World Economic and Financial Surveys

Regional Economic Outlook

Sub-Saharan Africa

Capital Flows and The Future of Work
Background Paper–Online Annexes

OCT 18

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The *Regional Economic Outlook: Sub-Saharan Africa* is published twice a year, in the spring and fall, to review developments in sub-Saharan Africa. Both projections and policy considerations are those of the IMF staff and do not necessarily represent the views of the IMF, its Executive Board, or IMF Management.

Contents

Acknowledgments

The following conventions are used in this publication:

- In tables, a blank cell indicates "not applicable," ellipsis points (. . .) indicate "not available," and 0 or 0.0 indicates "zero" or "negligible." Minor discrepancies between sums of constituent figures and totals are due to rounding.

- An en dash (–) between years or months (for example, 2009–10 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2005/06) indicates a fiscal or financial year, as does the abbreviation FY (for example, FY2006).

- "Billion" means a thousand million; "trillion" means a thousand billion.

- "Basis points" refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).

2. Capital Flows to Sub-Saharan Africa: Causes and Consequences
Annex 2.1.

This annex provides additional stylized facts and details on the data sources, econometric methodologies, and estimation results underlying the discussion in the chapter.

Data Sources and Country Coverage

The primary data sources for this chapter are the IMF's World Economic Outlook (WEO) and International Financial Statistics (IFS) databases. The monthly analysis is based on data obtained from Emerging Portfolio Fund Research (EPFR), Haver Analytics, and Bloomberg. The full set of data sources used in the analysis is listed in Annex Table 2.1.1.

The sample for sub-Saharan Africa comprises 45 countries listed in Annex Table 2.1.2. However, due to data limitations, the sample composition varies across the analyses. The country composition of the various groups (middle-income, low-income, oil exporters, resource-intensive, non-resource-intensive), as well as the comparator emerging market economies sample is also shown in Annex Table 2.1.2.

Annex Table 2.1.1. Data Description and Sources

Variable	Description	Sources
Capital flows		
Asset flows	In USD billion. Excludes reserve assets, and official other investment asset flows	IMF, WEO database
Bank flows	In USD billion	BIS Locational Statistics
Bond fund flows	In USD billion	EPFR Global
Equity fund flows	In USD billion	EPFR Global
Errors and omissions	In USD billion	IMF, WEO database
FDI liability flows	In USD billion	IMF, WEO database
Inward direct investment	In USD billion	IMF, Coordinated Direct Investment survey database
Inward portfolio investment	In USD billion	IMF, Coordinated Portfolio Investment survey database
Liability flows	In USD billion. Excludes official other investment liability flows	IMF, WEO database
Net capital flows	In USD billion. Excludes reserve assets, and official other investment asset and liability flows	IMF, WEO database
Other investment liability flows	In USD billion. Excludes official flows	IMF, WEO database
Portfolio liability flows	In USD billion	IMF, WEO database
Other macroeconomic and financial variables		
Broad money	In billions of national currency	IMF, IFS database
Capital account openness index	Index (high values: more open)	Chinn and Ito (2006)[1/]
Commodity prices	Index	IMF, WEO database
Compensation of employees	In percent of GDP	IMF, WEO database
Consumer price index (CPI)	Index	IMF, WEO and INS databases
Current account balance	In percent of GDP	IMF, WEO database
Domestic credit to private sector	In billions of national currency	IMF, IFS database
Exchange rate regime (de facto)	Index (1=hard or conventional peg; 2=basket peg/band/crawl/managed float; 3=free float)	Ghosh, Ostry, and Qureshi (2015)[2/]
External debt	In percent of GDP	IMF, WEO database
General government expense	In percent of GDP	IMF, WEO database
Inflation	In percent.	IMF, WEO database
Institutional quality index	Average of 12 political risk components normalized between 0 (low) and 1 (high)	International Country Risk Guide
Nominal GDP	In billions (USD and national currency)	IMF, WEO database
Official development assistance	In USD billion	World Bank, International Development Statistics database.

Variable	Description	Sources
Oil prices	Index	IMF, WEO database
Output gap	Difference between actual real GDP and trend (obtained from HP filter), in percent of trend real GDP	Staff calculations
Overvaluation	Difference between actual REER and trend (obtained from HP filter), in percent of trend REER	Staff calculations
Policy rate	Central bank policy rate or discount rate, in percent	IMF, IFS database
Private investment	In percent of GDP	IMF, WEO database
Public consumption	In percent of GDP	IMF, WEO database
Public debt	In percent of GDP	IMF, WEO database
Public investment	In percent of GDP	IMF, WEO database
Purchases/use of goods & services	In percent of GDP	IMF, WEO database
Real effective exchange rate (REER)	Index	IMF, WEO database
Real GDP	In billions of national currency	IMF, WEO database
Real GDP growth	In percent	IMF, WEO database, Penn World Tables 9.0 database
Real GDP growth in trading partners	In percent	IMF, WEO database
Real GDP per capita	In PPP terms.	IMF, WEO database, Penn World Tables 9.0 database
Real GDP per capita growth	In percent.	IMF, WEO database, Penn World Tables 9.0 database
Real U.S. govt. bond yield	(100+nominal govt. bond yield)/(100-future inflation)	Staff calculations
S&P 500 index returns volatility	Standard deviation of monthly returns of the S&P500 index, in percent	Bloomberg and staff calculations
Social benefits	In percent of GDP	IMF, WEO database
Sovereign bond issuances	In USD billion	Bloomberg LLP
Stock of external liabilities and assets	In USD billion	External Wealth of Nations Mark II database.
Stock of reserves	In USD billion	IMF, WEO database
Terms of trade of goods	US Dollars	IMF, WEO database
Total investment	In percent of GDP	IMF, WEO database
Trade openness	Sum of exports and imports, in percent of GDP	IMF, WEO database
U.S. 10-year govt. bond yield	In percent.	IMF, IFS database (Bloomberg for monthly data)
VIX/VXO	In logs	Chicago Board Options Exchange

1/ Chinn, M., and H. Ito, 2006, "What Matters for Financial Development? Capital Controls, Institutions, and Interactions," *Journal of Development Economics*, 81 (1): 163-192.

2/ Ghosh, A., J. Ostry, and M. Qureshi, 2015, "Exchange Rate Management and Crisis Susceptibility: A Reassessment," *IMF Economic Review*, 63 (1): 238-276.

Annex Table 2.1.2. Country Coverage

Group	Countries
Sub-Saharan Africa (SSA)	Angola*, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon*, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Republic of the Congo, Côte d'Ivoire*, Equatorial Guinea, Eritrea, Ethiopia*, Gabon*, The Gambia, Ghana*, Guinea, Guinea-Bissau, Kenya*, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius*, Mozambique*, Namibia*, Niger, Nigeria*, Rwanda*, Senegal*, Seychelles, Sierra Leone, South Africa*, South Sudan, Swaziland, São Tomé and Príncipe, Tanzania*, Togo, Uganda, Zambia*, Zimbabwe
Low-income	Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Eritrea, Ethiopia, The Gambia, Guinea, Guinea-Bissau, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Rwanda, Sierra Leone, South Sudan, Tanzania, Togo, Uganda, Zimbabwe
Middle-income	Angola, Botswana, Cabo Verde, Cameroon, Republic of the Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Kenya, Lesotho, Mauritius, Namibia, Nigeria, Seychelles, São Tomé and Príncipe, Senegal, South Africa, Swaziland, Zambia
Oil exporters	Angola, Cameroon, Chad, Republic of the Congo, Equatorial Guinea, Gabon, Nigeria, South Sudan
Other resource intensive	Botswana, Burkina Faso, Central African Republic, Democratic Republic of the Congo, Ghana, Guinea, Liberia, Mali, Namibia, Niger, Sierra Leone, South Africa, Tanzania, Zambia, Zimbabwe
Non-resource intensive	Benin, Burundi, Cabo Verde, Comoros, Côte d'Ivoire, Eritrea, Ethiopia, The Gambia, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Senegal, Seychelles, Swaziland, São Tomé and Príncipe, Togo, Uganda
Emerging market economies (EMEs)	Argentina, Brazil, Bulgaria, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, Russia, Thailand, Turkey, Venezuela

*SSA countries included in the analysis using monthly data.

Additional Stylized Facts

Annex Figure 2.1.1. Sub-Saharan Africa and Emerging Markets: Net Financial Flows, 1980-2017 (Percent of M2)

Source: IMF, World Economic Outlook database, and IMF staff calculations.
Notes: Statistics represent sum of flows to the region in percent of total M2 for the region. No statistics for EMEs including China are reported for 1980-89 because of lack of data availability on Chinese reserve asset flows for that period. For 1990-99, China's data is available for three years 1997-99.

Annex Figure 2.1.3. Sub-Saharan Africa and Emerging Markets: Net Financial Flows, 1980-2017 (Percent of GDP)
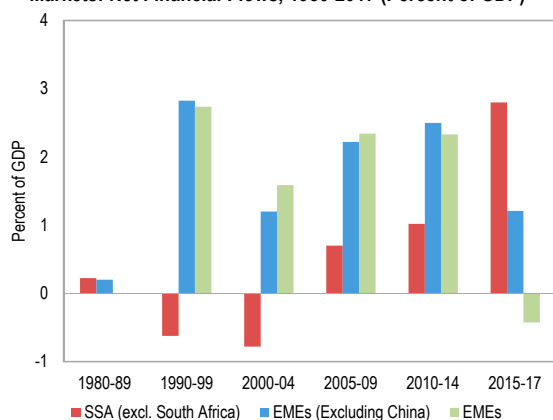
Source: IMF, World Economic Outlook database, and IMF staff calculations.
Note: Statistics represent sum of flows to the region (excluding South Africa) in percent of total GDP for the region (excluding South Africa). No statistics for EMEs including China are reported for 1980-89 because of lack of data availability on Chinese reserve asset flows for that period. For 1990-99, China's data is available for three years 1997-99.

Annex Figure 2.1.5 Sub-Saharan Africa Frontier Markets: Sovereign Bond Issuance, 2007–18 (in USD billion)
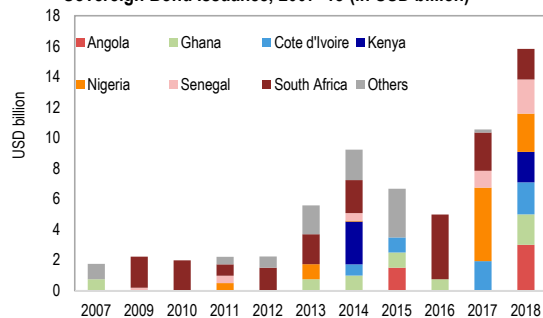
Source: Bloomberg LLP.
Notes:Other countries are Cameroon, Ethiopia, Gabon, Namibia, Rwanda, Tanzania, and Zambia. Data is as of June 2018.

Annex Figure 2.1.2. Sub-Saharan Africa (excl. South Africa): Financial Flows, 1980-2017 (in USD billion and percent of GDP)

Source: IMF, World Economic Outlook database.
Notes: Statistics for 2017 are provisional. Negative values indicate outflows. Flows exclude reserve asset and official other investment flows. Net financial flows in percent of GDP is the sum of financial flows to the region in percent of regional GDP.

Annex Figure 2.1.4 Sub-Saharan Africa: Net Official Development Assistance, 1980-2016 (in USD billion)

Source: World Bank, World Development Indicators database.

Annex Figure 2.1.6. Sub-Saharan Africa: Composition of Net Financial Flows, 1980-2017 (in USD billion)
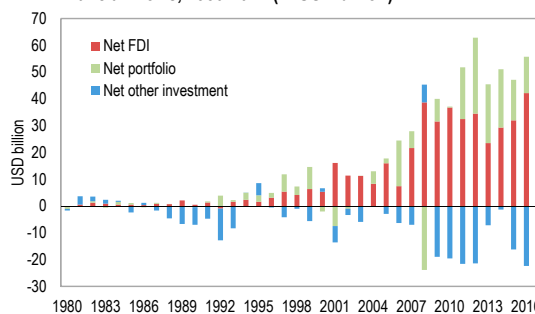
Source: IMF, World Economic Outlook database.
Notes: Statistics for 2017 are provisional. Negative values indicate outflows. Flows exclude official other investment flows. The components do not necessarily add up to total net financial flows because of lack of data availability.

Annex Figure 2.1.7. SSA: Portfolio Debt and Equity Flows, 1980-2017 (in USD billion)
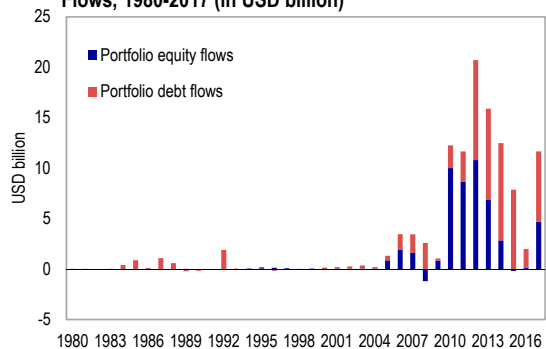
Source: IMF, World Economic Outlook database.
Notes: Portfolio debt and equity flows do not add up to total portfolio liabillity flows for the region because of lack of data availability. Disaggregated data is also unavailable for South Africa.

Annex Figure 2.1.8. Sub-Saharan Africa (excl. Mauritius): Composition of Financial Flows, 1980-2017 (in USD billion)
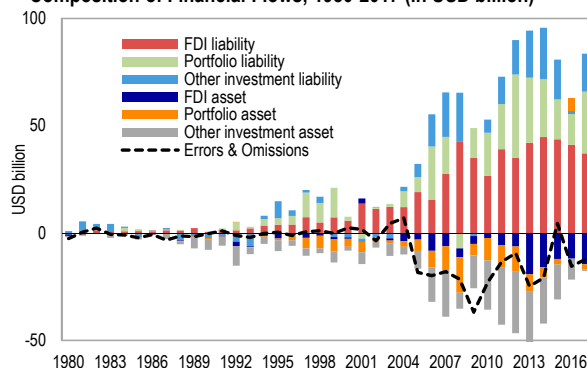
Source: IMF WEO database.
Notes: Statistics for 2017 are provisional. Negative values indicate outflows. Flows exclude official other investment flows. The components do not necessarily add up to total liability and asset flows because of lack of data availability.

Annex Figure 2.1.9 Sub-Saharan Africa and Emerging Markets: Errors and Omissions, 1980-2017 (in percent of GDP)
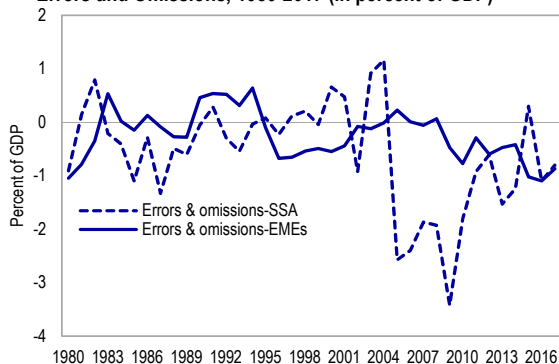
Source: IMF, World Economic Outlook database.
Notes: SSA (EME) errors and omissions are in percent of SSA (EME) GDP. Statistics for 2017 are provisional. Mauritius is excluded from the sample. Negative values indicate outflows.

Annex Figure 2.1.10 Sub-Saharan Africa: Errors and Omissions, 1980-2017 (in percent of GDP)
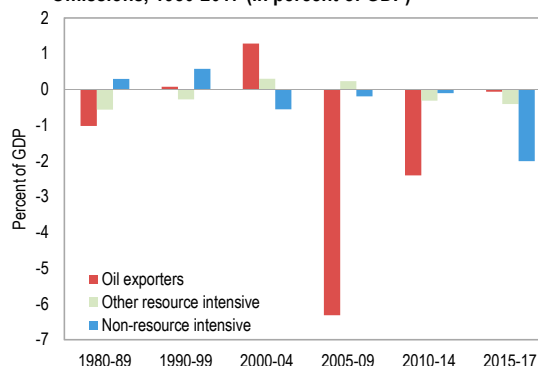
Source: IMF, World Economic Outlook database.

Annex Figure 2.1.11 Sub-Saharan Africa: Stock of External Liabilities and Assets, 1980-2015 (In USD billion)
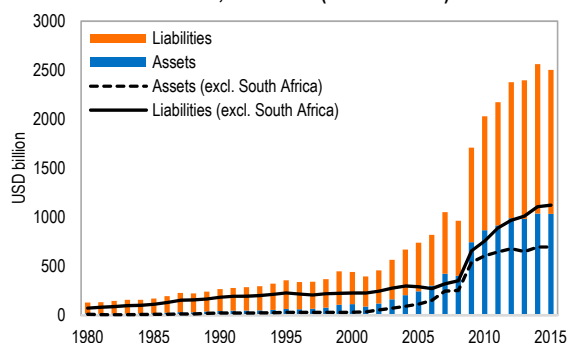
Source External Wealth of Nations Mark II database.

Annex Figure 2.1.12 Sub-Saharan Africa: Short-term External Debt, 1980-2017 (In USD billion)
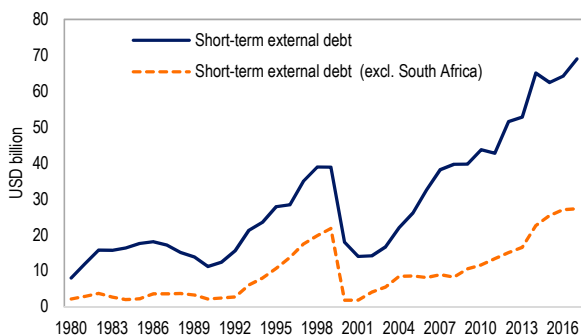
Source: IMF, World Economic Outlook database.

Annex Figure 2.1.13 Top Three Source Countries for Inward Direct Investment, 2009-16 (In USD billion)

1. Sub-Saharan Africa

2. Sub-Saharan Africa excluding South Africa and Mauritius
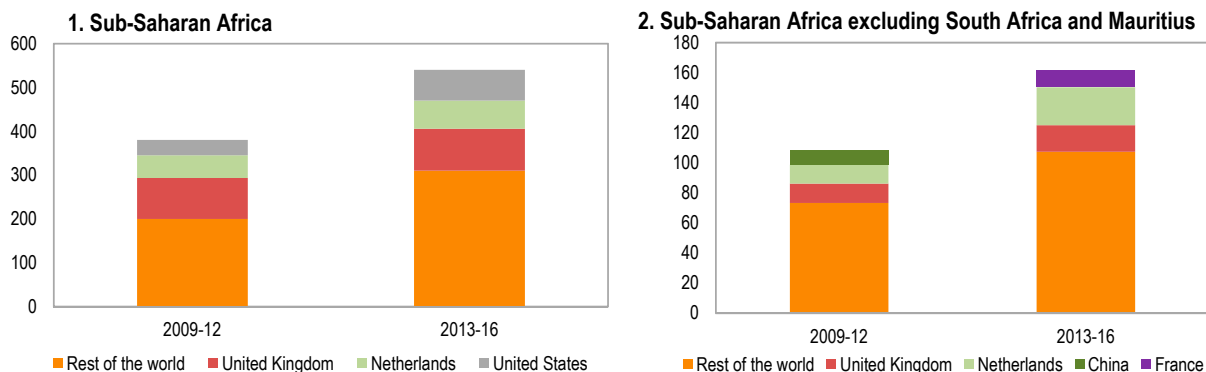
Source: Coordinated Direct Investment Survey database.
Note: Statistics are period averages, and represent the outstanding stock of inward direct investment in Sub-Saharan Africa. The right-hand panel excludes South Africa and Mauritius, which have large outstanding stock of direct investment liabilities. Inwards direct investment data is available for only 20 countries in sub-Saharan Africa, which are South Africa, Botswana, Cabo Verde, Benin, Ghana, Guinea-Bissau, Cote d'Ivoire, Mali, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Seychelles, Senegal, Tanzania, Togo, Uganda, Burkina Faso, and Zambia.

Annex Figure 2.1.14 Top Three Source Countries for Inward Portfolio Investment, 2009-16 (In USD billion)

1. Sub-Saharan Africa

2. Sub-Saharan Africa excluding South Africa and Mauritius
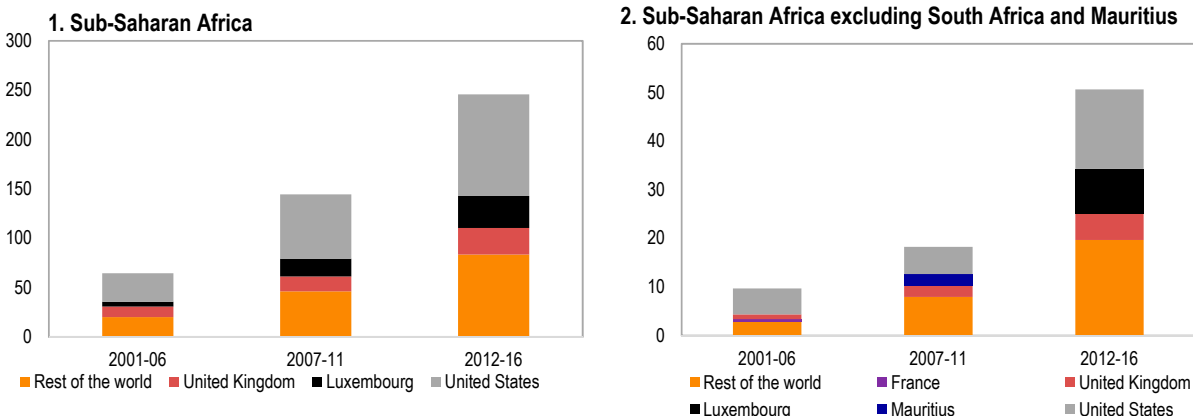
Source: IMF Coordinated Portfolio Investment Survey database.
Note: Statistics are period averages, and represent the outstanding stock of portfolio investment in Sub-Saharan Africa based on the reported outsanding stock of portfolio assets by reporting countries.

Annex Figure 2.1.15 Top Three Source Countries for Cross-Border Bank Investment, 2001-16 (In USD billion)

1. Sub-Saharan Africa

2. Sub-Saharan Africa excluding South Africa and Mauritius
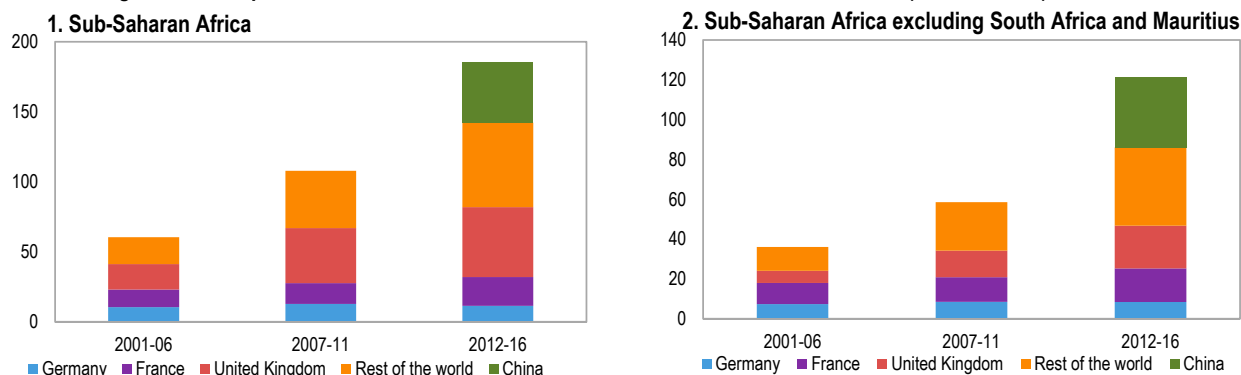
Source: Bank for International Statements database and Cerutti and Zhou (2018).
Note: Statistics are period averages, and represent the outstanding stock of cross-border banking claims in Sub-Saharan Africa based on the stock of banking claims by reporting countries. South Africa's outstanding stock of banking claims in South Africa are excluded. While the BIS does not release China's bilateral exposure to individual counterparties,

Annex Figure 2.1.16 Sub-Saharan Africa: Distribution of Financial Flows, 1980-2017

Net Financial Flows (Percent of GDP)

Liability Flows (Percent of GDP)

Asset Flows (Percent of GDP)
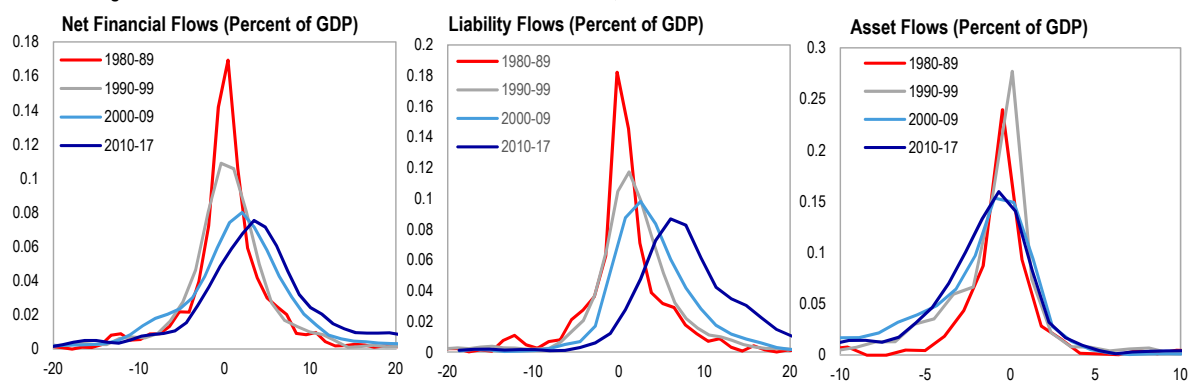
Source: IMF, World Economic Outlook database, and IMF staff calculations.
Note: Outliers (defined as those in the top and bottom percentile of the full distribution) are excluded.

Annex Table 2.1.3. Transition Probabilities for Liability Flows, 1980–2017

	Sub-Saharan Africa		Emerging Markets	
FDI	Positive	Negative	Positive	Negative
Positive	96.4	3.6	98.7	1.4
Negative	55.4	44.6	66.7	33.3
Portfolio	Positive	Negative	Positive	Negative
Positive	84.7	15.3	81.5	18.6
Negative	40.4	59.6	49.4	50.6
Other investment	Positive	Negative	Positive	Negative
Positive	76.3	23.8	75.8	24.2
Negative	37.1	62.9	43.0	57.0
Portfolio debt flows	Positive	Negative	Positive	Negative
Positive	80.0	20.0	78.8	21.2
Negative	38.6	61.4	55.6	44.4
Portfolio equity flows	Positive	Negative	Positive	Negative
Positive	82.5	17.5	75.2	24.8
Negative	63.6	36.4	56.9	43.1

Source: IMF staff estimates.

Note: Statistics represent transition probabilities of moving between inflows and outflows for the different types of liability flows.

Drivers of Financial Flows

An extensive body of literature examines the determinants of cross-border capital flows to emerging market and developing countries, and broadly categorizes the key drivers into global "push" and domestic "pull" factors.[1] Push factors reflect external conditions that induce investors to invest in foreign markets (such as economic growth and interest rates in advanced economies, the investors' perception of global economic risk, and international commodity prices). Pull factors are recipient country-specific characteristics that reflect opportunities and risks to investors (such as the return on investment, macroeconomic performance, integration in international goods and financial markets, financial sector development, credit worthiness, factor endowments, and the investment climate).[2] While both push and pull factors matter for capital flows, studies indicate that the relative importance of these factors could vary across the types of flows.[3]

To investigate the factors associated with capital inflows to sub-Saharan Africa, this analysis draws on the existing literature and estimates the following model:

$$K_{jt} = \sum_i \beta_i x_{i,t} + \sum_k \gamma_k z_{k,jt} + \mu_j + \varepsilon_{jt}, \tag{A2.1.1}$$

where K_{jt} denotes nonofficial capital flows—both in net and gross terms (that is, net financial flows, as well as liability and asset flows)—in percent of GDP, to country j at time t; x and z are global push and domestic pull factors, respectively; μ are the time-invariant country-specific characteristics; and ε is the random error term. To address potential endogeneity concerns of the domestic pull factors in equation A2.1.1, current values of these variables are substituted with lagged values. Equation A2.1.1 is estimated for the period 1980-2017 using the ordinary least squares method, with the standard errors clustered at the country level.

The global factors considered in equation A2.1.1 reflect supply-side factors largely beyond the control of sub-Saharan African countries that underpin the supply of global liquidity and induce investors to increase exposure to the region. Based on the neoclassical theory, which predicts that capital should respond to interest rate differentials between countries—flowing from countries with low return (capital-abundant economies) to those with high return (capital-scarce economies)—one such factor is the interest rate in advanced economies. To capture that, the analysis includes the US interest rate (10-year government bond yield), where capital flows to sub-Saharan Africa are expected to increase with lower US interest rates, and vice versa.[4] In addition, the analysis includes global market uncertainty—proxied by the volatility of the Standard & Poor (S&P) 500

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[1] See Calvo, Leiderman, and Reinhart (1993), Chuhan, Claessens, and Mamingi (1993), Fernandez-Arias (1996), Fernandez-Arias and Montiel (1996), Taylor and Sarno (1997), and Ghosh and others (2014).

[2] Pull factors may be influenced by the push factors—for example, low interest rates in advanced economies could reduce the default risk of emerging market and developing countries and improve their credit worthiness, attracting capital flows to these countries. Similarly, higher commodity prices could improve the growth prospects of commodity-intensive countries, leading to more inflows to these economies.

[3] For example, Ghosh and others (2014) find that liability flows (that is, nonresident acquisition of domestic assets) are more sensitive to changes in global financial conditions than asset flows (i.e., resident acquisition of foreign assets). Differentiating by the type of asset, Taylor and Sarno (1997) find that while both global and domestic factors are equally important for equity flows, global factors—particularly changes in the US interest rate—matter much more for the short-run dynamics of bond flows. Similarly, Cerutti, Claessens, and Puy (2015) report that bank and portfolio flows are more sensitive to global push factors than FDI and other non-bank flows.

[4] The reported results are for the nominal US government bond yield, but the results remain similar if the real yield is used instead. The results are also broadly similar if the 3-year US government bond yield or 3-month T-bill rate are used as proxies for the US interest rate.

index returns—and the international commodity price index (in logs) as other global push factors.[5] Greater volatility of the S&P 500 index returns is likely to be associated with lower flows to sub-Saharan African countries, since advanced economies are traditionally considered to be safe havens in times of increased uncertainty. Higher commodity prices, however, are likely to be positively correlated with inflows inasmuch as they indicate a boom in demand for the exports of resource-intensive countries in the region, and perhaps the recycling of income earned by commodity exporters in other regions.

Among pull factors, the analysis considers the country's external financing need proxied by the (lagged) current account balance, in percent of GDP. Even if the country does have an external financing need, this may not be met if the capital account is closed. To capture this possibility, the analysis includes a measure of (de jure) financial account openness taken from Chinn and Ito (2008). Fast-growing economies are more likely to experience large capital flows, not only because of their potentially large financing needs, but also because investors may be attracted to the potential productivity gains and corresponding returns. Likewise, investors may feel more confident investing in countries with greater trade connectivity, better institutional quality, and lower debt vulnerabilities. Thus, the analysis includes real GDP growth rate, as well as measures of trade openness, institutional quality, real GDP per capita, and external debt ratio among the pull factors. Finally, the de facto exchange rate regime (with lower values indicating less flexible exchange rate regimes) is included to capture the possibility that the implicit guarantee of a fixed exchange rate may encourage greater cross-border borrowing and lending.[6]

Estimation Results

The estimation results for equation A2.1.1, presented in Annex Table 2.1.4, show that the US interest rate is a statistically significant determinant of net financial flows to sub-Saharan Africa. A 100 basis point decline in the nominal US government bond yield, on average, implying an increase in net flows by about 0.2 to 0.4 of a percent of GDP. For commodity prices, the effect is statistically significant when global factors are included with country-fixed effects only (column 1), but its estimated coefficient weakens when other domestic factors are included in the model (columns 2-4). Among domestic factors, countries with better macroeconomic performance (measured by real GDP growth), higher real GDP per capita, greater trade openness, and a larger external financing need receive more inflows on a net basis.[7]

Much of the effect of the decline in US interest rates on net flows to sub-Saharan Africa stems from an increase in liability flows (columns 5-8). A 100 basis point decline in the US government bond yield, on average, increases liability flows by about 0.3 to 0.5 of a percent of GDP. In addition, liability flows are significantly affected by international commodity prices, with a 10 percent increase in the commodity price index implying an increase in liability flows by about 0.2 to 0.3 of a percent of GDP. For asset flows, there is some evidence that higher US interest rates and global market volatility lead to greater inflows, suggesting

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[5] The volatility of S&P 500 index returns is used instead of the commonly used VIX because the latter is only available from 1990 onward. The correlation between the S&P500 index returns volatility measure and the VIX is 0.53 (statistically significant at the 1 percent level).

[6] In addition, the analysis considers the domestic interest rate (policy rate or discount rate, according to data availability), and the expected real exchange rate depreciation of the domestic currency (proxied by the log difference between the actual real effective exchange rate and its long-term trend), as well as the stock of foreign exchange reserves (in percent of GDP) as domestic pull factors, but finds their estimated coefficients to be statistically insignificant.

[7] The estimated coefficients on de jure capital account openness and institutional quality indices are statistically insignificant in these specifications with country-fixed effects included in the model, but are positive and significant without country-fixed effects. This could be because of the slow-moving nature of these variables, which makes it likely that the country-fixed effects are absorbing their effects in the results presented in Annex Table 2.1.4.

Annex Table 2.1.4 Sub-Saharan Africa: Drivers of Financial Flows, 1980–2017

	Net financial flows				Liability flows				Asset flows			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US interest rate	-0.314***	-0.245**	-0.235**	-0.388**	-0.445***	-0.369***	-0.295**	-0.484**	0.181***	0.108*	0.053	0.243
	(0.110)	(0.101)	(0.105)	(0.168)	(0.090)	(0.108)	(0.115)	(0.185)	(0.055)	(0.058)	(0.058)	(0.144)
Commodity prices (log)	2.139**	0.863	0.705	-0.914	3.200***	1.503*	1.622*	1.212	-0.510	-0.003	-0.248	-0.652
	(0.928)	(0.838)	(0.924)	(1.279)	(0.970)	(0.807)	(0.912)	(1.188)	(0.703)	(0.766)	(0.866)	(0.679)
S&P500 index volatility	0.041	0.032	0.042	0.017	0.012	0.033	0.037	-0.008	0.041*	0.033	0.043*	0.039
	(0.036)	(0.037)	(0.040)	(0.048)	(0.053)	(0.055)	(0.059)	(0.062)	(0.021)	(0.024)	(0.026)	(0.030)
Current account balance/GDP		-0.198***	-0.192***	-0.250***		-0.078	-0.074	-0.130**		-0.118***	-0.119***	-0.143***
		(0.067)	(0.064)	(0.060)		(0.058)	(0.053)	(0.059)		(0.026)	(0.030)	(0.031)
Trade openness		0.027	0.015	0.076**		0.055**	0.049	0.083		-0.035	-0.036	-0.027
		(0.027)	(0.032)	(0.036)		(0.025)	(0.030)	(0.054)		(0.022)	(0.026)	(0.024)
Real GDP per capita (log)		3.310***	4.017***	3.149		4.172***	4.715***	-0.961		-1.255	-1.265	2.877*
		(0.779)	(0.845)	(2.086)		(1.435)	(1.609)	(2.496)		(1.389)	(1.498)	(1.680)
Real GDP growth			0.145***	0.106**			0.091*	-0.015			0.016	0.049**
			(0.053)	(0.041)			(0.053)	(0.045)			(0.024)	(0.021)
Exchange rate regime			0.121	-0.298			1.016	0.955			-0.718*	-1.016**
			(0.412)	(0.452)			(0.635)	(0.597)			(0.394)	(0.403)
Capital account openness			-0.622	-0.554			-0.051	-0.055			-0.325	-0.353
			(0.402)	(0.365)			(0.491)	(0.453)			(0.455)	(0.434)
External debt/GDP				0.001				-0.025**				0.021**
				(0.011)				(0.010)				(0.009)
Institutional quality				2.021				10.234*				-1.726
				(4.967)				(5.146)				(3.003)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,531	1,456	1,343	811	1,531	1,450	1,338	807	1,531	1,454	1,340	814
Adjusted R2	0.230	0.276	0.292	0.281	0.288	0.341	0.346	0.285	0.298	0.333	0.336	0.319
Countries	44	44	43	29	44	44	43	29	44	44	43	29

Source: IMF staff estimates.

Notes: Flows are in percent of GDP. All domestic variables are lagged one period. Sample size varies across estimations because of data availability. Clustered standard errors (by country) reported in parentheses. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

retrenchment by domestic residents from abroad as global financial conditions tighten. These results are consistent with other studies for emerging market economies that document a similar behavior by domestic residents in the face of changes in global financial conditions.

The effect of global factors, however, depends on the type of flow. In general, US interest rates and commodity prices have a much stronger effect on inward direct investment than on other types of flows, while global market volatility has a statistically stronger effect on foreign portfolio flows (Annex Table 2.1.5). For example, a 100-basis point reduction in the US government bond yield implies an increase of about 0.2 of a percent of GDP of FDI flows, but about 0.03 of a percent of GDP increase in foreign portfolio flows to sub-Saharan Africa. By contrast, a one standard deviation shock to the global market volatility index reduces portfolio flows to sub-Saharan Africa by about 0.1 of a percent of GDP, but has no statistically significant effect on FDI.[8]

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[8] Comparing the adjusted R-squared across the specifications in Annex Table 2.1.5, it is evident that both push and pull factors (including country-fixed effects) explain a much large share of the variation in FDI flows than in other types of flows. Excluding push factors from the estimations, the adjusted R-squared for FDI liability flows is in the range of 0.30-0.45, while that for portfolio flows is around 0.05-0.17.

Annex Table 2.1.5 Sub-Saharan Africa: Drivers of Different Types of Liability Flows, 1980–2017

	FDI liability flows				Portfolio liability flows				Other investment liability flows			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US interest rate	-0.296***	-0.194***	-0.179***	-0.381**	-0.023	-0.024	-0.027*	-0.082**	-0.092	-0.091	-0.048	-0.001
	(0.074)	(0.052)	(0.055)	(0.141)	(0.015)	(0.016)	(0.014)	(0.037)	(0.076)	(0.094)	(0.101)	(0.213)
Commodity prices (log)	2.303***	1.475**	1.561**	1.080	0.147	0.164*	0.158	0.130	0.607	-0.330	-0.177	0.103
	(0.764)	(0.668)	(0.720)	(1.080)	(0.095)	(0.087)	(0.111)	(0.164)	(0.677)	(0.604)	(0.531)	(0.758)
S&P500 index volatility	0.013	0.018	0.021	-0.014	-0.025**	-0.027**	-0.026*	-0.021**	0.017	0.039	0.039	0.021
	(0.024)	(0.019)	(0.021)	(0.028)	(0.012)	(0.013)	(0.014)	(0.009)	(0.045)	(0.048)	(0.050)	(0.047)
Current account balance/GDP		-0.071	-0.069	-0.088		-0.010	-0.012*	-0.007		-0.004	-0.000	-0.032
		(0.046)	(0.047)	(0.083)		(0.006)	(0.007)	(0.007)		(0.046)	(0.045)	(0.055)
Trade openness		0.061***	0.054***	0.053		-0.005	-0.005	-0.009		-0.001	-0.002	0.039
		(0.015)	(0.017)	(0.036)		(0.005)	(0.006)	(0.013)		(0.019)	(0.022)	(0.023)
Real GDP per capita (log)		0.720	0.724	-1.652		0.093	0.146	0.631		3.612***	4.233***	0.396
		(0.677)	(0.811)	(1.904)		(0.138)	(0.170)	(0.421)		(0.947)	(0.962)	(1.197)
Real GDP growth			0.024	-0.009			-0.004	-0.006			0.051	-0.019
			(0.025)	(0.030)			(0.004)	(0.007)			(0.041)	(0.049)
Exchange rate regime			0.269	-0.036			0.017	0.187			1.127**	0.921**
			(0.424)	(0.407)			(0.198)	(0.150)			(0.474)	(0.396)
Capital account openness			0.082	0.047			-0.039	-0.070			-0.509	-0.266
			(0.237)	(0.320)			(0.034)	(0.072)			(0.491)	(0.296)
External debt/GDP				-0.009				0.001				-0.015
				(0.007)				(0.002)				(0.009)
Institutional quality				3.807				-0.323				6.682*
				(3.291)				(1.320)				(3.402)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,446	1,382	1,282	789	1,369	1,315	1,214	737	1,517	1,437	1,330	799
Adjusted R2	0.397	0.445	0.437	0.338	0.069	0.072	0.060	0.190	0.124	0.170	0.191	0.198
Countries	43	43	43	29	41	41	41	28	44	44	43	29

Source: IMF staff estimates.

Notes: Flows are in percent of GDP. All domestic variables are one-period lagged. Sample size varies across estimations because of data availability. Clustered standard errors (by country) reported in parentheses. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Surge and Reversal

To examine the drivers of large nonresident capital movements in and out of sub-Saharan Africa, the analysis follows the existing literature (e.g., Ghosh and others 2014) to define an observation as a large inflow episode—or a "surge"—if it lies above the top 30th percentile of the country's own distribution of liability flows (expressed in percent of GDP) and in the top 30th percentile of the entire sample's distribution of liability flows (in percent of GDP):

$$S_{jt} = \begin{cases} 1 \; if \; K_{jt} \in \{top\,30^{th}\; percentile\,(K_{js})_{s=1}^{T}\} \cap \{top\,30^{th}\; percentile\,(K_{is})_{i=1,s=1}^{N,T}\} \\ 0 \; otherwise \end{cases} \qquad (A2.1.2)$$

where S_{jt} is an indicator of whether there is a surge in country j at time t, K_{jt} is the liability flow (measured in percent of GDP) to country j in time t, and N and T indicate the total number of countries and years in the sample, respectively.[9] As discussed in Ghosh et al. (2014), the reason for identifying surges based on the country-specific distribution of capital flows as well as the sample-wide criterion is to ensure that surges are not only "large" based on the country's own experience but also by cross-country standards. This prevents countries experiencing capital outflows or very small inflows (on a net basis) through most of the sample

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[9] Figure 2.6 in the chapter considers net financial flows, in percent of GDP, to define surges. To classify each surge observation as an asset-flow or liability-flow surge, the analysis then considers whether the change in asset flows is greater or smaller than the change in liability flows. See Ghosh and others (2014) for details.

period to be identified as having surges.[10] Symmetrically, large outflows of non-resident investments (or a "reversal") are defined as an observation that lies both in the bottom 30th percentile of the country's own distribution of liability flows (expressed in percent of GDP) and in the bottom 30th percentile of the entire sample's distribution of liability flows (in percent of GDP). With this definition, if two (or more) consecutive years meet the specified criteria, then each year is coded as a surge or reversal observation.

Next, probit models of the following form are estimated:

$$\Pr(S_{jt} = 1) = F(\sum_i \beta_i x_{i,t} + \sum_k \gamma_k x_{k,jt}), \qquad\qquad (A2.1.3)$$

$$\Pr(R_{jt} = 1) = F(\sum_i \beta_i x_{i,t} + \sum_k \gamma_k x_{k,jt}), \qquad\qquad (A2.1.4)$$

where S_{jt} and R_{jt} are indicator variables of whether a liability flow surge or reversal occurs in country j in period t; and x and z are the various global push and domestic pull factors defined above, respectively. As before, lagged values of the domestic factors are used to mitigate potential endogeneity concerns, and country-specific effects are included while estimating equations (A2.1.3) and (A2.1.4). In addition, standard errors are clustered at the country level in order to address the possibility of serial correlation in the error term.

Estimation Results

The results reported in Annex Table 2.1.6 (columns 1-5) indicate that liability flow surges to sub-Saharan Africa are statistically significantly affected by US interest rates and commodity prices. For example, against an unconditional surge probability of about 23 percent in the estimated sample, a 100 basis point decline in the US government bond yield is associated with a 2 percentage point higher likelihood of a surge (evaluated at mean values of other regressors). Likewise, an increase in commodity prices strongly raises the likelihood of an inflow surge across sub-Saharan Africa countries. While the estimated coefficient on this measure of S&P500 index returns volatility is negative—indicating a lower likelihood of a surge as global market volatility rises—it is statistically insignificant. Together with country fixed effects, these global factors have considerable explanatory power: the pseudo-R^2 (which compares the log likelihood of the full model with that of a constant only model) is 17 percent, and the probit sensitivity (proportion of surges correctly called) is about 27 percent (column 1).

Turning to domestic pull factors, the external financing need proxied by the lagged current account balance, in percent of GDP, is highly statistically significant, as is real GDP growth. Countries with stronger institutions are also significantly more likely to experience inflow surges, as are countries with more flexible exchange rate regimes.[11] Adding these pull factors more than doubles the pseudo-R^2 to 21-26 percent and raises the sensitivity from 33-55 percent; overall, the probit calls 90 percent of the observations correctly.

For reversals, the results show a somewhat symmetric effect of US interest rates, but not that for commodity prices (Annex Table 2.1.6, columns 6-10). In fact, commodity price increases lower the likelihood of a reversal in resource-intensive countries only. Among domestic factors, higher real GDP growth, greater

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[10] Several other thresholds have also been used in the literature to identify large capital movements. For example, Reinhart and Reinhart (2008) select a cut-off of the 20th percentile for net capital flows (in percent of GDP), and Cardarelli, Elekdag, and Kose (2009) define a surge when net private capital flows (in percent of GDP) to a country exceed its trend by one standard deviation (or fall in the top quartile of the regional distribution). Forbes and Warnock (2012) use quarterly data on gross capital flows, and define a surge as an annual increase in gross inflows that is more than one standard deviation above the (five-year rolling) average, and at least two standard deviations above the average in at least one quarter.

[11] The result for flexible exchange rate regimes is in contrast to those for EMEs, which typically find that fixed exchange rate regimes receive larger inflows, presumably because of low currency risk (e.g., Ghosh et al., 2014; Ghosh, Ostry, and Qureshi, 2015).

exchange rate flexibility, and better institutional quality lower the likelihood of a reversal occurrence. Overall, with pull factors the pseudo-R2 for the probit model is around 16-34 percent, and the sensitivity (proportion of reversals correctly called) is about 21-28 percent (column 1).

Annex Table 2.1.6. Sub-Saharan Africa: Likelihood of Surge and Reversal of Liability, 1980–2017

	Surge					Reversal				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
US interest rate	-0.090***	-0.094***	-0.091***	-0.104***	-0.230***	0.099***	0.102***	0.087***	0.136***	0.274***
	(0.029)	(0.028)	(0.029)	(0.037)	(0.067)	(0.026)	(0.025)	(0.025)	(0.034)	(0.069)
Commodity prices (log)	0.672***	0.489***	0.485***	0.373*	0.757**	-0.488**	-0.338	-0.361	0.349	-0.423
	(0.187)	(0.154)	(0.165)	(0.219)	(0.295)	(0.213)	(0.222)	(0.229)	(0.233)	(0.417)
S&P500 index volatility	-0.007	-0.004	-0.002	-0.008	-0.012	0.006	0.005	0.005	0.006	0.026*
	(0.009)	(0.010)	(0.011)	(0.014)	(0.016)	(0.008)	(0.008)	(0.009)	(0.011)	(0.014)
Current account balance/GDP		-0.030***	-0.032***	-0.033***	-0.049***		0.014*	0.013	0.015**	0.011
		(0.008)	(0.008)	(0.008)	(0.013)		(0.007)	(0.008)	(0.007)	(0.015)
Trade openness		0.014***	0.013***	0.014***	-0.007		-0.003	-0.000	-0.001	-0.004
		(0.004)	(0.004)	(0.004)	(0.010)		(0.005)	(0.005)	(0.005)	(0.011)
Real GDP per capita (log)		0.165	0.180	0.154	0.397		-0.545**	-0.574**	-0.476	-0.540
		(0.215)	(0.201)	(0.209)	(0.753)		(0.261)	(0.253)	(0.306)	(0.523)
Real GDP growth			0.037***	0.035***	0.032*			-0.038***	-0.035***	-0.026
			(0.012)	(0.011)	(0.019)			(0.012)	(0.011)	(0.019)
Exchange rate regime			0.276*	0.249*	0.302			-0.179	-0.137	-0.461*
			(0.148)	(0.145)	(0.212)			(0.139)	(0.157)	(0.245)
Resource*US interest rate				0.025					-0.064	
				(0.056)					(0.050)	
Resource*Commodity prices				0.257					-1.274***	
				(0.323)					(0.390)	
Resource*S&P500 volatility				0.011					0.004	
				(0.021)					(0.017)	
External debt/GDP				0.000	0.002				0.002	-0.002
				(0.001)	(0.002)				(0.002)	(0.004)
Institutional quality					4.734*					-4.666**
					(2.783)					(1.999)
Reserves/GDP					-0.014					0.015
					(0.017)					(0.021)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,531	1,450	1,410	1,389	589	1,531	1,450	1,410	1,389	589
Pseudo-R2	0.170	0.214	0.226	0.231	0.262	0.143	0.164	0.174	0.198	0.340
Countries	44	44	44	43	29	44	44	44	43	29
Sensitivity	26.65	32.62	35.09	34.48	54.69	15.90	21.02	23.88	30.37	37.93
Specificity	92.72	93.58	93.84	93.93	87.91	95.52	95.81	94.88	95.11	96.22

Source: IMF staff estimates.
Notes: Surge (crash) is a binary variable equal to one if the liability flow (in percent of GDP) lies in the top (bottom) of the country's and full sample's liability flow (in percent of GDP) distribution. All specifications ares estimated using the probit models, with domestic variables lagged one period. Sensitivity is the proportion of surge (crash) occurrence observations that are correctly classified, while the specificity is the proportion of surge (crash) non-occurrences that are correctly classified. Sample size varies across estimations because of data availability. Clustered standard errors (by country) are reported in parentheses. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

The Global Financial Cycle and Sub-Saharan Africa

To further explore the extent to which sub-Saharan Africa is linked to the "global financial cycle," the analysis uses monthly data on capital flows (specifically bond and equity fund flows) and asset prices (government bond yields and real stock returns) for a sub-sample of sub-Saharan African countries, and estimates the following model:

$$F_{jt} = \sum_i \beta_i x_{i,t} + \sum_k \gamma_k z_{k,jt} + \mu_j + \varepsilon_{jt}, \tag{A2.1.5}$$

where F_{jt} denotes the domestic financial variables (bond, equity, sum of bond and equity fund flows in percent of GDP, sovereign bond yield in percent, and real stock market returns in percent) in country j at time t; x and z denote global and domestic variables considered above; μ is country fixed effects, and ε is the random error term.[12] Different variants of equation (A2.1.5) are estimated using ordinary least squares and include country-year effects as well as country-quarter effects, to capture the effect of all possible time-variant domestic factors that may affect the dependent variables. In all specifications, the standard errors are clustered at the country level.

The results show that—controlling for domestic factors—bond and equity flows to sub-Saharan Africa are strongly affected by global risk appetite, the US interest rate, and commodity prices (Annex Table 2.1.7). Higher US interest rates lower fund inflows to sub-Saharan Africa countries, while a higher risk appetite and commodity prices lead to greater inflows. Specifically, a 100 basis point increase decline in the US interest rate is, on average, associated with about 0.3 of a percent of GDP higher bond fund flows, and about 0.1 of a percent of GDP higher equity fund flows, while a one standard deviation decrease in (log) VIX increases bond and equity fund flows by 0.2 and 0.1 of a percent of GDP, respectively.

In addition, prices of both bonds and stocks are also affected by global factors (Annex Table 2.1.7). A 100 basis points increase in the US interest rate and a one standard deviation increase in the VIX (in log terms) leads to an increase in sovereign bond yields by about 111 and 18 basis points, respectively, while a one standard deviation increase in commodity prices lowers the yields by about 21 basis points. For stock returns, the effect of the VIX index is statistically the strongest, with a one standard deviation increase in the VIX index on average implying a drop in stock returns by about 1.7 percentage points.

Notably, these effects are on par with those for emerging market economies (Annex Table 2.1.8). In addition, they have strengthened for the sub-Saharan Africa countries after the global financial crisis (Annex Table 2.1.9). Thus, for example, a one standard deviation decrease in the VIX (in log terms) implies an increase in fund flows to sub-Saharan Africa by about 0.2 of a percent of GDP before 2009, but by about 0.5 of a percent of GDP after the crisis (Annex Table 2.1.10). Similarly, for fund flows, the estimated coefficients of US interest rate and commodity prices are smaller and not statistically important in the precrisis sample, but larger and statistically significant in the postcrisis sample.[13]

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[12] The monthly data for our sample of countries is available over 2000-17 for equity fund flows, bond yields, and stock returns, and over 2004-17 for bond fund flows. Since the VIX index is available for this period, we use that as a measure of global market uncertainty (or risk appetite) instead of the S&P500 index returns volatility. In addition, among the domestic variables, we also consider economic risk rating, political risk rating, and financial risk rating variables that are available at monthly frequency. Data for all other domestic variables is mostly available at annual frequency.

[13] These results are robust to considering a consistent sample of countries in both the pre and post crisis periods. They are also robust to the exclusion of South Africa from the sample.

Annex Table 2.1.7 Sub-Saharan Africa: Drivers of Monthly Fund Flows, Stock Return and Bond Yield, 2000–2017

	Bond flows			Equity flows			Bond+Equity flows			Stock return			Bond yield		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
US interest rate	-0.070***	-0.332***	-0.482***	0.002	-0.130	-0.176	-0.109*	-0.670**	-0.980**	0.787**	-0.745	-2.032	0.018	0.107***	0.127***
	(0.014)	(0.055)	(0.100)	(0.016)	(0.091)	(0.157)	(0.056)	(0.253)	(0.409)	(0.260)	(0.456)	(1.137)	(0.011)	(0.019)	(0.023)
Commodity prices (log)	0.006	0.325***	1.009***	0.061***	0.127**	0.215	0.097	0.501***	1.986**	1.071**	1.917	2.745	-0.038**	-0.228**	-0.363***
	(0.036)	(0.063)	(0.291)	(0.013)	(0.047)	(0.182)	(0.087)	(0.106)	(0.593)	(0.468)	(1.545)	(4.380)	(0.016)	(0.081)	(0.109)
S&P 500 index volatility	-0.362***	-0.553***	-0.648***	-0.086***	-0.363**	-0.455	-0.449***	-1.065**	-1.432*	-3.511***	-4.536***	-4.597	0.058***	0.193***	0.159***
	(0.060)	(0.115)	(0.161)	(0.026)	(0.144)	(0.287)	(0.102)	(0.373)	(0.729)	(0.523)	(1.129)	(2.122)	(0.015)	(0.026)	(0.021)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Year Dummy		Yes			Yes			Yes			Yes			Yes	
Country*Quarter Dummy			Yes			Yes			Yes			Yes			Yes
Observations	1,352	1,352	1,352	1,938	1,938	1,938	840	840	840	1,764	1,764	1,764	1,320	1,320	1,320
Adjusted R-squared	0.143	0.489	0.666	0.0330	0.243	0.404	0.0798	0.384	0.570	0.0478	0.0848	0.163	0.97	0.983	0.993
Countries	13	13	13	13	13	13	8	8	8	10	10	10	13	13	13

Note: Bond and equity flows are in percent of GDP. Stock return is in percentage points and bond yield is in percent. Sample size varies across estimations because of data availability. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Annex Table 2.1.8 Emerging Market Economies: Drivers of Fund Flows, Stock Returns and Bond Yields, 2000M1-17M12

	Bond flows			Equity flows			Bond+Equity flows			Stock return			Bond yield		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
US interest rate	-0.090	-0.147*	-0.112	-0.011	-0.079*	-0.035	-0.143**	-0.427	-0.120	0.067	-2.268*	-2.896	0.019	0.054	0.057
	(0.057)	(0.076)	(0.086)	(0.008)	(0.040)	(0.036)	(0.044)	(0.240)	(0.098)	(0.530)	(1.207)	(1.744)	(0.010)	(0.027)	(0.031)
Commodity prices (log)	0.133	0.21	-0.409*	0.001	0.005	-0.111	0.079	0.107	-0.564	-0.259	2.216	4.185	0.016	-0.07	-0.029
	(0.083)	(0.142)	(0.208)	(0.024)	(0.174)	(0.187)	(0.058)	(0.197)	(0.557)	(0.861)	(2.217)	(7.159)	(0.009)	(0.055)	(0.046)
S&P 500 index volatility	-0.285**	-0.290**	-0.237**	-0.117***	-0.244**	-0.510	-0.425**	-0.422**	-1.474	-4.880***	-5.638***	-5.273	0.049*	0.117**	0.061
	(0.114)	(0.115)	(0.109)	(0.039)	(0.080)	(0.400)	(0.123)	(0.138)	(1.194)	(0.788)	(1.630)	(3.251)	(0.021)	(0.035)	(0.029)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Year Dummy		Yes			Yes			Yes			Yes			Yes	
Country*Quarter Dummy			Yes			Yes			Yes			Yes			Yes
Observations	293	293	293	648	648	648	150	150	150	733	733	733	340	340	340
Adjusted R-squared	0.386	0.388	0.499	0.0114	0.0264	0.138	0.0434	0.146	0.212	0.043	0.064	0.115	0.993	0.994	0.998
Countries	8	8	8	11	11	11	6	6	6	9	9	9	5	5	5

Note: Bond and equity flows are in percent of GDP. Stock return is in percentage points and bond yield is in percent. Sample size varies across estimations because of data availability. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Annex Table 2.1.9 Sub-Saharan Africa: Drivers of Monthly Fund Flows, Stock Returns and Bond Yields Before the Global Financial Crisis, 2000M1-08M12

	Bond flows			Equity flows			Bond+Equity flows			Stock return			Bond yield		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
US interest rate	-0.048***	-0.327***	-0.467***	-0.010	-0.264***	-0.268***	-0.054**	-0.645***	-0.768***	-0.166	-2.376***	-3.243	0.010***	0.072***	0.127***
	(0.012)	(0.051)	(0.089)	(0.007)	(0.040)	(0.043)	(0.020)	(0.078)	(0.118)	(0.136)	(0.555)	(1.910)	(0.003)	(0.007)	(0.010)
Commodity prices (log)	0.069*	0.078	0.814***	-0.041*	-0.087	-0.081	-0.005	0.011	0.768***	-1.851***	-2.320	-11.132***	0.012***	-0.048***	-0.120***
	(0.038)	(0.054)	(0.224)	(0.021)	(0.078)	(0.110)	(0.040)	(0.104)	(0.243)	(0.537)	(1.991)	(2.851)	(0.004)	(0.015)	(0.040)
S&P 500 index volatility	-0.311***	-0.806***	-0.998***	-0.184***	-0.574***	-0.916***	-0.478***	-1.401***	-2.028***	-4.107***	-9.942***	-15.194***	0.013*	0.101***	0.128***
	(0.051)	(0.135)	(0.186)	(0.031)	(0.093)	(0.183)	(0.056)	(0.173)	(0.281)	(0.818)	(1.990)	(3.992)	(0.006)	(0.009)	(0.010)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Year Dummy		Yes			Yes			Yes			Yes			Yes	
Country*Quarter Dummy			Yes			Yes			Yes			Yes			Yes
Observations	2,851	2,851	2,851	3,689	3,689	3,689	2,818	2,818	2,818	1,918	1,918	1,918	3,528	3,528	3,528
Adjusted R-squared	0.0803	0.321	0.486	0.0338	0.244	0.428	0.0648	0.368	0.543	0.0534	0.188	0.320	0.987	0.990	0.994
Countries	17	17	17	18	18	18	17	17	17	9	9	9	18	18	18

Note: Bond and equity flows are in percent of GDP. Stock return is in percentage points and bond yield is in percent. Sample size varies across estimations because of data availability. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Annex Table 2.1.10 Sub-Saharan Africa: Drivers of Monthly Fund Flows, Stock Returns and Bond Yields After the Global Financial Crisis, 2009M1-17M12

	Bond flows			Equity flows			Bond+Equity flows			Stock return			Bond yield		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
US interest rate	-0.030	-0.386***	-0.634***	0.063***	-0.157	-0.284	-0.002	-0.750***	-1.279*	0.682*	0.239	-0.987	0.029	0.143***	0.165***
	(0.030)	(0.075)	(0.151)	(0.019)	(0.117)	(0.253)	(0.036)	(0.283)	(0.591)	(0.306)	(0.411)	(1.709)	(0.017)	(0.029)	(0.018)
Commodity prices (log)	-0.055	0.220***	1.362***	0.025	0.243	0.461	-0.025	0.574**	2.706**	2.520***	2.712*	2.175	-0.106***	-0.305***	-0.465***
	(0.049)	(0.056)	(0.336)	(0.016)	(0.147)	(0.520)	(0.057)	(0.241)	(1.122)	(0.473)	(1.210)	(3.331)	(0.020)	(0.064)	(0.104)
S&P 500 index volatility	-0.413***	-0.773***	-0.746***	-0.107***	-0.451**	-0.446	-0.564***	-1.476**	-1.444*	-2.558***	-3.168***	-3.768*	0.072	0.222***	0.185***
	(0.073)	(0.190)	(0.213)	(0.030)	(0.186)	(0.240)	(0.132)	(0.557)	(0.659)	(0.545)	(1.007)	(1.711)	(0.042)	(0.043)	(0.019)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Year Dummy		Yes			Yes			Yes			Yes			Yes	
Country*Quarter Dummy			Yes			Yes			Yes			Yes			Yes
Observations	1,059	1,059	1,059	1,290	1,290	1,290	690	690	690	1,031	1,031	1,031	980	980	980
Adjusted R-squared	0.130	0.504	0.688	0.0680	0.298	0.468	0.0918	0.418	0.607	0.0678	0.138	0.285	0.923	0.962	0.982
Countries	13	13	13	13	13	13	8	8	8	10	10	10	13	13	13

Note: Bond and equity flows are in percent of GDP. Stock return is in percentage points and bond yield is in percent. Sample size varies across estimations because of data availability. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Macroeconomic Consequences

The macroeconomic implications of financial inflows to sub-Saharan Africa are examined by assessing their association with different types of vulnerabilities (such as movement of the real exchange rate and output above trend, and domestic credit growth), as well as with domestic investment and economic growth.

Vulnerabilities

A typical concern associated with capital inflows is that they lead to currency appreciation pressures—via inflation under fixed exchange rates and via nominal appreciation under more flexible exchange rate regimes—resulting in overvalued exchange rates, which in turn raise competitiveness (and financial-stability) concerns. In addition to currency overvaluation, another common concern of policymakers is that large inflows lead to economic overheating, and result in positive output gaps and high inflation. Part of the reason that such flows are expansionary is that they fuel domestic credit growth, which often proves unsustainable as flows recede.

To assess whether inflows to sub-Saharan Africa are associated with macroeconomic and financial vulnerabilities, the following model is estimated:

$$V_{jt} = \rho f_{jt} + \sum_k \gamma_k w_{k,jt} + \delta_J + \varphi_t + \epsilon_{jt}, \tag{A2.1.6}$$

where V denotes a vulnerability (currency overvaluation defined as deviation of the real effective exchange rate from its trend, the output gap defined as the deviation of real GDP from its trend; and rapid credit growth defined as the change in the domestic credit-to-GDP ratio) in country j at time t; f is financial flow (in percent of GDP); w are relevant control variables (such as per capita income, real GDP growth, level of financial development proxied by the credit-to-GDP ratio, trade openness, etc.); δ denotes country-fixed effects; φ are year effects to capture common shocks across countries; and ϵ is the random error term.

The results reported in Annex Table 2.1.11 suggest that neither net, nor aggregate liability or asset flows, are on average statistically associated with currency overvaluation, output gap, and credit growth in sub-Saharan African countries. Disaggregating liability flows by type, however, shows that portfolio flows are prone to generating these vulnerabilities. Specifically, a 10 percent of GDP increase in portfolio inflows is, on average, associated with about a 3 percentage point deviation of the real exchange rate and output from trend and a 1 percent of GDP increase in domestic credit to the private sector.[14]

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[14] Splitting the sample into middle and low-income countries suggests that much of the effects of portfolio flows is in the middle-income country sub-sample, which have historically been the major recipients of these flows. The data for portfolio equity and debt flows is rather limited, but the available results show that output gap is associated with both types of flows, while currency overvaluation is more strongly impacted by portfolio equity flows (perhaps because they are not used to immediately finance imports).

Annex Table 2.1.11 Sub-Saharan Africa: Liability Flows and Macroeconomic Vulnerabilities, 1980–2017

	REER overvaluation			Output gap			Change in private credit/GDP		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Net financial flows/GDP	-0.005			-0.025			-0.000		
	(0.042)			(0.019)			(0.011)		
Liability flows/GDP		0.011			-0.018			-0.000	
		(0.043)			(0.022)			(0.011)	
Asset flows/GDP		-0.016	0.020		-0.010	-0.016		-0.021	-0.013
		(0.048)	(0.054)		(0.026)	(0.037)		(0.018)	(0.028)
FDI liability flows/GDP			0.004			-0.016			-0.009
			(0.112)			(0.056)			(0.022)
Portfolio liability flows/GDP			0.276**			0.157***			0.099**
			(0.124)			(0.031)			(0.045)
Other investment liab. flows/GDP			0.027			-0.029			0.006
			(0.047)			(0.032)			(0.015)
Trade openness	-0.018	-0.020	-0.017	0.053***	0.052***	0.055***	-0.001	-0.002	0.001
	(0.040)	(0.042)	(0.049)	(0.014)	(0.015)	(0.016)	(0.009)	(0.009)	(0.010)
Real GDP per capita (log)	0.913	0.903	0.734	3.681***	3.662***	3.766***	0.216	0.152	0.096
	(0.977)	(1.054)	(1.074)	(0.868)	(0.866)	(0.896)	(0.480)	(0.454)	(0.427)
Exchange rate regime	-2.473	-2.547	-3.193	-0.548	-0.504	-0.318	0.179	0.167	0.201
	(2.111)	(2.132)	(2.331)	(0.533)	(0.537)	(0.564)	(0.232)	(0.235)	(0.239)
Real GDP growth	0.017	0.010	0.030				0.032*	0.037**	0.037*
	(0.066)	(0.067)	(0.064)				(0.018)	(0.018)	(0.020)
Trading partner real GDP growth				0.035	0.044	0.025			
				(0.118)	(0.116)	(0.119)			
Initial credit to GDP							-0.044**	-0.047**	-0.056***
							(0.019)	(0.019)	(0.020)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,283	1,267	1,145	1,434	1,416	1,256	1,254	1,266	1,131
R-squared	0.070	0.071	0.086	0.192	0.192	0.224	0.403	0.406	0.432
Countries	42	42	40	44	44	41	44	44	40

Notes: Dependent variable is REER overvaluation (in percent) in cols. (1)-(3), output gap (in percent) in cols. (4)-(6), and change in private sector credit to GDP (in percentage points) in cols. (7)-(9). Capital flow variables are in percent of GDP. All variables are lagged one period. Initial credit to GDP ratio is lagged two periods. All regressions include a constant and country and year-fixed effects. Clustered standard errors at country level are reported in parentheses. ***,**,* denote statistical significance at the 1, 5, and 10 percent levels, respectively.

Domestic Investment

To assess the impact of capital flows on domestic investment, the following model is estimated:

$$Investment_{it} = \alpha + \beta_1 f_{it} + \sum_k \gamma_k w_{k,it} + \lambda_t + \varphi_i + e_{it}, \qquad (A2.1.7)$$

where *Investment*$_{it}$ denotes (alternatively) total, private, and public investment in percent of GDP for country *i* in time *t*; *f* represents variables capturing various types of capital flows, including total net capital flows, asset and liability flows, and sub-components of liability flows (that is, FDI, portfolio, and other investment flows)—in percent of GDP; λ denotes year effects to capture common shocks across countries; φ are country-fixed effects; and e is the random error term. In addition, several other country-specific variables (*w*) are included in equation (A2.1.7) that could affect both investment and capital flows including (log of) real GDP per capita as a proxy for institutional quality and the level of financial development, real GDP growth to proxy for the accelerator effect of economic activity on investment, the degree of trade openness, a *de facto* measure of exchange rate flexibility, and the level of external and total public debt. All regressors are lagged to mitigate potentially endogeneity concerns, and to cluster the standard errors at the country level.

Annex Table 2.1.12 Sub-Saharan Africa: Impact of Capital Flows on Total Investment, 1980–2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Net flows/GDP	0.190**	0.165**	0.179**	0.188**							
	(0.075)	(0.069)	(0.070)	(0.079)							
Asset flows/GDP					0.083	0.115	0.116	0.115	0.296***	0.290***	0.286***
					(0.224)	(0.184)	(0.184)	(0.193)	(0.075)	(0.076)	(0.085)
Liability flows/GDP					0.237***	0.181**	0.197***	0.204**			
					(0.075)	(0.071)	(0.070)	(0.077)			
FDI liability flows/GDP									0.553***	0.457***	0.474***
									(0.088)	(0.100)	(0.111)
Portfolio liability flows/GDP									0.245	0.224	0.175
									(0.158)	(0.155)	(0.142)
Other investment liability flows/GDP									0.006	0.009	0.025
									(0.083)	(0.086)	(0.079)
GDP per capita (log of)	-0.238	-0.015	0.242	0.280	-0.564	-0.105	0.264	0.285	0.669	1.063	1.701
	(3.427)	(3.613)	(3.816)	(4.263)	(3.642)	(3.707)	(3.853)	(4.286)	(3.743)	(3.852)	(4.557)
Real GDP Growth		0.212***	0.206***	0.209***		0.213***	0.215***	0.218***		0.180***	0.202***
		(0.070)	(0.074)	(0.070)		(0.068)	(0.072)	(0.069)		(0.064)	(0.070)
Trade openness/GDP		0.091**	0.101**	0.106**		0.097**	0.104**	0.109**		0.056	0.067
		(0.042)	(0.044)	(0.044)		(0.041)	(0.043)	(0.043)		(0.043)	(0.044)
Exchange rate regime		1.043	0.951	0.944		0.834	0.686	0.659		1.602	1.376
		(1.176)	(1.330)	(1.285)		(1.177)	(1.329)	(1.278)		(1.361)	(1.396)
External Debt/GDP			-0.014	-0.026			-0.007	-0.015			-0.012
			(0.016)	(0.021)			(0.017)	(0.021)			(0.022)
Public Debt/GDP				0.004				-0.001			0.007
				(0.019)				(0.019)			(0.018)
Constant	23.559	13.468	11.340	11.003	25.790	14.005	10.855	10.763	15.193	5.855	0.294
	(27.448)	(28.491)	(29.867)	(33.668)	(28.897)	(29.132)	(30.042)	(33.695)	(29.863)	(29.954)	(35.534)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,407	1,353	1,313	1,276	1,388	1,335	1,294	1,257	1,249	1,207	1,134
R-squared	0.050	0.096	0.104	0.110	0.060	0.108	0.114	0.119	0.125	0.152	0.168
Countries	43	43	42	42	43	43	42	42	40	40	40

Note: Dependent variable is total investment to GDP (in percent) from World Economic Outlook. Extreme observations (outliers) defined as those in the top and bottom percentile of the distribution for relevant variables are excluded from the sample. All regressors are lagged to mitigate endogeneity concerns. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Econometric Results

The results for sub-Saharan African countries over 1980–2017 show that both net and liability flows have a statistically strong positive association with domestic investment (Annex Table 2.1.12; columns 1-8). Specifically, a 1 percent of GDP increase in these flows is associated with about 0.2 of a percent of GDP increase in total investment. This impact, however, stems mainly from FDI—with a one percent of GDP increase in FDI being associated with a 0.5 of a percent of GDP increase in domestic investment—while there is little evidence that portfolio flows, on average, affect domestic investment (columns 9-12).

Disaggregating total investment into private and public investment, the association of net and liability flows with private investment is of about the same magnitude as with total investment (Annex Table 2.1.13). The results again suggest that FDI is significantly positively associated with private investment (columns 9-12), while for portfolio flows, the evidence is weaker. Interestingly, no financial flows of any type are found to be statistically significantly associated with public investment (Annex Table 2.1.14). It is worth noting, however, that if public consumption (in percent of GDP) is considered instead of public investment, the association with portfolio flows is positive and statistically significant (Annex Table 2.1.15).

These results are robust to a variety of specifications and estimation methods including using five-year averages of variables (instead of annual panel data) and the two-stage least squares instrumental variable strategy where

Annex Table 2.1.13 Sub-Saharan Africa: Impact of Capital Flows on Private Investment, 1980–2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Net flows/GDP	0.218***	0.212***	0.222***	0.234***							
	(0.060)	(0.059)	(0.062)	(0.069)							
Asset flows/GDP					0.213*	0.212*	0.196*	0.209*	0.298***	0.283***	0.271***
					(0.125)	(0.107)	(0.106)	(0.112)	(0.071)	(0.070)	(0.080)
Liability flows/GDP					0.246***	0.227***	0.243***	0.254***			
					(0.069)	(0.070)	(0.069)	(0.078)			
FDI liability flows/GDP									0.485***	0.509***	0.548***
									(0.084)	(0.087)	(0.098)
Portfolio liability flows/GDP									0.290*	0.243	0.199
									(0.162)	(0.145)	(0.125)
Other investment liability flows/GDP									0.060	0.067	0.077
									(0.063)	(0.061)	(0.058)
GDP per capita (log of)	0.418	0.423	0.771	1.031	0.345	0.399	0.849	1.099	0.840	0.544	1.544
	(2.845)	(3.523)	(3.579)	(3.760)	(2.956)	(3.569)	(3.602)	(3.756)	(3.074)	(3.719)	(4.031)
Real GDP Growth		0.144**	0.146**	0.161**		0.144**	0.153**	0.169***		0.129**	0.161**
		(0.056)	(0.063)	(0.061)		(0.054)	(0.060)	(0.059)		(0.050)	(0.062)
Public Investment/GDP		0.025	-0.009	0.029		0.047	0.018	0.062		0.000	0.026
		(0.121)	(0.117)	(0.118)		(0.123)	(0.120)	(0.124)		(0.140)	(0.134)
Trade openness/GDP		0.016	0.025	0.028		0.021	0.025	0.029		-0.023	-0.016
		(0.037)	(0.037)	(0.037)		(0.037)	(0.036)	(0.037)		(0.036)	(0.034)
Exchange rate regime		0.582	0.520	0.418		0.435	0.264	0.157		0.768	0.297
		(1.135)	(1.310)	(1.197)		(1.134)	(1.323)	(1.194)		(1.320)	(1.361)
External Debt/GDP			-0.003	-0.020			0.005	-0.011			-0.005
			(0.018)	(0.022)			(0.020)	(0.022)			(0.022)
Public Debt/GDP				0.013				0.011			0.018
				(0.018)				(0.017)			(0.016)
Constant	11.392	8.848	5.763	3.510	11.895	8.776	4.871	2.688	7.089	9.541	0.709
	(23.156)	(27.879)	(28.115)	(29.796)	(23.842)	(28.203)	(28.272)	(29.709)	(24.943)	(29.348)	(31.862)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,379	1,306	1,269	1,232	1,360	1,288	1,251	1,214	1,239	1,184	1,113
R-squared	0.056	0.068	0.072	0.082	0.067	0.079	0.084	0.093	0.116	0.126	0.150
Number of ifscode	43	43	42	42	43	43	42	42	40	40	40

Note: Dependent variable is private investment to GDP (in percent) from World Economic Outlook. Extreme observations (outliers) defined as those in the top and bottom percentile of the distribution for relevant variables are excluded from the sample. All regressors are lagged to mitigate endogeneity concerns. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Annex Table 2.1.14 Sub-Saharan Africa: Impact of Capital Flows on Public Investment, 1980–2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Net flows/GDP	0.017	-0.002	0.002	0.003							
	(0.032)	(0.030)	(0.026)	(0.026)							
Asset flows/GDP					-0.078	-0.054	-0.042	-0.051			
					(0.085)	(0.065)	(0.062)	(0.063)			
Liability flows/GDP					0.033	-0.003	-0.010	-0.012			
					(0.029)	(0.029)	(0.024)	(0.023)			
FDI liability flows/GDP									0.097	0.007	-0.012
									(0.060)	(0.063)	(0.059)
Portfolio liability flows/GDP									-0.048	-0.024	-0.028
									(0.065)	(0.056)	(0.052)
Other investment liability flows/GDP									-0.021	-0.031	-0.027
									(0.048)	(0.051)	(0.045)
GDP per capita (log of)	0.303	0.684	0.508	0.300	0.067	0.606	0.458	0.259	0.469	0.976	0.532
	(0.902)	(0.789)	(0.938)	(1.087)	(1.047)	(0.886)	(0.987)	(1.139)	(1.051)	(0.875)	(1.152)
Real GDP Growth		0.068*	0.061*	0.043		0.069*	0.063*	0.044		0.056	0.039
		(0.034)	(0.034)	(0.034)		(0.035)	(0.035)	(0.035)		(0.036)	(0.037)
Trade openness/GDP		0.064***	0.066***	0.063***		0.065***	0.068***	0.065***		0.067***	0.067***
		(0.019)	(0.018)	(0.020)		(0.019)	(0.018)	(0.020)		(0.022)	(0.024)
Exchange rate regime		0.189	0.186	0.190		0.161	0.174	0.162		0.416	0.528
		(0.389)	(0.434)	(0.473)		(0.404)	(0.457)	(0.504)		(0.415)	(0.501)
External Debt/GDP			-0.011	-0.001			-0.011	-0.000			-0.003
			(0.009)	(0.008)			(0.008)	(0.008)			(0.008)
Public Debt/GDP				-0.012				-0.015*			-0.013
				(0.008)				(0.008)			(0.009)
Constant	4.301	-3.498	-1.744	0.293	5.966	-2.929	-1.447	0.599	2.809	-6.203	-1.942
	(7.047)	(6.652)	(7.729)	(9.061)	(8.088)	(7.390)	(8.095)	(9.428)	(8.134)	(7.234)	(9.435)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,393	1,331	1,292	1,255	1,372	1,311	1,272	1,235	1,255	1,205	1,132
R-squared	0.031	0.123	0.133	0.131	0.045	0.135	0.146	0.146	0.054	0.152	0.164
Number of ifscode	43	43	42	42	43	43	42	42	40	40	40

Note: Dependent variable is public investment to GDP (in percent) from World Economic Outlook. Extreme observations (outliers) defined as those in the top and bottom percentile of the distribution for relevant variables are excluded from the sample. All regressors are lagged to mitigate endogeneity concerns. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Annex Table 2.1.15 Sub-Saharan Africa: Impact of Capital Flows on Public Consumption, 1980–2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Net flows/GDP	0.051	0.041	0.037	0.036							
	(0.049)	(0.036)	(0.036)	(0.036)							
Asset flows/GDP					0.022	0.047	0.044	0.040	0.028	0.023	-0.004
					(0.069)	(0.082)	(0.081)	(0.085)	(0.071)	(0.060)	(0.057)
Liability flows/GDP					0.039	0.018	0.029	0.026			
					(0.053)	(0.038)	(0.042)	(0.042)			
FDI liability flows/GDP									0.132	0.045	0.034
									(0.088)	(0.055)	(0.052)
Portfolio liability flows/GDP									0.211**	0.241**	0.222**
									(0.103)	(0.101)	(0.094)
Other investment liability flows/GDP									-0.046	-0.045	-0.055
									(0.043)	(0.036)	(0.040)
GDP per capita (log of)	-0.208	-0.131	0.290	0.124	-0.108	0.113	0.463	0.267	-0.114	0.018	0.135
	(1.404)	(1.155)	(1.080)	(1.119)	(1.416)	(1.183)	(1.102)	(1.157)	(1.312)	(1.034)	(1.085)
Real GDP Growth		-0.046	-0.036	-0.023		-0.053	-0.043	-0.030		-0.068	-0.048
		(0.053)	(0.054)	(0.052)		(0.053)	(0.053)	(0.053)		(0.057)	(0.057)
Trade openness/GDP		0.070**	0.072***	0.074**		0.066**	0.068**	0.070**		0.081***	0.091***
		(0.026)	(0.026)	(0.028)		(0.027)	(0.027)	(0.029)		(0.029)	(0.030)
Exchange rate regime		-0.259	-0.311	-0.127		-0.351	-0.374	-0.176		-0.206	-0.113
		(0.593)	(0.614)	(0.486)		(0.617)	(0.646)	(0.509)		(0.690)	(0.586)
External Debt/GDP			0.008	0.007			0.009	0.007			0.003
			(0.012)	(0.011)			(0.013)	(0.013)			(0.012)
Public Debt/GDP				-0.008				-0.006			-0.004
				(0.012)				(0.012)			(0.013)
Constant	16.942	11.864	8.092	9.326	16.247	10.538	7.245	8.686	15.242	9.416	7.670
	(11.268)	(9.998)	(9.591)	(9.763)	(11.341)	(10.092)	(9.681)	(9.988)	(10.665)	(9.189)	(9.628)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,424	1,365	1,324	1,287	1,404	1,346	1,304	1,267	1,263	1,216	1,142
R-squared	0.052	0.102	0.112	0.119	0.051	0.095	0.106	0.111	0.068	0.125	0.145
Number of ifscode	43	43	42	42	43	43	42	42	40	40	40

Note: Dependent variable is public consumption to GDP (in percent) from World Economic Outlook. Extreme observations (outliers) defined as those in the top and bottom percentile of the distribution for relevant variables are excluded from the sample. All regressors are lagged to mitigate endogeneity concerns. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Annex Table 2.1.16 Sub-Saharan Africa: Impact of Portfolio Flows on Public Expenditure, 1980–2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Government Expense			Compensation Pub. Employees			Comp. Pub. Emp. and G&S			Social Benefits		
Asset flows/GDP	0.105	0.053	0.057	0.035	0.025	0.025	0.040	0.022	0.016	0.009	0.008	0.009
	(0.089)	(0.067)	(0.058)	(0.030)	(0.023)	(0.016)	(0.058)	(0.038)	(0.030)	(0.015)	(0.014)	(0.013)
FDI liability flows/GDP	0.086	0.004	0.010	0.025	-0.008	-0.028	0.084	0.045	0.028	0.004	0.012	0.009
	(0.101)	(0.075)	(0.060)	(0.050)	(0.039)	(0.028)	(0.047)	(0.047)	(0.044)	(0.014)	(0.011)	(0.009)
Portfolio liability flows/GDP	0.249**	0.275**	0.219**	0.079***	0.082***	0.085***	0.110***	0.117**	0.127**	0.049**	0.046**	0.039**
	(0.103)	(0.114)	(0.095)	(0.025)	(0.026)	(0.029)	(0.036)	(0.047)	(0.051)	(0.018)	(0.018)	(0.019)
Other investment liability flows/GDP	-0.083*	-0.069	-0.046	-0.012	-0.012	-0.025*	-0.036	-0.032	-0.037	0.001	0.004	-0.002
	(0.047)	(0.046)	(0.041)	(0.015)	(0.017)	(0.014)	(0.026)	(0.027)	(0.025)	1.082	1.398*	1.350*
GDP per capita (log of)	-0.375	-0.100	0.900	0.042	0.155	-0.092	0.384	0.354	-0.510	(0.655)	-0.003	0.001
	(1.798)	(1.807)	(1.681)	(0.715)	(0.737)	(0.624)	(1.766)	(1.912)	(2.047)		(0.728)	(0.667)
Real GDP Growth		-0.006	0.055		0.014	0.003		-0.017	-0.021		-0.002	0.004
		(0.041)	(0.058)		(0.016)	(0.015)		(0.026)	(0.025)		(0.009)	(0.010)
Trade openness/GDP		0.063**	0.058*		0.025	0.021		0.026	0.027		-0.175	-0.124
		(0.031)	(0.034)		(0.016)	(0.015)		(0.026)	(0.027)		(0.005)	(0.004)
Exchange rate regime		-0.837	-1.028**		-0.149	0.073		-0.138	-0.001		(0.212)	(0.185)
		(0.537)	(0.493)		(0.211)	(0.232)		(0.309)	(0.378)			-0.006
External Debt/GDP			0.001			0.001			0.004			(0.006)
			(0.015)			(0.008)			(0.010)			0.011*
Public Debt/GDP			0.038			-0.005			-0.007			(0.006)
			(0.024)			(0.006)			(0.011)			-0.006
Constant	20.889	15.532	6.260	6.974	4.545	6.708	8.269	6.828	13.731	-6.842	-9.041	-9.298*
	(14.621)	(14.533)	(13.982)	(5.737)	(6.125)	(5.392)	(13.994)	(15.144)	(16.532)	(5.248)	(5.568)	(5.239)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	988	945	895	934	891	841	848	809	762	559	546	513
R-squared	0.099	0.120	0.179	0.115	0.155	0.171	0.098	0.108	0.131	0.258	0.295	0.399
Number of ifscode	41	40	40	40	39	39	39	38	38	27	27	27

Note: Dependent variable is government expense (col. 1-3), compensation of public employees (col. 4-6), compensation of public employees and purchases of goods and services (col. 7-9), and social benefits (col. 10-12), all to GDP (in percent) from World Economic Outlook. Extreme observations (outliers) defined as those in the top and bottom percentile of the distribution for relevant variables are excluded from the sample. All regressors are lagged to mitigate endogeneity concerns. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

flows to the region (in percent of regional GDP) are used as an instrument.[15] These results are also robust to using alternate variables for government current and capital expenditure from the fiscal accounts (instead of public consumption and investment data from the national accounts used above).

Disaggregating government expenditure into compensation of public employees (as well as the sum of compensation of public employees and purchases of goods/services) and social benefits shows that these current expenditures are statistically strongly (and positively) associated with portfolio inflows (Annex Table 2.1.16).[16]

Economic Growth

In addition to assessing the impact of capital flows on investment, the analysis looks at whether capital flows are associated with economic growth in sub-Saharan Africa. The available literature has produced mixed evidence on the growth effects of capital flows and capital account openness more broadly (see Barro 1991; Rodrik 1998; Quinn and Toyoda 2008). Some studies argue that the growth benefits of capital flows are conditional on the type of flow, as well as on achieving a certain degree of financial and institutional development (Borensztein 1998; Dell'Ariccia et al. 2008; Kose et al. 2011).

To determine the association between capital flows and real GDP growth for the sample of sub-Saharan African countries, the existing literature is followed, and the following model is estimated:

$$Real\ GDP\ growth_{it} = \alpha + \beta_1 X_{it} + \sum_k \gamma_k\, w_{k,it} + \lambda_t + \varphi_i + e_{it}, \qquad (A2.1.8)$$

where the left hand-side variable is the annual growth rate of real GDP (in percent), and the definition of the other variables is the same as above (except that the growth rate of trading partners and changes in the terms of trade as additional control variables are included). As before, all domestic variables are lagged in order to mitigate potential endogenous concerns and the standard errors are clustered by country.

Econometric Results

The estimation results for equation A2.1.8 suggest a significantly positive association between financial flows (both net and liability) and economic growth in sub-Saharan Africa (Annex Table 2.1.17). Similar to investment, however, this association seems to be mainly stemming from FDI, where the results suggest that a one percent of GDP increase in FDI inflows is associated with about 0.1 percentage point increase in the short-run economic growth rate. Among other factors, greater openness to trade, lower levels of public debt, and an improvement in the terms of trade matter significantly for economic growth in sub-Saharan Africa.

While the results reported here are for annual data, as per the norm in the growth literature, five-year averages are also used to assess factors affecting long-term growth. The results for capital flows (including FDI) become statistically weaker in this case, and the coefficient on the flow variables turns statistically insignificant when the full set of control variables is included in the specifications.

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[15] Using five-year period averages conveys results comparable to those obtained using annual data, but the impact of capital inflows on investment is estimated to be larger. On average, a 1 percent of GDP increase in net flows is associated with about 0.4 of a percent increase in the investment-to-GDP ratios, and a one percent of GDP increase in FDI flows is estimated to lead to an increase of about 0.9 of a percent in the investment-to-GDP ratios. This larger impact holds when considering the impact of capital inflows on private investment ratios. The five-year average results are also robust to using the (initial) value of flows at the beginning of the five-year window.

[16] Splitting the sample into pre and post global financial crisis periods, unconditional correlations show that portfolio flows are positively associated with public expenditure but not with public investment in both periods. Focusing separately on resource and nonresource intensive countries, however, the correlation between public investment and portfolio flows is positive for nonresource intensive countries.

Annex Table 2.1.17 Sub-Saharan Africa: Impact of Capital Flows on Real GDP Growth, 1980–2017

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Net flows/GDP	0.059**	0.063**	0.026	0.020							
	(0.026)	(0.030)	(0.020)	(0.021)							
Asset flows/GDP					0.017	0.031	0.037	0.039	0.031	0.034	0.034
					(0.036)	(0.043)	(0.034)	(0.032)	(0.046)	(0.054)	(0.044)
Liability flows/GDP					0.087**	0.093***	0.056**	0.045*			
					(0.033)	(0.034)	(0.023)	(0.025)			
FDI liability flows/GDP									0.112***	0.089*	0.040
									(0.040)	(0.048)	(0.043)
Portfolio liability flows/GDP									0.032	-0.101	-0.030
									(0.052)	(0.062)	(0.058)
Other investment liability flows/GDP									0.085	0.138***	0.062**
									(0.051)	(0.049)	(0.025)
Real GDP per capita (log)	-2.256**	-2.128*	-3.104***	-3.874***	-2.442***	-2.281**	-3.147***	-3.867***	-2.313***	-2.323***	-3.818***
	(1.007)	(1.060)	(0.863)	(0.713)	(0.849)	(0.859)	(0.827)	(0.697)	(0.819)	(0.800)	(0.759)
Trade openness/GDP		0.036**	0.040***	0.030**		0.031*	0.037***	0.029**		0.027	0.032**
		(0.014)	(0.013)	(0.012)		(0.016)	(0.013)	(0.012)		(0.017)	(0.014)
Trading partner real GDP growth		0.077	0.139	0.159		0.114	0.184	0.201		0.203	0.257*
		(0.130)	(0.133)	(0.133)		(0.131)	(0.133)	(0.135)		(0.145)	(0.142)
Terms of trade		0.010	0.014*	0.011*		0.011	0.014*	0.011*		0.014**	0.015**
		(0.006)	(0.008)	(0.007)		(0.006)	(0.007)	(0.006)		(0.007)	(0.007)
Exchange rate regime		0.607	0.673	0.532		0.626	0.726*	0.581		0.931*	0.724
		(0.431)	(0.404)	(0.434)		(0.440)	(0.413)	(0.441)		(0.467)	(0.465)
External Debt/GDP			-0.006	0.008			-0.006	0.008			0.008
			(0.007)	(0.009)			(0.007)	(0.009)			(0.009)
Investment/GDP			0.014	0.022			0.014	0.022			0.017
			(0.021)	(0.020)			(0.019)	(0.018)			(0.021)
Public Debt/GDP				-0.019**				-0.018**			-0.017*
				(0.009)				(0.009)			(0.009)
Constant	22.911***	18.031**	25.065***	32.113***	24.065***	19.118**	25.166***	31.830***	23.125***	19.254***	31.217***
	(8.137)	(8.699)	(7.022)	(5.888)	(6.901)	(7.199)	(6.801)	(5.842)	(6.636)	(6.626)	(6.253)
Country-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,303	1,176	1,099	1,059	1,289	1,166	1,088	1,048	1,126	1,043	962
R-squared	0.124	0.129	0.152	0.168	0.135	0.141	0.160	0.175	0.136	0.147	0.185
Countries	42	41	41	41	42	41	41	41	40	39	39

Note: Dependent variable is real GDP growth (in percent) from Penn World Tables. Extreme observations (outliers) defined as those in the top and bottom percentile of the distribution for relevant variables are excluded from the sample. All regressors except for terms of trade change (in percent) and growth of trading partners (in percent) are lagged to mitigate endogeneity concerns. Standard errors reported in parentheses are clustered by country. Constant is included in all specifications. ***,**, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

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3. The Future of Work in Sub-Saharan Africa
Annex 3.1. Stories from the Ground

This annex provides examples of innovative technologies being used on the ground in sub-Saharan Africa to solve real world problems. While the list is by no means comprehensive, it provides a flavor of how technologies can be used to improve efficiency and increase inclusion.

UjuziKilimo and ICow (Kenya): Provide support to farmers and herders by advising on crop cycle, fertilizers, seeds, poultry, milk productivity, weather, and best practices.

FarmDrive (Kenya): Connects unbanked and underserved smallholder farmers to credit, while helping financial institutions cost-effectively increase their agricultural loan portfolio.

Kytabu (Kenya): Enables teachers and students in underprivileged schools to lease textbooks on mobile devices for a day, week, month, or school term with mobile money. Gives teachers and students the opportunity to listen to audiobooks and watch videos.

Zenvus (Nigeria): Measures and analyzes soil data like temperature, nutrients, and vegetative health to help farmers apply the right fertilizer and optimally irrigate their farms.

Hello Tractor (Nigeria): Using GPS and data management technologies, connects farmers with the nearest tractor owner.

UN Food and Agriculture Organization: Has launched a mobile app that helps collect data and maps the spread of fall armyworm infestation, which has become a threat to a food security of more than 300 million people in Africa.

Emprego (Mozambique): The largest online job-board in Mozambique, it launched a phone recruitment solution for blue-collar workers.

Babyl (Rwanda): Digital healthcare provider that combines the latest technology with the knowledge and experience of the best doctors to make healthcare more accessible and affordable.

SafeMotos (Rwanda): The first and largest motorcycle ride–sharing company in Africa which aims to help riders find safe motorcycle drivers.

Zipline (Rwanda): The company delivers blood, plasma, and other medical products inside drones to clinics and hospitals.

Vula Mobile (South Africa): Medical diagnostic app that provides health workers with a tool that helps to get patients quick and efficient specialist care.

FundiBots (Uganda): The company works with schools and communities to provide hands-on, practical STEM / general science education in classrooms and communities. It uses robotics training to create and inspire a new generation of problem solvers, innovators and change-makers. Creates kits to encourage students to learn more about such subjects as mechanics and electronics.

EcoCash (Zimbabwe): Provides mobile solutions to peer-to-peer payments, ecommerce and mobile insurance.

Annex 3.2. Modeling Approach

The Fourth Industrial Revolution and the impact of automation has received a lot of attention recently in the economics literature. In a traditional production function, **technological change** can be modeled as a Hicks neutral shock that increases the productivity of both capital and labor, or as a factor-augmenting shock that increases the productivity of either capital or labor. Kotlikoff and Sachs (2012) and Nordhaus (2015) model automation as a capital-augmenting shock, whereas Bessen (2017) models it as a labor-augmenting shock. Acemoglu and Restrepo (2018) point out that such approaches may miss the potentially high substitutability of labor by the new technologies, and therefore develop a task-based model where automation leads to an expansion of the set of tasks that can be performed by machines. Berg, Buffie and Zanna (2018) also recognize that automation may substitute directly for labor, and model technological change as an increase in robot productivity where robots are treated as a separate input in the production function. They find that the more easily robots substitute for workers, the higher the increase in GDP per capita and the greater the drop in the labor share, leading to a richer economy but with more inequality.

We extend the framework in Berg, Buffie and Zanna (2018) by adding a low-income region to the model and allow for trade linkages between the two regions. The model features two regions, sub-Saharan Africa (SSA) and the rest of the world (ROW), and allows us to build intuition on how the new wave of technological progress can impact sub-Saharan Africa. The model is in discrete time and has no uncertainty.

Each region is populated by a household that lives forever and owns the three **factors of production: labor (L), capital (K) and robots (Z)**. As discussed in the chapter, the factor "robots" is to be interpreted in a general sense and is meant to include the broad range of new technologies associated with the Fourth Industrial Revolution. The household also owns the firms operating the production technology and has a financial asset, which allows it to borrow or save against the other region.

Household preferences are given by the utility function:

$$\sum \beta^t \frac{C_{i,t}^{1-\frac{1}{\tau}}}{1-\frac{1}{\tau}}$$

where $C_{i,t}$ is consumption of household i (with $i = SSA, ROW$) in period t, β is the discount factor, and τ determines the intertemporal elasticity of substitution.

Household i seeks to maximize utility given its budget constraint:

$$C_{i,t} + I^K_{i,t} + I^Z_{i,t} + (B^{-i}_{i,t+1} - B^i_{i,t+1})$$
$$= r^Z_t Z_{i,t} + r^K_t K_{i,t} + w_t L_{i,t} + (1 + r^B_t)(B^{-i}_{i,t} - B^i_{i,t}) + \pi_{i,t}$$

where $I^K_{i,t}$ and $I^Z_{i,t}$ are investment in capital and robots, and $(B^{-i}_{i,t+1} - B^i_{i,t+1})$ is the net financial asset holding for country i. Return rates to capital, robots, and financial assets are given by r^K_t, r^Z_t, and r^B_t respectively. No arbitrage across the three assets implies that the rates of net return (after accounting for depreciation) will be equalized across countries in equilibrium. Finally, $\pi_{i,t}$ represents the profits of firms operating the production technology in the country.

The rules of motion for accumulation of capital and robot stock are given by:

$$K_{t+1} = I^K_t + (1-\delta^K)K_t$$
$$Z_{t+1} = I^Z_t + (1-\delta^Z)Z_t$$

where δ^K and δ^Z are depreciation rates of capital and robot stock.

Production technology is the same in both countries. Labor and robots are combined using a CES technology to produce "tasks", and tasks are combined with capital using a Cobb-Douglas function to obtain the final output. The CES technology allows flexibility to model the **relationship between labor and robots either as complements or substitutes** through the elasticity of substitution σ in the production function:

$$Y_{i,t} = A_i K_{i,t}{}^{\alpha} \left(e L_{i,t}^{\frac{\sigma-1}{\sigma}} + (1-e)\left(b_t Z_{i,t}\right)^{\frac{\sigma-1}{\sigma}} \right)^{\frac{(1-\alpha)\sigma}{\sigma-1}}$$

Using this production function, the latest wave of technological innovation can be modelled as an **increase in the productivity of robots, b_t.** The level of total factor productivity (A_i) is the only parameter allowed to vary across regions. All remaining parameters are assumed to be the same.

The calibration strategy largely follows Berg, Buffie and Zanna (2018). For each level of the elasticity of substitution σ, we calibrate the level of total factor productivity in SSA and the labor share in the production of tasks *(e)* to match relative GDP per capita between the two regions and the robot share in income in ROW. Since total factor productivity is lower in SSA, wages will be lower in SSA in the initial steady state.

The robot revolution could help SSA grow faster than ROW if robots complement workers, but SSA would be hurt more if they turn out to be substitutes. After a doubling of robot productivity, both regions will reach a new steady state with higher GDP per capita. The **increase in GDP per capita will be higher for SSA if labor and robots are complements, but it will be lower if they are substitutes.** The intuition for this result comes from the level of wages. Because SSA has lower productivity, wages are lower. Then, if robots complement labor, SSA is particularly well positioned to take advantage of the increase in robot productivity. On the other hand, if robots substitute workers, ROW benefits more because it starts with workers that are already very expensive and uses robots more intesively in production to begin with. i.e. there is greater incentive to invest in robots (and complementary capital) in ROW when robot productivity increases as wages are high and robots easily substitute for labor.

Workers in SSA have relatively more to gain if labor and robots are complements, but less to lose if they are substitutes. The share of labor in income declines in both regions if robots substitute workers. However, the decline is larger in ROW as workers are relatively more expensive and so, companies are eager to substitute them away for robots, leading to a stronger decline in the labor share. Such incentives are weaker in SSA. When robots and labor are complements, companies will be quick to take advantage of the new technology particularly in SSA, where workers are relatively cheaper, and so the labor share will increase more.

Model Estimates for GDP per Capita
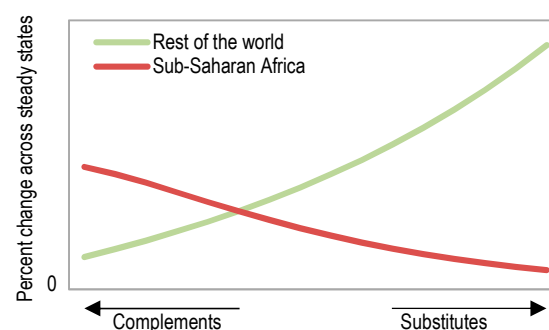
Source: IMF staff calculations.

Model Estimates for Labor Share
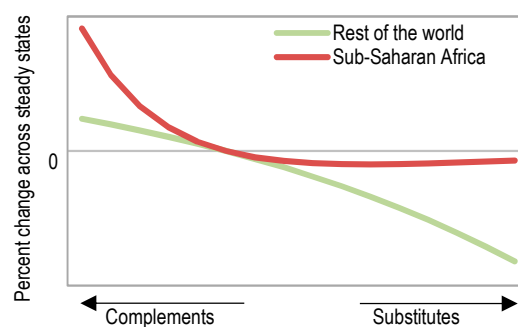
Source: IMF staff calculations.

Financial flows have the potential **to amplify the response to technological changes** during the transition. When robots and labor are substitutes,[1] the higher demand for robots in ROW is so strong that resources are channeled out of SSA, leading to a fall of GDP per capita in the short run, in addition to the decline in wages and labor share. SSA runs a current account surplus in the transition period, sending resources abroad and building foreign assets. In the final steady state, consumption in SSA is greater than output, the difference financed by interest income on the accumulated assets. But if robots and labor are complements, resources may flow into SSA and GDP per capita will grow even more rapidly than what is implied by the direct effect of higher robot productivity.

Sub-Saharan Africa's Net Foreign Assets
(Percent of initial global GDP)
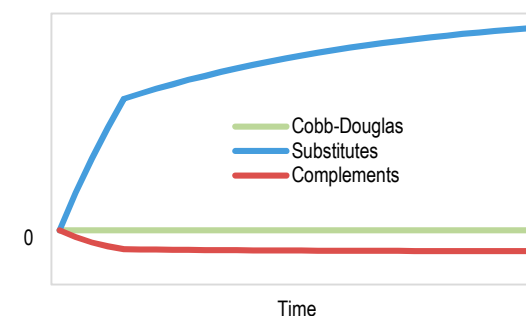
Source: IMF staff calculations.

Several caveats must be taken into account when interpreting the results of the model. First, as discussed in the introduction, how to model technological change is an open question as our understanding of the impact of new technologies is still nascent. Second, the model is very simple and therefore misses a number of features which could be of interest such as inequality within countries, unemployment, human capital, the role of government, capital market frictions, endogenous innovation, and political economy factors. Third, given the uncertainty surrounding the nature and magnitude of technological change, only qualitative results can be offered.

GDP per capita in Sub-Saharan Africa
(Percent change with respect to initial steady state)
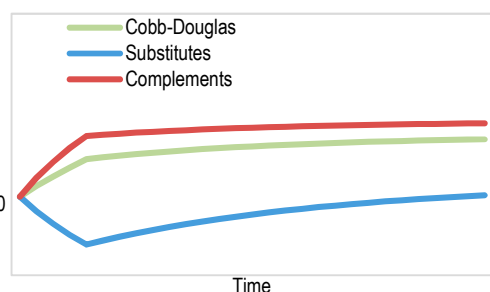
Source: IMF staff calculations.

GDP per capita in Rest of the World
(Percent change with respect to initial steady state
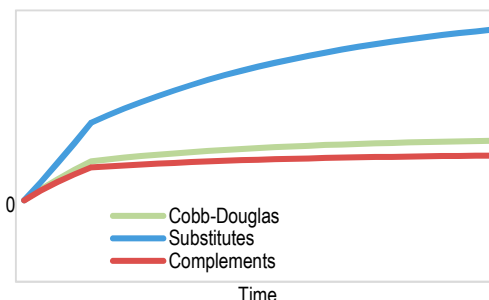
Source: IMF staff calculations.

Labor Share in Sub-Saharan Africa
(Percent change with respect to initial steady state)
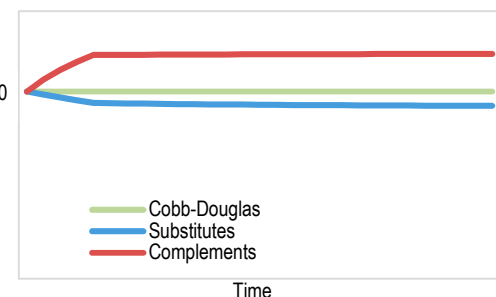
Source: IMF staff calculations.

Labor Share in Rest of the World
(Percent change with respect to initial steady state)
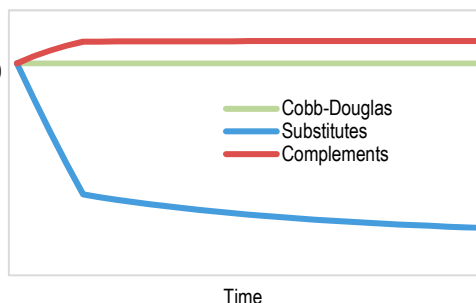
Source: IMF staff calculations.

[1] The figures show transition dynamics for economies with three different levels of elasticity of substitution between labor and robots: σ=2 for the case of substitutes, σ=1 corresponds to a Cobb-Douglas production function, and σ=0.8 for the case of complements.

Annex 3.3. Detailed Description of The Future of Work Scenarios

	Africa Arisen	Africa for Africa	Africa Adrift
This is a world where	*… the opportunities of technological change and global integration have been successfully leveraged by sub-Saharan Africa, creating an emerging vibrant middle class. However, in a gig economy, job volatility is the norm.*	*… sub-Saharan Africa had to chart its own course in a volatile global economic and political environment. Regional integration has spurred growth. With limited tax revenue, governments struggle to keep up with the continent's growing needs.*	*… policies have been thwarted by the impact of technological change and climate change, leaving sub-Saharan African economies stagnant and indebted. Disenfranchised people turn to social media to hold their governments accountable.*
	Exogenous Factors Shaping Scenarios		
Technical change	Technological change has improved the productivity of low-skilled workers and created new jobs in professional services.	Technological change has replaced workers across the skill spectrum. With lower labor costs, technological adoption has been slower in sub-Saharan Africa.	Technological change has allowed a localization and reshoring of manufacturing, rendering worthless infrastructure projects designed to make sub-Saharan Africa the world's next manufacturing hub.
Global economic integration	After initial trade frictions, the global system returned to a path of deepening integration and cooperation.	The technology shock has led to inward looking policies around the globe. Trade flows and development assistance declined sharply.	Inward looking policies in advanced economies and some emerging markets, fueled partly by technology related increase in inequality, led to inward looking policies, volatile geopolitics marked by trade wars and intellectual property disputes, and a collapse of the global trading system.
Climate change	Productivity improvements in agriculture and technological innovations offset the impacts of climate change and sub-Saharan Africa has become self-sufficient in food.	Climate change and pollution reduce sub-Saharan Africa's growth potential.	Climate change and pollution hit harder and faster than anticipated. Regular food shortages due to droughts and pests contribute to economic mass migration.

	Africa Arisen	Africa for Africa	Africa Adrift
	Political and Social Dynamics		
Politics	In some countries, strong leaders stay in power for longer, in others, regular democratic transitions.	Strong push for regional integration in the face of global disintegration; a new wave of Pan-Africanism. Large countries and existing trade blocs take the lead in deepening and broadening the Continental Free Trade Agreement.	Frequent economic crises and continued dependence on primary commodities create an "each for their own" mentality. Elites strengthen their hold on key institutions. Eventually, population demand accountability and force change. Political crises occur in some countries, but transitions are largely peaceful.
Role of the state	Initially, lean governments focus on regulation and effective bureaucracy. A growing tax base allows for an expansion of roles.	States become the drivers of growth, but a limited tax base requires prioritization. Use of technology to strengthen service delivery and revenue mobilization.	Visibly weak states. High debt and limited tax base constrain government's ability to intervene. Poor service delivery.
Government's use of techonology	Use of technology to improve service delivery and revenue mobilization.	Use of distributed ledger technology to facilitate African trade.	Use of technology to maintain security and attempt to censor the opposition.
Infrastructure	Focus on digital infrastructure to allow technology to flourish. Public and private models of provisions. Steady improvements.	Focus on regional transport infrastructure to create a 1½ billion consumers regional market.	Traditional transport infrastructure to support domestic manufacturing has become obsolete. Slow refocusing on digital infrastructure.
Civil society	Emerging middle class.	Return of the diaspora brings skills and capital.	Elites and have-nots pitched against each other. Tight class ceilings sometimes feel impenetrable. Slowly spreading use of technology to access education and break out of poverty. Social media is the critical tool to organize and eventually overcome the power of entrenched interests.

	Africa Arisen	Africa for Africa	Africa Adrift
	Future of Work		
Economic landscape	Thriving economies driven by urban centers that have become innovation hubs. Countries integrated into global value chains. Brands and fashions drive cycles. Presence of large international tech companies. Emerging large-scale technology intensive agriculture and agro-processing. Limited manufacturing activity that is largely automated. High-end tourism for global and regional clientele.	Regional integration has created a large African market that allows domestic firms to enjoy economies of scale and create regional value chains. Economic centers dominate, while the periphery lags. More self-sufficient structures. More traditional mix of agriculture, manufacturing, and services. Remittances have dwindled. Volatility is local or regional.	The development strategy via the manufacturing sector has been thwarted by the technology shock. Continued dependence on primary commodities. Consumer services tailored to the elites, including provision of private security. Remittances provide partial social safety net. High-end tourism for global elites who have benefited from technology.
World of work in 2040	Project-based world of work; a gig economy landscape. Multinationals and global value chains dominate employment opportunities. Dominant occupations include professional services, tech entrepreneurs, low-skilled services. Technology has increased the productivity of the low-skilled, including in agriculture. Little job security, given high exposure to global volatility and whims of dominant firms.	Project-based world of work. Production for the local and regional market. Less of a digital economy. Can do/must do attitude allows grassroot innovators to flourish. Large regional firms as prominent employers.	Subsistence activities dominate. Government arrears hobble businesses. Large-scale economic migration with no place to go to. Escape poverty trap by providing care services for ageing populations in other parts of the world.
Informality	Existing levels of informality proved a fertile ground for launching the gig economy. Informality is receding.	Informality remains a defining feature.	Informality is increasing further as people do not see value in government services.
Skills for success	At the top end, creativity, innovation, entrepreneurship, STEM. At the low end, basic digital literacy, emotional intelligence and stamina for routine jobs. Adaptability, mobility, continuous learning. Ability to let go of obsolete knowledge.	Entrepreneurship to develop African solutions. Vocational skills. Digital literacy to work with micro manufacturing and 3D printing. Technocratic civil service.	Endowments and connections. Owners of the new super-commodities. An "exit" ticket from education.

31

	Africa Arisen	Africa for Africa	Africa Adrift
Education	Government partners with the private sector in the design of curricula and delivery of education. Use of global and local online courses. Focus on working with technology.	Government provision of quality education. Curricula span basic digital literacy to vocational training. Use of regionally developed online courses.	Governments provide basic low-quality education within tight budgets. Elites rely on private schools. Access to global online courses and accreditation as the way out of the poverty trap.
Social policies	Countries with faster growth expand social safety nets to provide support during frequent job transitions. Introduction of portable health insurance and retirement saving schemes. Family and community networks remain important.	Within tight resource envelopes, bare bone social safety nets focused on extreme poverty. Family and community networks are the main shock absorbers.	Governments are initially focused on controlling social activity, including through censorship. As governments become more accountable, they improve social service delivery, albeit from a low basis.
Winners	Expanding middle class; large multi-national technology companies.	Entrepreneurs catering to regional demand; returning diaspora who benefited from local opportunities.	Migrants who were able to move to advanced economies; elite who maintain control over commodity monopolies.
Losers	Rentiers' (increased transparency and lower corruption in government; commodity based monopolies weakened); people outside the social safety net.	Workers stuck in rural and "old" sectors who remain poor and vulnerable.	Weak government; the common workers (all non-elite).
	Policy Challenges in 2040		
	• Facilitating high job mobility and continuous learning. • As automation increasingly substitutes humans, allocation of work and finding meaning beyond work.	• Making the sprawling megacities efficient and productive. • Reducing informality and gradually strengthening the social safety net.	• Initially, security and crime prevention are the overarching priority. • Towards the end, adjusting to the technological upheaval and catching up with the rest of the world.

Annex 3.4. Contributors to Scenario Planning Approach

The scenarios were developed in a workshop which was facilitated by Shirin Elahi (Scenarios Architecture) and Alberto Behar (IMF). The scenarios benefited greatly from insights distilled from interviews conducted with a broad range of experts, including Julius Akinyemi (MIT), Stone Atwine (Entrepreneur), Brahima Coulibaly (Brookings Institute), Stefan Dercon (University of Oxford), Shanta Devarajan (World Bank), Peter Draper (University of Adelaide), Andreas Freytag (University of Jena), Idayat Hassan (Centre for Democracy and Development), Remi Jedwab (George Washington University), Susan Lund (McKinsey Global Institute), Arthur Muliro (Society for International Development), Elizabeth Nyamayaro (UN Women), Thomas Schäfer (Volkswagen), Catarina Tully (School of International Futures).

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Statistical Appendix

Unless otherwise noted, data and projections presented in this *Regional Economic Outlook* are IMF staff estimates as of September 20, 2018, consistent with the projections underlying the October 2018 *World Economic Outlook*.

The data and projections cover 45 sub-Saharan African countries in the IMF's African Department. Data definitions follow established international statistical methodologies to the extent possible. However, in some cases, data limitations limit comparability across countries.

Country Groupings

Countries are aggregated into three (non-overlapping) groups: oil exporters, other resource-intensive countries, and non-resource-intensive countries (see country groupings table on following page).

- The oil exporters are countries where net oil exports make up 30 percent or more of total exports.

- The other resource-intensive countries are those where non-renewable natural resources represent 25 percent or more of total exports.

- The non-resource-intensive countries refer to those that are not classified as either oil exporters or other resource-intensive countries.

Countries are also aggregated into four (overlapping) groups: oil exporters, middle-income, low-income, and countries in fragile situations (see country groupings table on following page).

The membership of these groups reflects the most recent data on per capita gross national income (averaged over three years) and the World Bank, Country Policy and Institutional Assessment (CPIA) score, (averaged over three years).

- The middle-income countries had per capita gross national income in the years 2015–17 of more than US$995.00 (World Bank, using the Atlas method).

- The low-income countries had average per capita gross national income in the years 2015–17 equal to or lower than US$995.00 (World Bank, using the Atlas method).

- The countries in fragile situations had average CPIA scores of 3.2 or less in the years 2015–17 and/or had the presence of a peacekeeping or peacebuilding mission within the last three years.

- The membership of sub-Saharan African countries in the major regional cooperation bodies is shown on page 52: CFA franc zone, comprising the West African Economic and Monetary Union (WAEMU) and CEMAC; the Common Market for Eastern and Southern Africa (COMESA); the East Africa Community (EAC-5); the Economic Community of West African States (ECOWAS); the Southern African Development Community (SADC); and the Southern Africa Customs Union (SACU). EAC-5 aggregates include data for Rwanda and Burundi, which joined the group only in 2007.

Methods of Aggregation

In Tables SA1–SA3, SA6–SA7, SA13, SA15–SA16, and SA22–SA23, country group composites are calculated as the arithmetic average of data for individual countries, weighted by GDP valued at purchasing power parity as a share of total group GDP. The source of purchasing power parity weights is the World Economic Outlook (WEO) database.

In Tables SA8–SA12, SA17–SA21, and SA24–SA26, country group composites are calculated as the arithmetic average of data for individual countries, weighted by GDP in US dollars at market exchange rates as a share of total group GDP.

In Tables SA4–SA5 and SA14, country group composites are calculated as the geometric average of data for individual countries, weighted by GDP valued at purchasing power parity as a share of total group GDP. The source of purchasing power parity weights is the WEO database.

In Tables SA27–SA28, country group composites are calculated as the unweighted arithmetic average of data for individual countries.

Sub-Saharan Africa: Member Countries of Groupings

Oil exporters	Other resource-intensive countries	Non-resource-intensive countries	Middle-income countries	Low-income countries		Countries in fragile situations
Angola	Botswana	Benin	Angola	Benin	Malawi	Burundi
Cameroon	Burkina Faso	Burundi	Botswana	Burkina Faso	Mali	Central African Rep.
Chad	Central African Rep.	Cabo Verde	Cabo Verde	Burundi	Mozambique	Chad
Congo, Republic of	Congo, Dem. Rep. of	Comoros	Cameroon	Central African Rep.	Niger	Comoros
Equatorial Guinea	Ghana	Côte d'Ivoire	Congo, Republic of	Chad	Rwanda	Congo, Dem. Rep. of
Gabon	Guinea	Eritrea	Côte d'Ivoire	Comoros	Sierra Leone	Congo, Republic of
Nigeria	Liberia	Eswatini	Equatorial Guinea	Congo, Dem. Rep. of	South Sudan	Côte d'Ivoire
South Sudan	Mali	Ethiopia	Eswatini	Eritrea	Tanzania	Eritrea
	Namibia	Gambia, The	Gabon	Ethiopia	Togo	Gambia, The
	Niger	Guinea-Bissau	Ghana	Gambia, The	Uganda	Guinea
	Sierra Leone	Kenya	Kenya	Guinea	Zimbabwe	Guinea-Bissau
	South Africa	Lesotho	Lesotho	Guinea-Bissau		Liberia
	Tanzania	Madagascar	Mauritius	Liberia		Malawi
	Zambia	Malawi	Namibia	Madagascar		Mali
	Zimbabwe	Mauritius	Nigeria			São Tomé & Príncipe
		Mozambique	São Tomé & Príncipe			South Sudan
		Rwanda	Senegal			Togo
		São Tomé & Príncipe	Seychelles			Zimbabwe
		Senegal	South Africa			
		Seychelles	Zambia			
		Togo				
		Uganda				

Sub-Saharan Africa: Member Countries of Regional Groupings

The West African Economic and Monetary Union (WAEMU)	Economic and Monetary Community of Central African States (CEMAC)	Common Market for Eastern and Southern Africa (COMESA)	East Africa Community (EAC-5)	Southern African Development Community (SADC)	Southern Africa Customs Union (SACU)	Economic Community of West African States (ECOWAS)
Benin	Cameroon	Burundi	Burundi	Angola	Botswana	Benin
Burkina Faso	Central African Rep.	Comoros	Kenya	Botswana	Eswatini	Burkina Faso
Côte d'Ivoire	Chad	Congo, Dem. Rep. of	Rwanda	Congo, Dem. Rep. of	Lesotho	Cabo Verde
Guinea-Bissau	Congo, Republic of	Eritrea	Tanzania	Eswatini	Namibia	Côte d'Ivoire
Mali	Equatorial Guinea	Eswatini	Uganda	Lesotho	South Africa	Gambia, The
Niger	Gabon	Ethiopia		Madagascar		Ghana
Senegal		Kenya		Malawi		Guinea
Togo		Madagascar		Mauritius		Guinea-Bissau
		Malawi		Mozambique		Liberia
		Mauritius		Namibia		Mali
		Rwanda		Seychelles		Niger
		Seychelles		South Africa		Nigeria
		Uganda		Tanzania		Senegal
		Zambia		Zambia		Sierra Leone
		Zimbabwe		Zimbabwe		Togo

List of Country Abbreviations:

AGO	Angola	ERI	Eritrea	MLI	Mali	SWE	Eswatini
BDI	Burundi	ETH	Ethiopia	MWI	Malawi	SYC	Seychelles
BEN	Benin	GAB	Gabon	MOZ	Mozambique	TCD	Chad
BFA	Burkina Faso	GHA	Ghana	MUS	Mauritius	TGO	Togo
BWA	Botswana	GIN	Guinea	NAM	Namibia	TZA	Tanzania
CAF	Central African Rep.	GMB	Gambia, The	NER	Niger	UGA	Uganda
CIV	Côte d'Ivoire	GNB	Guinea-Bissau	NGA	Nigeria	ZAF	South Africa
CMR	Cameroon	GNQ	Equatorial Guinea	RWA	Rwanda	ZMB	Zambia
COD	Congo, Dem. Rep. of	KEN	Kenya	SEN	Senegal	ZWE	Zimbabwe
COG	Congo, Rep. of	LBR	Liberia	SLE	Sierra Leone		
COM	Comoros	LSO	Lesotho	SSD	South Sudan		
CPV	Cabo Verde	MDG	Madagascar	STP	São Tomé & Príncipe		

List of Sources and Footnotes for Appendix Tables SA1—SA28:

Tables SA1–SA3, SA6–SA19, SA21, SA24–25

Source: IMF, Common Surveillance database and IMF, World Economic Outlook database, October 2018.

[1] Fiscal year data.

[2] In constant 2009 US dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Tables SA4–SA5

Sources: IMF, World Economic Outlook database, October 2018.

[1] In constant 2009 US dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Table SA20

Source: IMF, World Economic Outlook database, October 2018.

[1] Including grants.

[2] Fiscal year data.

[3] In constant 2009 US dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Tables SA22–SA23

Source: IMF, Information Notice System.

[1] An increase indicates appreciation. Note: "..." denotes data not available.

Table SA26

Sources: IMF, Common Surveillance database, and IMF, World Economic Outlook database, October 2018

[1] As a member of the West African Economic and Monetary Union (WAEMU), see WAEMU aggregate for reserves data.

[2] As a member of the Central African Economic and Monetary Community (CEMAC), see CEMAC aggregate for reserves data.

[3] Fiscal year data.

[4] In constant 2009 US dollars. The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in US dollars. Staff estimates of US dollar values may differ from authorities' estimates.

Note: "..." denotes data not available.

Table SA27

Source: IMF, International Financial Statistics.

[1] Includes offshore banking assets. Note: "..." denotes data not available.

Table SA28

Source: IMF, International Financial Statistics.

[1] Loan-to-deposit ratio includes deposits and loans of commercial banks to the public sector.

Note: "..." denotes data not available.

List of Tables:

Table SA1. Real GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	12.5	0.9	4.9	3.5	8.5	5.0	4.8	0.9	−2.6	−2.5	−0.1	3.1
Benin	4.2	2.3	2.1	3.0	4.8	7.2	6.4	2.1	4.0	5.6	6.0	6.3
Botswana	6.0	−7.7	8.6	6.0	4.5	11.3	4.1	−1.7	4.3	2.4	4.6	3.6
Burkina Faso	5.9	3.0	8.4	6.6	6.5	5.8	4.3	3.9	5.9	6.4	5.9	6.0
Burundi	4.4	3.8	5.1	4.0	4.4	5.9	4.5	−4.0	−1.0	0.0	0.1	0.4
Cabo Verde	7.1	−1.3	1.5	4.0	1.1	0.8	0.6	1.0	3.8	3.9	4.3	4.0
Cameroon	4.1	2.2	3.4	4.1	4.5	5.4	5.9	5.7	4.6	3.5	3.8	4.4
Central African Rep.	3.3	1.7	3.0	3.3	4.1	−36.7	1.0	4.8	4.5	4.3	4.3	5.0
Chad	9.8	4.1	13.6	0.1	8.8	5.8	6.9	1.8	−6.4	−3.1	3.5	3.6
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	2.7	2.8	2.8
Congo, Dem. Rep. of	6.1	2.9	7.1	6.9	7.1	8.5	9.5	6.9	2.4	3.4	3.8	4.1
Congo, Rep. of	4.3	7.8	8.7	3.4	3.8	3.3	6.8	2.6	−2.8	−3.1	2.0	3.7
Côte d'Ivoire	1.8	3.3	2.0	−4.2	10.1	9.3	8.8	8.8	8.3	7.8	7.4	7.0
Equatorial Guinea	15.5	1.3	−8.9	6.5	8.3	−4.1	0.4	−9.1	−8.6	−3.2	−7.7	−2.6
Eritrea	−1.1	3.9	2.2	8.7	7.0	4.6	2.9	2.6	1.9	5.0	4.2	3.8
Eswatini	4.2	1.6	3.8	2.2	4.7	6.4	1.9	0.4	1.4	1.6	1.3	0.4
Ethiopia[1]	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.4	8.0	10.9	7.5	8.5
Gabon	1.3	−2.3	6.3	7.1	5.3	5.5	4.4	3.9	2.1	0.5	2.0	3.4
Gambia, The	3.3	6.5	6.5	−4.3	5.6	4.8	−0.9	5.9	0.4	4.6	5.4	5.4
Ghana	6.2	4.8	7.9	14.0	9.3	7.3	4.0	3.8	3.7	8.4	6.3	7.6
Guinea	3.7	−1.5	4.2	5.6	5.9	3.9	3.7	3.8	10.5	8.2	5.8	5.9
Guinea-Bissau	3.2	3.4	4.6	8.1	−1.7	3.3	1.0	6.1	6.3	5.9	4.5	5.0
Kenya	4.6	3.3	8.4	6.1	4.6	5.9	5.4	5.7	5.9	4.9	6.0	6.1
Lesotho	4.1	3.1	6.3	6.7	4.9	2.2	3.0	2.5	3.1	−1.6	0.8	1.2
Liberia	7.5	5.2	6.4	7.7	8.4	8.8	0.7	0.0	−1.6	2.5	3.0	4.5
Madagascar	5.8	−4.7	0.3	1.5	3.0	2.3	3.3	3.1	4.2	4.2	5.0	5.4
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	2.3	4.0	3.3	4.7
Mali	4.2	4.7	5.4	3.2	−0.8	2.3	7.1	6.2	5.8	5.4	5.1	4.8
Mauritius	4.3	3.3	4.4	4.1	3.5	3.4	3.7	3.6	3.8	3.8	3.9	4.0
Mozambique	8.1	6.4	6.7	7.1	7.2	7.1	7.4	6.6	3.8	3.7	3.5	4.0
Namibia	4.3	0.3	6.0	5.1	5.1	5.6	6.4	6.1	0.7	−0.8	1.1	3.1
Niger	5.2	−0.7	8.4	2.2	11.8	5.3	7.5	4.3	4.9	4.9	5.3	5.4
Nigeria	7.7	8.4	11.3	4.9	4.3	5.4	6.3	2.7	−1.6	0.8	1.9	2.3
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.6	8.9	6.0	6.1	7.2	7.8
São Tomé & Príncipe	6.3	2.4	6.7	4.4	3.1	4.8	6.5	3.8	4.2	3.9	4.0	4.5
Senegal	4.6	2.1	3.6	1.5	5.1	2.8	6.6	6.4	6.2	7.2	7.0	6.7
Seychelles	4.8	−1.1	5.9	5.4	3.7	6.0	4.5	4.9	4.5	5.3	3.6	3.3
Sierra Leone	5.8	3.2	5.3	6.3	15.2	20.7	4.6	−20.5	6.3	3.7	3.7	5.5
South Africa	4.8	−1.5	3.0	3.3	2.2	2.5	1.8	1.3	0.6	1.3	0.8	1.4
South Sudan	...	...	...	...	−52.4	29.3	2.9	−0.2	−13.9	−5.1	−3.2	−4.6
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	7.0	6.0	5.8	6.6
Togo	−0.0	5.5	6.1	6.4	6.5	6.1	5.9	5.7	5.1	4.4	4.7	5.0
Uganda	8.3	8.1	7.7	6.8	2.2	4.7	4.6	5.7	2.3	4.8	5.9	6.1
Zambia	7.7	9.2	10.3	5.6	7.6	5.1	4.7	2.9	3.8	3.4	3.8	4.5
Zimbabwe[2]	−7.4	7.4	15.4	16.3	13.6	5.3	2.8	1.4	0.7	3.7	3.6	4.2
Sub-Saharan Africa	**6.4**	**3.8**	**7.1**	**5.1**	**4.6**	**5.2**	**5.1**	**3.3**	**1.4**	**2.7**	**3.1**	**3.8**
Median	4.8	3.2	6.2	5.2	5.1	5.3	4.6	3.8	3.8	3.9	3.9	4.5
Excluding Nigeria and South Africa	6.5	3.6	6.3	6.0	5.9	6.3	5.8	4.5	3.5	4.4	4.6	5.4
Oil-exporting countries	**8.2**	**6.4**	**9.3**	**4.6**	**4.3**	**5.4**	**5.9**	**2.3**	**−1.7**	**0.2**	**1.6**	**2.4**
Excluding Nigeria	9.3	1.6	4.2	4.0	4.4	5.6	4.8	1.4	−2.0	−1.2	0.6	2.8
Oil-importing countries	**5.3**	**1.9**	**5.4**	**5.4**	**4.8**	**5.1**	**4.6**	**4.0**	**3.6**	**4.4**	**4.0**	**4.6**
Excluding South Africa	5.6	4.3	7.0	6.7	6.4	6.6	6.2	5.5	5.2	6.0	5.6	6.1
Middle-income countries	**6.4**	**3.4**	**7.0**	**4.5**	**4.5**	**4.6**	**4.7**	**2.6**	**0.4**	**1.8**	**2.3**	**3.0**
Excluding Nigeria and South Africa	6.7	2.4	5.3	5.1	6.8	5.5	5.1	3.4	2.7	3.1	3.8	4.9
Low-income countries	**6.3**	**5.1**	**7.4**	**7.1**	**4.7**	**7.3**	**6.6**	**5.7**	**4.4**	**5.8**	**5.4**	**6.0**
Excluding low-income countries in fragile situations	8.1	6.7	7.8	8.1	6.3	7.3	7.5	7.4	6.1	7.3	6.3	7.0
Countries in fragile situations	**3.5**	**3.3**	**6.0**	**3.6**	**3.8**	**7.4**	**6.1**	**4.0**	**2.7**	**3.8**	**4.5**	**4.7**
CFA franc zone	5.0	2.7	4.0	2.8	6.1	4.4	6.0	4.3	3.5	3.9	4.4	5.0
CEMAC	6.6	2.3	3.6	4.4	5.9	2.8	4.9	2.0	−0.3	0.3	1.7	3.2
WAEMU	3.6	2.9	4.3	1.3	6.4	5.9	7.0	6.3	6.5	6.6	6.4	6.3
COMESA (SSA members)	6.2	5.6	8.1	7.4	6.1	6.4	6.4	6.0	4.8	6.0	5.6	6.1
EAC-5	6.2	5.2	7.4	6.9	4.5	6.1	5.9	6.1	5.4	5.3	5.9	6.3
ECOWAS	6.7	6.9	9.7	5.0	5.1	5.7	6.1	3.2	0.5	2.7	3.2	3.6
SACU	4.8	−1.6	3.4	3.5	2.4	3.0	2.1	1.3	0.8	1.3	1.0	1.5
SADC	5.8	0.3	4.5	4.4	4.3	4.1	3.6	2.4	1.4	1.8	2.0	2.9

See sources and footnotes on page 37.

Table SA2. Real Non-Oil GDP Growth
(Percent)

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	9.3	7.9	7.6	8.7	8.6	9.0	8.9	−3.0	−2.5	−3.3	2.0	3.0
Benin	4.2	2.3	2.1	3.0	4.8	7.2	6.4	2.1	4.0	5.6	6.0	6.3
Botswana	6.0	−7.7	8.6	6.0	4.5	11.3	4.1	−1.7	4.3	2.4	4.6	3.6
Burkina Faso	5.9	3.0	8.4	6.6	6.5	5.8	4.3	3.9	5.9	6.4	5.9	6.0
Burundi	4.4	3.8	5.1	4.0	4.4	5.9	4.5	−4.0	−1.0	0.0	0.1	0.4
Cabo Verde	7.1	−1.3	1.5	4.0	1.1	0.8	0.6	1.0	3.8	3.9	4.3	4.0
Cameroon	4.2	3.1	4.4	4.9	4.6	5.2	5.4	4.4	5.3	5.0	4.5	4.9
Central African Rep.	3.3	1.7	3.0	3.3	4.1	−36.7	1.0	4.8	4.5	4.3	4.3	5.0
Chad	6.3	6.3	17.3	0.2	11.5	8.1	7.1	−2.9	−6.0	−0.5	1.5	2.7
Comoros	1.3	1.8	2.1	2.2	3.0	3.5	2.0	1.0	2.2	2.7	2.8	2.8
Congo, Dem. Rep. of	5.9	2.8	7.2	7.0	7.2	8.6	9.5	7.1	2.4	3.6	4.1	3.8
Congo, Rep. of	5.7	3.9	6.4	7.5	9.7	8.2	7.9	5.3	−3.2	−7.9	−5.4	1.7
Côte d'Ivoire	1.8	2.1	2.6	−4.8	12.5	9.0	9.4	8.4	7.9	8.5	7.8	7.1
Equatorial Guinea	29.0	18.2	−10.2	15.9	6.8	1.5	−0.5	−9.7	−4.2	3.7	−10.7	−0.1
Eritrea	−1.1	3.9	2.2	8.7	7.0	4.6	2.9	2.6	1.9	5.0	4.2	3.8
Eswatini	4.2	1.6	3.8	2.2	4.7	6.4	1.9	0.4	1.4	1.6	1.3	0.4
Ethiopia[1]	11.8	10.0	10.6	11.4	8.7	9.9	10.3	10.4	8.0	10.9	7.5	8.5
Gabon	5.0	−3.3	13.1	10.5	7.1	7.7	5.1	3.8	3.3	1.7	2.3	4.0
Gambia, The	3.3	6.5	6.5	−4.3	5.6	4.8	−0.9	5.9	0.4	4.6	5.4	5.4
Ghana	6.2	4.8	7.6	8.6	8.6	6.7	4.0	4.0	5.0	4.0	5.0	6.0
Guinea	3.7	−1.5	4.2	5.6	5.9	3.9	3.7	3.8	10.5	8.2	5.8	5.9
Guinea-Bissau	3.2	3.4	4.6	8.1	−1.7	3.3	1.0	6.1	6.3	5.9	4.5	5.0
Kenya	4.6	3.3	8.4	6.1	4.6	5.9	5.4	5.7	5.9	4.9	6.0	6.1
Lesotho	4.1	3.1	6.3	6.7	4.9	2.2	3.0	2.5	3.1	−1.6	0.8	1.2
Liberia	7.5	5.2	6.4	7.7	8.4	8.8	0.7	0.0	−1.6	2.5	3.0	4.5
Madagascar	5.8	−4.7	0.3	1.5	3.0	2.3	3.3	3.1	4.2	4.2	5.0	5.4
Malawi	6.1	8.3	6.9	4.9	1.9	5.2	5.7	2.9	2.3	4.0	3.3	4.7
Mali	4.2	4.7	5.4	3.2	−0.8	2.3	7.1	6.2	5.8	5.4	5.1	4.8
Mauritius	4.3	3.3	4.4	4.1	3.5	3.4	3.7	3.6	3.8	3.8	3.9	4.0
Mozambique	8.1	6.4	6.7	7.1	7.2	7.1	7.4	6.6	3.8	3.7	3.5	4.0
Namibia	4.3	0.3	6.0	5.1	5.1	5.6	6.4	6.1	0.7	−0.8	1.1	3.1
Niger	5.2	−0.7	8.4	1.3	4.2	3.2	8.9	5.7	4.5	4.6	5.7	5.0
Nigeria	10.8	10.0	12.4	5.3	5.9	8.3	7.3	3.6	−0.3	0.5	1.6	1.9
Rwanda	9.0	6.3	7.3	7.8	8.8	4.7	7.6	8.9	6.0	6.1	7.2	7.8
São Tomé & Príncipe	6.3	2.4	6.7	4.4	3.1	4.8	6.5	3.8	4.2	3.9	4.0	4.5
Senegal	4.6	2.1	3.6	1.5	5.1	2.8	6.6	6.4	6.2	7.2	7.0	6.7
Seychelles	4.8	−1.1	5.9	5.4	3.7	6.0	4.5	4.9	4.5	5.3	3.6	3.3
Sierra Leone	5.8	3.2	5.3	6.3	15.2	20.7	4.6	−20.5	6.3	3.7	3.7	5.5
South Africa	4.8	−1.5	3.0	3.3	2.2	2.5	1.8	1.3	0.6	1.3	0.8	1.4
South Sudan	...	...	...	...	−0.8	4.1	−17.5	−1.2	−10.2	−6.1	−6.3	−4.5
Tanzania	6.5	5.4	6.4	7.9	5.1	7.3	7.0	7.0	7.0	6.0	5.8	6.6
Togo	−0.0	5.5	6.1	6.4	6.5	6.1	5.9	5.7	5.1	4.4	4.7	5.0
Uganda	8.3	8.1	7.7	6.8	2.2	4.7	4.6	5.7	2.3	4.8	5.9	6.1
Zambia	7.7	9.2	10.3	5.6	7.6	5.1	4.7	2.9	3.8	3.4	3.8	4.5
Zimbabwe[2]	−7.4	7.4	15.4	16.3	13.6	5.3	2.8	1.4	0.7	3.7	3.6	4.2
Sub-Saharan Africa	**7.3**	**4.9**	**7.6**	**5.5**	**5.4**	**6.3**	**5.5**	**3.3**	**1.9**	**2.6**	**3.0**	**3.6**
Median	5.1	3.3	6.3	5.6	5.1	5.3	4.6	3.8	3.8	3.9	4.1	4.5
Excluding Nigeria and South Africa	6.6	4.9	6.8	6.7	6.6	6.7	6.0	3.9	3.7	4.2	4.5	5.3
Oil-exporting countries	**10.5**	**9.1**	**10.7**	**6.1**	**6.3**	**7.9**	**6.7**	**2.3**	**−0.6**	**0.1**	**1.4**	**2.2**
Excluding Nigeria	5.1	6.9	6.2	8.2	7.4	7.1	5.5	−0.9	−1.3	−0.9	0.8	2.9
Oil-importing countries	**5.2**	**1.9**	**5.4**	**5.0**	**4.8**	**5.0**	**4.6**	**4.0**	**3.6**	**4.2**	**4.0**	**4.5**
Excluding South Africa	5.6	4.3	7.0	6.2	6.3	6.5	6.2	5.5	5.3	5.7	5.6	6.0
Middle-income countries	**7.6**	**4.8**	**7.7**	**5.1**	**5.3**	**6.2**	**5.4**	**2.6**	**1.1**	**1.5**	**2.2**	**2.8**
Excluding Nigeria and South Africa	6.9	4.7	6.2	6.3	7.1	6.7	6.0	2.6	3.0	2.7	3.8	4.8
Low-income countries	**6.1**	**5.2**	**7.6**	**7.1**	**6.0**	**6.6**	**6.1**	**5.5**	**4.5**	**5.9**	**5.3**	**5.9**
Excluding low-income countries in fragile situations	8.1	6.7	7.8	8.1	6.0	7.3	7.6	7.5	6.1	7.3	6.3	7.0
Countries in fragile situations	**3.4**	**2.9**	**6.2**	**3.9**	**7.4**	**6.4**	**5.1**	**3.7**	**2.8**	**3.8**	**3.9**	**4.5**
CFA franc zone	6.5	4.2	4.7	4.2	6.8	5.4	6.1	3.9	3.9	4.7	4.0	5.1
CEMAC	9.7	5.9	4.9	7.6	7.1	5.1	4.8	1.1	0.8	1.8	0.4	3.4
WAEMU	3.6	2.6	4.5	1.0	6.5	5.7	7.3	6.2	6.3	6.8	6.6	6.2
COMESA (SSA members)	6.2	5.6	8.1	7.4	6.1	6.4	6.4	6.1	4.8	6.0	5.6	6.1
EAC-5	6.2	5.2	7.4	6.9	4.5	6.1	5.9	6.1	5.4	5.3	5.9	6.3
ECOWAS	8.9	8.1	10.5	4.9	6.3	7.7	6.9	3.9	1.5	2.1	2.9	3.2
SACU	4.8	−1.6	3.4	3.5	2.4	3.0	2.1	1.3	0.8	1.3	1.0	1.5
SADC	5.5	1.2	4.9	5.1	4.3	4.7	4.2	1.8	1.4	1.7	2.2	2.9

See sources and footnotes on page 37.

Table SA3. Real Per Capita GDP Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	9.3	−2.1	1.8	0.5	5.4	1.9	1.8	−2.0	−5.5	−5.3	−3.0	0.1
Benin	1.2	−0.5	−0.7	0.1	1.9	4.3	3.5	−0.6	1.2	2.9	3.3	3.6
Botswana	4.6	−8.9	7.2	3.8	2.6	9.3	2.2	−3.5	2.4	0.5	2.7	1.7
Burkina Faso	2.8	−0.1	5.2	3.5	3.3	2.7	1.3	0.9	2.9	3.4	4.4	3.2
Burundi	1.8	0.5	1.9	0.9	1.3	2.8	1.5	−6.8	−4.1	−3.1	−2.8	−2.5
Cabo Verde	6.4	−1.5	1.1	3.3	−2.0	−0.4	−0.6	−0.2	2.6	2.6	3.1	2.8
Cameroon	1.3	−0.6	0.9	1.6	2.0	2.8	3.3	3.1	2.1	1.0	1.2	1.9
Central African Rep.	1.5	−0.2	1.1	1.3	2.1	−37.9	−0.9	2.8	2.5	2.3	2.3	3.0
Chad	7.1	1.6	10.8	−2.3	6.2	3.2	4.3	−0.7	−8.7	−5.8	1.0	1.1
Comoros	−1.2	−0.8	−0.5	−0.5	0.3	0.8	−0.7	−1.6	−0.5	0.0	0.1	0.1
Congo, Dem. Rep. of	3.0	−0.1	4.0	3.8	4.0	5.3	6.3	3.8	−0.6	0.4	0.8	1.1
Congo, Rep. of	1.7	5.2	6.1	0.9	1.3	0.8	4.2	0.1	−5.2	−5.5	−0.5	1.2
Côte d'Ivoire	−0.8	0.6	−0.6	−6.6	7.3	6.5	6.0	6.1	5.6	5.1	4.7	4.3
Equatorial Guinea	12.1	−1.5	−11.5	3.6	5.3	−6.8	−2.3	−11.5	−11.0	−5.7	−10.1	−5.0
Eritrea	−3.7	1.3	−0.3	6.2	4.5	2.3	0.7	0.4	−0.2	3.0	2.2	1.9
Eswatini	3.2	0.5	2.7	1.0	3.5	5.2	0.7	−0.8	0.2	0.3	0.0	−0.9
Ethiopia[1]	9.1	8.3	8.9	9.6	7.0	8.2	8.6	8.7	6.3	9.1	5.8	6.8
Gabon	−1.5	−5.9	2.4	3.2	1.4	1.5	0.8	0.6	−0.5	−1.8	0.7	2.0
Gambia, The	0.0	3.2	3.2	−7.3	2.4	1.6	−4.0	2.7	−2.6	1.4	2.2	2.2
Ghana	3.6	2.2	5.2	11.2	6.6	4.6	1.4	1.2	1.1	5.7	3.6	4.9
Guinea	1.4	−4.1	1.5	2.9	3.2	1.3	1.1	1.3	7.8	5.6	3.2	3.3
Guinea-Bissau	1.0	1.1	3.8	5.8	−3.8	1.0	−1.2	3.8	4.0	3.6	2.3	2.7
Kenya	1.8	0.5	6.1	3.4	1.5	3.1	2.4	2.8	3.0	2.0	3.1	3.3
Lesotho	3.8	2.5	5.6	5.9	4.2	1.5	2.3	1.8	2.4	−2.2	0.1	0.5
Liberia	4.1	1.1	2.7	4.5	5.5	6.2	−1.7	−2.4	−4.1	−0.1	0.4	1.9
Madagascar	2.8	−7.4	−2.5	−1.4	0.2	−0.6	0.5	0.3	1.3	1.3	2.1	2.6
Malawi	3.5	5.3	3.9	1.9	−1.0	2.3	2.7	0.1	−0.6	1.1	0.4	1.8
Mali	0.9	1.3	2.1	0.1	−3.7	−0.7	3.7	2.8	2.4	2.1	1.7	1.5
Mauritius	3.8	3.0	4.1	3.9	3.2	3.1	3.5	3.4	3.8	3.4	3.5	3.6
Mozambique	5.0	3.4	3.7	4.1	4.2	4.2	4.5	3.7	1.0	1.0	0.8	1.3
Namibia	2.9	−1.2	4.5	3.5	3.1	3.7	4.4	4.1	−1.2	−2.6	0.2	2.2
Niger	1.5	−4.1	5.1	−0.9	8.5	2.1	4.3	1.2	1.7	1.7	2.1	2.2
Nigeria	4.9	5.5	8.3	2.1	1.5	2.6	3.5	−0.1	−4.2	−1.9	−0.8	−0.5
Rwanda	6.8	4.1	4.1	5.7	5.7	2.4	5.0	6.3	3.4	3.5	4.6	5.2
São Tomé & Príncipe	3.5	−0.5	3.7	1.6	0.4	2.2	3.9	1.3	1.7	1.5	1.7	2.2
Senegal	1.8	−0.7	0.6	−1.5	2.0	−0.2	3.5	3.3	3.2	4.1	4.0	3.7
Seychelles	3.7	−1.5	3.0	8.2	2.7	4.1	2.9	2.9	3.8	4.6	2.4	2.3
Sierra Leone	2.3	0.8	3.0	3.9	12.6	18.0	1.3	−22.2	4.0	1.4	1.5	3.3
South Africa	3.5	−2.9	1.6	1.8	0.7	1.0	0.3	−0.3	−1.0	−0.3	−0.8	−0.2
South Sudan	...	...	...	...	−54.1	25.2	−0.2	−3.1	−16.4	−7.8	−6.1	−7.5
Tanzania	3.6	2.7	3.8	5.3	2.7	5.2	4.9	4.9	4.8	3.1	3.7	4.5
Togo	−3.4	2.7	3.3	3.6	3.7	3.3	3.2	3.1	2.5	1.8	2.1	2.4
Uganda	4.7	4.5	4.2	3.4	−0.9	1.7	1.6	2.6	−0.7	1.7	2.8	3.0
Zambia	4.7	6.0	7.1	2.4	4.4	1.9	1.5	−0.2	0.6	0.3	0.7	1.4
Zimbabwe[2]	−8.1	6.4	14.4	15.2	8.4	2.4	0.2	−1.1	−1.9	1.1	1.0	1.6
Sub-Saharan Africa	**4.0**	**1.4**	**4.6**	**2.6**	**2.1**	**2.8**	**2.7**	**0.8**	**−1.0**	**0.3**	**0.7**	**1.4**
Median	3.0	0.6	3.5	3.3	2.7	2.4	2.2	1.2	1.2	1.4	1.7	2.2
Excluding Nigeria and South Africa	3.8	1.0	3.7	3.4	3.1	3.7	3.2	1.9	1.0	1.8	2.1	2.9
Oil-exporting countries	**5.3**	**3.5**	**6.4**	**1.8**	**1.5**	**2.6**	**3.0**	**−0.5**	**−4.4**	**−2.4**	**−1.1**	**−0.3**
Excluding Nigeria	6.3	−1.3	1.3	1.1	1.5	2.6	1.8	−1.4	−4.7	−3.9	−2.0	0.1
Oil-importing countries	**3.2**	**−0.1**	**3.3**	**3.2**	**2.5**	**2.9**	**2.4**	**1.8**	**1.4**	**2.2**	**1.9**	**2.4**
Excluding South Africa	2.9	1.8	4.4	4.1	3.6	4.0	3.6	3.0	2.7	3.4	3.2	3.6
Middle-income countries	**4.1**	**1.1**	**4.6**	**2.1**	**2.1**	**2.2**	**2.3**	**0.2**	**−1.9**	**−0.6**	**−0.1**	**0.6**
Excluding Nigeria and South Africa	4.0	−0.2	2.8	2.4	4.0	2.7	2.4	0.8	0.1	0.5	1.2	2.3
Low-income countries	**3.4**	**2.5**	**4.7**	**4.5**	**2.0**	**4.8**	**4.1**	**3.2**	**2.0**	**3.2**	**3.0**	**3.5**
Excluding low-income countries in fragile situations	5.1	4.0	5.2	5.6	3.8	5.0	5.2	5.1	3.8	4.8	4.1	4.7
Countries in fragile situations	**0.9**	**0.6**	**3.3**	**1.0**	**0.9**	**4.5**	**3.2**	**1.2**	**−0.0**	**1.0**	**1.7**	**1.9**
CFA franc zone	2.1	−0.2	1.1	−0.0	3.2	1.5	3.1	1.5	0.7	1.2	1.9	2.3
CEMAC	3.7	−0.5	0.8	1.6	3.0	−0.0	2.1	−0.7	−2.7	−2.2	−0.6	0.9
WAEMU	0.6	0.0	1.4	−1.6	3.4	3.0	4.0	3.3	3.5	3.7	3.7	3.4
COMESA (SSA members)	3.6	3.1	5.7	4.9	3.3	3.9	3.9	3.5	2.3	3.5	3.1	3.6
EAC-5	3.2	2.3	4.7	4.1	1.6	3.5	3.2	3.5	2.8	2.3	3.2	3.7
ECOWAS	3.9	4.1	6.8	2.2	2.3	2.9	3.3	0.4	−2.2	−0.1	0.5	0.9
SACU	3.5	−3.0	2.0	2.0	1.0	1.5	0.6	−0.3	−0.8	−0.3	−0.6	−0.0
SADC	4.0	−1.5	2.6	2.4	2.2	2.1	1.6	0.3	−0.6	−0.3	−0.1	0.9

See sources and footnotes on page 37.

Table SA4. Consumer Prices
(Annual average, percent change)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	20.9	13.7	14.5	13.5	10.3	8.8	7.3	9.2	30.7	29.8	20.5	15.8
Benin	3.9	0.4	2.2	2.7	6.7	1.0	−1.1	0.3	−0.8	0.1	2.3	2.3
Botswana	9.4	8.1	6.9	8.5	7.5	5.9	4.4	3.1	2.8	3.3	3.8	3.9
Burkina Faso	3.8	0.9	−0.6	2.8	3.8	0.5	−0.3	0.9	−0.2	0.4	2.0	2.0
Burundi	11.4	10.6	6.5	9.6	18.2	7.9	4.4	5.6	5.5	16.6	1.2	7.3
Cabo Verde	2.9	1.0	2.1	4.5	2.5	1.5	−0.2	0.1	−1.4	0.8	1.0	1.6
Cameroon	2.7	3.0	1.3	2.9	2.4	2.1	1.9	2.7	0.9	0.6	1.0	1.1
Central African Rep.	3.5	3.5	1.5	1.2	5.9	6.6	11.6	4.5	4.6	4.1	4.0	3.4
Chad	1.5	10.1	−2.1	1.9	7.7	0.2	1.7	6.8	−1.1	−0.9	2.1	2.6
Comoros	4.0	4.8	3.9	2.2	5.9	1.6	1.3	2.0	1.8	1.0	2.0	2.0
Congo, Dem. Rep. of	14.6	46.1	23.5	14.9	0.9	0.9	1.2	1.0	18.2	41.5	23.0	13.5
Congo, Rep. of	3.7	4.3	0.4	1.8	5.0	4.6	0.9	3.2	3.2	0.5	1.2	2.0
Côte d'Ivoire	3.2	1.0	1.4	4.9	1.3	2.6	0.4	1.2	0.7	0.8	1.7	2.0
Equatorial Guinea	4.4	5.7	5.3	4.8	3.4	3.2	4.3	1.7	1.4	0.7	0.9	1.4
Eritrea	16.4	33.0	11.2	3.9	6.0	6.5	10.0	9.0	9.0	9.0	9.0	9.0
Eswatini	6.9	7.4	4.5	6.1	8.9	5.6	5.7	5.0	7.8	6.2	5.0	5.3
Ethiopia	18.0	8.5	8.1	33.2	24.1	8.1	7.4	10.1	7.3	9.9	12.7	9.5
Gabon	0.9	1.9	1.4	1.3	2.7	0.5	4.5	−0.1	2.1	2.7	2.8	2.5
Gambia, The	6.2	4.6	5.0	4.8	4.6	5.2	6.3	6.8	7.2	8.0	6.2	5.3
Ghana	13.3	13.1	6.7	7.7	7.1	11.7	15.5	17.2	17.5	12.4	9.5	8.0
Guinea	25.0	4.7	15.5	21.4	15.2	11.9	9.7	8.2	8.2	8.9	8.2	8.0
Guinea-Bissau	4.2	−1.6	1.1	5.1	2.1	0.8	−1.0	1.5	1.5	1.1	2.0	2.2
Kenya	8.3	10.6	4.3	14.0	9.4	5.7	6.9	6.6	6.3	8.0	5.0	5.6
Lesotho	6.9	5.8	3.3	6.0	5.5	5.0	4.6	4.3	6.2	5.3	6.3	5.3
Liberia	9.8	7.4	7.3	8.5	6.8	7.6	9.9	7.7	8.8	12.4	21.3	24.5
Madagascar	12.5	9.0	9.2	9.5	5.7	5.8	6.1	7.4	6.7	8.3	7.8	7.2
Malawi	8.3	8.4	7.4	7.6	21.3	28.3	23.8	21.9	21.7	12.2	9.2	8.4
Mali	3.1	2.2	1.3	3.1	5.3	−0.6	0.9	1.4	−1.8	1.8	2.5	2.1
Mauritius	7.4	2.5	2.9	6.5	3.9	3.5	3.2	1.3	1.0	3.7	5.1	4.5
Mozambique	10.2	3.3	12.7	10.4	2.1	4.2	2.3	2.4	19.2	15.3	6.0	5.7
Namibia	5.4	9.5	4.9	5.0	6.7	5.6	5.3	3.4	6.7	6.1	3.5	5.8
Niger	4.0	4.3	−2.8	2.9	0.5	2.3	−0.9	1.0	0.2	2.4	3.9	2.0
Nigeria	11.6	12.5	13.7	10.8	12.2	8.5	8.0	9.0	15.7	16.5	12.4	13.5
Rwanda	10.9	10.3	2.3	5.7	6.3	4.2	1.8	2.5	5.7	4.8	3.3	5.5
São Tomé & Príncipe	20.8	17.0	13.3	14.3	10.6	8.1	7.0	5.3	5.4	5.7	6.8	5.5
Senegal	3.3	−2.2	1.2	3.4	1.4	0.7	−1.1	0.1	0.8	1.3	0.4	0.9
Seychelles	9.0	31.8	−2.4	2.6	7.1	4.3	1.4	4.0	−1.0	2.9	4.4	3.7
Sierra Leone	12.5	7.5	7.9	6.1	6.6	5.5	4.6	6.7	10.9	18.2	15.6	13.1
South Africa	5.5	7.1	4.3	5.0	5.6	5.8	6.1	4.6	6.3	5.3	4.8	5.3
South Sudan	...	...	...	...	45.1	−0.0	1.7	52.8	379.8	187.9	106.4	91.4
Tanzania	6.6	12.1	7.2	12.7	16.0	7.9	6.1	5.6	5.2	5.3	3.8	4.7
Togo	3.8	3.7	1.4	3.6	2.6	1.8	0.2	1.8	0.9	−0.7	0.4	1.2
Uganda	7.5	13.0	3.7	15.0	12.7	4.9	3.1	5.4	5.5	5.6	3.8	4.2
Zambia	13.7	13.4	8.5	8.7	6.6	7.0	7.8	10.1	17.9	6.6	8.5	8.2
Zimbabwe[1]	39.9	6.2	3.0	3.5	3.7	1.6	−0.2	−2.4	−1.6	0.9	3.9	9.6
Sub-Saharan Africa	**8.9**	**9.7**	**8.1**	**9.3**	**9.2**	**6.5**	**6.3**	**6.9**	**11.2**	**11.0**	**8.6**	**8.5**
Median	7.2	7.3	4.3	5.4	6.0	4.9	4.4	4.3	5.5	5.3	4.0	5.3
Excluding Nigeria and South Africa	9.4	9.3	6.4	10.5	9.0	5.7	5.3	6.5	10.6	10.2	8.0	7.0
Oil-exporting countries	**11.1**	**11.4**	**12.0**	**10.0**	**11.1**	**7.5**	**7.1**	**8.7**	**17.6**	**17.1**	**12.6**	**12.7**
Excluding Nigeria	9.9	8.8	7.5	7.7	8.4	5.0	4.7	7.9	22.6	18.6	13.1	10.7
Oil-importing countries	**7.6**	**8.5**	**5.4**	**8.9**	**7.8**	**5.8**	**5.7**	**5.5**	**6.9**	**7.0**	**6.1**	**5.8**
Excluding South Africa	9.2	9.5	6.1	11.4	9.2	5.9	5.5	6.1	7.2	7.9	6.7	6.1
Middle-income countries	**8.7**	**9.5**	**8.5**	**8.3**	**8.4**	**6.9**	**6.8**	**7.0**	**11.5**	**11.0**	**8.5**	**8.7**
Excluding Nigeria and South Africa	9.1	8.2	6.2	8.3	6.4	5.9	6.0	6.5	10.8	9.4	7.1	6.4
Low-income countries	**9.7**	**10.7**	**6.8**	**13.2**	**12.1**	**5.3**	**4.4**	**6.6**	**10.3**	**11.0**	**8.9**	**7.7**
Excluding low-income countries in fragile situations	9.4	8.9	5.8	16.6	14.4	6.0	4.6	5.9	6.0	6.8	6.7	6.0
Countries in fragile situations	**8.2**	**10.3**	**6.4**	**7.1**	**7.2**	**4.1**	**3.3**	**6.2**	**13.2**	**13.6**	**9.8**	**8.5**
CFA franc zone	3.1	2.6	1.1	3.2	3.2	1.7	1.2	1.8	0.6	0.9	1.6	1.8
CEMAC	2.7	4.5	1.5	2.7	3.8	2.2	2.7	2.7	1.3	0.8	1.5	1.7
WAEMU	3.4	0.8	0.8	3.6	2.7	1.3	−0.1	0.9	0.1	1.0	1.8	1.8
COMESA (SSA members)	11.4	13.0	7.3	15.4	11.3	6.1	5.8	6.7	8.4	10.3	8.8	7.7
EAC-5	7.8	11.6	5.1	13.2	12.3	6.3	5.5	5.7	5.7	6.5	4.2	5.0
ECOWAS	10.3	10.2	10.9	9.5	10.2	7.5	7.2	8.2	12.7	13.0	10.0	10.5
SACU	5.7	7.2	4.4	5.1	5.8	5.8	6.0	4.5	6.2	5.2	4.7	5.2
SADC	8.2	9.8	7.0	7.6	7.1	6.3	6.0	5.3	10.4	9.9	7.6	7.1

See sources and footnotes on page 37.

Table SA5. Consumer Prices
(End of period, percent change)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	17.3	14.0	15.3	11.4	9.0	7.7	7.5	12.1	41.1	23.7	20.0	12.0
Benin	4.1	−0.5	4.0	1.8	6.8	−1.8	−0.8	2.3	−2.7	3.0	1.7	2.8
Botswana	9.9	5.8	7.4	9.2	7.4	4.1	3.8	3.1	3.0	3.2	4.4	3.6
Burkina Faso	4.1	−1.8	−0.3	5.1	1.7	0.1	−0.1	1.3	−1.6	2.1	2.0	2.0
Burundi	12.5	4.6	4.1	14.9	11.8	9.0	3.7	7.1	9.5	10.5	5.3	9.0
Cabo Verde	3.5	−0.4	3.4	3.6	4.1	0.1	−0.4	−0.5	−0.3	0.3	1.0	1.6
Cameroon	3.1	0.9	2.6	2.7	2.5	1.7	2.6	1.5	0.3	0.8	1.0	1.1
Central African Rep.	4.7	−1.2	2.3	4.3	5.9	5.9	9.7	4.8	4.7	4.2	3.6	3.4
Chad	3.3	4.7	−2.2	10.7	2.1	0.9	3.7	4.1	−4.9	7.2	−2.3	5.4
Comoros	4.4	2.2	6.7	4.9	1.0	3.5	0.0	2.0	0.8	2.9	6.2	2.8
Congo, Dem. Rep. of	17.2	53.4	9.8	8.7	2.8	1.1	1.0	0.9	23.6	55.0	20.0	14.8
Congo, Rep. of	6.0	−1.8	2.6	1.8	7.5	2.1	0.5	4.1	−0.0	1.8	2.1	2.4
Côte d'Ivoire	3.9	−1.7	5.1	2.0	3.4	0.4	0.9	1.4	−0.2	1.1	2.0	2.0
Equatorial Guinea	4.3	5.0	5.4	4.9	2.6	4.9	2.6	1.6	2.0	−0.2	1.3	1.5
Eritrea	17.5	22.2	14.2	12.3	2.9	9.5	10.0	9.0	9.0	9.0	9.0	9.0
Eswatini	7.7	4.5	4.5	7.8	8.3	4.4	6.2	4.9	8.7	4.7	5.5	4.9
Ethiopia	19.3	7.1	14.6	35.9	15.0	7.7	7.1	10.0	6.7	13.6	10.5	8.0
Gabon	1.1	0.9	0.7	2.3	2.2	3.3	1.7	−1.2	4.1	1.1	2.8	2.5
Gambia, The	5.2	2.7	5.8	4.4	4.9	5.6	6.9	6.7	7.9	6.9	5.5	5.0
Ghana	13.7	9.5	6.9	8.4	8.1	13.5	17.0	17.7	15.4	11.8	8.0	8.0
Guinea	24.6	7.9	20.8	19.0	12.8	10.5	9.0	7.3	8.7	9.5	8.0	8.0
Guinea-Bissau	4.9	−6.4	5.7	3.4	1.6	−0.1	−0.1	2.4	1.6	−1.3	2.0	2.3
Kenya	9.0	8.0	5.8	18.9	3.2	7.1	6.0	8.0	6.3	4.5	6.9	5.0
Lesotho	7.2	3.5	3.6	7.2	5.0	5.5	2.0	7.5	4.4	4.9	7.0	5.0
Liberia	9.5	9.7	6.6	11.4	7.7	8.5	7.7	8.0	12.5	13.9	27.0	22.0
Madagascar	13.6	8.0	10.2	6.9	5.8	6.3	6.0	7.6	7.0	9.0	7.7	6.4
Malawi	11.6	7.6	6.3	9.8	34.6	23.5	24.2	24.9	20.0	7.1	9.0	7.8
Mali	3.7	1.7	1.9	5.3	2.4	0.0	1.2	1.0	−0.8	1.1	2.0	2.1
Mauritius	7.3	1.5	6.1	4.9	3.2	4.1	0.2	1.3	2.3	4.2	5.9	4.7
Mozambique	9.2	4.2	16.6	5.5	2.2	3.0	1.1	11.1	21.1	7.2	6.5	5.5
Namibia	6.1	7.9	3.1	7.4	6.4	4.9	4.6	3.7	7.3	5.2	2.9	5.8
Niger	5.3	−3.1	1.4	1.4	0.7	1.1	−0.6	2.2	−2.2	4.8	2.4	2.0
Nigeria	10.3	13.9	11.8	10.3	12.0	8.0	8.0	9.6	18.5	15.4	12.9	13.0
Rwanda	11.4	5.7	0.2	8.3	3.9	3.6	2.1	4.5	7.3	0.7	5.0	6.0
São Tomé & Príncipe	21.9	16.1	12.9	11.9	10.4	7.1	6.4	4.0	5.1	7.7	6.0	5.0
Senegal	3.8	−4.5	4.3	2.7	1.1	−0.1	−0.8	0.4	2.1	−0.7	0.8	1.7
Seychelles	16.1	−2.5	0.4	5.5	5.8	3.4	0.5	3.2	−0.2	3.5	5.2	3.8
Sierra Leone	11.8	7.5	7.4	6.6	6.2	5.4	4.6	8.4	17.4	15.3	15.0	13.0
South Africa	6.4	6.3	3.5	6.2	5.7	5.4	5.3	5.3	6.7	4.7	5.3	5.3
South Sudan	...	...	...	...	25.2	−8.8	9.9	109.9	479.7	117.7	99.4	92.7
Tanzania	7.1	12.2	5.6	19.8	12.1	5.6	4.8	6.8	5.0	4.0	4.3	5.0
Togo	4.9	0.6	3.8	1.5	2.8	−0.4	1.8	1.6	0.5	−1.6	1.5	2.0
Uganda	8.4	10.9	1.5	23.7	4.3	5.5	2.1	8.4	5.7	3.3	4.3	4.5
Zambia	13.4	9.9	7.9	7.2	7.3	7.1	7.9	21.1	7.5	6.1	8.5	8.0
Zimbabwe[1]	...	−7.7	3.2	4.9	2.9	0.3	−0.8	−2.5	−0.9	3.5	6.3	10.9
Sub-Saharan Africa	**9.0**	**9.1**	**7.7**	**10.0**	**8.1**	**6.1**	**6.0**	**8.0**	**12.5**	**10.1**	**8.8**	**8.2**
Median	7.3	4.7	5.3	6.8	5.0	4.4	3.7	4.5	5.1	4.7	5.3	5.0
Excluding Nigeria and South Africa	9.7	7.5	7.1	11.7	6.9	5.2	5.1	8.2	11.3	9.4	7.8	6.7
Oil-exporting countries	**10.0**	**12.0**	**10.8**	**9.5**	**10.4**	**6.8**	**7.1**	**9.9**	**21.0**	**15.3**	**12.8**	**12.0**
Excluding Nigeria	9.1	7.5	8.3	7.5	6.7	4.1	5.1	10.7	27.7	15.1	12.5	9.3
Oil-importing countries	**8.4**	**7.0**	**5.4**	**10.3**	**6.4**	**5.5**	**5.2**	**6.7**	**6.8**	**6.8**	**6.2**	**5.8**
Excluding South Africa	9.9	7.5	6.7	13.1	6.9	5.5	5.1	7.4	6.8	7.8	6.6	6.0
Middle-income countries	**8.6**	**9.0**	**7.9**	**8.5**	**8.0**	**6.5**	**6.5**	**7.9**	**12.9**	**9.7**	**8.9**	**8.3**
Excluding Nigeria and South Africa	9.0	6.2	7.2	8.4	5.6	5.9	5.8	8.0	11.6	7.6	7.3	5.7
Low-income countries	**10.6**	**9.2**	**6.9**	**15.7**	**8.4**	**4.4**	**4.3**	**8.5**	**11.0**	**11.3**	**8.3**	**7.7**
Excluding low-income countries in fragile situations	10.1	7.5	7.1	20.6	9.1	5.0	3.9	7.5	5.7	6.9	6.2	5.6
Countries in fragile situations	**9.3**	**8.1**	**6.1**	**6.7**	**6.7**	**2.8**	**3.9**	**8.0**	**14.6**	**14.2**	**9.3**	**8.9**
CFA franc zone	3.7	−0.0	2.8	3.5	2.9	1.2	1.2	1.6	−0.0	1.4	1.5	2.1
CEMAC	3.4	1.9	2.2	4.0	3.2	2.5	2.4	1.9	0.5	1.7	1.1	2.2
WAEMU	4.0	−1.7	3.4	3.0	2.6	0.0	0.2	1.3	−0.4	1.2	1.8	2.0
COMESA (SSA members)	12.5	10.7	7.5	17.6	7.4	6.3	5.3	8.5	7.9	10.8	8.7	7.3
EAC-5	8.4	9.9	4.4	19.6	6.6	6.1	4.5	7.5	5.9	4.0	5.3	5.0
ECOWAS	9.5	10.5	10.1	9.0	10.0	7.1	7.3	8.7	14.5	12.2	10.2	10.2
SACU	6.5	6.3	3.6	6.3	5.8	5.4	5.3	5.1	6.6	4.7	5.2	5.2
SADC	8.6	9.0	6.2	8.2	6.9	5.6	5.4	6.9	11.5	9.0	7.9	6.8

See sources and footnotes on page 37.

Table SA6. Total Investment
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	27.7	42.8	28.2	26.4	26.7	26.1	27.5	34.2	27.2	29.6	26.4	26.1
Benin	20.7	21.9	23.1	24.1	22.6	27.8	28.6	25.6	24.6	28.4	28.4	28.7
Botswana	30.3	38.9	41.4	38.6	38.8	29.4	28.2	32.6	28.6	28.1	28.3	30.0
Burkina Faso	18.5	17.9	18.0	15.4	14.9	18.7	21.5	13.8	15.8	17.5	16.3	17.0
Burundi	14.6	14.2	15.1	14.7	14.3	15.4	15.9	11.0	9.0	7.0	6.0	5.0
Cabo Verde	40.8	43.8	47.6	47.5	37.2	31.6	37.0	38.8	37.5	38.6	36.3	38.6
Cameroon	20.9	29.1	28.0	28.0	27.9	28.3	29.3	27.7	28.4	28.1	29.1	29.6
Central African Rep.	10.1	13.2	14.3	12.2	15.0	8.7	17.5	13.9	13.7	13.8	15.3	15.9
Chad	22.5	30.1	34.4	28.4	31.4	27.4	30.4	26.9	16.7	21.1	23.6	25.8
Comoros	10.7	12.4	15.4	14.9	16.8	20.4	18.5	18.4	21.0	21.4	21.6	21.8
Congo, Dem. Rep. of	11.0	13.9	13.7	10.1	14.2	16.8	22.8	20.2	11.8	12.0	12.4	14.4
Congo, Rep. of	24.4	27.9	22.2	25.7	31.0	30.6	46.5	60.7	60.9	32.4	25.3	25.4
Côte d'Ivoire	10.0	8.7	13.4	4.0	16.1	20.7	19.7	20.1	20.7	20.8	23.7	24.7
Equatorial Guinea	29.5	39.4	38.1	32.0	41.1	30.3	28.7	24.7	16.6	12.0	10.8	11.3
Eritrea	15.9	9.3	9.3	10.0	9.5	9.3	8.5	8.1	8.1	7.8	7.2	7.0
Eswatini	17.0	15.4	14.5	12.9	12.3	12.1	12.3	11.4	12.4	11.8	13.3	11.9
Ethiopia[1]	22.7	24.7	25.5	32.1	37.1	34.1	38.0	39.4	38.0	39.0	39.5	39.4
Gabon	25.4	29.1	26.1	23.8	29.1	33.3	35.9	34.8	34.2	30.4	30.4	31.1
Gambia, The	13.0	12.6	13.1	13.0	18.2	14.0	14.6	13.4	13.0	19.9	20.6	21.1
Ghana	22.2	21.4	25.9	12.8	17.0	13.3	18.8	16.7	14.5	13.6	13.8	14.7
Guinea	12.0	6.3	5.5	9.1	14.7	11.6	6.4	7.3	24.8	12.0	19.8	16.0
Guinea-Bissau	11.0	10.8	10.8	9.9	6.7	7.2	11.4	8.6	8.8	10.6	12.2	12.3
Kenya	18.9	19.3	20.7	21.7	21.5	20.1	22.4	18.1	16.2	16.7	16.8	18.5
Lesotho	22.6	27.9	26.8	25.2	31.4	30.2	30.7	28.7	27.9	24.0	25.0	30.9
Liberia	...	...	...	...	...	...	...	...	...	...	...	...
Madagascar	29.7	35.6	23.4	17.6	17.6	15.9	15.6	13.1	14.8	15.2	17.1	19.0
Malawi	19.4	24.4	22.8	12.4	12.0	12.7	12.0	12.2	10.8	13.4	11.8	13.0
Mali	22.4	22.0	24.0	19.7	17.2	17.8	20.2	20.8	22.8	22.3	19.4	19.0
Mauritius	24.4	23.8	27.1	23.9	24.4	22.0	19.7	18.1	17.9	16.9	15.8	14.9
Mozambique	15.1	14.6	18.3	25.7	47.4	54.5	55.4	45.3	38.1	39.2	40.0	66.0
Namibia	23.7	24.7	22.9	18.7	25.6	21.2	34.5	31.5	23.4	20.0	22.3	23.0
Niger	23.2	32.1	49.5	43.9	39.5	40.2	39.3	42.5	37.0	37.3	38.5	40.8
Nigeria	16.5	19.4	17.3	16.2	14.9	14.9	15.8	15.5	15.4	15.5	13.6	13.8
Rwanda	18.1	23.4	23.0	23.5	25.8	26.5	25.3	26.5	25.9	23.4	25.0	26.4
São Tomé & Príncipe	42.2	38.9	55.9	44.6	35.6	28.2	25.2	32.3	27.5	26.9	29.2	32.4
Senegal	20.5	19.3	19.1	20.2	25.0	24.7	25.9	25.3	28.5	28.5	25.9	25.5
Seychelles	28.6	27.3	36.6	35.4	38.1	38.5	37.7	33.8	30.2	28.6	28.0	30.5
Sierra Leone	10.2	10.0	31.1	41.9	27.9	12.7	13.1	13.8	12.3	19.1	18.9	18.9
South Africa	20.2	20.7	19.5	19.7	20.0	21.2	20.5	21.0	19.4	18.6	18.1	18.0
South Sudan	...	...	...	5.5	10.7	12.8	20.6	14.6	17.5	8.7	9.2	7.8
Tanzania	26.3	25.1	27.3	33.2	28.5	30.3	30.1	27.2	24.6	27.9	30.5	31.4
Togo	21.3	21.1	21.6	25.7	23.3	29.6	27.9	32.2	31.1	24.1	28.2	26.4
Uganda	29.3	27.1	26.7	28.7	28.4	27.4	25.7	24.8	24.4	25.1	27.2	28.9
Zambia	33.2	30.3	29.9	33.6	31.8	34.0	34.0	42.8	41.8	42.2	44.4	42.1
Zimbabwe[2]	...	14.7	22.4	20.3	12.0	11.5	11.9	12.6	15.6	19.4	18.7	17.9
Sub-Saharan Africa	**20.2**	**22.7**	**21.3**	**20.5**	**21.1**	**21.1**	**22.1**	**22.2**	**20.9**	**20.8**	**20.5**	**21.1**
Median	21.1	22.0	23.0	22.6	23.8	21.6	24.0	22.8	21.9	21.0	22.0	22.4
Excluding Nigeria and South Africa	22.5	25.7	24.8	23.5	25.5	24.9	26.8	26.8	24.8	24.8	25.2	26.2
Oil-exporting countries	**19.2**	**24.4**	**20.5**	**18.8**	**18.8**	**18.4**	**19.8**	**20.3**	**19.0**	**18.6**	**16.8**	**17.0**
Excluding Nigeria	25.6	36.8	29.0	25.0	28.4	27.1	29.7	32.5	28.4	26.7	25.2	25.5
Oil-importing countries	**20.9**	**21.4**	**21.9**	**21.7**	**22.8**	**23.0**	**23.9**	**23.6**	**22.2**	**22.4**	**22.9**	**23.8**
Excluding South Africa	21.4	21.9	23.4	22.9	24.5	24.1	25.8	25.0	23.7	24.3	25.2	26.4
Middle-income countries	**19.9**	**22.7**	**20.7**	**19.4**	**19.8**	**19.8**	**20.6**	**21.1**	**19.7**	**19.3**	**18.3**	**18.6**
Excluding Nigeria and South Africa	23.1	28.2	25.7	23.0	25.5	24.2	26.4	27.6	24.8	23.9	23.5	24.0
Low-income countries	**21.7**	**22.5**	**23.8**	**24.1**	**25.6**	**25.7**	**27.2**	**26.0**	**24.8**	**25.8**	**27.0**	**28.6**
Excluding low-income countries in fragile situations	23.7	24.2	26.0	30.0	31.4	31.9	33.1	31.6	29.8	31.5	32.7	35.0
Countries in fragile situations	**17.1**	**18.4**	**19.2**	**14.7**	**17.8**	**18.0**	**20.5**	**20.6**	**20.1**	**17.8**	**18.6**	**19.1**
CFA franc zone	20.3	23.9	24.8	22.1	25.8	26.2	28.0	27.6	26.3	24.7	24.7	25.3
CEMAC	23.7	30.9	29.4	27.5	31.4	29.4	32.7	32.7	30.3	25.6	25.5	26.3
WAEMU	17.3	17.4	20.6	17.1	20.5	23.2	23.8	23.1	23.2	24.0	24.2	24.6
COMESA (SSA members)	22.4	23.1	23.1	24.1	24.9	24.2	25.9	25.8	24.4	25.2	26.0	26.7
EAC-5	23.3	23.1	24.2	27.1	25.4	25.4	25.8	23.0	21.3	22.6	24.1	25.5
ECOWAS	17.0	19.0	18.4	16.2	16.1	16.1	17.2	16.8	16.9	16.9	15.9	16.1
SACU	20.7	21.5	20.5	20.4	20.9	21.5	21.2	21.8	19.9	19.0	18.7	18.7
SADC	22.3	24.9	22.5	22.5	22.8	23.6	23.9	24.8	22.0	22.3	22.2	23.1

See sources and footnotes on page 37.

Table SA7. Gross National Savings
(Percent of GDP)

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	39.1	26.3	34.8	37.9	37.2	32.0	29.8	28.5	24.5	28.6	24.3	24.2
Benin	14.0	13.6	14.9	16.8	15.1	20.4	20.0	16.6	15.2	17.3	17.7	19.8
Botswana	40.6	26.8	38.2	41.8	40.6	39.0	43.5	41.2	38.8	40.3	37.1	37.7
Burkina Faso	8.1	13.2	15.8	11.5	8.2	7.4	13.4	5.3	8.5	9.3	7.7	9.4
Burundi	1.5	9.2	3.7	1.0	–3.8	–4.3	–3.4	–6.7	–4.1	–5.3	–7.4	–7.6
Cabo Verde	31.3	29.2	35.2	31.2	24.6	26.8	27.9	35.6	35.0	32.4	27.2	28.4
Cameroon	19.5	25.9	25.5	25.2	24.6	24.8	25.3	23.9	25.2	25.5	25.9	26.6
Central African Rep.	4.6	4.1	4.1	4.6	8.5	5.4	2.7	4.2	8.2	5.4	6.4	7.5
Chad	23.0	21.9	25.9	22.6	23.6	18.2	21.5	13.3	7.5	15.5	19.4	20.3
Comoros	4.4	5.5	15.0	8.9	11.3	13.4	12.2	18.0	13.6	17.3	12.5	11.7
Congo, Dem. Rep. of	7.0	8.4	12.5	8.0	6.2	11.8	18.2	16.5	8.7	11.5	12.4	12.6
Congo, Rep. of	27.7	13.3	29.6	39.7	48.8	44.4	47.9	6.6	–12.8	19.5	34.5	37.8
Côte d'Ivoire	11.1	15.4	15.3	14.4	14.9	19.4	21.2	19.5	19.2	15.9	19.1	20.5
Equatorial Guinea	36.0	29.7	17.8	26.4	40.0	27.9	24.5	8.5	3.6	6.1	7.6	7.8
Eritrea	12.8	1.6	3.2	13.2	12.2	12.9	12.5	6.8	6.0	5.5	5.6	4.7
Eswatini	13.1	4.8	1.7	8.1	18.0	22.7	23.1	23.3	29.7	25.4	23.4	21.6
Ethiopia[1]	19.7	15.4	24.5	33.1	31.2	28.1	30.7	32.4	32.7	32.1	33.2	33.1
Gabon	41.7	33.5	41.0	47.8	47.0	40.5	43.5	29.2	24.3	25.6	28.8	30.6
Gambia, The	8.0	5.0	3.6	5.5	13.8	7.3	7.4	3.7	7.1	6.8	8.1	7.4
Ghana	14.1	16.0	17.3	3.8	5.3	1.3	9.3	9.0	7.8	9.0	9.7	10.7
Guinea	8.1	0.6	–0.9	–9.3	–5.2	–1.0	–7.0	–5.3	–6.3	5.1	–1.3	–0.4
Guinea-Bissau	7.5	5.0	–2.7	8.6	–1.7	2.6	12.0	10.5	10.1	8.6	8.7	8.2
Kenya	16.3	14.9	14.8	12.5	13.1	11.3	12.0	11.4	11.0	10.4	11.2	13.3
Lesotho	37.6	29.5	17.9	11.7	23.0	25.1	25.9	24.7	19.7	20.3	19.0	18.3
Liberia	...	...	...	...	...	...	...	...	...	...	...	...
Madagascar	16.7	14.6	13.2	10.7	10.2	10.1	15.3	11.2	15.4	14.8	14.9	15.5
Malawi	12.8	20.5	26.2	3.8	2.8	4.3	3.7	2.8	–2.8	3.9	2.5	4.9
Mali	15.6	15.6	13.3	14.7	15.0	14.9	15.4	15.4	15.5	16.5	12.1	11.1
Mauritius	22.5	15.8	14.8	13.2	18.1	18.2	16.0	15.2	15.8	16.9	6.6	3.4
Mozambique	9.4	4.4	8.1	4.4	14.9	11.5	17.2	5.0	–1.2	16.8	21.8	21.3
Namibia	30.4	23.2	19.4	15.7	19.9	17.2	23.7	19.1	9.6	16.7	16.3	15.4
Niger	13.4	6.9	24.9	18.8	22.9	23.0	23.0	21.2	20.6	22.4	21.7	21.9
Nigeria	30.6	24.1	20.8	18.8	18.7	18.6	16.0	12.3	16.0	18.2	15.7	14.8
Rwanda	6.0	6.6	6.4	4.9	7.3	10.5	10.0	7.5	6.1	12.5	12.3	13.9
São Tomé & Príncipe	14.1	14.2	33.0	16.9	13.7	13.1	3.3	19.3	21.0	18.7	22.2	22.2
Senegal	12.9	14.1	15.6	13.7	16.3	16.5	19.0	20.4	21.3	21.2	18.2	18.4
Seychelles	14.8	12.4	17.2	12.4	17.0	26.5	14.6	15.2	10.2	8.1	9.6	12.5
Sierra Leone	4.5	–1.7	9.6	–16.9	–4.0	–4.8	–7.2	–5.9	7.9	10.0	7.3	7.7
South Africa	16.0	18.0	18.0	17.5	14.8	15.4	15.4	16.4	16.6	16.1	14.9	14.5
South Sudan	...	...	...	23.3	–5.2	9.0	19.0	7.4	18.7	3.6	0.5	10.5
Tanzania	20.9	18.3	21.2	21.6	19.3	14.9	21.8	24.9	23.1	25.0	26.1	25.7
Togo	13.2	15.9	15.8	17.9	15.7	16.4	17.9	21.2	21.8	16.1	19.0	18.4
Uganda	26.6	21.4	18.8	18.8	21.7	20.3	17.6	17.7	21.5	20.6	20.3	20.0
Zambia	32.1	36.2	37.4	38.3	37.1	33.5	36.2	38.9	37.3	38.3	40.4	38.7
Zimbabwe[2]	...	5.6	21.2	22.0	6.5	5.6	7.2	8.0	19.1	23.3	20.9	19.9
Sub-Saharan Africa	**22.5**	**20.0**	**20.4**	**19.5**	**19.0**	**18.3**	**18.5**	**16.6**	**17.3**	**18.8**	**17.9**	**17.8**
Median	14.5	14.9	17.2	14.6	15.1	15.9	17.4	15.3	15.4	16.6	16.0	15.5
Excluding Nigeria and South Africa	21.4	18.4	21.4	21.0	21.2	19.3	21.5	19.4	18.2	20.2	20.2	20.7
Oil-exporting countries	**31.3**	**24.6**	**23.6**	**23.0**	**23.1**	**21.8**	**19.9**	**15.1**	**16.9**	**19.7**	**17.7**	**17.4**
Excluding Nigeria	33.0	26.0	30.8	33.1	34.0	29.6	29.7	22.3	19.0	23.4	23.2	24.4
Oil-importing countries	**16.8**	**16.7**	**18.1**	**17.0**	**16.0**	**15.7**	**17.5**	**17.7**	**17.5**	**18.2**	**17.9**	**18.1**
Excluding South Africa	17.4	15.8	18.2	16.6	16.8	15.8	18.7	18.4	18.0	19.3	19.4	19.7
Middle-income countries	**24.1**	**21.5**	**21.2**	**20.1**	**19.9**	**19.1**	**18.6**	**16.3**	**17.1**	**18.5**	**17.1**	**16.9**
Excluding Nigeria and South Africa	25.3	22.0	24.5	24.1	25.5	22.7	24.2	20.9	18.6	20.5	20.3	20.8
Low-income countries	**16.1**	**13.9**	**17.4**	**17.5**	**16.0**	**15.4**	**18.4**	**17.6**	**17.8**	**19.9**	**20.1**	**20.5**
Excluding low-income countries in fragile situations	18.5	15.6	19.7	21.6	21.6	19.4	22.5	22.4	22.4	24.3	25.2	25.3
Countries in fragile situations	**13.3**	**12.2**	**15.4**	**14.1**	**11.9**	**13.5**	**16.1**	**11.3**	**10.3**	**13.3**	**14.1**	**15.2**
CFA franc zone	19.5	19.4	20.8	22.2	24.1	22.7	24.2	17.6	15.9	18.3	19.6	20.6
CEMAC	27.5	25.2	26.5	30.2	34.0	29.4	30.4	18.0	13.9	20.3	24.0	25.3
WAEMU	12.3	14.0	15.6	14.6	14.8	16.7	18.7	17.2	17.5	16.7	16.5	17.3
COMESA (SSA members)	18.3	16.4	19.0	19.3	18.8	18.1	19.6	19.7	20.1	20.7	20.9	21.2
EAC-5	19.1	16.9	17.2	16.3	16.4	14.0	16.2	16.9	16.9	17.6	18.1	18.8
ECOWAS	25.3	21.2	19.3	16.3	16.5	16.4	15.4	12.5	15.2	16.9	15.0	14.6
SACU	17.4	18.4	18.6	18.3	16.1	16.6	17.1	17.7	17.6	17.4	16.2	15.8
SADC	20.3	19.1	21.3	20.9	19.3	18.5	19.8	19.9	18.7	20.2	19.1	18.7

Table SA8. Overall Fiscal Balance, Including Grants
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	3.6	−7.9	3.4	8.1	4.1	−0.3	−5.7	−2.9	−4.5	−6.1	−0.8	−0.2
Benin	−0.6	−3.1	−0.4	−1.3	−0.3	−1.9	−2.3	−7.6	−5.9	−5.8	-4.7	-2.4
Botswana	4.5	−13.6	−7.8	−0.1	0.9	5.6	3.7	−4.6	0.7	0.2	−3.7	−3.0
Burkina Faso	−0.8	−4.7	−4.6	−2.3	−3.1	−4.0	−2.0	−2.4	−3.5	−7.8	−5.0	−3.0
Burundi	−8.2	−5.1	−3.6	−3.5	−3.8	−1.8	−3.6	−5.3	−6.2	−7.8	−8.6	−9.1
Cabo Verde	−3.4	−5.8	−10.5	−7.7	−10.3	−9.3	−7.6	−4.6	−3.1	−3.1	−3.1	−5.9
Cameroon	7.9	−0.0	−1.0	−2.4	−1.4	−3.7	−4.2	−4.4	−6.1	−4.9	−2.6	−2.1
Central African Rep.	0.5	−0.6	−1.5	−2.4	−0.0	−6.5	−4.3	−0.6	1.6	−1.1	0.9	0.7
Chad	1.2	−9.2	−4.2	2.4	0.5	−2.1	−4.2	−4.4	−2.0	−0.2	1.3	0.5
Comoros	−1.7	0.6	7.0	1.4	3.3	17.8	−0.6	4.3	−7.4	0.6	−1.9	−2.7
Congo, Dem. Rep. of	0.1	1.0	−0.9	−0.9	2.0	2.0	0.1	−0.2	−1.0	−1.5	−0.6	−1.6
Congo, Rep. of	14.6	4.9	16.6	17.0	9.4	−3.6	−13.6	−24.8	−20.4	−7.6	9.0	10.5
Côte d'Ivoire	−1.0	−1.4	−1.8	−4.0	−3.1	−2.2	−2.2	−2.8	−3.9	−4.2	−3.8	−3.0
Equatorial Guinea	16.3	−6.5	−4.5	0.8	−7.2	−4.4	−7.5	−15.1	−10.8	−2.5	0.6	2.3
Eritrea	−17.9	−14.7	−16.9	−16.1	−15.7	−15.5	−14.8	−14.8	−14.7	−14.5	−13.2	−12.9
Eswatini	1.4	−2.9	−9.1	−3.8	3.4	0.7	−1.2	−5.2	−10.4	−8.8	−11.5	−9.5
Ethiopia[1]	−3.4	−0.9	−1.3	−1.6	−1.2	−1.9	−2.6	−1.9	−2.3	−3.3	−3.7	−3.5
Gabon	8.5	6.8	2.7	1.7	6.2	−3.1	6.0	−1.1	−4.7	−1.7	1.3	0.7
Gambia, The	−1.6	−1.6	−2.8	−3.0	−2.8	−5.6	−3.8	−5.3	−6.5	−5.4	−2.5	−0.1
Ghana	−5.2	−7.2	−10.1	−7.4	−11.3	−12.0	−10.9	−5.4	−8.9	−5.1	−6.0	−3.9
Guinea	−1.1	−4.9	−9.6	−0.9	−2.5	−3.9	−3.2	−6.9	−0.1	−2.1	−2.2	−2.2
Guinea-Bissau	−5.4	2.9	−0.2	−1.4	−2.3	−1.8	−2.6	−3.5	−5.6	−1.4	−2.6	−2.3
Kenya	−1.9	−4.3	−4.4	−4.1	−5.0	−5.7	−7.4	−8.1	−8.3	−7.9	−6.6	−5.8
Lesotho	7.6	−2.9	−3.8	−8.9	4.5	−1.7	3.1	−1.0	−6.3	−2.4	−4.0	−2.2
Liberia	0.5	−1.4	1.1	−4.3	−2.8	−6.0	−3.1	−4.4	−3.7	−5.2	−5.1	−4.9
Madagascar	−2.6	−2.5	−0.9	−2.4	−2.6	−4.0	−2.3	−3.3	−1.3	−2.4	−2.3	−4.3
Malawi	−2.3	−3.6	1.8	−4.1	−1.8	−6.4	−4.8	−6.3	−7.3	−7.3	−4.0	−2.4
Mali	3.6	−3.7	−2.6	−3.4	−1.0	−2.4	−2.9	−1.8	−3.9	−2.9	−3.3	−3.0
Mauritius	−3.6	−3.4	−3.1	−3.1	−1.8	−3.4	−3.2	−3.6	−3.5	−3.3	−3.5	−3.5
Mozambique	−2.9	−4.9	−3.8	−4.8	−3.9	−2.7	−10.7	−7.2	−6.3	−4.4	−7.1	−7.6
Namibia	1.9	−0.4	−4.9	−6.8	−3.0	−4.3	−6.1	−7.9	−8.7	−5.1	−7.6	−9.8
Niger	7.1	−5.3	−2.4	−1.5	−1.1	−2.6	−8.0	−9.1	−6.1	−5.0	−5.9	−4.5
Nigeria	4.7	−5.4	−4.2	0.4	0.2	−2.3	−2.1	−3.5	−3.9	−5.3	−5.1	−4.5
Rwanda	0.6	0.3	−0.7	−0.9	−2.5	−1.3	−4.0	−2.8	−2.3	−2.5	−2.0	−2.1
São Tomé & Príncipe	31.5	−19.3	−11.7	−12.5	−11.2	1.9	−5.3	−6.3	−4.2	−2.6	0.4	−3.7
Senegal	−2.0	−3.6	−3.9	−4.9	−4.1	−4.3	−3.9	−3.7	−3.3	−3.0	−3.5	−3.0
Seychelles	−0.7	4.8	0.5	3.4	2.9	0.4	3.7	1.9	0.2	0.4	1.0	1.1
Sierra Leone	2.2	−2.3	−5.0	−4.5	−5.2	−2.4	−3.6	−4.5	−8.5	−9.1	−9.8	−10.0
South Africa	0.1	−5.2	−5.0	−4.1	−4.4	−4.3	−4.3	−4.8	−4.1	−4.6	−4.6	−4.5
South Sudan	...	...	...	4.6	−14.8	−3.5	−9.2	−20.3	−21.3	3.7	17.7	−3.7
Tanzania	−2.5	−4.5	−4.8	−3.6	−4.1	−3.9	−3.0	−3.3	−2.2	−1.4	−2.9	−4.1
Togo	−1.5	−3.7	−2.3	−6.3	−6.5	−5.2	−6.8	−8.8	−9.6	−0.3	−3.2	−0.7
Uganda	−0.8	−2.1	−5.7	−2.7	−3.0	−4.0	−4.7	−4.6	−4.9	−3.8	−4.7	−5.9
Zambia	2.1	−2.1	−2.4	−1.8	−2.8	−6.2	−5.7	−9.3	−5.8	−7.8	−9.8	−10.9
Zimbabwe[2]	−3.5	−2.0	0.7	−0.5	0.0	−1.7	−1.4	−1.0	−8.4	−12.7	−10.8	−9.1
Sub-Saharan Africa	**1.7**	**−4.6**	**−3.5**	**−1.2**	**−1.8**	**−3.2**	**−3.7**	**−4.4**	**−4.5**	**−4.8**	**−4.2**	**−3.9**
Median	−0.7	−3.2	−2.9	−2.4	−2.5	−3.4	−3.8	−4.5	−4.9	−3.8	−3.5	−3.0
Excluding Nigeria and South Africa	1.1	−3.7	−2.0	−0.3	−1.6	−3.2	−4.6	−4.8	−5.0	−4.7	−3.6	−3.5
Oil-exporting countries	**5.3**	**−5.0**	**−2.2**	**2.2**	**0.7**	**−2.1**	**−3.2**	**−4.2**	**−4.6**	**−5.2**	**−3.3**	**−3.0**
Excluding Nigeria	6.6	−4.3	2.3	5.5	1.7	−1.8	−5.4	−5.8	−6.0	−5.0	0.1	0.3
Oil-importing countries	**−0.5**	**−4.2**	**−4.5**	**−3.8**	**−3.8**	**−4.0**	**−4.3**	**−4.6**	**−4.5**	**−4.6**	**−4.7**	**−4.5**
Excluding South Africa	−1.2	−3.4	−3.9	−3.5	−3.3	−3.9	−4.2	−4.5	−4.7	−4.6	−4.8	−4.5
Middle-income countries	**2.2**	**−4.9**	**−3.7**	**−1.1**	**−1.6**	**−3.3**	**−3.7**	**−4.5**	**−4.8**	**−5.1**	**−4.4**	**−3.9**
Excluding Nigeria and South Africa	2.6	−4.1	−1.5	0.7	−1.0	−3.5	−5.3	−5.5	−6.1	−5.4	−3.6	−3.0
Low-income countries	**−1.3**	**−3.0**	**−2.9**	**−1.9**	**−2.5**	**−2.6**	**−3.7**	**−4.1**	**−3.7**	**−3.7**	**−3.7**	**−4.0**
Excluding low-income countries in fragile situations	−1.6	−2.9	−3.4	−2.6	−2.6	−3.0	−4.0	−3.6	−3.2	−3.4	−4.0	−4.1
Countries in fragile situations	**0.4**	**−2.1**	**−0.4**	**0.1**	**−1.5**	**−2.3**	**−3.9**	**−5.2**	**−4.9**	**−4.3**	**−2.6**	**−2.9**
CFA franc zone	4.7	−1.9	−0.7	−0.3	−1.1	−3.3	−3.8	−5.7	−5.6	−3.9	−2.1	−1.4
CEMAC	9.3	−0.8	1.2	2.6	0.4	−3.6	−4.4	−7.7	−7.3	−3.6	0.5	0.9
WAEMU	−0.1	−3.0	−2.6	−3.5	−2.7	−3.0	−3.2	−4.0	−4.3	−4.2	−4.0	−3.0
COMESA (SSA members)	−1.7	−2.2	−2.7	−2.5	−2.2	−3.2	−4.0	−4.4	−4.8	−5.4	−5.2	−5.1
EAC-5	−1.9	−3.7	−4.5	−3.4	−4.2	−4.5	−5.2	−5.6	−5.5	−5.0	−5.0	−5.1
ECOWAS	2.9	−5.0	−4.4	−0.9	−1.1	−3.2	−2.8	−3.7	−4.3	−5.0	−4.9	−4.1
SACU	0.3	−5.3	−5.1	−4.0	−4.0	−3.8	−3.9	−4.8	−4.1	−4.5	−4.7	−4.6
SADC	0.3	−5.1	−3.4	−1.8	−2.1	−2.9	−4.1	−4.2	−4.0	−4.6	−4.0	−4.1

See sources and footnotes on page 37.

Table SA9. Overall Fiscal Balance, Excluding Grants
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	3.4	–7.9	3.4	8.1	4.1	–0.3	–5.7	–2.9	–4.5	–6.1	–0.9	–0.2
Benin	–2.7	–6.0	–1.8	–3.7	–2.1	–2.8	–3.2	–8.2	–6.6	–6.8	–6.1	–4.1
Botswana	3.8	–14.6	–8.2	–0.6	0.8	5.3	3.4	–4.7	0.6	–0.0	–3.8	–3.1
Burkina Faso	–10.2	–10.6	–9.0	–7.3	–8.0	–9.5	–6.1	–6.1	–6.2	–10.4	–8.8	–6.0
Burundi	–24.2	–24.0	–26.3	–25.3	–21.9	–19.2	–17.3	–14.9	–9.1	–10.6	–11.4	–11.8
Cabo Verde	–9.1	–11.4	–17.3	–10.6	–13.1	–11.9	–9.4	–7.0	–5.8	–6.7	–5.0	–7.1
Cameroon	2.1	–0.8	–1.5	–2.8	–1.8	–4.0	–4.4	–4.5	–6.4	–5.2	–2.9	–2.5
Central African Rep.	–5.5	–5.9	–7.0	–4.9	–4.9	–9.3	–15.1	–7.8	–4.4	–6.5	–6.6	–6.9
Chad	–0.7	–11.8	–5.5	0.8	–2.2	–4.3	–6.1	–7.8	–4.9	–4.4	–3.1	–2.9
Comoros	–7.8	–9.1	–7.8	–6.0	–6.0	–9.7	–9.9	–10.8	–16.3	–11.1	–12.5	–13.2
Congo, Dem. Rep. of	–1.0	–1.9	–4.4	–2.8	–0.1	0.2	–4.2	–3.4	–3.5	–3.4	–2.5	–4.0
Congo, Rep. of	14.2	4.6	16.5	16.5	9.2	–4.0	–14.1	–25.6	–21.3	–8.2	8.5	10.0
Côte d'Ivoire	–2.1	–1.9	–2.3	–4.3	–3.7	–3.5	–3.9	–4.3	–5.2	–5.4	–5.0	–4.1
Equatorial Guinea	16.3	–6.5	–4.5	0.8	–7.2	–4.4	–7.5	–15.1	–10.8	–2.5	0.6	2.3
Eritrea	–24.8	–17.3	–21.7	–19.1	–16.8	–16.8	–15.8	–15.6	–15.8	–15.5	–14.1	–13.7
Eswatini	0.8	–3.4	–9.1	–3.8	3.3	0.3	–2.8	–5.9	–11.3	–9.5	–12.3	–10.1
Ethiopia[1]	–7.5	–5.2	–4.5	–4.8	–2.9	–3.4	–3.7	–3.0	–3.2	–4.0	–4.5	–4.2
Gabon	8.5	6.8	2.7	1.7	6.2	–3.1	6.0	–1.1	–4.7	–1.7	1.3	0.7
Gambia, The	–2.6	–4.2	–5.1	–6.3	–8.5	–7.1	–6.3	–6.5	–7.6	–13.2	–11.6	–10.1
Ghana	–8.6	–10.2	–12.4	–9.5	–12.8	–12.5	–11.7	–7.3	–9.5	–5.8	–6.2	–4.1
Guinea	–1.7	–5.1	–9.9	–3.5	–4.6	–5.0	–6.3	–8.0	–1.3	–3.6	–3.5	–3.4
Guinea-Bissau	–14.2	–13.0	–9.8	–8.1	–4.7	–5.2	–12.1	–10.0	–9.6	–6.9	–7.3	–7.3
Kenya	–2.9	–5.0	–5.0	–4.6	–5.5	–6.2	–7.9	–8.5	–8.7	–8.2	–7.0	–6.2
Lesotho	6.1	–5.6	–10.4	–15.8	–3.0	–5.8	1.5	–4.0	–8.9	–4.6	–6.2	–4.3
Liberia	0.3	–6.7	–2.7	–8.0	–8.2	–12.8	–17.9	–22.2	–21.5	–21.1	–20.9	–20.4
Madagascar	–9.2	–4.2	–2.8	–4.3	–3.8	–5.3	–4.6	–4.8	–4.8	–5.3	–5.7	–7.0
Malawi	–12.3	–11.1	–8.2	–7.7	–10.6	–13.1	–8.0	–10.0	–10.3	–10.9	–6.0	–6.2
Mali	–6.2	–7.8	–5.1	–6.6	–1.2	–5.2	–5.1	–4.5	–5.5	–4.5	–4.5	–4.6
Mauritius	–3.9	–4.9	–3.8	–3.8	–2.5	–3.8	–3.3	–3.7	–4.1	–4.0	–4.2	–4.2
Mozambique	–9.7	–13.3	–12.0	–12.3	–8.9	–7.9	–15.0	–10.2	–8.4	–6.5	–9.0	–9.6
Namibia	1.8	–0.6	–5.0	–6.9	–3.1	–4.5	–6.2	–8.0	–8.7	–5.1	–7.6	–9.8
Niger	–7.6	–9.7	–7.0	–5.2	–7.2	–10.6	–13.5	–14.5	–12.2	–12.2	–13.2	–12.6
Nigeria	4.7	–5.4	–4.2	0.4	0.2	–2.3	–2.1	–3.5	–3.9	–5.3	–5.1	–4.5
Rwanda	–9.8	–11.1	–12.5	–12.3	–10.2	–10.6	–11.7	–9.0	–7.4	–7.3	–6.9	–6.1
São Tomé & Príncipe	–8.0	–34.6	–31.4	–32.0	–29.4	–11.0	–15.3	–17.8	–17.4	–12.6	–12.5	–16.1
Senegal	–3.6	–6.0	–5.9	–6.7	–6.4	–6.3	–6.5	–5.9	–5.5	–5.1	–5.6	–5.0
Seychelles	–1.8	0.8	–0.3	0.9	–1.9	–3.9	0.5	1.1	–1.1	–0.5	–0.8	–0.4
Sierra Leone	–7.5	–8.4	–10.3	–10.1	–9.0	–5.0	–7.8	–9.9	–11.5	–11.7	–11.8	–11.9
South Africa	0.1	–5.2	–5.0	–4.1	–4.4	–4.3	–4.3	–4.8	–4.1	–4.6	–4.6	–4.5
South Sudan	...	...	...	1.7	–20.9	–9.9	–15.6	–26.8	–21.4	3.6	17.7	–3.8
Tanzania	–7.2	–8.1	–8.2	–6.9	–7.0	–6.3	–4.7	–4.1	–2.9	–2.3	–3.7	–4.9
Togo	–2.5	–5.1	–4.2	–9.3	–8.9	–8.6	–9.2	–11.1	–12.4	–3.5	–7.1	–4.5
Uganda	–6.0	–4.5	–8.2	–4.4	–4.9	–5.0	–5.8	–5.9	–6.0	–4.6	–6.4	–7.1
Zambia	–5.7	–5.4	–3.9	–2.4	–4.5	–7.6	–6.5	–9.5	–6.0	–8.0	–10.4	–11.2
Zimbabwe[2]	–3.5	–2.5	0.7	–0.5	0.0	–1.7	–1.4	–1.0	–8.4	–12.7	–10.8	–9.1
Sub-Saharan Africa	**0.4**	**–5.6**	**–4.3**	**–1.9**	**–2.5**	**–3.8**	**–4.4**	**–5.0**	**–5.1**	**–5.4**	**–4.8**	**–4.5**
Median	–3.5	–5.9	–5.3	–4.8	–4.7	–5.2	–6.3	–7.3	–6.6	–5.8	–6.1	–5.0
Excluding Nigeria and South Africa	–1.9	–5.9	–4.0	–2.0	–3.1	–4.6	–6.1	–6.2	–6.1	–5.7	–4.7	–4.6
Oil-exporting countries	**4.9**	**–5.1**	**–2.3**	**2.0**	**0.6**	**–2.3**	**–3.3**	**–4.4**	**–4.7**	**–5.3**	**–3.4**	**–3.1**
Excluding Nigeria	5.3	–4.6	2.2	5.1	1.2	–2.3	–5.9	–6.4	–6.3	–5.3	–0.2	–0.0
Oil-importing countries	**–2.3**	**–5.8**	**–5.8**	**–4.9**	**–4.9**	**–5.1**	**–5.4**	**–5.6**	**–5.4**	**–5.4**	**–5.6**	**–5.4**
Excluding South Africa	–4.9	–6.4	–6.6	–5.8	–5.3	–5.8	–6.2	–6.2	–6.1	–5.9	–6.2	–5.9
Middle-income countries	**1.7**	**–5.2**	**–3.9**	**–1.2**	**–1.8**	**–3.4**	**–3.9**	**–4.7**	**–5.0**	**–5.3**	**–4.5**	**–4.1**
Excluding Nigeria and South Africa	0.9	–5.1	–2.2	0.1	–1.6	–4.0	–5.8	–6.0	–6.6	–5.9	–4.1	–3.5
Low-income countries	**–6.3**	**–7.1**	**–6.7**	**–5.2**	**–5.5**	**–5.6**	**–6.6**	**–6.5**	**–5.5**	**–5.5**	**–5.6**	**–5.9**
Excluding low-income countries in fragile situations	–7.4	–7.5	–7.5	–6.6	–5.7	–5.9	–6.2	–5.4	–4.6	–4.8	–5.6	–5.6
Countries in fragile situations	**–2.8**	**–4.7**	**–3.0**	**–2.1**	**–3.8**	**–4.8**	**–7.0**	**–8.2**	**–7.2**	**–6.4**	**–4.6**	**–5.0**
CFA franc zone	1.3	–3.7	–1.9	–1.6	–2.4	–4.9	–5.4	–7.3	–7.1	–5.5	–3.8	–3.0
CEMAC	6.8	–1.5	0.7	2.1	–0.2	–4.1	–5.0	–8.4	–8.0	–4.4	–0.3	0.1
WAEMU	–4.4	–5.7	–4.7	–5.8	–4.8	–5.8	–5.8	–6.3	–6.4	–6.3	–6.2	–5.2
COMESA (SSA members)	–5.3	–5.1	–5.5	–4.6	–4.0	–4.9	–5.7	–5.8	–6.0	–6.4	–6.3	–6.3
EAC-5	–5.6	–6.6	–7.5	–6.2	–6.4	–6.5	–6.9	–6.9	–6.4	–5.8	–6.0	–6.1
ECOWAS	1.8	–5.8	–5.0	–1.5	–1.6	–3.7	–3.3	–4.3	–4.9	–5.7	–5.6	–4.7
SACU	0.3	–5.4	–5.2	–4.1	–4.1	–3.9	–3.9	–4.9	–4.1	–4.5	–4.7	–4.6
SADC	–0.5	–5.9	–4.1	–2.3	–2.7	–3.4	–4.7	–4.6	–4.4	–5.0	–4.4	–4.5

See sources and footnotes on page 37.

Table SA10. Government Revenue, Excluding Grants
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	39.0	37.1	42.8	45.5	41.3	36.7	30.7	24.1	17.5	16.9	18.7	19.5
Benin	16.6	17.2	17.5	16.4	17.4	17.6	16.3	16.7	14.7	17.6	17.6	17.1
Botswana	41.5	36.8	33.8	35.8	36.6	37.3	38.1	31.1	33.1	31.5	28.8	28.5
Burkina Faso	13.1	13.6	15.3	15.7	15.7	18.9	17.4	17.0	18.4	19.0	19.7	20.5
Burundi	13.9	13.9	14.5	16.9	15.6	14.0	14.4	12.3	12.1	11.2	11.0	10.9
Cabo Verde	22.7	22.1	21.8	22.7	21.6	21.9	21.1	24.4	24.2	25.2	27.7	26.7
Cameroon	16.6	15.0	14.4	15.8	15.9	16.0	16.4	16.4	14.5	14.6	15.1	15.3
Central African Rep.	9.4	10.8	11.6	10.8	11.5	5.6	4.9	7.1	8.2	8.3	9.2	9.5
Chad	14.1	12.3	18.9	23.2	21.7	18.5	15.8	10.5	9.6	10.8	12.0	12.0
Comoros	14.1	13.9	14.3	16.1	19.3	15.5	14.5	16.5	14.5	16.8	17.7	16.9
Congo, Dem. Rep. of	8.6	10.7	12.1	11.8	14.4	12.9	14.3	13.6	9.3	8.5	9.2	9.9
Congo, Rep. of	42.2	29.9	41.1	45.9	49.0	50.2	47.6	31.8	33.2	27.9	34.7	34.8
Côte d'Ivoire	17.5	18.0	17.7	14.0	18.6	18.4	17.1	18.5	18.0	18.1	18.1	18.1
Equatorial Guinea	33.7	33.4	26.6	28.3	28.0	24.9	24.1	26.6	16.9	17.0	17.3	17.3
Eritrea	22.3	13.3	13.3	14.8	14.2	14.1	14.1	14.0	13.8	13.7	14.2	14.1
Eswatini	30.2	29.4	21.1	20.7	29.8	28.3	28.8	27.1	24.7	27.5	25.0	23.8
Ethiopia[1]	13.9	11.9	14.0	13.4	13.8	14.4	15.0	14.0	15.0	14.2	13.2	12.9
Gabon	28.7	29.4	25.8	23.5	30.2	31.6	29.7	21.1	17.1	16.4	18.5	19.1
Gambia, The	9.5	9.8	8.7	10.4	10.5	10.7	12.2	12.8	12.3	11.4	12.7	13.8
Ghana	13.6	13.4	14.4	17.1	17.0	16.3	17.7	17.6	16.6	16.7	17.3	17.6
Guinea	9.5	11.1	10.6	12.5	15.5	13.7	13.8	13.7	14.6	13.8	14.5	15.4
Guinea-Bissau	9.4	9.1	10.8	10.1	9.1	8.0	12.6	13.7	12.1	12.8	13.7	14.8
Kenya	18.7	18.1	19.2	19.0	18.7	19.2	19.3	18.7	18.3	17.9	18.4	18.6
Lesotho	48.0	54.7	40.5	39.6	50.6	48.2	48.1	44.2	38.4	40.8	39.3	38.7
Liberia	15.1	16.9	21.9	21.4	22.1	20.3	14.5	14.0	14.0	13.6	13.6	14.3
Madagascar	11.7	9.9	11.2	9.7	9.6	9.6	10.1	10.4	11.2	11.8	12.2	12.5
Malawi	16.4	19.4	21.8	18.4	18.3	21.6	21.8	21.1	20.8	21.8	21.9	21.7
Mali	15.0	15.1	15.2	14.0	14.4	14.5	14.9	16.4	16.7	18.4	19.1	18.4
Mauritius	17.8	19.9	20.6	20.2	20.4	20.6	20.2	20.7	20.4	22.1	21.7	21.7
Mozambique	12.7	15.6	17.9	19.8	21.9	26.2	27.5	25.0	24.1	26.5	23.8	23.4
Namibia	28.5	30.6	27.8	29.8	30.6	30.9	33.5	33.4	30.3	31.3	30.2	28.5
Niger	13.7	14.3	13.6	14.2	15.3	16.6	17.6	18.0	14.4	14.2	15.4	15.9
Nigeria	20.9	10.1	12.4	17.7	14.3	11.0	10.5	7.6	5.6	6.2	8.5	8.4
Rwanda	12.7	12.4	12.8	13.9	15.5	16.2	16.5	18.4	18.4	18.1	18.5	18.0
São Tomé & Príncipe	33.2	17.4	18.5	20.2	16.8	20.6	15.1	16.7	14.4	13.8	14.7	13.4
Senegal	16.4	14.9	15.6	16.5	16.4	15.7	16.6	17.1	18.6	17.2	17.3	17.5
Seychelles	36.5	32.9	34.2	37.2	36.7	33.8	34.3	33.4	36.6	35.6	38.1	35.6
Sierra Leone	8.8	9.1	9.9	11.4	11.3	10.7	9.8	10.8	11.9	12.5	12.9	12.8
South Africa	27.5	26.5	26.4	26.8	26.9	27.3	27.6	28.1	28.6	28.3	29.0	29.5
South Sudan	...	...	...	22.7	10.8	15.4	20.8	14.6	33.7	41.6	46.2	38.1
Tanzania	10.8	12.1	12.0	12.3	12.7	13.1	13.3	13.7	14.7	15.0	15.0	15.2
Togo	15.1	14.9	16.7	16.2	17.8	18.1	18.3	19.5	18.8	18.3	20.5	19.7
Uganda	12.2	10.8	10.6	12.8	11.6	11.6	12.3	13.5	13.9	14.2	14.4	14.9
Zambia	15.2	13.3	14.2	17.1	17.0	16.2	18.1	18.6	18.0	17.4	17.2	16.1
Zimbabwe[2]	6.2	11.2	21.8	24.2	24.9	24.6	23.8	24.3	21.7	21.9	25.2	25.2
Sub-Saharan Africa	**23.0**	**19.0**	**20.4**	**22.8**	**21.5**	**19.8**	**18.9**	**17.2**	**16.3**	**17.0**	**18.1**	**18.0**
Median	15.2	14.9	16.2	17.1	17.4	17.6	17.1	17.1	16.9	17.0	17.6	17.5
Excluding Nigeria and South Africa	20.9	19.8	21.6	23.4	23.2	22.1	21.1	18.9	17.2	17.1	17.7	17.8
Oil-exporting countries	**24.5**	**16.5**	**18.9**	**23.9**	**20.9**	**17.6**	**16.0**	**11.8**	**9.2**	**10.1**	**12.1**	**11.8**
Excluding Nigeria	31.6	29.9	33.5	35.3	34.0	31.2	27.7	21.9	17.4	17.0	19.0	19.2
Oil-importing countries	**22.0**	**20.7**	**21.4**	**21.9**	**21.9**	**21.7**	**21.7**	**21.7**	**21.2**	**21.2**	**21.6**	**21.6**
Excluding South Africa	16.2	15.7	16.5	17.0	17.7	17.6	17.9	17.7	17.2	17.2	17.3	17.3
Middle-income countries	**25.0**	**20.4**	**21.6**	**24.3**	**22.9**	**20.8**	**19.7**	**17.7**	**16.7**	**17.5**	**18.9**	**18.7**
Excluding Nigeria and South Africa	26.2	24.8	26.3	28.5	28.4	26.5	25.0	21.7	19.0	18.6	19.4	19.6
Low-income countries	**12.2**	**12.6**	**14.2**	**15.3**	**15.2**	**15.4**	**15.6**	**15.3**	**15.0**	**15.2**	**15.5**	**15.5**
Excluding low-income countries in fragile situations	12.7	12.7	13.5	14.1	14.6	15.4	15.3	15.5	15.6	15.8	15.4	15.4
Countries in fragile situations	**15.5**	**15.0**	**18.1**	**18.9**	**19.2**	**18.7**	**18.5**	**16.5**	**15.7**	**15.7**	**17.2**	**17.1**
CFA franc zone	20.4	19.2	19.9	20.5	21.9	21.4	20.5	18.5	17.0	17.0	18.0	18.1
CEMAC	24.7	22.5	23.4	25.3	26.5	25.6	24.2	19.6	16.4	16.1	17.9	18.1
WAEMU	15.9	15.9	16.2	15.0	16.9	17.1	16.7	17.6	17.4	17.7	18.1	18.1
COMESA (SSA members)	14.9	14.3	15.8	16.2	16.5	16.4	16.7	16.7	16.0	15.8	16.0	16.0
EAC-5	14.5	14.3	14.7	15.2	15.2	15.5	15.8	16.1	16.4	16.3	16.7	16.9
ECOWAS	19.1	11.5	13.2	17.2	14.9	12.4	11.9	9.8	8.8	9.7	11.6	11.4
SACU	28.2	27.2	26.7	27.2	27.6	28.0	28.4	28.5	28.9	28.6	29.1	29.4
SADC	26.7	25.6	26.7	27.9	27.7	27.0	26.1	24.7	23.4	23.2	24.1	24.4

See sources and footnotes on page 37.

Table SA11. Government Expenditure
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	35.5	45.0	39.4	37.4	37.2	37.0	36.5	27.1	22.0	23.0	19.5	19.7
Benin	19.4	23.2	19.2	20.1	19.5	20.4	19.4	24.9	21.3	24.4	23.7	21.3
Botswana	37.6	51.4	42.0	36.4	35.8	32.0	34.7	35.8	32.5	31.5	32.6	31.7
Burkina Faso	23.3	24.2	24.4	23.0	25.5	28.4	23.5	23.1	24.5	29.4	28.4	26.5
Burundi	38.1	38.0	40.8	42.2	37.5	33.2	31.8	27.2	21.2	21.8	22.3	22.7
Cabo Verde	31.8	33.4	39.2	33.3	34.7	33.8	30.5	31.4	30.1	31.9	32.6	33.8
Cameroon	14.5	15.7	16.0	18.6	17.8	20.0	20.8	20.9	20.9	19.8	18.0	17.8
Central African Rep.	14.9	16.6	18.6	15.7	16.4	14.9	20.0	14.9	12.6	14.8	15.7	16.4
Chad	14.8	24.1	24.4	22.4	23.9	22.8	22.0	18.3	14.5	15.2	15.1	15.0
Comoros	21.9	23.0	22.1	22.1	25.3	25.2	24.3	27.4	30.8	27.9	30.2	30.1
Congo, Dem. Rep. of	9.6	12.6	16.5	14.6	14.5	12.7	18.5	17.0	12.7	11.9	11.7	13.9
Congo, Rep. of	28.0	25.3	24.6	29.5	39.7	54.3	61.7	57.4	54.5	36.1	26.2	24.8
Côte d'Ivoire	19.6	19.9	20.0	18.2	22.3	21.9	21.0	22.8	23.3	23.4	23.0	22.2
Equatorial Guinea	17.4	39.8	31.2	27.5	35.2	29.3	31.6	41.6	27.8	19.6	16.6	15.0
Eritrea	47.1	30.6	35.1	33.9	31.0	30.8	30.0	29.6	29.6	29.2	28.3	27.9
Eswatini	29.4	32.9	30.2	24.5	26.5	28.0	31.6	33.0	36.0	37.0	37.3	34.0
Ethiopia[1]	21.5	17.1	18.5	18.2	16.6	17.8	17.5	17.3	18.2	18.2	17.7	17.1
Gabon	20.2	22.6	23.1	21.7	23.9	34.7	23.8	22.3	21.8	18.1	17.2	18.4
Gambia, The	12.1	14.0	13.8	16.7	19.0	17.8	18.5	19.4	19.9	24.6	24.4	23.9
Ghana	22.1	23.6	26.8	26.6	29.8	28.7	29.4	25.0	26.1	22.6	23.6	21.7
Guinea	11.2	16.2	20.5	16.0	20.0	18.6	20.2	21.7	16.0	17.5	18.0	18.8
Guinea-Bissau	23.6	22.1	20.5	18.2	13.8	13.2	24.7	23.6	21.7	19.7	21.0	22.0
Kenya	21.6	23.1	24.2	23.6	24.2	25.4	27.2	27.2	27.0	26.2	25.4	24.8
Lesotho	41.9	60.4	51.0	55.4	53.6	54.0	46.7	48.2	47.3	45.4	45.5	43.0
Liberia	14.2	23.6	24.6	29.4	30.2	33.0	32.3	36.2	35.5	34.7	34.5	34.7
Madagascar	20.9	14.1	14.0	14.1	13.4	14.9	14.7	15.1	16.0	17.1	18.0	19.6
Malawi	28.6	30.5	30.0	26.1	28.9	34.7	29.8	31.1	31.1	32.7	27.9	27.9
Mali	21.2	22.8	20.3	20.6	15.5	19.7	20.0	20.9	22.3	22.9	23.6	23.0
Mauritius	21.7	24.8	24.4	24.1	22.8	24.4	23.5	24.4	24.5	26.1	25.9	25.9
Mozambique	22.5	28.9	29.9	32.2	30.8	34.1	42.5	35.2	32.5	33.0	32.8	33.0
Namibia	26.7	31.2	32.7	36.8	33.8	35.5	39.8	41.4	39.0	36.4	37.8	38.3
Niger	21.3	23.9	20.6	19.4	22.5	27.2	31.1	32.5	26.6	26.5	28.5	28.5
Nigeria	16.2	15.5	16.6	17.4	14.1	13.4	12.7	11.1	9.5	11.5	13.7	12.9
Rwanda	22.5	23.5	25.3	26.2	25.7	26.8	28.3	27.4	25.8	25.4	25.4	24.1
São Tomé & Príncipe	41.2	51.9	49.9	52.2	46.2	31.5	30.4	34.5	31.8	26.4	27.2	29.5
Senegal	20.0	20.9	21.6	23.1	22.8	22.0	23.1	23.0	24.0	22.3	22.9	22.4
Seychelles	38.3	32.1	34.6	36.3	38.6	37.8	33.8	32.4	37.7	36.1	38.9	36.0
Sierra Leone	16.4	17.5	20.2	21.5	20.3	15.7	17.6	20.7	23.3	24.2	24.7	24.7
South Africa	27.4	31.7	31.4	30.9	31.4	31.6	31.9	32.9	32.7	32.9	33.6	34.0
South Sudan	...	...	...	21.0	31.6	25.3	36.4	41.3	55.1	38.0	28.5	41.8
Tanzania	18.0	20.2	20.2	19.1	19.8	19.4	17.9	17.8	17.7	17.3	18.8	20.1
Togo	17.7	20.0	20.9	25.5	26.7	26.7	27.5	30.7	31.2	21.8	27.6	24.3
Uganda	18.1	15.3	18.8	17.2	16.6	16.7	18.2	19.4	19.9	18.8	20.9	22.0
Zambia	21.0	17.8	18.1	19.5	21.5	23.8	24.6	28.1	24.0	25.3	27.6	27.4
Zimbabwe[2]	9.7	13.7	21.2	24.7	24.8	26.2	25.2	25.3	30.2	34.6	36.0	34.3
Sub-Saharan Africa	**22.6**	**24.5**	**24.7**	**24.7**	**24.0**	**23.6**	**23.4**	**22.2**	**21.4**	**22.4**	**22.9**	**22.5**
Median	21.4	23.4	23.7	23.1	24.8	26.2	25.2	27.1	24.5	24.6	25.4	24.3
Excluding Nigeria and South Africa	22.8	25.7	25.6	25.4	26.3	26.7	27.2	25.1	23.4	22.9	22.4	22.3
Oil-exporting countries	**19.6**	**21.6**	**21.1**	**21.9**	**20.4**	**20.0**	**19.3**	**16.2**	**13.9**	**15.4**	**15.6**	**14.9**
Excluding Nigeria	26.3	34.5	31.3	30.2	32.8	33.5	33.7	28.4	23.7	22.3	19.2	19.3
Oil-importing countries	**24.3**	**26.5**	**27.3**	**26.8**	**26.9**	**26.8**	**27.1**	**27.3**	**26.6**	**26.7**	**27.1**	**27.0**
Excluding South Africa	21.1	22.1	23.1	22.8	23.0	23.4	24.1	23.8	23.3	23.1	23.5	23.2
Middle-income countries	**23.3**	**25.6**	**25.5**	**25.5**	**24.7**	**24.2**	**23.6**	**22.3**	**21.6**	**22.9**	**23.4**	**22.8**
Excluding Nigeria and South Africa	25.3	29.9	28.5	28.4	30.0	30.6	30.8	27.8	25.7	24.5	23.5	23.1
Low-income countries	**18.5**	**19.6**	**20.9**	**20.6**	**20.7**	**21.0**	**22.2**	**21.8**	**20.5**	**20.7**	**21.1**	**21.4**
Excluding low-income countries in fragile situations	20.1	20.2	20.9	20.6	20.3	21.3	21.5	20.9	20.3	20.5	21.1	21.1
Countries in fragile situations	**18.2**	**19.7**	**21.1**	**21.0**	**23.0**	**23.5**	**25.5**	**24.7**	**22.8**	**22.1**	**21.8**	**22.1**
CFA franc zone	19.1	22.8	21.8	22.0	24.3	26.3	25.9	25.8	24.1	22.5	21.8	21.1
CEMAC	17.8	24.1	22.7	23.2	26.7	29.7	29.2	28.0	24.4	20.5	18.3	18.0
WAEMU	20.3	21.6	20.9	20.8	21.7	22.8	22.5	23.9	23.8	24.0	24.3	23.3
COMESA (SSA members)	20.2	19.4	21.2	20.7	20.6	21.3	22.4	22.5	22.0	22.2	22.3	22.3
EAC-5	20.2	20.9	22.3	21.4	21.6	22.0	22.7	23.0	22.8	22.2	22.7	22.9
ECOWAS	17.3	17.2	18.1	18.7	16.5	16.1	15.2	14.2	13.7	15.4	17.2	16.2
SACU	27.9	32.5	31.9	31.3	31.7	31.8	32.3	33.4	33.1	33.1	33.8	34.1
SADC	27.2	31.5	30.8	30.2	30.4	30.4	30.8	29.3	27.7	28.2	28.4	28.8

See sources and footnotes on page 37.

Table SA12. Government Debt
(Percent of GDP)

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	30.5	56.3	37.2	29.6	26.7	33.1	39.8	57.1	75.3	65.0	80.5	71.8
Benin	24.4	25.6	28.7	29.9	26.7	25.3	30.5	42.4	49.7	54.6	56.8	55.0
Botswana	7.4	17.9	20.4	20.4	19.2	17.4	17.3	17.2	15.6	14.0	13.2	13.5
Burkina Faso	32.8	29.1	31.2	28.1	28.2	28.8	30.4	35.8	38.3	38.1	41.2	41.3
Burundi	134.4	25.7	46.9	42.7	41.4	36.1	35.8	45.3	48.4	51.7	58.4	63.5
Cabo Verde	73.8	65.2	72.4	78.8	91.1	102.5	115.9	126.0	129.5	127.1	130.0	130.6
Cameroon	29.9	12.0	14.7	15.7	15.4	18.2	21.5	32.0	32.5	36.9	36.9	36.6
Central African Rep.	69.6	21.1	21.4	21.8	23.5	38.5	69.2	64.0	56.0	52.9	46.9	41.8
Chad	25.8	31.6	30.1	30.6	28.8	30.5	41.5	43.8	52.4	52.5	49.2	45.4
Comoros	65.1	53.6	50.7	45.7	42.6	18.2	21.7	23.9	27.7	32.4	29.0	30.5
Congo, Dem. Rep. of	105.0	93.2	31.9	26.3	23.2	19.1	16.8	16.8	19.3	18.1	16.2	15.0
Congo, Rep. of	119.1	97.3	54.0	42.9	45.7	50.0	60.3	112.1	128.7	130.8	100.7	89.9
Côte d'Ivoire	76.6	64.2	63.0	69.2	45.0	43.4	44.8	47.3	47.0	47.0	48.8	47.3
Equatorial Guinea	2.0	4.3	7.9	7.2	7.1	6.3	12.6	33.6	43.3	37.4	37.3	37.4
Eritrea	158.4	144.6	143.8	132.4	128.3	127.5	128.7	132.5	132.8	131.2	129.4	127.3
Eswatini	14.4	10.4	13.8	14.2	14.6	14.8	14.0	18.8	25.5	28.4	37.6	44.3
Ethiopia[1]	67.9	37.8	40.5	45.3	37.7	42.9	46.8	54.0	53.2	54.2	59.5	59.9
Gabon	41.7	26.0	21.3	21.4	21.4	31.1	34.1	44.7	64.2	62.7	58.4	57.0
Gambia, The	63.8	37.9	40.7	49.7	49.2	58.6	69.4	68.6	82.3	88.0	82.8	77.1
Ghana	39.2	36.1	46.3	42.6	47.9	57.2	70.2	72.2	73.4	71.8	71.2	67.1
Guinea	79.9	61.3	68.8	58.1	27.2	34.0	35.1	41.9	41.8	37.9	40.4	43.1
Guinea-Bissau	197.5	159.0	68.3	45.8	46.5	48.9	57.4	54.6	57.9	53.9	55.3	52.7
Kenya	45.2	41.1	44.4	43.0	43.9	44.0	48.6	51.4	53.2	54.2	56.1	55.4
Lesotho	48.2	34.1	31.8	33.7	37.0	38.5	38.3	42.2	36.2	33.7	39.3	38.7
Liberia	357.7	113.4	21.8	19.3	17.6	17.9	21.7	25.9	28.3	34.4	40.1	42.5
Madagascar	56.6	33.7	31.7	32.2	33.0	33.9	34.7	35.5	38.4	36.0	35.1	36.4
Malawi	62.9	35.6	29.6	30.6	43.9	59.3	55.2	61.1	60.3	59.2	57.9	57.6
Mali	29.2	21.9	25.3	24.0	25.4	26.4	27.4	30.7	36.0	35.4	36.9	37.1
Mauritius	56.8	56.9	57.1	57.2	56.6	59.1	62.0	65.4	66.1	64.0	63.9	62.5
Mozambique	49.7	41.9	43.3	38.0	40.1	53.1	62.4	88.1	121.6	102.1	112.9	118.7
Namibia	23.3	15.5	16.0	26.2	23.7	24.2	24.7	38.6	39.5	41.3	47.2	54.0
Niger	43.2	27.7	24.3	27.8	26.9	26.3	32.0	41.0	45.2	45.3	46.3	48.4
Nigeria	15.8	8.6	9.6	12.1	12.7	12.9	13.1	16.0	19.6	21.8	24.8	26.8
Rwanda	45.2	19.5	20.0	19.9	20.0	26.7	29.1	33.4	37.3	40.5	42.6	43.4
São Tomé & Príncipe	215.0	72.4	79.5	78.0	81.0	71.1	69.5	86.5	93.1	88.4	76.9	73.7
Senegal	25.7	26.9	28.3	32.7	34.2	36.8	42.4	44.5	47.8	48.3	50.4	47.5
Seychelles	155.7	106.1	82.2	82.5	80.1	68.2	72.7	67.4	69.1	63.6	59.9	54.9
Sierra Leone	94.1	48.1	46.8	44.8	36.8	30.5	35.0	45.3	54.9	63.9	79.2	93.4
South Africa	30.5	30.1	34.7	38.2	41.0	44.1	47.0	49.3	51.6	53.0	55.7	57.3
South Sudan	...	...	...	0.0	8.9	17.6	38.3	69.3	86.6	62.7	43.7	53.2
Tanzania	33.5	24.4	27.3	27.8	29.2	30.9	33.8	37.2	38.0	37.0	37.4	38.6
Togo	92.7	80.6	46.7	47.2	47.2	55.7	60.4	72.2	81.6	75.7	75.7	70.6
Uganda	39.4	19.2	22.4	23.4	24.6	27.7	30.8	33.5	37.4	40.0	42.9	44.7
Zambia	54.4	20.5	18.9	20.8	25.4	27.1	36.1	62.3	60.7	63.1	70.9	77.6
Zimbabwe[2]	51.5	71.7	59.3	48.3	45.3	48.3	49.6	51.9	69.9	82.3	81.9	79.6
Sub-Saharan Africa	**33.5**	**28.9**	**27.7**	**28.4**	**28.4**	**30.2**	**32.5**	**38.6**	**43.8**	**45.4**	**48.5**	**48.2**
Median	50.6	34.9	31.9	32.2	33.0	33.9	38.3	45.3	51.6	52.9	50.4	53.2
Excluding Nigeria and South Africa	47.0	40.5	35.2	32.5	31.6	35.1	39.9	49.2	54.0	53.1	56.2	54.8
Oil-exporting countries	**22.1**	**19.2**	**15.9**	**16.2**	**16.3**	**18.1**	**20.3**	**27.0**	**33.8**	**35.7**	**39.3**	**37.7**
Excluding Nigeria	34.7	41.2	30.1	23.6	23.4	28.6	35.8	53.3	65.9	60.6	66.7	60.9
Oil-importing countries	**40.8**	**35.6**	**36.1**	**37.7**	**38.1**	**40.7**	**43.9**	**48.3**	**50.6**	**51.4**	**53.9**	**54.5**
Excluding South Africa	52.2	40.3	37.5	37.2	35.7	38.3	41.9	47.6	50.1	50.5	52.8	53.0
Middle-income countries	**28.7**	**26.0**	**26.2**	**27.7**	**27.7**	**29.2**	**31.1**	**36.9**	**42.5**	**44.7**	**47.9**	**47.4**
Excluding Nigeria and South Africa	40.0	39.9	35.2	33.0	31.6	35.7	41.1	52.7	58.9	56.8	60.7	57.8
Low-income countries	**58.5**	**41.5**	**35.2**	**31.7**	**31.5**	**34.2**	**38.2**	**44.9**	**47.9**	**48.1**	**50.4**	**50.9**
Excluding low-income countries in fragile situations	43.6	29.3	31.1	32.2	31.1	35.0	39.2	46.9	49.2	49.2	52.9	53.9
Countries in fragile situations	**80.0**	**62.9**	**46.2**	**38.4**	**35.3**	**36.3**	**40.2**	**46.5**	**50.0**	**50.6**	**50.1**	**49.1**
CFA franc zone	43.8	34.3	31.2	30.8	27.5	29.8	34.6	44.4	49.1	49.5	49.2	47.6
CEMAC	38.6	26.3	22.6	21.0	20.7	24.2	30.5	45.4	52.6	53.7	50.4	48.3
WAEMU	49.2	42.2	40.3	41.8	34.9	35.6	38.8	43.5	46.4	46.5	48.3	47.1
COMESA (SSA members)	60.4	43.6	37.3	36.8	36.3	38.0	41.3	47.1	49.5	51.2	53.9	54.2
EAC-5	42.1	29.8	33.2	32.8	33.9	35.5	39.2	42.9	45.0	46.0	47.9	48.3
ECOWAS	27.2	18.4	18.2	20.0	19.0	20.0	20.6	24.2	29.6	32.2	35.0	35.7
SACU	29.4	29.1	33.5	37.0	39.3	42.1	44.6	47.2	49.0	50.5	53.2	54.9
SADC	34.8	36.5	34.1	34.9	35.8	38.7	42.0	48.4	53.3	52.5	56.7	56.3

See sources and footnotes on page 37.

Table SA13. Broad Money
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	19.0	45.6	34.8	35.0	31.5	33.3	35.7	40.9	39.5	31.1	27.1	27.6
Benin	24.8	32.8	34.9	35.8	34.0	36.7	40.9	42.4	41.0	39.2	45.7	46.3
Botswana	46.7	52.7	49.3	42.6	44.8	42.7	38.3	45.8	41.4	40.2	40.6	41.1
Burkina Faso	20.3	25.9	27.2	27.4	28.3	30.3	32.0	37.9	38.9	43.5	45.9	48.2
Burundi	22.3	24.3	27.5	25.7	25.4	23.5	23.0	22.4	21.7	22.9	25.8	26.4
Cabo Verde	75.1	77.5	80.1	78.5	82.1	89.4	95.6	98.9	104.1	105.5	104.6	103.1
Cameroon	17.7	20.0	21.2	21.9	20.7	21.3	21.8	22.5	22.5	22.6	22.8	22.8
Central African Rep.	15.9	16.1	17.8	19.2	18.3	28.5	29.1	27.5	26.2	26.7	26.8	26.8
Chad	8.9	11.0	11.4	12.0	12.4	13.3	15.6	15.9	15.8	15.8	16.0	16.2
Comoros	26.0	30.4	34.1	34.9	38.3	36.9	38.2	43.6	45.9	45.0	45.0	45.0
Congo, Dem. Rep. of	6.6	10.1	10.5	10.6	11.6	11.5	11.8	12.1	12.5	13.4	13.2	13.4
Congo, Rep. of	17.1	23.3	23.3	27.2	33.1	33.5	37.7	46.1	42.7	34.9	30.5	27.3
Côte d'Ivoire	11.0	14.1	15.7	18.7	14.8	14.5	14.6	15.2	14.1	12.8	16.7	17.8
Equatorial Guinea	6.4	10.5	12.3	10.6	14.8	16.7	14.5	17.8	17.4	16.1	16.4	19.0
Eritrea	130.2	121.6	123.2	114.6	111.8	113.3	113.5	96.1	100.8	101.4	101.7	101.4
Eswatini	19.6	25.4	25.6	25.1	24.4	25.4	24.5	25.8	30.5	29.5	29.1	29.1
Ethiopia[1]	34.6	24.8	27.0	27.6	25.3	27.1	28.1	28.5	28.9	31.7	34.1	35.6
Gabon	17.0	20.3	19.5	20.5	23.2	24.8	24.4	25.4	24.7	22.7	22.7	24.7
Gambia, The	23.5	29.5	29.1	35.8	34.8	37.2	38.8	34.1	36.7	40.0	39.9	38.5
Ghana	22.8	28.0	29.9	30.4	30.0	28.8	32.5	33.9	33.9	32.3	32.3	32.8
Guinea	13.6	18.4	26.4	25.1	22.2	22.6	23.8	26.8	24.9	24.1	23.3	23.3
Guinea-Bissau	20.3	25.3	28.8	35.3	32.6	32.7	46.4	48.6	46.9	45.2	46.1	46.0
Kenya	35.7	36.5	40.1	40.6	40.5	42.3	43.2	42.4	38.4	36.9	39.1	39.1
Lesotho	28.6	35.5	36.3	32.2	31.6	34.1	30.8	31.3	31.1	35.1	34.5	33.8
Liberia	13.0	20.2	22.7	26.8	23.3	22.3	22.2	22.4	20.5	19.9	19.9	19.9
Madagascar	23.6	24.5	24.7	26.1	25.7	25.2	25.4	26.2	28.4	29.6	29.5	29.5
Malawi	15.8	19.8	22.1	25.1	25.7	26.0	24.5	24.3	23.0	23.7	24.1	24.1
Mali	25.6	24.7	24.5	24.4	27.0	28.2	27.9	28.9	28.9	29.0	29.4	29.0
Mauritius	94.5	96.3	97.5	96.6	98.6	98.2	101.4	106.9	109.9	113.6	114.7	114.7
Mozambique	17.0	24.2	24.7	27.7	30.6	33.4	38.5	42.1	37.1	35.6	34.2	34.1
Namibia	40.8	63.2	63.6	65.2	57.2	56.2	53.6	54.6	51.7	53.4	53.4	53.4
Niger	13.7	17.6	19.5	19.5	21.9	22.6	26.2	26.1	27.1	24.1	24.8	25.3
Nigeria	16.0	24.3	20.8	18.8	21.3	19.3	20.9	20.9	26.5	26.7	27.6	27.8
Rwanda	16.6	17.2	18.3	20.0	19.8	20.9	22.4	24.8	23.9	23.6	24.9	26.1
São Tomé & Príncipe	34.3	37.1	38.7	38.0	39.0	38.3	38.8	40.6	34.3	31.4	32.7	32.7
Senegal	22.9	26.3	28.0	28.8	28.3	29.8	31.8	35.2	37.4	37.5	36.5	44.3
Seychelles	84.6	55.5	62.1	60.2	52.0	58.3	69.1	66.4	71.8	77.7	77.9	77.9
Sierra Leone	16.7	22.6	23.5	23.1	21.9	19.8	21.7	24.0	25.1	24.5	25.3	25.6
South Africa	72.5	77.7	75.8	74.6	72.9	71.0	70.8	73.5	72.6	72.6	72.6	72.6
South Sudan	...	...	...	9.5	19.8	14.6	17.6	38.2	28.8	16.0	15.2	18.8
Tanzania	21.8	23.3	25.1	24.7	23.8	22.7	23.3	24.3	22.3	21.3	21.1	21.5
Togo	30.0	36.8	39.8	43.4	44.1	47.7	46.7	51.5	54.2	56.9	56.9	56.9
Uganda	18.5	17.9	21.7	19.8	19.8	19.9	21.0	20.9	21.9	22.1	22.6	23.2
Zambia	18.0	17.8	18.4	19.1	19.6	20.5	20.9	25.8	20.6	22.1	23.0	23.1
Zimbabwe[2]	10.8	16.5	23.1	25.7	26.5	25.5	27.6	29.5	34.5	44.7	48.3	51.1
Sub-Saharan Africa	**34.2**	**39.0**	**37.2**	**35.9**	**36.0**	**35.0**	**35.7**	**37.2**	**38.2**	**37.7**	**38.0**	**38.3**
Median	20.3	24.6	26.0	26.8	26.5	28.2	28.1	29.5	30.5	31.1	29.5	29.1
Excluding Nigeria and South Africa	23.8	28.6	28.8	28.7	28.4	29.0	30.1	32.2	31.2	30.3	30.7	31.5
Oil-exporting countries	**16.1**	**26.2**	**22.2**	**20.6**	**22.5**	**21.4**	**23.0**	**24.3**	**27.8**	**26.5**	**26.6**	**26.9**
Excluding Nigeria	16.4	30.7	26.1	24.8	25.5	26.6	28.2	32.9	31.3	26.0	24.0	24.6
Oil-importing countries	**45.9**	**48.1**	**48.1**	**47.5**	**46.0**	**45.1**	**45.3**	**46.7**	**45.4**	**45.2**	**45.5**	**45.6**
Excluding South Africa	26.2	27.9	29.7	30.1	29.4	29.8	30.8	32.0	31.2	31.5	32.5	33.3
Middle-income countries	**37.3**	**43.3**	**40.4**	**39.3**	**39.3**	**37.9**	**38.5**	**40.0**	**41.6**	**40.8**	**41.0**	**41.2**
Excluding Nigeria and South Africa	25.1	33.3	32.2	32.7	31.7	32.5	33.6	36.3	34.8	32.4	32.4	33.2
Low-income countries	**22.0**	**22.7**	**24.6**	**24.1**	**24.5**	**24.9**	**26.1**	**27.5**	**27.3**	**28.0**	**29.0**	**29.8**
Excluding low-income countries in fragile situations	23.5	23.0	25.1	25.2	24.5	25.3	26.9	28.0	27.4	28.1	29.4	30.3
Countries in fragile situations	**18.0**	**20.7**	**22.3**	**22.4**	**23.5**	**23.2**	**24.0**	**26.0**	**25.5**	**25.2**	**26.0**	**26.4**
CFA franc zone	16.7	20.0	21.2	22.4	22.7	23.9	24.9	27.0	26.9	26.2	27.3	28.7
CEMAC	14.2	17.2	18.1	18.8	20.4	21.7	22.4	24.7	24.0	22.5	22.2	22.5
WAEMU	19.0	22.6	24.1	25.7	24.9	25.9	27.1	29.0	29.1	28.9	30.9	33.1
COMESA (SSA members)	29.8	28.4	30.6	30.8	30.3	31.0	31.8	32.3	31.8	33.1	34.6	35.2
EAC-5	26.3	26.7	29.7	29.3	29.0	29.2	30.1	30.2	28.2	27.3	28.3	28.6
ECOWAS	17.2	24.3	22.2	21.1	22.8	21.4	23.0	23.6	27.7	27.7	28.7	29.3
SACU	69.7	75.4	73.5	72.1	70.4	68.4	67.9	70.7	69.6	69.6	69.6	69.5
SADC	52.3	58.7	56.2	55.2	53.4	52.1	52.1	54.7	53.4	52.4	51.8	51.6

See sources and footnotes on page 37.

Table SA14. Broad Money Growth
(Percent)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	64.6	21.5	5.3	37.1	4.9	14.1	16.2	11.8	14.3	−0.1	17.4	25.0
Benin	15.3	9.0	9.7	9.8	7.2	17.2	18.2	6.0	0.3	1.0	26.0	10.0
Botswana	17.4	−1.3	10.7	4.4	10.0	8.4	4.6	19.9	5.4	2.7	9.4	9.5
Burkina Faso	13.7	24.2	18.6	14.3	16.6	10.9	9.3	19.3	11.8	21.6	13.7	13.7
Burundi	21.1	19.8	29.4	5.7	18.0	9.7	11.2	1.3	6.6	19.2	18.6	11.7
Cabo Verde	12.5	3.5	5.4	4.6	6.3	11.4	7.4	6.3	8.4	6.5	5.0	4.2
Cameroon	10.5	6.9	11.3	10.6	1.4	10.8	10.8	9.2	5.5	5.9	5.6	5.8
Central African Rep.	7.5	11.7	16.1	13.8	1.6	5.6	14.6	5.3	5.8	10.3	8.6	8.7
Chad	23.6	−4.6	25.3	14.2	13.4	8.6	26.5	−4.7	−7.7	−4.3	7.2	7.5
Comoros	7.6	13.3	19.4	9.6	16.0	2.8	8.1	17.1	10.3	1.8	5.1	5.0
Congo, Dem. Rep. of	52.5	49.7	30.9	22.9	21.8	18.6	12.6	10.5	22.2	47.7	21.3	18.7
Congo, Rep. of	30.1	5.3	37.6	34.5	21.1	0.7	13.1	−11.2	−15.4	−10.4	9.1	−5.2
Côte d'Ivoire	11.9	24.5	19.7	17.3	−10.5	10.8	13.8	16.3	2.5	−1.0	40.3	16.3
Equatorial Guinea	30.7	29.9	33.5	7.7	57.8	7.3	−14.1	−10.9	−16.4	1.0	1.9	14.6
Eritrea	11.2	15.7	15.6	14.6	14.3	16.5	12.9	−5.1	18.2	16.8	15.9	14.5
Eswatini	15.7	26.8	7.9	5.5	10.0	15.9	3.9	13.6	26.4	3.8	5.2	6.1
Ethiopia[1]	18.1	19.9	24.4	36.5	32.9	24.2	26.9	24.2	20.4	28.8	27.5	24.8
Gabon	14.2	2.2	19.2	26.5	15.7	6.1	1.6	−1.4	−5.2	−3.9	9.2	13.4
Gambia, The	16.5	19.4	13.7	11.0	7.8	15.1	11.2	−0.9	15.3	19.3	11.0	6.4
Ghana	31.3	26.0	34.4	32.2	24.3	19.1	36.8	26.1	22.0	16.7	18.7	18.7
Guinea	35.5	25.9	74.4	9.4	1.0	14.1	12.3	20.3	9.9	15.8	10.4	14.4
Guinea-Bissau	27.1	4.9	22.9	50.7	−10.0	2.8	42.8	24.8	8.8	8.1	6.5	7.3
Kenya	14.9	16.0	21.6	19.1	14.1	16.2	16.4	14.1	3.7	9.5	18.2	12.3
Lesotho	16.8	17.9	14.5	1.0	7.3	21.2	4.0	12.6	5.5	17.4	5.9	4.3
Liberia	33.5	30.2	27.4	41.4	−1.4	7.8	2.1	1.7	−5.2	−2.5	−2.0	0.8
Madagascar	17.2	10.2	9.6	16.4	6.9	5.3	11.1	14.6	20.1	17.8	12.8	12.9
Malawi	27.6	23.9	33.9	35.7	22.9	35.1	20.7	23.7	15.2	19.7	12.6	12.5
Mali	5.6	16.0	9.0	15.3	15.2	7.4	7.1	13.2	7.3	7.9	9.0	5.3
Mauritius	13.0	2.4	6.9	6.4	2.5	5.8	8.7	10.2	9.1	9.3	5.2	9.2
Mozambique	22.2	34.6	17.6	23.9	25.6	21.2	27.3	21.7	2.4	12.2	4.8	9.7
Namibia	17.3	59.6	10.5	11.7	4.1	12.8	7.8	10.2	4.9	9.5	4.6	9.0
Niger	16.1	20.3	23.4	6.8	31.3	10.2	24.5	4.6	8.7	−4.9	12.5	9.7
Nigeria	37.2	17.1	6.9	4.0	29.1	1.0	20.4	5.9	36.4	13.0	15.9	13.2
Rwanda	23.6	13.0	16.9	26.7	14.1	15.8	18.8	21.1	7.6	12.3	16.5	18.8
São Tomé & Príncipe	29.8	8.2	25.1	10.4	20.3	13.9	16.8	13.1	−4.8	−0.4	12.6	11.4
Senegal	11.6	13.3	11.5	7.9	6.2	8.2	11.3	19.3	13.8	9.2	6.3	32.1
Seychelles	7.9	7.0	13.5	4.5	−0.6	23.7	26.6	2.9	12.1	16.4	7.4	7.0
Sierra Leone	24.5	31.3	28.5	22.6	22.5	16.7	16.6	4.9	17.9	7.0	16.9	15.2
South Africa	18.9	1.8	6.9	8.3	5.2	5.8	7.2	10.5	6.1	6.9	5.6	6.7
South Sudan	...	...	...	...	34.0	−1.7	21.5	117.4	142.5	34.6	71.9	100.7
Tanzania	22.0	17.7	25.4	18.2	12.5	10.0	15.6	18.8	4.8	6.1	9.1	13.4
Togo	16.9	14.3	15.3	17.3	10.2	16.6	3.7	20.6	12.6	9.9	6.8	7.5
Uganda	19.1	16.6	41.5	10.5	14.9	9.5	15.2	11.7	11.1	12.8	13.0	13.3
Zambia	25.6	7.7	29.9	21.7	17.9	20.8	12.6	35.2	−5.7	21.4	19.9	12.4
Zimbabwe[2]	1.4	340.0	68.6	33.1	19.9	4.6	12.6	8.2	17.5	41.7	18.5	18.2
Sub-Saharan Africa	**25.6**	**14.8**	**13.5**	**12.7**	**16.5**	**7.9**	**15.3**	**11.4**	**16.3**	**11.0**	**14.0**	**13.4**
Median	17.4	16.3	18.9	14.2	14.1	10.8	12.6	11.8	8.7	9.5	10.4	11.7
Excluding Nigeria and South Africa	23.2	20.6	21.5	21.2	14.3	13.4	15.7	15.4	9.9	11.5	16.2	15.9
Oil-exporting countries	**37.1**	**16.4**	**8.8**	**9.5**	**24.1**	**3.5**	**17.8**	**6.8**	**27.8**	**9.6**	**15.3**	**14.4**
Excluding Nigeria	37.5	14.8	13.8	25.7	12.5	10.0	11.7	9.2	8.3	1.2	13.6	17.6
Oil-importing countries	**18.8**	**13.7**	**17.0**	**15.1**	**11.2**	**11.3**	**13.4**	**15.0**	**8.9**	**12.0**	**13.1**	**12.7**
Excluding South Africa	18.8	22.7	24.2	19.7	15.0	14.6	17.0	17.5	10.4	14.6	16.9	15.5
Middle-income countries	**27.2**	**12.3**	**10.2**	**10.7**	**16.0**	**6.3**	**14.6**	**9.7**	**17.2**	**9.0**	**13.1**	**12.3**
Excluding Nigeria and South Africa	26.1	17.1	17.5	21.4	11.2	13.1	14.1	13.6	6.5	6.2	15.9	15.3
Low-income countries	**19.7**	**25.2**	**26.6**	**20.8**	**18.2**	**13.7**	**17.5**	**17.4**	**13.7**	**17.5**	**16.5**	**16.6**
Excluding low-income countries in fragile situations	19.1	19.0	25.5	21.3	20.3	15.4	19.9	18.5	10.9	15.2	16.8	16.9
Countries in fragile situations	**19.3**	**30.5**	**27.3**	**20.6**	**10.9**	**10.4**	**13.9**	**13.7**	**12.5**	**14.4**	**20.4**	**14.6**
CFA franc zone	14.9	13.9	18.6	14.7	11.1	9.1	9.9	7.3	1.7	2.9	14.3	11.9
CEMAC	18.5	9.2	22.1	16.0	17.7	7.6	6.7	−1.1	−4.7	−0.1	6.4	6.8
WAEMU	11.7	18.4	15.4	13.5	5.2	10.5	12.8	15.1	7.1	5.1	20.3	15.7
COMESA (SSA members)	19.1	24.6	26.4	22.0	18.9	16.5	16.9	17.2	11.9	21.1	19.1	16.5
EAC-5	18.6	16.7	26.9	16.9	13.8	12.4	15.9	15.3	5.8	9.2	13.7	13.2
ECOWAS	31.2	18.1	11.0	7.7	23.8	4.2	20.0	9.0	28.7	11.8	16.8	14.1
SACU	18.7	3.3	7.2	8.1	5.5	6.4	7.1	10.9	6.2	6.8	5.7	6.9
SADC	24.1	12.0	11.6	14.9	8.1	9.5	10.5	13.2	7.9	9.4	9.4	11.2

See sources and footnotes on page 37.

Table SA15. Claims on Nonfinancial Private Sector
(Percent change)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	71.9	60.5	19.2	28.8	24.2	15.0	1.1	17.6	−1.8	−1.3
Benin	18.8	24.2	7.8	11.8	6.6	14.3	7.9	2.6	8.7	−0.2
Botswana	21.1	10.3	11.2	21.9	21.6	13.8	13.7	9.0	9.0	5.3
Burkina Faso	16.2	1.0	17.6	18.8	22.5	24.1	17.2	10.4	6.2	10.1
Burundi	8.4	25.5	39.1	35.5	11.9	9.5	7.4	−3.8	−0.3	−4.0
Cabo Verde	20.3	11.8	9.0	13.3	−0.6	2.0	−0.9	0.4	3.6	6.5
Cameroon	8.2	9.1	8.2	28.3	2.6	14.9	14.4	11.4	7.2	2.3
Central African Rep.	8.7	8.7	30.2	19.2	31.0	−18.1	5.4	−2.1	13.2	1.1
Chad	17.3	21.0	30.2	24.4	32.1	2.7	40.2	2.3	−5.1	−3.2
Comoros	11.4	44.1	25.9	8.9	22.4	12.6	9.6	16.8	7.2	6.3
Congo, Dem. Rep. of	91.1	41.1	18.0	17.1	25.2	26.5	23.0	17.4	29.3	11.3
Congo, Rep. of	19.1	31.0	50.4	40.6	44.2	17.0	26.3	9.3	7.1	−5.4
Côte d'Ivoire	10.8	12.5	13.5	−0.4	10.1	18.2	19.2	28.5	13.3	15.3
Equatorial Guinea	50.1	13.8	30.6	30.7	−13.6	34.3	18.4	14.1	4.2	1.3
Eritrea	6.3	1.2	1.8	14.7	19.8	131.0	35.8	−65.6	7.6	13.1
Eswatini	21.4	13.1	−0.5	26.0	−1.7	20.2	9.8	4.2	11.6	3.9
Ethiopia[1]	42.1	11.0	28.1	25.0	37.7	10.8	19.9	31.0	23.0	30.4
Gabon	10.0	−7.9	1.9	42.0	24.1	23.6	−2.0	−9.8	−5.6	−3.0
Gambia, The	13.2	10.3	14.8	8.8	4.3	20.5	−7.5	−7.9	−12.3	−1.2
Ghana	44.1	16.2	24.8	29.0	32.9	29.0	41.8	24.5	15.4	13.7
Guinea	19.2	15.8	43.8	93.4	−3.2	35.0	44.0	27.1	5.9	2.3
Guinea-Bissau	61.1	−3.0	36.5	107.0	38.2	−16.1	−6.6	50.1	6.9	−25.3
Kenya	19.9	13.9	20.3	30.9	10.4	20.1	22.2	16.0	4.1	2.4
Lesotho	28.3	23.9	28.8	25.1	42.2	10.3	11.8	8.2	5.8	8.3
Liberia	36.0	31.5	40.1	32.4	11.2	27.2	5.6	8.1	2.3	14.7
Madagascar	24.8	6.5	11.2	7.0	4.8	16.2	18.4	16.5	8.2	18.4
Malawi	41.2	39.5	52.4	20.5	25.4	14.4	20.0	29.9	4.6	0.4
Mali	7.2	11.0	13.5	24.1	4.8	11.7	18.7	19.9	17.6	7.4
Mauritius	15.4	0.5	12.5	12.3	17.4	14.2	−2.2	8.7	−0.6	11.8
Mozambique	27.5	58.6	29.3	6.4	19.9	15.6	25.2	22.1	14.5	−15.3
Namibia	14.7	10.5	12.4	9.5	16.9	14.5	16.5	13.8	8.6	5.0
Niger	28.7	17.3	14.2	16.9	17.0	10.1	8.4	12.7	9.6	4.8
Nigeria	47.0	22.0	−5.6	2.6	6.6	9.4	18.0	4.6	23.4	−4.4
Rwanda	23.4	5.9	10.3	27.5	34.8	11.3	19.3	30.0	9.1	13.9
São Tomé & Príncipe	53.5	39.3	35.8	15.4	11.0	−3.3	−1.4	9.0	6.6	1.3
Senegal	16.7	4.0	15.3	17.9	9.9	11.6	8.6	7.5	9.3	15.3
Seychelles	21.9	−9.2	23.6	5.2	8.5	4.5	26.2	7.8	10.3	17.8
Sierra Leone	35.5	45.4	31.5	21.8	−6.9	11.9	5.4	9.1	16.7	4.9
South Africa	19.4	2.0	3.1	6.7	9.3	7.1	7.2	8.0	4.7	4.3
South Sudan	...	...	...	−34.0	125.7	45.4	49.8	51.2	221.5	32.9
Tanzania	35.8	9.6	20.0	27.2	18.2	15.3	19.4	24.8	8.2	2.6
Togo	13.0	13.2	17.2	39.1	17.8	34.0	−0.8	23.4	10.2	0.5
Uganda	27.5	17.3	41.8	28.3	10.8	6.2	14.1	15.1	6.4	17.6
Zambia	43.2	−5.7	15.4	28.2	37.0	12.6	26.4	29.3	−9.4	5.2
Zimbabwe[2]	5.8	388.2	143.3	62.8	27.1	3.7	4.7	−2.3	−3.6	5.9
Sub-Saharan Africa	**30.9**	**16.4**	**8.6**	**13.0**	**13.3**	**12.5**	**15.4**	**11.4**	**12.3**	**3.5**
Median	20.7	13.1	18.6	21.9	17.4	14.3	14.4	11.4	7.2	4.9
Excluding Nigeria and South Africa	29.3	20.8	22.1	23.4	19.7	17.0	17.3	17.3	9.3	8.0
Oil-exporting countries	**44.4**	**25.0**	**0.8**	**8.0**	**10.5**	**11.8**	**16.0**	**7.0**	**18.3**	**−3.1**
Excluding Nigeria	39.1	32.5	19.5	22.0	20.7	18.1	11.1	13.6	6.4	0.5
Oil-importing countries	**23.1**	**10.7**	**14.7**	**16.9**	**15.4**	**13.0**	**14.9**	**14.7**	**8.2**	**8.2**
Excluding South Africa	26.1	17.1	23.0	23.9	19.4	16.6	19.5	18.6	10.1	10.2
Middle-income countries	**32.0**	**14.8**	**4.1**	**10.8**	**11.0**	**11.6**	**14.2**	**9.3**	**11.6**	**1.2**
Excluding Nigeria and South Africa	31.0	19.3	17.9	25.5	17.7	18.4	15.7	16.2	4.6	5.2
Low-income countries	**27.3**	**22.8**	**27.6**	**21.1**	**22.1**	**15.4**	**19.3**	**18.7**	**14.7**	**11.1**
Excluding low-income countries in fragile situations	30.3	14.4	25.0	23.6	22.9	12.5	17.9	22.7	12.9	13.1
Countries in fragile situations	**21.7**	**31.3**	**29.4**	**16.3**	**20.5**	**19.4**	**21.3**	**15.1**	**16.1**	**8.4**
CFA franc zone	15.5	10.9	17.0	22.5	11.5	16.7	15.3	12.0	7.5	5.4
CEMAC	18.0	11.5	20.0	31.8	11.3	17.6	17.1	6.2	2.9	−0.5
WAEMU	13.6	10.3	14.3	14.4	11.6	15.9	13.6	17.1	11.3	10.1
COMESA (SSA members)	28.3	20.2	26.9	25.9	21.7	15.1	18.6	17.9	9.5	13.7
EAC-5	26.4	12.9	24.5	29.0	14.6	14.7	19.0	19.2	6.2	5.8
ECOWAS	39.0	19.5	0.4	7.5	8.9	12.3	19.0	8.3	19.9	−0.2
SACU	19.4	2.8	3.8	7.7	10.0	7.8	7.8	8.1	5.1	4.4
SADC	28.0	15.0	11.2	14.2	15.0	10.8	9.8	12.8	4.7	3.7

See sources and footnotes on page 37.

Table SA16. Claims on Nonfinancial Private Sector
(Percent of GDP)

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	7.5	23.1	19.9	18.8	20.1	21.4	19.9	24.0	19.9	15.5
Benin	14.3	20.7	21.6	22.7	21.4	22.5	22.9	23.0	24.1	22.8
Botswana	22.0	28.8	27.1	27.3	31.8	31.7	31.0	33.7	31.5	31.4
Burkina Faso	17.5	18.4	19.2	20.1	21.8	26.2	29.6	32.4	31.6	32.0
Burundi	14.1	13.7	16.6	20.0	18.7	17.2	16.3	15.1	13.7	11.6
Cabo Verde	41.4	58.0	61.9	65.7	64.3	64.2	63.3	61.8	62.2	63.0
Cameroon	8.6	9.7	9.9	11.9	11.4	12.2	12.9	13.5	13.7	13.4
Central African Rep.	6.9	7.2	8.9	10.1	12.3	14.9	14.0	12.3	12.5	11.7
Chad	2.6	3.9	4.2	4.8	5.8	5.9	7.6	8.4	8.6	8.6
Comoros	8.9	14.8	17.5	17.8	20.6	21.7	22.8	26.0	26.6	27.2
Congo, Dem. Rep. of	2.1	4.4	4.1	4.0	4.5	4.8	5.3	5.8	6.4	5.1
Congo, Rep. of	2.8	5.0	5.4	6.6	9.6	11.3	14.2	21.3	25.0	21.6
Côte d'Ivoire	16.0	18.7	19.7	20.0	19.5	20.4	21.5	24.6	25.3	26.8
Equatorial Guinea	2.7	5.8	6.7	7.0	5.3	7.5	9.0	14.2	17.3	16.1
Eritrea	24.5	16.6	14.8	13.8	14.1	28.3	34.1	10.4	10.0	9.7
Eswatini	18.6	20.6	19.1	22.4	19.4	21.0	21.4	20.6	21.6	20.9
Ethiopia[1]	10.9	9.3	10.4	9.8	9.3	8.8	8.7	9.3	9.6	10.7
Gabon	9.1	10.1	8.3	9.8	11.9	14.8	14.0	13.4	12.9	12.0
Gambia, The	7.6	9.3	9.3	11.2	10.5	11.8	10.2	8.3	6.8	6.2
Ghana	11.7	15.5	15.4	15.3	16.1	16.8	19.6	20.2	19.1	17.8
Guinea	3.9	3.5	4.2	7.0	5.9	7.2	9.7	11.5	10.3	8.8
Guinea-Bissau	2.5	5.2	6.6	11.1	15.8	13.0	12.0	15.1	14.4	9.6
Kenya	23.5	25.8	28.0	31.2	30.1	32.5	34.9	34.8	31.6	28.4
Lesotho	8.2	11.1	12.8	14.1	18.3	18.0	17.4	17.0	17.0	17.7
Liberia	4.6	7.7	9.6	10.6	10.3	11.7	12.1	12.9	12.8	14.6
Madagascar	10.1	11.3	11.5	11.2	10.8	11.7	12.6	13.2	12.9	13.5
Malawi	6.7	10.9	13.8	13.9	14.6	12.5	11.7	12.2	10.4	9.1
Mali	15.9	15.5	16.0	17.1	17.3	18.8	20.6	22.6	24.7	24.7
Mauritius	72.0	80.1	85.4	89.3	98.8	106.3	98.8	102.7	96.3	101.8
Mozambique	12.4	23.8	26.8	25.7	27.2	28.2	32.0	35.1	34.6	25.1
Namibia	48.0	48.0	49.1	49.3	48.6	48.4	49.9	52.5	51.5	51.0
Niger	7.3	12.1	12.4	13.6	13.5	13.9	14.1	15.1	15.8	15.5
Nigeria	12.0	21.1	15.9	14.2	13.3	13.0	13.8	13.7	15.7	13.4
Rwanda	11.9	11.8	11.8	13.0	15.2	15.4	16.6	19.7	19.3	19.3
São Tomé & Príncipe	25.7	34.9	39.5	40.6	38.4	32.0	27.4	27.6	26.1	24.3
Senegal	16.0	19.2	21.2	23.8	24.2	26.3	27.3	27.3	27.9	29.5
Seychelles	25.1	20.1	24.4	23.9	22.5	21.3	25.2	25.3	26.9	29.5
Sierra Leone	4.0	7.2	7.7	7.5	5.4	4.7	4.7	5.3	5.5	5.3
South Africa	68.3	72.3	68.0	65.9	66.9	65.9	65.7	66.6	65.0	63.4
South Sudan	...	...	...	0.2	0.6	0.7	1.0	1.5	1.5	0.8
Tanzania	10.4	13.2	13.7	14.4	14.7	14.6	15.6	17.1	16.2	14.9
Togo	17.0	19.8	21.7	28.1	30.6	38.0	35.6	40.2	41.4	39.7
Uganda	9.2	10.6	12.9	13.7	13.2	12.9	13.5	13.9	13.9	14.7
Zambia	8.8	10.0	9.2	10.0	12.0	11.7	13.4	15.7	12.1	11.2
Zimbabwe[2]	3.8	8.2	16.5	22.5	24.5	23.5	23.7	22.8	21.9	21.2
Sub-Saharan Africa	**27.0**	**31.2**	**28.4**	**27.3**	**27.4**	**27.2**	**27.4**	**28.1**	**27.9**	**26.3**
Median	10.7	13.4	15.1	14.2	15.8	16.8	16.6	17.1	17.3	16.1
Excluding Nigeria and South Africa	13.0	16.6	17.1	17.4	18.1	19.0	19.7	21.1	20.2	19.2
Oil-exporting countries	**10.4**	**19.3**	**15.2**	**13.6**	**13.4**	**13.6**	**14.1**	**14.9**	**15.9**	**13.6**
Excluding Nigeria	6.7	14.9	13.5	12.3	13.8	15.0	14.9	17.9	16.6	14.1
Oil-importing countries	**37.7**	**39.6**	**38.1**	**37.5**	**37.6**	**37.3**	**37.4**	**37.9**	**36.3**	**34.9**
Excluding South Africa	15.1	17.2	18.3	19.2	19.6	20.4	21.3	22.2	21.3	20.6
Middle-income countries	**31.4**	**36.3**	**32.6**	**31.4**	**31.3**	**31.1**	**31.2**	**32.0**	**31.9**	**30.1**
Excluding Nigeria and South Africa	15.5	20.7	20.7	21.5	22.2	23.6	24.3	26.5	24.9	23.5
Low-income countries	**9.7**	**11.5**	**12.6**	**12.6**	**13.2**	**13.6**	**14.3**	**15.1**	**15.1**	**14.5**
Excluding low-income countries in fragile situations	11.1	13.0	14.1	14.4	14.4	14.6	15.4	16.5	16.3	15.6
Countries in fragile situations	**9.0**	**10.7**	**11.8**	**11.6**	**12.7**	**13.5**	**14.4**	**15.7**	**16.4**	**16.1**
CFA franc zone	10.9	12.9	13.5	14.8	15.1	16.9	18.0	20.2	21.3	21.3
CEMAC	6.0	7.5	7.6	8.9	9.3	10.7	11.8	14.0	15.0	14.0
WAEMU	15.2	17.9	18.9	20.3	20.6	22.4	23.6	25.5	26.3	26.8
COMESA (SSA members)	15.4	16.5	18.0	19.2	19.4	20.0	20.4	20.6	19.4	18.9
EAC-5	15.4	17.2	18.8	20.5	20.2	20.9	22.3	23.0	21.5	20.0
ECOWAS	12.5	19.8	16.2	15.2	14.6	14.8	15.8	16.1	17.7	16.1
SACU	64.9	68.9	64.8	63.0	64.0	62.9	62.7	63.7	62.0	60.6
SADC	45.4	49.4	46.5	45.2	45.9	45.2	44.7	46.0	43.9	42.0

See sources and footnotes on page 37.

Table SA17. Exports of Goods and Services
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	65.8	59.0	61.4	60.9	56.1	50.9	41.8	29.6	28.0	27.6	36.4	39.0
Benin	13.7	14.3	17.9	16.0	13.2	15.5	15.8	17.6	16.3	18.4	20.0	21.2
Botswana	50.9	40.7	43.6	49.8	44.2	61.5	60.8	52.1	52.7	40.0	39.9	40.5
Burkina Faso	10.6	12.6	21.0	23.8	23.9	26.4	25.9	26.6	27.4	28.0	25.9	24.5
Burundi	7.8	6.7	8.9	10.1	9.4	8.8	7.2	5.6	5.5	5.1	5.1	5.2
Cabo Verde	35.8	33.2	38.3	42.2	45.0	47.0	48.1	41.3	44.9	47.9	51.0	52.0
Cameroon	25.3	19.7	22.0	25.4	25.4	24.8	24.6	21.8	19.2	18.7	18.2	17.5
Central African Rep.	13.2	10.7	11.8	13.5	13.4	16.7	18.5	18.2	18.7	17.0	16.2	15.8
Chad	45.6	35.2	37.8	40.6	38.2	33.4	31.5	26.5	24.4	27.5	33.7	34.1
Comoros	14.8	13.8	15.7	16.6	14.9	15.6	18.2	16.5	17.9	19.1	18.1	18.2
Congo, Dem. Rep. of	29.5	27.4	43.0	41.6	32.8	38.4	35.4	27.4	25.5	31.6	36.7	36.6
Congo, Rep. of	80.2	66.9	73.3	77.8	75.3	67.8	67.5	59.4	56.5	67.4	79.4	80.5
Côte d'Ivoire	48.6	50.8	50.6	53.2	48.9	41.5	39.3	37.7	32.4	31.1	32.3	32.4
Equatorial Guinea	79.7	72.6	81.2	76.3	74.3	64.9	58.9	45.3	39.4	39.8	42.0	39.1
Eritrea	5.8	4.5	4.8	26.3	20.8	19.5	21.8	13.6	9.5	9.2	9.9	8.3
Eswatini	59.6	49.6	46.5	35.5	38.2	43.3	48.7	48.0	47.2	44.6	42.6	41.8
Ethiopia[1]	14.6	10.6	15.5	18.2	13.9	12.5	11.6	9.7	8.3	7.7	7.9	8.4
Gabon	59.0	52.0	59.2	64.1	64.8	61.5	54.5	43.5	36.2	41.2	45.1	45.6
Gambia, The	18.3	15.3	13.9	17.0	19.7	19.3	19.4	16.1	16.0	12.4	15.4	16.4
Ghana	23.8	29.7	29.3	36.9	40.1	33.9	39.4	44.7	40.8	43.3	40.1	38.6
Guinea	22.0	19.1	22.3	25.5	28.2	23.0	22.3	21.1	28.4	39.9	35.8	36.4
Guinea-Bissau	17.0	18.8	14.9	25.7	15.5	18.3	20.2	27.5	26.3	28.3	24.7	25.0
Kenya	23.5	20.0	22.5	24.0	22.2	19.9	18.3	16.6	14.0	13.2	13.5	13.7
Lesotho	46.9	39.5	39.6	41.1	38.7	34.0	34.2	42.0	39.3	42.4	42.6	43.6
Liberia	38.4	25.9	32.0	36.5	42.6	37.1	33.1	25.8	23.5	22.6	21.8	21.6
Madagascar	27.1	22.5	25.0	26.8	28.6	30.1	32.8	32.1	33.5	35.4	34.7	34.0
Malawi	17.1	17.0	19.6	17.6	23.8	30.6	29.1	25.5	29.3	27.2	27.3	27.4
Mali	24.0	22.9	22.9	21.6	26.9	24.9	22.6	24.0	23.5	23.1	23.1	21.3
Mauritius	53.3	45.5	49.4	50.6	51.9	46.5	49.1	47.3	42.7	40.3	39.5	39.3
Mozambique	29.0	24.5	24.7	26.5	30.6	29.8	27.5	27.9	34.6	42.9	42.9	43.0
Namibia	38.5	42.6	41.7	41.4	42.0	43.7	44.3	42.2	36.0	34.2	34.3	34.3
Niger	17.6	20.3	22.2	20.9	21.9	22.6	21.0	18.3	16.3	16.6	16.9	17.7
Nigeria	28.4	19.6	22.4	24.7	21.4	19.3	14.8	10.1	9.5	13.5	16.9	15.6
Rwanda	11.3	11.1	10.8	14.1	13.9	15.4	17.7	18.1	18.4	22.4	23.5	24.5
São Tomé & Príncipe	11.6	10.4	12.3	12.6	13.1	16.4	25.3	28.5	27.3	26.9	24.8	24.8
Senegal	20.8	19.2	19.8	21.2	22.3	22.2	21.7	22.6	21.5	21.7	21.8	22.1
Seychelles	85.8	108.0	93.8	100.2	105.2	94.7	102.2	94.2	94.8	102.4	106.5	106.8
Sierra Leone	15.0	15.0	16.2	18.3	32.4	35.9	30.2	17.8	24.8	27.1	27.0	30.8
South Africa	29.6	27.9	28.6	30.5	29.7	31.0	31.5	30.2	30.7	29.8	29.1	29.2
South Sudan	...	...	...	72.4	9.3	28.0	34.0	21.0	57.9	70.8	76.4	95.1
Tanzania	18.2	18.9	20.6	22.4	20.9	19.4	18.4	19.6	18.8	18.1	18.7	19.1
Togo	34.6	35.6	37.8	43.6	45.2	46.5	39.7	35.8	33.4	31.9	32.3	32.6
Uganda	16.3	18.1	17.2	20.4	20.1	19.1	18.4	20.1	19.5	18.5	18.7	19.0
Zambia	35.1	32.0	39.7	40.1	41.2	41.4	40.8	38.7	35.3	35.3	40.6	42.9
Zimbabwe[2]	27.6	22.5	35.5	40.7	30.8	27.6	25.8	24.9	25.4	24.0	22.4	20.7
Sub-Saharan Africa	**32.1**	**27.8**	**30.3**	**33.3**	**30.6**	**29.2**	**26.5**	**22.4**	**22.1**	**23.8**	**25.5**	**25.1**
Median	26.2	22.5	23.8	26.5	28.6	29.8	29.1	26.5	27.3	27.6	27.3	29.2
Excluding Nigeria and South Africa	36.6	32.7	36.9	40.6	37.2	35.1	32.6	27.4	25.6	26.0	27.9	28.1
Oil-exporting countries	**38.2**	**30.0**	**32.8**	**36.7**	**31.9**	**28.8**	**23.4**	**16.3**	**15.5**	**19.4**	**23.9**	**22.8**
Excluding Nigeria	58.1	51.6	56.2	58.9	52.6	48.2	42.2	31.0	29.3	30.1	37.1	38.3
Oil-importing countries	**28.5**	**26.3**	**28.5**	**30.7**	**29.6**	**29.7**	**29.3**	**27.6**	**26.6**	**26.5**	**26.5**	**26.5**
Excluding South Africa	27.5	25.0	28.5	30.9	29.5	28.7	27.8	26.0	24.3	24.6	25.0	25.1
Middle-income countries	**34.2**	**29.8**	**31.7**	**34.2**	**32.2**	**30.4**	**27.3**	**23.0**	**22.6**	**24.6**	**26.5**	**26.0**
Excluding Nigeria and South Africa	46.0	42.2	45.4	48.2	46.3	42.6	39.3	33.0	30.0	29.6	32.3	32.6
Low-income countries	**21.6**	**19.1**	**23.4**	**28.8**	**23.3**	**24.0**	**22.9**	**20.4**	**20.0**	**21.3**	**22.3**	**22.4**
Excluding low-income countries in fragile situations	17.1	16.0	18.6	20.7	19.3	18.6	17.7	17.0	16.1	16.4	16.9	17.4
Countries in fragile situations	**35.8**	**32.6**	**37.9**	**43.6**	**35.7**	**35.4**	**34.2**	**28.8**	**28.5**	**30.9**	**33.3**	**33.0**
CFA franc zone	39.7	36.4	40.6	43.1	42.2	38.5	35.9	31.0	27.6	28.4	30.2	29.9
CEMAC	50.3	43.5	49.8	53.2	52.1	47.0	43.5	34.2	29.6	32.0	35.8	35.3
WAEMU	29.0	29.4	31.0	31.6	31.3	29.7	28.4	28.4	26.1	25.8	26.1	26.0
COMESA (SSA members)	26.3	21.8	27.4	29.3	26.4	26.1	24.9	21.7	19.6	20.0	20.9	21.1
EAC-5	19.5	18.5	19.8	21.9	20.7	19.1	18.1	18.0	16.4	15.8	16.2	16.5
ECOWAS	27.9	22.1	24.2	26.7	24.4	22.1	18.4	15.2	15.4	19.2	21.5	20.4
SACU	31.0	29.0	29.7	31.5	30.8	32.7	33.3	31.8	32.2	30.6	30.1	30.1
SADC	34.9	32.7	34.6	36.7	35.6	36.1	34.5	30.6	30.3	29.8	31.4	31.8

Table SA18. Imports of Goods and Services
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	41.2	59.5	42.3	39.3	35.8	36.0	36.7	32.7	27.1	22.3	31.1	32.4
Benin	24.9	27.0	29.2	26.1	25.2	28.3	31.0	29.7	29.2	32.9	33.9	33.6
Botswana	40.3	53.0	51.2	53.5	55.0	61.4	53.9	53.4	42.6	33.9	36.6	37.4
Burkina Faso	25.4	23.2	28.5	33.0	34.7	39.8	34.9	36.3	35.9	37.7	36.8	33.9
Burundi	34.3	28.2	43.4	43.5	46.7	41.5	37.3	32.9	24.9	23.4	25.4	24.9
Cabo Verde	64.5	63.4	66.8	73.8	68.1	62.8	66.4	56.7	60.8	67.5	69.0	71.0
Cameroon	25.8	24.1	24.8	28.0	28.0	27.3	27.7	25.2	21.7	20.6	21.1	20.5
Central African Rep.	22.1	23.2	26.5	24.4	24.9	26.1	40.5	38.6	35.7	34.7	35.4	33.4
Chad	44.3	46.8	48.6	48.1	48.0	43.1	43.9	42.9	39.4	41.4	44.3	44.5
Comoros	39.5	47.9	50.3	52.0	53.1	50.6	48.8	45.4	43.8	46.9	50.3	51.5
Congo, Dem. Rep. of	34.9	36.9	51.9	48.0	39.9	38.6	44.0	33.2	30.1	33.1	37.2	38.2
Congo, Rep. of	57.7	73.7	59.4	53.9	51.0	51.3	64.9	111.2	120.1	69.5	58.1	56.2
Côte d'Ivoire	41.3	39.9	43.3	36.9	44.7	38.6	34.4	34.2	29.5	30.7	32.9	32.8
Equatorial Guinea	35.9	47.9	58.9	43.4	41.3	41.9	41.6	44.3	36.1	29.9	28.6	27.3
Eritrea	41.6	23.4	23.3	32.3	24.2	21.3	22.8	19.8	16.9	16.3	15.7	14.2
Eswatini	68.9	63.1	59.1	41.7	40.8	41.9	44.7	38.6	42.1	42.7	42.0	39.9
Ethiopia[1]	36.3	27.9	33.1	36.5	32.8	28.8	28.2	30.3	27.6	23.7	22.6	23.3
Gabon	27.5	34.6	29.5	23.7	36.2	43.7	41.3	38.9	34.4	34.2	33.3	33.2
Gambia, The	27.2	25.4	24.9	26.0	27.7	27.1	32.1	32.8	28.0	34.9	38.4	39.6
Ghana	40.0	42.9	43.5	49.3	52.5	47.1	49.6	56.3	48.0	47.3	44.5	42.4
Guinea	24.2	21.1	25.4	43.2	44.4	31.6	33.0	30.7	59.1	47.4	52.3	45.9
Guinea-Bissau	28.7	35.2	35.2	30.9	25.7	25.8	31.4	32.2	30.2	34.2	31.1	32.4
Kenya	31.9	30.5	33.9	39.4	35.5	33.2	33.0	27.6	22.8	24.1	23.3	23.1
Lesotho	105.8	105.1	99.1	96.2	98.3	85.6	82.0	85.0	79.8	83.0	82.4	87.8
Liberia	123.7	84.3	79.7	82.2	84.2	69.1	84.9	82.5	67.9	56.1	52.1	51.1
Madagascar	43.5	45.8	39.2	38.2	39.1	38.7	37.2	35.5	35.8	39.0	40.6	40.1
Malawi	35.0	31.7	34.9	28.0	38.2	42.4	39.7	36.6	46.0	40.3	39.8	39.6
Mali	33.7	34.0	37.9	29.7	31.8	39.9	38.1	39.6	40.3	38.8	38.9	38.2
Mauritius	61.5	55.6	61.2	64.1	64.7	60.6	61.4	57.9	52.9	54.2	55.3	56.8
Mozambique	38.6	39.7	45.2	58.0	81.7	81.2	72.6	71.7	72.3	65.3	58.3	83.6
Namibia	41.8	55.8	52.1	50.6	55.7	59.3	66.7	67.0	55.9	45.1	47.7	47.6
Niger	31.2	46.7	49.0	47.8	39.4	39.1	38.9	40.9	33.5	33.7	35.1	38.0
Nigeria	17.7	16.6	19.2	21.9	17.5	14.9	15.1	14.9	11.6	13.5	16.6	15.9
Rwanda	26.1	28.7	28.6	34.2	34.0	32.0	33.0	36.3	36.9	32.3	35.0	35.7
São Tomé & Príncipe	57.2	54.7	61.0	63.1	54.0	58.9	65.9	59.6	53.0	49.2	48.1	49.5
Senegal	35.6	32.5	32.1	35.9	39.1	38.6	36.7	35.4	32.5	35.3	35.2	34.4
Seychelles	95.4	117.0	108.1	116.6	122.5	101.5	118.0	103.2	105.0	114.1	114.6	114.7
Sierra Leone	24.4	30.5	43.9	84.4	65.7	46.2	57.4	43.8	36.9	47.3	46.1	48.3
South Africa	30.6	27.5	27.4	29.7	31.2	33.3	33.0	31.4	30.1	28.4	28.9	29.4
South Sudan	...	...	...	30.4	34.1	29.9	31.6	28.9	61.5	80.8	80.3	88.2
Tanzania	26.8	28.4	29.5	34.2	33.0	30.2	28.3	27.1	22.1	19.6	21.3	22.9
Togo	50.7	50.2	53.4	64.5	59.2	66.3	57.7	57.8	53.2	50.0	51.2	49.7
Uganda	27.0	28.1	30.6	35.3	31.6	28.7	29.2	31.2	26.1	26.7	29.2	31.1
Zambia	30.4	26.7	27.6	32.2	36.3	39.3	37.7	41.7	37.9	36.5	42.3	44.2
Zimbabwe[2]	37.0	48.9	64.0	76.8	59.7	56.5	51.7	46.7	39.9	37.6	38.0	35.1
Sub-Saharan Africa	**29.9**	**30.3**	**30.5**	**32.5**	**31.5**	**30.4**	**30.0**	**29.1**	**26.8**	**26.5**	**28.4**	**28.4**
Median	35.8	36.1	42.8	39.4	39.4	39.8	38.9	38.6	36.9	36.5	38.0	38.2
Excluding Nigeria and South Africa	36.9	40.3	40.4	41.1	40.9	39.5	39.3	37.8	33.9	31.7	33.6	34.1
Oil-exporting countries	**24.3**	**27.3**	**26.1**	**27.5**	**24.0**	**22.1**	**22.3**	**21.2**	**18.0**	**18.4**	**22.1**	**21.2**
Excluding Nigeria	37.3	49.8	41.7	37.7	36.8	36.8	37.8	36.3	32.6	27.0	32.4	32.7
Oil-importing countries	**33.5**	**32.3**	**33.6**	**36.4**	**37.5**	**37.7**	**37.2**	**35.8**	**32.9**	**31.6**	**32.2**	**32.7**
Excluding South Africa	36.8	36.4	39.8	43.0	42.9	40.8	40.0	38.5	34.4	33.4	34.0	34.5
Middle-income countries	**29.2**	**29.6**	**29.0**	**30.8**	**29.6**	**28.7**	**28.2**	**27.4**	**24.9**	**25.0**	**27.1**	**26.7**
Excluding Nigeria and South Africa	39.1	45.1	41.8	41.2	41.4	40.5	40.5	39.6	34.5	31.6	34.1	34.2
Low-income countries	**33.5**	**33.4**	**38.1**	**41.0**	**40.1**	**37.9**	**37.5**	**35.6**	**33.2**	**31.9**	**33.0**	**34.0**
Excluding low-income countries in fragile situations	30.1	29.7	32.8	37.4	37.5	35.4	33.7	34.0	29.8	27.6	27.9	30.4
Countries in fragile situations	**39.9**	**41.6**	**46.2**	**44.5**	**44.3**	**41.5**	**42.7**	**40.6**	**40.1**	**38.2**	**39.8**	**38.9**
CFA franc zone	34.8	37.5	39.4	36.5	38.5	38.9	38.4	39.4	35.7	33.7	34.1	33.5
CEMAC	34.1	39.8	40.8	36.9	38.3	38.8	40.3	42.8	38.6	32.4	32.0	31.4
WAEMU	35.4	35.3	38.0	36.1	38.7	39.1	36.4	36.5	33.5	34.7	35.6	35.1
COMESA (SSA members)	36.7	34.2	39.0	42.1	38.8	36.9	36.8	34.0	30.4	29.9	30.7	30.9
EAC-5	29.1	29.2	31.7	36.7	34.1	31.4	30.8	28.6	23.9	23.5	24.2	24.9
ECOWAS	23.4	22.4	24.4	27.1	24.1	21.5	20.9	21.3	19.7	22.0	24.4	23.3
SACU	32.1	30.0	29.6	31.6	33.3	35.6	35.4	34.0	32.1	29.8	30.4	30.9
SADC	33.9	35.7	33.7	35.5	36.4	37.7	37.7	35.3	32.2	29.8	32.3	33.6

See sources and footnotes on page 37.

Table SA19. Trade Balance on Goods
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	42.9	25.8	40.5	42.1	37.0	30.7	21.0	10.7	13.9	15.4	18.9	20.8
Benin	−10.7	−9.9	−10.2	−9.9	−11.1	−10.1	−11.0	−7.4	−8.4	−9.1	-8.0	-6.2
Botswana	9.5	−12.8	−7.8	−4.5	−12.3	−2.3	3.3	−5.6	9.5	5.3	2.6	2.3
Burkina Faso	−9.5	−5.8	−1.5	−2.5	−3.6	−5.6	−2.1	−2.3	−1.4	−2.8	−4.1	−3.1
Burundi	−16.4	−14.5	−30.2	−29.0	−32.2	−29.1	−24.4	−21.7	−14.9	−14.6	−17.2	−16.6
Cabo Verde	−39.0	−39.6	−40.9	−45.1	−36.6	−33.6	−32.5	−29.6	−32.2	−36.3	−37.6	−39.5
Cameroon	1.7	−1.6	−0.8	−2.2	−0.9	−0.6	−1.3	−1.2	−0.7	−0.6	−1.4	−1.6
Central African Rep.	−4.0	−7.8	−8.8	−5.7	−5.5	−5.4	−20.3	−20.1	−16.5	−15.7	−18.0	−17.5
Chad	24.4	4.8	8.0	10.8	7.7	6.6	2.9	0.5	2.2	3.1	8.4	8.1
Comoros	−22.9	−28.9	−29.2	−30.3	−32.2	−30.5	−31.3	−28.6	−25.0	−26.9	−29.9	−30.4
Congo, Dem. Rep. of	0.2	−3.2	2.1	2.3	0.2	6.8	−0.9	−0.6	−0.5	2.3	5.1	3.9
Congo, Rep. of	47.1	22.8	37.1	45.5	43.1	33.1	24.6	−13.0	−21.9	28.7	47.6	49.4
Côte d'Ivoire	15.0	17.5	14.6	23.3	11.4	9.6	11.0	9.6	8.4	7.4	5.5	5.7
Equatorial Guinea	54.8	40.7	37.8	48.2	47.5	37.8	32.9	16.5	16.3	21.0	25.1	22.4
Eritrea	−33.9	−19.9	−19.6	−8.6	−5.3	−3.3	−2.4	−7.4	−8.8	−8.1	−7.4	−7.2
Eswatini	−3.6	−3.7	−3.3	−0.9	1.9	9.3	11.6	14.3	10.7	8.4	7.1	8.1
Ethiopia[1]	−20.6	−15.8	−16.3	−16.6	−16.9	−17.6	−17.9	−20.8	−18.9	−15.9	−14.9	−15.2
Gabon	41.6	29.8	38.7	49.4	42.3	32.2	28.1	15.5	13.3	18.7	22.8	23.5
Gambia, The	−12.8	−13.6	−13.3	−13.6	−14.1	−12.6	−16.8	−19.1	−15.2	−24.9	−26.8	−27.5
Ghana	−14.9	−8.6	−9.2	−7.7	−10.0	−8.0	−3.6	−8.4	−4.1	2.3	0.5	0.2
Guinea	2.2	1.8	1.8	−9.3	−3.5	−0.4	−5.0	−4.7	−23.2	−0.7	−9.3	−3.4
Guinea-Bissau	−6.0	−9.8	−13.4	−0.3	−5.1	−2.9	−4.6	4.3	4.5	3.6	2.7	1.0
Kenya	−12.2	−13.4	−15.6	−20.1	−18.5	−18.6	−17.4	−13.1	−10.8	−12.9	−11.9	−11.4
Lesotho	−38.4	−45.8	−43.1	−39.3	−45.1	−39.0	−36.0	−32.2	−29.9	−28.9	−27.5	−29.3
Liberia	−22.0	−19.9	−10.2	−16.5	−19.0	−12.3	−33.4	−34.5	−23.7	−16.5	−13.9	−16.1
Madagascar	−13.5	−19.2	−11.8	−10.1	−11.2	−8.0	−5.1	−3.4	−2.6	−3.9	−5.5	−5.5
Malawi	−12.8	−10.3	−10.7	−7.9	−10.9	−7.8	−7.4	−7.6	−11.1	−8.9	−8.6	−8.6
Mali	−4.4	−6.0	−8.6	−2.6	0.9	−1.9	−3.5	−3.6	−4.1	−3.9	−4.4	−5.9
Mauritius	−14.6	−17.0	−18.9	−20.4	−21.1	−18.7	−17.7	−15.8	−16.7	−19.7	−22.8	−24.4
Mozambique	−5.5	−11.3	−11.3	−17.1	−26.7	−31.1	−27.7	−28.1	−12.9	−4.0	−2.1	−21.4
Namibia	−4.0	−14.0	−9.9	−8.8	−16.4	−15.6	−21.5	−24.6	−19.1	−10.5	−12.7	−12.7
Niger	−6.9	−14.7	−14.2	−14.4	−6.6	−5.6	−8.6	−12.3	−9.1	−9.0	−9.8	−11.3
Nigeria	15.3	8.5	8.2	7.9	8.5	8.2	3.7	−1.3	−0.1	3.5	4.2	3.8
Rwanda	−10.3	−14.2	−13.6	−17.2	−18.8	−15.1	−15.8	−14.9	−15.5	−9.5	−10.0	−10.0
São Tomé & Príncipe	−36.6	−39.7	−43.2	−44.9	−38.2	−38.2	−36.5	−34.1	−29.8	−28.6	−31.0	−32.7
Senegal	−14.5	−12.5	−11.8	−14.0	−16.2	−15.8	−14.3	−12.1	−10.4	−12.7	−12.6	−11.8
Seychelles	−29.8	−37.6	−39.3	−43.0	−38.5	−29.7	−40.3	−34.3	−37.3	−41.4	−44.0	−43.7
Sierra Leone	−7.5	−14.3	−20.2	−56.9	−24.1	−0.6	−6.8	−18.0	−7.6	−15.1	−16.6	−13.9
South Africa	−0.6	1.1	2.2	1.6	−1.1	−2.0	−1.4	−1.1	0.8	1.5	0.4	0.0
South Sudan	...	...	...	49.1	−19.6	1.9	9.5	−1.3	16.5	10.9	13.4	26.1
Tanzania	−9.8	−10.0	−9.5	−12.2	−13.0	−12.2	−11.4	−9.4	−5.9	−4.8	−5.9	−6.9
Togo	−13.2	−12.2	−13.3	−21.7	−14.4	−20.1	−19.4	−24.7	−21.6	−20.0	−20.7	−19.2
Uganda	−8.9	−8.1	−10.9	−11.7	−10.0	−8.3	−8.9	−9.7	−6.1	−6.7	−8.3	−9.4
Zambia	4.7	6.3	13.7	9.8	6.3	5.9	6.0	−0.3	−0.2	1.4	1.2	1.5
Zimbabwe[2]	−7.4	−18.2	−17.9	−23.9	−18.6	−18.8	−15.9	−14.7	−9.1	−8.6	−10.8	−10.0
Sub-Saharan Africa	**5.9**	**2.6**	**4.5**	**5.6**	**3.5**	**3.0**	**0.8**	**−3.1**	**−1.8**	**0.4**	**0.4**	**0.1**
Median	−8.2	−10.8	−10.5	−9.3	−11.1	−7.8	−7.4	−9.4	−8.8	−6.7	−8.0	−7.2
Excluding Nigeria and South Africa	5.3	−0.2	3.6	6.7	2.7	1.8	−0.3	−5.2	−3.7	−1.5	−1.3	−1.7
Oil-exporting countries	**21.9**	**12.6**	**15.2**	**18.0**	**15.7**	**13.5**	**8.2**	**1.2**	**2.7**	**7.0**	**8.5**	**8.3**
Excluding Nigeria	35.0	21.1	31.1	36.6	29.7	24.5	18.1	7.4	9.2	13.2	16.8	17.8
Oil-importing countries	**−4.0**	**−4.3**	**−3.1**	**−3.8**	**−6.4**	**−6.2**	**−6.2**	**−6.8**	**−4.9**	**−3.6**	**−4.3**	**−4.8**
Excluding South Africa	−7.4	−8.9	−8.4	−9.2	−10.8	−9.3	−9.3	−10.3	−8.0	−6.6	−7.0	−7.5
Middle-income countries	**8.5**	**5.4**	**7.2**	**8.1**	**6.6**	**5.7**	**3.3**	**−1.0**	**0.5**	**2.7**	**2.8**	**2.5**
Excluding Nigeria and South Africa	13.2	6.7	11.8	15.3	11.9	9.2	6.4	−0.5	0.8	3.0	3.4	3.3
Low-income countries	**−7.5**	**−10.1**	**−9.3**	**−6.5**	**−11.2**	**−9.1**	**−9.9**	**−11.2**	**−9.4**	**−7.3**	**−7.3**	**−8.1**
Excluding low-income countries in fragile situations	−11.3	−11.5	−11.5	−13.1	−14.1	−14.1	−13.9	−14.9	−11.7	−9.7	−9.6	−11.2
Countries in fragile situations	**4.7**	**−0.4**	**1.7**	**8.1**	**−0.2**	**2.1**	**0.2**	**−3.9**	**−3.8**	**−0.0**	**0.9**	**1.2**
CFA franc zone	12.6	7.3	9.6	14.6	12.0	8.1	6.1	0.3	−0.1	2.3	3.6	3.5
CEMAC	26.9	15.9	20.5	27.1	25.1	19.1	14.6	3.3	2.2	9.3	13.5	13.3
WAEMU	−1.9	−1.1	−1.9	0.4	−2.4	−3.3	−2.3	−2.3	−1.9	−2.7	−3.6	−3.4
COMESA (SSA members)	−9.8	−11.1	−9.9	−11.3	−11.7	−10.1	−10.9	−11.4	−10.2	−9.5	−9.2	−9.4
EAC-5	−10.8	−11.4	−12.9	−15.9	−15.3	−14.5	−14.0	−11.7	−8.9	−9.3	−9.6	−9.8
ECOWAS	9.1	5.0	4.9	4.8	5.0	5.0	2.0	−2.3	−1.4	1.6	1.5	1.4
SACU	−0.6	−0.1	1.2	0.9	−2.2	−2.5	−2.0	−2.1	0.4	1.1	−0.0	−0.4
SADC	3.7	1.7	5.2	5.7	3.2	2.6	1.1	−1.5	1.0	2.4	1.8	1.0

See sources and footnotes on page 37.

Table SA20. External Current Account[1]
(Percent of GDP)

	2004–08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	12.3	–10.8	9.0	11.7	10.8	6.1	–2.6	–8.8	–4.8	–1.0	–2.1	–1.9
Benin	–6.7	–8.3	–8.2	–7.3	–7.4	–7.4	–8.6	–9.0	–9.4	–11.1	-10.6	-8.9
Botswana	10.7	–6.3	–2.8	3.1	0.3	8.9	15.4	7.8	13.7	12.3	8.7	7.7
Burkina Faso	–10.4	–4.7	–2.2	–4.0	–6.7	–11.3	–8.1	–8.5	–7.2	–8.1	–8.6	–7.6
Burundi	–7.8	1.7	–12.2	–14.4	–18.6	–19.3	–18.5	–17.7	–13.1	–12.3	–13.4	–12.6
Cabo Verde	–9.5	–14.6	–12.4	–16.3	–12.6	–4.9	–9.1	–3.2	–2.4	–6.2	–9.1	–10.2
Cameroon	–0.9	–3.1	–2.5	–2.7	–3.3	–3.6	–4.0	–3.8	–3.2	–2.7	–3.2	–3.0
Central African Rep.	–5.5	–9.1	–10.2	–7.6	–6.5	–3.3	–14.8	–9.7	–5.5	–8.4	–8.9	–8.4
Chad	0.4	–8.2	–8.5	–5.8	–7.8	–9.1	–8.9	–13.6	–9.2	–5.7	–4.2	–5.5
Comoros	–6.3	–6.9	–0.4	–6.0	–5.5	–7.0	–6.3	–0.4	–7.4	–4.1	–9.2	–10.1
Congo, Dem. Rep. of	–0.2	–6.1	–10.5	–5.2	–4.6	–5.0	–4.6	–3.7	–3.1	–0.5	–0.0	–1.8
Congo, Rep. of	3.2	–14.6	7.3	14.0	17.7	13.8	1.4	–54.1	–73.6	–12.9	9.1	12.4
Côte d'Ivoire	1.1	6.7	1.9	10.4	–1.2	–1.4	1.4	–0.6	–1.1	–4.6	–4.6	–4.2
Equatorial Guinea	13.6	–9.7	–20.2	–5.7	–1.1	–2.4	–4.3	–16.2	–12.9	–5.9	–3.1	–3.6
Eritrea	–3.1	–7.6	–6.1	3.2	2.7	3.6	4.0	–1.4	–2.1	–2.4	–1.6	–2.3
Eswatini	–3.1	–11.6	–8.7	1.0	12.5	18.7	21.2	26.1	17.2	13.7	10.3	9.8
Ethiopia[2]	–8.4	–6.7	–1.4	–2.5	–6.9	–5.9	–6.4	–10.2	–9.0	–8.1	–6.2	–6.2
Gabon	17.2	4.4	14.9	24.0	17.9	7.3	7.6	–5.6	–9.9	–4.9	–1.6	–0.5
Gambia, The	–5.1	–7.6	–9.5	–7.5	–4.5	–6.8	–7.2	–9.8	–5.9	–13.1	–12.5	–13.6
Ghana	–8.1	–5.5	–8.6	–9.0	–11.7	–11.9	–9.5	–7.7	–6.7	–4.5	–4.1	–4.0
Guinea	–3.9	–5.7	–6.4	–18.4	–20.0	–12.5	–13.4	–12.5	–31.1	–6.9	–21.2	–16.4
Guinea-Bissau	–3.6	–5.8	–13.5	–1.3	–8.4	–4.6	0.5	1.9	1.3	–2.0	–3.6	–4.1
Kenya	–2.6	–4.4	–5.9	–9.2	–8.4	–8.8	–10.4	–6.7	–5.2	–6.3	–5.6	–5.3
Lesotho	15.1	1.6	–8.9	–13.4	–8.4	–5.1	–4.8	–3.9	–8.2	–3.7	–6.0	–12.5
Liberia	–4.6	–11.5	–17.6	–12.8	–11.4	–17.0	–19.4	–20.8	–14.1	–19.1	–18.3	–21.4
Madagascar	–12.9	–21.1	–10.2	–7.0	–7.6	–5.9	–0.3	–1.9	0.6	–0.3	–2.2	–3.4
Malawi	–12.9	–10.2	–8.6	–8.6	–9.2	–8.4	–8.3	–9.4	–13.6	–9.5	–9.3	–8.1
Mali	–7.3	–10.8	–10.7	–5.1	–2.2	–2.9	–4.7	–5.3	–7.2	–5.8	–7.2	–7.8
Mauritius	–6.0	–7.2	–10.0	–13.5	–7.1	–6.2	–5.6	–4.8	–4.3	–6.6	–8.2	–10.4
Mozambique	–8.9	–10.9	–16.1	–25.3	–44.7	–42.9	–38.2	–40.3	–39.3	–22.4	–18.2	–44.7
Namibia	6.7	–1.5	–3.5	–3.0	–5.7	–4.0	–10.8	–12.4	–13.8	–3.3	–6.0	–7.6
Niger	–9.2	–24.4	–19.8	–25.1	–16.1	–16.8	–15.4	–20.5	–15.7	–14.1	–16.2	–18.3
Nigeria	14.0	4.7	3.6	2.6	3.8	3.7	0.2	–3.2	0.7	2.8	2.0	1.0
Rwanda	–3.2	–7.0	–7.2	–7.4	–11.2	–8.7	–10.3	–14.5	–15.8	–6.8	–8.9	–9.4
São Tomé & Príncipe	–28.1	–24.7	–22.9	–27.7	–21.9	–15.2	–21.9	–13.0	–6.5	–8.2	–7.0	–10.2
Senegal	–7.6	–5.3	–3.5	–6.5	–8.7	–8.2	–7.0	–5.4	–4.0	–7.3	–7.7	–7.1
Seychelles	–13.8	–14.8	–19.4	–23.0	–21.1	–11.9	–23.1	–18.6	–20.1	–20.5	–18.4	–18.0
Sierra Leone	–6.9	–13.3	–22.7	–65.0	–31.8	–17.5	–18.2	–17.4	–2.3	–11.3	–13.4	–14.1
South Africa	–4.3	–2.7	–1.5	–2.2	–5.1	–5.8	–5.1	–4.6	–2.8	–2.5	–3.2	–3.5
South Sudan	...	...	...	18.2	–15.9	–3.9	–1.5	–7.1	1.3	–5.0	–8.8	2.7
Tanzania	–6.5	–7.6	–7.7	–10.8	–11.6	–10.6	–10.1	–8.4	–4.5	–2.8	–4.3	–5.5
Togo	–8.1	–5.2	–5.8	–7.8	–7.6	–13.2	–10.0	–11.0	–9.3	–8.0	–9.2	–8.0
Uganda	–2.7	–5.6	–8.0	–9.9	–6.8	–7.1	–8.1	–7.1	–2.9	–4.6	–6.9	–8.9
Zambia	–1.1	6.0	7.5	4.7	5.4	–0.6	2.1	–3.9	–4.5	–3.9	–4.0	–3.4
Zimbabwe[3]	0.3	–11.2	–14.3	–20.1	–13.1	–16.6	–14.2	–9.5	–3.4	–4.1	–5.8	–5.6
Sub-Saharan Africa	**2.1**	**–2.4**	**–0.8**	**–0.6**	**–1.7**	**–2.2**	**–3.6**	**–6.0**	**–3.9**	**–2.3**	**–2.8**	**–3.4**
Median	–4.4	–7.1	–8.4	–7.0	–7.4	–6.2	–7.2	–8.4	–5.9	–5.8	–6.2	–7.1
Excluding Nigeria and South Africa	–0.0	–6.5	–3.3	–1.6	–3.4	–4.4	–5.7	–8.5	–6.8	–4.6	–4.8	–5.4
Oil-exporting countries	**12.4**	**0.6**	**3.5**	**4.8**	**4.7**	**3.5**	**–0.6**	**–5.3**	**–2.2**	**0.8**	**0.7**	**0.2**
Excluding Nigeria	9.0	–8.0	3.5	8.9	6.6	3.2	–2.3	–10.4	–8.5	–2.6	–2.0	–1.4
Oil-importing countries	**–4.1**	**–4.4**	**–3.9**	**–4.7**	**–6.9**	**–7.2**	**–6.5**	**–6.5**	**–5.0**	**–4.2**	**–4.8**	**–5.5**
Excluding South Africa	–4.0	–5.8	–6.3	–7.1	–8.4	–8.2	–7.4	–7.7	–6.2	–5.3	–5.8	–6.6
Middle-income countries	**3.7**	**–1.0**	**0.7**	**1.0**	**0.3**	**–0.3**	**–2.2**	**–4.8**	**–2.6**	**–1.1**	**–1.6**	**–1.9**
Excluding Nigeria and South Africa	3.5	–5.0	0.0	2.6	1.6	–0.5	–3.0	–7.0	–5.7	–3.3	–3.3	–3.2
Low-income countries	**–5.7**	**–8.6**	**–8.5**	**–8.1**	**–11.0**	**–10.2**	**–9.5**	**–10.2**	**–8.2**	**–6.3**	**–6.9**	**–8.2**
Excluding low-income countries in fragile situations	–6.9	–8.0	–7.1	–9.8	–12.4	–11.9	–11.3	–12.2	–9.3	–7.5	–7.5	–9.7
Countries in fragile situations	**–2.6**	**–6.6**	**–6.4**	**–1.8**	**–5.7**	**–5.2**	**–5.1**	**–8.5**	**–8.5**	**–4.8**	**–4.9**	**–4.7**
CFA franc zone	0.4	–4.6	–3.4	0.8	–1.0	–3.0	–3.5	–9.0	–8.9	–6.2	–5.0	–4.7
CEMAC	5.7	–5.5	–2.5	3.6	3.3	0.3	–2.2	–13.1	–13.7	–5.1	–1.7	–1.2
WAEMU	–5.0	–3.8	–4.5	–2.4	–5.7	–6.5	–4.8	–5.7	–5.3	–7.0	–7.5	–7.2
COMESA (SSA members)	–4.1	–6.1	–5.7	–6.5	–5.8	–6.3	–6.3	–6.7	–5.6	–5.2	–5.1	–5.4
EAC-5	–4.0	–5.7	–7.1	–9.9	–9.4	–9.2	–10.0	–8.0	–5.4	–5.1	–5.7	–6.2
ECOWAS	8.2	2.0	1.0	0.2	0.7	0.7	–1.5	–4.1	–1.6	–0.3	–1.3	–1.7
SACU	–3.3	–2.9	–1.7	–2.1	–4.8	–4.9	–4.1	–4.0	–2.2	–1.6	–2.6	–3.0
SADC	–1.7	–4.9	–1.4	–1.3	–3.1	–4.1	–5.1	–6.2	–3.8	–2.3	–3.2	–4.2

See sources and footnotes on page 37.

Table SA21. Net Foreign Direct Investment
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	−0.5	3.1	−5.5	−4.6	−7.5	−9.6	−1.6	7.1	1.3	−3.2	−2.7	1.4
Benin	2.1	1.5	2.8	1.3	2.6	3.3	4.0	1.4	1.4	3.4	4.1	4.1
Botswana	4.2	2.0	1.7	9.0	5.3	5.3	2.5	2.1	−1.2	0.4	−0.5	−0.8
Burkina Faso	1.6	1.1	0.4	0.4	2.3	3.6	2.3	2.1	2.7	3.5	3.0	2.7
Burundi	0.1	0.0	0.0	0.2	0.0	2.6	2.4	1.5	1.2	1.1	1.2	1.2
Cabo Verde	9.4	7.0	6.7	5.6	3.8	3.5	6.8	7.0	6.9	5.4	7.9	8.2
Cameroon	1.7	1.8	1.6	1.6	2.8	2.7	2.6	1.9	1.7	2.3	2.2	2.2
Central African Rep.	3.3	2.1	3.1	1.7	2.2	0.1	3.5	0.0	0.4	0.4	0.8	1.1
Chad	8.5	6.5	5.2	4.5	4.7	4.0	5.2	5.1	2.4	3.7	4.3	5.0
Comoros	0.6	2.6	1.5	3.8	1.7	1.4	0.7	0.8	0.4	0.4	1.1	1.1
Congo, Dem. Rep. of	5.3	−1.5	13.3	6.5	10.5	5.2	5.1	3.0	2.4	2.6	1.9	2.5
Congo, Rep. of	11.2	13.6	7.6	1.3	−2.1	4.3	15.9	33.4	45.6	20.9	19.7	19.4
Côte d'Ivoire	1.9	1.6	1.3	1.1	1.2	1.3	1.2	1.4	1.5	1.4	1.5	1.6
Equatorial Guinea	9.3	12.1	20.4	12.8	15.7	9.8	5.2	9.0	2.8	4.9	2.1	4.1
Eritrea	1.4	4.9	4.3	1.5	1.4	1.2	1.2	1.1	1.0	1.0	0.9	0.9
Eswatini	1.9	1.6	3.0	2.2	0.8	2.0	0.6	1.0	0.7	−2.8	0.5	0.5
Ethiopia[1]	1.4	0.7	1.0	2.0	0.6	2.6	2.6	3.4	4.5	5.2	4.9	5.2
Gabon	4.2	5.2	3.5	4.1	3.9	5.1	5.8	6.9	8.9	9.1	9.1	10.3
Gambia, The	5.8	4.9	5.3	4.3	7.1	6.3	6.1	5.3	5.0	5.6	6.0	6.3
Ghana	2.9	11.3	7.9	8.1	7.9	6.7	8.7	8.1	8.1	6.9	6.0	5.0
Guinea	4.0	2.1	2.2	5.6	8.8	1.6	0.7	3.0	18.4	12.7	13.4	9.6
Guinea-Bissau	1.2	2.1	3.3	2.2	0.7	1.9	2.5	1.5	1.4	2.8	2.8	2.9
Kenya	0.5	0.2	0.4	3.3	2.3	1.7	1.2	0.6	0.3	0.5	0.7	0.7
Lesotho	2.2	3.6	0.9	2.2	2.1	1.9	4.2	4.6	2.8	1.6	1.6	1.6
Liberia	3.7	8.7	16.2	17.0	16.6	17.6	11.0	9.1	7.1	7.4	9.3	11.6
Madagascar	3.7	8.1	3.9	7.8	7.8	5.2	2.9	4.5	4.5	3.1	3.1	3.2
Malawi	1.8	0.9	2.3	0.8	1.4	1.7	0.8	1.8	3.1	2.0	2.2	2.3
Mali	1.8	7.3	3.7	4.2	3.1	2.3	1.0	1.5	1.9	2.2	2.0	1.7
Mauritius	1.5	2.4	124.0	−8.8	48.5	9.9	4.3	2.9	106.3	81.1	79.5	77.4
Mozambique	3.8	8.0	9.8	27.1	37.1	38.6	29.1	26.1	28.4	18.2	14.8	37.0
Namibia	6.3	5.7	7.0	7.0	8.6	6.5	4.7	7.9	3.2	3.4	3.9	3.8
Niger	2.3	13.4	17.5	16.5	12.1	8.1	8.9	6.9	3.5	3.7	4.6	6.4
Nigeria	2.1	2.4	1.4	1.9	1.2	0.8	0.5	0.3	0.8	0.6	0.6	0.5
Rwanda	1.2	2.2	0.7	1.6	2.2	3.4	3.9	2.7	2.6	2.7	2.7	3.2
São Tomé & Príncipe	13.2	8.1	25.6	12.6	7.8	−0.1	6.5	8.2	4.9	10.0	8.8	11.8
Senegal	1.3	1.5	1.6	1.6	1.2	1.5	1.9	2.1	1.3	2.2	2.0	2.2
Seychelles	11.9	20.2	19.2	19.5	23.8	12.2	16.1	10.8	12.8	18.0	10.7	10.9
Sierra Leone	3.9	4.5	9.2	32.3	19.0	7.3	7.7	6.2	4.2	4.1	7.7	9.9
South Africa	1.1	2.1	1.0	1.1	0.4	0.5	−0.5	−1.3	−0.8	−1.7	−0.7	−0.2
South Sudan	...	...	...	−0.4	−0.5	−3.8	−0.0	0.2	−1.1	0.7	0.7	2.9
Tanzania	3.5	3.7	4.0	4.5	4.4	4.5	3.8	3.4	2.9	2.6	2.6	2.9
Togo	2.8	0.3	1.4	−13.9	−7.7	4.7	−6.7	−2.2	−2.7	−3.5	−3.3	−3.7
Uganda	4.7	4.4	2.5	4.3	4.7	4.4	3.9	3.1	2.6	2.7	3.7	4.9
Zambia	5.9	2.8	3.1	4.7	9.5	6.0	11.8	5.5	7.3	4.2	5.0	5.1
Zimbabwe[2]	0.7	1.3	1.2	2.9	2.5	2.5	3.0	2.5	2.1	1.6	0.4	0.4
Sub-Saharan Africa	**2.0**	**2.9**	**2.9**	**2.2**	**2.2**	**1.4**	**1.7**	**2.1**	**2.9**	**1.8**	**2.1**	**2.7**
Median	2.6	2.7	3.1	3.3	2.8	3.4	3.5	3.0	2.6	2.7	2.7	2.9
Excluding Nigeria and South Africa	2.8	3.8	5.2	3.1	3.9	2.3	3.6	4.7	5.5	3.9	4.0	5.0
Oil-exporting countries	**2.3**	**3.2**	**1.2**	**1.2**	**0.2**	**−0.6**	**0.8**	**2.3**	**1.8**	**0.5**	**0.7**	**1.5**
Excluding Nigeria	2.7	4.9	0.7	−0.2	−1.9	−3.5	1.4	7.0	4.0	0.4	1.1	3.8
Oil-importing countries	**1.9**	**2.8**	**4.1**	**3.0**	**3.9**	**3.2**	**2.6**	**1.9**	**3.7**	**2.6**	**2.9**	**3.4**
Excluding South Africa	2.9	3.3	7.1	4.9	6.8	5.2	4.6	3.9	6.0	5.1	4.9	5.4
Middle-income countries	**1.8**	**2.9**	**2.5**	**1.6**	**1.4**	**0.5**	**1.0**	**1.6**	**2.5**	**1.2**	**1.6**	**2.0**
Excluding Nigeria and South Africa	2.5	4.1	5.6	1.8	2.5	0.2	2.8	5.3	6.6	3.8	4.1	5.0
Low-income countries	**3.3**	**3.3**	**4.6**	**5.2**	**6.1**	**5.4**	**4.6**	**4.1**	**4.2**	**4.0**	**3.9**	**5.0**
Excluding low-income countries in fragile situations	2.9	3.4	3.6	6.0	6.6	7.1	5.9	5.1	4.8	4.6	4.6	6.4
Countries in fragile situations	**4.0**	**3.6**	**5.1**	**3.5**	**4.2**	**3.0**	**3.6**	**3.9**	**4.9**	**3.5**	**3.6**	**3.6**
CFA franc zone	3.8	4.8	5.1	3.6	3.9	3.8	3.9	4.6	4.2	3.7	3.7	3.9
CEMAC	5.7	6.6	7.1	4.8	5.5	5.0	5.9	7.8	7.6	6.0	5.8	6.4
WAEMU	1.8	3.1	2.9	2.1	2.2	2.6	2.0	1.9	1.6	2.0	2.1	2.2
COMESA (SSA members)	2.6	1.7	9.8	3.1	6.6	3.8	3.8	2.7	7.1	6.0	5.8	5.9
EAC-5	2.3	2.2	2.0	3.7	3.4	3.2	2.7	2.0	1.6	1.6	1.8	2.1
ECOWAS	2.2	3.1	2.2	2.7	2.1	1.7	1.3	1.2	1.8	1.7	1.7	1.6
SACU	1.3	2.2	1.2	1.5	0.8	0.9	−0.2	−0.7	−0.6	−1.4	−0.5	−0.1
SADC	1.5	2.6	3.1	1.4	1.9	0.6	1.5	2.3	3.4	1.1	1.7	3.2

See sources and footnotes on page 37.

Table SA22. Real Effective Exchange Rates[1]
(Annual average; index, 2010 = 100)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	76.1	105.9	100.0	103.3	114.3	121.6	126.8	128.2	125.0	155.6
Benin	103.5	106.8	100.0	99.3	97.7	99.1	98.1	87.7	87.7	88.2
Botswana	89.4	91.5	100.0	99.9	108.0	92.7	88.3	88.9	89.7	96.4
Burkina Faso	101.4	108.9	100.0	101.8	101.5	103.2	107.4	100.5	95.2	92.1
Burundi	87.3	97.2	100.0	99.3	102.3	102.4	106.6	121.7	122.0	131.0
Cabo Verde	98.1	102.5	100.0	102.1	99.7	103.1	103.0	100.1	98.5	99.0
Cameroon	101.2	106.6	100.0	100.2	96.5	99.5	100.7	97.8	99.7	99.9
Central African Rep.	94.8	104.8	100.0	98.9	99.2	107.4	119.8	118.7	124.1	127.0
Chad	95.9	108.1	100.0	94.0	101.8	101.9	103.2	101.2	97.7	92.3
Comoros	103.5	105.1	100.0	100.4	100.0	97.1	102.8	93.1	93.7	95.8
Congo, Dem. Rep. of	142.2	141.8	100.0	105.7	117.6	117.0	117.8	134.8	128.6	103.6
Congo, Rep. of	97.6	107.1	100.0	99.0	96.4	103.2	104.8	98.9	102.4	103.0
Côte d'Ivoire	102.1	106.3	100.0	102.0	98.0	102.4	103.4	99.1	99.3	99.2
Equatorial Guinea	88.2	101.2	100.0	103.7	99.8	104.0	106.9	98.4	100.0	100.5
Eritrea	58.2	89.5	100.0	110.6	130.7	151.8	176.8	227.0	271.4	324.2
Eswatini	92.9	92.5	100.0	100.1	100.1	94.2	90.4	89.8	87.4	94.1
Ethiopia	102.1	116.8	100.0	105.2	126.1	127.7	130.9	150.0	153.1	155.9
Gabon	98.8	103.8	100.0	98.7	96.6	98.4	102.8	98.9	100.6	102.4
Gambia, The	102.2	102.9	100.0	92.5	90.3	83.6	76.3	76.2	91.3	92.8
Ghana	102.4	93.6	100.0	95.1	87.5	88.1	68.4	69.4	79.1	77.7
Guinea	95.8	107.7	100.0	96.5	107.6	120.7	131.0	147.6	133.9	139.4
Guinea-Bissau	98.7	104.5	100.0	102.1	99.6	101.2	100.4	97.9	99.6	99.5
Kenya	91.6	101.2	100.0	95.9	109.1	113.0	117.1	122.2	127.1	131.1
Lesotho	89.8	87.7	100.0	100.5	94.7	84.7	79.2	73.8	68.8	76.6
Liberia	91.6	98.4	100.0	99.8	109.0	107.7	107.9	132.1	131.9	121.0
Madagascar	85.7	100.2	100.0	105.3	104.2	107.9	104.2	101.8	100.6	108.2
Malawi	95.5	106.2	100.0	96.8	79.0	66.8	72.7	83.4	72.4	74.4
Mali	98.5	105.3	100.0	100.5	101.1	101.6	103.5	99.8	97.9	98.7
Mauritius	93.9	96.7	100.0	106.3	108.0	107.9	111.3	110.2	111.1	115.8
Mozambique	117.1	118.1	100.0	120.9	129.4	128.8	128.7	119.6	90.9	95.9
Namibia	91.0	88.8	100.0	98.6	94.8	86.7	81.6	79.6	77.0	85.2
Niger	101.2	107.2	100.0	100.0	94.8	98.3	97.8	92.9	93.0	94.4
Nigeria	87.8	91.9	100.0	100.4	111.7	119.1	127.6	126.7	116.3	105.5
Rwanda	87.2	105.0	100.0	94.6	100.6	99.8	96.0	103.5	102.3	101.7
São Tomé & Príncipe	82.3	102.7	100.0	111.8	117.4	128.5	137.6	138.5	147.4	153.9
Senegal	103.7	106.6	100.0	101.1	97.4	99.5	98.8	92.9	94.1	93.7
Seychelles	129.5	95.6	100.0	92.7	91.9	108.2	104.8	116.9	116.6	113.7
Sierra Leone	94.8	103.3	100.0	100.7	117.5	127.2	131.2	143.0	130.0	112.2
South Africa	94.3	86.6	100.0	98.0	92.8	83.1	78.0	77.5	72.1	81.2
South Sudan	...	...	...	...	...	...	...	...	...	...
Tanzania	99.4	104.4	100.0	93.4	108.7	116.5	119.3	113.9	110.5	109.4
Togo	92.4	108.4	100.0	100.7	96.9	99.1	100.3	93.4	94.3	93.6
Uganda	103.2	107.1	100.0	93.9	105.6	106.8	108.9	105.5	101.2	97.4
Zambia	90.2	94.3	100.0	97.4	100.7	104.4	100.2	90.2	88.5	96.5
Zimbabwe	...	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	**93.0**	**96.4**	**100.0**	**99.6**	**104.2**	**105.0**	**105.7**	**105.7**	**101.2**	**102.1**
Median	95.8	104.4	100.0	100.1	100.6	103.1	103.5	100.1	99.7	99.5
Excluding Nigeria and South Africa	95.3	105.0	100.0	99.9	105.3	107.7	107.6	108.2	107.8	110.6
Oil-exporting countries	**87.2**	**95.5**	**100.0**	**100.7**	**109.9**	**116.7**	**123.7**	**122.5**	**114.9**	**110.0**
Excluding Nigeria	86.3	105.6	100.0	101.3	105.5	110.5	114.0	112.1	111.5	123.5
Oil-importing countries	**97.3**	**97.0**	**100.0**	**98.8**	**100.2**	**97.0**	**94.0**	**94.6**	**92.1**	**96.2**
Excluding South Africa	98.8	104.7	100.0	99.4	105.2	106.8	105.5	106.9	106.6	107.1
Middle-income countries	**91.1**	**93.2**	**100.0**	**99.5**	**102.9**	**103.2**	**103.6**	**102.7**	**98.1**	**99.6**
Excluding Nigeria and South Africa	91.4	101.2	100.0	99.7	102.1	104.6	102.7	101.4	103.4	109.7
Low-income countries	**100.9**	**110.0**	**100.0**	**100.1**	**109.5**	**111.9**	**114.0**	**117.3**	**113.8**	**112.3**
Excluding low-income countries in fragile situations	101.6	109.7	100.0	99.6	112.2	115.3	117.3	118.9	115.4	115.4
Countries in fragile situations	**100.0**	**109.5**	**100.0**	**101.0**	**102.8**	**105.1**	**107.1**	**110.1**	**107.9**	**105.1**
CFA franc zone	99.1	106.1	100.0	100.4	98.2	101.1	102.6	97.6	97.9	97.7
CEMAC	96.8	105.3	100.0	99.6	97.9	101.2	103.4	99.2	100.5	100.3
WAEMU	101.4	106.7	100.0	101.1	98.5	101.0	101.9	96.3	95.8	95.5
COMESA (SSA members)	97.7	107.2	100.0	100.0	110.1	111.6	113.4	119.5	119.4	120.1
EAC-5	96.0	103.6	100.0	94.6	107.6	111.9	114.6	114.6	113.9	114.1
ECOWAS	91.1	94.7	100.0	100.0	107.3	113.3	117.1	115.9	109.9	102.4
SACU	93.9	86.9	100.0	98.2	93.6	83.7	78.6	78.2	73.0	82.1
SADC	93.3	94.1	100.0	99.4	99.7	94.7	92.0	91.5	86.3	94.8

See sources and footnotes on page 37.

Table SA23. Nominal Effective Exchange Rates[1]
(Annual average; index, 2010 = 100)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	114.0	118.9	100.0	94.2	96.9	96.6	95.5	88.9	66.6	64.1
Benin	104.1	105.8	100.0	101.2	96.1	99.6	102.2	93.1	96.3	99.1
Botswana	115.5	95.7	100.0	95.4	98.3	81.4	75.5	74.2	73.7	78.5
Burkina Faso	92.1	103.4	100.0	104.2	104.0	110.4	121.7	120.9	124.2	128.9
Burundi	108.4	99.2	100.0	96.1	87.8	84.4	87.1	96.8	94.3	89.9
Cabo Verde	101.7	102.4	100.0	101.1	99.1	102.8	104.4	102.7	104.1	106.2
Cameroon	100.4	104.6	100.0	101.2	98.1	101.7	103.3	99.5	103.1	105.8
Central African Rep.	101.7	104.4	100.0	100.8	97.8	101.3	103.0	98.7	99.8	100.4
Chad	98.4	103.0	100.0	101.1	98.8	100.7	102.1	98.5	101.0	102.4
Comoros	99.6	104.5	100.0	102.9	100.1	105.2	106.7	99.3	102.2	107.9
Congo, Dem. Rep. of	194.0	113.1	100.0	94.9	100.0	100.9	102.4	118.0	111.6	75.8
Congo, Rep. of	101.7	105.2	100.0	101.1	98.2	102.0	103.4	97.1	99.3	99.8
Côte d'Ivoire	101.6	105.1	100.0	100.6	97.9	102.0	104.6	100.6	101.8	102.9
Equatorial Guinea	98.9	104.7	100.0	102.0	97.0	99.4	99.2	90.2	91.2	92.8
Eritrea	96.9	98.1	100.0	98.7	102.7	104.1	105.6	118.2	123.1	130.7
Eswatini	105.7	93.7	100.0	98.3	94.1	87.2	82.5	80.3	75.3	79.1
Ethiopia	164.0	122.3	100.0	81.9	81.4	78.3	76.6	81.7	79.4	75.7
Gabon	101.6	103.5	100.0	100.3	97.8	100.7	102.0	98.9	99.8	100.4
Gambia, The	107.9	105.2	100.0	91.7	88.2	79.1	69.5	66.3	75.4	72.5
Ghana	155.6	101.1	100.0	90.8	80.4	74.4	51.1	44.9	44.4	39.7
Guinea	167.0	120.9	100.0	82.3	81.7	84.0	85.0	90.1	77.0	75.1
Guinea-Bissau	100.9	103.6	100.0	100.5	98.3	100.7	101.9	98.7	100.1	100.7
Kenya	107.4	102.5	100.0	89.0	96.7	97.6	97.2	97.7	97.3	95.5
Lesotho	106.8	89.2	100.0	98.8	89.8	78.1	70.8	64.5	57.3	62.1
Liberia	122.9	103.4	100.0	95.0	99.7	93.5	86.3	98.7	91.4	76.1
Madagascar	113.0	107.0	100.0	99.6	95.7	95.6	88.6	81.3	76.2	77.2
Malawi	115.5	110.3	100.0	94.3	67.7	45.4	41.3	40.5	29.8	28.3
Mali	99.5	103.8	100.0	101.2	99.3	102.8	105.9	102.9	105.1	106.7
Mauritius	104.9	96.9	100.0	103.3	104.0	102.8	104.8	103.8	105.6	108.3
Mozambique	143.7	128.9	100.0	112.4	121.0	118.9	119.2	109.4	73.4	68.2
Namibia	104.5	90.6	100.0	97.6	90.8	81.0	74.3	71.5	66.6	71.7
Niger	99.7	104.9	100.0	100.9	98.1	102.1	104.9	100.8	102.8	104.4
Nigeria	118.4	101.8	100.0	94.1	95.9	96.7	98.0	91.2	74.3	58.7
Rwanda	102.9	101.9	100.0	97.4	98.5	95.2	91.8	99.7	93.9	88.7
São Tomé & Príncipe	156.6	114.1	100.0	101.0	98.4	101.4	103.1	99.7	101.9	103.0
Senegal	100.5	104.7	100.0	101.4	99.1	103.1	105.7	101.6	103.6	104.1
Seychelles	200.7	91.4	100.0	93.5	88.9	102.6	99.2	108.5	110.9	107.4
Sierra Leone	139.6	119.1	100.0	87.9	92.4	93.2	90.4	91.5	75.8	64.1
South Africa	110.4	88.2	100.0	96.3	88.3	76.2	68.4	65.7	57.9	63.2
South Sudan	...	...	...	...	...	...	...	...	...	...
Tanzania	120.0	108.2	100.0	87.4	90.2	92.0	91.3	84.5	79.6	76.7
Togo	100.2	104.7	100.0	101.6	98.6	102.3	106.3	99.7	102.7	105.6
Uganda	122.8	108.3	100.0	85.4	88.7	88.3	89.9	81.0	78.6	74.2
Zambia	119.5	99.6	100.0	94.9	94.9	94.7	86.8	73.1	61.9	65.0
Zimbabwe	...	...	...	...	...	...	...	...	...	...
Sub-Saharan Africa	**116.5**	**101.0**	**100.0**	**94.5**	**93.1**	**89.9**	**86.9**	**82.8**	**73.6**	**68.7**
Median	106.8	104.4	100.0	98.7	97.8	99.4	99.2	97.7	94.3	89.9
Excluding Nigeria and South Africa	117.8	107.6	100.0	93.9	93.5	92.6	89.7	86.4	81.2	78.6
Oil-exporting countries	**114.6**	**104.3**	**100.0**	**95.1**	**96.3**	**97.3**	**98.2**	**91.7**	**76.4**	**64.1**
Excluding Nigeria	106.5	111.1	100.0	97.8	97.5	98.9	98.9	93.1	82.1	81.4
Oil-importing countries	**117.5**	**98.7**	**100.0**	**94.1**	**90.7**	**84.8**	**79.4**	**76.8**	**71.4**	**71.6**
Excluding South Africa	122.1	106.5	100.0	92.7	92.2	90.6	86.8	84.3	80.7	77.5
Middle-income countries	**114.1**	**98.7**	**100.0**	**95.3**	**93.4**	**89.7**	**86.0**	**81.0**	**70.6**	**65.8**
Excluding Nigeria and South Africa	111.5	105.2	100.0	95.7	94.9	94.0	88.9	83.7	78.2	77.4
Low-income countries	**126.5**	**110.8**	**100.0**	**91.8**	**91.7**	**90.9**	**90.6**	**89.8**	**84.9**	**80.1**
Excluding low-income countries in fragile situations	127.6	112.4	100.0	89.4	90.7	90.5	90.5	88.3	83.6	80.5
Countries in fragile situations	**117.5**	**107.4**	**100.0**	**97.4**	**94.8**	**94.4**	**94.3**	**94.5**	**91.1**	**85.2**
CFA franc zone	100.0	104.5	100.0	101.3	98.5	102.1	104.6	100.1	102.3	104.0
CEMAC	100.2	104.3	100.0	101.2	97.9	101.0	102.2	97.2	99.6	101.3
WAEMU	99.9	104.6	100.0	101.4	99.0	103.2	106.9	102.7	104.8	106.5
COMESA (SSA members)	127.4	107.8	100.0	90.1	91.2	89.1	87.4	87.5	83.4	78.8
EAC-5	114.3	105.5	100.0	88.2	92.6	93.2	93.0	89.3	86.4	83.4
ECOWAS	117.7	102.6	100.0	94.7	94.8	95.5	94.1	88.0	76.0	63.9
SACU	110.3	88.6	100.0	96.4	88.9	76.7	69.1	66.4	58.9	64.2
SADC	115.3	96.9	100.0	95.6	91.5	83.4	77.7	74.2	64.4	65.9

See sources and footnotes on page 37.

Table SA24. External Debt, Official Debt, Debtor Based
(Percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	23.5	21.6	20.3	18.1	16.9	21.6	23.8	31.1	44.0	34.5	42.1	44.3
Benin	20.1	15.0	17.0	15.8	15.7	17.3	18.4	20.9	21.4	23.1	23.6	25.7
Botswana	3.8	13.6	15.3	12.3	12.4	12.1	11.6	11.3	10.0	14.0	11.3	9.8
Burkina Faso	29.4	25.6	26.7	21.7	22.9	22.1	21.8	25.9	26.1	24.3	23.7	23.7
Burundi	120.2	21.2	22.4	24.0	22.6	21.0	18.9	18.2	16.7	15.3	14.9	14.1
Cabo Verde	46.0	45.5	51.2	53.2	70.0	81.4	82.6	95.1	92.7	99.2	95.3	96.2
Cameroon	17.9	4.9	5.6	6.3	8.2	11.4	14.9	19.4	19.6	22.5	23.6	25.5
Central African Rep.	61.0	9.0	9.0	8.0	9.9	15.0	35.0	32.6	28.2	27.9	23.6	21.7
Chad	23.4	27.4	24.6	20.7	20.5	21.8	29.1	25.0	27.1	28.7	26.0	25.1
Comoros	73.0	51.9	48.9	44.9	40.7	18.6	19.1	22.7	26.3	30.1	26.5	28.0
Congo, Dem. Rep. of	88.9	74.8	24.2	20.7	18.3	15.0	13.0	13.2	13.8	13.1	12.9	12.3
Congo, Rep. of	61.5	11.1	17.1	17.0	25.3	23.5	22.1	38.4	48.2	41.0	30.5	28.4
Côte d'Ivoire	67.8	53.0	47.1	48.1	29.1	27.2	24.5	28.9	26.9	30.6	33.5	32.8
Equatorial Guinea	2.0	4.5	8.0	6.7	7.3	6.2	5.6	8.8	9.1	9.0	10.3	13.1
Eritrea	60.0	49.1	45.8	35.8	29.4	25.1	22.5	22.6	20.5	20.1	20.1	19.9
Eswatini	12.5	9.9	8.1	7.3	7.0	7.5	7.5	9.2	9.5	10.3	12.6	14.1
Ethiopia[1]	37.2	14.7	18.8	24.4	20.6	23.5	25.2	37.9	33.8	33.5	30.5	30.8
Gabon	32.8	20.3	16.8	15.4	16.6	24.2	25.3	33.3	35.6	40.6	37.4	40.6
Gambia, The	49.7	24.8	23.2	27.6	26.4	32.5	35.6	36.4	40.9	46.3	45.1	43.1
Ghana	24.1	19.6	19.4	19.3	21.8	24.9	35.8	42.8	38.5	36.5	34.5	31.3
Guinea	61.9	47.7	45.9	53.3	17.9	18.8	20.8	21.4	22.2	20.7	26.5	31.1
Guinea-Bissau	161.7	128.7	38.7	24.5	27.3	25.7	22.8	23.1	22.8	20.9	19.9	20.0
Kenya	25.2	20.9	21.5	22.4	21.1	19.3	22.8	24.6	26.1	26.9	28.3	29.1
Lesotho	39.5	32.4	29.0	27.3	29.4	33.0	31.2	35.8	34.8	33.4	34.0	37.0
Liberia	345.4	95.5	6.9	6.9	6.6	7.5	11.5	16.4	20.1	24.7	29.6	34.1
Madagascar	46.0	26.0	23.5	21.6	22.8	22.5	22.7	26.0	25.4	24.4	25.0	27.2
Malawi	42.2	12.9	12.4	11.4	20.1	26.6	30.0	27.8	32.7	32.4	30.8	31.3
Mali	27.9	20.9	21.4	19.0	22.2	22.2	19.6	22.2	23.8	25.6	24.1	24.1
Mauritius	11.4	10.7	11.6	12.4	13.0	15.9	15.5	16.1	14.6	12.9	12.0	10.6
Mozambique	46.6	36.8	38.4	33.7	33.2	47.0	52.4	66.6	92.4	90.7	91.6	95.1
Namibia	4.7	4.9	4.3	6.4	7.8	7.9	8.0	12.9	16.6	15.5	16.2	16.6
Niger	31.1	19.6	16.9	15.5	17.1	18.2	20.5	27.2	29.7	30.7	31.4	33.8
Nigeria	11.4	3.5	3.2	3.5	3.8	2.6	2.6	3.1	4.0	6.3	8.2	7.9
Rwanda	36.2	13.7	13.5	15.2	14.5	20.4	22.8	26.9	33.6	36.9	38.4	38.9
São Tomé & Príncipe	215.0	72.4	79.5	78.0	81.0	71.1	69.5	86.5	78.8	74.7	66.9	64.8
Senegal	22.7	22.2	21.7	22.4	24.9	26.3	29.1	30.9	31.2	39.5	42.8	42.2
Seychelles	62.0	87.6	49.3	48.1	48.3	39.2	37.3	35.0	31.8	30.0	28.8	26.9
Sierra Leone	71.4	28.2	30.4	32.4	25.8	21.3	22.5	29.4	36.1	45.9	56.8	69.4
South Africa	7.2	7.6	9.5	10.0	14.1	14.4	15.3	12.9	18.9	21.3	19.9	20.4
South Sudan	...	...	...	...	...	...	...	...	...	...	...	...
Tanzania	26.7	17.4	19.3	21.1	21.7	22.8	23.6	27.6	28.7	27.9	28.2	28.9
Togo	70.2	51.8	16.7	11.9	13.7	14.8	16.8	21.2	19.3	20.8	23.6	25.8
Uganda	27.1	12.2	13.4	14.2	14.7	16.2	15.9	20.9	22.0	25.4	28.1	30.4
Zambia	41.6	9.0	7.3	8.0	13.7	13.6	19.9	34.5	38.2	36.9	41.2	44.5
Zimbabwe[2]	56.9	64.8	58.4	47.3	42.9	41.2	39.6	40.6	42.1	38.6	36.5	33.2
Sub-Saharan Africa	**19.4**	**13.7**	**12.4**	**12.4**	**13.3**	**13.7**	**14.6**	**17.0**	**20.6**	**22.2**	**23.0**	**23.1**
Median	38.4	21.1	19.9	20.0	20.5	21.4	22.5	26.0	26.6	27.9	28.2	28.7
Excluding Nigeria and South Africa	34.0	23.6	20.6	19.8	19.2	21.1	23.0	28.5	30.6	30.0	31.1	31.6
Oil-exporting countries	**15.6**	**7.6**	**7.3**	**7.4**	**7.6**	**7.8**	**8.2**	**10.1**	**13.7**	**15.2**	**17.3**	**16.8**
Excluding Nigeria	23.9	16.3	16.5	15.1	15.5	19.1	21.3	27.9	35.8	31.4	34.7	36.3
Oil-importing countries	**22.0**	**17.8**	**16.0**	**16.1**	**17.8**	**18.8**	**20.4**	**22.7**	**25.4**	**26.5**	**26.3**	**26.8**
Excluding South Africa	38.2	26.5	22.4	22.2	21.0	22.0	23.8	28.7	28.9	29.5	29.9	30.2
Middle-income countries	**14.1**	**10.2**	**10.2**	**10.4**	**11.6**	**11.7**	**12.5**	**14.0**	**18.1**	**20.1**	**21.0**	**20.9**
Excluding Nigeria and South Africa	26.5	19.7	18.8	18.0	17.7	19.8	22.3	28.2	31.6	30.3	32.3	32.7
Low-income countries	**45.9**	**29.1**	**23.5**	**22.9**	**21.6**	**23.0**	**23.9**	**28.9**	**29.4**	**29.7**	**29.5**	**30.2**
Excluding low-income countries in fragile situations	31.4	18.0	19.9	21.2	20.6	23.6	25.0	33.1	33.2	33.6	33.2	34.2
Countries in fragile situations	**64.0**	**43.7**	**30.9**	**28.3**	**24.3**	**23.2**	**22.8**	**24.9**	**25.6**	**26.1**	**26.5**	**26.4**
CFA franc zone	34.0	22.6	20.7	19.2	18.3	19.5	20.6	25.2	25.9	28.4	28.8	29.5
CEMAC	25.3	11.1	12.3	11.5	13.5	15.6	18.0	23.2	25.0	26.5	25.4	26.8
WAEMU	42.8	33.9	29.5	27.9	23.6	23.5	23.2	26.8	26.5	29.8	31.4	31.5
COMESA (SSA members)	40.0	25.4	20.1	20.2	19.9	20.1	21.6	27.0	27.2	27.4	27.4	27.8
EAC-5	28.5	17.6	18.7	19.9	19.7	19.9	21.7	24.9	26.5	27.3	28.5	29.5
ECOWAS	21.2	11.6	9.4	9.4	8.5	7.8	7.9	9.6	11.6	14.6	16.6	16.1
SACU	7.3	7.9	9.7	10.0	13.9	14.1	15.0	12.9	18.4	20.7	19.4	19.8
SADC	15.9	15.0	13.7	13.5	16.2	17.8	19.2	20.5	26.2	25.7	26.0	26.6

See sources and footnotes on page 37.

Table SA25. Terms of Trade on Goods
(Index, 2010 = 100)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	91.9	83.8	100.0	124.4	131.4	129.3	118.4	69.2	59.2	74.8	84.8	86.0
Benin	42.1	78.5	100.0	107.4	74.5	63.9	62.4	60.0	58.7	53.2	48.8	45.4
Botswana	104.5	96.5	100.0	101.2	114.8	117.9	122.4	129.4	164.9	120.5	119.5	122.8
Burkina Faso	158.6	140.2	100.0	100.0	116.3	107.5	89.0	101.3	109.7	112.8	115.2	110.4
Burundi	68.8	65.9	100.0	91.0	72.3	65.3	81.9	47.0	60.2	58.4	51.5	52.0
Cabo Verde	101.2	86.7	100.0	107.4	106.7	95.1	89.2	67.5	68.5	80.2	88.9	88.3
Cameroon	113.7	89.7	100.0	100.5	110.5	108.9	100.9	87.0	89.1	86.8	83.4	80.3
Central African Rep.	93.3	99.4	100.0	100.6	100.3	121.5	139.4	207.6	207.2	167.3	141.1	140.0
Chad	76.1	78.3	100.0	121.2	123.1	134.8	128.2	67.0	62.3	79.8	100.4	100.3
Comoros	109.9	91.8	100.0	135.9	148.3	121.4	99.7	102.0	159.0	192.9	185.6	184.4
Congo, Dem. Rep. of	93.9	85.1	100.0	89.4	83.9	79.8	87.0	87.6	88.1	119.8	134.6	130.3
Congo, Rep. of	101.5	66.9	100.0	118.5	105.6	98.1	90.6	69.4	65.8	95.8	99.4	97.2
Côte d'Ivoire	65.1	85.8	100.0	93.8	85.9	67.0	75.0	79.0	105.4	100.8	97.6	95.7
Equatorial Guinea	71.9	85.2	100.0	111.1	129.0	95.2	77.2	46.7	47.0	57.6	76.8	74.8
Eritrea	157.0	99.4	100.0	100.5	100.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3
Eswatini	90.5	98.9	100.0	88.2	89.8	115.9	119.2	120.0	111.1	100.9	99.6	102.8
Ethiopia[1]	62.8	76.7	100.0	120.2	127.5	106.2	108.6	109.3	109.7	113.0	100.7	95.9
Gabon	90.4	81.5	100.0	131.4	122.0	120.7	109.6	60.4	54.2	69.4	89.8	89.8
Gambia, The	158.1	117.3	100.0	93.7	118.1	137.1	120.0	96.4	111.8	55.9	59.0	60.5
Ghana	60.9	83.1	100.0	118.7	116.7	107.8	100.0	85.7	87.5	83.0	82.1	82.2
Guinea	97.4	89.0	100.0	78.1	119.0	128.5	134.5	136.5	191.8	172.3	163.7	154.8
Guinea-Bissau	124.2	87.3	100.0	142.2	100.5	98.8	118.8	159.9	203.0	254.2	216.6	223.2
Kenya	86.7	100.9	100.0	81.3	79.1	79.5	81.0	96.2	86.7	73.9	64.2	63.1
Lesotho	134.7	99.6	100.0	98.5	96.8	97.1	95.0	103.9	106.2	112.9	116.8	114.5
Liberia	72.8	70.6	100.0	99.8	76.6	84.6	75.5	55.2	63.6	68.6	57.6	57.2
Madagascar	86.2	77.0	100.0	108.6	123.5	152.6	172.5	159.9	195.5	230.1	226.0	227.6
Malawi	83.3	94.5	100.0	100.2	85.6	83.3	85.3	87.4	87.2	77.6	74.3	73.4
Mali	76.0	91.6	100.0	130.8	144.9	122.0	129.4	147.9	170.3	167.8	159.6	153.8
Mauritius	97.2	103.9	100.0	96.4	96.4	97.5	96.4	112.1	115.5	107.9	108.1	105.1
Mozambique	91.2	87.8	100.0	101.6	93.1	93.1	91.7	89.5	91.1	94.1	91.5	89.2
Namibia	89.3	96.8	100.0	108.9	108.3	126.8	135.9	140.3	125.2	125.2	125.2	125.2
Niger	69.5	94.7	100.0	100.3	103.0	99.8	80.8	74.4	71.8	66.6	69.2	69.9
Nigeria	96.0	90.7	100.0	113.0	113.0	114.2	111.0	81.4	76.3	83.4	94.5	94.2
Rwanda	73.9	85.0	100.0	96.9	102.9	117.9	114.3	130.1	112.8	121.5	117.2	117.0
São Tomé & Príncipe	152.3	93.5	100.0	87.6	141.8	106.8	114.2	95.1	125.9	168.9	118.1	114.5
Senegal	83.7	100.4	100.0	94.8	94.9	87.5	89.3	100.3	100.9	101.6	105.8	102.1
Seychelles	103.8	99.2	100.0	99.7	101.5	101.7	101.9	98.8	95.9	97.4	100.9	100.7
Sierra Leone	98.8	93.6	100.0	92.6	95.5	92.3	77.5	60.1	65.5	74.5	65.9	66.5
South Africa	84.5	94.7	100.0	106.8	102.3	101.4	100.2	103.1	106.1	111.1	107.8	106.0
South Sudan	...	...	...	...	...	...	...	...	...	...	...	...
Tanzania	66.1	93.4	100.0	103.0	103.8	100.8	97.1	96.3	98.6	94.3	88.0	86.8
Togo	96.6	97.0	100.0	105.1	101.0	99.6	103.0	110.0	106.3	102.4	100.8	100.7
Uganda	102.0	120.3	100.0	112.4	106.5	109.0	117.7	126.0	143.6	131.3	123.9	121.1
Zambia	77.9	72.9	100.0	106.4	91.3	85.1	83.2	80.6	79.2	90.2	86.2	80.2
Zimbabwe[2]	51.3	70.5	100.0	152.1	126.5	99.7	91.8	93.2	96.8	86.1	85.7	83.2
Sub-Saharan Africa	**88.3**	**91.2**	**100.0**	**109.6**	**109.0**	**107.1**	**104.6**	**91.1**	**92.3**	**97.0**	**98.8**	**97.3**
Median	90.8	91.2	100.0	101.4	103.4	101.4	100.1	96.2	99.7	99.1	100.0	98.7
Excluding Nigeria and South Africa	86.3	89.3	100.0	109.2	110.2	105.1	102.0	92.5	95.7	97.3	96.8	95.2
Oil-exporting countries	**95.3**	**88.4**	**100.0**	**115.2**	**117.1**	**116.4**	**110.9**	**78.1**	**72.6**	**81.0**	**91.6**	**91.6**
Excluding Nigeria	93.9	83.4	100.0	119.7	125.6	121.1	110.6	69.7	64.0	76.5	86.1	86.0
Oil-importing countries	**83.5**	**93.1**	**100.0**	**105.4**	**102.6**	**99.2**	**98.9**	**101.8**	**106.0**	**106.8**	**102.9**	**100.7**
Excluding South Africa	82.6	91.7	100.0	104.1	102.8	97.7	98.0	101.0	105.9	104.4	100.2	97.8
Middle-income countries	**89.3**	**91.3**	**100.0**	**109.7**	**109.0**	**107.9**	**104.8**	**88.1**	**87.3**	**92.2**	**95.5**	**94.4**
Excluding Nigeria and South Africa	88.2	88.3	100.0	109.4	111.0	106.0	100.8	84.4	84.7	85.2	86.9	85.8
Low-income countries	**83.2**	**90.7**	**100.0**	**108.8**	**109.0**	**103.6**	**103.9**	**103.1**	**109.5**	**113.4**	**109.9**	**107.0**
Excluding low-income countries in fragile situations	80.4	94.6	100.0	108.1	109.0	102.1	100.7	103.5	106.6	105.5	97.7	94.7
Countries in fragile situations	**83.2**	**83.9**	**100.0**	**107.8**	**104.5**	**97.9**	**100.5**	**96.2**	**110.0**	**118.9**	**119.8**	**117.3**
CFA franc zone	88.1	89.9	100.0	108.8	109.6	98.9	94.0	85.2	93.6	96.0	98.2	95.9
CEMAC	95.1	83.4	100.0	113.8	117.5	110.0	100.4	73.3	73.5	81.3	89.0	87.4
WAEMU	80.8	96.2	100.0	103.2	101.1	87.5	87.7	95.1	108.7	106.9	104.9	101.9
COMESA (SSA members)	84.1	90.3	100.0	103.1	100.2	95.6	98.2	102.9	103.4	105.3	99.8	97.0
EAC-5	82.0	100.9	100.0	95.6	93.6	94.0	94.7	102.0	100.3	91.3	82.8	81.3
ECOWAS	91.2	91.2	100.0	111.2	111.3	109.8	106.9	84.2	84.6	89.6	96.5	95.5
SACU	85.6	94.9	100.0	106.4	102.8	103.0	102.5	105.6	109.6	111.9	108.9	107.5
SADC	85.9	91.5	100.0	109.0	107.1	106.4	104.2	96.4	98.3	104.1	104.9	103.8

See sources and footnotes on page 37.

Table SA26. Reserves
(Months of imports of goods and services)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Angola	3.1	4.4	5.0	7.1	7.8	7.2	8.8	10.7	10.3	6.1	4.9	5.5
Benin[1]	...	...	...	...	...	...	...	...	...	...	...	...
Botswana	20.7	15.9	11.5	10.9	10.0	10.6	12.9	13.6	14.6	12.9	12.5	11.8
Burkina Faso[1]	...	...	...	...	...	...	...	...	...	...	...	...
Burundi	2.7	4.4	4.1	3.3	3.5	3.5	3.9	2.1	1.4	1.4	1.3	1.3
Cabo Verde	3.2	4.1	3.4	3.7	4.0	4.5	7.4	6.0	6.1	5.2	5.2	4.8
Cameroon[2]	...	...	...	...	...	...	...	...	...	...	...	...
Central African Rep.[2]	...	...	...	...	...	...	...	...	...	...	...	...
Chad[2]	...	...	...	...	...	...	...	...	...	...	...	...
Comoros	6.3	6.4	5.5	6.4	6.8	6.0	8.4	9.2	6.6	6.3	6.7	6.0
Congo, Dem. Rep. of	0.3	1.1	1.1	1.3	1.5	1.4	1.7	1.2	0.5	0.5	0.6	0.7
Congo, Rep. of [2]	...	...	...	...	...	...	...	...	...	...	...	...
Côte d'Ivoire[1]	...	...	...	...	...	...	...	...	...	...	...	...
Equatorial Guinea[2]	...	...	...	...	...	...	...	...	...	...	...	...
Eritrea	2.1	2.6	1.9	2.2	2.4	2.0	2.3	2.2	2.0	1.5	1.5	1.4
Eswatini	2.5	4.0	4.0	3.2	4.2	4.7	5.2	4.2	3.6	3.4	2.8	2.7
Ethiopia[3]	2.3	1.9	2.0	2.6	2.0	1.8	1.5	1.9	2.1	2.0	1.7	1.7
Gabon[2]	...	...	...	...	...	...	...	...	...	...	...	...
Gambia, The	3.7	5.3	5.2	5.2	6.0	4.8	3.0	2.3	1.4	2.8	2.9	3.0
Ghana	2.7	2.7	2.9	2.9	2.9	2.9	2.5	2.6	2.6	2.9	2.9	3.0
Guinea	0.5	2.4	1.2	3.2	2.9	2.9	3.3	1.1	1.4	1.4	1.9	2.1
Guinea-Bissau[1]	...	...	...	...	...	...	...	...	...	...	...	...
Kenya	2.9	3.4	2.9	2.9	3.7	3.8	5.4	5.6	4.7	4.1	4.4	4.5
Lesotho	4.7	5.3	4.3	3.9	5.5	5.4	6.2	5.8	4.4	4.2	3.5	3.7
Liberia	0.4	2.4	2.3	2.1	2.2	1.7	1.9	2.4	3.0	3.1	2.8	3.0
Madagascar	2.5	3.5	2.6	3.6	3.1	2.3	2.7	2.8	3.0	3.6	3.8	3.9
Malawi	1.3	0.9	1.6	1.0	1.1	2.0	3.0	3.2	2.9	3.3	2.9	3.1
Mali[1]	...	...	...	...	...	...	...	...	...	...	...	...
Mauritius	3.8	4.5	4.2	4.4	5.0	5.3	6.9	7.9	8.3	9.3	9.1	9.0
Mozambique	4.2	5.0	3.4	2.3	2.6	3.1	3.5	3.8	2.8	4.6	2.9	2.3
Namibia	2.0	3.9	3.0	2.9	2.8	2.1	1.8	2.9	2.6	1.6	1.5	1.0
Niger[1]	...	...	...	...	...	...	...	...	...	...	...	...
Nigeria	10.7	7.2	4.3	4.8	6.9	6.0	5.6	7.3	6.5	7.2	8.0	7.5
Rwanda	3.5	6.5	5.2	6.5	5.6	4.9	3.8	3.5	4.1	4.1	3.9	3.8
São Tomé & Príncipe	4.6	6.6	3.9	4.6	3.5	3.3	4.1	4.7	3.9	3.3	3.3	3.3
Senegal[1]	...	...	...	...	...	...	...	...	...	...	...	...
Seychelles	0.8	2.2	2.6	2.6	2.7	3.2	3.9	4.3	3.7	3.7	3.3	3.3
Sierra Leone	3.8	3.4	1.6	1.8	2.2	2.0	3.6	5.0	3.5	3.3	3.3	3.5
South Africa	3.5	4.6	4.3	4.7	5.0	5.1	5.9	6.2	5.7	5.6	5.5	5.2
South Sudan	...	...	...	6.3	3.5	2.5	1.4	0.3	0.2	0.1	0.4	0.4
Tanzania	4.8	4.6	4.1	3.5	3.6	4.0	4.3	4.7	5.3	5.3	4.8	4.7
Togo[1]	...	...	...	...	...	...	...	...	...	...	...	...
Uganda	5.6	4.9	3.9	3.7	4.7	4.8	5.3	5.4	5.1	5.0	4.4	4.2
Zambia	1.7	3.8	3.0	2.8	2.7	2.6	3.4	3.4	2.4	2.0	1.4	0.8
Zimbabwe[4]	0.2	0.8	0.6	0.5	0.6	0.4	0.5	0.6	0.8	0.5	0.4	0.4
Sub-Saharan Africa	**5.0**	**5.1**	**4.1**	**4.5**	**5.2**	**4.9**	**5.2**	**5.9**	**5.2**	**4.9**	**4.9**	**4.8**
Median	3.0	4.1	3.4	3.3	3.5	3.3	3.8	3.8	3.5	3.4	3.3	3.3
Excluding Nigeria and South Africa	3.6	4.1	3.8	4.2	4.3	4.1	4.7	4.7	4.2	3.6	3.3	3.4
Oil-exporting countries	**7.2**	**6.4**	**4.4**	**5.3**	**6.7**	**6.0**	**6.1**	**7.4**	**6.6**	**6.3**	**6.6**	**6.6**
Excluding Nigeria	3.6	4.8	4.7	6.2	6.5	6.0	7.0	7.7	6.7	4.6	4.0	4.6
Oil-importing countries	**3.5**	**4.2**	**3.8**	**4.0**	**4.0**	**4.0**	**4.5**	**4.6**	**4.2**	**4.1**	**4.0**	**3.8**
Excluding South Africa	3.6	3.8	3.3	3.2	3.3	3.2	3.6	3.6	3.3	3.2	3.1	3.1
Middle-income countries	**5.4**	**5.5**	**4.3**	**4.9**	**5.8**	**5.5**	**5.9**	**6.8**	**6.0**	**5.6**	**5.8**	**5.7**
Excluding Nigeria and South Africa	4.1	4.7	4.4	5.1	5.4	5.2	6.1	6.6	5.6	4.4	4.2	4.4
Low-income countries	**2.9**	**3.2**	**2.7**	**2.8**	**2.7**	**2.6**	**2.6**	**2.5**	**2.4**	**2.4**	**2.2**	**2.2**
Excluding low-income countries in fragile situations	3.8	3.8	3.2	2.8	3.0	3.0	3.0	3.2	3.2	3.3	2.9	2.8
Countries in fragile situations	**2.1**	**3.0**	**3.0**	**3.8**	**3.1**	**2.7**	**2.7**	**1.9**	**1.4**	**1.4**	**1.7**	**1.8**
CFA franc zone	4.8	5.6	5.6	5.6	5.4	4.9	5.2	4.6	3.1	3.2	3.8	4.0
CEMAC	4.3	5.4	4.6	5.4	5.6	5.4	5.8	4.3	2.3	2.4	3.0	3.6
WAEMU	5.4	5.9	6.6	5.8	5.2	4.5	4.7	5.0	3.9	3.9	4.7	4.5
COMESA (SSA members)	2.4	3.0	2.7	2.7	3.0	2.9	3.4	3.4	3.1	2.9	2.9	2.9
EAC-5	4.0	4.3	3.7	3.4	4.0	4.1	4.9	5.1	4.9	4.6	4.4	4.4
ECOWAS	7.4	6.2	4.0	4.4	5.9	5.3	5.0	6.2	5.2	5.6	6.1	5.8
SACU	4.0	5.0	4.4	4.9	5.1	5.2	6.1	6.3	6.0	5.7	5.6	5.3
SADC	3.7	4.5	4.2	4.8	5.1	5.0	5.9	6.3	6.0	5.2	4.8	4.6

See sources and footnotes on page 37.

Table SA27. Banking Penetration
(Total banking sector assets in percent of GDP)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	24.1	62.7	56.5	53.3	50.8	52.8	52.6	64.2	65.0	52.0
Benin	32.9	45.8	49.7	53.6	54.2	58.6	63.7	71.6	74.3	69.3
Botswana	51.4	64.2	60.8	53.0	57.7	54.6	52.1	60.6	55.3	54.1
Burkina Faso	28.4	34.1	38.0	39.7	41.2	46.8	53.9	62.5	67.9	72.6
Burundi	28.8	31.5	36.4	36.4	35.4	34.0	34.9	35.2	35.5	37.7
Cabo Verde	90.0	98.5	103.0	111.2	120.6	134.5	137.0	141.1	146.6	148.5
Cameroon	20.7	23.5	26.0	26.9	25.7	27.4	27.6	28.6	29.2	29.3
Central African Rep.	12.6	15.8	17.3	19.1	19.2	25.7	25.4	24.6	24.1	24.0
Chad	7.3	9.4	10.0	10.3	11.0	11.7	14.6	17.0	21.3	21.7
Comoros	25.1	34.4	37.6	41.5	44.5	42.5	42.9	47.5	53.5	49.7
Congo, Dem. Rep. of	6.7	12.3	11.4	12.2	14.0	14.0	14.3	14.9	15.6	14.7
Congo, Rep. of	12.2	17.0	18.4	23.1	28.0	29.6	34.2	44.8	47.5	39.8
Côte d'Ivoire	25.2	29.4	32.1	37.7	36.4	37.3	39.8	43.8	45.6	48.4
Equatorial Guinea	9.0	14.2	16.1	14.1	18.0	20.2	21.6	27.3	29.1	26.1
Eritrea	143.7	126.0	124.7	113.1	105.6	110.0	104.9	...	...	...
Eswatini	27.9	34.7	34.7	35.3	32.8	34.1	33.5	35.0	39.1	38.7
Ethiopia	...	...	...	...	...	...	...	...	...	...
Gabon	23.6	26.5	23.4	25.5	28.8	32.3	29.9	33.2	34.6	24.9
Gambia, The	29.0	37.3	39.0	45.3	45.2	48.4	53.7	...	...	...
Ghana	29.7	40.1	39.5	38.1	37.3	39.6	46.4	47.6	50.2	47.6
Guinea	11.3	15.2	20.1	24.3	19.7	20.3	22.3	24.5	23.0	21.3
Guinea-Bissau	11.0	19.7	24.8	28.1	28.3	30.3	33.7	32.1	32.4	31.3
Kenya	57.4	54.1	56.0	57.6	58.1	60.7	63.6	63.1	58.9	55.5
Lesotho	37.5	45.4	45.7	41.3	39.8	46.4	43.2	44.2	39.6	46.3
Liberia	...	...	...	...	...	...	...	...	...	...
Madagascar	26.0	27.6	27.5	28.3	28.4	27.1	27.0	27.5	28.5	29.2
Malawi	15.3	23.5	27.3	29.8	31.8	31.6	30.2	32.1	31.7	...
Mali	30.7	35.3	37.7	36.0	36.9	41.9	47.6	52.0	54.4	51.8
Mauritius[1]	272.9	306.6	359.4	369.5	370.2	359.2	347.5	344.3	324.6	342.2
Mozambique	33.2	46.5	52.7	53.7	61.0	63.7	71.7	80.0	78.4	72.9
Namibia	66.3	95.3	93.4	94.9	87.8	85.2	82.1	86.8	85.7	87.9
Niger	14.5	21.7	24.4	24.9	26.3	28.1	30.8	31.8	33.1	34.7
Nigeria	27.5	39.0	31.2	30.4	29.2	30.1	30.5	29.7	31.2	30.4
Rwanda	23.9	22.7	25.5	31.5	31.7	35.3	37.8	38.1	37.7	37.9
São Tomé & Príncipe	64.8	80.3	77.2	74.7	85.6	81.4	78.3	81.1	72.8	62.2
Senegal	28.9	34.9	40.1	42.4	42.3	46.4	50.2	54.8	59.2	57.7
Seychelles	118.8	100.0	109.3	113.0	102.2	117.5	116.5	93.0	93.8	98.0
Sierra Leone	16.2	25.9	24.9	24.5	23.0	21.3	23.1	26.5	27.8	30.2
South Africa	116.4	120.9	116.3	115.4	115.1	111.4	113.0	122.4	114.8	113.6
South Sudan	...	...	...	6.7	14.7	13.4	19.3	68.7	75.2	48.3
Tanzania	24.2	27.7	30.0	28.8	29.0	28.8	29.4	31.3	28.4	28.1
Togo	38.0	46.9	51.7	61.4	68.7	79.8	78.2	85.3	96.1	93.6
Uganda	24.0	23.1	26.6	26.1	27.1	28.0	29.1	28.9	30.5	30.6
Zambia	24.9	25.9	25.5	25.8	27.6	29.2	31.8	38.1	33.1	32.4
Zimbabwe	...	23.7	33.0	37.6	41.7	40.9	42.6	45.6	52.4	61.3
Sub-Saharan Africa	**41.9**	**48.1**	**50.8**	**51.1**	**51.9**	**53.8**	**54.9**	**57.6**	**58.0**	**57.4**
Median	26.6	34.3	35.6	36.4	36.4	37.3	39.8	44.2	45.6	46.9
Excluding Nigeria and South Africa	40.3	46.5	49.7	50.0	50.9	52.9	54.1	56.6	57.2	56.6
Oil-exporting countries	**17.8**	**27.5**	**26.0**	**23.8**	**25.8**	**27.2**	**28.8**	**39.2**	**41.6**	**34.1**
Excluding Nigeria	16.1	25.5	25.1	22.8	25.3	26.8	28.5	40.5	43.1	34.6
Oil-importing countries	**46.9**	**52.2**	**55.8**	**57.3**	**57.9**	**59.8**	**60.9**	**62.1**	**62.0**	**63.3**
Excluding South Africa	44.8	50.2	54.0	55.6	56.2	58.3	59.4	60.2	60.3	61.6
Middle-income countries	**56.5**	**65.7**	**68.2**	**69.2**	**69.7**	**71.5**	**71.6**	**74.2**	**72.8**	**71.8**
Excluding Nigeria and South Africa	54.7	64.1	67.6	68.7	69.4	71.6	71.5	74.0	72.8	71.8
Low-income countries	**27.8**	**32.1**	**35.0**	**35.3**	**36.5**	**38.4**	**40.5**	**41.8**	**43.9**	**43.0**
Excluding low-income countries in fragile situations	25.9	31.7	35.3	36.9	38.6	41.3	45.2	49.2	50.0	49.4
Countries in fragile situations	**29.7**	**34.0**	**36.2**	**36.3**	**37.8**	**39.0**	**40.4**	**41.4**	**43.4**	**41.6**

See sources and footnotes on page 37.

Table SA28. Banking Sector: Loan-to-Deposit Ratio[1]
(Percent of deposits)

	2004-08	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	42.6	55.8	72.5	79.3	89.1	85.8	75.0	67.2	60.2	62.0
Benin	79.7	84.4	80.4	82.2	80.6	80.1	80.1	71.6	69.6	86.8
Botswana	55.8	55.4	55.4	67.5	74.0	79.1	82.5	76.4	76.9	76.7
Burkina Faso	94.2	88.1	82.6	81.2	84.7	90.6	95.6	92.2	84.8	85.5
Burundi	67.7	59.3	66.4	82.0	81.7	75.8	75.9	74.0	72.3	59.6
Cabo Verde	54.8	72.5	74.2	80.2	73.9	64.7	59.2	57.2	53.6	54.0
Cameroon	69.3	68.3	69.4	70.3	80.1	81.4	82.3	87.9	90.3	87.1
Central African Rep.	118.0	98.2	103.7	99.6	109.1	108.3	108.2	99.1	100.9	87.4
Chad	82.7	85.5	73.4	73.5	77.5	80.2	80.9	83.3	87.7	94.9
Comoros	49.5	54.2	57.6	55.1	56.5	64.7	67.9	70.0	67.0	75.5
Congo, Dem. Rep. of	49.7	58.6	57.5	68.8	68.0	68.7	71.4	73.7	80.0	75.5
Congo, Rep. of	36.4	38.7	39.5	38.3	49.8	59.6	55.3	72.8	82.0	88.9
Côte d'Ivoire	106.2	96.6	88.3	76.4	80.3	83.9	80.9	85.1	86.9	89.6
Equatorial Guinea	43.0	56.6	59.0	68.1	38.0	48.1	54.1	74.9	91.5	95.5
Eritrea	24.6	25.3	23.8	24.0	24.7	23.3	21.9	...	...	...
Eswatini	96.7	79.6	74.4	85.8	79.8	81.7	86.2	79.3	72.8	73.9
Ethiopia	...	...	...	...	...	...	...	...	...	...
Gabon	62.5	59.6	62.7	62.9	65.1	77.7	81.4	73.3	80.0	82.4
Gambia, The	38.0	42.1	43.7	40.8	39.9	37.5	30.8	...	...	...
Ghana	73.3	73.4	65.5	57.9	63.2	69.5	70.6	70.3	65.8	62.9
Guinea	...	...	...	...	...	...	...	...	...	...
Guinea-Bissau	46.4	97.9	69.1	68.1	98.7	92.9	87.4	87.3	86.4	88.0
Kenya	76.6	72.5	72.6	77.8	76.9	80.5	83.7	87.0	88.6	83.5
Lesotho	26.4	34.9	36.6	37.2	50.9	45.3	47.9	45.7	50.8	44.9
Liberia	...	...	...	...	...	...	...	...	...	...
Madagascar	72.2	72.2	73.8	69.1	64.0	68.9	72.7	77.0	68.4	69.8
Malawi	...	...	...	...	...	...	...	...	...	...
Mali	93.6	83.4	82.0	86.7	88.2	90.4	87.3	87.4	91.9	101.2
Mauritius	65.5	67.7	68.2	80.9	77.2	72.6	74.9	68.0	66.8	66.1
Mozambique	53.3	67.7	74.4	74.4	71.1	74.4	73.5	61.7	66.2	67.2
Namibia	110.1	73.6	74.5	74.3	77.5	82.8	88.8	92.5	95.4	92.8
Niger	91.4	102.4	88.6	105.5	101.0	110.9	101.3	107.8	112.3	123.5
Nigeria	76.3	79.1	64.0	56.2	54.8	57.4	65.3	68.3	77.9	72.1
Rwanda	78.4	85.9	83.2	88.7	94.9	84.4	86.2	81.3	85.9	89.8
São Tomé & Príncipe	66.7	74.9	108.1	110.0	84.0	78.2	58.9	76.0	72.3	63.8
Senegal	80.8	78.8	86.1	91.4	92.8	96.6	94.6	88.4	91.3	100.7
Seychelles	30.9	30.7	35.9	33.9	34.7	28.9	31.8	42.6	43.8	43.4
Sierra Leone	38.7	47.2	47.5	46.5	40.5	37.0	34.4	31.9	30.6	33.3
South Africa	122.8	120.1	120.7	113.2	119.0	118.7	117.3	118.1	117.5	115.6
South Sudan	...	...	...	9.8	11.8	15.2	11.3	7.7	8.7	8.7
Tanzania	52.0	64.6	62.1	67.1	69.9	71.2	75.6	81.4	87.3	81.9
Togo	85.2	70.6	74.8	80.0	84.5	96.2	84.3	90.8	80.7	82.8
Uganda	58.8	71.4	77.2	85.5	79.5	80.0	74.6	75.4	75.8	71.2
Zambia	50.5	60.1	52.9	56.5	65.2	61.1	65.7	60.1	54.1	49.7
Zimbabwe	...	51.3	68.8	85.5	87.4	93.4	87.4	72.4	59.1	46.7
Sub-Saharan Africa	**67.2**	**69.0**	**69.3**	**70.5**	**71.7**	**73.1**	**72.3**	**74.8**	**75.2**	**75.3**
Median	66.8	71.0	71.0	74.3	77.2	78.2	75.6	75.4	77.9	76.7
Excluding Nigeria and South Africa	65.4	67.4	68.1	69.8	70.9	72.4	71.3	73.8	74.0	74.3
Oil-exporting countries	**59.0**	**63.4**	**62.9**	**57.3**	**58.3**	**63.2**	**63.2**	**66.9**	**72.3**	**74.0**
Excluding Nigeria	56.1	60.8	62.8	57.4	58.8	64.0	62.9	66.7	71.5	74.2
Oil-importing countries	**69.0**	**70.2**	**70.6**	**73.7**	**75.0**	**75.5**	**74.5**	**76.8**	**76.0**	**75.6**
Excluding South Africa	67.2	68.6	69.1	72.5	73.6	74.2	73.2	75.5	74.6	74.3
Middle-income countries	**67.4**	**67.5**	**69.0**	**70.9**	**71.3**	**72.7**	**72.8**	**74.5**	**75.9**	**75.3**
Excluding Nigeria and South Africa	63.8	63.9	66.4	69.4	69.6	71.0	70.8	72.5	73.5	73.2
Low-income countries	**66.9**	**70.5**	**69.5**	**70.2**	**72.1**	**73.5**	**71.9**	**75.1**	**74.5**	**75.2**
Excluding low-income countries in fragile situations	72.5	80.7	78.4	83.5	83.1	84.5	83.9	81.6	83.1	86.6
Countries in fragile situations	**64.9**	**66.0**	**67.4**	**65.5**	**67.4**	**69.1**	**65.7**	**72.6**	**71.6**	**71.1**

See sources and footnotes on page 37.

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13/8

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13/6

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13/5

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13/4

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Kalpana Kochhar, Catherine Pattillo, Yan Sun, Nujin Suphaphiphat, Andrew Swiston, Robert Tchaidze, Benedict Clements, Stefania Fabrizio, Valentina Flamini, Laure Redifer, Harald Finger, and an IMF Staff Team

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Papageorgiou, Chris, Nicola Spatafora

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18/184
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Manabu Nose

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Miyajima, Ken, James Yetman

18/173
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Kabundi, N. Alain, Mlachila, Montfort

18/105
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18/63
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Wilfried A. Kouamé and Sampawende J.-A. Tapsoba

17/281
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Francisco Arizala, Jesus R Gonzalez-Garcia, Charalambos G Tsangarides, Mustafa Yenice

17/243
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Manabu Nose

17/236
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Goksu Aslan, Corinne Deléchat, Monique Newiak, and Fan Yang

17/203
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Richard Allen, Taz Chaponda, Lesley Fisher, and Rohini Ray

17/202
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Tsangarides, Charalambos, Francisco Arizala, Jesus Gonzalez-Garcia, Mustafa Yenice.

17/163
Financial Resource Curse in Resource-Rich Countries
Mlachila, Montfort , Rasmané Ouedraogo

17/156
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Medina, Leandro, Andew W. Jonelis, Mehmet Cangul

17/112
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Sébastien Walker

17/48
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Wu, Dong Frank

17/109
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Newiak, Monique, Tim Willems

16/247
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Uppal, Ali, Emre Alper, Niko Hobdari

16/205
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Schimmelpfennig, Axel, Nasha Maveé, Roberto Perrelli

16/140
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Kazandjian, Romina, Lisa Kolovich, Kalpana Kochhar, Monique Newiak

16/137
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Anand, Rahul, Siddharth Kothari, Naresh Kumar

16/120
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Alper, Emre, R. Armando Morales, Fan Yang

16/118
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Dieterich, Christine, Anni Huang, Alun H. Thomas

16/115

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16/113

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16/111

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16/24

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Anand, Rahul, Roberto Perrelli, Boyang Zhang

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Kinda, Tidiane, Montfort Mlachila, Rasmané Ouedraogo

15/268

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Deléchat, Corinne, Ejona Fuli, Dafina Mulaj, Gustavo Ramirez, Rui Xu

15/236

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Alter, Adrian, Matteo Ghilardi, Dalia Hakura

15/235

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Alter, Adrian, Boriana Yontcheva

15/221

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Anderson, Derek, Jorge Iván Canales Kriljenko, Paulo Drummond, Pedro Espaillat, Dirk Muir

15/190

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Marchettini, Daniela, Rodolfo Maino

15/189

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Nguyen, Anh D. M., Jemma Dridi, D. Filiz Unsal, Oral Williams

15/185

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Thomas, Alun H.

15/169

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Carlson, Stacey, Era Dabla-Norris, Mika Saito, Yu Shi

15/149

Network Effects of International Shocks and Spillovers
Kireyev, Alexei, Andrei Leonidov

15/126

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Soto, Mauricio, Vimal Thakoor, Martin Petri

15/99

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Kireyev, Alexei

15/83

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Munseob Lee, Cheikh A. Gueye

15/49

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Ahmat Jidoud

15/25

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Delechat, Corinne, Will Clark, Pranav Gupta, Malangu Kabedi-Mbuyi, Mesmin Koulet-Vickot, Carla Macario, Toomas Orav, Manuel Rosales, Rene Tapsoba, Dmitry Zhdankin, Susan Yang

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Stepanyan, Ara, Lamin Leigh

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14/241

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Canales Kriljenko, Jorge Iván, Mehdi Hosseinkouchack, Alexis Meyer-Cirkel

14/231

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Saxegaard, Magnus

14/172

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Mlachila, Montfort, Rene Tapsoba, Sampawende J.-A. Tapsoba

14/159

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Charry, Luisa, Pranav Gupta, Vimal Thakoor

14/150

How Solid is Economic Growth in the East African Community?

Gigineishvili, Nikoloz, Paolo Mauro, Ke Wang

14/149

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Gelbard, Enrique, Mumtaz Hussain, Rodolfo Maino, Yibin Mu, Etienne B. Yehoue

14/143

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Drummond, Paulo, Vimal Thakoor, Shu Yu

14/94

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David, Antonio, Montfort Mlachila, Ashwin Moheeput

14/51

Surging Investment and Declining Aid: Evaluating Debt Sustainability in Rwanda

Clark, Will, Birgir Arnason

13/261

Natural Gas, Public Investment and Debt Sustainability in Mozambique

Melina, Giovanni, Yi Xiong

13/250

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Drummond, Paulo, Estelle X. Liu

13/239

Money Targeting in a Modern Forecasting and Policy Analysis System: an Application to Kenya

Andrle, Michal, Andrew Berg, Enrico Berkes, Rafael A. Portillo, Jan Vlcek, R. Armando Morales

13/237

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Clark, Will, Manuel Rosales

13/226

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Fischer, Felix, Charlotte J. Lundgren, Samir Jahjah

13/216

Fiscal Discipline in WAEMU: Rules, Institutions, and Markets

Hitaj, Ermal, Yasin Kursat Onder

13/215

Inclusive Growth and Inequality in Senegal

Kireyev, Alexei

13/201

Africa's Got Work to Do: Employment Prospects in the New Century

Fox, Louise, Cleary Haines, Jorge Huerta Muñoz, Thomas, Alun H.

13/188

Resource Dependence and Fiscal Effort in Sub-Saharan Africa

Thomas, Alun H., Juan P. Treviño

13/176

Benchmarking Structural Transformation Across the World

Dabla-Norris, Era, Alun H. Thomas, Rodrigo Garcia-Verdu, Yingyuan Chen

13/173

Tax Administration Reform in the Francophone Countries of Sub-Saharan Africa

Fossat, Patrick, Michel Bua

13/161

Financial Depth in the WAEMU: Benchmarking Against Frontier SSA Countries

Ahokpossi, Calixte, Kareem Ismail, Sudipto Karmakar, Mesmin Koulet-Vickot

13/147

Investing Volatile Oil Revenues in Capital-Scarce Economies: An Application to Angola

Richmond, Christine, Irene Yackovlev, Shu-Chun Yang

13/144

Fiscal Sustainability, Public Investment, and Growth in Natural Resource-Rich, Low-Income Countries: The Case of Cameroon

Samaké, Issouf, Priscilla Muthoora, Bruno Versailles

13/139

Inclusive Growth: An Application of the Social Opportunity Function to Selected African Countries

Adedeji, Olumuyiwa, Huancheng Du, Maxwell Opoku-Afari

13/116

Inclusive Growth and the Incidence of Fiscal Policy in Mauritius — Much Progress, But More Could be Done

David, Antonio, Martin Petri

13/53

The Quality of the Recent High-Growth Episode in Sub-Saharan Africa

Mlachila, Montfort, Marcelo Martinez

13/51

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Boutin-Dufresne, Francois, Santiago Peña, Oral Williams, Tomasz A. Zawisza

13/39

Monetary Transmission Mechanism in the East African Community: An Empirical Investigation

Davoodi, Hamid, Shiv Dixit, Gabor Pinter

13/34

Determinants of Bank Interest Margins in Sub-Saharan Africa

Ahokpossi, Calixte

13/32

Exchange Rate Liberalization in Selected Sub-Saharan African Countries: Successes, Failures, and Lessons

Mæhle, Nils, Haimanot Teferra, Armine Khachatryan

13/31

Inward and Outward Spillovers in the SACU Area
Canales-Kriljenko, Jorge Iván, Farayi Gwenhamo,
Thomas, Saji

13/12

Bond Markets in Africa
Mu, Yibin, Peter Phelps, Janet Stotsky

12/290

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Union (SACU) Region*
Basdevant, Olivier, Dalmacio Benicio, Yorbol Yakhshilikov

12/280

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Growth, and Debt Sustainability in Cape Verde*
Mu, Yibin

12/272

The East African Community: Prospects for Sustained Growth
McAuliffe, Catherine, Sweta Saxena, Masafumi Yabara

12/249

*Financing Growth in the WAEMU through the Regional
Securities Market: Past Successes and Current Challenges*
Diouf, Mame Astou, Francois Boutin-Dufresne

12/208

*Exchange Rate and Foreign Interest Rate Linkages for
Sub-Saharan Africa Floaters*
Thomas, Alun H.

12/196

A Financial Conditions Index for South Africa
Gumata, Nombulelo, Nir Klein, Eliphas Ndou

12/177

*Estimating the Implicit Inflation Target of the South African
Reserve Bank*
Klein, Nir

12/160

Monetization in Low- and Middle-Income Countries
McLoughlin, Cameron, Noriaki Kinoshita

12/148

*The Relationship between the Foreign Exchange Regime
and Macroeconomic Performance in Eastern Africa*
Stotsky, Janet Gale, Olumuyiwa Adedeji,
Manuk Ghazanchyan, Nils O. Maehle

12/141

*Exchange Rate Pass-Through in Sub-Saharan African
Economies and its Determinants*
Razafimahefa, Ivohasina Fizara

12/136

*Welfare Effects of Monetary Integration: The Common
Monetary Area and Beyond*
Asonuma, Tamon, Xavier Debrun, Paul R. Masson

12/127

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Growth, and Debt Sustainability in Togo*
Andrle, Michal, Antonio David, Raphael A. Espinoza,
Marshall Mills, Luis-Felipe Zanna

12/119

*Tracking Short-Term Dynamics of Economic Activity in
Low-Income Countries in the Absence of High-Frequency
GDP Data*
Opoku-Afari, Maxwell, Shiv Dixit

12/108

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and Key Determinants*
Drummond, Paulo, Wendell Daal, Nandini Srivastava,
Luiz E. Oliveira

12/94

*Monetary Policy in Low-Income Countries in the Face of the
Global Crisis: The Case of Zambia*
Baldini, Alfredo, Jaromir Benes, Andrew Berg, Mai Dao,
Rafael Portillo

12/93

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Within Southern Africa Customs Union Countries (SACU)*
Basdevant, Olivier

12/92

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South Africa: A Closer Look*
Klein, Nir

12/73

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Matter?*
Lonkeng Ngouana, Constant

12/32

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Community*
Sanya, Sarah, Matthew Gaertner

12/20

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12/18

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Yabara, Masafumi

12/7

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Cripolti, Valerio, George Tsibouris