

CHAPTER 1

RECENT ECONOMIC AND SOCIAL DEVELOPMENTS IN AFRICA



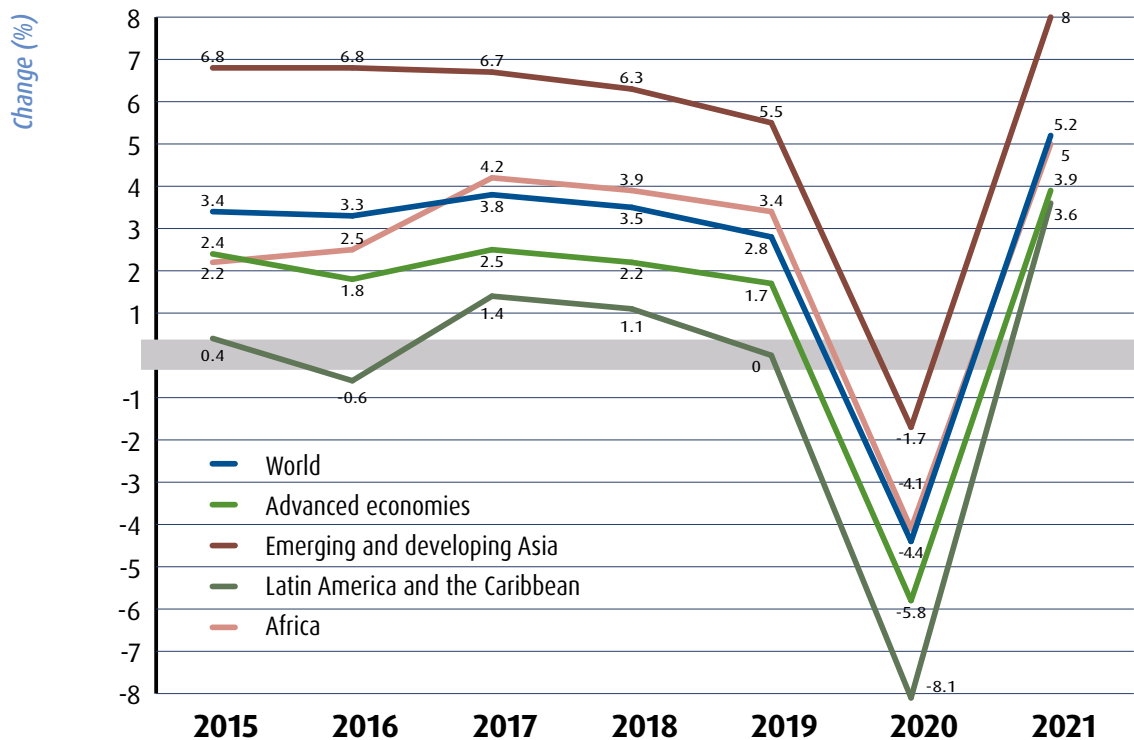
RECENT GLOBAL ECONOMIC PERFORMANCE AND ITS IMPLICATIONS FOR AFRICA

Global GDP growth slowed to 2.8 per cent in 2019 from 3.5 per cent in 2018 (FIGURE 1.1). Trade also slowed in 2019, weighed down by the lower economic growth and by trade tensions. The value of global merchandise trade fell by 3 per cent to \$18.9 trillion. By contrast, global commercial services trade rose 2 per cent to \$6.0 trillion, though the pace of growth was slower than in 2018 (WTO, 2020). GDP growth in Asia¹ stabilized at almost 6 per cent a year during 2015–2018 and slowed

to 5.5 per cent in 2019. Lower growth in Asia was attributable to a decline in fixed investments and exports (IMF, 2019).

In 2020, global GDP growth is projected to contract to -4.4 per cent (see FIGURE 1.1). The outbreak and spread of COVID-19 have led to containment measures such as lockdowns and physical distancing disrupting normal economic activity around the world. World trade is expected to fall by between 13 per cent and 32 per cent in 2020, with services

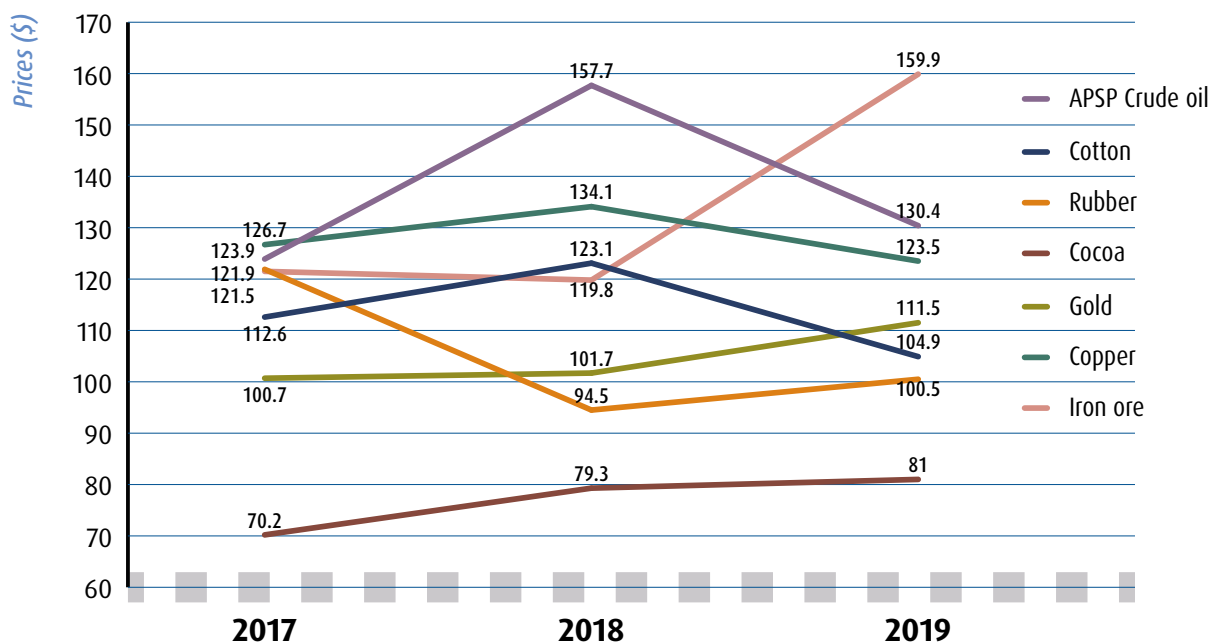
FIGURE 1.1 GLOBAL ECONOMIC GROWTH, 2015–2021



Note: The data reported for Africa and Asia are the average calculated from country raw data.

Source: Based International Monetary Fund World Economic Outlook Database data, October 2020.

FIGURE 1.2 SELECT PRIMARY COMMODITY PRICES, 2017–2019



Source: ECA calculation based on data from IMF (2020).

trade being the most directly affected component due to transport and travel restrictions and the closure of many retail and hospitality enterprises. But some services may benefit from the crisis—for instance information technology services, for which demand has increased as people work from home and socialize remotely (WTO, 2020). Discretionary consumer spending has shifted from non-essential products such as clothes towards basic food and pharmaceutical products. Offline spending on apparel in the European Union has declined by an estimated 30–40 per cent, and in highly affected regions by as much as 80 per cent (ECA, 2020). GDP growth in Asia is expected to decelerate further in 2020 to 1.0 per cent, driven by global policy uncertainty and slower growth in China due to trade tensions, a decline in the working age population and the economic impact of the COVID-19 global pandemic.

Global GDP is projected to rebound to 5.2 per cent growth in 2021 (see **FIGURE 1.1**). Although a global trade recovery is projected for 2021, the outcome wholly depends on the duration of the COVID-19 outbreak and the effectiveness of policy responses to it (WTO, 2020). In Asia growth is forecast to

rebound in 2021 to 8.5 per cent following an expected resumption of political stability, projected high rates of savings and investment, and a shift from low-productivity agriculture towards manufacturing and services in some of the region's emerging economies (EIU, 2020).

Africa, the second fastest growing region in the world, grew at an estimated 3.4 per cent in 2019. In a best-case scenario simulation run by ECA, its average growth in 2020 will fall to 1.8 per cent, directly due to the economic impact of COVID-19. According to the International Monetary Fund (IMF) projections, Africa's economic growth is expected to contract to -4.1 per cent in 2020 (**FIGURE 1.1**). Growth in Africa is projected to rebound to 5.0 per cent in 2021, supported by the effective implementation of COVID-19 response measures and global economic recovery. In 2019, an increase in oil prices to \$68.30 in 2018 from \$52.80 in 2017 (**FIGURE 1.2**) accelerated economic growth in the top three oil-producing African countries: Nigeria (from 1.9 per cent in 2018 to 2.3 per cent in 2019), Angola (from -1.2 per cent in 2018 to -0.3 per cent in 2019) and the Republic of Congo (from 1.6 per cent in 2018 to 4 per cent in 2019).

Some countries reported economic contractions in 2019 despite their natural resource endowments, such as Equatorial Guinea (-4.6 per cent), Libya (-19 per cent), Sudan (-2.6 per cent) and Zimbabwe (-7.1 per cent). The economy of Equatorial Guinea is weakly diversified, and its oil production is decreasing due to reduced yields at working oil wells; economic activity is expected to continue contracting in the coming years. In Libya insecurity makes the environment highly uncertain, reducing oil production. South Africa, another major African economy, had low growth of 0.6 per cent in 2019 and is expected to face a contraction in 2020 due to COVID-19. In South Africa manufacturing and mining output shrank in 2019 due partially to labour strikes, while growth in retail sales trended downwards.

“The globally coordinated response to COVID-19 provides a template for climate response in Africa”

Africa benefitted in 2019 from slight increases in some key primary commodity prices. But as the severity of COVID-19 increased in February and March 2020, the commodity prices plummeted for more than two-thirds of African exports. The price of petroleum, which accounts for 40 per cent of African exports and 7.4 per cent of GDP in Africa, crashed by more than 50 per cent to its lowest level since 2003. Metal prices fell 20 per cent from end-December 2019 values, while cotton fell 26 per cent. The Economic Commission for Africa (ECA) projects a minimum \$65 billion loss to fuel revenue for 2020. The exception is gold, which rose up by 5 per cent in March 2020. Tea and coffee prices have declined due to falling demand, particularly for away-from-home consumption in major import markets such as the United States and the European Union. And cocoa prices in April 2020 fell 6 per cent from the start of the year (ECA, 2020).

Current accounts in 2019 were negative for most countries of the continent. The average current account deficit was estimated at 4 per cent of GDP in 2019, driven by increased domestic demand for investment and consumption. Total investment in Africa increased 10 per cent on average in 2019 and is expected to drop by 5 per cent in 2020.

The spread of COVID-19 in China and the resulting shut-downs of factories and other economic activities there further disrupted Africa's global trade value chains in 2020. A further challenge has been the shift of the COVID-19 epicentre from China—which accounts for 11 per cent of African exports and 16 per cent of African imports—to Europe—which accounts for 33 per cent of African exports and 32 per cent of African imports (ECA, 2020). In 2018 the value of China-Africa trade reached \$185 billion, up from \$155 billion in 2017 (UN Comtrade, 2020). Even if the spread of the coronavirus is suppressed in Africa, its economic damage is unavoidable (ECA, 2020). With China the world's biggest oil importer, the International Energy Agency (IEA) projected oil demand to fall by 435,000 barrels year-on-year in the first quarter of 2020 because of the coronavirus's impact in China.

COVID-19 has had a major effect on tourism in Africa, especially in the small island states. For instance, Seychelles reported a 38 per cent decline in annual economic output linked to the deterioration of its tourism industry. Tourism flows declined even before lockdowns and travel restrictions were imposed in American, Chinese and European cities. In 2018, 95 per cent of tourists in Africa were from outside the continent.

Air travel restrictions and the reduction of air travel routes has affected major African carriers. The International Air Transport Authority (IATA) projects a \$4 billion drop in revenue for African airlines. The effect is aggravated for airlines that were weak before the pandemic. They will likely end up filing for bankruptcy or seeking bailouts (ECA, 2020).

The health systems of most countries in Africa are weaker than those in other regions of the world. The continent depends on imported medicinal and pharmaceutical products. In 2020, spending on health will increase as governments set aside funds to sustain their health systems and absorb costs related to the COVID-19 lockdowns. In a best-case scenario (with suppression of coronavirus spread and intense early physical distancing measures) \$44 billion would be required for testing, personal protective equipment and treatment of COVID-19 patients requiring hospitalization and intensive care across Africa (ECA, 2020). Due to the resources being redirected to COVID-19, Africa's existing health challenges will face spill-over costs, as happened in the Ebola crisis. Thus, non-COVID-19 health issues should be kept in view.

Developed countries have injected trillions of dollars into COVID-19 health, social safety net and economic stimulus response. For example, the United States adopted a \$2.2 trillion dollar stimulus package for COVID-19 response (UNCTAD, 2020). Africa lacks the capacity to react similarly due to high fiscal deficits, costs of borrowing and debt-to-GDP levels and to the depreciation of many African currencies against the euro and the dollar. More than 50 per cent of African countries recorded fiscal deficits above 3 per cent in 2019. Some 22 African countries had debt-to-GDP ratios above the African average of 61 per cent—breaching the 60 per cent debt-to-GDP threshold defined by the African Monetary Co-operation Program (AMCP) as uncomfortable, especially for more advanced economies with larger debt-carrying capacity, such as South Africa. The 2019 spending increase resulted from development financing needs, especially for investment in infrastructure (ECA, 2020).

Climate change is another global condition that could affect economic growth in Africa. Increasing seasonal variability, an increasing frequency and intensity of droughts and floods, and shifting habitats and agro-ecological zones due to climate change can cause food insecurity, lower trade balances, raise inflation pressure (due to reduced supply) and raise fiscal imbalances (due to reduced revenues and increased investment in climate change adaptation). For instance, cyclone Idai, which hit Mozambique in March–April 2019, weakened the economy, caused \$700 million - \$1 billion in damage and resulted in 1,000 lives lost.

The globally coordinated response to COVID-19 provides a template for climate response in Africa. Since Africa's fiscal space has been further constrained by COVID-19, additional assistance such as debt relief and innovations in mobilizing private sector finance are required for African countries to fulfil their nationally determined contributions to climate action (ECA, 2020)

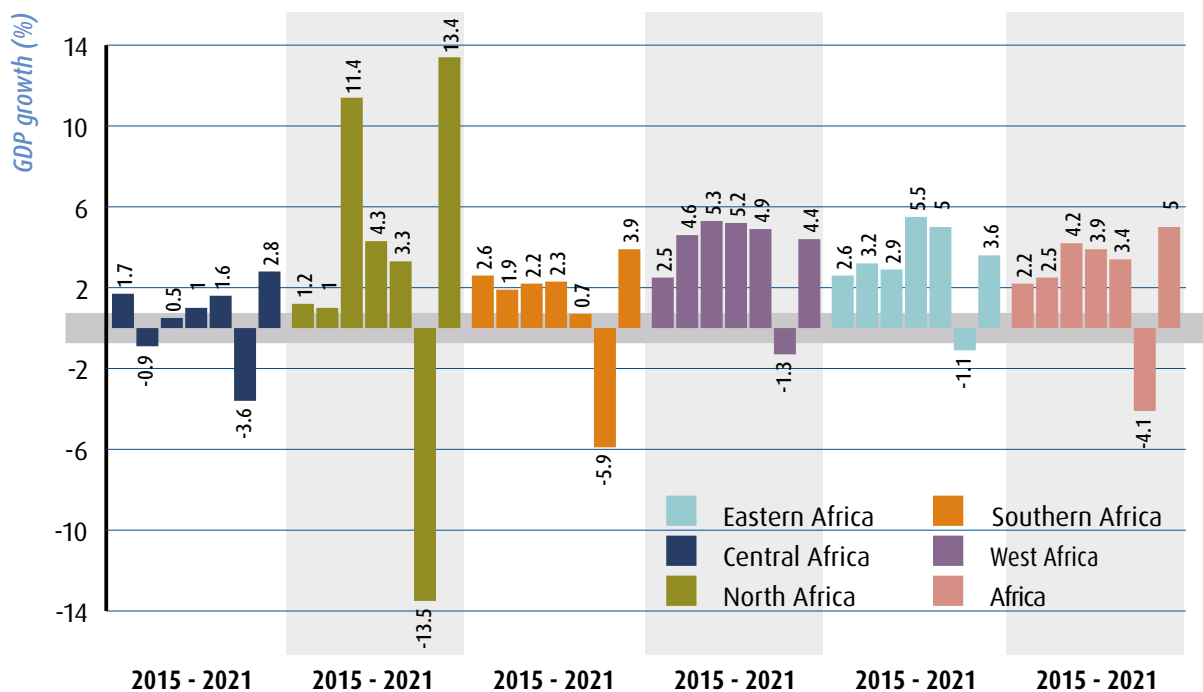
RECENT ECONOMIC DEVELOPMENTS IN AFRICA

African economies are highly heterogeneous,² though some commonalities can be established on selected development indicators. Growth in North Africa is highly volatile, sparked by the changing political situation of Libya (FIGURE 1.3). For example, economic growth in Libya was negative from 2013 to 2016, turned positive from 2017 to 2019 and is expected to be negative (-66.7 per cent) in 2020. The 2011 collapse of the Libyan government and the incapacity of the public sector impedes effective and efficient governance. The fragile country needs more stable institutions to address pressing economic and social issues. Aside from Libya, growth in North Africa in 2019 was underpinned by growth in Egypt (5.6 per cent), Mauritania (5.9 per cent) and Morocco (2.2 per cent). Growth in Algeria declined from 1.4 per cent in 2018 to 0.8 per cent

in 2019. Since 2018, Sudan experienced an economic slump (-2.3 per cent in 2018 and -2.5 per cent in 2019). Its exports fell by 3 per cent in 2019, and its imports by 7 per cent. Private sector consumption in Sudan also declined (-2.8 per cent in 2018)—consumption was the main driver of economic growth in North Africa as of 2019.

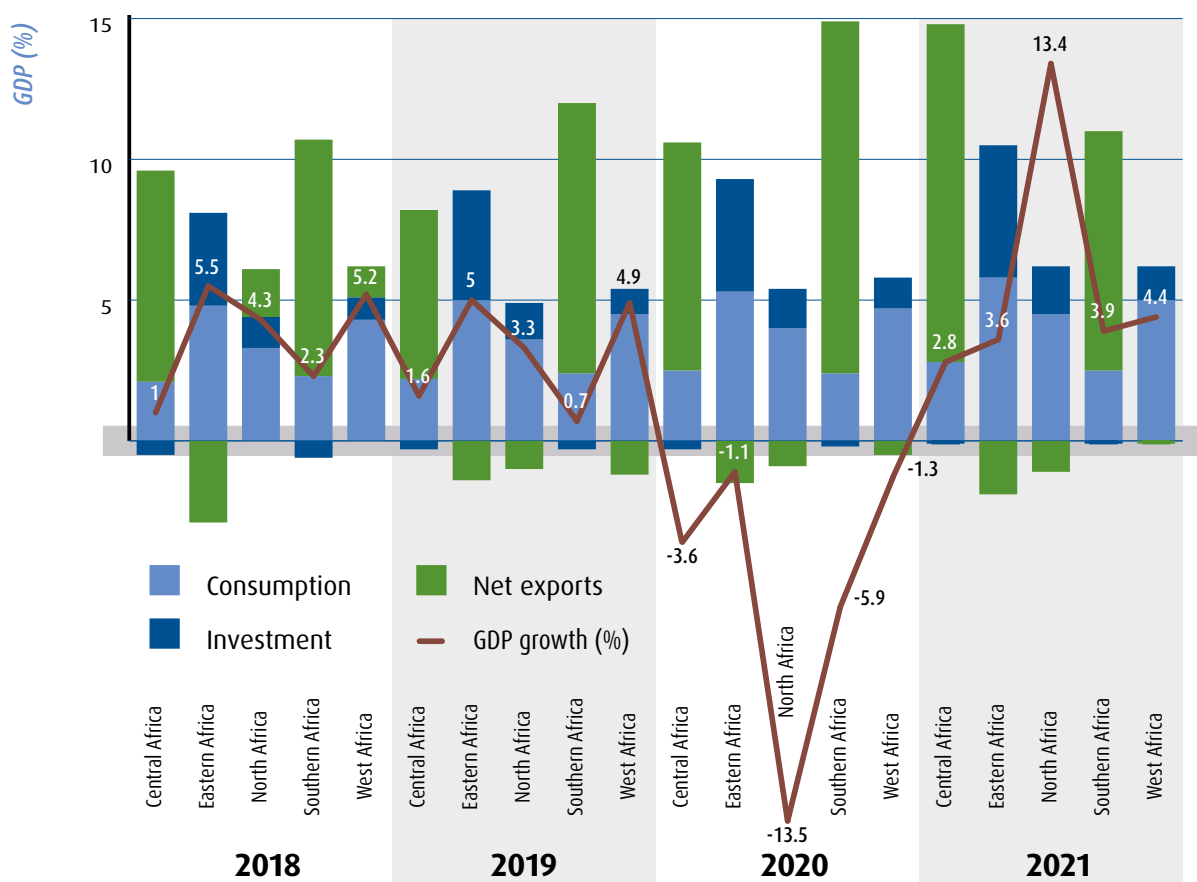
Growth in West Africa decreased slightly from 5.2 per cent in 2018 to 4.9 per cent in 2019 and is projected to drop to -1.3 per cent in 2020 but rebound by 5.7 percentage points to 4.4 per cent in 2021. The fast-growing economies of the region—Benin, Burkina Faso, Côte d’Ivoire, the Gambia, Ghana, Guinea, Niger and Senegal—recorded growth above 6 per cent in 2018 and above 5 per cent in 2019. Economic growth in

FIGURE 1.3 ECONOMIC GROWTH IN AFRICA BY REGIONAL GROUP, 2015–2021



Source: Based on data from IMF (October 2020).

FIGURE 1.4 COMPONENTS OF ECONOMIC GROWTH IN AFRICA, 2018–2021



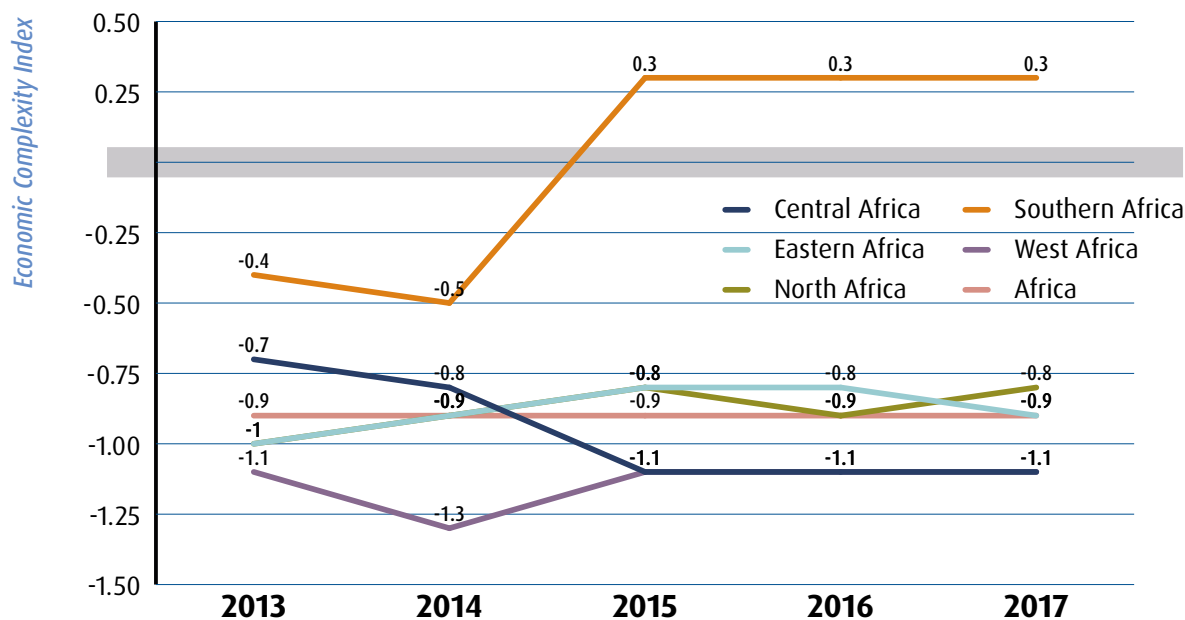
Source: Based on data from World Development Indicators (October 2020). Data for 2020–2021 are projected.

2019 in Nigeria (2.2 per cent) and Liberia (–2.5 per cent) were lower than in other countries of the region. Nigeria is recovering slowly from the negative commodity price shock in 2016, and the economy is projected to contract by 4.3 per cent in 2020. In West Africa, growth is driven by final consumption (households and government) and investment (FIGURE 1.4). Most countries had an investment-to-GDP ratio greater than 25 per cent in 2018, with investment oriented towards infrastructure, such as roads, port, and airports. East Africa was the fastest growing region in 2019, with average growth of 5.0 per cent, a decline from 5.5 percent in 2018 and is expected to further decline to -1.1 per cent in 2020. All East African countries grew at about the same rate in 2019 as in 2018. The growth rate in this region is also supported by consumption and investment.

Central Africa’s economic growth rose from 1.0 per cent in 2018 to 1.6 per cent in 2019 but is expected to decline to -3.6 per cent in 2020. Growth was estimated to be negative in 2019 in Equatorial Guinea (–6.1 per cent) and the Republic of the Congo (–0.6 per cent). With GDP growth of 4.4 per cent in 2019, the Democratic Republic of the Congo is leading the region. Growth in Central Africa is supported by consumption and trade, so, the region is relatively exposed to external adverse shocks.

The growth rate in the Southern region slowed from 2.3 per cent in 2018 to 0.7 per cent in 2019 and is expected to decline further to –5.9 per cent in 2020. Economic growth is expected to slow in 2020 in most countries of this region, but average growth is projected to improve in 2021 to 3.9 per cent. Exports

FIGURE 1.5 EVOLUTION OF THE ECONOMIC COMPLEXITY INDEX IN AFRICA, BY SUBREGION, 2013–2017



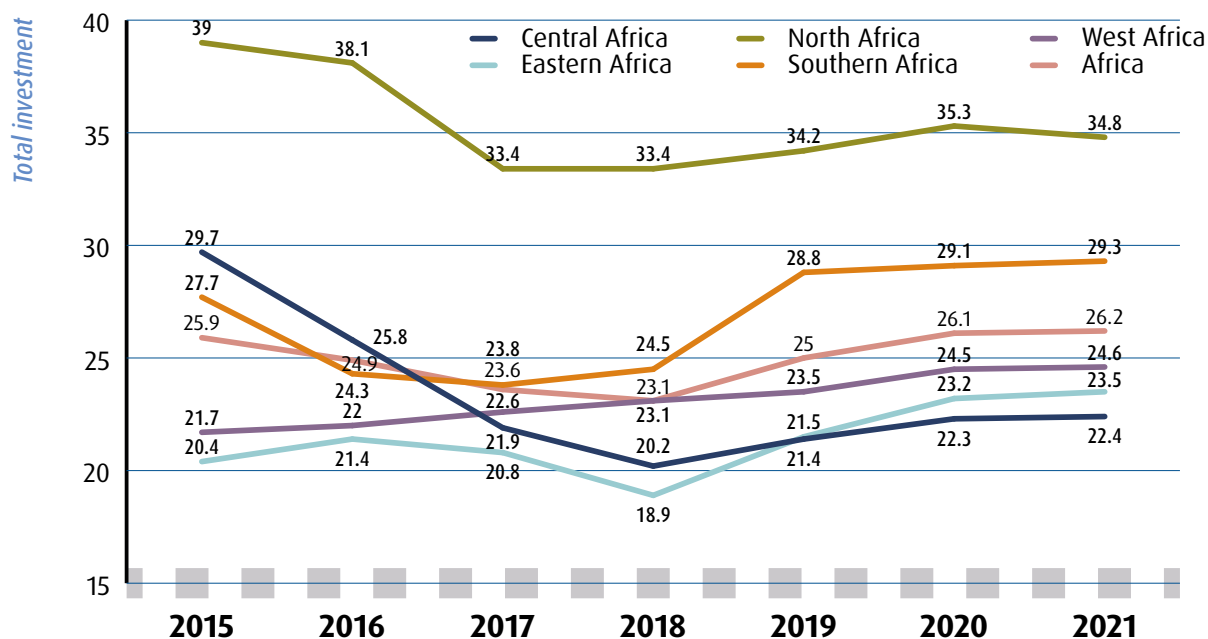
Source: Hausmann et al. (2019).

are the main driver of economic growth in Southern Africa, followed by domestic consumption. The projected growth relies on increased external demand, mainly from India and China, and increased commodity prices.

Despite Africa's growth, many economies remain unsophisticated or undiversified (FIGURE 1.5). The lack of economic sophistication is explained by low levels of innovation, limited productive capabilities, low investment and poor quality of education. The Economic Complexity Index (ECI) is only positive in Southern Africa after 2015.³ Hidalgo and Hausmann (2009) suggest that countries tend to converge to an income level dictated by the complexity of their productive structures, meaning that development efforts should focus on generating conditions that would allow complexity to emerge and so to generate sustained growth and prosperity. In contrast, African economies on their current path could not guarantee sustainable growth in the long run to eradicate poverty or achieve the other Sustainable Development Goals (SDGs). Building capabilities will require investments in human and physical capital. But Africa has a lower investment rate

“Investment is key to build infrastructure and foster innovation”

FIGURE 1.6 TOTAL INVESTMENT, BY SUBREGION, 2015–2021



Note: Investment or gross capital formation is measured by the total value of the gross fixed capital formation and changes in inventories and acquisitions less disposals of valuables for a unit or sector.

Source: ECA based on data from IMF.

(24 per cent of GDP) than China (40 per cent) or South Asia (28 per cent). Although the investment rate is higher in North Africa, it has been decreasing—from 39 per cent in 2015 to 34 per cent in 2019. Decreases were also observed in other regions, except West Africa, from 2015 to 2018 (FIGURE 1.6).

Investment is key to build infrastructure and foster innovation. South Korea, for instance, to reach its current level of innovation, has kept investment above 30 per cent of GDP on average since 1980. The evidence from China and India over the past decade is similar. The recent Continental Free Trade Agreement can play a critical role in identifying appropriate markets, improving the business environment, attracting investment and addressing key issues such as skills, infrastructure and competition.

PROSPECTS FOR THE AfCFTA FOR TRADE AND REGIONAL INTEGRATION

The African Continental Free Trade Area (AfCFTA), under an agreement signed in March 2018 by 44 African countries, creates a single continental market and a customs union for capital and business travellers. It aims to unlock the potential for increased industrial capacity and provide major growth opportunities for African economies. Of 55 African Union (AU) member states, 54 had signed the agreement by 7 July 2019. The AfCFTA's scope goes beyond that of traditional free trade areas, since it will include free trade in services, investments, intellectual property rights, competition policies and even e-commerce. If successful, the agreement will create a single African market of over 1.2 billion consumers with a total GDP above \$ 2.5 trillion.⁴

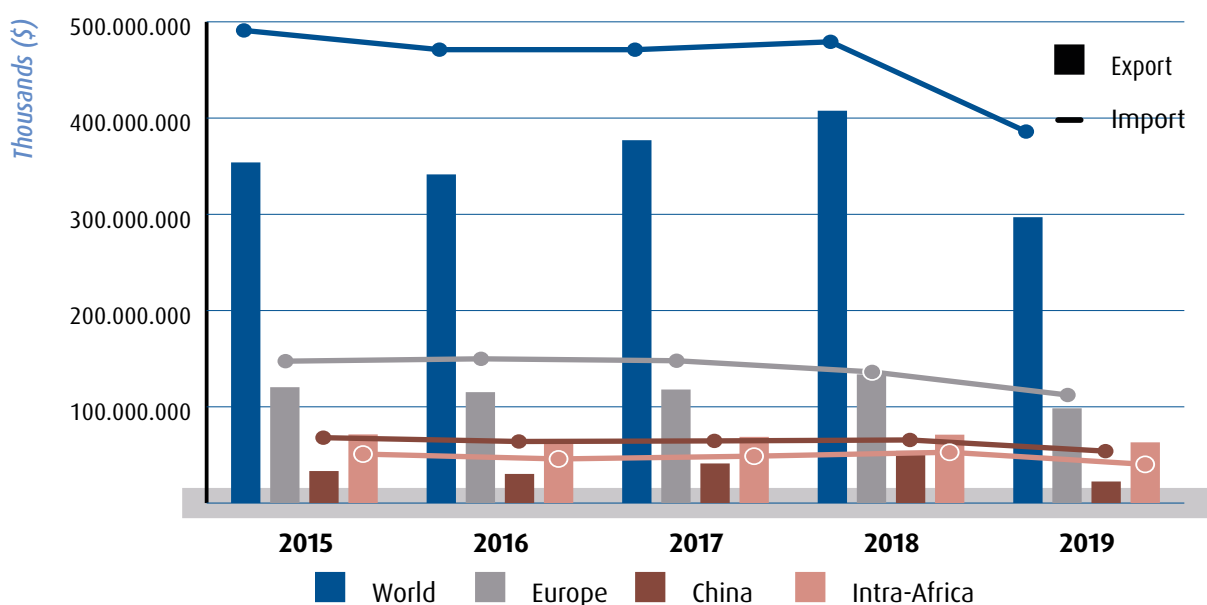
The agreement establishing the AfCFTA entered into force on 30 May 2019 for the 24 countries that had deposited their instruments of ratification. Five more countries deposited instruments of ratification during the 12th Extraordinary Session of the Assembly of the AU on the AfCFTA in Niamey, Niger, on 7 July 2019, which marked the launch of the operational phase of the AfCFTA agreement. Cameroon officially approved ratification on 31 October 2019, and Angola on 28 April 2020, and the deposit of their instruments of ratification is pending.

The AfCFTA aims to accelerate continental integration and increase intra-African trade. It is expected to increase intra-African trade by 15 to 25 per cent (or \$36–43 billion) by 2040 (ECA, 2018).⁵ The cumulative effect could boost Africa’s GDP by up to \$44 billion. Once trade barriers are removed and services trade is further liberalized, the eventual benefits could be twice the aforementioned amounts.⁶ In 2019, intra-African exports made up 20 per cent of total African exports, and intra-African imports were estimated at 12 per cent of total African imports (FIGURE 1.7). While intra-African trade is improving, its rate remains low compared with intra-regional trade in Asia, Europe or North America.

Implementation of the AfCFTA is expected to unlock manufacturing potential and facilitate industrialization, driving jobs and sustainable growth (Signé, 2018). For example, African countries are expected to use the AfCFTA over the long term to create regional value chains so Africa can better serve its own health market, estimated at \$259 billion annually (ECA, 2020). The private sector, as the engine of growth, will catalyse investment in infrastructure and industrialization and so contribute crucially to implementing the AfCFTA. The private sector can generate productivity and enhance the participation of households and business firms in economic activity, driving economic growth and prosperity.

The private sector also plays a key role generating government revenue, contributing more than 80 per cent of government revenue in low-income and middle-income countries through company taxes, resource rents and income taxes.⁷ In Southern Africa tax revenue was 27 per cent of GDP in 2017 and in North Africa 22 per cent. The proportions are much smaller in Central Africa (9 per cent) and East Africa (14 per cent).⁸

FIGURE 1.7 TOTAL MERCHANDISE TRADE IN AFRICA, 2017–2019



Note: Based on data from UNCTADStat.

SOCIOECONOMIC DEVELOPMENT AND IMPLICATIONS

Although Africa is the world's second fastest growing region, poverty and inequality remain a concern. The poverty rate in Africa decreased from 54 per cent in 1990 to 41 per cent in 2015, but the number of African people living in poverty increased from 278 million to 413 million (Beegle and Christiaensen, 2019). And the impact of COVID-19 will push between 5 million and 29 million people below the extreme poverty line of \$1.90 per day, compared with a baseline 2020 African growth scenario, according to ECA projections. Vulnerable households affected by COVID-19 face a 17.1 per cent increased probability of shifting to transient poverty, a 4.2 per cent increased probability of staying in poverty for a decade or longer and a 5.9 per cent decreased probability of moving out of poverty (ECA, 2020).

Of the poor 82 per cent live in rural areas, primarily engaged in agricultural or poorly remunerated employment. Non-wage microenterprises are the main source of non-agricultural employment and income for the poor and near-poor. Reduced demand due to COVID-19 has depressed the prices of agricultural commodities such as coffee, tea and cocoa. The continued decline in prices is expected to affect vulnerable small-scale farmers in Africa (ECA, 2020).

Poor households may suffer from a lack of access to health services, education and a good standard of living. To include such dimensions in the analysis of poverty, the global Multidimensional Poverty Index (MPI) was developed. **FIGURE 1.8** plots the MPI for 46 African countries based on the latest available data. The proportion of multidimensionally poor in Africa varies from 0.5 per cent in the Tunisia to 59 per cent in Niger. On average, 26.4 per cent of people are multidimensionally poor in Africa, compared with 14.2 per cent in Asia and 11.4 per cent in developing countries (Alkire, Kanagaratnam and Suppa, 2019). Compared with the Asian region average, the multidimensional poverty rate is higher in 34 African countries. It is also higher than the average in Latin America and the Caribbean (3.3 per cent), East Asia and the Pacific (2.4 per cent) and Europe and Central Asia (0.4 per cent).

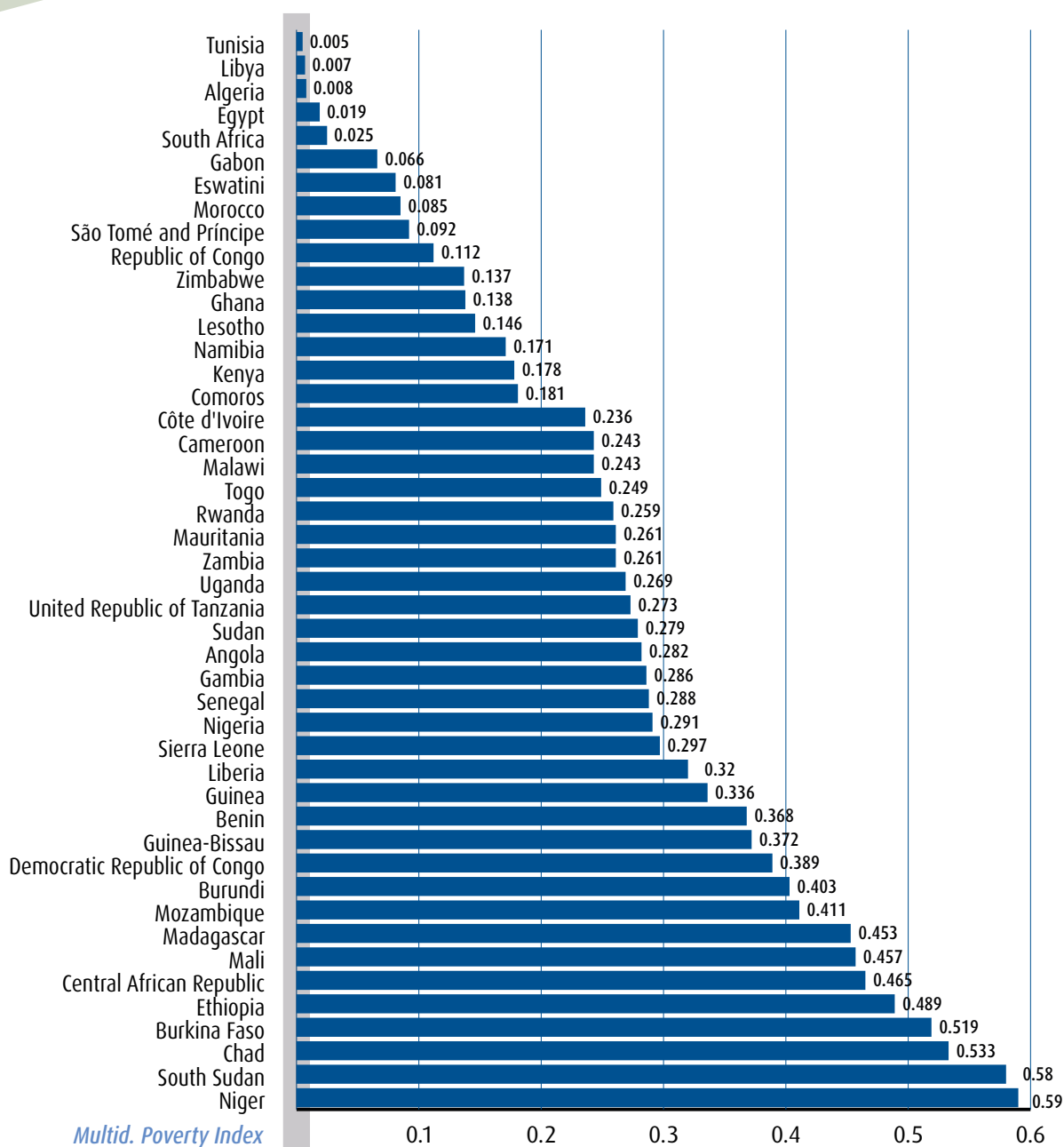
The MPI has three main components: living standard, education and health.⁹ The living standard dimension is related to Sustainable Development Goals (SDGs) 6.1, 6.2 and 7.1. Education is related to SDG 4, focusing on access, and the health dimension is linked to SDG 2.

The living standard contributes the most to MPI in 37 of the 46 African countries covered by this study (the other nine are Algeria, Burkina Faso, Côte d'Ivoire, Egypt, Libya, Mali, Morocco, Senegal and the Tunisia). Education contributes the second most to the index, except in nine countries where the health dimension comes second. In the MPI analysis one size does not fit all. Although improving living standards should be the priority in most countries, improving access to education would help reduce poverty in others. Moreover, all countries should improve on the health dimension of the MPI, even though in most it contributes the least to multidimensional poverty.

The COVID-19 crisis has disrupted the global economy. It is first and foremost a health crisis, with adverse social impacts. Africa is particularly vulnerable, given weaker health systems, difficult living conditions (with over half of urban dwellers living in slums) and sparse access to sanitation. African health systems are weaker than those elsewhere in the world, with lower ratios of hospital beds, intensive care units and health professionals to their populations. Africa on average has 1.8 beds per 1,000 people, compared with 6.0 in France and 8.2 in the Russian Federation (ECA, 2020). More than 40 per cent of the population in Africa does not have access to potable water, and less than 30 per cent has access to electricity in rural areas. In South Asia, 88 per cent of the population has access to potable water, and 80 per cent of the rural population has access to electricity.

The global mean years of schooling improved from 5.8 in 1990 to 8.4 in 2018 but lagged considerably in Africa at 5.5. Other education challenges in Africa include low capabilities of students and limited number of teachers, especially in low human capacity developing countries (UNDP, 2018).¹⁰ The

FIGURE 1.8 MULTIDIMENSIONAL POVERTY INDEX, 2007–2018



Source: Alkire, Kanagaratnam and Suppa (2019).

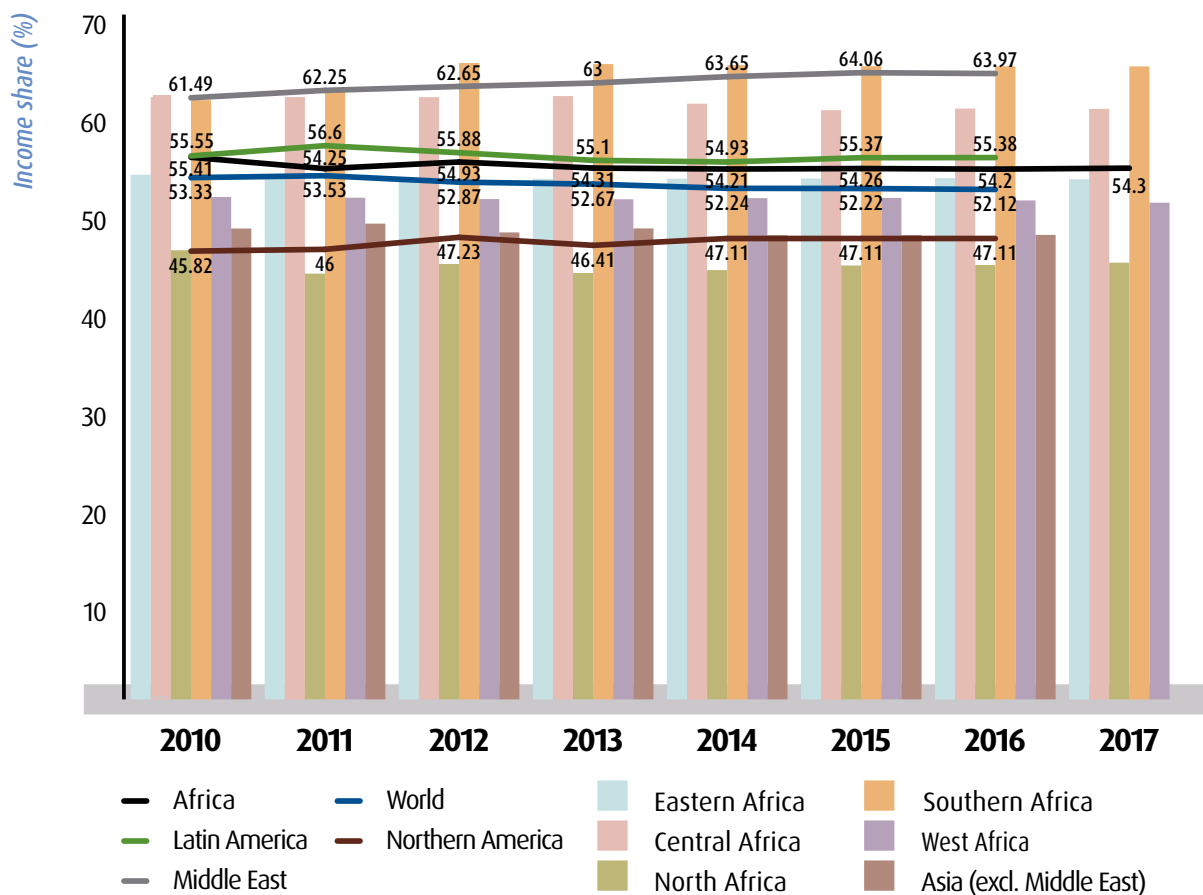
pupil-to-teacher ratio at primary schools in Africa varied from 16 in Tunisia to 70 in Malawi in 2017, revealing that many countries do not have enough teachers to effectively educate their students. The average pupil-teacher ratio in Africa is 35. More than a fifth of children ages 6–11 are out of school, and

a third of youth ages 12–14. According to UNESCO Institute for Statistics data, almost 60 per cent of youth ages 15–17 are not in school. Armed conflict is a major barrier to education on the continent.

Living standard and education are subcomponents of the SDGs, which African countries are far from achieving. Africa's overall MPI score is 55, suggesting it is on average 55 per cent of the way to the best possible outcome across the 17 SDGs. By country, African index scores range from 71 in Algeria to 39 in Central African Republic. Algeria, though the best performer in Africa, ranks only 53 of 162 countries globally, followed in Africa by Tunisia, Morocco, Egypt, São Tomé and Príncipe, Cabo Verde, and Gabon (see ANNEX TABLE 1.1). Other African countries fall below rank 100 in the world. North African economies seem to perform well compared with the rest of the continent. In Central Africa Republic, only the SDGs for climate action and responsible consumption and production have been achieved.

In addition to poverty and poor performance related to the SDGs, inequality remains a concern in Africa. Over the past five years, inequality in Africa slightly decreased: in 2017 the top 10 per cent of the population by income held 54.3 per cent of the national income, down from 55.3 per cent in 2013 (FIGURE 1.9). Inequality in Africa is higher than in Asia or North America, but lower than in the Middle East or Latin America. Income inequality appears lower in Algeria, Mali and Mauritania than in the rest of the continent. It is higher in the southern part of the continent, where more than 60 per cent of national income is held by the top 10 per cent of the population, than elsewhere. Increased poverty due to the impact of COVID-19 is projected to exacerbate income inequalities in Africa (ECA, 2020).

FIGURE 1.9 INCOME SHARES OF THE TOP 10 PER CENT OF THE POPULATION, 2010–2017



Note: These figures plot the pre-tax national income share held by the top 10 per cent of the population.

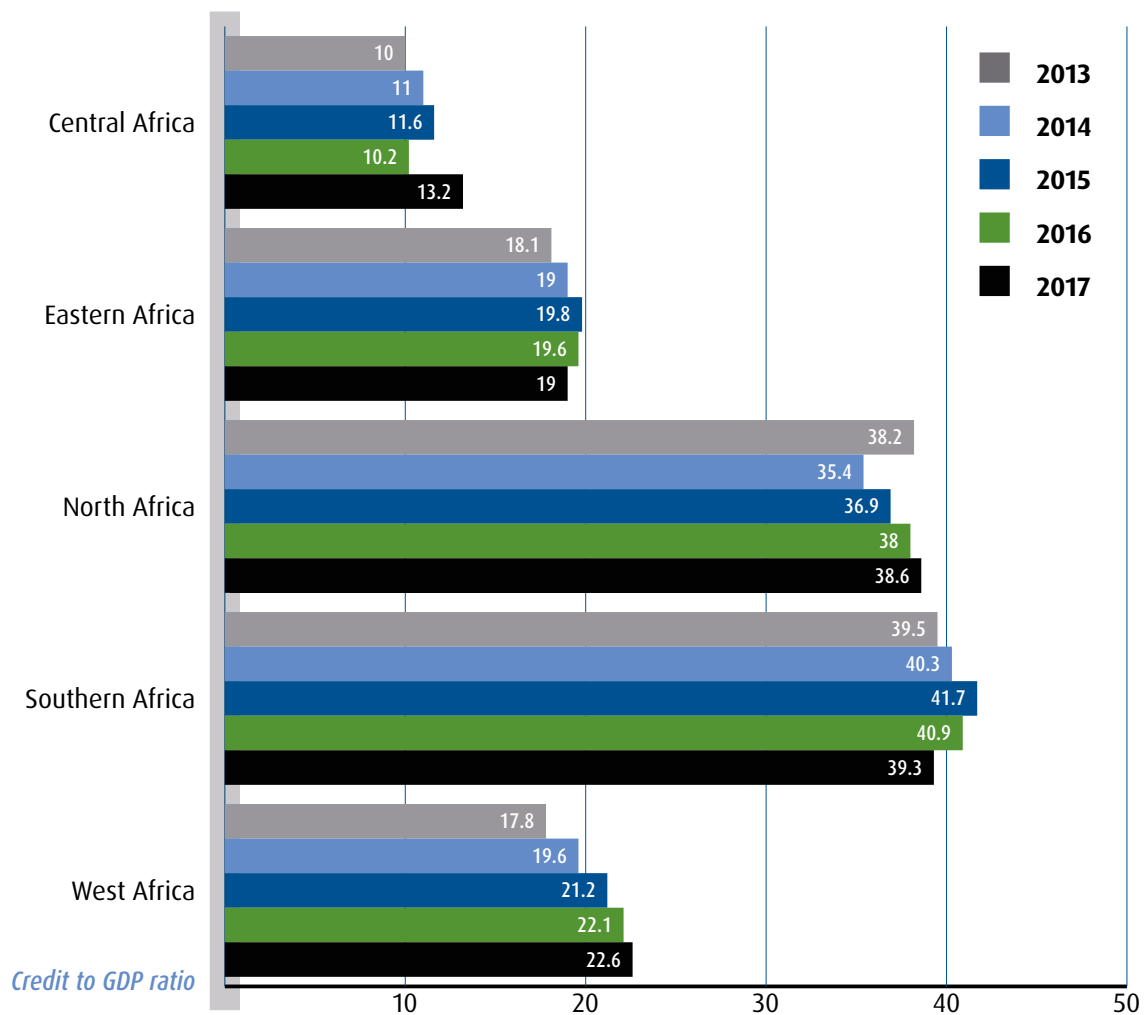
Source: Based on data come from World Inequality Database.

FINANCIAL SECTOR PERFORMANCE

Financial sector performance in Africa is critical for sustainable development financing by both the public and private sectors. For instance, well-functioning banks and financial markets serve as intermediaries for savers and borrowers, monitor firms' and individuals' debt, provide mechanisms to manage financial risk and facilitate transactions (Levine, 2018).

Globally, banks dominate the financial sector. The credit-to-GDP ratio is very low in Africa—less than 30 per cent of GDP, compared with 138 per cent in East Asia and the Pacific (FIGURE 1.10). In North Africa and Southern Africa, the financial sector has slightly greater depth in such countries as Mauritius, Morocco, Namibia, South Africa and Tunisia,

FIGURE 1.10 CREDIT-TO-GDP RATIO BY AFRICAN REGION



Note: Ratio of private credit by deposit money in banks and other financial institutions to GDP (%). Regional grouping based on countries with available data for select time frame.

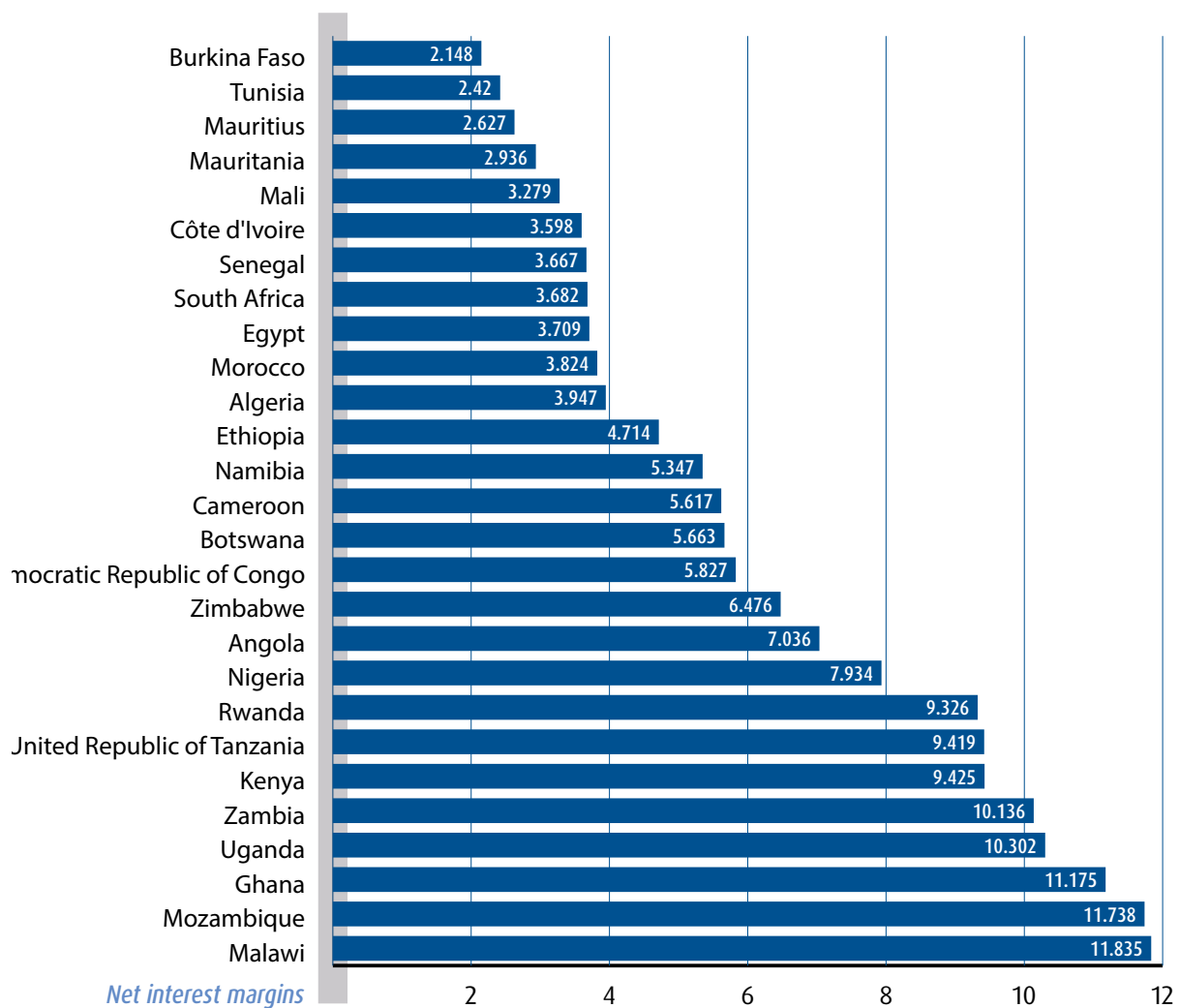
Source: ECA calculation based on data from the Global Financial Development Database (2019).

which had credit-to-GDP ratios ranging from 62 per cent to 98 per cent in 2017 (Global Financial Development Database, 2019). Bank financing to the private sector remains low. Even when it exists, it does not fit the needs of the private sector since about 60 per cent is short-term, that is, with a tenor of less than one year. And because banks have been inherently opaque, companies have been unable to access bank finance for many years (Leon, 2018; Fosu et al., 2017).

Central and West African countries are less financially developed than North and Southern ones. North and Southern

African banks are actively expanding continent-wide, with vast networks shaping the banking landscape of many African countries. They foster financial development and economic integration, which stimulate competition and efficiency, promote product innovation, boost modern management and information systems and introduce higher skills and expertise to host countries (Enoch et al., 2015; Pelletier, 2018). The increasing presence of pan-African banks is associated with improvements in firms' access to bank finance (Kanga, Murinde and Soumaré, 2018; Leon and Zins, 2020).

FIGURE 1.11 NET INTEREST MARGINS IN SELECT COUNTRIES, 2017



Source: ECA calculation based on data from the Global Financial Development Database (2019).

TABLE 1.1 RETURN ON ASSETS AND RETURN ON EQUITY, BY REGION, 2012–2017

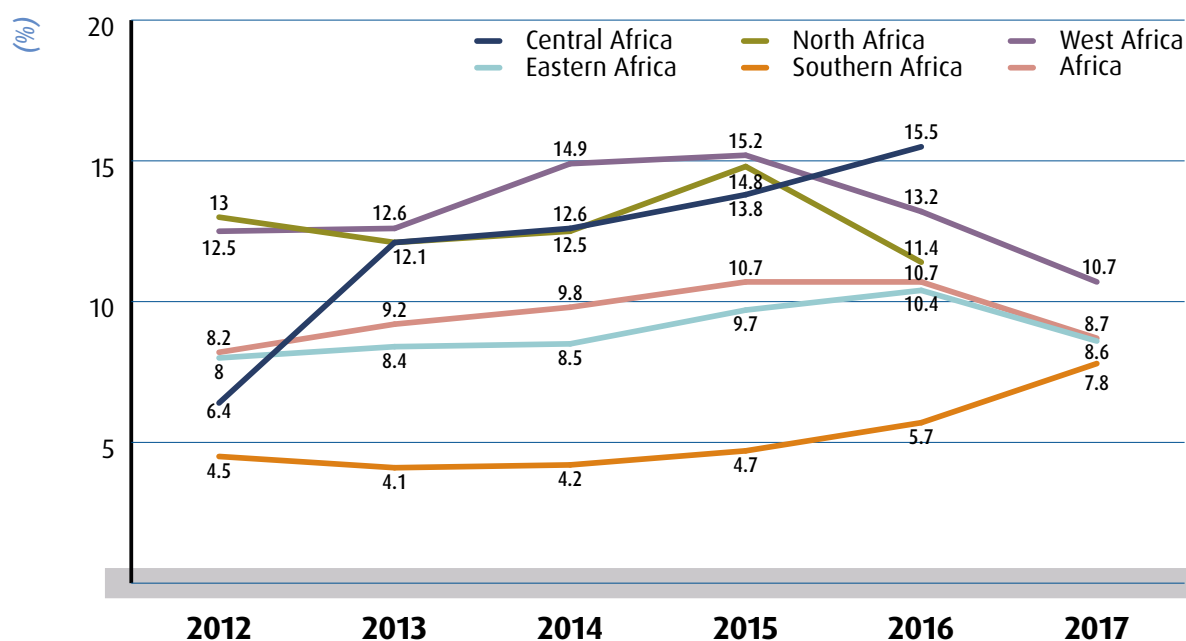
	RETURN ON ASSETS			RETURN ON EQUITY		
	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM
Central Africa	-3.2	1.1	6.4	-10.2	10.8	40.7
East Africa	0.1	2.6	13.8	0.5	20.9	52.5
North Africa	-0.3	1.1	3.1	0.6	11.1	27.9
Southern Africa	0.6	2.4	6.8	5.9	19.5	42.5
West Africa	-3.9	1.5	8.8	-33.0	16.2	95.1
Africa	-3.9	1.8	13.8	-33.0	16.4	95.1

Note: Data from the Global Financial Development Database, October 2019.

Although underdeveloped, the banking sector is profitable, with high but varying net interest margins (NIM). The average NIM was 6 per cent in Africa in 2013–2017, higher than the 4.5 per cent average in South Asia in 2016. The low NIM in Asia (and hence low profitability) led some banks to venture into lesser developed neighbouring economies with robust economic growth, an emerging middle class, higher demand for innovative financial services and rising infrastructure

financing needs. Similar regional expansion has been observed in some African countries with declining NIM or decreasing domestic profitability, such as Morocco and South Africa. African countries that recorded high NIMs (above 10 per cent on average) include Ghana, Malawi, Mozambique, Uganda and Zambia, indicating banks are highly profitable in those countries (FIGURE 1.11). The high ratios can be explained by the structure of their balance sheets, the high interest rate

FIGURE 1.12 TREND IN BANK REGULATORY CAPITAL TO RISK-WEIGHTED ASSET RATIO



Note: Calculations for the 2017 average figures for Africa and regional economic groups are based on the values from these countries: West Africa: Guinea; Southern Africa: Mauritius and Malawi; East Africa: Kenya, Madagascar, United Republic of Tanzania and Uganda.

Source: Based on data from the Financial Development and Structure Dataset (2019).

environment in which they operate or the high concentration of few banks in their respective countries. For instance, in both Malawi and Mozambique, bank concentration was very high, with the three largest banks in Malawi holding 86.8 per cent of total commercial banking assets in 2017, and the three largest in Mozambique holding 76.9 per cent (Global Financial Development Database, 2019).

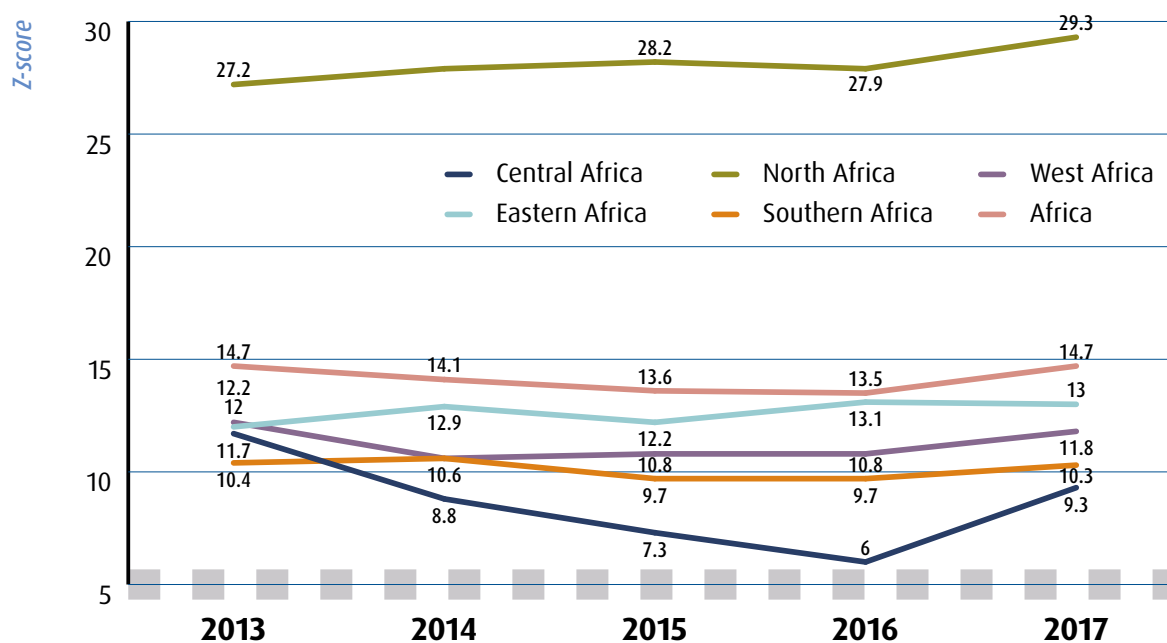
The net margins are consistent with average return on assets and return on equity in the African banking sector (TABLE 1.1). Throughout Africa, the banking sector generates profits, even if some countries in West, North and Central Africa show negative average returns. Negative returns are not concentrated in a specific country and do not appear systematic or systemic.

The banking sector in Africa is well capitalized. From 2010 to 2016 the ratio of regulatory capital to risk-weighted assets was greater than 13 per cent (FIGURE 1.12), mainly because the regulatory environment was pushing for greater capitalization, creating opportunities for private firms to invest in the financial industry (Allen, Otchere and Senbet, 2011). The banking sector in West Africa was better capitalized from 2010 to 2015 than in the rest of the continent, though downward

oil price trends can adversely affect Nigeria’s and Ghana’s banking sectors, as reflected in the 2016 West African figures. Although banks are well capitalized, the ratio of non-performing loans (NPLs) was higher in West Africa than in other part of the continent before 2016. Southern Africa showed strong financial soundness. Southern countries display very low NPLs and high capital ratios (TABLE 1.2). In contrast, Algeria and Tunisia in North Africa, Central African Republic in Central Africa and Mauritania and Sierra Leone in West Africa display high NPL ratios and capital to asset ratios at the same time—the banking sector in those countries probably uses capital to expand its loan portfolio by lending to risky customers.

Banking sector stability is greater in North Africa than in other regions of the continent—consistent with North African banks’ high capital-to-asset ratio and low ratio of NPLs (FIGURE 1.13). In Africa overall, banking sector stability improved slightly from 2016 to 2017, particularly in Central Africa (average bank z-score up 3.3 percentage points) and West Africa (up 1 percentage point). But Central Africa experienced a slight decline in banking sector stability between 2013 and 2016, as did West Africa between 2013 and 2014.

FIGURE 1.13 TRENDS IN BANKING SECTOR STABILITY



Source: Based on data from the Global Financial Development Database (2019).

TABLE 1.2 BANK REGULATORY CAPITAL AND NON-PERFORMING LOANS RATIOS, BY COUNTRY
(Per cent)

	REGULATORY CAPITAL	NPLs	YEAR
Algeria	18.90	11.44	2016
Botswana	19.25	4.85	2016
Burundi	20.21	19.01	2016
Cameroon	9.09	10.65	2016
Central African Republic	32.02	25.61	2016
Chad	13.17	20.88	2016
Congo	19.09	4.85	2016
Djibouti	12.51	22.07	2015
Egypt	13.20	7.20	2015
Equatorial Guinea	27.27	24.64	2016
Eswatini	22.21	9.62	2016
Gabon	8.11	6.65	2016
Ghana	17.75	17.29	2016
Guinea	17.89	9.44	2016
Kenya	18.87	11.66	2016
Lesotho	18.05	3.59	2016
Madagascar	13.67	8.36	2016
Mauritania	23.10	27.60	2015
Mauritius	18.24	7.76	2016
Morocco	13.80	6.90	2014
Mozambique	17.10	4.30	2015
Namibia	15.15	1.54	2016
Nigeria	14.78	12.82	2016
Rwanda	23.05	7.08	2016
Senegal	16.70	18.80	2015
Seychelles	26.61	6.75	2016
Sierra Leone	33.98	31.73	2015
South Africa	15.93	2.86	2016
South Sudan	20.20	5.10	2015
United Republic of Tanzania	19.15	9.61	2016
Tunisia	12.10	14.50	2015
Uganda	19.83	10.40	2016
Zambia	26.16	9.66	2016

Note: Year is the last year for which data were available.

Source: Based on data from the Financial Development and Structure Dataset, 2019.

FINANCING OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT IN AFRICA

A 2019 study concluded that financial inclusion is a promising channel for translating growth into lower inequality (Demir and Murinde, 2019). It found that financial inclusion could increase opportunities enabling firms to develop business, create jobs, increase the incomes of its employees and their households and in turn enable people to increase their investment in education and health. A study in Kenya found access to mobile money services increased savings by more than a fifth among women and allowed 185,000 women to develop business or retail activities (Demirgüç-Kunt et al., 2018).

Beyond growth and inclusion, Africa is seeking to cover other economic, social and environmental dimensions while achieving the SDGs. Huge financing needs for achieving sustainable development limit many countries' abilities to improve growth and prosperity. A new estimate suggests a financing gap of \$2.5 trillion for all emerging and developing countries and \$200 billion-\$1.3 trillion for Africa. Because Africa's population is expected to grow by 43 per cent over 2015-2030, the gap could reach \$19.5 trillion by 2030.

Further, African governments require additional funds to deal with COVID-19. In a best-case scenario, with suppression of the coronavirus spread and intense early physical distancing measures, \$44 billion would be required across Africa for testing, personal protective equipment and treatment of

COVID-19 patients requiring hospitalization and intensive care treatment (ECA, 2020).

By recent estimates Africa needs \$100 billion a year to close its infrastructure gap (McKinsey & Company, 2019). That figure aligns with African Development Bank estimates of the continent's infrastructure needs amounting to \$130 billion-\$170 billion a year, with a financing gap of \$68 billion-\$108 billion (AfDB, 2018). The gap is about 3-5 per cent of the continent's GDP. Key sectors are energy and transportation, accounting for about 55 per cent of the financing needs, and water supply and sanitation, accounting for about 40 per cent (TABLE 1.3).

Investing in infrastructure is key to boosting growth. Poor infrastructure reduces Africa's average per capita growth by up to 2 per cent every year (AfDB, 2018). Access to electricity is the biggest obstacle to business operations in Africa, with access to finance being the second.¹¹

The digital revolution under way in Africa, mainly based on mobile phone networks, presents opportunities for sustainably developing finance. The infrastructure is suitable for developing prepayment systems. If telecommunications companies and banks collaborated, prepayment systems could be replaced by bank account transfers based on bank credit.

TABLE 1.3 AFRICA'S INFRASTRUCTURE FINANCING NEEDS

INFRASTRUCTURE SUBSECTORS	ANNUAL COST (\$ BILLIONS)
Power	35-50
Water supply and sanitation	56-66
Information and communications technology	4-7
Road and other transport sectors (air, rail, and port)	35-47
Total	130-170

Source: AfDB, 2018.

BOX 1.1 DIGITAL SOLUTION AND LENDING: TWO EXAMPLES FROM KENYA

M-KESHO, introduced by Safaricom in 2010, is a mobile account that allows users to receive small loans. Eligibility for a loan is based on a six-month history of M-Pesa mobile money transactions. Since the process is based on M-Pesa transactions, it is quicker than traditional screening by financial institutions.

Ovamba offers short-term funding for African small and medium enterprises (SMEs) in the trade and commodities sectors that cannot front the cost of trade or inventory purchases. SMEs can request financing via their mobile phone or computer. Ovamba then uses on-the-ground teams and technology to assess the risk and decides creditworthiness within 48 hours, using algorithms and information on local customs, including ethics, social norms and business practices.

Ovamba financing, following the Islamic model prohibiting interest, is based on risk-sharing on agreed terms. Rather than lend money, Ovamba purchases assets or receivables on behalf of its SME client. The assets or receivables are owned by Ovamba and sold to the SME client at a pre-agreed mark-up covering all costs incurred and a margin for Ovamba.

Source: Songwe, Kanga and Murinde, 2019.

Digital mobile phones help collect information on creditworthiness and can encourage commerce by reducing transaction costs. **BOX 1.1** provides two examples of lending based on mobile phone digital solutions.

Private equity financing is increasing in Africa, though Africa's share is still lagging. From 2013 to 2018, equity funding raised in Africa totalled \$18 billion (McKinsey Global Markets Review, 2019). Private equity capital in Africa in 2018 represented 0.7 per cent of the world total, compared to 3.5 per cent for Asia share of global private equity capital. Private equity funders and venture capital funds are active in countries with well-developed capital markets where they can liquidate their investment, take their profit and re-invest.

African stock exchanges, despite recent innovations, are less capitalized (representing 67 per cent of GDP in 2017) than those in high income countries (140 per cent) or East Asia

and the Pacific (112 per cent). They are also less liquid, and trading on them can be expensive. To develop a well-functioning capital market takes considerable time and a sound regulatory and supervisory framework (**BOX 1.2**). African stock exchanges are improving through demutualization, trading innovations, automated settlement and clearing systems, new trading instruments (such as derivatives, commodity exchange and mutual funds and other collective vehicles) and special windows for small and medium enterprises.

Alternative finance, especially crowdfunding, is another fast-growing market in Africa. The capital raised through nascent crowdfunding in Africa increased from \$44 million in 2013 to \$181 million in 2016 (Cambridge Centre for Alternative Finance, 2018). Crowdfunding presents some difficulties, since entrepreneurs must spend time building a base of contacts that will contribute capital and promote the fundraising campaign. Even so, it can have non-monetary benefits, such as increased credibility and market awareness.

BOX 1.2 THE ROLE OF FINANCIAL REGULATION

Financial service suppliers collect credit information on investors and borrowers and any additional information required to match lenders and borrowers and to post accurate and timely financial instrument prices to facilitate fair trading (Mullineux and Murinde, 2014). To function effectively the financial system needs access to a database of credit standings, diligent data protection and appropriate freedom of access to non-confidential information. National development

banks, supported by regional agencies such as the African Development Bank, could help oversee the development of credit score databases.

Payment systems based on networks—mobile phone networks or the internet—need appropriate regulation. Regulators should identify the right rules for the right threats in the digital economy. The digital revolution breaks down the boundaries between

financial services and other industries (in telecommunications and beyond). To prevent internet-based fraud, regulators must prioritize supervision ensuring the protection and fair use of customer data. As cybercriminals launch more sophisticated and frequent attacks globally, data protection and security become more pertinent. So, regulators must require network-based financial service providers to use the most effective safeguards.

CONCLUSIONS AND POLICY IMPLICATIONS

Africa is economically the second fastest growing region in the world, estimated to have grown 3.5 per cent in 2019. Growth is projected to slow in 2020, to 1.8 per cent in the best-case scenario and -2.6 per cent in the worst-case scenario. And even if the spread of COVID-19 is suppressed in Africa, its economic damage will be great. More effective measures aimed at addressing the socio-economic devastation that COVID-19 is causing could lead to economic recovery and contribute to a projected rebound of growth to 5 per cent in 2021. African economies, to enable economic recovery and

“African economies, to enable economic recovery and SDG progress, should fully explore innovative financing by the private sector, raise investment to 35-40 per cent of GDP, enhance competitiveness and support regional integration”

SDG progress, should fully explore innovative financing by the private sector, raise investment to 35-40 per cent of GDP, enhance competitiveness and support regional integration. The African Continental Free Trade Area (AfCFTA), enacted by a March 2018 agreement that has been signed by 54 African countries, is a key to this strategy.

For 2020–2030, the private sector in Africa will play an important role in enabling economic recovery from the COVID-19 pandemic, increasing economic prosperity and achieving the SDGs. In its primary role as the engine of growth, it will generate productivity and enhance economic participation by households and business firms, in turn driving inclusive economic growth. Financial sector innovations will support well-functioning systems connecting savers to borrowers. Bank financing must meet private sector needs, in contrast to current bank offerings, in which 60 per cent of credit to the private sector is short-term (see Fosu et al., 2017).

Multidimensional poverty and inequality persist, as shown by socioeconomic indicators. The COVID-19 pandemic could push additional 5–29 million Africans into extreme poverty and exacerbate existing income inequalities. But financial innovation to support financial inclusion appears promising for increasing opportunities for firms and households and thus for translating growth into decreased inequality.

ANNEX

ANNEX TABLE 1.1 AFRICAN COUNTRIES ON THE SDG INDEX, 2019

REGION	COUNTRY	SDG INDEX	SDG INDEX RANK
Central Africa	Angola	51.32	149
	Cameroon	56.02	127
	Central African Republic	39.08	162
	Chad	42.79	161
	Congo, Democratic Republic of the	44.95	160
	Congo	54.22	132
	Gabon	64.76	99
	São Tomé and Príncipe	65.48	95
East Africa	Burundi	51.55	145
	Comoros	52.98	137
	Djibouti	51.36	148
	Ethiopia	53.25	135
	Kenya	57.03	125
	Madagascar	46.70	158
	Malawi	51.38	146
	Mauritius	63.59	105
	Mozambique	53.03	136
	Rwanda	56.02	126
	United Republic of Tanzania	55.82	128
	Uganda	52.57	140
	Zambia	52.62	139
	Zimbabwe	59.67	121
North Africa	Algeria	71.10	53
	Egypt, Arab Rep.	66.21	92
	Morocco	69.07	72
	Sudan	51.36	147
	Tunisia	69.99	63
Southern Africa	Botswana	59.77	120
	Eswatini	51.69	142
	Lesotho	50.94	150
	Namibia	59.87	119
	South Africa	61.48	113
West Africa	Benin	50.85	151
	Burkina Faso	52.40	141
	Cabo Verde	65.05	96
	Côte d'Ivoire	55.70	129
	The Gambia	55.00	131
	Ghana	63.80	104
	Guinea	52.81	138
	Liberia	48.18	157
	Mali	50.21	152
	Mauritania	53.33	134
	Niger	49.45	154
	Nigeria	46.41	159
	Senegal	57.30	124
	Sierra Leone	49.24	155
Togo	51.60	144	

Note: Seychelles is not included in the 2019 ranking.

Source: Sachs et al., 2019.

REFERENCES

- AfDB (African Development Bank). 2018. "Africa's Infrastructure: Great Potential but Little Impact on Inclusive Growth." Chapter 3 in *African Economic Outlook 2018*. Abidjan, Côte d'Ivoire: AfDB.
- Alkire, S., U. Kanagaratnam and N. Suppa. 2019. "The Global Multidimensional Poverty Index (MPI) 2019." OPHI MPI Methodological Note 47, Oxford Poverty and Human Development Initiative, University of Oxford, Oxford, UK.
- Allen, F., I. Otchere and L. W. Senbet. 2011. "African Financial Systems: A Review." *Review of Development Finance* 1 (2): 79–113.
- Beegle, K., and L. Christiaensen (Eds.). 2019. *Accelerating Poverty Reduction in Africa*. Washington, DC: World Bank.
- Cambridge Centre for Alternative Finance. 2018. *The 2nd Annual Middle East & Africa Alternative Finance Industry Report*. Cambridge, UK: University of Cambridge.
- Demir, A., and V. Murinde. 2019. "How Does Financial Inclusion Affect Sustainable Growth and Sustainable Reduction in Poverty and Income Inequality?" Working Paper Series, Centre for Global Finance, London.
- Demirgüç-Kunt, A., L. Klapper, D. Singer, S. Ansar and J. Hess. 2018. *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC: World Bank.
- Department of Foreign Affairs and Trade, Government of Australia. 2014. "The Role of Private Sector in Supporting Economic Growth and Reducing Poverty in the Indo-Pacific Region." Submission to the Joint Standing Committee on Foreign Affairs, Defence and Trade. <https://www.apf.gov.au/DocumentStore.ashx?id=53a5f52f5ee9-414b-879b-6bbcd7e8678&subId=252459>.
- ECA (United Nations Economic Commission for Africa). 2018. *Financement de l'industrialisation en Afrique Centrale*. Addis Ababa, Ethiopia: ECA.
- ECA (United Nations Economic Commission for Africa). 2020. "COVID-19 in Africa: Protecting Lives and Economies." Addis Ababa, Ethiopia: ECA.
- EIU (Economist Intelligence Unit). "Foresight 2020: Economic, Industry and Corporate Trends." http://graphics.eiu.com/files/ad_pdfs/eiuForesight2020_WP.pdf.
- Enoch, M. C., M. P. H. Mathieu, M. M. Mecagni and M. J. I. C. Kriljenko. 2015. "Pan-African Banks: Opportunities and Challenges for Cross-Border Oversight." Departmental Paper 15/04, International Monetary Fund, Washington, DC.
- Financial Development and Structure Dataset. 2019. Washington, DC: World Bank. <https://www.worldbank.org/en/publication/gfdr/data/financial-structure-database>.
- Fosu, S., C. G. Ntim, W. Coffie and V. Murinde. 2017. "Bank Opacity and Risk-taking: Evidence from Analysts' Forecasts." *Journal of Financial Stability* (33): 81–95.
- Global Financial Development Database. 2019. Washington, DC: World Bank. <https://databank.worldbank.org/reports.aspx?source=global-financial-development>.
- Hausmann, R., C. A. Hidalgo, S. Bustos, M. Coscia, A. Simoes and M. A. Yildirim. 2019. *The Atlas of Economic Complexity*. Cambridge, MA: MIT Press. <https://oec.world/en/rankings/country/eci/>.
- Hidalgo, C. A., and R. Hausmann. 2009. "The Building Blocks of Economic Complexity." *Proceedings of the National Academy of Sciences* 106 (26): 10570–10575.
- IMF (International Monetary Fund). 2019. *World Economic Outlook: Global Manufacturing Downturn, Rising Trade Barriers*. Washington, DC: IMF.
- IMF (International Monetary Fund). 2020. "IMF Primary Commodity Prices." Washington, DC: IMF. <https://www.imf.org/en/Research/commodity-prices>.
- Kanga, D., V. Murinde, L. Senbet and I. Soumaré. 2018. "Bank Lending and Competition in WAEMU Banking System: Does Cross-border Banking Increase Firms' Access to Finance?" Working Paper, Centre for Global Finance, London.
- Leon, F. 2018. "The Credit Structure Database." CREA Discussion Paper 2018-07, Center for Research in Economic Analysis, University of Luxembourg.
- Leon, F., and A. Zins. 2020. "Regional Foreign Banks and Financial Inclusion: Evidence from Africa." *Economic Modelling* 84 (January): 102–116. <https://doi.org/10.1016/j.econmod.2019.03.012>.
- Levine, R. 2018. "Finance, Growth and Economic Prosperity." *Macroeconomic Review* April (Special Feature B): 82–88.
- McKinsey & Company. 2019. "Unlocking Africa's \$100 Billion Public-Finance Opportunity." October.
- McKinsey Global Markets Review. 2019. "Private Markets Come of Age." <https://www.mckinsey.com/~media/mckinsey/industries/private%20equity%20and%20principal%20investors/our%20insights/private%20markets%20come%20of%20age/private-markets-come-of-age-mckinsey-global-private-markets-review-2019-vf.ashx>.
- Mullineux, A. W., and V. Murinde. 2014. "Financial Sector Policies for Enterprise Development in Africa." *Review of Development Finance* 4 (2): 66–72.
- OECD (Observatory of Economic Complexity). n.d. "Economic Complexity Legacy Rankings (ECI)." Accessed November 2019 at <https://oec.world/en/rankings/country/eci/>.

- Pelletier, A. 2018. "Performance of Foreign Banks in Developing Countries: Evidence from Sub-Saharan African Banking Markets." *Journal of Banking & Finance* 88: 292-311.
- Sachs, J., G. Schmidt-Traub, C. Kroll, G. Lafortune and G. Fuller. 2019. *Sustainable Development Report 2019*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN).
- Signé, L. 2018. "The Potential of Manufacturing and Industrialization in Africa: Trends, Opportunities and Strategies." Africa Growth Initiative, Brookings Institution, Washington, DC.
- Songwe, V., D. Kanga and V. Murinde. 2019. "The FinTech Revolution and Innovative Financing of the Private Sector in Africa: Delivering Hope and Aspiration?" Mimeo.
- UN (United Nations). 2020. UN Comtrade Database. New York: United Nations. <https://comtrade.un.org/data/>.
- UNCTAD (United Nations Conference on Trade and Development). 2020. *The Covid-19 Shock to Developing Countries: Towards a "Whatever It Takes" Programme for the Two-thirds of the World's Population Being Left Behind*. Trade and Development Report Update. New York and Geneva: UNCTAD.
- UNDP (United Nations Development Programme). 2018. "Mean Years of Schooling (Years)." New York: UNDP Human Development Report Office. <http://hdr.undp.org/en/indicators/103006#>.
- UNSD (United Nations Statistics Division). n.d. "Methodology: Standard Country or Area Codes for Statistical Use (M49)." Accessed on February 2020 at <https://unstats.un.org/unsd/methodology/m49/>.
- World Bank. 2019. Economic Survey, June 2019. Washington, DC: World Bank. www.enterprisesurveys.org.
- World Bank. 2020. World Development Indicators database. Washington, DC: World Bank.
- WTO (World Trade Organization). 2020. "Trade Statistics and Outlook." Press Release 899, WTO, Geneva.

ENDNOTES

- 1 In this report, Asia includes Asian emerging and development countries, namely Bangladesh, China, Hong Kong, India, Indonesia, Malaysia, Pakistan, Philippines, Singapore, Republic of Korea, Sri Lanka, Taiwan, Thailand and Viet Nam.
- 2 African regions are defined according to the UNSD (n.d.).
- 3 Economic complexity measures the knowledge intensity of an economy by considering the knowledge intensity of the products it exports (OEC, n.d.).
- 4 https://www.uneca.org/sites/default/files/uploaded-documents/ATPC/updated_q_a_21jan2020.pdf
- 5 These projections are based on the sole removal of tariffs on goods and depending on liberalization effort.
- 6 https://www.uneca.org/sites/default/files/uploaded-documents/ATPC/updated_q_a_21jan2020.pdf
- 7 Department of Foreign Affairs and Trade, Government of Australia (2014).
- 8 Average calculated from the World Development Indicators database.
- 9 Living standard covers the following components: (1) The household has no electricity. (2) The household does not have access to improved sanitation. (3) The household does not have access to an improved source of drinking water. (4) At least one of the household's three dwelling elements—floor, walls or roof—is made of inadequate materials: the floor is made of natural materials or the walls or the roof are made of natural or rudimentary materials. (5) The household cooks with dung, wood, charcoal or coal. (6) The household does not own a car or truck and does not own more than one of the following assets: radio, television, telephone, computer, animal cart, bicycle, motorbike or refrigerator. Deprivation in education means that no household member age 10 or older has completed six years of schooling, or that any school-age child is not attending school up to the age at which he or she would complete class 8. The health component covers malnutrition (any adult under age 70 or any child for whom nutritional information is available is undernourished) and child mortality (any child in the household has died in the five years preceding the survey).
- 10 Raw data from UNDP (2018).
- 11 Some 20.7 per cent of African firms report that access to electricity is the main obstacle affecting their operations, and 19.6 per cent of firms report access to finance as the main obstacle. These proportions are estimated from World Bank Economic Survey, June 2019.

