



# THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

## STAFF REPORT FOR THE 2015 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

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Approved By

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*Ethiopia's external debt remains sustainable, but the risk of external debt distress has increased from "low" to "moderate" due to weak export performance and higher than expected non-concessional borrowing, reflecting faster execution of the government's investment program. Over the longer term, a recovery in exports and a moderation of non-concessional borrowing would improve external debt indicators. In assessing the risk of external debt distress, the DSA calls for the use of judgment, focusing in particular on capacity to repay. In this regard, the fact that external loans are being used primarily to finance growth-enhancing infrastructure helps reduce the risk of debt distress. However, uncertainties related to foreign demand and foreign financing for investment present downside risks to export growth. Total public sector debt (domestic and external) also remains sustainable, though vulnerable to risks. To enhance debt sustainability, it remains essential to promote the growth and diversification of exports. Ensuring an appropriate pace of public borrowing—especially from external, non-concessional sources—is also critical to ensure that public investment does not undermine debt sustainability. These findings highlight the importance of having a medium-term debt management strategy, and of increasing oversight of state-owned enterprises, which have been in the lead for major infrastructure projects and thus have contracted much of the external, non-concessional debt.*

## BACKGROUND AND KEY ASSUMPTIONS

**1. Ethiopia's large-scale public investment in infrastructure has been financed by significant borrowing, which has resulted in higher public debt.** Ethiopia reached the completion point under the Heavily Indebted Poor Countries (HIPC) Initiative in 2004 and benefited from debt relief under the Multilateral Debt Relief Initiative (MDRI) in 2006.<sup>1</sup> Public and publicly guaranteed (PPG) external debt<sup>2</sup> fell in the years that followed, reaching a low of 18 percent of GDP in mid-2012.<sup>3</sup> It rose to 23 percent of GDP by mid-2014 (and total public debt was 42 percent of GDP).

**2. The Debt Sustainability Analysis (DSA) prepared in 2014 concluded that Ethiopia's risk of external debt distress was "low", though on the cusp of "moderate".** No indicative threshold was breached in the baseline. However, the indicator showing the ratio of the present value of debt to exports (PVDE) temporarily breached the 150 percent threshold under the most extreme shocks scenarios.<sup>4</sup> With other risk indicators far below their respective thresholds, Ethiopia was considered a borderline case, for which the use of the probability approach was warranted. This analysis indicated a very low probability of debt distress, which underpinned the final assessment that Ethiopia's risk of external debt distress was "low". Incorporating remittances to determine the risk of debt distress did not change the final assessment.

**3. Since last year, there has been a significant increase in disbursements of non-concessional external loans.** The government issued a US\$1 billion Eurobond in December 2014 (which had not been anticipated in the 2014 DSA), and disbursement of commercial loans to state-owned enterprises (SOEs) accelerated. In total, SOEs borrowed \$4.1 billion during 2013-15, broadly as expected in the 2014 DSA. As SOE commercial borrowing is expected to remain significant in the coming years, the grant element of total public borrowing will fall further. However, as the large-scale public investment program begins to wind down and associated external financing for public enterprises declines, the non-concessional share of

<sup>1</sup> While Ethiopia has received debt relief from most of its creditors, it has not been able to reach agreement with a few bilateral creditors (Bulgaria, Libya, and FR Yugoslavia) and commercial creditors from Italy, the former Czechoslovakia, India, and FR Yugoslavia. These outstanding loans (US\$382.9 million) accounted for 3.2 percent of the debt stock in 2013/14. HIPC terms are assumed for these loans. While negotiations with Russia on outstanding loans (US\$161.6 million) have not completed, the debt service on these loans is assumed to be given HIPC comparable treatment.

<sup>2</sup> PPG debt includes the debt of the federal government, regional governments, and major state-owned enterprises *except* Ethiopian Airlines (EAL). EAL meets the criteria for exclusion set out in the 2013 Staff Guidance Note on the DSF for LICs (Annex 3) because it is run on commercial terms, has a sizeable profit margin (as reflected in audited accounts published annually), enjoys managerial independence, and borrows without government guarantee.

<sup>3</sup> The Ethiopian fiscal year runs from July 8 to July 7.

<sup>4</sup> Based on its 2014 Country Policy and Institutional Assessment (CPIA) score (3.4), Ethiopia is classified as a medium performer. The thresholds for the debt burden for medium performers are 150, 40, and 250 percent for the PV of debt to exports, GDP, and revenue, respectively; a 10 percent band is applied to the thresholds to determine if the country is a borderline case; debt service thresholds are 20 and 30 percent of exports and revenue, respectively. In the scenarios that include workers' remittances, the corresponding threshold for the PV of debt to exports and remittances is 120 percent, and is 16 percent for debt service to exports and remittances; the PV of debt to GDP and remittances is 36 percent.

external financing is expected to fall for total external debt (general government and SOEs). Other key assumptions include:

- Non-concessional loan disbursements will average about US\$1.7 billion per year in the next five years, and around US\$750 million per year over the entire projection period (FY2015/16–FY2034/35).
- The maturity on all new external loans will average 26 years, and 13-16 years for new non-concessional loans.
- The interest rate on all new external loans will average 2.2 percent, and 3-5 percent on new non-concessional loans.

**4. The accelerated disbursement of previously contracted commercial loans to state-owned enterprises reflects the ramping up of Ethiopia's infrastructure development.** Total non-concessional borrowing in 2014/15 is estimated at US\$4 billion. The DSA projects such borrowing to average US\$1.9 billion over the next two years. Major ongoing projects include the following:

- **Ethiopian Railway Corporation:** Awash Woldia / Hara Gebeya Railway Projects, the Addis Ababa Light Railway. Commercial disbursements are projected at US\$2 billion through 2016/17.
- **Ethio Telecom:** purchased US\$1.1 billion of equipment using commercial loans during 2014/15.
- **Power related projects (mostly in electricity transmission):** disbursements for the Genale Dawa dam and the final phase of the Gilgel Gibe III dam could reach US\$0.6 billion.
- **US\$1 billion Eurobond** and other loans to support development of industrial parks, the sugar industry, and power transmission infrastructure; also expansion of the road network and Bole International airport in Addis Ababa.

**5. IDA has reduced Ethiopia's ceiling for new non-concessional borrowing to US\$750 million for 2015/16 and, in principle, for 2016/17.** The ceiling was lowered in July 2015 (from the US\$1 billion ceiling that had been in place for 2012/13-2014/15) in light of rising risks of external debt distress. The reduced ceiling was seen as striking a good balance between encouraging the authorities to focus on concessional financing for public investment, while leaving room to tap non-concessional financing sources. At the same time, IDA revoked the 5 percent volume cut introduced for FY15 given that the authorities contained new non-concessional borrowing within the IDA limit of US\$1 billion. IDA will continue to support Ethiopia on regular credit term.

**6. The medium-term macroeconomic outlook remains broadly unchanged compared to the assumptions used in the 2014 DSA, though the outlook for exports is somewhat weaker (Box 1).** Real GDP growth is estimated at 8.7 percent in 2014/15 and projected at 8.1 percent in 2015/16, reflecting strong public infrastructure investment and favorable agricultural production. The projected long-run GDP growth rate is maintained at 6.5 percent. Compared to the 2014 DSA, the outlook for the level of exports is lower, reflecting underperformance in 2014/15. Exports of goods and services are projected to rebound in 2015/16—growing at 19.5 percent—and sustain healthy growth over the following years, reflecting

improved product diversification (for example in light manufacturing, horticulture, and electricity). Export growth is expected to taper off to 8.3 percent in the longer run. This fairly optimistic outlook faces downside risks if structural reforms are not sufficiently ambitious to address Ethiopia's considerable competitiveness challenges. The uncertain global outlook presents another downside risk to export growth. Weaker economic growth in Ethiopia's major trading partners could depress exports, and tighter global financing conditions could weaken FDI growth.<sup>1</sup> With respect to China, slower economic growth is a risk for Ethiopia. However, a rebalancing of China's demand towards consumption could boost Ethiopia's exports to China, which so far have been primarily vegetable products.

### Box 1. Ethiopia: Macroeconomic Assumptions for the Baseline Scenario

Real GDP growth is projected at 8.7 percent in 2014/15, 8.1 percent in 2015/16, and at 6.5 percent over the longer term. CPI Inflation is projected at 8.5 percent in the long run. The primary deficit of the public sector is projected to average 2.7 percent of GDP during the next five years, with better tax collection largely offsetting large public investment and current expenditures. An improvement in the fiscal balance is constrained by the slow pace of improvement in revenue as a share of GDP, reflecting a narrow tax base, significant tax exemptions and tax expenditures, and tax administration challenges. Also, as import growth slows, revenue from customs duties may also decline as a share of GDP.

The external current account deficit (before official transfers) is estimated at 14.7 percent of GDP in 2014/15. Improved export performance, a slowdown in capital imports and steady remittances will lead to a gradual decline of the deficit over the longer term. Economic transformation is expected to ameliorate the large external imbalances, with more dynamic and diversified exports and a phase down in the imports of capital goods.

Exports of goods and services are estimated to have declined by 5.9 percent in 2014/15. Exposure to volatile commodity prices—especially for gold and oilseeds—largely offset gains in export volumes. A recovery in traditional exports and the development of new exports could raise average growth to 16–17 percent over the next three years, and 11.3 percent in the long run. Investments in industrial parks and targeted sectors that receive government support are expected to contribute to export growth and diversification. Imports of goods and services are projected to slow down but increase well above GDP in the medium term as demand for imported capital goods is expected to remain strong during the second phase of the GTP. In the long run, imports are expected to grow in line with domestic output.

Remittances have played a key role in supporting the balance of payments and in 2014/15 are estimated at 7.4 percent of GDP. Economic stability in Ethiopia and solid growth in developed countries is expected to keep remittances rising in dollar terms but declining to 2.7 percent as a share of GDP by 2034/35.

Foreign direct investment is projected to increase from 3.6 percent of GDP in 2014/15 to 5.0 percent in the medium term, reflecting improved competitiveness and policies to attract foreign investment.

The exchange rate is expected to remain determined by the NBE's crawl-like arrangement with the real effective exchange rate remaining constant over time. Export growth will be driven by FDI, domestic investment, competitiveness reforms, better infrastructure, and labor productivity gains.

See the staff report at <http://www.imf.org> which provides a more detailed discussion of export projections for Ethiopia, and downside risks.

**7. The authorities requested that Ethio Telecom be excluded from the DSA.** In their view, Ethio Telecom meets most of the conditions for exclusion of an SOE: it is run as a commercial entity, its external commercial loans are not guaranteed by the government, and audited financial statements indicate its profitability. While some audited reports for Ethio Telecom have now been made available to staff, they are only through 2012, and do not provide sufficient information to assess whether there may be remaining contingent liabilities that could pose risk for the government. The government expects to have more recent audited financial reports for Ethio Telecom available in the coming year. The 2015 DSA includes Ethio Telecom's external debt (as was done in the 2014 DSA).

## EXTERNAL DEBT SUSTAINABILITY ANALYSIS

**8. The 2015 DSA projects external debt to peak as a share of GDP in 2017/18.** The present value (PV) of PPG external debt increases to 18.8 percent of GDP in 2014/15, and reaches 24.5 percent of GDP by 2017/18, reflecting the assumed sharp increase in disbursements to finance public investment projects. It would decline after that, falling below 10 percent of GDP in the long run.

**9. Under the baseline scenario, the ratio of the present value of debt-to-exports (PVDE) breaches the indicative threshold (Table 1 and Figure 1).** The PVDE ratio is estimated at 192 percent by end-June 2015. Despite the expected recovery in exports, it is projected to continue increasing, peaking at 220 percent in 2016/17. This would entail a baseline breach of 7 years, until 2020/21. All other debt indicators remain below their indicative thresholds in the baseline scenario. For the indicators related to debt service, the peaks in 2024/25 reflect the assumption that the Eurobond is repaid in full.

**10. Looking at alternative scenarios, a terms-of-trade shock appears to present the largest risk to external debt sustainability.** The breach of the indicative threshold for the PVDE ratio would last three more years, and extend to 2023/24. A depreciation shock would also have a significant impact, in particular on the debt service to revenue indicator (with a large share of imports exempt from customs duties, depreciation would not lead to as much of an increase in the birr value of customs duties than might otherwise be the case). As in the baseline, no other indicator breaches its indicative threshold in the alternative scenarios.

**Table 1. Ethiopia: Comparison of PPG External Debt Baseline Scenario, 2015–35**

Fiscal year ending July 7	2015	2016	2017	2018	2019	2020	2025	2035
(Percent, unless otherwise indicated)								
PV of Debt to Exports Ratio								
2015DSA	192.3	212.3	220.4	213.9	192.0	174.5	99.0	34.2
2014DSA	135.9	141.9	141.1	131.9	120.1	110.7	70.8	...
PV of Debt to GDP Ratio								
2015DSA	18.8	21.7	23.8	24.5	23.2	21.8	15.0	6.5
2014DSA	18.9	21.0	21.9	21.3	20.4	19.4	14.1	...
PV of Debt to Revenue Ratio								
2015DSA	114.8	134.8	144.4	146.0	136.9	128.1	90.7	39.1
2014DSA	131.5	147.1	154.6	149.4	140.8	132.3	96.3	...
Debt Service to Exports Ratio								
2015DSA	11.9	13.0	13.4	13.0	12.6	12.8	13.9	3.3
2014DSA	9.0	8.8	8.7	8.4	8.6	8.4	7.3	...
<i>Memorandum items:</i>								
Grant Element of New External Borrowing								
2015DSA	19.4	18.4	19.1	28.0	40.1	40.0	38.9	38.1
2014DSA	21.8	22.9	25.6	33.0	34.1	37.2	35.7	...
New Commercial Loan Disbursements (billions of U.S. dollars)								
2015DSA	3.327	3.104	2.916	1.502	0.589	0.654	0.700	0.750
2014DSA	2.707	2.271	1.745	0.930	0.820	0.655	0.700	...
Real GDP Growth (annual percent change)								
2015DSA	8.7	8.1	7.6	7.5	7.5	7.5	6.5	6.5
2014DSA	8.5	8.5	8.0	8.0	7.5	7.5	6.5	...
Current Account Balance to GDP Ratio								
2015DSA	-12.8	-9.9	-9.1	-8.1	-7.3	-6.6	-4.0	-2.7
2014DSA	-7.3	-6.7	-5.8	-5.5	-6.2	-5.3	-4.0	...

Sources: Ethiopian authorities; IMF and World Bank staff estimates and projections.

**11. In assessing the risk of external debt distress, the DSA calls for the use of judgment, focusing in particular on capacity to repay.** In the case of Ethiopia, external loans are being used primarily to finance infrastructure investment, which are expected to have growth pay-offs that will boost tax revenue and enhance debt repayment capacity. Large investments in energy, railroads, and roads will enhance competitiveness, boost export revenue, and promote economic diversification. While this is to some extent factored into the baseline growth projections, staff's assumptions are fairly conservative in this regard. The DSA provides for additional tools to evaluate the risk of external debt distress. Results from this extended, judgment-based analysis indicated the following:

- **Probability approach.** This approach assesses the evolution of the probability of debt distress over time, taking into account past economic performance. For Ethiopia, no indicator breaches the threshold in the baseline, and the breach of the threshold for the PVDE ratio in one shock

scenario is short-lived (2 years) and less than 3 percentage points from the threshold (Figure 2). In the historical scenario, the debt indicators would be lower than under the baseline. This reflects persistently high real GDP growth in the recent past and the better export performance prior to the recent stagnation, which lowers the debt ratios in the first years of the forecast and increases them in the outer years.

- **Including remittances.**<sup>1</sup> In Ethiopia, strong and relatively stable remittances play an important role in bolstering external stability. When remittances are included in the DSA, the breach of the augmented indicator (namely the ratio of the PV of debt to exports of goods and services *plus* remittances) reaches a maximum value of 149.8 percent and lasts 5 years (Figure 3). Other indicators are well below the revised thresholds even under the most extreme shocks.

**12. This augmented analysis indicates that Ethiopia has greater resilience to debt distress than suggested by the standard methodology.** Supported by robust past economic performance, the path of debt and debt service indicate that only in the most extreme shock (to exports) would the PVDE probability ratio be pushed above its policy threshold. These results support the assessment of Ethiopia’s risk of external debt distress as “moderate”.

**13. The increased risk of external debt distress calls for caution going forward regarding the pace of foreign borrowing.** Projects should be assessed carefully to ensure that they meet stringent economic and/or social rate of return assessments, in particular if they are being financed on non-concessional terms. Priority should also be given to those projects with solid growth-enhancing effects. Policies that promote exports will also be essential to bolster Ethiopia’s foreign exchange earnings, which remains a weakness for the economy overall. A more competitive exchange rate, better access to credit for the private sector, and fewer structural bottlenecks would all help in this regard

## PUBLIC DEBT SUSTAINABILITY ANALYSIS

**14. The projected path of total public sector debt-to-GDP has essentially remained the same as forecast in the 2014 DSA: rising in the coming years, and falling after that.** This reflects large domestic and external borrowing by SOEs to finance infrastructure investment. As these projects reach completion, total public sector expenditure would revert to lower levels in the long run.

**15. The PV of debt-to-GDP ratio remains below the threshold in the baseline.** However, there is a five-year threshold breach under the most extreme shock (a one-time depreciation). This is explained largely by the fact that Ethiopia has increased its exposure to external commercial debt. The breach provides additional evidence of a heightened risk of public debt distress.

**16. Debt stock related indicators are relatively flat and most extreme shocks do not alter significantly the results.** All debt indicators show a mild increase in the medium term, before returning to

<sup>1</sup> Remittances must be presented as the *base case* in the DSA if they are both greater than 10 percent of GDP and greater than 20 percent of exports of goods and services. Both ratios should be measured on a backward-looking, three-year average basis. While remittances in Ethiopia do not meet this criterion, they are large: in 2014/15 they accounted for about half of exports of goods and services and 5.5 percent of GDP.

levels similar to 2014/15. This result is predicated on the continuation of robust GDP growth, moderate public sector primary deficits, and—most crucially—low domestic interest rates (such that real interest rates remain mildly negative, as inflation is forecast at 8.5 percent in the long run).

**17. Public sector debt would grow in the long run as a result of a permanent negative shock to GDP growth, but debt service-to-revenue could absorb this shock (Figure 4).** The scenario that fixes the primary balance at its 2014/15 level shows a particularly sharp deterioration because of the unusually large primary deficit in that particular year, reflecting the high level of investment activity. The other two alternative scenarios (a shock to real GDP growth and primary balance at the historic average) show trajectories with no important changes in the debt ratios over the DSA horizon.

**18. The baseline scenario understates the public debt burden for the economy, because it is based on nominal interest rates on public sector borrowing remaining significantly below inflation.** Like in the 2014 DSA, with inflation projected to remain at a single-digit level, under current policies interest rates on SOEs' domestic borrowing would be negative in real terms. Ethiopia's relatively benign public sector debt outlook hinges strongly on the continuation of these financing conditions. If the actual cost of borrowing were to rise above inflation, the debt indicators would worsen or fiscal adjustment would be required to maintain sustainability.

**19. This assessment, with a moderate risk of debt distress, assumes the acceleration of external borrowing to achieve the investment required for the development plan.** The ongoing large public investment projects rely heavily on domestic financing and would lead to a large accumulation of public debt. Without an appropriate balance in the financing and pacing of the public investment projects in the GTP, resources for the private sector could be squeezed. Monitoring the operations of the consolidated public sector, including contingent liabilities arising from financial transactions among public entities, is thus important.

## CONCLUSION

**20. Ethiopia's risk of external debt distress has increased from "low" to "moderate".** This finding reflects the use of judgment in assessing the likely impact of Ethiopia's external public borrowing on growth, and hence on its capacity to repay. The risk assessment remains vulnerable to further delays in the recovery of exports, a terms-of-trade shock, higher external borrowing, and deterioration in external borrowing conditions. The exposure to a terms-of-trade shock is reflected in a more protracted breach in the PV of debt-to-exports ratio under the most extreme shock. However, robust economic performance and a continued favorable outlook help to reduce the probability of debt distress.

**21. Containing the risk of debt distress will depend critically on bolstering export performance.** Addressing competitiveness concerns, facilitating greater access to credit and foreign exchange for the private sector, and continued macroeconomic stability will play important roles in promoting export growth and export diversification. A more competitive exchange rate would also reduce headwinds for exporters, and contribute to increased availability of foreign exchange to finance imports of critical capital and intermediate goods.

**22. Ensuring that public sector borrowing is consistent with debt sustainability is also essential.**

The authorities need to monitor closely the debt levels and the terms of the new loans, especially those on commercial terms. A dedicated agency that monitors the financial positions of SOEs would increase transparency regarding their overall impact on public finances, and reduce fiscal risks. The authorities are also encouraged to increase non-debt sources of financing for GTP II. For example, private-public partnerships could bring in valuable equity financing while maintaining state control. The authorities should also ensure adequate concessionality of new external loans.

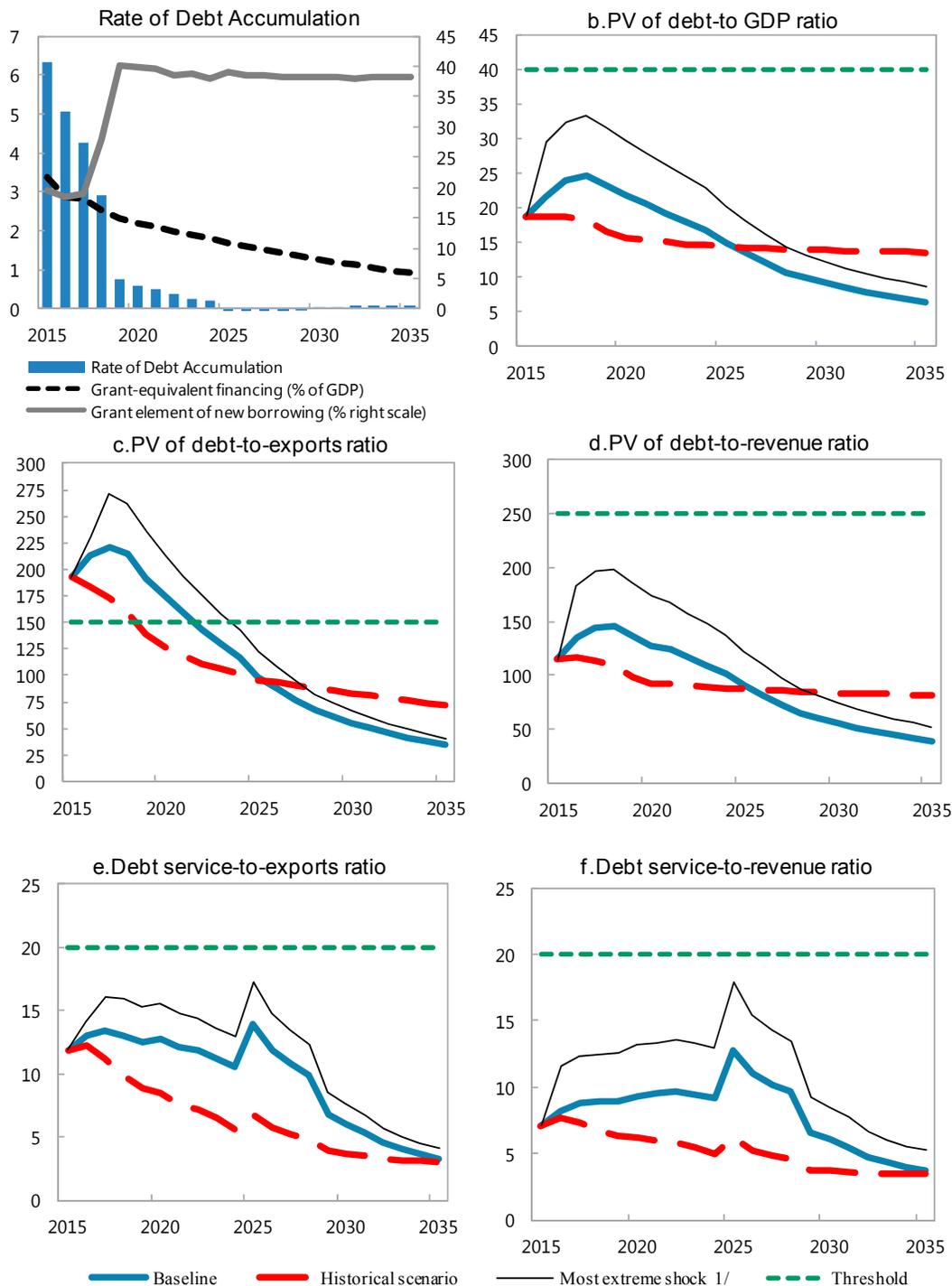
**23. As advised in previous DSAs, the authorities are encouraged to systematically update their medium-term debt management strategy (including SOEs) and to start monitoring the overall debt (external and domestic) of the consolidated public sector.**

A joint work from the World Bank and the IMF in collaboration with UNCTAD on medium-term debt management strategy advised Ethiopia on the growing vulnerabilities derived from SOEs borrowing strategy, including substantial domestic borrowing from the state-dominated banking system.

**24. The authorities disagreed with the DSA's finding of an increased risk of external debt distress.**

In their view, this assessment does not accurately reflect the Ethiopian government's capacity and commitment to repay its external debts, emphasizing that the financing is being used for growth-enhancing investments, which should bolster exports and tax revenue. They also noted that the deterioration in the debt indicators was due in large part to the very poor export performance in 2014/15, which they expected to reverse in the coming years. They also argued for the exclusion of Ethio Telecom from the DSA, noting that it is run on a commercial basis, is profitable, has audited financial accounts (though only through 2012), and borrows externally without a government guarantee. Staff noted that including SOEs was the norm for DSAs, and that Ethio Telecom did not yet meet the conditions required for exclusion (which include regular publication of audited financial accounts).

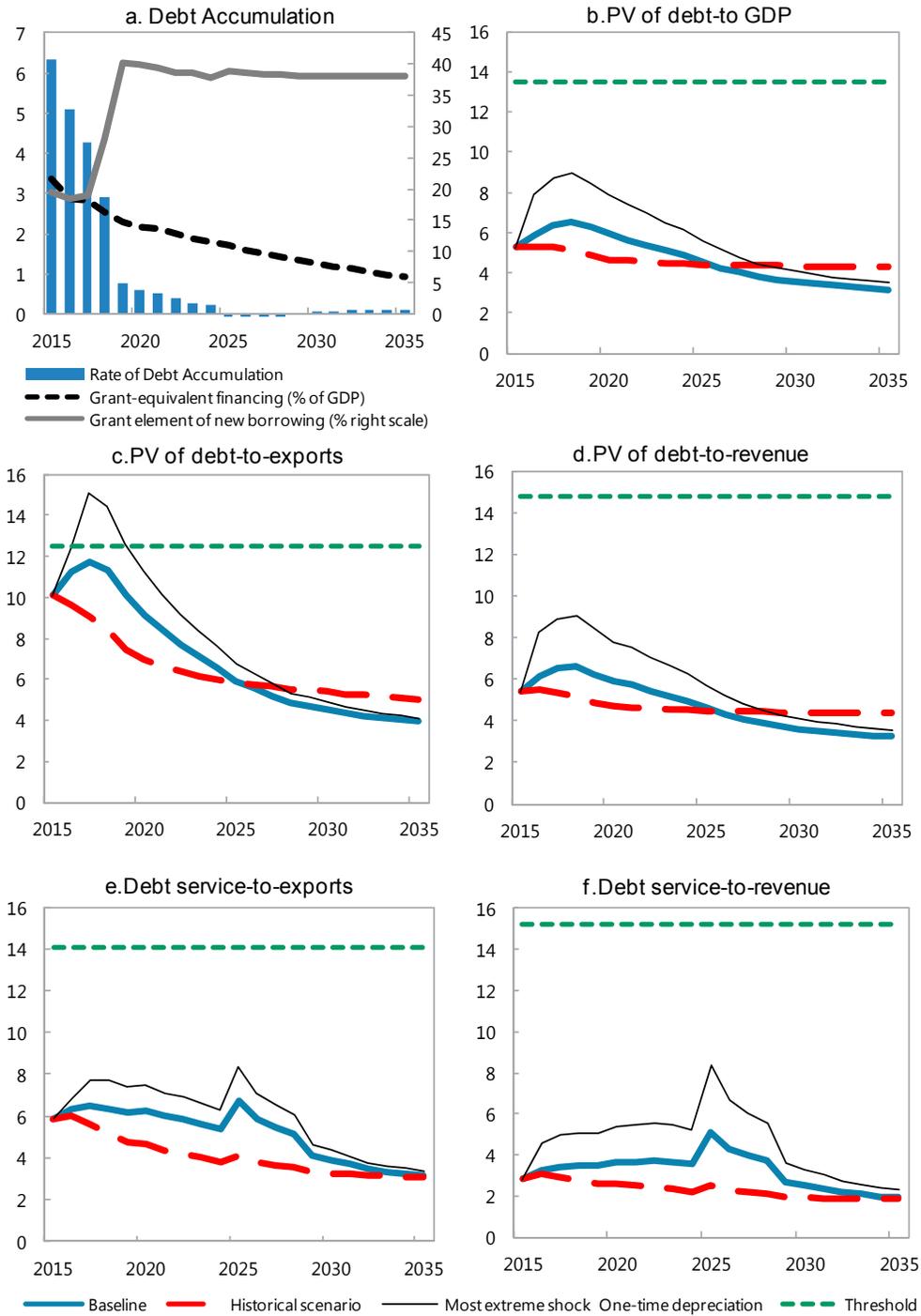
**Figure 1. Ethiopia: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2015–35<sup>1</sup>**



Sources: Ethiopian authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2025. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock.

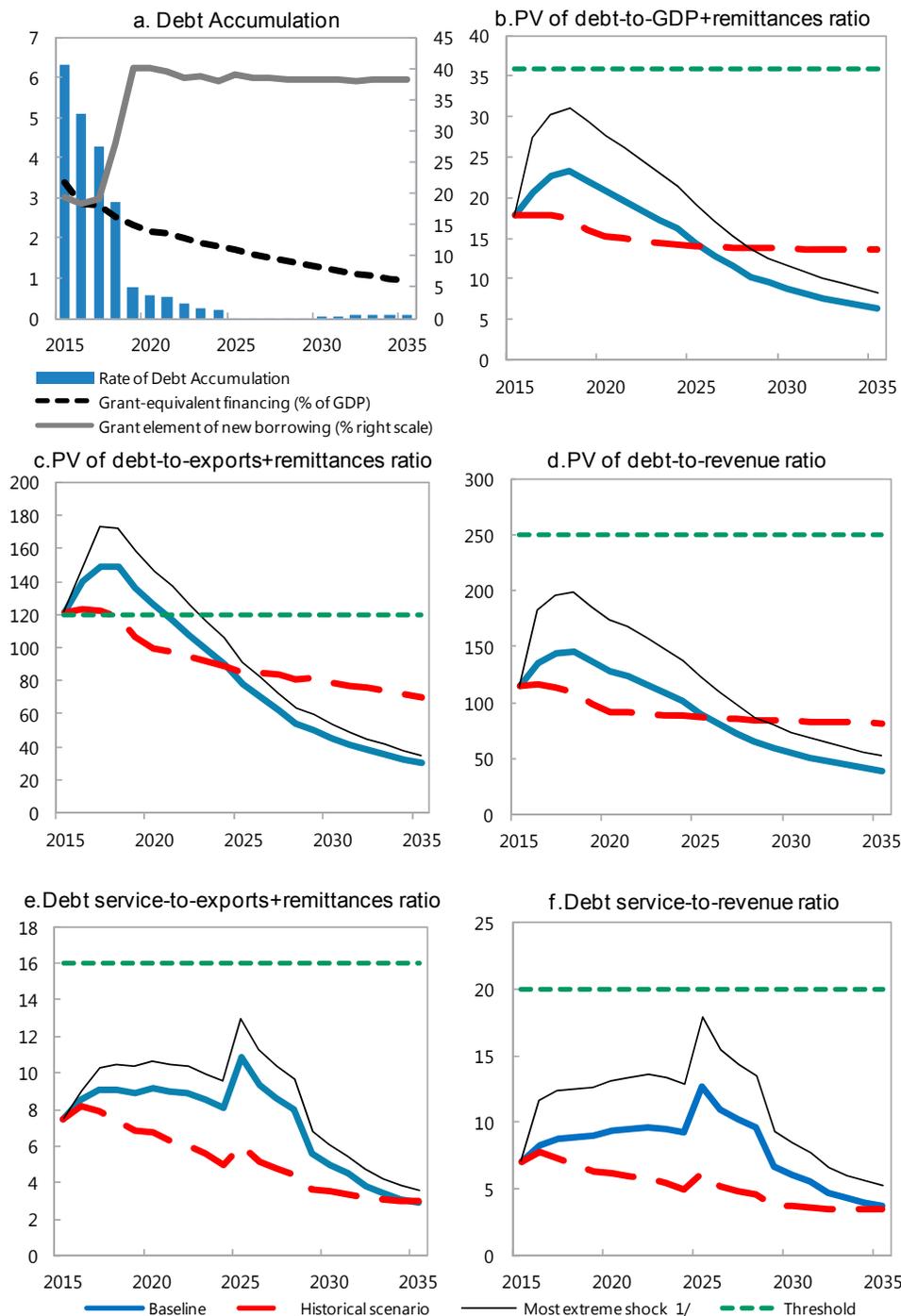
**Figure 2. Ethiopia: Probability of Debt Distress of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2015–35<sup>1</sup>**



Sources: Ethiopian authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2025. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock.

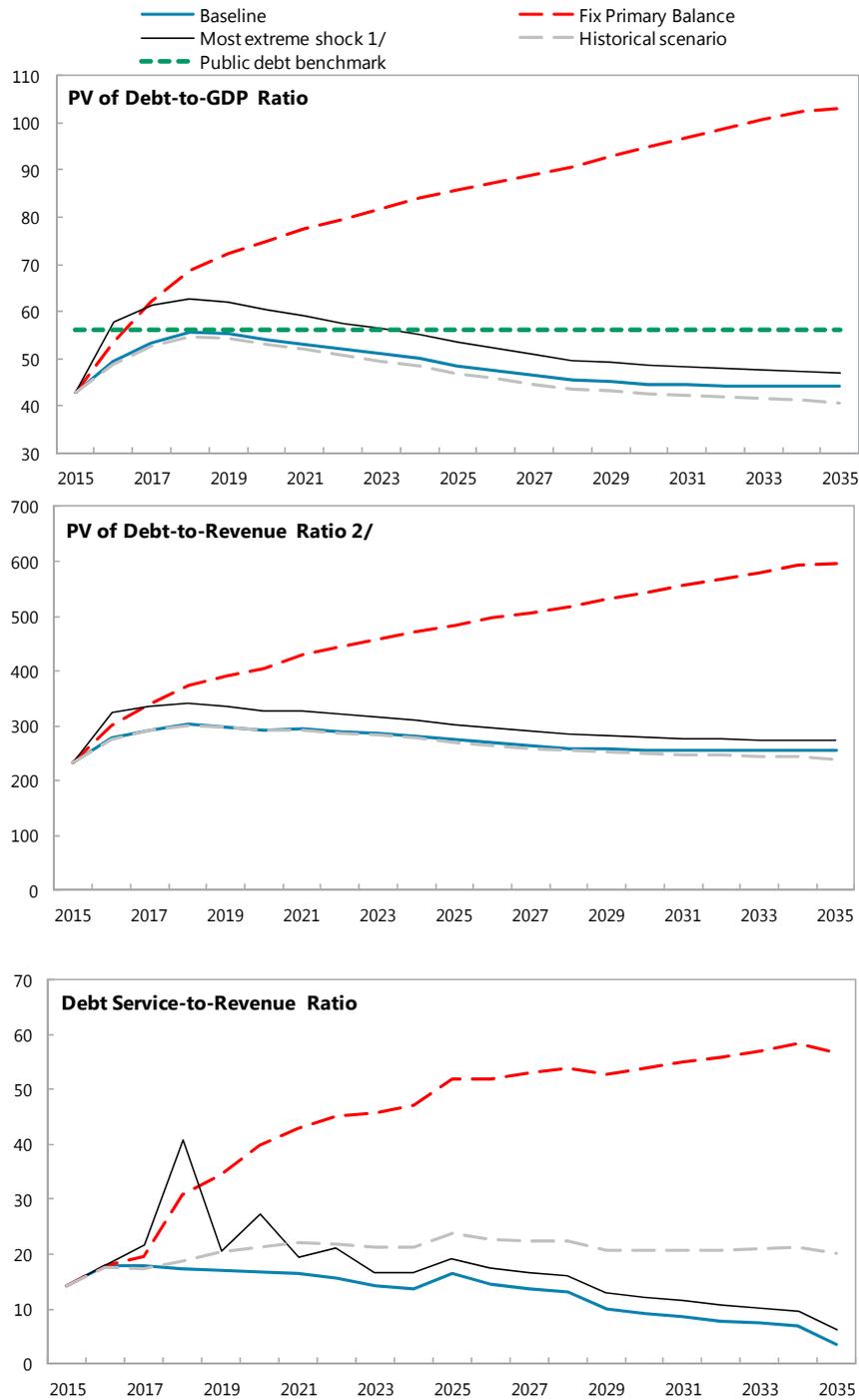
**Figure 3. Ethiopia: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios (Including Remittances), 2015–35<sup>1</sup>**



Sources: Ethiopian authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2025. In figure b. it corresponds to a one-time depreciation shock; in c. to an exports shock; in d. to a one-time depreciation shock; in e. to an exports shock and in figure f. to a one-time depreciation shock.

**Figure 4. Ethiopia: Indicators of Public and Publicly Guaranteed Debt (Domestic and External) Under Alternative Scenarios, 2015–35<sup>1</sup>**



Sources: Ethiopian authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2025. It corresponds to a one-time depreciation shock.

2/ Revenues are defined inclusive of grants.

Table 2. Ethiopia: External Debt Sustainability Framework, Baseline Scenario, 2012–35<sup>1</sup>

	Actual			Historical Average	Standard Deviation	Projections						2015-2020			2021-2035	
	2012	2013	2014			2015	2016	2017	2018	2019	2020	Average	2025	2035	Average	
<b>External debt (nominal) 1/</b>	<b>20.3</b>	<b>23.3</b>	<b>25.5</b>			<b>30.0</b>	<b>32.9</b>	<b>35.0</b>	<b>35.6</b>	<b>33.9</b>	<b>32.1</b>				<b>23.7</b>	<b>13.1</b>
<i>of which: public and publicly guaranteed (PPG)</i>	18.1	20.3	22.1			26.2	29.3	31.6	32.3	30.8	29.3				21.4	10.4
Change in external debt	-5.2	3.0	2.1			4.5	2.9	2.2	0.5	-1.7	-1.8				-2.2	-0.7
Identified net debt-creating flows	-2.7	1.5	2.3			7.3	3.7	2.4	1.0	-0.1	-0.7				-1.7	-0.5
<b>Non-interest current account deficit</b>	<b>6.2</b>	<b>5.7</b>	<b>7.8</b>	<b>5.3</b>	<b>2.2</b>	<b>12.3</b>	<b>9.3</b>	<b>8.3</b>	<b>7.2</b>	<b>6.4</b>	<b>5.8</b>				<b>3.4</b>	<b>2.5</b>
Deficit in balance of goods and services	17.8	16.4	17.8			21.8	19.0	17.8	16.3	14.9	13.8				10.5	6.4
Exports	13.8	12.5	11.7			9.8	10.2	10.8	11.5	12.1	12.5				15.1	19.0
Imports	31.7	28.9	29.5			31.6	29.2	28.6	27.7	26.9	26.3				25.6	25.4
Net current transfers (negative = inflow)	-11.7	-10.7	-10.0	-13.2	1.8	-9.4	-9.6	-9.3	-9.1	-8.7	-8.3				-6.9	-3.9
<i>of which: official</i>	-4.1	-3.2	-2.7			-2.0	-1.7	-1.8	-1.6	-1.5	-1.4				-1.2	-0.7
Other current account flows (negative = net inflow)	0.0	0.0	0.0			-0.1	-0.1	-0.2	0.0	0.2	0.2				-0.2	0.0
<b>Net FDI (negative = inflow)</b>	<b>-2.5</b>	<b>-2.6</b>	<b>-2.7</b>	<b>-2.7</b>	<b>0.7</b>	<b>-3.6</b>	<b>-4.1</b>	<b>-4.5</b>	<b>-4.7</b>	<b>-4.9</b>	<b>-5.0</b>				<b>-4.2</b>	<b>-2.4</b>
<b>Endogenous debt dynamics 2/</b>	<b>-6.4</b>	<b>-1.6</b>	<b>-2.8</b>			<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>				<b>-0.9</b>	<b>-0.6</b>
Contribution from nominal interest rate	0.2	0.3	0.3			0.4	0.7	0.8	0.9	0.9	0.9				0.6	0.3
Contribution from real GDP growth	-1.6	-1.8	-2.1			-2.0	-2.2	-2.3	-2.4	-2.4	-2.3				-1.6	-0.8
Contribution from price and exchange rate changes	-5.0	-0.1	-1.0			...	...	...	...	...	...				...	...
<b>Residual (3-4) 3/</b>	<b>-2.5</b>	<b>1.6</b>	<b>-0.2</b>			<b>-2.7</b>	<b>-0.8</b>	<b>-0.2</b>	<b>-0.5</b>	<b>-1.6</b>	<b>-1.1</b>				<b>-0.4</b>	<b>-0.2</b>
<i>of which: exceptional financing</i>	-0.3	-0.2	-0.1			0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0
PV of external debt 4/	...	...	18.1			22.6	25.3	27.3	27.8	26.3	24.7				17.2	9.2
In percent of exports	...	...	154.1			230.9	247.9	252.6	242.6	217.5	197.2				113.6	48.5
<b>PV of PPG external debt</b>	<b>...</b>	<b>...</b>	<b>14.7</b>			<b>18.8</b>	<b>21.7</b>	<b>23.8</b>	<b>24.5</b>	<b>23.2</b>	<b>21.8</b>				<b>15.0</b>	<b>6.5</b>
<b>In percent of exports</b>	<b>...</b>	<b>...</b>	<b>125.6</b>			<b>192.3</b>	<b>212.3</b>	<b>220.4</b>	<b>213.9</b>	<b>192.0</b>	<b>174.5</b>				<b>99.0</b>	<b>34.2</b>
<b>In percent of government revenues</b>	<b>...</b>	<b>...</b>	<b>102.0</b>			<b>114.8</b>	<b>134.8</b>	<b>144.4</b>	<b>146.0</b>	<b>136.9</b>	<b>128.1</b>				<b>90.7</b>	<b>39.1</b>
<b>Debt service-to-exports ratio (in percent)</b>	<b>6.6</b>	<b>8.5</b>	<b>10.5</b>			<b>16.9</b>	<b>18.2</b>	<b>18.6</b>	<b>18.1</b>	<b>17.4</b>	<b>17.5</b>				<b>16.2</b>	<b>3.9</b>
<b>PPG debt service-to-exports ratio (in percent)</b>	<b>4.9</b>	<b>6.5</b>	<b>7.0</b>			<b>11.9</b>	<b>13.0</b>	<b>13.4</b>	<b>13.0</b>	<b>12.6</b>	<b>12.8</b>				<b>13.9</b>	<b>3.3</b>
<b>PPG debt service-to-revenue ratio (in percent)</b>	<b>5.0</b>	<b>5.5</b>	<b>5.7</b>			<b>7.1</b>	<b>8.2</b>	<b>8.8</b>	<b>8.9</b>	<b>9.0</b>	<b>9.4</b>				<b>12.7</b>	<b>3.8</b>
Total gross financing need (Billions of U.S. dollars)	2.0	2.0	3.5			6.4	4.9	4.4	3.8	3.2	2.9				2.5	2.7
Non-interest current account deficit that stabilizes debt ratio	11.4	2.7	5.6			7.8	6.4	6.1	6.7	8.0	7.6				5.6	3.1
<b>Key macroeconomic assumptions</b>																
Real GDP growth (in percent)	8.7	9.8	10.3	10.8	1.1	8.7	8.1	7.6	7.5	7.5	7.5	7.8	6.5	6.5	6.7	
GDP deflator in US dollar terms (change in percent)	24.2	0.3	4.5	7.5	12.3	3.7	3.5	1.8	1.6	1.5	1.5	2.3	1.5	1.5	1.5	
Effective interest rate (percent) 5/	1.2	1.4	1.4	1.0	0.3	2.0	2.5	2.8	2.9	2.8	2.8	2.6	2.5	2.1	2.3	
Growth of exports of G&S (US dollar terms, in percent)	11.8	-0.5	8.4	16.0	9.3	-5.9	16.7	16.0	16.0	15.0	12.9	11.8	12.8	11.0	11.3	
Growth of imports of G&S (US dollar terms, in percent)	35.5	0.7	17.7	19.7	16.1	20.7	3.2	7.4	6.0	6.0	6.7	8.3	6.0	8.5	8.0	
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	19.4	18.4	19.1	28.0	40.1	40.0	27.5	38.9	38.1	38.4	
Government revenues (excluding grants, in percent of GDP)	13.6	14.8	14.4			16.4	16.1	16.5	16.8	17.0	17.0				16.5	16.6
Aid flows (in Billions of US dollars) 7/	2.8	2.7	2.7			2.3	2.3	2.5	2.5	2.5	2.6				2.9	3.4
<i>of which: Grants</i>	1.8	1.5	1.5			1.2	1.2	1.3	1.3	1.4	1.4				1.8	2.2
<i>of which: Concessional loans</i>	1.0	1.2	1.2			1.1	1.1	1.2	1.1	1.1	1.1				1.1	1.2
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			3.4	2.9	2.8	2.5	2.3	2.2				1.7	0.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			36.7	36.2	39.0	52.1	67.1	66.3				68.7	70.2
<b>Memorandum items:</b>																
Nominal GDP (Billions of US dollars)	43.1	47.5	54.8			61.8	69.1	75.7	82.8	90.3	98.5				148.1	324.0
Nominal dollar GDP growth	35.0	10.2	15.3			12.7	11.9	9.5	9.3	9.1	9.1	10.3	8.1	8.2	8.3	
PV of PPG external debt (in Billions of US dollars)	...	...	7.9			11.4	14.5	17.4	19.6	20.3	20.8				21.4	20.3
(PVt-PVt-1)/GDPt-1 (in percent)	...	...	...			<b>6.3</b>	<b>5.1</b>	4.3	2.9	0.8	0.6	3.3	-0.6	0.1	0.0	
Gross workers' remittances (Billions of US dollars)	1.9	2.5	3.0			3.5	3.7	3.9	4.2	4.5	4.8				6.2	8.8
PV of PPG external debt (in percent of GDP + remittances)	...	...	14.0			17.8	20.6	22.6	23.3	22.1	20.8				14.4	6.3
PV of PPG external debt (in percent of exports + remittances)	...	...	85.9			121.6	139.9	149.2	148.5	136.2	125.7				77.6	29.9
Debt service of PPG external debt (in percent of exports + remittances)	...	...	4.8			7.5	8.6	9.1	9.0	8.9	9.2				10.9	2.9

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

1/ Includes both public and private sector external debt.

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

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

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

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

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

7/ Defined as grants, concessional loans, and debt relief.

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

**Table 3. Ethiopia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2015–35**

	Projections							2035
	2015	2016	2017	2018	2019	2020	2025	
<b>PV of debt-to GDP ratio</b>								
<b>Baseline</b>	19	22	24	25	23	22	<b>15</b>	6
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	19	19	19	18	17	16	<b>14</b>	14
A2. New public sector loans on less favorable terms in 2015-2035 2	19	22	26	27	26	25	<b>20</b>	12
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	19	21	22	23	22	20	<b>14</b>	6
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	19	22	25	25	24	23	<b>15</b>	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	19	23	27	28	26	24	<b>17</b>	7
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	19	21	24	24	23	21	<b>15</b>	6
B5. Combination of B1-B4 using one-half standard deviation shocks	19	21	22	23	22	20	<b>14</b>	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	19	30	32	33	32	30	<b>20</b>	9
<b>PV of debt-to-exports ratio</b>								
<b>Baseline</b>	192	212	220	214	192	175	<b>99</b>	34
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	192	184	173	159	138	126	<b>95</b>	72
A2. New public sector loans on less favorable terms in 2015-2035 2	192	220	239	232	216	201	<b>132</b>	65
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	192	205	213	207	185	168	<b>95</b>	33
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	192	231	272	262	235	214	<b>122</b>	41
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	192	205	213	207	185	168	<b>95</b>	33
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	192	207	218	211	189	172	<b>97</b>	33
B5. Combination of B1-B4 using one-half standard deviation shocks	192	212	228	221	198	180	<b>102</b>	35
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	192	205	213	207	185	168	<b>95</b>	33
<b>PV of debt-to-revenue ratio</b>								
<b>Baseline</b>	115	135	144	146	137	128	<b>91</b>	39
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	115	117	113	109	98	92	<b>87</b>	82
A2. New public sector loans on less favorable terms in 2015-2035 2	115	140	156	159	154	147	<b>120</b>	74
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	115	128	135	136	128	119	<b>84</b>	36
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	115	134	150	151	141	132	<b>94</b>	39
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	115	142	162	164	153	143	<b>101</b>	43
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	115	132	143	144	135	126	<b>89</b>	38
B5. Combination of B1-B4 using one-half standard deviation shocks	115	129	134	136	127	119	<b>84</b>	36
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	115	184	196	199	186	174	<b>122</b>	52

**Table 3. Ethiopia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2015–35 (concluded)**

(percent)

Debt service-to-exports ratio								
<b>Baseline</b>	12	13	13	13	13	13	<b>14</b>	3
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	12	12	11	10	9	8	<b>7</b>	3
A2. New public sector loans on less favorable terms in 2015-2035 2	12	13	12	12	12	12	<b>10</b>	4
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	12	13	13	13	13	13	<b>14</b>	3
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	12	14	16	16	15	16	<b>17</b>	4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	12	13	13	13	13	13	<b>14</b>	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	12	13	13	13	13	13	<b>14</b>	3
B5. Combination of B1-B4 using one-half standard deviation shocks	12	14	15	14	14	14	<b>15</b>	3
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	12	13	13	13	13	13	<b>14</b>	3
<b>Debt service-to-revenue ratio</b>								
<b>Baseline</b>	7	8	9	9	9	9	<b>13</b>	4
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2015-2035 1/	7	8	7	7	6	6	<b>6</b>	3
A2. New public sector loans on less favorable terms in 2015-2035 2	7	8	8	9	9	9	<b>9</b>	5
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	7	8	8	9	9	9	<b>12</b>	4
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	7	8	9	9	9	10	<b>13</b>	4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	7	9	10	10	10	11	<b>15</b>	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	7	8	9	9	9	9	<b>13</b>	4
B5. Combination of B1-B4 using one-half standard deviation shocks	7	8	9	9	9	9	<b>12</b>	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	7	12	12	13	13	13	<b>18</b>	5
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	30	30	30	30	30	30	<b>30</b>	30
Sources: Country authorities; and staff estimates and projections.								
1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.								
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline, while grace and maturity periods are the same as in the baseline.								
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly a an offsetting adjustment in import levels).								
4/ Includes official and private transfers and FDI.								
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.								
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.								

**Table 4. Ethiopia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2012–35**  
(percent of GDP, unless otherwise indicated)

	Actual			Average <sup>5/</sup>	Standard Deviation <sup>5/</sup>	Estimate					Projections			
	2012	2013	2014			2015	2016	2017	2018	2019	2020	2015-20 Average	2025	2035
<b>Public sector debt 1/</b>	32.8	37.0	41.2			50.3	57.0	61.2	63.4	62.8	61.6		55.1	47.9
<i>of which: foreign-currency denominated</i>	18.1	20.3	22.1			26.2	29.3	31.6	32.3	30.8	29.3		21.4	10.4
Change in public sector debt	-5.4	4.2	4.2			9.1	6.7	4.2	2.3	-0.6	-1.2		-1.8	-0.3
Identified debt-creating flows	-7.0	3.2	2.8			3.8	-1.7	-2.9	-3.3	-3.6	-3.6		-3.1	-3.5
Primary deficit	3.7	5.9	7.4	4.0	2.2	8.1	3.3	2.2	2.2	2.1	2.3	3.4	2.2	2.3
Revenue and grants	17.7	18.1	17.1			18.4	17.8	18.3	18.4	18.5	18.5		17.7	17.3
<i>of which: grants</i>	4.1	3.2	2.7			2.0	1.7	1.8	1.6	1.5	1.4		1.2	0.7
Primary (noninterest) expenditure	21.4	24.0	24.5			26.4	21.1	20.5	20.6	20.6	20.7		19.9	19.6
Automatic debt dynamics	-10.3	-2.6	-4.6			-4.3	-5.0	-5.2	-5.5	-5.7	-5.8		-5.3	-5.7
Contribution from interest rate/growth differential	-6.4	-3.1	-4.2			-3.8	-4.8	-5.2	-5.6	-5.8	-5.9		-5.4	-5.8
<i>of which: contribution from average real interest rate</i>	-3.4	-0.1	-0.8			-0.6	-1.1	-1.2	-1.3	-1.4	-1.6		-1.9	-2.8
<i>of which: contribution from real GDP growth</i>	-3.1	-2.9	-3.5			-3.3	-3.8	-4.0	-4.3	-4.4	-4.4		-3.5	-3.0
Contribution from real exchange rate depreciation	-3.9	0.5	-0.3			-0.4	-0.1	0.0	0.1	0.1	0.1		...	...
Other identified debt-creating flows	-0.4	-0.1	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Privatization receipts (negative)	-0.4	-0.1	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	1.6	1.0	1.4			5.3	8.4	7.1	5.6	3.0	2.4		1.3	3.2
<b>Other Sustainability Indicators</b>														
<b>PV of public sector debt</b>	...	...	33.8			42.9	49.4	53.4	55.7	55.2	54.2		48.6	44.0
<i>of which: foreign-currency denominated</i>	...	...	14.7			18.8	21.7	23.8	24.5	23.2	21.8		15.0	6.5
<i>of which: external</i>	...	...	14.7			18.8	21.7	23.8	24.5	23.2	21.8		15.0	6.5
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...
Gross financing need 2/	5.5	8.1	9.4			10.7	6.5	5.5	5.4	5.3	5.4		5.2	2.9
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	197.7			233.7	277.6	292.4	302.2	298.4	293.0		274.5	254.9
PV of public sector debt-to-revenue ratio (in percent)	...	...	234.2			261.7	307.4	323.9	331.3	325.6	317.8		294.5	265.4
<i>of which: external 3/</i>	...	...	102.0			114.8	134.8	144.4	146.0	136.9	128.1		90.7	39.1
Debt service-to-revenue and grants ratio (in percent) 4/	10.2	12.1	11.9			14.3	18.0	17.9	17.4	17.0	16.7		16.5	3.6
Debt service-to-revenue ratio (in percent) 4/	13.3	14.7	14.1			16.1	19.9	19.8	19.1	18.5	18.1		17.7	3.8
Primary deficit that stabilizes the debt-to-GDP ratio	9.1	1.7	3.2			-1.0	-3.5	-1.9	-0.1	2.7	3.5		4.0	2.6
<b>Key macroeconomic and fiscal assumptions</b>														
Real GDP growth (in percent)	8.7	9.8	10.3	10.8	1.1	8.7	8.1	7.6	7.5	7.5	7.5	7.8	6.5	6.5
Average nominal interest rate on forex debt (in percent)	1.1	1.4	1.2	0.9	0.3	2.0	2.5	2.8	2.9	2.8	2.8	2.6	2.4	1.5
Average real interest rate on domestic debt (in percent)	-20.9	1.1	-3.5	-10.3	8.2	-3.6	-5.5	-5.4	-5.6	-5.8	-6.0	-5.3	-6.4	...
Real exchange rate depreciation (in percent, + indicates depreciation)	-18.9	2.9	-1.9	-3.5	11.0	-2.1	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	33.5	5.4	9.8	16.1	10.2	8.9	9.7	8.9	8.8	8.6	8.6	8.9	8.6	8.6
Growth of real primary spending (deflated by GDP deflator, in percent)	8.9	23.0	12.9	4.5	7.9	17.2	-13.8	4.7	8.1	7.6	8.1	5.3	6.2	5.7
Grant element of new external borrowing (in percent)	...	...	...	...	...	19.4	18.4	19.1	28.0	40.1	40.0	27.5	38.9	38.1

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/ Revenues excluding grants.

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

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

**Table 5. Ethiopia: Sensitivity Analysis for Key Indicators of Public Debt, 2015–35**  
(percent)

	Projections							
	2015	2016	2017	2018	2019	2020	2025	2035
<b>PV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	43	49	53	56	55	54	49	44
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	43	49	53	55	54	53	47	41
A2. Primary balance is unchanged from 2015	43	53	62	69	72	75	86	104
A3. Permanently lower GDP growth 1/	43	50	54	56	56	55	51	51
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	43	49	51	53	52	51	44	37
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	43	52	59	61	60	59	52	46
B3. Combination of B1-B2 using one half standard deviation shocks	43	50	55	56	55	53	45	37
B4. One-time 30 percent real depreciation in 2016	43	57	61	63	62	61	55	50
B5. 10 percent of GDP increase in other debt-creating flows in 2016	43	58	61	63	62	60	54	47
<b>PV of Debt-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	234	278	292	302	298	293	274	255
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	234	275	291	300	296	291	270	244
A2. Primary balance is unchanged from 2015	234	300	340	373	391	405	484	604
A3. Permanently lower GDP growth 1/	234	278	294	305	303	299	289	296
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	234	273	280	287	282	274	247	214
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	234	291	323	330	324	317	294	267
B3. Combination of B1-B2 using one half standard deviation shocks	234	281	303	307	298	289	255	213
B4. One-time 30 percent real depreciation in 2016	234	323	333	340	335	329	310	288
B5. 10 percent of GDP increase in other debt-creating flows in 2016	234	325	336	340	335	327	302	273
<b>Debt Service-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	14	18	18	17	17	17	17	4
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	14	18	17	19	20	21	24	20
A2. Primary balance is unchanged from 2015	14	18	20	31	34	40	52	57
A3. Permanently lower GDP growth 1/	14	18	18	18	17	17	18	9
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	14	18	17	16	15	14	13	-1
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	14	18	19	26	27	21	19	5
B3. Combination of B1-B2 using one half standard deviation shocks	14	18	18	22	24	17	13	-1
B4. One-time 30 percent real depreciation in 2016	14	20	22	22	23	23	27	10
B5. 10 percent of GDP increase in other debt-creating flows in 2016	14	18	22	41	21	27	19	6

Sources: Ethiopian 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.

**Statement by Ms. Kapwepwe, Executive Director for The Federal Democratic Republic  
of Ethiopia, Mr. Tucker, Senior Advisor to the Executive Director, and  
Ms. Gasasira-Manzi, Advisor to the Executive Director  
September 21, 2015**

1. The Ethiopian authorities are appreciative of the constructive engagement with the Fund over recent years. They thank staff for the frank and constructive dialogue during the 2015 Article IV mission, which will help inform implementation of their macroeconomic policy and development agenda. They remain committed to pursuing prudent macroeconomic policies and further deepening their structural reform agenda in support of their Growth and Transformation Plan (GTP).

2. Consistently strong economic growth over the past decade and a broadly stable macroeconomic environment has placed Ethiopia among the top performing economies in Sub-Saharan Africa. With broad-based expansion and increased diversification of the economy, growth has been rendered increasingly inclusive and employment-generating. Poverty has reduced significantly and the income gap narrowed substantially. Implementation of the authorities' GTP is on course to deliver remarkable socio-economic gains, and the authorities are committed to mobilizing the required financing for sustainable development. The economic outlook continues to be greatly favorable, reflecting the country's huge economic potential, prudent macroeconomic management, and productivity-enhancing reforms.

**Recent economic developments**

3. The Ethiopian economy continues on a strong growth trajectory, supported by the successful implementation of the GTP I, over the last five years. Real growth averaged 10.1 percent between FY2010/11 – FY2013/14 on account of favorable outturns in all key economic sectors, notably industry (20.0 percent), services (10.7 percent), and agriculture (6.6 percent). The growth momentum continued in FY2014/15, with real GDP estimated to have expanded by 8.7 percent.

4. Monetary policy has been geared towards achieving single digit inflation, with the National Bank of Ethiopia (NBE) appropriately calibrating its policy instruments to achieve this objective. Accordingly, reserve money growth has been kept in line with growth in nominal GDP and well within its annual target of 20 percent. However, to address short-term liquidity challenges during FY 2014/15, the NBE certificates of deposits held by the Commercial Bank of Ethiopia, which were issued in March 2013 following the lowering by NBE of the reserve requirement ratio, were redeemed. Moreover, the NBE extended short-term credit facility to several banks against NBE-bills. Inflationary pressures, exerted mainly by the higher food prices, drove inflation to low double digits, recording 11.8 percent in July 2015. The balance of payments came under immense pressures, reflecting a widening of the current account deficit. The exchange rate depreciated against the US dollar, though it appreciated markedly in real terms.

5. Fiscal policy implementation has remained prudent, with the authorities mobilizing most of the anticipated revenues and grants during FY2014/15. Tax collection increased in real terms with the tax-to-GDP ratio estimated at 12.9 percent. Budget execution kept in pace with the realized revenues, thus containing the deficit below the authorities' target of 3 percent of GDP. To further strengthen execution, the authorities continued implementation of program-based budgeting and the rolling of the integrated financial management information system to all federal budgetary agencies.

### **Medium-term outlook and policies**

6. The policy interventions over the medium term will be defined by the priorities set out in the authorities' second Growth and Transformation Plan (GTP II) which aims to elevate the country to middle income status by 2025. Broadly speaking, policies will focus on attaining high and sustainable economic growth, within a stable macroeconomic environment. Continued scaling up of investment in critical infrastructure, with due consideration to debt sustainability, and enhanced delivery of basic social services, coupled with increasing private sector participation, will form an integral part of the strategy. To this end, the authorities will seek to achieve an average real GDP growth rate of 11 percent and address underlying macroeconomic imbalances to support their medium-term objective.

### **Fiscal policy**

7. Implementation of the authorities' fiscal program for FY2015/16 and over the medium term will largely focus on attaining the priorities identified in the Sustainable Development Goals (SDGs) which is a major ambition of the authorities' five-year GTP. To this end, over 70 percent of the total federal government's budget has been allocated to key priority areas, including education, agriculture, health, rural electrification and urban development. On the revenue front, the authorities will continue efforts to enhance domestic revenue mobilization through strengthening tax administration and streamlining tax policies. In this context, the Ethiopian Revenue and Customs Authority will vigorously pursue its reform program which seeks to, among other things, improve technical tax collection capacity and increase awareness against tax evasion and fraud. While mindful of the financial implications of tax incentives, which are mainly in the form of export promotion duty waivers, the authorities consider these schemes crucial to accelerating industrial growth and improving foreign exchange earnings needed for investment and development.

### **Debt sustainability**

8. My authorities note the updated joint Debt Sustainability Analysis(DSA) undertaken by the Fund and World Bank staff which indicates that Ethiopia's risk of external debt distress has increased from 'low' to 'moderate', though external debt remains sustainable. While acknowledging the downside risks to export growth including from uncertainties related to foreign demand, the authorities disagree with staffs' overall assessment of an increased risk of external debt distress. They believe that the growth-enhancing benefits of the significant public investments primarily directed at critical infrastructure were not adequately taken into consideration. In this vein, the authorities underscore the fact that proceeds from the successful issuance of 1 billion in Eurobonds on international capital

markets will go towards developing critical infrastructure, including industrial parks, and are confident that as all these projects come on stream, the country's exports and tax revenues will be strengthened, thus eliminating any doubts about the Ethiopian government's capacity and commitment to repay its external debt. Further, the authorities reiterate their view that the inclusion of the debts of Ethio Telecom in the DSA is unwarranted given that the enterprise does not generate contingent financial liabilities on the central government. They emphasize that it continues to be profitably operated and maintains audited financial accounts in line with international standards.

### **Monetary and exchange rate policies**

9. Monetary policy will aim at maintaining price and exchange rate stability so as to create a macroeconomic environment that is conducive to rapid and sustained economic growth. To achieve these objectives, the NBE will, over the medium term, maintain a monetary targeting regime, with reserve money target set consistent with developments in the other key sectors. The NBE remains committed to containing inflationary pressures and considers the recent spike in inflation (year-on-year) to low double digits in July 2015 as driven by seasonal factors. An appropriate mix of monetary and fiscal policies will be employed going forward to keep inflation within single digits. In addition, the NBE's direct financing of the government will be placed on a declining path over the medium term. Furthermore, the authorities are determined to ramp up efforts at managing domestic liquidity by adopting a robust liquidity forecasting and management framework and introducing indirect monetary instruments.

10. On the exchange rate, the authorities recognize the need for greater flexibility of the exchange rate, in terms of benefits as an absorber of exogenous shocks, in supporting external competitiveness, and in strengthening foreign exchange reserves. However, while sharing staff's view that the birr may be overvalued in real terms, the authorities are inclined to pursue a path of gradual depreciation given the weak export responsiveness to real effective exchange rate movements but yet pronounced pass through into inflation.

### **Financial sector policies**

11. The NBE will continue to strengthen its financial stability monitoring tools to preserve the stability and soundness of the banking system which is assessed to be liquid, adequately capitalized and profitable. To this end, the recently-adopted risk-based supervisory framework combined with regular on-site examination will be utilized to mitigate any emerging financial risks. To mobilize savings and promote greater access to finance, the authorities will continue to build on the recent initiatives to promote financial inclusion, including development of national financial education and consumer protection strategy and implementation framework. The expansion of bank branch networks and the development of more innovative savings instruments will remain policy priorities going forward. The authorities emphasize that the current funding mechanism of the Development Bank of Ethiopia (DBE) has served the economy well by providing much-needed long-term

financial resources. Nonetheless, they undertake to continue exploring additional funding options that will further enhance the DBE's lending capacity.

### **Structural reforms**

12. The authorities are cognizant of the fact that attaining their goal of structurally transforming the economy and delivering equitable growth would require steadfast implementation of far-reaching structural reforms. To this end, they welcome the focus of the accompanying selected issues paper on poverty reduction and the macro-social impacts of policies on income distribution. The authorities intend to give due consideration to the policy recommendations when refining their pro-poor policy interventions, which already have proven to be effective and highly successful. Additionally, they are committed to enhancing the role of the private sector in the development process by providing greater access to credit and creating a favorable business climate. Finally, addressing the underlying impediments to increased external competitiveness will remain at the center of the authorities' policy strategy.

### **Conclusion**

13. The Ethiopian authorities recognize the challenges of macroeconomic management in the midst of scaled up investments in infrastructure and social development and are committed to instituting appropriate measures to address emerging macroeconomic imbalances and mitigate potential downside risks to the growth outlook. They are determined to persevere with efforts at structurally transforming their economy through enhanced domestic resource mobilization, increased investment in infrastructure, and more broad-based, pro-poor growth. Finally, the authorities consider the Fund's policy advice and technical assistance useful as they proceed with implementation of their development agenda.