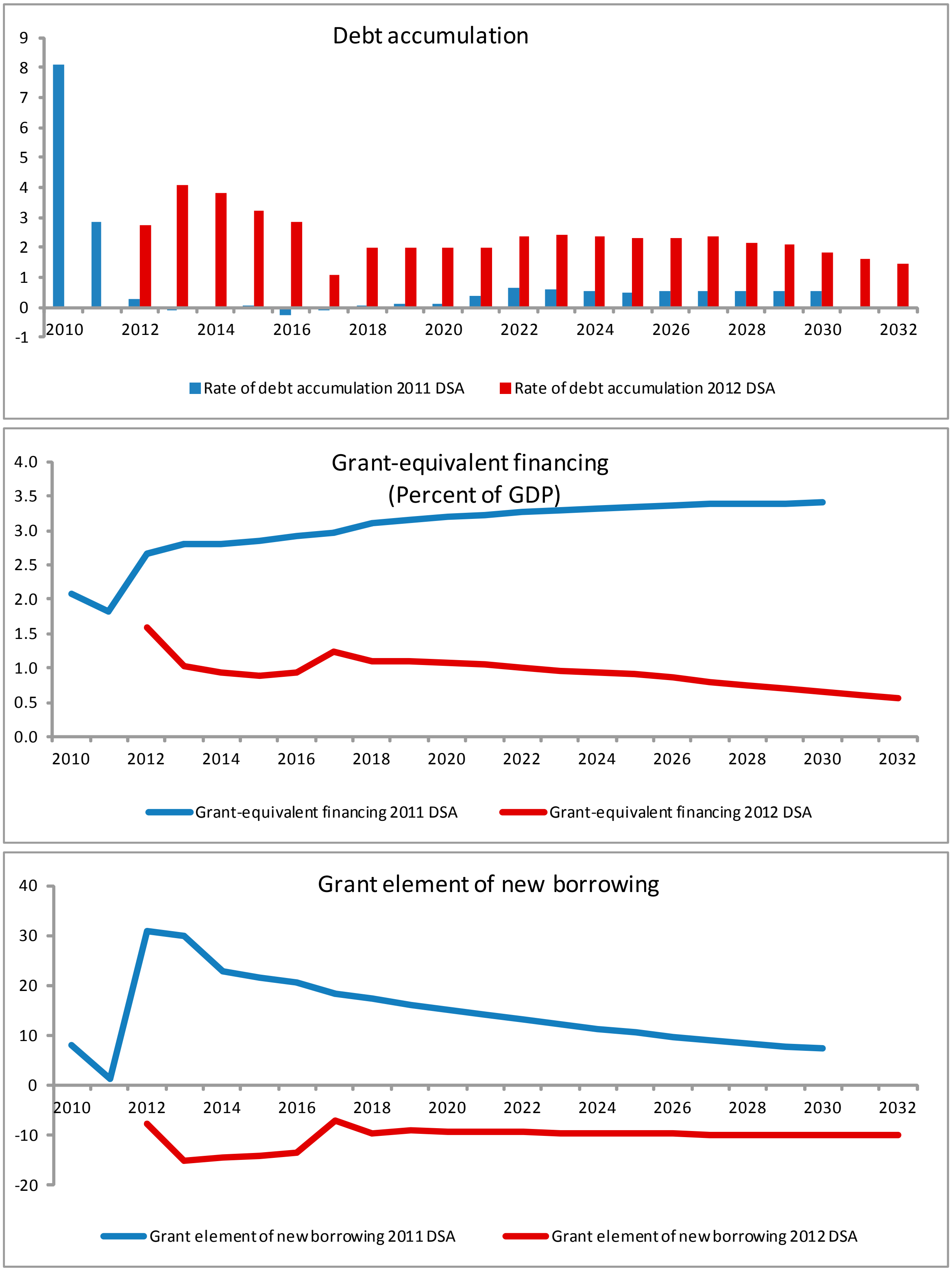
[3] Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

[4] Includes official and private transfers and FDI.

[5] Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

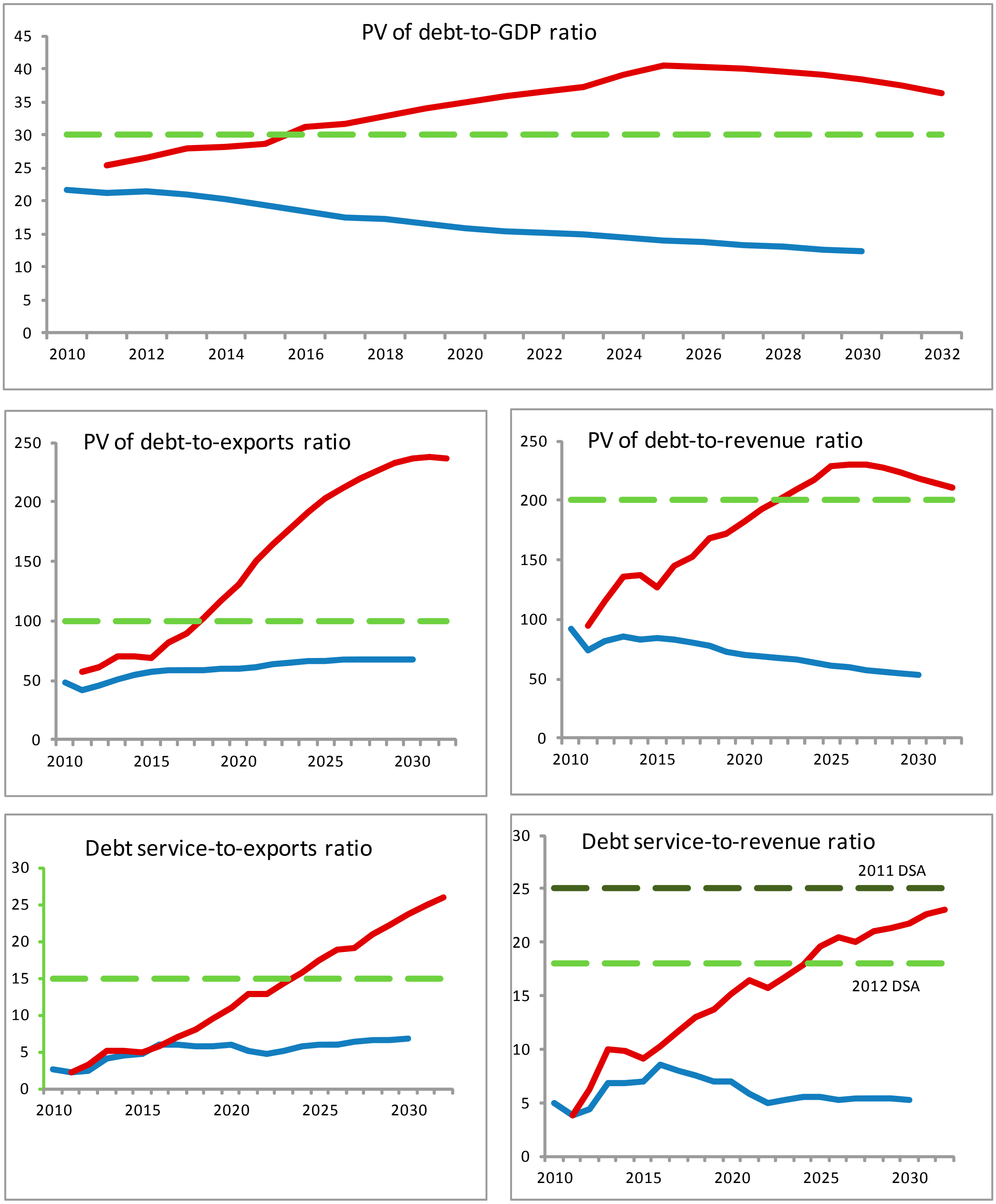
[6] Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 5. Chad: Changes Relative to the 2011 Baseline



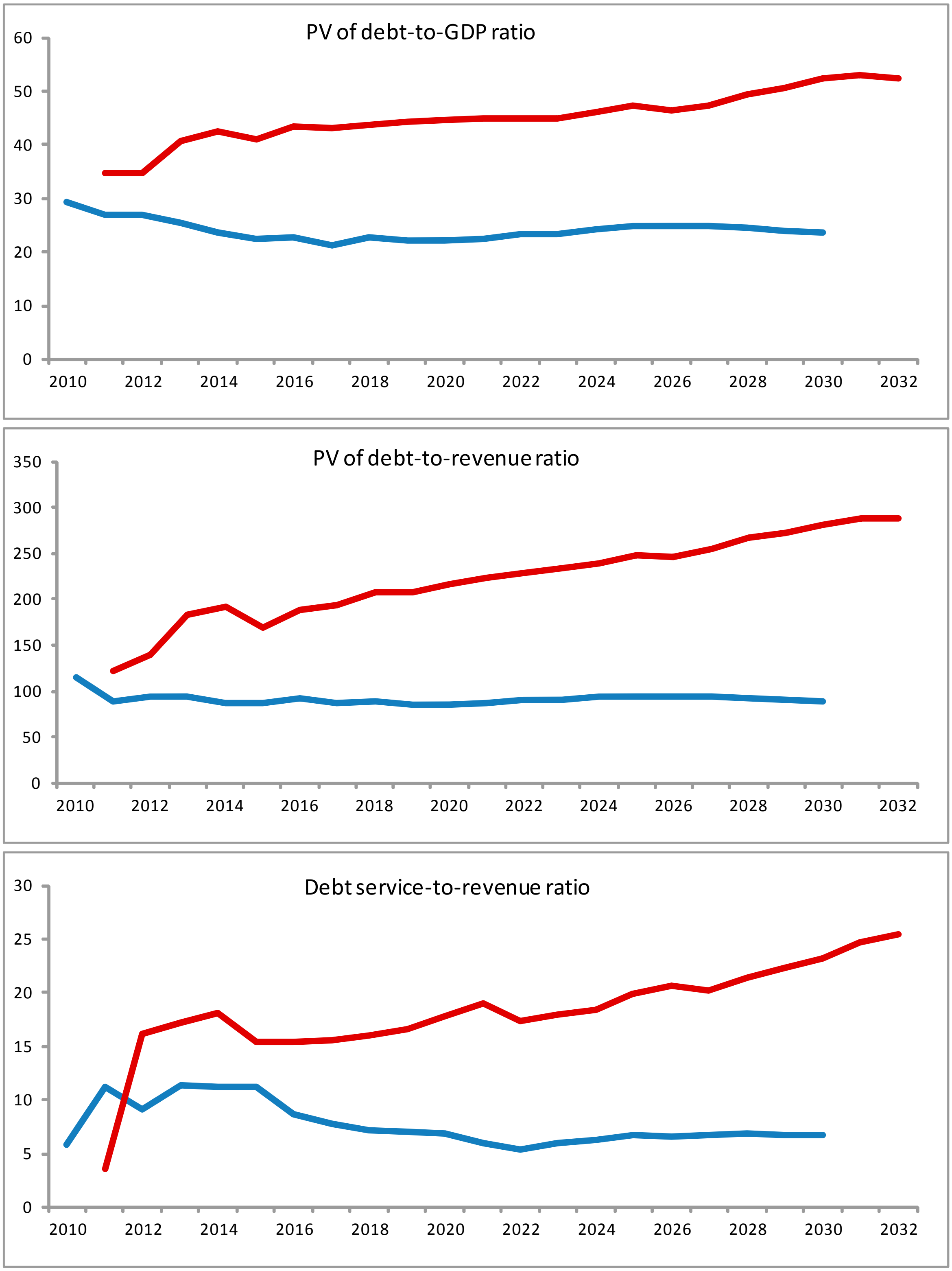
Source: Country authorities; and staff estimates and projections.

Figure 6. Chad: Changes Relative to the 2011 Baseline



Source: Country authorities; and staff estimates and projections.

Figure 7. Chad: Changes Relative to the 2011 Baseline



Source: Country authorities; and staff estimates and projections.

INTERNATIONAL MONETARY FUND

CHAD

STAFF REPORT FOR THE 2012 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

November 30, 2012

Prepared By

The African Department
(In collaboration with other departments)

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RELATIONS WITH THE IMF

As of October 31, 2012

I. Membership Status Joined: July 10, 1963;		Article VIII
II. General Resources Account	***SDR Million***	***%Quota***
Quota	66.60	100.00
Fund holdings of currency	63.67	95.60
Reserve tranche position	2.93	4.40
III. SDR Department	***SDR Million***	**%Allocation**
Net cumulative allocation	53.62	100.00
Holdings	0.06	0.11
IV. Outstanding Purchases and Loan:	***SDR Million***	***%Quota***
ECF Arrangements	3.14	4.71

V. Latest Financial Arrangements

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
ECF [1]	Feb 16, 2005	May 31, 2008	25.20	4.20
ECF [1]	Jan 07, 2000	Jan 06, 2004	47.60	42.40
ECF [1]	Sep 01, 1995	Apr 30, 1999	49.56	49.56

[1] Formerly PRGF.

VI. Projected Payments to Fund

(SDR Million; based on existing use of resources and present holdings of SDRs)

	Forthcoming				
	2012	2013	2014	2015	2016
Principal		1.88	0.84	0.42	
Charges/Interest	0.01	0.05	0.05	0.05	0.05
Total	0.01	1.93	0.89	0.47	0.05

VII. Implementation of HIPC Initiative

	Enhanced Framework
I. Commitment of HIPC assistance	
Decision point date	May 2001
Assistance committed by all creditors (US$ million) [1]	170.00
Of which: IMF assistance (US$ million)	18.00
(SDR equivalent in millions)	14.25
Completion point date	Floating
II. Disbursement of IMF assistance (SDR million)	
Assistance disbursed to the member	8.55
Interim assistance	8.55
Completion point balance	--
Additional disbursement of interest income [2]	--
Total disbursements	8.55

[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. Safeguards Assessments

The Bank of the Central African States (BEAC) is the regional central bank of the Central African States. The most recent safeguards assessment of the BEAC was completed on July 6, 2009. The findings of this assessment indicated that implementation of previous safeguards recommendations on financial reporting, internal audit, and internal control was limited, and that the changing risk profile of BEAC foreign exchange holdings required further actions to strengthen safeguards at BEAC. Subsequent to revelation of Paris office fraud, a series of measures and longer term safeguard measures were agreed between the IMF and BEAC in order to continue with country programs. Consequently, BEAC adopted an action plan for 2010 with the aims of strengthening key safeguards. In addition, since 2010, BEAC and the Fund agreed on additional measures to address the weaknesses highlighted by the special audit and strengthen governance bodies. Fund staff is actively monitoring the implementation of these measures.

IX. Exchange Rate Arrangement

Chad maintains an exchange system that is free from restrictions and multiple currency practices on payments and transfers for current international transactions. The BEAC common currency is the CFA franc, which was formerly pegged to the French franc and is now pegged to the euro. Repurchase of CFA franc banknotes exported outside the BEAC zone was suspended on August 2, 1993. Effective January 12, 1994, the CFA franc was devalued by 50 percent in foreign currency terms, and the exchange rate was adjusted from F 1 = CFAF 50 to F 1 = CFAF 100. Since January 1, 1999, the CFA franc has been pegged to the euro at the rate of EUR 1 = CFAF 655.957.

X. Article IV Consultations

Chad is on the 12-month cycle. The next Article IV consultation is expected to take place by December 2013.

XI. Technical Assistance

Department	***Purpose***	***Time of Delivery***
STA (AFRITAC)	National accounts	November 2012
FAD (AFRITAC)	Public financial management	October 2012
FAD	Customs administration	October 2012
FAD (AFRITAC)	Tax administration	September 2012
FAD (AFRITAC)	Public financial management	September 2012
FAD	Customs follow-up mission	July 2012
FAD (AFRITAC)	Public financial management	June 2012
STA (AFRITAC)	National accounts	June 2012
FAD (AFRITAC)	Tax administration	May–June 2012
STA (AFRITAC)	National accounts	May 2012
FAD	Resource revenue management	April–May 2012
FAD (AFRITAC)	Public financial management	March–April 2012
FAD (AFRITAC)	Tax administration	February 2012
STA (AFRITAC)	National accounts	November–December 2011
FAD (AFRITAC)	Public financial management	November 2011
FAD (AFRITAC)	Public financial management	September 2011
FAD (AFRITAC)	Customs	September 2011
STA (AFRITAC)	National accounts	August 2011
MCM	Banking system vulnerabilities	January 2011
FAD (AFRITAC)	Tax administration	February 2011
FAD (AFRITAC)	Tax administration	September–October 2010
FAD (AFRITAC)	Tax administration	June–July 2010
FAD (AFRITAC)	Public financial management	September 2010
STA	Balance of payments	September 2010
MCM (AFRITAC)	Public debt	May 2010

FAD	Tax policy review	April–May 2010
FAD (AFRITAC)	Tax and custom administration	March–April 2010
FAD(AFRITAC)	Customs administration	March 2010
STA (AFRITAC)	National accounts	March 2010
FAD (AFRITAC)	Public financial management	January 2010
FAD(AFRITAC)	Tax and customs administration	December 2009
MCM (AFRITAC)	Public debt	November 2009
FAD (AFRITAC)	Public financial management	September 2009
FAD (AFRITAC)	Tax administration	August–September 2009
FAD (AFRITAC)	Public financial management	August–September 2009
FAD	Tax and customs administration	April 2009
MCM (AFRITAC)	Public debt	April 2009
FAD (AFRITAC)	Treasury management	March 2009

XII. Financial Sector Assessment Program (FSAP) Participation, Report on the Observances of Standards and Codes (ROSCs), and Offshore Finance Center (OFC) Assessments

A joint IMF-World Bank mission conducted an FSAP for Chad during May 25–June 10, 2011, building on the mission that conducted a regional FSAP for CEMAC countries during January 30–February 9, 2006.

A ROSC Data Module mission visited Chad May 26–June 8, 2005.

XIII. Resident Representative

There has been no Fund Resident Representative in N'Djamena since October 2010.

JMAP BANK–FUND MATRIX

Title	Products	Provisional Timing of Missions	Expected Delivery Date
A. Mutual Information on Relevant Work Programs			
The World Bank work program in the next 18 months	1. Technical assistance for data collection and analysis of the new household survey (ECOSIT3)		Second quarter 2012
	2. Capacity building in public expenditure management		Ongoing
	3. Note on PRSP		December 2011
	4. Participation in national economic policy forum	Q4 2011	Q4 2011
	5. CAS		June 2012
The Fund work program in the next 18 months	1. 2011 Article IV Consultation	June 2011	September 2011: Board conclusion of 2011 Article IV consultation
	2. Staff visit to advise on the elaboration of the 2012 budget.	September 2011	September 2011
	3. Participation in national economic policy forum	Q4 2011	Q4 2011
	4. 2012 Article IV Consultation	June 2012	September 2012: Board conclusion of 2012 Article IV consultation
	Technical Assistance		
	Statistics: assist with implementation of new national accounts framework	August 2011	August 2011
	Public financial management	FY2012	FY2012

Title	Products	Provisional Timing of Missions	Expected Delivery Date
B. Requests for Work Program Inputs			
Fund request to Bank	1. Comments on the composition of the 2012 budget	Sept 2011	Sept 2011
	2. Latest Household Survey data (ECOSIT3)		Feb 2012
	3. Poverty Profile		April 2012
Bank request to Fund	1. Macroeconomic projections and analyses for 2011 and the medium term	June 2011	June 2011
	2. Revised macroeconomic projections and analyses for 2011 and the medium term	Sept 2011	Sept 2011
	3. Information on nonconcessional financing of budget or projects	Ongoing	
C. Agreement on Joint Products and Missions			
Joint products	1. Joint Bank-Fund Debt Sustainability Assessment		July 2011
	2. FSSA: Report submitted to Fund and Bank Boards		September 2011

STATISTICAL ISSUES

I. **Assessment of Data Adequacy for Surveillance**	
General: Data provision has capacity-related shortcomings, but is broadly adequate for surveillance. There is scope for improvement in quality, coverage, and timeliness in most macroeconomic datasets. The authorities have recently taken the initiative to improve the macroeconomic database, particularly the national accounts. The 2007 Report on the Observance of Standards and Codes (ROSC) found that the statistical system was weak and suffers from a shortage of both financial and human resources.	
National accounts: The authorities have revised national accounts estimates, moving from the 1968 System of National Accounts (SNA) to the 1993 SNA, for 2005–11. However, compilation remains weak owing to inadequate funding for the Institut National de la Statistique, des Etudes Economiques et Démographiques (INSEED). In addition, dissemination of data and metadata to the public could be improved by more timely releases and more detailed information. See staff report for further details.	
Price statistics: The Harmonized Consumer Price Index (HCPI) is of rather good quality. However, it covers only the capital city and the reporting lag sometimes exceeds two months. The regional authorities have work underway to improve the quality of the HCPI in each of the Central African Economic and Monetary Community (CEMAC) countries.	
Government finance statistics: Data weaknesses create uncertainty about the central government's actual fiscal position and hamper debt sustainability analysis. Staff is compelled to prepare estimates of central government financial operations from disparate administrative sources that may or may not fully reconcile with domestic bank financing or changes in net indebtedness.	
Monetary statistics: Banque des Etats de L'Afrique Centrale (BEAC) reports the expected core monetary and financial indicators within the expected lag, and has begun reporting data through the standardized report forms (SRFs) in June 2012. A key shortcoming of monetary and financial statistics is the lack of clear reconciliation between the domestic banking sector's net credit to the government and the implicit financing in the weak government financial accounts. In addition, the depository corporations' survey omits the large number of microfinance operations in the country.	
Balance of payments: Weaknesses in Chad's balance of payments data create uncertainty about its actual external position and hamper debt sustainability analysis. Customs-based data are unreliable and suffer from coverage problems, to the extent that they are not relied upon for balance of payments or national income estimation. Staff must estimate current and capital flows from disparate administrative sources, to supplement the official balance of payments. The IMF Statistics Department has recommended tighter coordination among the CEMAC, INSEED, and other agencies in order to improve data coverage. BEAC headquarters is coordinating technical reforms to improve data quality and timeliness.	
II. **Data Standards and Quality**	
Chad has been a participant in the IMF's GDDS since September 24, 2002. GDDS metadata and plans for improvement need to be updated.	A Data ROSC was published in August 2007.
III. **Reporting to STA (Optional)**	
Only international liquidity, monetary statistics, GDP, and prices are currently reported to STA for publication in the *International Financial Statistics (IFS)*. Chad has not yet been able to resume reporting of detailed data for publication in the *Government Finance Statistics Yearbook*. Annual fiscal data through 2001 have been reported and are included in the *IFS* database. The BEAC has yet to submit test monetary and financial statistics using the standardized report forms. Chad has yet to submit BOP and IIP data to STA.	

Chad: Table of Common Indicators Required for Surveillance							
	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]	Memo Items:	
						Data Quality: Methodological Soundness[8]	Data Quality – Accuracy and Reliability[9]
Exchange rates	Daily	Daily	D	D	D		
International reserve assets and reserve liabilities of the monetary authorities[1]	07/2012	10/2012	M	M	M		
Reserve/base money	07/2012	10/2012	M	M	M	LO, LNO, LNO, LO	LO, O, O, LO, NA
Broad money	07/2012	10/2012	M	QM	M		
Central bank balance sheet	07/2012	10/2012	M	M	M		
Consolidated balance sheet of the banking system	07/2012	10/2012	M	M	M		
Interest rates[2]	10/2012	11/2012	MI	QM	M		
Consumer price index	09/2012	11/2012	M	M	M		
Revenue, expenditure, balance and composition of financing[3] – general government[4]	08/2012	09/2012	Q	Q	Q	LO, LNO, LO, LO	O, LO, LO, LO, NO
Revenue, expenditure, balance and composition of financing[3]–central government	08/2012	09/2012	Q	Q	Q		
Stocks of central government and central government-guaranteed debt[5]	08/2012	04/2012	Q	Q	Q		
External current account balance	2011	09/2012	A	A	A		

Chad: Table of Common Indicators Required for Surveillance							
	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]	Memo Items:	
						Data Quality: Methodological Soundness[8]	Data Quality – Accuracy and Reliability[9]
Exports and imports of goods and services	2011	09/2012	A	A	A	O, O, O, LO	LO, LO, O, O, O
GDP/GNP	2011	09/2012	A	A	A	LNO, LO, LNO, LO	LNO, LNO, LNO, LNO, LNO
Gross external debt	12/ 2011	09/ 2012	Bi-M	Bi-M	Bi-M		
International investment position[6]	NA	NA	NA	NA	NA		

[1] Any reserve assets pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

[2] Both market-based and officially determined, including discount rates; money market rates; and 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, extra budgetary funds, social security funds) and state and local governments.

[5] Including currency and maturity composition.

[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.

[7] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

[8] Reflects the assessment provided in the data ROSC (published on August 31, 2007), and based on the findings of the mission of May 28 to June 8, 2005 for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).

[9] Same as footnote 8, except referring to international standards concerning (respectively) source data; assessment of source data; statistical techniques; assessment and validation of intermediate data and statistical outputs, and revision studies.

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL
RELATIONS
DEPARTMENT

Public Information Notice (PIN) No. 13/50
FOR IMMEDIATE RELEASE
May 14, 2013

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

IMF Executive Board Concludes 2012 Article IV Consultation with Chad

On December 14, 2012, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Chad on a lapse of time basis. Under the IMF's lapse of time procedures, the Executive Board completes the Article IV Consultations without convening formal discussions.[1]

Background

Economic performance in 2011–12 has been marked by increased oil exploration, weather shocks, and coming on stream of several large industrial projects. A severe drought provoked a food security crisis and a sharp increase in inflation in late 2011. Some fiscal consolidation was achieved in 2011 but was largely reversed in 2012.

After a strong recovery in 2010, real gross domestic product (GDP) growth slowed to 1.7 percent in 2011 as oil production declined and the drought affected agricultural production. Helped by high international prices of crude oil and the completion of several large, foreign-financed industrial projects, the balance of payments posted a surplus.

In 2012, real GDP growth is estimated to have rebounded to about 5½ percent, driven by the coming on stream of several industrial projects and a recovery in agriculture. Inflation is expected to drop to about 6 percent at year's end, if the effects of the recent floods on food prices remain contained.

In the near term, growth will be stimulated by public investments in infrastructure and bringing on stream new oil developments. In the medium term, oil production is expected to rise, with

[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.

a corresponding increase in exports and government revenues. However, absent further oil discoveries, proven reserves will be exhausted in twenty years.

In the area of public financial management (PFM), the repeated use of emergency spending procedures has led to significant budget overruns. Subsidies to public enterprises have surged, and the policy framework for public enterprises remains a challenge.

The public debt-to-GDP ratio increased significantly in recent years and will likely rise further over the medium term, reflecting the impact of the Master Facility Agreement (MFA) signed in 2011 with the Eximbank of China.

Chad’s weak business climate is perceived as an obstacle to private sector development. The shared awareness of the problem between the local business community and the authorities is promising but the task ahead is challenging.

Financial sector conditions have improved since the 2011 Financial Sector Assessment Program mission, owing to the recapitalization of state-owned banks, strong growth of several private banks, and technological innovations, including mobile banking. Nevertheless, private sector access to financial services remains limited and the banking system remains excessively exposed to the government.

Executive Board Assessment

In concluding the 2012 Article IV Consultation with Chad, Executive Directors endorsed staff’s appraisal as follows:

The improved security situation, strong oil revenue receipts, and prospects for additional oil production coming on stream over the next few years create a unique opportunity for Chad to address its development and poverty reduction needs. To capitalize on these favorable circumstances, Chad needs a medium-term strategy for transforming the oil windfall into a source of sustainable growth for the non-oil economy, putting in place a market-oriented policy framework for the new enterprises, and introducing public financial management reforms to optimize the use of additional oil resources.

Chad’s vulnerability to weather shocks came to the fore in the context of the 2011 drought and recent floods. Staff welcomes the broadening of the policy focus from the emergency response toward building resilience. To this effect, the cost of implementing the contemplated policies to address food security should be properly evaluated and provided for in the budget, including sufficient appropriations for the replenishment of buffer stocks and the implementation of a multi-pronged strategy to strengthen Chad’s resilience to weather shocks.

The relatively good fiscal performance registered in 2011 helped steer the economy toward medium-term sustainability; however, weaker fiscal discipline in 2012 reignited concerns about the course of fiscal policy. The 2012 supplementary budget deviates from a sustainable path. The envisaged expansion of the deficit also entails a draw-down of the deposits at the Banque des Etats de l'Afrique Centrale and thus delays the realization of financial savings to protect Chad against the risk of a downward shift in international oil prices.

The authorities should uphold the central role of the budget as a fiscal policy instrument and press ahead with PFM reforms. Currently, the budget does not accurately reflect the government's economic policies and the continued recourse to extra-budgetary spending undermines the implementation of stated budget objectives. The lack of progress on PFM reforms entails unnecessary costs. To remedy these shortcomings, the authorities should follow through on the implementation of their PFM reform agenda. These reforms should be accompanied by the strengthening of institutional, technical, and human capacities of the Ministry of Finance and Budget (MFB) and the harmonization of local practices with the new directives of the Communauté Economique et Monétaire de l'Afrique Centrale (CEMAC).[2]

The early experience with the new public enterprises underscores the importance of putting in place an appropriate market-oriented policy framework for these companies. The authorities' intention to reduce subsidies for public enterprises is welcome. However, to ensure that these enterprises contribute to the development of a modern industrial fabric in Chad, they should have a degree of freedom in price setting consistent with cost recovery. And, a regulatory framework for healthy competition should be established in the sectors susceptible to monopolistic practices. For the oil refinery, it remains crucial to find an export outlet for its excess production to increase its capacity utilization and improve its financial condition.

Public domestic and external debt levels remain manageable for the time being, but the authorities' intention to scale up foreign debt-financed public investment entails an elevated risk of debt distress. The authorities are encouraged to calibrate their public investment policy, taking into account Chad's debt service capacity and its high vulnerability to oil price shocks. Being a low income country, Chad should seek highly concessional terms for its external loans. The authorities are encouraged to seek to resolve the incompatibility between the MFA and debt sustainability objectives.

The 2013 budget should be anchored on the objective of medium-term fiscal sustainability, taking into account the need to build a precautionary savings cushion. Given the firm expectation of a significant increase in oil revenue from the new oil projects coming on stream in the near term, staff currently recommends a non-oil primary deficit (NOPD) path that is less

[2] CEMAC members are expected to complete the transposition at the national level of the new CEMAC directives of public financial management by December 31, 2013.

constraining compared with the path in the 2011 Article IV consultation. Nevertheless, starting with 2013 and over the medium term, a gradual tightening of the NOPD would be required to offset the expected decline in oil revenues over the long term. This gradual tightening would generate savings, primarily, to serve as a cushion against an oil revenue shock, but also to help smooth the transition to the post-oil era.

The publication of the White Book by the National Council of Employers of Chad is an important step toward improving Chad's business climate. The authorities are encouraged to work closely with the business community to further the agenda outlined in the White Book, in particular by improving the legal environment for private enterprises, making tax policy more business-friendly, professionalizing tax and customs administration, and developing the key elements of infrastructure.

The recapitalization of state-owned banks improved financial stability indicators but the concentrated exposure of banks to the public sector remains a source of risk. In the short term, to mitigate this risk, banks are encouraged to continue holding capital buffers in excess of the required minimum 8 percent. Looking forward, a durable solution to this problem would come from greater private sector participation, which should be encouraged, including by setting incentives for informal sector enterprises to migrate to the formal sector. Further, the strengthening of the centralized credit registry would help contain credit risk, and the implementation of the anti-money laundering framework would help strengthen governance.

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case. The staff report (use the free Adobe Acrobat Reader to view this pdf file) for the 2012 Article IV Consultation with Chad is also available.

Chad: Selected Economic and Financial Indicators, 2009–2013

	2009	2010	2011	2012	2013
			Est.	Proj.	
	(Annual percentage change, unless otherwise indicated)				
Real economy					
GDP at constant prices	-1.2	13.0	0.5	5.4	7.7
Oil GDP	-5.1	6.4	-2.5	-1.3	11.3
Non-oil GDP	0.0	15.0	1.4	7.1	6.8
Consumer price index (period average)	-2.1	-2.1	1.9	8.2	3.0
Consumer price index (end of period)	4.7	-2.2	10.8	6.0	3.0
Oil prices					
WEO (US$/barrel)[1]	61.8	79.0	104.0	106.2	105.1
Chadian price (US$/barrel)[2]	55.5	73.6	97.7	103.7	100.1
Oil production (in millions of barrels)	43.6	44.7	43.6	42.0	46.3
Exchange rate FCFA per US$ (period average)	471.0	494.4	471.4	…	…
Money and credit[3]					
Net foreign assets	-80.2	13.5	25.4	-16.9	9.3
Net domestic assets	81.3	13.2	-13.2	27.6	0.1
Of which: net claims on central government	72.5	8.7	-19.2	10.0	-11.0
Of which: credit to private sector	5.5	8.4	7.8	6.8	6.9
Broad money	1.1	26.8	12.2	10.8	9.4
Income velocity (non-oil GDP/broad money)	4.5	4.3	4.2	4.3	4.3
External sector (valued in CFA francs)					
Exports of goods and services, f.o.b.	-27.5	20.7	20.2	1.2	-1.6
Imports of goods and services, f.o.b.	20.5	16.1	9.4	-0.4	-0.8
Export volume	-7.9	-3.0	-3.9	-8.7	-9.7
Import volume	27.5	18.8	7.5	-0.3	-0.6
Overall balance of payments (in percent of GDP)	-10.6	-4.2	3.4	-2.1	0.4
Current account balance, including official transfers (in percent of GDP)	-18.3	-3.5	-1.0	-1.1	-3.3
Terms of trade	-44.9	30.6	22.9	10.9	9.3
External debt (in percent of GDP)	23.0	25.0	26.4	27.6	26.8
NPV of external debt (in percent of exports of goods and services)	39.7	48.1	56.7	58.9	61.5
	(Percent of non-oil GDP, unless otherwise indicated)				
Government finance					
Revenue	25.2	38.7	46.5	40.3	36.2
Of which: non-oil	12.0	12.5	11.0	10.4	10.9
Expenditure	46.1	49.9	44.9	49.5	44.6
Current	29.7	29.6	25.8	25.6	23.6
Capital	16.5	20.2	19.2	23.9	21.0
Non-oil primary balance (commitment basis, excl. grants)[4]	-28.1	-31.2	-28.1	-29.2	-25.0
Overall fiscal balance (excl. grants, commitments basis)	-20.9	-11.2	1.6	-9.2	-8.4
Overall fiscal balance (excl. grants, cash basis)	-20.8	-9.3	-2.3	-6.9	-8.6
Total debt (in percent of GDP)[5]	30.5	30.5	35.9	35.4	36.4
Of which: domestic debt[5]	7.5	5.5	9.5	7.8	9.6
Memorandum items:					
Nominal GDP (in billions of CFA francs)[6]	3,344	4,230	4,970	5,625	6,171
Of which: non-oil GDP	2,138	2,584	2,859	3,224	3,527
Nominal GDP (in billions of US$)[6]	7.1	8.6	10.5	10.9	11.7
Of which: non-oil GDP	4.5	5.2	6.1	6.2	6.7

Sources: Chadian authorities; and IMF staff estimates and projections.
[1]WEO 2012 Summer Production.
[2]Chadian oil price is WEO price minus quality discount.
[4]Defined as the total revenue excluding grants and oil revenue, minus total expenditure excluding net interest payments and foreign-financed investment.
[5]Central government, including government-guaranteed debt.
[6]GDP using National Accounts, base year 1995.