

## Chapter 1

# Africa's macroeconomic prospects

This chapter looks at macroeconomic conditions in the different regions and countries of Africa, as well as in the continent as a whole. It highlights how weaker oil and commodity prices, uncertain global conditions and domestic political uncertainties are affecting many African economies and explores how their governments are responding to these challenges. It examines Africa's recent economic growth and prospects for 2016 and 2017 and important driving forces on the demand and the supply side, as well as headwinds from adverse developments in terms of trade, which also affect fiscal positions and current accounts.

## In brief

Africa achieved impressive economic growth over the past 15 years with the average gross real domestic product (GDP) rising from just above 2% during the 1980-90s to above 5% in 2001-14. In the past two years, growth has been more moderate; this trend is expected to continue in 2016, but strengthen in 2017. Africa's growth is adversely affected by headwinds from weaknesses in the global economy and price falls of key commodities, but is supported by domestic demand, improved supply conditions, prudent macroeconomic management and favourable external financial flows. The AEO forecast assumes a gradual strengthening of the world economy and the slow recovery of commodity prices. However, given the fragile state of economic recovery and the high volatility of commodity prices this forecast is uncertain.

Growth remained highest in East Africa, followed by West Africa and Central Africa, and is lowest in Southern Africa and North Africa. Assuming gradual improvement in international and domestic conditions, growth is projected to accelerate in all regions in 2016/17. In West Africa, the Ebola epidemic has abated with Guinea, Liberia and Sierra Leone recovering gradually.

Monetary policy stances diverged as countries faced different inflationary and currency pressures. Monetary policy tightened in countries where current accounts and exchange rates came under pressure and imported inflation increased, however some countries reduced interest rates as inflation declined due to lower energy and food prices. As fiscal pressures intensified governments generally followed prudent fiscal policies. Measures were taken to limit spending and broaden the revenue base.

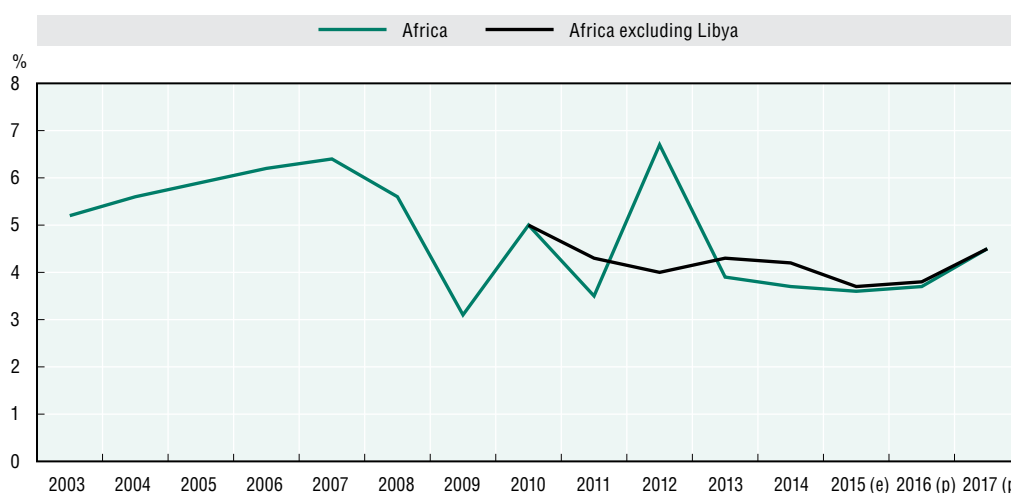
## Africa's growth slowed but is expected to strengthen again

Africa has achieved impressive economic growth over the past 15 years. Average growth of real gross domestic product (GDP) more than doubled from just above 2% during the 1980s and 1990s to above 5% between 2001 and 2014. In the past two years, growth has been more moderate with Africa's economies affected by headwinds from the global economy. Average growth of African economies weakened slightly in 2015 to 3.6% (down from 3.7% in 2014), about one percentage point lower than expected in the AEO 2015. Excluding Libya, where oil production remained volatile, Africa's overall growth reached 3.7% in 2015, down from 4.2% in 2014. The AEO macroeconomic outlook for Africa's economy assumes a gradual strengthening of the world economy and a slow recovery of commodity prices. Against this international backdrop Africa's average economic growth is expected to remain moderate in 2016 (3.7%), but strengthen in 2017 (to 4.5%) (Figure 1.1). However, given the fragile state of the global economic recovery and the high volatility of commodity prices this forecast is uncertain.

The main reasons for the slowdown in growth in 2015 were weaker global demand and lower international commodity prices, which adversely affected Africa's resource-rich countries. Growth of global real GDP and world trade volumes was more than one percentage point lower than assumed in the AEO 2015. The AEO forecast for 2015 was also based on the assumption that international oil prices would remain on average around 40% lower than in 2014, however prices were almost 50% lower. Metal prices, notably the price of copper and export prices for some agricultural products, such as cotton, were also lower than assumed.

Africa's growth remained higher than world growth despite strong headwinds from the international economy. Growth was also much higher than in the Latin America and the Caribbean region, where GDP declined slightly due mainly to deep recessions in Brazil and Venezuela. Despite its slowdown, the African continent remained the second fastest-growing economy in the world. Several African countries (Côte d'Ivoire, Djibouti, Ethiopia, Mozambique, Rwanda and Tanzania) were among the fastest-growing countries in the world with growth between 6% and around 10%.

Figure 1.1. Africa's economic growth, 2003-17



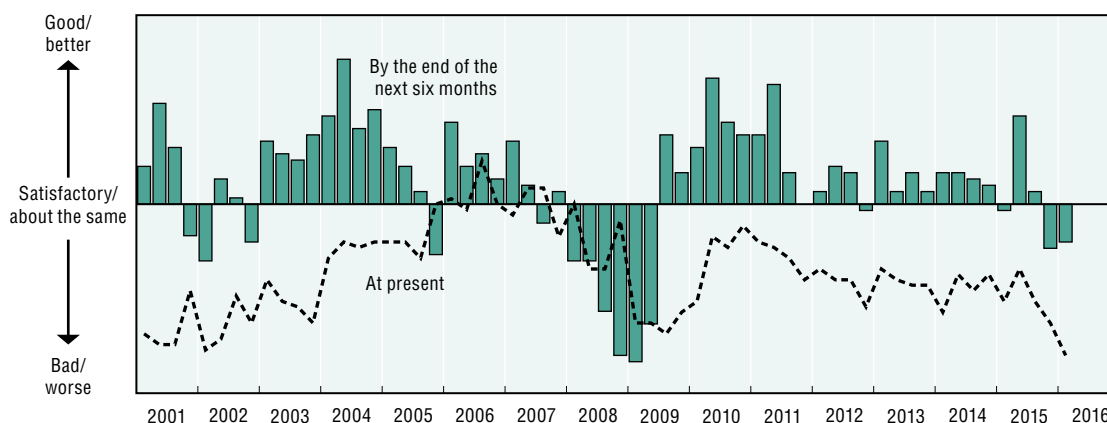
Note: (e) estimates; (p) projections.

Source: Statistics Department, African Development Bank.

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In emerging and developing Asia – the fastest-growing region in the world – growth declined from 6.8% in 2014 to 6.5% in 2015. In the People's Republic of China, the largest economy in the region, growth continued to decline to below 7% from 7.7% in 2013 and 7.3% in 2014. China's weaker growth and its transition from investment and exports of industrial goods towards consumption and services is an important factor in the recent drop in commodity prices, which suggests that the “commodity super cycle” of the past decade has come to an end. While lower commodity prices are providing significant headwinds to Africa's commodity exporters, the *rebalancing* of China's economy towards more consumption may provide backwinds to Africa's economies in the coming years. African countries best placed to export consumer goods to China, including agricultural products, are those that will benefit most from China's switch to more consumption-based growth. China's rising wages may also erode its competitiveness in low-end manufactures and could further increase FDI inflows to Africa (see Box 1.1).

Figure 1.2. Assessment of Africa's economic situation and six-month expectations, 2000 Q1–2016 Q1



Note: Qualitative assessments by participants of the quarterly survey to questions on the present situation of the economy and expectations for the next six months.

Source: Ifo institute World Economic Survey (2016).

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The weakening of Africa's growth is also reflected in an opinion poll conducted among African participants in the Ifo Institute's World Economic Survey.<sup>1</sup> In the second half of 2015, both the assessment of the current economic situation and expectations

for the next six months deteriorated, which – as becomes now obvious from official statistics – reflected the weakening of growth. At the beginning of 2016 these indicators had not yet improved, most probably due to the adverse effects from the still fragile world economy and further declining commodity prices (Figure 1.2).

#### Box 1.1. How China's lower and more balanced growth will affect Africa

The slowing of output growth in major emerging economies has been associated with lower commodity prices. Next to supply factors, the marked decline in investment and (rebalanced) growth in China is depressing commodity prices, particularly in metals and energy. Three key factors have underpinned Africa's good economic performance since the turn of the century: high commodity prices, high external financial flows, and improved policies and institutions. Macroeconomic headwinds for Africa's net commodity exporters may imply that Africa's second pillar of past performance – external financial inflows – will suffer as well.

While lower commodity prices are providing significant headwinds to Africa's commodity exporters, the *rebalancing* of China may also provide backwinds, albeit gradually. The relocation of low-end manufacturing from China might reinforce positive income effects of lower commodity prices in oil-importing countries. The backwinds can be expected to stimulate FDI inflows into Africa. Benefits from reduced fiscal pressures in countries with high fuel shares in imports (Egypt, Ethiopia, Kenya, Mozambique and Tanzania) mirror significant challenges for energy exporters (Angola, Chad, Congo, Gabon and Nigeria) and other commodity exporters (Ghana, South Africa and Zambia) arising from depressed commodity prices.

Lower commodity prices could shift Africa's centre of economic gravity from west to east, towards less commodity-dependent economies (Schaffnit-Chatterjee and Burgess, 2015). Investment finance could follow, reinforced by the peripheral outreach of China's One Belt One Road initiative (OBOR), which includes East Africa for infrastructure finance. China's new Silk Road Fund is targeting the economies along Africa's east coast. This suggests a shift away from a traditional focus on securing natural resources towards a more exploratory focus on opportunities for a manufacturing hub in the African region.

**China's slowdown could affect African development finance through several channels:**

- Growth linkage: the slowdown lowers global growth in general and low-income country growth in particular, especially for commodity exporters.
- Trade: the slowdown translates into reduced African export earnings and lower corporate savings and trade credits.
- Prices: the negative income effect in commodity-exporting countries of lower terms of trade associated with lower metal and mineral prices reduces household, corporate and public savings.
- Liquidity supply: lower official foreign-exchange reserves and sovereign-wealth fund assets may translate into lower credit supply to Africa.

**China's high growth has boosted global growth** in recent years (Figure 1.3). From 2011 to 2015, China's relative contribution to global growth was on a par with advanced countries, despite stagnating at a high level for a decade. India's contribution to global growth has also risen since the early 2000s. However, China has contributed almost 30% to global growth in recent years, approximately 20 percentage points more than India. As India is more closed and still considerably poorer than China, it cannot yet offset the impact of China's slowdown on global growth and trade.

A recent World Bank (2015) study uses a general equilibrium model to quantify how lower and more balanced growth in China might affect Africa's future growth (Figure 1.4). The model simulated the effects of a slowdown, a rebalancing and the combined effect of both.

The combined effect of China's lower growth and its rebalancing on sub-Saharan Africa is positive, as the positive effect from the more balanced growth outweighs the negative effect

**Box 1.1. How China's lower and more balanced growth will affect Africa (cont.)**

from lower growth. According to the simulation, by 2030, China's transition will increase the level of GDP in sub-Saharan Africa by 4.7% relative to the baseline. Countries best placed to export consumer goods to China, including agricultural products, will benefit most from China's lower but more balanced growth. According to this analysis, Zambia, a main copper exporter, is the only country that will not gain from China's switch to a more consumption-based growth model. However, this simulation does not consider possible growth effects in Africa from additional Chinese direct investment. To the extent that rising wages in China lead to higher unit labour cost, China's external competitiveness in low-end manufactures will be eroded. China could thus expand its current presence in Africa's special economic zones, or encourage the creation of new ones. Such positive growth effects from foreign direct investment (FDI) would increase as African countries reduce bottlenecks in infrastructure and energy supply.

**Trade linkages impact on financial flows via trade credits and indirectly via corporate profits.** China's trade engagement with Africa has risen markedly since 2000. China has crowded out other trade partners in relative terms, except for India, which tripled in Africa's export share (Table 1.1). In absolute terms, the trade dynamic of emerging partners was crucial in quadrupling African exports from USD 142.4 billion in 2000 to USD 566.6 billion in 2014. As a bloc, the group of emerging partners now buys more African exports than advanced countries. Only 15 years earlier, their share represented one fifth of total African exports. In terms of trade dynamics and trade shares, China and India now account for a sizeable portion of Africa's export earnings.

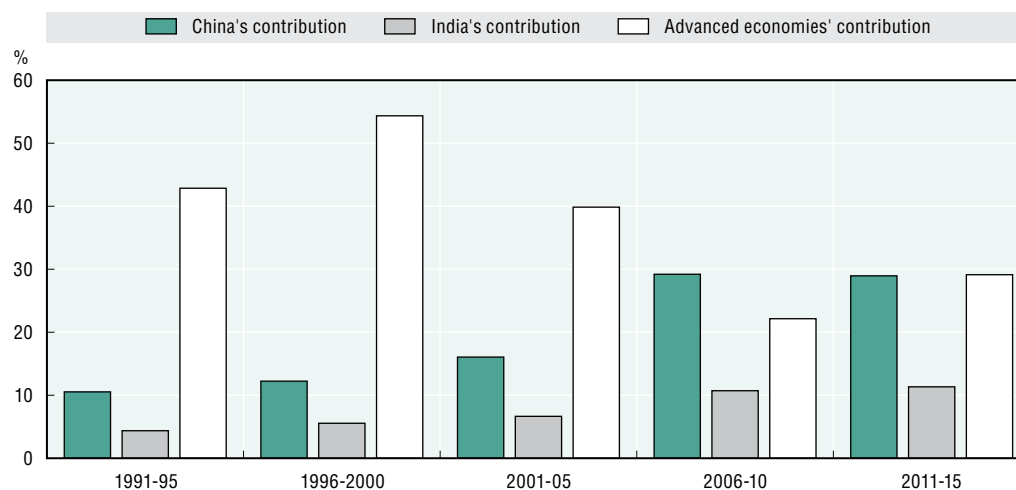
Trade finance is a potentially strong transmission channel between the financial sector and the real economy. Export credit and development loans from large emerging market economies (EMEs), notably Brazil, China and India, have occupied a relatively important role as vehicles for financing trade with Africa (AfDB et al., 2011). As a result of shrinking surpluses in their current account and dwindling reserves, the size of export buyer credits, resource-backed credit lines and hybrid financing mechanisms extended to Africa by China and other EMEs risk being cut back.

**The drop in commodity prices can undermine Africa's resource mobilisation.** The *price channel*, by which the EME slowdown impacts Africa's financing, reinforces the effects of the *trade channel*. From the perspective of finance, the impact of changes in commodity prices is unlikely to be symmetric or a zero-sum game. The recycling of large surpluses in the current account of oil exporters (including African) that has benefited African financing will not be paralleled by corresponding surpluses of oil importers.

**Tax revenues may also be negatively affected in a number of ways.** Many countries in Africa rely on trade taxes (tariffs) to sustain government revenues, so collapsing commodity exports will worsen fiscal positions. Unlike in non-resource-rich Africa, resource rents accounted for more than 80% of total tax collection in 2013 and 20% of GDP in oil-rich Algeria, Angola, Congo, Equatorial Guinea and Libya (AfDB/OECD/UNDP, 2015). Conversely, non-resource-rich countries broadened their tax base and raised tax collection through direct and indirect taxes. A generalised slump that affects consumption will lower tax revenues also in those countries.

**Financial flows to Africa may be harmed by depleted EME reserves.** The *liquidity-supply channel* has turned markedly since mid-2014. From a total of USD 1.8 trillion in 2000, global foreign exchange reserves reached a peak of USD 12 trillion in mid-2014. The fast accumulation of global economic imbalances over the 2000s brought about a significant shift in the world's wealth in favour of EMEs running surpluses (OECD, 2010). China alone stockpiled reserves from USD 170 billion in 2000 to USD 4 trillion in August 2014, in order to contain appreciation pressures. Since mid-2014, both foreign exchange reserves and sovereign wealth fund (SWF) assets in emerging economies have dropped as a result of lower commodity prices and lower gross capital inflows. Net sales of foreign reserves by China, the Russian Federation and Saudi Arabia accounted for most of the drop. From their peak, these three countries alone have lowered foreign exchange reserves by USD 1.5 trillion. These countries have been prominent emerging investors in Africa in the past (AfDB et al., 2011).

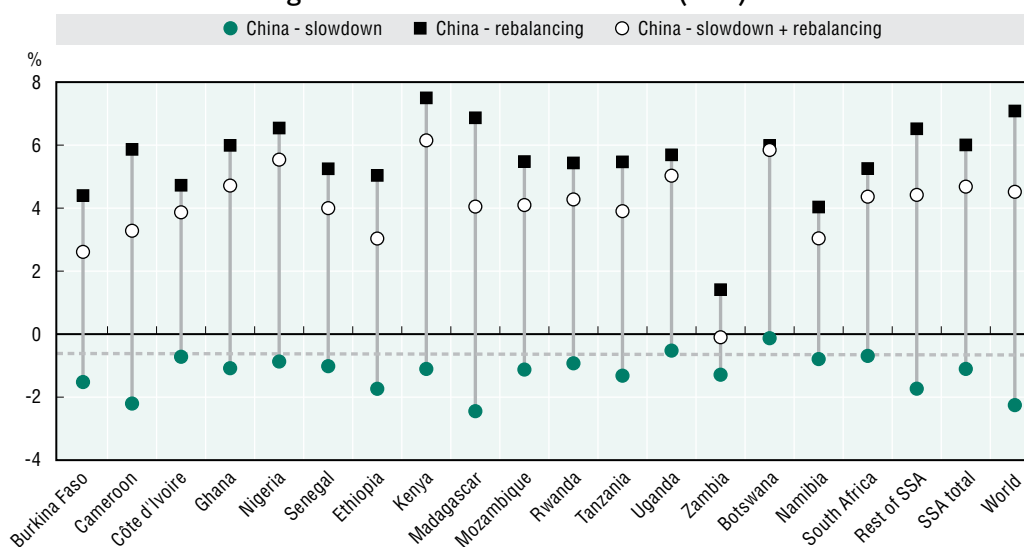
Figure 1.3. Contribution to global growth, 1991-2015, by areas (%)



Source: Author's calculations based on IMF (2015).

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Figure 1.4. Impact of China's transition to lower and more balanced growth on growth in sub-Saharan Africa (SSA)



Note: China's growth is assumed to slowdown to an average of 6% per year over 2016-30 and 4.6% in 2030. China's rebalancing is assumed to reduce the share of investment in GDP gradually from 46.7% in 2015 to 35.5% in 2030, with a corresponding increase in private consumption. The service sector is assumed to increase gradually from 50% of GDP in 2015 to 61% in 2030. As a counterfactual, the analysis assumed no rebalancing and constant annual real growth in China of 7% during 2016-30.

Source: World Bank (2015), data provided by the Africa Pulse team.

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Table 1.1. Shares of selected trade partners in Africa's exports and imports, 2000 and 2014 (%)

	2000		2014	
	Exports	Imports	Exports	Imports
<b>Traditional partners</b>	78.3	75.4	46.7	54.3
EU25	51.3	56.4	34.0	37.4
United States	20.4	10.1	5.5	6.4
<b>Emerging partners</b>	21.7	24.6	53.3	45.7
Brazil	2.0	1.3	1.7	3.0
China	4.6	4.9	18.4	15.3
India	2.4	2.1	6.1	7.4
Russian Federation	0.3	1.0	1.0	0.6
Turkey	1.9	1.3	2.4	1.0
Thailand	0.6	1.2	1.5	0.8
<b>Total value (billion USD)</b>	<b>142.4</b>	<b>104.0</b>	<b>566.6</b>	<b>531.5</b>

Sources: 2000 data: AfDB et al. (2011); 2014 data: UN Comtrade (2015).

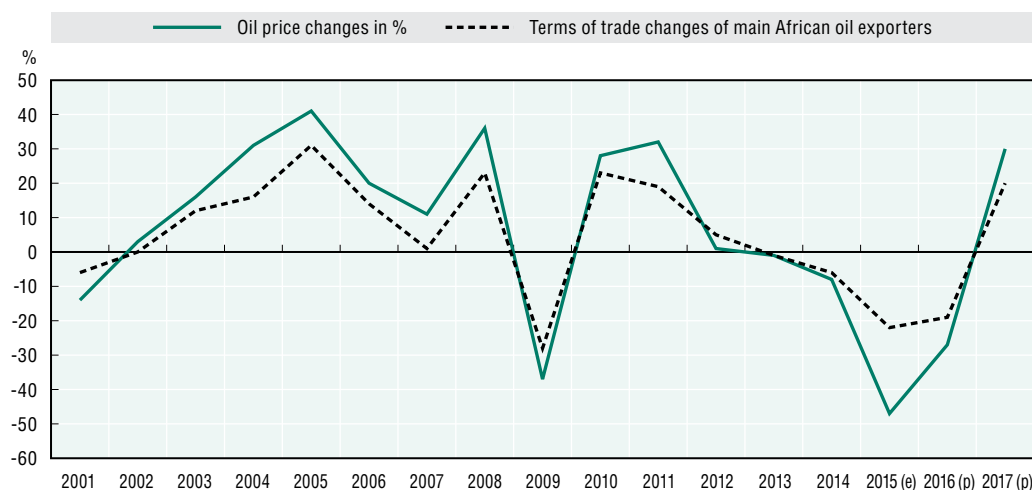
## Domestic demand and improved supply conditions support growth against global headwinds

In 2015, on the *demand side*, private consumption continued to support growth, helped by lower oil and food prices and growing remittances (see Chapter 2 for details on external financial flows). Construction investment, both public and private, also remained an important driver of growth. In contrast, exports remained mostly sluggish and often declined due to weak global demand. Thus, Africa's growth was again supported by domestic factors, which helped to cope with headwinds from the global economy. Given Africa's vulnerability to external shocks, promotion of regional trade and integration has assumed even greater importance (see Chapter 3).

The recent fall in export prices relative to import prices has led to terms of trade losses, which reduce the purchasing power of domestic output and adversely affect profits and investment. Assuming an average oil price of USD 37 per barrel in 2016 and USD 48 per barrel in 2017, the terms of trade of Africa's main oil exporters will again be lower in 2016 than in 2015, and will only improve in 2017 (Figure 1.5). However, given the recent volatility of oil and other commodity prices, assumptions about their future development and thus the terms of trade prospects for oil-exporting and other commodity-exporting countries are highly uncertain, with the risks probably weighted more towards the downside.

The recent commodity bust again highlighted the vulnerability of economies that depend on a few commodities, with many governments in resource-rich countries now increasing their efforts to diversify. Lower exchange rates should also help to improve the international competitiveness of other sectors.

Figure 1.5. Oil prices and terms of trade of Africa's main oil exporters, 2001-17



Note: (e) estimates; (p) projections.

Source: Author's calculations.

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### Box 1.2. Africa's terms of trade

Africa's terms of trade (i.e. the ratio of export prices to import prices) have improved markedly over the past decade. This improvement was driven mainly by development in resource-rich countries, which benefited from the international commodity price boom fuelled by the global economic recovery and high and resource-intensive growth in China. Africa's average (GDP-weighted) terms of trade reached a peak in 2008, rising 65% from its level in 2000. This positive trend was interrupted by the severe global recession in 2009, when commodity prices plummeted. After commodity prices recovered, Africa's terms of trade reached a second peak in 2012,

**Box 1.2. Africa's terms of trade (cont.)**

over 80% higher than in 2000. In 2014 and 2015, oil and other commodity prices plummeted once more. Earlier terms of trade gains were partially lost, although Africa's average terms of trade level remained around 50% higher than in 2000 (according to AEO estimates).

Terms of trade changes differ significantly between individual countries. Given their high dependence on oil and non-oil commodities, Africa's resource-rich countries are particularly affected by the boom and bust of international commodity prices. At the same time, oil-importing countries suffered from the earlier boom in oil prices and now benefit from the lower prices. However, resource-rich countries have to cope with highly volatile terms of trade. This is most notable for the terms of trade of Africa's main oil exporting countries, which are highly correlated with the development of oil prices (Figure 1.5). Measuring the volatility of terms of trade changes reveals very high volatility in oil-exporting countries such as Algeria, Angola, Democratic Republic of the Congo, Gabon, Libya, Nigeria and Sudan, as well as in Zambia, which depends heavily on copper exports. The Standard Deviation (i.e. the amount of variation from the mean) of annual terms of trade changes in these countries was around 15 or higher between 2001 and 2014. In contrast, volatility was much lower (SD between 2 and around 5) in countries that depend less on commodities and/or are more diversified, such as Ethiopia, Kenya, Senegal, South Africa, Tanzania, Tunisia and Uganda.

The earlier terms of trade boom improved economic prosperity. However, the recent fall in export prices relative to import prices has partly reversed earlier terms of trade gains. The purchasing power of domestic output ("command GDP") has declined relative to real GDP, but growth of real GDP has also reduced, as lower commodity prices tend to reduce investment and growth in the resource sector. Other sectors also suffer through their direct linkages with the resource sector or indirectly where governments respond to lower revenues by cutting spending. However, this negative effect on growth is mitigated where lower exchange rates enable other firms to export more and/or cope better with import competition.

It is important to also consider the magnitude and speed of terms of trade changes, both of which have risen markedly. While economic growth generally benefits from terms of trade gains, highly volatile shifts in terms of trade can lead to macroeconomic instability and reduce medium-term growth (Awel, 2012). However, the adverse effects of terms of trade boom and busts on the economy can be mitigated if monetary and fiscal policies manage to contain inflation and build up savings during the boom period. This prevents overheating, limits the real appreciation of the exchange rate and also creates fiscal space, which is needed to counteract an economic downturn in the following terms of trade bust. However, if policies are pro-cyclical and unable to contain inflation during the boom, large terms of trade changes will be more disruptive and policies will be less able to mitigate the adverse effects on the economy when the terms of trade deteriorate. (For more details about the recent policies of individual countries see the respective Country Notes.)

On the *supply side*, many African countries have further improved conditions for doing business. Among the 51 African countries evaluated in the *Doing Business* report (World Bank, 2016a), 23 improved their ranking in 2015. Conditions for doing business improved most in Kenya, Uganda, Seychelles and Mauritania (as measured by improved rankings). In 20 other countries, conditions (as measured by scores) remained the same or improved, but their rankings declined nonetheless as scores in other countries improved more. In Gabon and Zambia, both the score and the ranking declined, as was the case in Rwanda, which was among the top reformers in recent years. But Rwanda still ranks second best after Mauritius among African countries in ease of doing business (see Chapter 5).

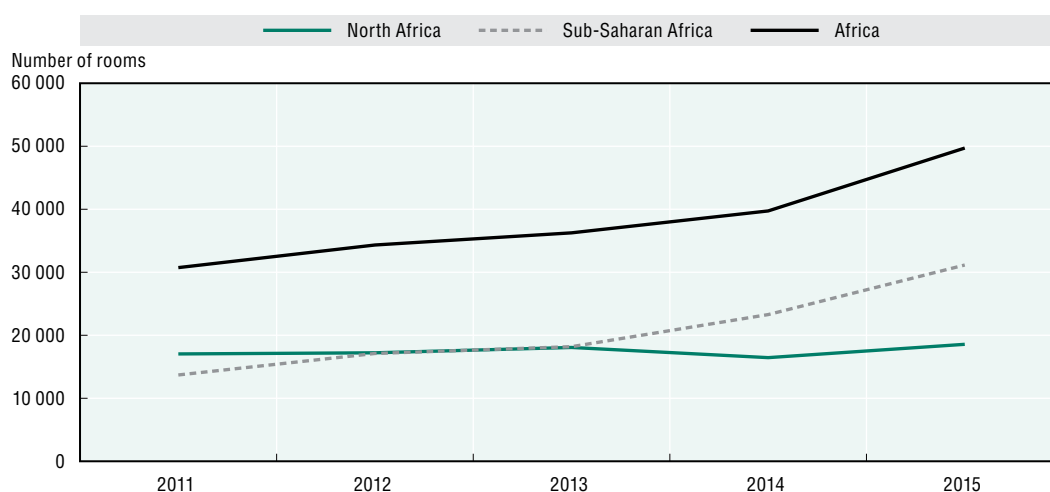


In 2015, agriculture supported growth in countries where weather conditions remained favourable and investment had increased productivity. However, several countries experienced a headwind on growth (notably Ethiopia, Malawi, Namibia, South Africa, Zambia and Zimbabwe) due to droughts or floods. This sector remains vulnerable to weather conditions and volatile prices of agricultural products. In resource-rich countries, growth declined as lower commodity prices strained government budgets and investment. In some countries, production in extractive industries remained unchanged or increased slightly despite lower commodity prices (Nigeria and Zambia), while in others it declined (Botswana, Equatorial Guinea, Gabon, Guinea, Sierra Leone and South Africa).

Manufacturing activity improved in a few countries (Ethiopia, Kenya, Rwanda and South Africa), but was often constrained by weak export demand and/or power shortages. New investment is expected to boost manufacturing in the coming years in several countries (e.g. Botswana and Mauritius). The construction sector continued to boost growth in many countries, often driven by public infrastructure programmes, but also by private investment including in housing. The service sector also remained an important driver of growth in Africa. Both traditional services such as transport, trade, real estate, public and financial services and new information and telecommunication technologies remain important drivers for productivity and growth.

Tourism is also an important and growing service sector in Africa. The number of available hotel rooms continued to increase (Figure 1.6). However, according to the World Tourism Organization (UNWTO, 2016), international tourist arrivals in Africa declined in 2015 by 3% to 53 million. In North Africa, arrivals declined by 8% and in sub-Saharan Africa by 1%, although the latter returned to positive growth in the second half of the year. In some countries, tourism was adversely affected by terrorism and security problems in the region (Burkina Faso, Cameroon, Egypt, Kenya and Tunisia). Meanwhile, in several countries tourism boosted growth in 2015 (Ethiopia, Madagascar, Mauritius, Rwanda, Seychelles and Zimbabwe).

Figure 1.6. Number of available hotel rooms in Africa, 2011-15



Source: AfDB/NYU Africa House/ATA (2015).  
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An examination of the fastest-growing African countries over the past five years reveals very different sector patterns (Table 1.2). In Nigeria, structural changes seem to be in accordance with traditional three-sector theory, as shares of the primary sector

declined while those of other sectors increased.<sup>2</sup> The share of agriculture also declined in many other countries, but increased in Kenya and Tanzania. The share of extractive industries declined in some countries but increased in others as new production started and boosted growth (oil in Ghana and iron-ore mining in Sierra Leone). The share of manufacturing increased in only a few countries (Niger, Nigeria and Uganda), but remained broadly constant or even declined in many others. In contrast, the construction and service sectors were important drivers of growth in many countries.

In short, African countries are achieving growth performance with quite different sectoral patterns. However, the simplistic three-sector theory can be misleading as productivity is not only raised by factor reallocation between sectors, but also through modernisation and reallocation within sectors, as well as via better linkages between sectors. In particular, higher productivity in agriculture can boost food processing and leather processing and manufacturing to the benefit of both sectors (McMillan and Harttgen, 2015).

Table 1.2. Sectoral changes in Africa's fast-growing countries, 2009-14  
(Changes of shares in GDP in percentage points)

	Agriculture, forestry, fishing and hunting	Mining and quarrying including oil and gas extraction	Manufacturing	Construction	Electricity, gas and water	Services
<b>Burkina Faso</b>	-0.7	5.4	-3.6	4.2	0.3	-5
<b>Congo</b>	0.1	-3.6	0.1	1.8	0.1	1.5
<b>Democratic Republic of the Congo</b>	-1.9	0.4	-1.5	0.5	0	2.5
<b>Ethiopia</b>	-10.2	0.6	0.3	4.1	-0.4	5.6
<b>Ghana</b>	-12.2	7.4	-1	3.7	-0.1	2.2
<b>Kenya</b>	3.3	0.2	-1.7	0.6	-0.3	-2.1
<b>Malawi</b>	-5.3	0.2	-2.1	1.9	-0.1	5.4
<b>Mozambique</b>	-2.2	2	-1.8	0.5	-0.1	1.6
<b>Niger</b>	-1.6	3.3	1	0	-0.1	-2.6
<b>Nigeria</b>	-16.1	-17.1	6.5	1.9	0.4	24.4
<b>Rwanda</b>	-1.2	1.1	-0.5	1.5	0.1	-1
<b>Sierra Leone</b>	-8.2	17.2	-0.6	-0.5	0.1	-8
<b>Tanzania</b>	1.5	1.6	0	2.1	-0.5	-4.7
<b>Uganda</b>	-2.5	-0.5	1.5	2.1	-0.4	-0.2
<b>Zambia</b>	-2.9	-2.3	-1.2	3.4	0.1	2.9

Note: Selected countries with average annual real GDP growth during this period of above 5%.

Source: Author's calculations based on data from the Statistics Department, African Development Bank.

## Growth remains highest in East Africa

Economic growth varies across countries and regions, reflecting factors such as differences in income levels, dependence on commodity exports, political and social stability, and macroeconomic and structural policies. In 2015, growth continued to be highest in East Africa, followed by West Africa and Central Africa, and remained lowest in Southern Africa and North Africa. Assuming a gradual improvement in international and domestic conditions, growth is projected to accelerate in all regions in 2016/17 (Table 1.3).

**Table 1.3. Africa's growth by region, 2014-17**  
(Real GDP growth in percent)

	2014	2015 (e)	2016 (p)	2017 (p)
Africa	3.7	3.6	3.7	4.5
Central Africa	6.1	3.7	3.9	5.0
East Africa	6.5	6.3	6.4	6.7
North Africa	1.4	3.5	3.3	3.8
Southern Africa	2.8	2.2	1.9	2.8
West Africa	6.0	3.3	4.3	5.5
Memorandum items:				
Africa excl. Libya	4.2	3.7	3.8	4.5
Sub-Saharan Africa (SSA)	5.0	3.6	4.0	4.9
SSA excl. South Africa	5.9	4.2	4.7	5.6

Note: (e) estimates; (p) projections.

Source: Statistics Department, African Development Bank.

In 2015, **East Africa** was again the continent's fastest-growing region and is expected to continue its high growth path in 2016/17. The region benefits from large FDI inflows, although there is some uncertainty about the actual development of these flows in 2015 (see Chapter 2). The region's strong growth performance in 2015 was widespread with many countries achieving growth of more than 5% (Djibouti, Ethiopia, Kenya, Rwanda, Tanzania and Uganda) and expected to continue on a high growth path in 2016/17. Sudan also performed better following the shock of the secession in 2011. Growth in these countries was often driven by services and construction including public investment programmes, but also partly by industry and – where weather conditions remained favourable (Sudan and Tanzania) – by agriculture. Conversely, in South Sudan the fall in oil prices and oil production and the political conflict had a strong negative impact on real GDP, which contracted in 2015. The future outlook depends in particular on the timely implementation of the latest Peace Agreement. In Eritrea, the economy stagnated due to low export demand and difficult business and investment conditions, and in Comoros the energy crisis continued to weigh on growth.

In **West Africa**, growth slowed in 2015 due to the sharp fall in commodity prices and the Ebola crisis. In Nigeria, Africa's largest economy, oil production remained low and growth of the non-oil sector weakened as the government cut spending due to lower oil revenues. Private-sector activity was also adversely affected by tighter monetary policy and foreign exchange restrictions, which were implemented to counter depreciation of the currency. Growth is expected to recover gradually with the help of a more expansionary government budget. The Ebola crisis has a significant impact on the economies of Guinea, Liberia and in particular Sierra Leone, with the fall in commodity prices further adding to the shock (see Box 1.3). However, some other countries in the region achieved relatively high growth in 2015 (Benin, Côte d'Ivoire, Mali, Senegal and Togo) and their outlook for 2016/17 remains favourable.

In **Central Africa**, growth also weakened in 2015. Growth in the Republic of the Congo (Congo) declined as the government responded to falling oil revenues by cutting infrastructure investment. In Equatorial Guinea, GDP fell as oil production declined, and this trend is likely to continue in 2016/17. In the Central African Republic, GDP recovered despite the political conflict and security risks, and with improved security and a normalisation of international co-operation the economy should continue to pick up. Cameroon continued its trend of solid and broad-based growth driven by agriculture

and forestry, construction, industry and oil production, despite security problems in parts of its northern border region. In Gabon, the government continued its investment programme and boosted growth despite lower oil revenues. In the Democratic Republic of the Congo, growth moderated in 2015 but remained solid, driven by agriculture, services and industries, with production increasing in the majority of extractive industries.

In **Southern Africa**, growth slowed down in 2015 and is expected to recover only in 2017. Weak international conditions including lower commodity prices, the drought and other factors, such as power shortages, dampened growth in the region in 2015. South Africa continued its low growth trajectory and is expected to weaken further in 2016 before recovering in 2017. Many factors, notably low commodity prices, weak export demand, and power shortages, strikes and the drought in agriculture, are depressing consumer and business confidence and production. As South Africa is an important export destination for neighbouring countries its weakness affects the whole region. In other countries in the region that depend even more on commodity exports, notably Angola (oil) and Zambia (copper) as well as Botswana (diamonds), growth also declined. In Mozambique, growth moderated in 2015 but remained solid, and was boosted by higher production in agriculture and the power and extractive industries sectors. Despite a significant reduction in 2015, FDI also remained a major driver of Mozambique's growth.

In **North Africa**, the macroeconomic situation remains uneven. In Libya, disruption in oil production and ongoing political conflicts and uncertainty led to another fall in real GDP. Ending the fighting between rival militias and establishing a national government is key for an economic recovery. Tunisia achieved only modest growth in 2015 boosted by good harvests, while production in other sectors remained weak. Mining and industry sectors were adversely affected by weak exports and tourism, which had recovered gradually, declined once again after terrorist attacks. In Algeria, growth remained steady thanks to a rebound in oil production. Morocco achieved the highest broad-based growth in the region supported on the demand side by private consumption and investment and on the production side by the construction sector and agriculture, which benefited from good weather conditions and past investment in irrigation. Tourism was also adversely affected by security problems in the region but to a much lower extent than in Tunisia. In Egypt, growth strengthened as the political scene stabilised and business sentiment improved. Higher wages and social spending supported consumption and investment also increased. On the production side, the service sector boosted growth although tourism was again adversely affected by security concerns. Current plans for economic reforms and mega projects will, if fully implemented, further strengthen the economy.

### Box 1.3. The Ebola crisis

Thanks to international support and national policies, the spread of the Ebola Virus Disease (EVD) in the three most-affected countries has been contained. The World Health Organization (WHO) declared West Africa "free of Ebola", although there is still a risk of flare-ups. The three West African countries most hit by the EVD outbreak, Guinea, Liberia and Sierra Leone, are on their way to recovery. The epidemic caused tremendous human hardship and resulted in high economic and social costs in these countries including possible reversals of gains achieved in various areas. By mid-March 2016, in these three countries there had been 28 603 reported cases of the virus (0.13% of the total population in these countries) and 11 301 reported deaths (4 809 in Liberia, 3 956 in Sierra Leone and 2 536 in Guinea) according to WHO. A large number of health workers also died as a result of infection. Health systems must now be restored to functioning status and further improved. Governments are taking measures not only to restore gains lost due to the EVD crisis, but also to better cope with the risks of epidemics and other health threats, and improve access to quality health services.

**Box 1.3. The Ebola crisis (cont.)**

During the height of the epidemic, economic activity came to a standstill in the most-affected regions, unemployment increased and children could not go to school. As these countries also depend on commodity exports (iron ore in Sierra Leone and Liberia, aluminium, oil, gold and diamonds in Guinea), these economies suffered a “double shock”, as commodity prices declined sharply. As a result of these shocks, real GDP shrank in Sierra Leone in 2015 by about one fifth. In Guinea and Liberia, the impact was smaller with GDP estimated to reach levels similar to 2014. In the three years prior to the Ebola outbreak (2011-13), and before the commodity price declines, average growth amounted to almost 14% in Sierra Leone, above 8% in Liberia and above 3% in Guinea.

The economic costs from these shocks include high fiscal costs. Despite massive budget support from donors and direct donor spending to fight the epidemic, fiscal positions weakened in 2014/15. There are also ongoing surveillance and prevention costs. Given the reduced fiscal space, governments now face the challenge of preventing excessive debt and ensuring medium-term fiscal sustainability, while preserving growth-enhancing government expenditures such as infrastructure investment. The economic forecast for these countries is cautiously optimistic. In Guinea and Liberia, real GDP growth is expected to accelerate in 2016 to 4% and almost 3%, respectively, and to strengthen further in 2017. In Sierra Leone, growth is expected to recover only by 2017, but the level of GDP will still be much lower than in 2014.

**International commodity prices have declined further**

Commodity prices, which started to edge down in 2013, fell sharply during the second half of 2014. The decline continued during 2015 and the beginning of 2016 (Figures 1.7, 1.8 and 1.9). Between mid-2014 and January 2016 the oil price declined by more than 70% and is presently at its lowest level in 13 years, almost 30% lower than at its lowest level during the 2008/09 global recession. The main reason for the plunging prices is global oversupply. With new suppliers coming on stream, demand has not kept pace with supply but is restrained by slower economic growth in industrial and emerging countries, including China. Slowing demand from China and other countries also reduced copper prices to their lowest level in more than seven years. Prices of other commodities, such as iron ore and gold, and export prices of some agricultural products, notably cotton, also declined, with gold price recovering recently. The decline of coffee prices was more moderate and the price of cocoa remained high in 2015.

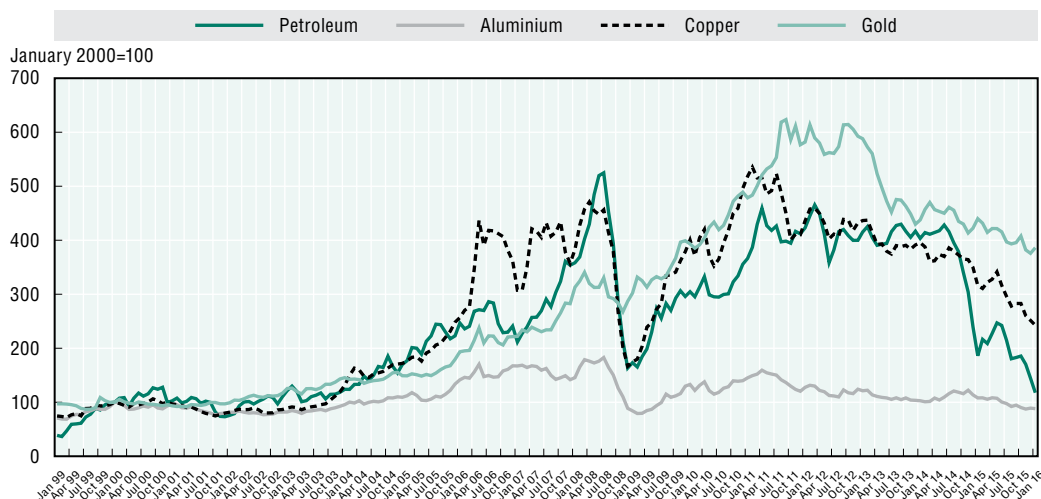
The AEO 2016 economic forecast for Africa is based on the assumption that the price of oil and other commodities will stabilise and slowly recover. But given current low levels, average prices will still be lower in 2016 than in 2015, and will only increase in 2017. Assuming an average oil price level of USD 37 per barrel in 2016 and USD 48 per barrel in 2017, oil prices will decline by 27% in 2016 before rising by around 30% in 2017. However, given the uncertainties affecting the global economy in general and oil and commodity markets in particular, these assumptions involve significant risks, with downside risks probably more significant than upside risks.

Africa's main commodity exporters are heavily affected by these price declines. In some countries production in extractive industries has continued to increase, thus boosting GDP, while in others production has been cut. The low price levels also weigh against profits and can have adverse effects on investment and exploration, thus reducing growth potential. In several African countries, revenues from oil and non-oil commodity exports are the main source of finance for both import demand and, through tax revenues, government expenditure. These countries now have to cope with weaker current accounts and exchange rates and additional fiscal pressures. However, lower

oil prices also have beneficial effects as they reduce costs for heating, transport and production in energy-intensive sectors. Import prices of basic foodstuffs also continued to decline in 2015. Taken together with lower energy prices, this decline mitigates inflationary pressures, increases the purchasing power of households, tends to boost domestic demand and could also alleviate poverty.

Commodity prices can affect Africa's economic growth through various channels. The overall effect depends on the size of oil and non-oil commodity exports and oil and food imports. Analysis by the African Development Bank shows that, in the short term, the growth impact (per percentage price change) through the export channel is largest for oil prices, followed by metal prices and export prices of agricultural products. However, over the longer term, the latter have the largest impact on growth in exporting countries. According to this analysis, the average commodity price increase between 2010 and 2014 explains about 30% of growth in Africa's commodity-exporting countries (AfDB, forthcoming). However, this implies that if commodity prices remain at current low levels, growth prospects for Africa's commodity-exporting countries would remain weaker than in AEO projections, which assume a gradual recovery of commodity prices during 2016/17.

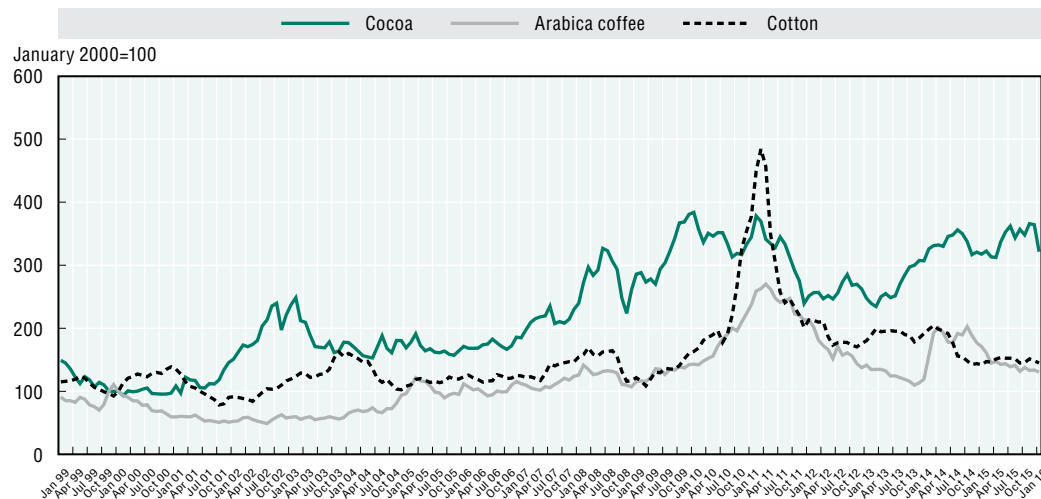
Figure 1.7. Commodity prices, January 1999-January 2016



Source: World Bank (2016b).

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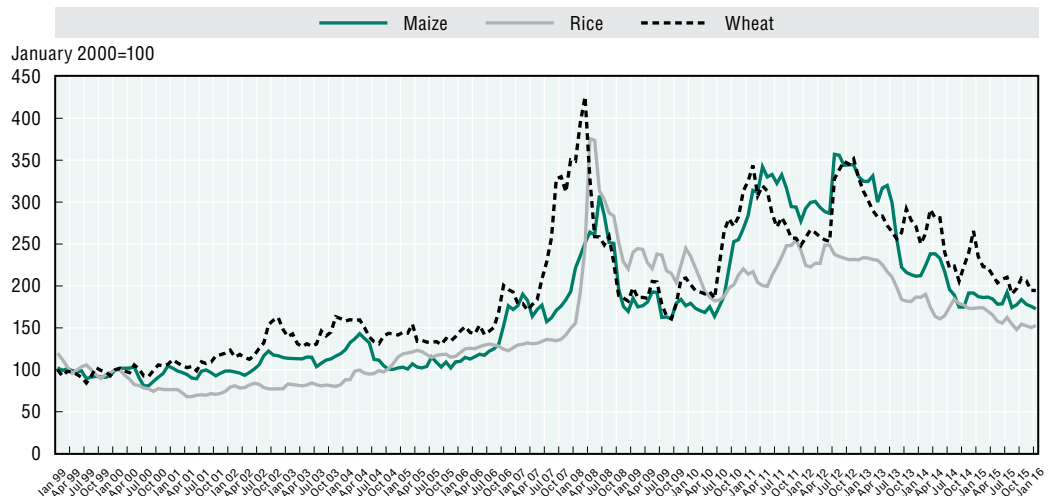
Figure 1.8. Export prices of agricultural products, January 1999-January 2016




Source: World Bank (2016b).

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Figure 1.9. Import prices of basic foodstuffs, January 1999-January 2016



Source: World Bank (2016b).

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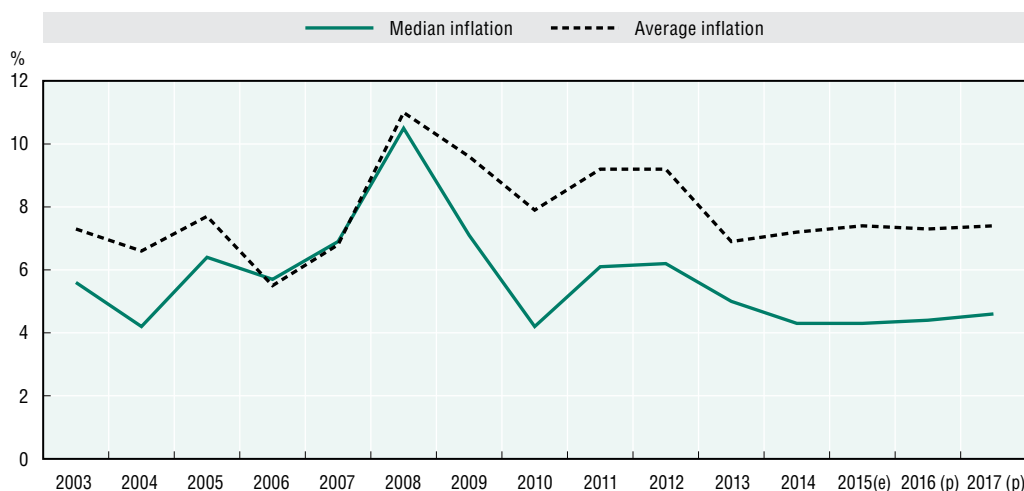
## Monetary policy stances diverge as countries face different inflationary and currency pressures

In many African countries, inflation remained moderate in 2015. However, Africa's average inflation remains higher (7.4%) than median inflation (4.3%) due to particularly high inflation in several countries: South Sudan (41.1%), Malawi (21.2%), Sudan (16.9%), Eritrea (12.5%), Egypt (11.2%), Angola (10.2%) and Zambia (10.1%) (Figure 1.10). Inflationary pressures increased in countries where currencies depreciated in the wake of lower commodity prices, eroding external and fiscal positions and global risk perceptions. In 2015, central banks continued to maintain or achieve price stability, in accordance with their mandate. They used different monetary frameworks to pursue their objectives, such as inflation targeting (Ghana and South Africa) or other regimes, often with money aggregates as operational and intermediate targets (Berg et al., 2015). Exchange rate regimes also differ between countries. In many countries, central banks are labouring to improve the effectiveness of their policies for macroeconomic management. This is particularly difficult in countries with underdeveloped financial markets, and in cases where countries are hit by external shocks and central banks are faced with conflicting targets. This was the case in 2015 when external balances deteriorated and exchange rates came under pressure in resource-rich countries after the fall of oil and other commodity prices. In Nigeria, monetary policy was first eased to stimulate the economy and foreign reserves were used to defend the currency. But towards the end of 2015, foreign exchange restrictions were implemented to stabilise the exchange rate and halt the erosion of foreign reserves. The authorities are expected to gradually lift the restrictions and adopt a more flexible exchange rate policy. Since the end of 2015, a Standby Credit Facility agreement with the International Monetary Fund (IMF) together with further monetary and fiscal tightening is being used to stabilise the exchange rate and shore up reserves.

Several other countries also coped with worsening external positions, sharply falling exchange rates and inflationary pressures. They generally responded by tightening policies (e.g. Algeria, Angola, Ghana, Kenya, Lesotho, Malawi, South Africa, Uganda and Zambia). But several other countries (e.g. Botswana, Morocco, Mauritius)


continued accommodative monetary policy or saw room for further easing with a view to stimulating the economy, as inflation remained low or declined due to lower oil and food prices. The Central African Economic and Monetary Union (CEMAC)<sup>3</sup> also responded to lower growth and moderate inflation and further reduced its benchmark interest rate to 2.45%. In contrast, the West African Economic and Monetary Union (WAEMU)<sup>4</sup> kept its benchmark interest rate constant at 3.5%. In 2015, inflation in WAEMU countries was on average below 1.5% and lower than in CEMAC countries, where it was around 3%.

Figure 1.10. Consumer price inflation in Africa, 2003-17



Note: (e) estimates; (p) projections.

Source: Statistics Department, African Development Bank.

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## Fiscal positions and current accounts have deteriorated in many countries

Falling commodity prices significantly impacted government budgets in resource-rich countries already in 2014, with pressure increasing in 2015. Many countries had accumulated reserves during the preceding boom period and were able to cope with these headwinds. But some had recorded relatively large budget deficits in 2014, which increased further in 2015 (Algeria, Congo, Libya, South Sudan and Zambia). Some countries less dependent on oil or other commodities also face significant budgetary pressures, and a few ran deficits in 2015 close to 10% of GDP or higher (Congo, Egypt, Eritrea and Gambia).

However, a few countries recorded budget surpluses in 2015 (Botswana, Lesotho and Seychelles), and many experienced relatively small budget deficits of around 3% of GDP or lower (Burkina Faso, Comoros, Democratic Republic of the Congo, Ethiopia, Gabon, Guinea-Bissau, Mauritania, Nigeria, Sudan, Swaziland and Zimbabwe). Most governments are taking measures to limit budget deficits.

Given increased budgetary pressures, maintaining debt at sustainable levels assumes even greater importance. According to the World Bank and IMF debt sustainability analysis, almost half of countries assessed in recent years are at a moderate risk of debt distress and almost a quarter are at low risk, while more than a quarter are at high risk. The risk assessment worsened for six countries (compared to AEO 2015), which moved from moderate to high-risk classification (Cameroon, Ghana and Mauritania) or from low to moderate risk (Congo, Ethiopia and Madagascar). Comoros moved in the other direction from high to moderate risk (Table 1.4).



**Table 1.4. Debt sustainability analysis in African countries:  
Assessing risks of debt distress**

Low risk	Moderate risk	High risk
Benin (January 2013)	Burkina Faso (May 2015)	Burundi (April 2015)
Kenya (September 2015)	Cabo Verde (September 2014)	Cameroon (December 2015)
Liberia (February 2015)	Comoros (February 2015)	Central African Republic (October 2015)
Nigeria (March 2015)	Congo (September 2015)	Chad (May 2015)
Rwanda (June 2015)	Democratic Republic of the Congo (October 2015)	Djibouti (December 2015)
Senegal (September 2015)	Côte d'Ivoire (December 2014)	Ghana (September 2015)
Tanzania (July 2015)	Ethiopia (October 2015)	Mauritania (February 2015)
Uganda (November 2015)	Gambia (April 2015)	Sao Tome and Principe (July 2015)
	Guinea (February 2015)	Sudan (December 2014)
	Lesotho (July 2014)	Zimbabwe (July 2014)
	Madagascar (December 2015)	
	Malawi (March 2015)	
	Mali (December 2014)	
	Mozambique (August 2015)	
	Niger (March 2015)	
	Sierra Leone (November 2015)	
	South Sudan (December 2014)	
	Togo (November 2014)	
	Zambia (June 2015)	

Note: Date of most recent analysis in parentheses.

Source: Joint World Bank-IMF Low Income Countries Debt Sustainability Analysis (LIC DSA).

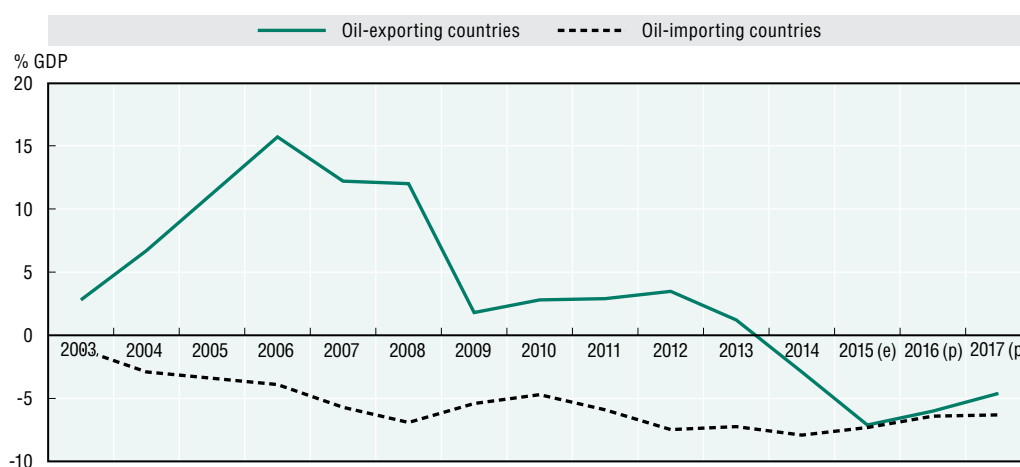
Measures to limit indebtedness differ between countries and include spending cuts, tax rate increases, tax base broadening and improved tax collection. On the spending side, the narrower fiscal space increases the importance of using spending effectively to improve provision of basic services for the whole population and boost economic growth. Lower energy prices make it politically easier to phase-out energy subsidies and several countries have already implemented such measures.

On the revenue side, a balance must be struck between different objectives, in particular creating more revenues and avoiding adverse effects on economic growth. Broadening the tax base by reducing tax preferences and exemptions and improving tax administration is generally preferable to increasing statutory tax rates. An effective tax administration requires a highly qualified and well-equipped staff that can work without political interference. The task of tax collectors is eased if the tax burden is relatively low, if the number of taxes is relatively small, and if taxation law is clear, relatively simple and gives tax collectors minimal discretionary power to determine tax liability. Reducing corruption and improving the quality of public spending, such that people perceive taxes as essential for financing public goods and services, also facilitates tax collection (Leibfritz, 2015).

In Africa, there is significant potential for further improving tax collection. According to the World Bank's *Paying Taxes 2016* report, Africa remains a difficult region in which to pay tax but many countries are implementing measures to reduce compliance costs for taxpayers (World Bank /PwC, 2015). Several countries have recently implemented or improved electronic systems for filing and paying taxes, such as Cabo Verde, Morocco, Mozambique, Rwanda, Seychelles, Tanzania and Zambia. Five African countries stand out in terms of ease of paying taxes and are listed among the 50 best-practice countries in the World Bank report. These are Mauritius (ranked 13), South Africa (20), Seychelles (43), Zambia (46) and Rwanda (48). However, many African countries still rank poorly in this international comparison, largely because of their high administrative burden on taxpayers and the complexity of their tax systems.


The sharp fall in oil prices not only increased pressure on government budgets, but also led to a sharp deterioration in current accounts for oil-exporting countries (Figure 1.11). During the oil price boom, Africa's main oil-exporting countries generally recorded large surpluses in their current accounts, but since last year all hold deficits. These were particularly large in the Republic of the Congo and Libya, where oil production was disrupted by ongoing political conflict. Oil-importing countries are benefiting from lower oil prices and some have improved their current accounts. But on average, the current account deficit of these countries improved only marginally despite relief from lower international oil and food prices. Lower export prices and export volumes outweigh lower import prices for oil and food. In some countries, weaker exchange rates also pushed up import prices.

Figure 1.11. Current account balance in Africa's oil-exporting and oil-importing countries, 2003-17



Note: (e) estimates; (p) projections.

Source: Statistics Department, African Development Bank.

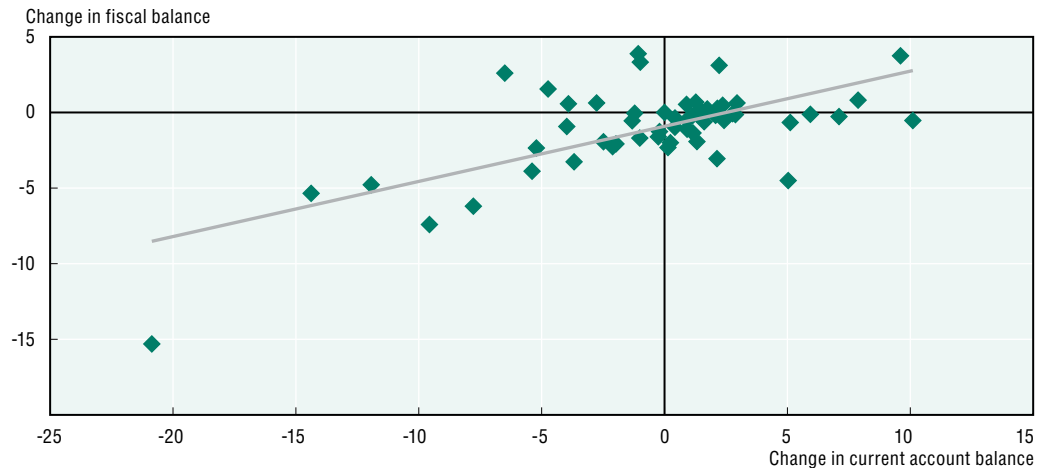
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Most African countries have now a “twin deficit” with both the government budget and the current account in deficit. Where this leads to declining foreign reserves and inflationary pressures, it can pose serious risks to macroeconomic stability. External and fiscal deficits are sometimes interrelated, but the causal relationship can go both ways. For example, a twin deficit could be caused by a decline in export revenues, which leads to lower government revenues while imports and government spending are maintained at existing levels, with the result that both external and fiscal positions deteriorate. However, a twin deficit could also originate from the government budget if an increase in public spending is not accompanied by higher public revenue or private net savings, causing both fiscal and external positions to deteriorate. A combination of lower export earnings and higher public expenditure could also lead to a twin deficit.


In 2015, worsening of current accounts was often accompanied by deterioration of the fiscal position (Figure 1.12). For resource-rich countries such as Algeria, Chad, Congo, Gabon, Libya, Nigeria, South Sudan and Zambia, the deterioration of the external balance (due to lower export earnings) led to the deterioration of the fiscal balance (due to lower tax revenues from extractive industries). In several countries, currency depreciation also contributed to the recent deterioration of external balances by pushing up import prices. However, weaker currencies will eventually result in an improvement in trade balances, with domestic firms better able to compete with foreign firms, both in export and domestic markets (J-curve effect).<sup>5</sup>

Prevention of unsustainable twin deficits therefore requires not only prudent fiscal policies, but also competitive real exchange rates and further improvement in conditions for domestic firms and foreign direct investment. Both fiscal and external deficits will then eventually decline. If the remaining current account deficits are to a large extent financed through FDI they will be sustainable, as this type of financing does not increase external debt.

Figure 1.12. Changes in current account and government budget balances in African countries between 2014 and 2015, in percentage points of GDP



Note: The positive-sloped trend line and the R-square of 0.44 in the regression between the change in current account balance and fiscal balance suggest that both balances are related, although there are other influencing factors.

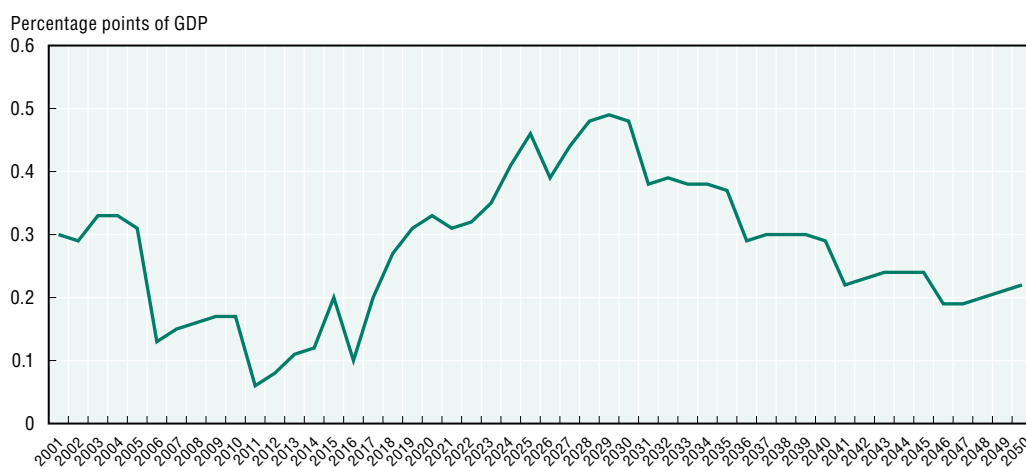
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## Will Africa reap a demographic growth dividend from its young population?

Africa is the continent with the fastest-growing population in the world. From 2000 to 2015, population numbers increased by more than 370 million from 814 million to almost 1.2 billion. According to United Nations projections (medium scenario), the population will rise to almost 1.7 billion in 2030 and almost 2.5 billion in 2050.<sup>6</sup> Africa's share of the world population is predicted to increase from currently around 16% to almost 20% in 2030 and above 25% in 2050. A young and growing population is generally seen as providing a “demographic dividend” to GDP growth and GDP per capita growth through labour supply. The underlying reason is growth of the labour force and the proportion of population of working age.

In coming decades, Africa will have the most favourable demographics in the world, in terms of the development of people at working ages. Its population at working age (defined as 15-64) is increasing rapidly and faster than the total population. This absolute and relative increase of potential labour supply opens a window to boost Africa's annual growth of GDP per capita by up to half a percentage point over the next 15 years (Figure 1.13). However, measuring the positive mechanical demographic effects on labour supply and growth (see Annex 1.A1) only provides a starting point for analysis of the effects. It is important to also consider the labour market and productivity. The positive labour supply effect on growth will only materialise if enough jobs are created. Otherwise, people will be discouraged from entering the labour force (causing labour market participation to fall) or, after entering the labour market, will be unable to find a job (causing unemployment to rise). This requires a fundamental change in policy, as Africa has failed in the past to create enough good jobs despite higher economic growth (Page and Shimeles, 2014; Gallup, 2015).

Figure 1.13. Africa's potential demographic dividend



Note: Potential impact on GDP per capita growth (in percentage points) as calculated by the percentage change in the proportion of the working-age population.

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The demographic effect on productivity growth is linked to impacts on savings, investment, labour efficiency and innovation. In principle, productivity growth in young populations should increase in each of these areas. As birth rates decline, both families and the government will have more resources available per child to provide better education and health care, which boosts productivity over time. With relatively more people at working age, the savings rate could increase and also raise productivity through more investment. Migration of workers to areas with higher levels of income and productivity, notably in cities, could also increase Africa's productivity. By the mid-2030s, about half of Africans are expected to live in cities (see Chapters 6, 7 and 8).

However, a number of downside risks could impact productivity growth. In particular, the growing labour force may lack the necessary skills (human capital), and firms and public infrastructure may not provide adequate physical capital. Africa's demographics also raise a number of questions: Will current low levels of productivity in agriculture and the effects of global climate change compromise Africa's ability to provide food security for a growing population? How can Africa attain environmental sustainability in the face of rising populations and increasing economic activity?

Africa's future demographics thus offer opportunities but also create challenges. Africa's "economic renaissance" of the past two decades gives reason to hope that the continent will reap the demographic dividend in coming decades. But as much depends on how policy makers respond to these challenges, it is difficult to judge which view will finally prevail (AfDB/OECD/UNDP, 2015: 139ff; Basu and Basu, 2015; Canning, Raja and Yazbeck, 2015; Leridon, 2015; Sachs, 2015).

These considerations suggest that countries in East, West and Central Africa have the potential to reap a significant demographic dividend, while the dividend will be much smaller in Southern Africa and North Africa (see Annex 1.A1). To exploit this potential, countries must make managing demographic transition a key policy priority.

It is of the utmost importance to:

- reduce bottlenecks that still constrain demand for labour by promoting entrepreneurship and private-sector activity in general, while simultaneously helping young people to obtain the skills needed to obtain a decent job (see the Special Theme on Promoting Youth Employment in AfDB et al., 2012)
- ensure food security and environmental sustainability
- speed up the demographic transition towards lower birth rates by improving health care, education and family planning.

Table 1.5. Macroeconomic developments in Africa, 2007-17  
(Summary table)

	2007-11	2012	2013	2014	2015(e)	2016(p)	2017(p)
<b>Real GDP growth (%)</b>							
Central Africa	5.9	6.3	3.3	6.1	3.7	3.9	5.0
East Africa	6.4	4.5	7.2	6.5	6.3	6.4	6.7
North Africa	3.6	9.6	1.7	1.4	3.5	3.3	3.8
Southern Africa	3.8	3.4	3.7	2.8	2.2	1.9	2.8
West Africa	6.3	5.2	5.7	6.0	3.3	4.3	5.5
<b>Africa</b>	<b>4.7</b>	<b>6.4</b>	<b>3.9</b>	<b>3.7</b>	<b>3.6</b>	<b>3.7</b>	<b>4.5</b>
<b>Africa (excluding Libya)</b>	<b>5.0</b>	<b>3.9</b>	<b>4.3</b>	<b>4.2</b>	<b>3.7</b>	<b>3.8</b>	<b>4.5</b>
<i>Memorandum items</i>							
<i>North Africa (including Sudan)</i>	<i>3.6</i>	<i>9.0</i>	<i>1.9</i>	<i>1.6</i>	<i>3.6</i>	<i>3.5</i>	<i>4.0</i>
<i>Sub-Saharan Africa</i>	<i>5.4</i>	<i>4.5</i>	<i>5.2</i>	<i>5.0</i>	<i>3.6</i>	<i>4.0</i>	<i>4.9</i>
<i>Sub-Saharan Africa excluding South Africa</i>	<i>6.2</i>	<i>5.1</i>	<i>5.9</i>	<i>5.9</i>	<i>4.2</i>	<i>4.7</i>	<i>5.6</i>
<i>Oil-exporting countries</i>	<i>4.8</i>	<i>7.9</i>	<i>3.5</i>	<i>3.7</i>	<i>3.5</i>	<i>3.9</i>	<i>4.6</i>
<i>Oil-importing countries</i>	<i>4.5</i>	<i>4.2</i>	<i>4.5</i>	<i>3.8</i>	<i>3.6</i>	<i>3.4</i>	<i>4.4</i>
<b>Consumer prices (inflation in %)</b>							
Central Africa	7.0	3.5	1.8	2.4	2.1	2.3	2.4
East Africa	12.7	19.3	12.8	12.5	9.3	7.9	8.0
North Africa	7.9	7.6	5.1	6.4	7.6	6.3	6.7
Southern Africa	8.1	6.5	6.4	6.3	5.8	7.9	8.0
West Africa	9.8	10.5	7.7	7.2	8.3	8.7	8.0
<b>Africa</b>	<b>8.9</b>	<b>9.2</b>	<b>6.8</b>	<b>7.2</b>	<b>7.3</b>	<b>7.2</b>	<b>7.2</b>
<i>Memorandum items</i>							
<i>North Africa (including Sudan)</i>	<i>8.2</i>	<i>9.4</i>	<i>7.1</i>	<i>8.4</i>	<i>8.2</i>	<i>6.8</i>	<i>7.0</i>
<i>Sub-Saharan Africa</i>	<i>10.0</i>	<i>10.2</i>	<i>7.8</i>	<i>7.6</i>	<i>7.2</i>	<i>7.8</i>	<i>7.6</i>
<i>Oil-exporting countries</i>	<i>9.7</i>	<i>10.4</i>	<i>7.5</i>	<i>8.2</i>	<i>8.8</i>	<i>8.3</i>	<i>8.4</i>
<i>Oil-importing countries</i>	<i>7.6</i>	<i>7.4</i>	<i>5.7</i>	<i>5.6</i>	<i>5.2</i>	<i>5.6</i>	<i>5.6</i>
<b>Overall fiscal balance, including grants (% GDP)</b>							
Central Africa	4.0	-0.4	-1.3	-2.2	-4.2	-4.0	-2.9
East Africa	-2.5	-3.8	-4.0	-3.6	-4.6	-4.4	-3.7
North Africa	-1.3	-3.1	-6.7	-11.1	-13.3	-12.1	-11.3
Southern Africa	-1.7	-2.3	-2.9	-4.0	-3.9	-3.9	-3.8
West Africa	-2.4	-2.2	-0.3	-0.2	-2.9	-3.6	-3.3
<b>Africa</b>	<b>-1.5</b>	<b>-2.6</b>	<b>-3.3</b>	<b>-4.8</b>	<b>-6.6</b>	<b>-6.5</b>	<b>-5.9</b>
<i>Memorandum items</i>							
<i>North Africa (including Sudan)</i>	<i>-1.3</i>	<i>-3.1</i>	<i>-6.3</i>	<i>-10.1</i>	<i>-11.8</i>	<i>-10.7</i>	<i>-10.0</i>
<i>Sub-Saharan Africa</i>	<i>-1.6</i>	<i>-2.3</i>	<i>-1.9</i>	<i>-2.2</i>	<i>-3.7</i>	<i>-3.9</i>	<i>-3.5</i>
<i>Oil-exporting countries</i>	<i>-0.8</i>	<i>-1.5</i>	<i>-2.7</i>	<i>-5.3</i>	<i>-8.1</i>	<i>-8.1</i>	<i>-7.3</i>
<i>Oil-importing countries</i>	<i>-2.4</i>	<i>-4.1</i>	<i>-4.2</i>	<i>-4.0</i>	<i>-4.4</i>	<i>-4.0</i>	<i>-3.6</i>
<b>External current account, including grants (%GDP)</b>							
Central Africa	-2.3	-3.0	-6.5	-7.6	-10.2	-10.4	-10.6
East Africa	-5.8	-7.2	-10.0	-9.3	-8.9	-7.1	-7.2
North Africa	5.5	1.6	-1.4	-5.1	-9.3	-7.5	-6.6
Southern Africa	-2.1	-2.6	-3.6	-5.3	-6.1	-5.8	-5.6
West Africa	4.4	0.8	0.7	-1.8	-4.6	-4.4	-3.2
<b>Africa</b>	<b>1.5</b>	<b>-1.0</b>	<b>-2.6</b>	<b>-4.8</b>	<b>-7.3</b>	<b>-6.4</b>	<b>-5.8</b>
<i>Memorandum items</i>							
<i>North Africa (including Sudan)</i>	<i>4.4</i>	<i>0.6</i>	<i>-2.1</i>	<i>-5.5</i>	<i>-9.0</i>	<i>-7.3</i>	<i>-6.5</i>
<i>Sub-Saharan Africa</i>	<i>-0.4</i>	<i>-2.2</i>	<i>-3.2</i>	<i>-4.8</i>	<i>-6.5</i>	<i>-6.0</i>	<i>-5.4</i>
<i>Oil-exporting countries</i>	<i>6.6</i>	<i>3.5</i>	<i>0.9</i>	<i>-2.9</i>	<i>-7.3</i>	<i>-6.4</i>	<i>-5.4</i>
<i>Oil-importing countries</i>	<i>-5.2</i>	<i>-7.4</i>	<i>-7.9</i>	<i>-7.9</i>	<i>-7.3</i>	<i>-6.4</i>	<i>-6.3</i>

Note: (e): estimates; (p): projections.

Source: Statistics Department, African Development Bank.

### Annex 1.A1. Africa's potential demographic dividend

Growth in the proportion of the working-age population is boosting growth of per capita GDP (see Box 1.A1.1). Over the past 15 years, the potential demographic impact on Africa's average annual GDP per capita growth amounted to 0.2%, and is expected to double to 0.4% in the coming 15 years, before declining marginally to 0.3% between 2030 and 2050. The potential demographic dividend will be particularly large in East, West and Central Africa (Tables 1.A1.1 and 1.A1.2 and Figure 1.A1.1), as the demographic transition to lower birth rates has been delayed in these regions, but is now accelerating. This raises the proportion of the working-age population and reduces the dependency ratio. In contrast, the lowering of birth rates in North and Southern Africa is more advanced and the speed of the demographic transition is slowing (Figure 1.A1.2).

The future demographics of Africa can be mapped onto the Demographic Transition Model (DTM), which describes population change over time.<sup>7</sup> East, West and Central Africa match stage 3 of the model relatively well, while demographic transition in North and Southern Africa (or at least in the more developed countries in these regions) is more advanced and can be characterised as stage 4. In countries where birth rates are still high, policies could help to accelerate their decline. This would further reduce population growth and increase the potential demographic dividend, as the proportion of the working-age population would increase faster and the dependency ratio would fall further. According to the theory of demographic transition, there is a positive relationship between fertility and child mortality. In order to achieve a desired number of surviving children, fertility tends to be high when child mortality is also high, and declines when child survival increases. While other factors also affect fertility, the impact of child mortality seems to be obvious for African countries (Figure 1.A1.3). This implies that better health care and education together with adequate family planning help to speed up the demographic transition and further improve economic growth and welfare.

In contrast to Africa, the proportion of the working-age population is already declining in more developed countries, as well as in some emerging countries. In the coming years, China will face a pronounced reduction in the proportion of the working-age population, partly as result of the former one-child policy. China's demographic dividend of past decades could thus act as a "tax" weighing on growth of potential output (West, 2015). Indeed, over the past 15 years China's demographic transition boosted annual growth of potential GDP per capita by 0.5% (Table 1.A1.2). However, over the next 15 years the change in demographics will, all things being constant, reduce growth by a similar amount (i.e. a turnaround of 1%).

Table 1.A1.1. Estimates and projections of Africa's population and working-age population

	Levels in million (rounded)				Annual average growth in %		
	2000	2015	2030	2050	2002-15	2016-30	2031-50
<b>Africa</b>							
Population	814	1 186	1 679	2 478	2.5	2.3	2.0
Working-age population	439	658	985	1 534	2.7	2.7	2.2
<b>East Africa</b>							
Population	259	394	579	878	2.8	2.6	2.1
Working-age population	133	211	336	547	3.1	3.1	2.5
<b>Central Africa</b>							
Population	96	152	232	369	3.1	2.9	2.4
Working-age population	49	79	128	224	3.2	3.3	2.8
<b>North Africa</b>							
Population	172	224	282	354	1.8	1.6	1.1
Working-age population	102	140	181	226	2.2	1.7	1.1
<b>Southern Africa</b>							
Population	51	63	70	78	1.3	0.8	0.5
Working-age population	31	41	47	53	1.8	0.9	0.6
<b>West Africa</b>							
Population	235	353	516	798	2.7	2.6	2.2
Working-age population	125	188	292	484	2.8	3.0	2.6

Note: The working-age population is aged 15-64.

Source: Author's calculations based on UN DESA (2015).

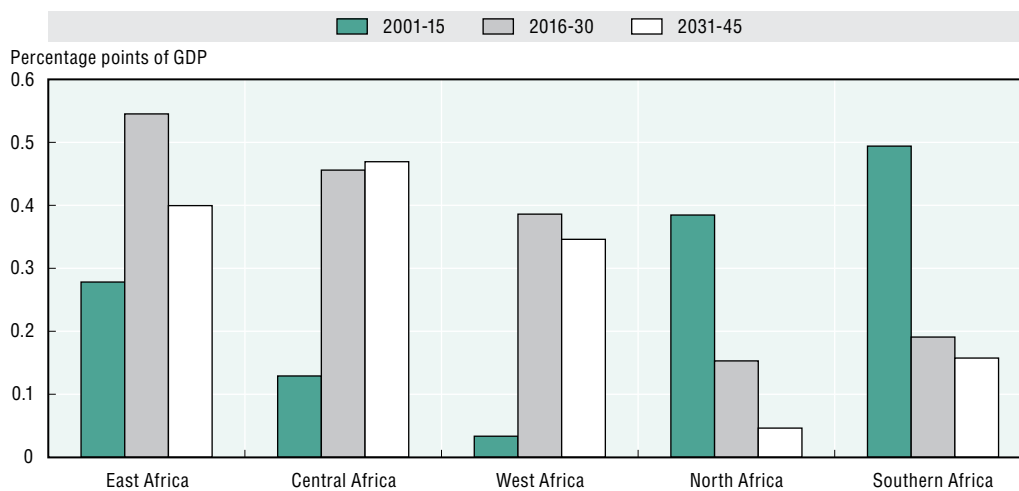
Table 1.A1.2. Estimates and projections of Africa's potential demographic dividend

	Proportion of population at working age (%) (Age groups 15-64)				Percentage change in the proportion of population at working age (annual average)		
	2000	2015	2030	2050	2001-15	2016-30	2031-50
Africa	53.96	55.53	58.56	61.90	0.2	0.4	0.3
East Africa	51.26	53.44	57.98	62.33	0.3	0.6	0.4
Central Africa	50.67	51.66	55.30	60.56	0.1	0.5	0.5
North Africa	59.12	62.61	64.06	63.77	0.4	0.2	0.0
Southern Africa	60.47	65.11	66.99	68.23	0.5	0.2	0.1
West Africa	53.09	53.36	56.54	60.61	0.0	0.4	0.4
<i>Memorandum items:</i>							
World	63.00	65.70	64.70	62.70	0.3	-0.1	-0.2
More developed regions	67.50	66.00	61.10	57.80	-0.1	-0.5	-0.3
Less developed regions excluding China	59.60	63.30	64.60	64.30	0.4	0.1	0.0
China	68.30	73.20	68.00	58.90	0.5	-0.5	-0.7

Note: Percentage change refers to the potential demographic impact on annual GDP per capita growth. It refers to the percentage change (not the percentage point change) of the proportion of the working-age population calculated as:  $100 \cdot (t/t-1 - 1)$ . For example, the potential annual average demographic dividend 2015-30 for Africa is calculated as  $100 \cdot (58.56/55.3-1)/15 = 0.4$ .

Source: Author's calculations based on UN DESA (2015).

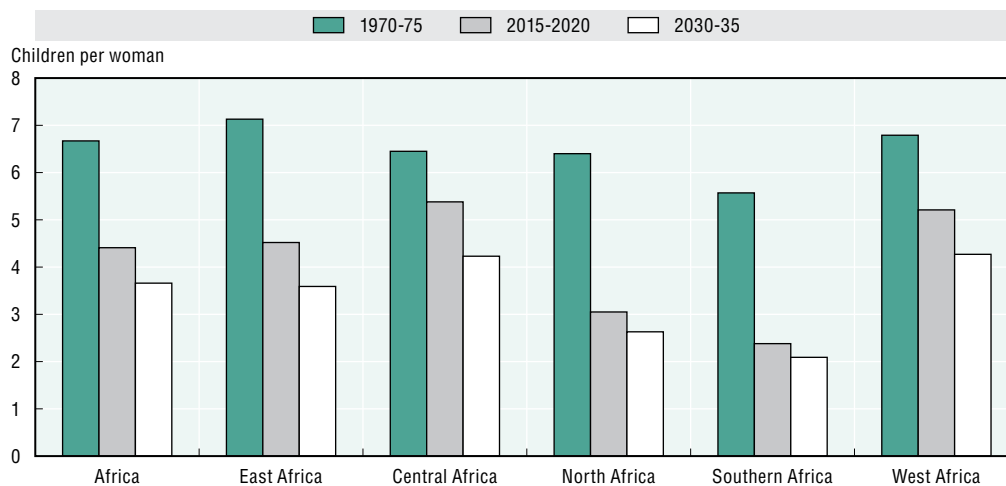
Figure 1.A1.1. Potential demographic dividend in Africa by region



Note: The potential impact on GDP per capita growth (in percentage points) is calculated by the percentage change in the proportion of the working-age population (2001-50).

Source: Author's calculations based on UN DESA (2015).  
 StatLink <http://dx.doi.org/10.1787/888933350060>

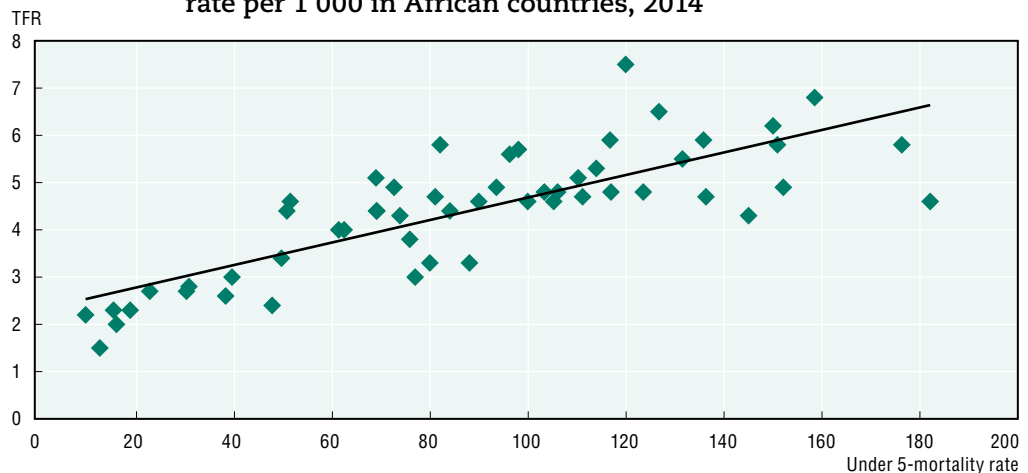
Figure 1.A1.2. Development and prospects of total fertility (children per woman) in Africa



Source: UN DESA (2015).  
 StatLink <http://dx.doi.org/10.1787/888933350075>




Figure 1.A1.3. Total fertility rate (TFR) per woman and under-5 mortality rate per 1 000 in African countries, 2014



Note: The regression line is  $TFR = 2.322 + .0237 * U-5MR$  and the R-square of the regression between the under-5 mortality rate and TFR is 0.623. This mono-causal (and therefore simplistic) approach suggests that TFR of 6 is associated with U-5MR of 155, thus reducing TFR to 3 requires a reduction of U-5MR to around 30.

Source: Author's calculations based on AEO 2015 statistics.

StatLink  <http://dx.doi.org/10.1787/888933350087>

#### Box 1.A1.1. Calculating the potential demographic growth dividend

The mechanical demographic impact through labour supply on gross domestic product (GDP) can be seen from the following identities:

$$(1) GDP = (GDP/E) * E = PROD * E$$

Where E is the number of employed workers and  $GDP/E = PROD$  is productivity per worker.

Economic growth is then:

$$(1a) \text{Growth of GDP} = \text{growth of E} + \text{growth of PROD}$$

With growth of PROD, the share of the employed workers in the labour force (employment rate) and the share of the labour force in the population at working age (participation rate) all remaining constant, the change in growth of GDP is equal to the change in growth of the labour force (LF) and the change in growth of the working-age population (WAPOP).

$$(1b) \text{Change in growth of GDP} = \text{change in growth of employment (E)} = \text{change in growth of labour force (LF)} = \text{change in growth of working-age population (WAPOP)}.$$

The population POP consists of those employed (E) and those non-employed (NE), where NE is the sum of children, pensioners and people at working age who are not employed.

$$(2) POP = E + NE$$

Dividing equation (1) by equation (2) gives GDP per capita:

$$(3) GDP/POP = \alpha * PROD$$

Taking logs of equation 3 and differentiating with respect to time yields:

$$(3a) \text{Growth of GDP/POP} = \text{growth of } \alpha + \text{growth of PROD}$$

Where  $\alpha$  is the employment rate (i.e. the share of employed persons in the total population), thus incorporating both participation and employment ( $\alpha = E/POP$ ). If the share of the labour force in the population at working age (participation rate) and the share of the employed in the labour force (employment rate) remain constant, the growth of GDP per capita is equal to the sum of productivity growth and the growth of the proportion of the working-age population (WAPOP/POP).

$$(3b) \text{Growth of GDP/POP} = \text{growth of PROD} + \text{growth of WAPOP/POP}$$

Hence, all other things being equal, increase in the growth of the proportion of the working-age population will increase growth of per capita GDP.

## Notes

1. The quarterly Ifo World Economic Survey (WES) attempts to draw an up-to-date picture of the current economic situation and the short-term outlook in about 120 industrial, emerging and developing countries. Unlike the official statistics, which are primarily constructed around quantitative information, WES consists of qualitative information including appraisals and expectations of economic experts. The 1 100 survey participants work in research institutes, universities, think tanks, and chambers of industry or financial institutions. In Africa, the survey covers 30 countries and receives on average 150 responses quarterly.
2. According to traditional three-sector theory, the share of the primary sector (agriculture and extractive industry) in overall activity is high during early stages of development, but tends to decline as economies develop. The share of the secondary sector (manufacturing) increases during the low and middle stages of development and declines at higher income levels when labour costs make manufacturing less competitive. In contrast, the share of the tertiary sector (services) continuously increases and becomes most important at higher income levels.
3. The CEMAC members are Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea and Gabon.
4. The WAEMU members are Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.
5. The J-curve effect suggests that trade balances initially worsen following currency depreciation, as imports become more costly and exports less valuable. However, the trade balance eventually improves due to low-priced exports, with export volumes increasing and import volumes falling, as local consumers purchase less of the more expensive imports and buy more local goods.
6. The medium scenario assumes that Africa's total average fertility (children per woman) declines from 4.71 in 2010-15 to 3.11 in 2045-50.
7. The Demographic Transition Model (DTM) distinguishes five stages: i) high stationary population with both high birth rates and death rates; ii) early expanding population with declining death rates, especially among children, as health care improves, while birth rates remain high; iii) late expanding population with continued falling death rates, while birth rates also decline as a result of improved economic conditions, better education and women's status, and access to contraception; iv) stabilising population with both low birth and death rates (most economically advanced countries are at this stage); and v) declining population with fertility rates falling below the replacement rate (around two children) and the proportion of the elderly increasing (ageing populations).

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