The History of African Development

An Online Textbook for a New Generation of African Students and Teachers

Edited by

Ewout Frankema, Ellen Hillbom, Ushehwedu Kufakurinani
and Felix Meier zu Selhausen

AEHN
AFRICAN ECONOMIC
HISTORY NETWORK

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A Textbook for a New Generation of African Students and Teachers

The History of African Development is published by the African Economic History Network (AEHN). This book aims to draw experts in the field of African History, Economics and African Development Studies together around an open access textbook. The book is intended for teachers and undergraduate students at African universities, but also for an interested public audience. The chapters describe and explain various aspects of historical African development trajectories in plain English language. All chapters include a list of suggested readings, data sources and study questions to test student's comprehension. By offering this book in an open-source (CC BY) environment, the AEHN seeks to facilitate a wider diffusion of the knowledge that is generated within its academic network and to support capacity building among a new generation of African historians and development practitioners.

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The African Economic History Network (AEHN) is an academic initiative intended to foster communication, collaboration and research as well as teaching amongst scholars studying the long-term development of sub-Saharan Africa, from the pre-colonial era to the present-day. The AEHN was founded in 2011 and holds an annual conference, publishes a working papers series in African Economic History and a textbook *The History of African Development*, as well as an academic blog and a bimonthly newsletter.

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Contents

Introduction

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1. We are all Africans

Africa is the cradle of humankind. During the 20th century scientists have found strong evidence that the evolution of the modern human being (*the homo sapiens*) originated in Africa, some 500,000 to 200,000 years ago. From Africa our ancestors migrated across the entire world: first to Asia and Europe, and later to Australia, America and many of the tiny islands in the world oceans. Since the time of this exodus, societies inside as well as outside Africa have experienced very different development paths: some societies became sedentary agriculturalists, others remained or became tribal hunter and gatherers. Economically, politically and military powerful nations emerged. Industrialization revolutionized societies from the 18th century onward, first in Europe and later also in many other parts of the world. Some societies became wealthy, while others remained in poverty. All of these changes happened in different ways and at different times depending on a variety of historical circumstances. For us to understand where we are today, we need to know where we came from and what has influenced our various trajectories of development. This makes the study of history so valuable for personal intellectual development.

Today, Africa boasts with energetic people and their numbers are increasing rapidly. It is estimated that by 2050 about one quarter of the world population will live on the African continent, which is the second largest in terms of land area, behind Asia. All these people want to make the best of their own lives and that of their children. Africa hosts a large number of animals, plants and trees that can be found nowhere else in the world. The continent has vast tracts of fertile land in varying climate zones, among the worlds' largest freshwater lakes, and some of the world's richest deposits of minerals. But if Africa is so resourceful and has so many people eager to develop these resources, why then are so many Africans still poor? Why are African economies less productive than most Western or Asian economies? And why is wealth and power *within* African countries so unequally distributed across different groups of people? To study such vastly important questions one has to start thinking in a more systematic way about the specific development trajectories of African societies, polities and economies.

This textbook aims to introduce students to a wide range of themes and concepts that deal with the *history of African development*. The book seeks to create bridges between the study of economic, social and political history and long-term human development in Africa. The key premise of the book is that understanding the *drivers of historical change* is the key to *explaining long-term development*, and that within this process of historical change, there are important 'general patterns' to discover in the economic, political and social structures of African and non-African societies. A better understanding of these patterns will help a new generation of African students to engage with the major development issues of their time.

The textbook is used worldwide. However, more than half of downloaded chapters are from Africa, where the book is used in teaching courses at the universities of Stellenbosch (South Africa), Zimbabwe, Malawi, Ghana, African School of Economics (Benin), Mountains of the Moon University (Uganda), American University of Nigeria, among many others.

This textbook aims at a better understanding of Africa's long-term development.

2. A complex history

The history of African development is, as we have argued above, a complex history. If the problem of poverty, for instance, would be easy to resolve, all Africans would be wealthy today and there would also be little reason for studying economic development. If all African countries were governed by highly efficient and effective administrations, there would be less reason to study political development. The fact that poverty and coercion has been a constant factor in human history, while people have made great efforts to reduce it in every region of the world indicates that wealth and power are complex phenomena. History is a study of complexity.

The reason that we need to study the history of development is that it includes many different factors that all affect and connect to each other. Understanding development thus requires not only an understanding of the relevant factors (economic growth, education, health, good governance, food security), but also an understanding of their specific *interaction*. To understand 'causality' in long-term processes of socio-economic or political development implies a basic conception of what is meant by 'sufficient' and 'necessary conditions'. The best way to start exploring complexity it is to break it down in pieces that we can understand. This is what the chapters in this book all try to do. Break down an extremely complicated long-term process of development in a very large area of the world (Africa) into pieces. The challenge that remains to the student reading these texts is to reconnect these pieces and start building up his or her own understanding of African development and, by doing so, enlarge the intellectual wealth of Africa.

3. Sources and methods in African Economic History

Africa not only has a complex economic history, its sources and methods to analyse it are equally complex. Where written sources have been unavailable for pre-colonial Africa archaeological evidence and other sources have been used. Such sources include linguistic evidence, for example in the histories of Bantu migrations. Rock art has also provided important information about Africa's (economic) way of life in the past. Some scholars have appropriated anthropometrics and paleobiology in combination with archaeology to reconstruct Africa's ancient (economic) past. However, in some parts, written evidence has survived allowing to reconstruct some aspects of Africa's pre-colonial past. This evidence comes from the encounters that Africans had with the outside world. For example, written sources from Africa's early encounters with European and Arab traders provide important information about Africa's economic past. It is from such sources that scholars have been able to quantitatively and qualitatively reconstruct and explore the histories of the slave trades, slavery, legitimate commerce and Africa's pre-colonial economic organisations.

For Africa's more recent past colonial government and Christian missionary archives represent key sources for scholars studying Africa's colonial era. Written evidence produced by colonial institutions and individuals have provided important information about colonial tax extraction, living standards, demography, external trade and education etc. Colonial archives have been criticised for their own biases shaped by racial and class prejudices. In other instances it has been possible to access sources produced by Africans which have helped counterbalance potentially Eurocentric colonial narratives. Colonial archives have produced evidence which includes statistics and narrative texts and these have helped build qualitative and quantitative economic histories. In more recent times, the volumes of data available as well as expanding computer technology have allowed for the creation large datasets that reconstruct Africa's past. The chapters of this online textbook reflect these evolving methods in the writing and research of African economic history.

4. Our approach

We have chosen to combine three approaches for teaching history and development. First, we adopt a *historical approach* because the development of states, economies and societies can only be thoroughly understood from a long-term perspective. People, families, communities or countries do not originate from one day to another, nor do they grow rich or become powerful in a split second. Societies that have grown wealthy have achieved this as a result of centuries of change and current levels of global inequality are the outcome of a long-term historical process of socio-economic and political divergence.

Second, we adopt a *comparative approach*. Conducting comparisons is valuable because it helps us to identify similarities and differences that form the basis for drawing lessons from history. One of these lessons, for instance, is that societies who manage to diversify their exports are less vulnerable to sudden changes of commodity prices in the world market. African history is full of lessons that can be used to inform current economic policies. Comparisons can be made on various levels. Some chapters place African countries in the context of global economic developments. Others compare development within Africa or do both. Comparisons are essential to develop a broader spatial and temporal framework in which to explore the determinants of development.

Third, we adopt a *thematic approach*. Each book chapter discusses a specific theme that is connected to the encompassing question of long-term African development. This can be a historical theme, such as the African slave trades, the partition of Africa or Africa's colonial history, but it can also be a more contemporary theme, for instance about the causes and consequences of African population growth, Africa's rise of mass-education and great strides towards democratization or the explosive growth of African cities.

Chapters use some important breakdowns in time, which we call temporal demarcations. The most common breakdown is threefold: the pre-colonial, the colonial and the post-colonial era. These are very crude temporal distinctions and do not equally apply to all African societies. Whereas one could argue that the colonial period in some parts of West Africa, such as Senegal started around the mid-19th Century, in other parts of Central Africa we would locate such a 'start' somewhere in the early 20th Century. Periodisation is also open to criticism because it raise the impression of a clear break in development path whereas in reality, such breaks can often not clearly be pinpointed to a particular moment in time. For instance, while many Africans celebrate a day of formal political independence, which was in the majority of countries obtained around the year 1960, economic independence may not have been obtained until present. Nor did formal independence mean that external political influences became irrelevant.

Still we have good reasons to structure the analysis of African development into a period before, during and after European colonial rule. First, most of current African countries are the result of territorial borders that were drawn during the colonial era. These borders were not established overnight, but they do constitute an important political reality at present. Second, the era of independence did eventually alter the foundations for the governance of African societies, as nearly all African countries became ruled by local African politicians replacing European officials.

The geographical demarcation of this book also poses a major challenge. Throughout this book we will discuss development in Africa, thus suggesting that there are patterns that are common to a large uniform geographic entity. In reality we know that Africa is an extremely diverse continent, with very different social, political and economic structures. How can we justify the term 'African development', if the historical experience of development has been so varied? This is a difficult question. One way to cope with this complicating factor is that most of the chapters focus on Sub-Saharan Africa, excluding North Africa. A second way of dealing with variety is that we try to indicate, whenever possible, to which areas certain 'general patterns of development' do apply, and which areas form the exception.

5. The authors

The authors of this book come from various places in the world. We are African and non-African scholars who have scholarly expertise in African long-term socio-economic, demographic or political development. We are committed to spread our knowledge and communicate the results of our academic research to a wider public audience. *The History of African Development* textbook is the outcome of a collective project that ties our expertise together in a single and freely accessible 'open source' textbook.

The chapters of this book all deal with a specific topic and are written by an author with specific expertise. Some of the views of the authors are open to debate and there is nothing wrong with this. In fact, without discussion, science would not make much progress. Therefore, we encourage students not only to read these texts (as consumers) but also to discuss these texts (as critical users). The chapters are written in such a way that they can be used in courses that deal with, or touch upon, African history, African development studies or economics and politics. We have taken care to keep the chapters to a limited length (c. 5.000 words) and used a lot of tables, maps, graphs and pictures to enrich the reading experience. Every chapter contains a brief list of suggested reading materials and ends with five discussion questions, which can be used to test your comprehension of the read contents.

The authors have all contributed voluntarily to this book because we believe in the added value of studying history for obtaining a deeper understanding of present-day development issues. We also believe that more people with a deeper understanding of development issues, increase chances of creating a better world, a world with less poverty, lower inequality and a world governed by wise leaders that prioritize social interests over private ones.

Chapter 1

What is 'Development'?

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1. Defining 'development'

Before we can discuss 'African development' we first need to know what the word 'development' means. Unfortunately, there does not exist a single, universally accepted, definition of 'development'. Development is an abstract concept, the meaning of which is far more difficult to grasp than something tangible like a bicycle, a pair of shoes or your teacher. If you would ask five people what the word 'development' means, it is likely that you will get five very different answers. One thing is clear though, the word 'development' refers to *some kind of process of change that occurs over time*.

To be more specific about the way we use the term 'development' in this textbook we make a distinction between '*human* development' and other categories of development such as '*political* development', '*economic* development', '*social* development' or '*cultural* development'. Although all these categories are related, the term '*human* development' emphasizes aspects of development that are of direct importance to people. This emphasis appears in the following definition offered by the United Nations:

"*The basic objective of human development is to enlarge the range of people's choices to make development more democratic and participatory*." (UN, 2011).

Nobel Prize winner Amartya Sen has defined development along similar lines. According to Sen development can be regarded as "*a process of expanding the freedoms that people enjoy*" (2000, 3). Development thus depends on the ability and capacity of people to make choices in their personal and social lives. The process of expanding peoples freedoms requires removing many different kinds of material and immaterial barriers to freedom, such as poverty, insecurity, or unaccountable government, but also a lack of good infrastructure complicating physical mobility or a lack of access to safe drinking water, food or electricity. In Sen's understanding of development, the *freedom* that people enjoy to decide over the course of their own lives is essential. Economic or political developments are also important, but mainly because they create particular conditions for achieving the higher aim of human freedom.

Although the focus on people's freedom of choice gives us a more specific idea of how to define 'development', there remain a lot of questions about the meaning of *development as freedom*. First of all, when we talk about 'freedom', or 'liberty', it is important to know to whom this applies. Few people will actually think that the ideal of human freedom should be pursued under all circumstances. For instance, parents will restrict the 'freedom' of their children until they have reached a certain degree of maturity. If they wouldn't protect their children by limiting their freedom, chances are high that children will not survive. Moreover, what constitutes freedom for one person, family or community, often implies a reduction of freedom for others. If I allow myself the freedom to eat all the food on the table, there will be nothing left for my family members. And what about the 'freedom' of humans versus other living creatures, such as plants and animals? Indeed, freedom and un-freedom go hand in hand: if we agree that all people have a basic right to free medical care, we simultaneously claim that doctors have a duty to assist us.

The idea that human freedom is almost always distributed unequally among members of any type of group or society, is best captured in another abstract term: 'human agency'. Human agency refers to the capacity of humans to act. This capacity is largely restricted by natural forces, many of which humans are not able to control or manipulate. But agency can also be restricted by economic, social or political structures or institutions (rules, see for further explanation below), that go beyond the control of the individual. An important example of the latter type of man-made restrictions is gender inequality. In a situation of gender inequality, the agency of women is restricted in favour of the agency of man. There are many societies in today's world where gender inequality is supported by cultural norms, values, religious institutes or even by state law. Hence, if we care about human development, and we agree that it is about expanding the freedoms all people enjoy, than the pursuit of gender equality by supporting female agency is very important.

2. Institutions

Organizations such as states, families, schools and sports clubs create rules that coordinate and distribute the rights and duties of their members. States may provide free primary education to people, but also oblige them to preserve part of their later income for taxes to finance these schools. Such rules are subject to public discussion and political debate. Even between two neighbour village families there may exist very different rules about how their members allocate household labour and shared resources.

We call rules that regulate the behaviour of people 'institutions'. Institutions include formal rules such as laws that are written down on paper, but also informal rules, codes of conduct that are adopted by many but not formally included in codified law. The institutions that govern people's behaviour are inspired by different conceptions of what people believe to be 'normal' or 'appropriate' and what they see as 'ab-normal' or 'inappropriate'. In more simple terms, we can define institutions as the ‘rules of the game’: without such rules it is impossible for people to live together in peace and harmony.

But for people living together it is not only important to have rules. It is equally important to have mechanisms to control and enforce these rules. Rules can only function in practice if people who disobey the rules are corrected. For instance, in a soccer game the referee has the power to correct the behaviour of players and make sure that the match is played under fair conditions. The referee cannot change the rules of the game, he/she can only make sure that they are applied when the game is played. People can only start to trust institutions if the abuse of rules is constrained. If people trust that the rules will be obeyed they feel more secure and they become more likely to invest in their businesses, or to pay taxes to their government. Indeed, if state authorities commit themselves to uphold institutions and secure the rule of law, then this also implies that they fight corruption and punish people who abuse political power for personal gain.

There is no society in the world where institutions, including the systems of control, are set up in a perfect way. National laws, or social codes, always favour some interests over others. But if societies and politicians have to balance the rights and duties of people, it would be helpful if we rank the various aspects of human freedom in order of importance. This is more difficult than you may think it is. How would you rank, for instance, such basic necessities as access to water, access to food, protection against violence, access to health care, access to electricity, free public education, political representation or internet access? Can we make a list? And even if we were able to agree on the priorities, would we then also be able to agree on the best ways to achieve those priorities? Should the government take money from family Y and give it to family X? Or should private property be protected at the expense of economic inequality? Indeed, any ranking of development priorities is informed by notions of ‘equality’ and ‘inequality’.

3. Human development and the ‘poverty trap’

Poverty is regarded as one of the most important barriers to human development, because poor people have limited access to a large range of basic commodities and services. A lack of access to education, health care or internet reduces their chances to make *sustainable* improvements in their living conditions. The impossibility to escape from poverty is referred to as the ‘poverty trap’. The poverty trap can operate both at the *micro-level* of the family as well as the *macro-level* of countries or regions. To see how this trap works, you may consider that health is important for earning an income. But at the same time, income is an important means to get access to sanitation, medicines and health care. We call such a relationship between health and income a ‘reciprocal’ relationship.

Reciprocity is essential to understand how people can become trapped in a situation of poverty. To reduce poverty the income levels of the poor need to be raised and, simultaneously, their access to important services should be structurally improved to prevent them from falling back into poverty.

This reciprocity is the main reason why economic growth is a *necessary condition* for human development (and poverty reduction), but not a *sufficient condition*.

Scientists and international organizations have developed so-called composite indices to measure human development at a national level. The most famous of these indicators is the *Human Development Index* (HDI) constructed by the United Nations. This index does not only look at average levels of income, but also at access to education and conditions of human health. The Human Development Index thus offers a broader picture of human development than income levels alone.

Many African countries rank at the bottom of the HDI not only because of low income levels, but also because of the limited access to education and health care of the poor. Table 1 shows the ten countries at the top and the bottom of the HDI in 2020. The table shows that the bottom 10 countries of the HDI are all in Africa. But there is also some good news. In the past two decades many African countries have made significant progress in all three domains of the HDI, that is average income levels have been on the rise, access to education has widened and life expectancies have risen, despite the HIV/AIDS-epidemics and the recent Covid-19 crisis. These developments have not led to a decline in inequality though. In many African countries income inequality has remained very high. In other words, the conditions to make free choices have improved for some Africans, but certainly not for all.

Table 1: The top 10 and bottom 10 countries of the UN Human Development Index 2020

Rank	Country	HDI	Rank	Country	HDI
1	Norway	0.957	180	Eritrea	0.459
2	Ireland	0.955	181	Mozambique	0.456
3	Switzerland	0.955	182	Burkina Faso	0.452
4	Hong Kong, China	0.949	183	Sierra Leone	0.452
5	Iceland	0.949	184	Mali	0.434
6	Germany	0.947	185	Burundi	0.433
7	Sweden	0.945	186	South Sudan	0.433
8	Australia	0.944	187	Chad	0.398
9	Netherlands	0.944	188	Central African Republic	0.397
10	Denmark	0.940	189	Niger	0.394

Source: United Nations (2020).

One of the reasons for the low scores of African countries on the HDI is that many African states still fail to support the provision of basic public services such as health care, infrastructure and education. If states want to enhance the access of citizens to public services they require solid fiscal systems (for financing public services) and effective bureaucracies (for coordinating these investments). This is just one example of the crucial importance of 'good institutions' for human development. However, African states do not always act in the interest of the poor.

The poverty trap is not only caused by a lack of material wealth, but also by a lack of opportunities to raise intellectual (immaterial) wealth. There are enormous advantages to knowing how to read and write (literacy) and to knowing how to count and calculate (numeracy). Education also increases the chances of people to find a job that earns a decent income. In virtually every society there is a strong relationship between income levels and education. Indeed, the question of African poverty does not only involve income levels, but also involves access to education, health care and many other conditions that help people to escape the poverty trap and improve their agency.

Farmers often suffer from poverty because their crops do not generate sufficient income.

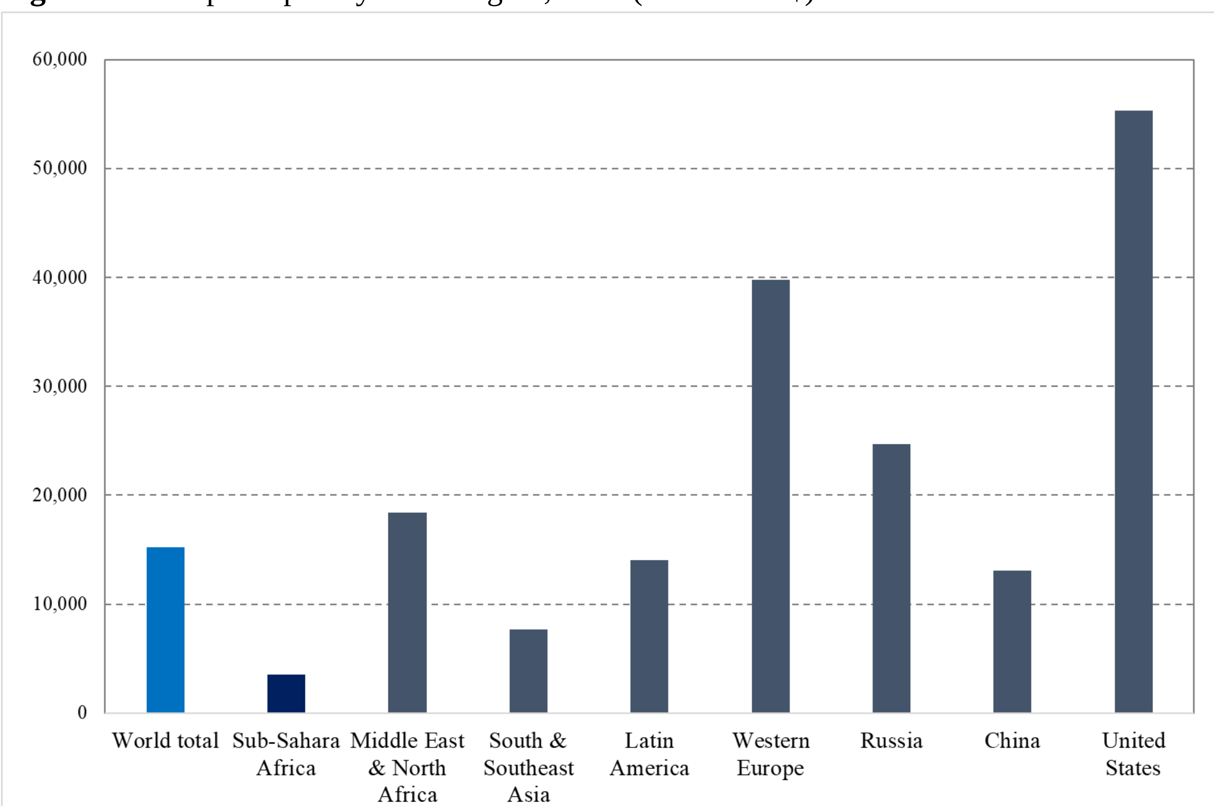
4. Economic growth in Africa

Since increasing income is one of the keys to reduce poverty, it is important to look at how average incomes of African peoples have evolved in the long-run. Economists study the relative wealth of countries with the help of so-called national income accounts. 'National income' refers to the total value of all income earned, or the total value of all the commodities and services produced, in a particular country and in a particular period of time (usually one calendar year). To estimate average income levels, national income is divided by the total population to obtain 'average income per capita'. In academic literature and media reports national income is commonly referred to as GDP (Gross Domestic Product). The *national income* earned in a society is more or less equal to the total value of *domestic production*.

In Figure 1 we compare the *GDP per capita* figures of Sub-Sahara Africa in 2018 with other world regions. These GDP data are expressed in US dollars with a constant value, that is, US dollars valued at 2011 price-levels. Figure 1 shows that Sub-Sahara Africa is the poorest region of the world. Africa is much poorer than Western Europe or the US, where average annual incomes often exceed $40,000. But also compared to the average levels of Asian and Latin American GDP per capita, African income levels lag behind. Average incomes in Sub-Sahara Africa are ca. $3,500.

Yet, there are some reasons to believe that Africa is richer than figure 1 actually suggests. National income accounts tend to include the income that is earned via market transactions, that is, the value of goods and services that receive a price in the market and whose exchange is recorded by national statistical offices. A lot of economic activity that is taking place within households, the farm or the village community does not involve market transactions. These activities, that are central to the lives of many Africans (and especially the African poor) tend to be excluded from official statistics and if we would include these activities GDP would be higher. However, whereas the average African may be richer than suggested in this graph, there is no doubt that Africa remains the region with the largest share of poor people in the world. According to World Bank estimates ca. 40 percent of all Africans are living on less than 1.90$ a day. This is regarded as extreme poverty and it is visible in virtually every country south of the Sahara.

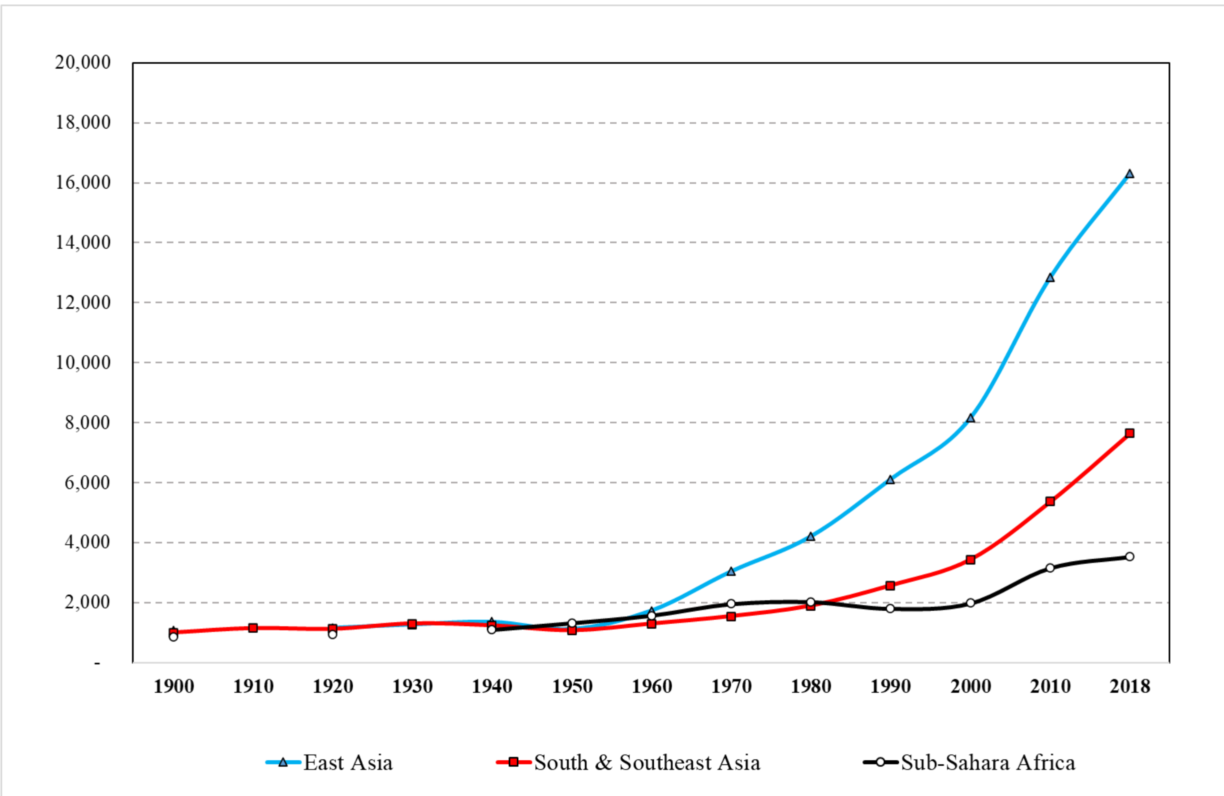
Figure 1: GDP per capita by world region, 2018 (in 2011 US$)



Source: Maddison Project Database, v. 2020.

That the average African today is poorer than the average world citizen does not mean that this has always been the case. A large part of the gap between Africa and other developing regions has emerged during the final three decades of the 20th century. Figure 2 shows the development of GDP per capita in Sub-Sahara Africa, South and Southeast Asia & East Asia 1900 to 2018. Up to circa 1960 the income levels of Africa and Asia were comparable, around $1,500 per person per year expressed in US$ at price levels of 2011. Indeed, small-holder farmers or urban dwellers in Africa were not necessarily poorer than their colleagues in India or China. Japan was the only Asian country that was considerably richer in 1960. In the 1980s the Chinese economy also began to grow at very high rates. Today, the average Chinese is considerably richer than the average African. Especially after 1980, African economies have also lost much ground compared to economies in South and Southeast Asia, which includes large countries such as India and Indonesia.

Figure 2: GDP per capita (USD) of Sub-Sahara Africa, East Asia and South & Southeast Asia, 1900-2018



Source: Maddison Project Database, v. 2020.

Why did African incomes not rise in a similar way as Asian incomes? There exists no simple answer to this big and important question. As we have stated in the introduction of this textbook, we cannot even begin to think about an answer without looking at different episodes in African history. Many African economies stagnated, or even collapsed, in the period between 1975 and 2000. Of all 52 African countries for which data exist, 29 countries have experienced negative growth rates in the last quarter of the 20th century, which means that in more than half of all African countries the economy contracted.

The deeper causes of this economic collapse must be traced further back in history. What we know for sure is that there are multiple causes for Africa's growth collapse and that these causes are interrelated. To give one example of 'multi-causality': many African economies were suffering from declining world market prices of their export commodities since the early 1970s. The prices of coffee, cotton, cocoa and minerals, like copper ore, fell sharply compared to the prices of imported manufactured products. At the same time African governments accumulated huge debts on loans that they were unable to pay back. The African debt crises was thus reinforced by declining export and custom revenues.

This period also saw a rise in the number of violent conflicts in the region. Different ethnic or social groups were fighting for political influence or access to valuable economic resources such as diamonds (Sierra Leone), oil (Sudan), land (Rwanda) or coltan (Democratic Republic of Congo). In times of war, the economy loses and in some cases military conflict can even lead to famines, as in the case of Ethiopia in the mid-1980s and in Somalia and Sudan in more recent years. Not all African economies fared badly though. Oil producing countries, such as Equatorial Guinea and Gabon, benefitted from rising world oil prices and the economy of Botswana and Mauritius experienced rapid economic growth in the last decades of the 20th century.

When we take a closer look at the determinants of African economic growth in the second part of the 20th century there are at least two factors that set large parts of Africa apart from other developing regions. The first is that labour productivity in agriculture, (still) the largest sector in most African economies, has not risen in the same way as it did in large parts of Asia or Latin America. Many African countries became net food importers after 1970, whereas many Asian countries gained self-sufficiency in food production or even became large net exporters of food crops. Africa has missed the benefits from the so-called "green revolution", by failing to implement a range of technological advances in the production of staple foods such as wheat, rice and maize.

The second factor is that Africa has experienced a rather slow process of structural change. Structural change refers to the transformation of production processes from low value added activities towards high value added activities. The development of manufacturing industries is a crucial part of structural change. Manufacturing industries tend to produce more output per worker than agricultural industries and thus have the potential to raise average income levels. A large part of the economic growth in Asia has been caused by rapid industrialisation. Countries like Japan, South Korea, Taiwan, Malaysia, Thailand, Indonesia and Vietnam produce a vast range of manufactured commodities and sell these products across the globe, especially to wealthy consumers in Europe and North America, but increasingly also to emerging African middle class consumers. These commodities consists of textiles, shoes, electronics, cars, toys, furniture and many, many other items.

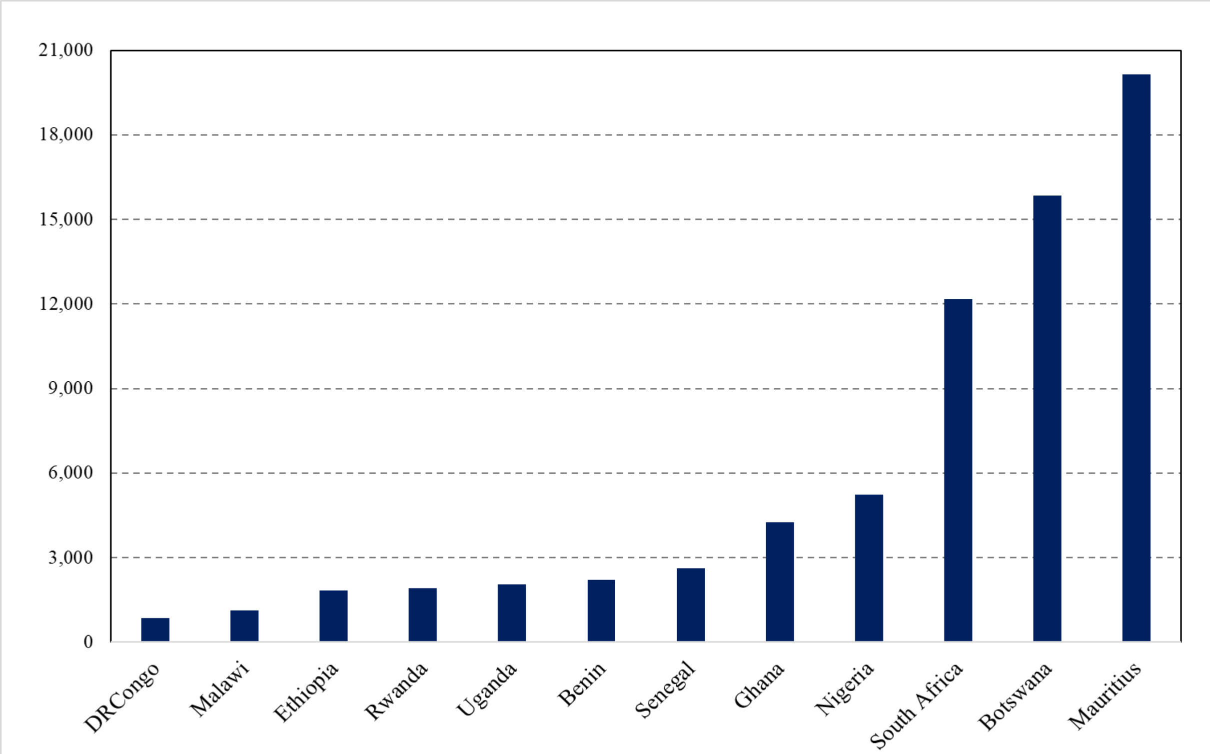
With the exception of Japan, most Asian countries underwent a structural change of their economies during the second half of the 20th century and this process is still on-going. Also in Latin America industrializing countries such as Brazil, Chile and Mexico have managed to raise labour productivity levels on the basis of structural change. The result is that in countries like China and Brazil the number of extremely poor people (those who live on $1.90 per day) has declined rapidly. Structural change also makes economies more stable, because it implies a *diversification* of productive activities: a larger range of economic activities spreads the opportunities for job growth and reduces the risk of a total collapse of the economy.

5. Current African economic development

Behind the broad generalizations of African economic development in a global perspective, there has been a huge variation of growth experiences *within* Africa. After all, Africa consists of more than 50 countries, and these have experienced varying phases of growth and contraction over time. This intra-African variation is reflected in the GDP per capita presented in Figure 3. It shows a selection of African countries with income levels below and above $3,000. Among the lower income countries are the DRC (Congo), Malawi, Ethiopia, Rwanda, Uganda and Benin. At the higher end of the income distribution we find countries such as South Africa, Botswana and Mauritius. Senegal, Ghana and Nigeria are somewhere in between. One of the explanations for these large gaps in GDP per capita is that among the higher income countries in Africa there are quite a few countries with large reserves of mineral resources such as oil, gold or diamonds. But mineral resource wealth does not explain everything. Nigeria is a major oil-exporting country as well, yet it's average income level is far lower than Mauritius, which does not export any oil or precious metals.

Notwithstanding the large income gaps, the majority of African economies has experienced a period of rapid economic growth between 1995 and 2015. In recent years, however, growth slowed down again, amongst others due to falling world market prices for African export commodities (including oil) and the Covid-19 pandemic. Some countries such as Ethiopia and Rwanda recorded yearly growth rates between 5 and 10 percent, which is in line with growth rates recorded in Asia and Latin America in the past decades. These growth rates are also much higher than in the advanced economies of Western Europe and North America. These rates of GDP growth led to high rates of GDP *per capita* growth, as population growth rates were lower than 2 percent per year. However, we need to keep in mind that these countries were growing from very low initial levels and are still considered to be very poor by global standards.

Figure 3: GDP per capita in a selection of African countries, 2018



Source: Maddison Project Database, v. 2020.

It is not clear to which extent the poorest Africans have benefitted from the growth revival, and whether these rates can be sustained in the coming decades. African economic growth has not been driven by a rapid development of manufacturing industries like in Asia and Latin America. The recent wave of growth is mainly driven by increasing exports of tropical cash crops (tea, tobacco, cocoa, coffee, palm oil etc.) and mineral resources such as metal ores, oil and gold. In some countries the fruits of these increasing trade revenues have directly accrued to farmers or wage workers. In other cases the profits have disappeared in the pockets of a few mega-rich families or foreign firms who have managed to monopolize the most profitable sectors of the economy, such as the oil sector.

One of the biggest disadvantages of GDP per capita as a measure of welfare is that it does not show how income is distributed among people. Figures 1 to 3 have presented *average* incomes. These averages do not represent the actual incomes of most people, because incomes are not equally distributed. The poorest people make a living of perhaps as little as $1.5 a day, which is about $500 a year. For this reason it is important to not focus only on economic growth, but also on the broader concept of economic development, including the distribution of income.

6. From economic growth to economic development

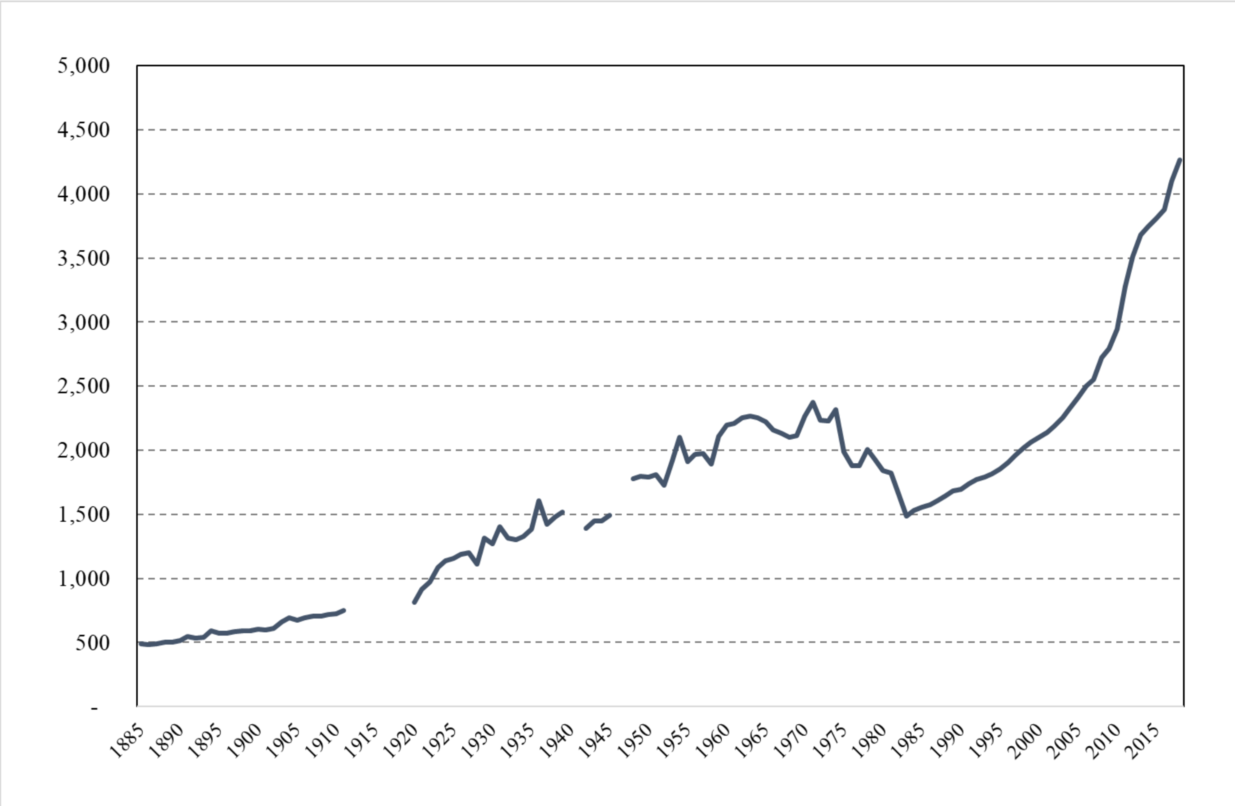
Economic growth is an essential condition for economic development, and eventually, also for human development. But what is the difference between economic growth and economic development? The first thing to remember is that economic growth is part of a process of economic development, but that the latter includes a wider range of changes in the economy. Economic development is economic growth that is accompanied by structural change and diversification. Diversification means that the range of productive activities widens. Diversification leads to an increase in the number of jobs and is usually also accompanied by an increase in labour productivity. Labour productivity refers to the level of production (output) per worker. And if labour becomes more productive, their incomes will rise.

Ideally, economic development includes a process of economic expansion that is sustainable over time (a permanent improvement of income levels) and allows broad participation (it is inclusive). Unlike economic growth, economic development encapsulates the possibility to reduce poverty in a structural way. To see how economic growth can contribute to economic development it is useful to make a distinction between *extensive* growth and *intensive* growth. Extensive growth is economic growth as result of adding more resources (inputs) to the system of production. You can think of extra labour hours, extra raw materials, more land or more machines, transport equipment or infrastructure (capital goods). Intensive growth is the result of producing in a more efficient way. Efficiency means that you can produce more with the same (or even less) resources than before. Intensive growth is thus driven by productivity growth. To increase productivity workers have to become better trained and production systems have to incorporate better technology.

A simple example of productivity growth is the following: suppose you have to move 10 heavy bags of rice from one village to another over a distance of 10 kilometre. You walk every day back and forth with one bag. After 10 days you have completed the job. Motor car technology (combustion engine, axes, metal etcetera) will allow you to move the bags in a much more efficient manner. You can drive up and down in perhaps less than one hour, instead of walking ten days! However, to have the car carry the rice bags, you need to have a driver who is trained to drive the car and an investor who owns a car for rent. Indeed, the combination of investments in capital, human skills, knowledge and technology is essential for achieving intensive growth. These are the key determinants of what Nobel Prize winner Simon Kuznets has called 'modern economic growth'. Modern economic growth leads to a sustained rise in GDP per capita, a sustained reduction of poverty rates and a structural transformation of the economy because people become more productive.

African history has witnessed several phases of economic growth, and in some places and periods even strong economic growth. However, most of this growth has been extensive growth. African growth has especially been driven by the sale of natural resources, or even people in the form of slaves. Economic development has lagged behind. Without productivity growth and structural change phases of extensive growth will always be followed by phases of stagnation or decline. Figure 4 shows the long term trend of GDP per capita in Ghana - also known as the Gold Coast in the colonial era. You can see a very rapid rise between 1900 and 1930. In these years the Gold Coast economy experienced a cocoa-boom. Many cocoa-farmers and people working on the railways and in the harbours benefitted. Export revenues and wages rose. The colonial government received increasing amounts of tax money and re-invested part of this money in railways and public schools. The Gold Coast quickly became one of the richest countries in Sub-Sahara Africa.

Figure 4: GDP per capita in Ghana, 1885-2018



Sources: Broadberry and Gardner (2021) (1885-1950); Maddison Project Database, v. 2020 (1950-2018).

However, with the collapse of world market prices for cocoa in the 1930s and again in the 1970s, it became clear that much of the gains were temporary. Ghana's economy was dependent on cocoa, and had insufficiently diversified into other economic activities. When an economy depends so heavily on world market prices income levels can be highly volatile. Ghana's government revenues suffered as custom duties declined and the state became increasingly indebted. Ghana's integration in the world economy (globalisation) thus had a large impact on the lives of its citizens, for better or worse. The only way for societies to strengthen their position in the world economy is to turn from extensive to intensive growth. Ghana is currently diversifying its exports from cocoa towards gold, oil and tropical hardwood, which is by itself not a bad strategy. Yet, all of these export products are still natural-resource based commodities. These exports can only form a basis for sustainable economic growth in the future if the money that is earned with these exports is re-invested in health, education, infrastructure and economic activities that create more jobs and labour productivity growth.

7. Conclusion

The central question of this chapter was: what is development? We have seen that the term ‘development’ is not so easy to define and that it is subject to different types of interpretation. In the definition of ‘human development’, the idea of *expanding the freedoms that people enjoy* is crucial. But human freedom is not just an aim in itself, it is also often a means towards achieving more of it. If people are not in a position to use their talents, to acquire skills and knowledge or to reap the benefit from their entrepreneurship, economic growth cannot be sustained in the long run. Freedom is not something that is given, it is both secured and constrained by rules. We have called such rules institutions and distinguished between formal institutions (e.g. laws) and informal institutions (e.g. social behaviour). Political authorities design many of the formal rules of the game in the economy and are also responsible for controlling and maintaining the rule of law. To enhance the freedom of people to make their own economic decisions it is necessary that governments offer a minimal degree of security to people and that, in turn, people have a minimum degree of trust in the way their rulers guarantee security. Only under such conditions are people likely to make investments that may enhance their welfare in the long term. This is not the place to further discuss the various institutions that are needed to achieve intensive growth, but in other chapters of this textbook we will address the role of institutions in more detail.

Study questions

1. Human development differs from economic development or political development. Can you describe the most important differences?
2. What are, in your view, the most important elements of human freedom? Can you also indicate how some of these elements contain aspects of un-freedom?
3. What are *institutions* and why are they important? Can you think of institutions that are typical for Africa, your country, or your family?
4. Can you mention two differences between the long-term paths of economic growth in Africa and Asia?
5. Economic growth is often considered a *necessary condition* for ‘development’, but not a *sufficient condition*. Can you explain what is meant by this?

Discussion exercise

Divide the class into sub-groups of 3-5 students. Let each group discuss what they believe to be the three most important barriers to human freedom in their country and rank these in order of importance. One student per group will be asked to present the list and offer a short discussion of the arguments in support of their choices.

Suggested readings

Broadberry, Stephen, and Leigh Gardner (2021). Economic growth in Sub-Saharan Africa, 18852008: Evidence from eight countries. *Explorations in Economic History*, 101424.

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About the author

Ewout Frankema is the chair of the Rural and Environmental History Group at Wageningen University, editor-in-chief of the *Journal of Global History* and research fellow of the UK Centre for Economic Policy Research (CEPR). His research agenda focuses on a deeper understanding of the long-term comparative economic development of developing regions (Africa, Latin America, Asia) and the historical origins and nature of present-day global inequality. He has taught courses in history, economics and development studies at the University of Groningen, Utrecht University, Wageningen University, and offered guest lectures at universities in Benin, Uruguay, Uganda, Spain, Sweden and the UK

Chapter 2

Production Systems in Pre-colonial Africa

Erik Green
Lund University

1. Introduction

How did Africans organize production in order to sustain their livelihoods or occasionally produce a surplus in pre-colonial Africa? In this chapter we will investigate this broad question. The chapter will show that Africans were innovative and adaptable to changing circumstances. At the same time, the opportunity to establish systems that would generate sustain surplus production was in most times and most places hampered by prevailing factor endowments (i.e. the relative supply of land, labour and capital), geography and the disease environment.

People in pre-colonial Africa were engaged in hunting and gathering, agriculture, mining and simple manufacturing. Agriculture involved most people, so the chapter looks mainly at farming activities. The chapter explains that farmers in those days faced two big challenges: a hostile environment and scarcity of labour. In many regions the environmental conditions were unfavourable for production. And almost all regions suffered from a shortage of labour. We will, however, see that there were many different systems of production in pre-colonial Africa, to suit the variety of conditions the people faced.

The production systems had to be flexible to deal with the existing conditions. Pre-colonial Africans could make an impression on nature. As a Malawian proverb says: 'It is people who make the world: the bush has wounds and scars.' They were not, however, able to *transform* nature on a large scale, since economic development was not far advanced in the pre-colonial period. Without modern machinery such as tractors, and modern inputs such as chemical fertilisers and pesticides, they were to a large extent at the mercy of the land and the weather. Minor temporary changes in conditions could have severe effects on people's livelihood, for example, two weeks' delay in the rains could reduce the crop yield by one third.

The chapter does not capture all spatial and temporal differences in economic activities in pre-colonial Africa. What it aims to do is to focus on some of the major differences in production systems and the key factors that can explain why the systems developed as they did. It begins with outlining the factors that affected production and how these were organized. It then discusses the economic activities in the different ecological zones found in Africa. This is followed by a section that discusses specialization, adaptation and crises.

2. Conditions for production in pre-colonial Africa

Looking at the geography of the continent enables us to understand other factors that affected production. Map 1 shows the five main ecological regions in Africa. These are the tropical rain forest, the savannah, the highlands, the deserts and the temperate zones. The last two produced very little in pre-colonial times. The deserts are huge but have always been very scarcely populated. The temperate zones include only the southern tip of Africa and in pre-colonial times these were populated only by a small number of pastoralists and hunter-gatherers. So the rest of this chapter discusses the first three regions – forests, savannah and highlands – as these are the ones most relevant to our study of production. Before we do that, however, let us first provide a very brief summary of some of the generic conditions affecting economic activities in pre-colonial Africa.

Scholars have not been able to conclusively identify to origins and diffusion of food production in Africa, but the origin of food production in West Africa did not lag far behind that of the Near East. Food production using iron tools is believed to have spread across Africa through the Bantu migration that began c. 1000 BC. Population density was low in most regions and at most times in pre-colonial Africa. Because people were widely spread out, land was in abundance but labour was scarce. Conflicts over land seldom developed and there were no economic incentives to give people property rights to land. In these vast African landscapes, pastoralists could move freely in search of grazing land without coming into conflict with the settled farming communities. And the abundance of land meant that the farmers could use extensive agricultural methods. This means that they did not use a lot of inputs to keep the land fertile. Once land was exhausted, or they wanted to increase yields, they opened a new field.

What held up production, then, was not an insufficient supply of land but an insufficient supply of manpower. Plenty of strong young people were needed to work the land and open new fields. Without a big labour force, farmers were limited in their use of extensive agriculture. Shifting cultivation and land rotation (instead of crop rotation) was common. Labour was very valuable, and institutions that regulated the use of labour, such as the family, kinship systems and slavery, played a crucial role in Africa's pre-colonial economic history.

The African environment was in many ways more severely hostile than that of other continents. Two factors that limited exploitation of the natural resources were the generally thin soils, animal diseases and crop pests. Soil quality obviously differed from region to region, but we have no reason to assume that it was low overall. The problem was that in most regions of pre-colonial Africa the soil nutrients were concentrated in the topsoil. This meant that the good soil was vulnerable to erosion, and its fertility was severely depleted when the land was exposed to wind and heavy rain. Another problem was that the thin topsoil made plough agriculture inefficient, because turning up the soil with a plough would bring the less fertile soils to the surface. This is one reason why the plough was used in only a few regions of pre-colonial Africa. Summing up, farmers had to work with – land that was of fairly good quality in most regions, but with fragile soils that were difficult to exploit.

The other limiting factor, diseases and pests, restricted what animals could be kept and what crops could be grown. Sleeping sickness (trypanosomiasis) and rinderpest effectively prevented livestock rearing in many places, and swarms of locusts could devastate crops. Animal diseases could wipe out herds, so stock loss was a constant threat to the growth of pastoral and agropastoral societies. These diseases also affected agricultural societies by limiting crop production, because where disease was endemic the farmers could not keep cattle and thus did not have manure to use as fertiliser for their crops. And there was another factor that limited crop production – a factor that farmers in those days could not have known about. If you look at a world map, you will see that geographically the continent of Africa is aligned along longitudes rather than along latitudes. It is a botanical fact that species tend to diffuse more successfully along latitudes than along longitudes. In other words, if you travel east or west you will see more variety of plant species than if you travel north or south. This meant that the domestic crop repertoire – in other words, the range of different crops for human and animal use – was relatively poor in Africa. So there was a limit to how many new crops farmers could introduce to enhance productivity.

As we shall see in the next three sections the various ecological regions offered its own specific conditions for production. This helps to explain the great variety of production systems that existed in pre-colonial Africa. As we have noted above, Africans were not passive victims of their situation. On the contrary, African agency is a key to understand how production systems developed and changed in pre-colonial Africa.

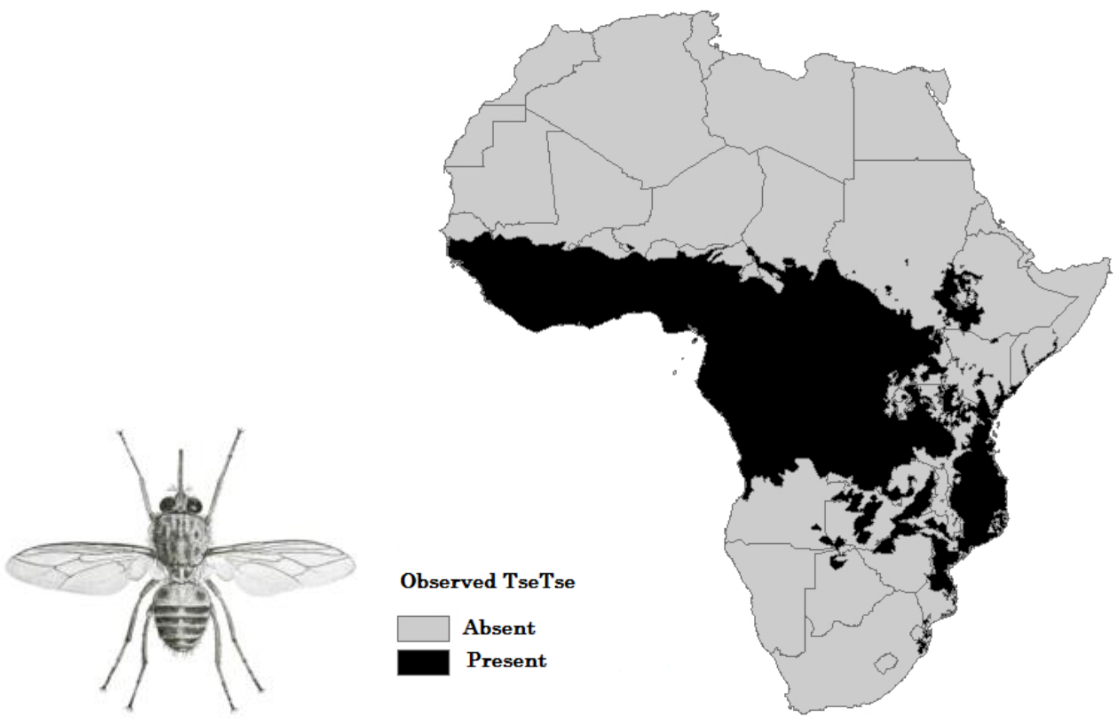
The tropical forest zones

Agriculture and mining were the two most important productive activities in the tropical forest zones during our period. In 1000 AD, the beginning of our period, West Africa was the main supplier of gold to Western Europe. This, however, was an exceptional case. The main economic activity in the forest region was agriculture.

The forest was both a blessing and a curse. Forest land, newly cleared with iron axes and digging sticks, was very fertile. Here people grew oil-palms, yams and plantains (a type of banana). These were labour saving crops that yielded well and were thus suitable for the labour-scarce economies of the forest zones. But the forest limited people's access to grazing land.. It meant also that plough agriculture could not develop, with no oxen to draw the plough. The forest also limited long distance trade, as goods had to be transported by human porters in the absence of pack animals.

The forest harboured mosquitoes and tsetse flies, especially along the rivers and streams. Map 2 shows the prevalence of the tsetse fly in Africa. It was found in west, central and parts of eastern Arica. And the presence of tsetse flies of course meant that people were infected with sleeping sickness, thus aggravating the scarcity of labour. Malaria was probably the biggest killer, but sleeping sickness was more prevalent. Although the tsetse fly carried trypanosomiasis that was fatal for humans, it was its effect on livestock that more profoundly impacted the pre-colonial economies. Tsetse flies also carried the animal trypanosomiasis parasite (also known as nagana) that is fatal to cattle and horses. The presence of tsetse flies prevented the development of pastoral or agro-pastoral systems in the forest zones. With no cattle, ploughs – one of the most important labour saving technologies in the pre-industrial age – could be introduced. It also impeded long-distance trade human porters had to be used to carry goods. This is one of the reasons why trans-Sahara trade for the West African economies as it was the only tsetse free transport route and camels could be used as carriers.

Figure 1: Tsetse distribution, 1973

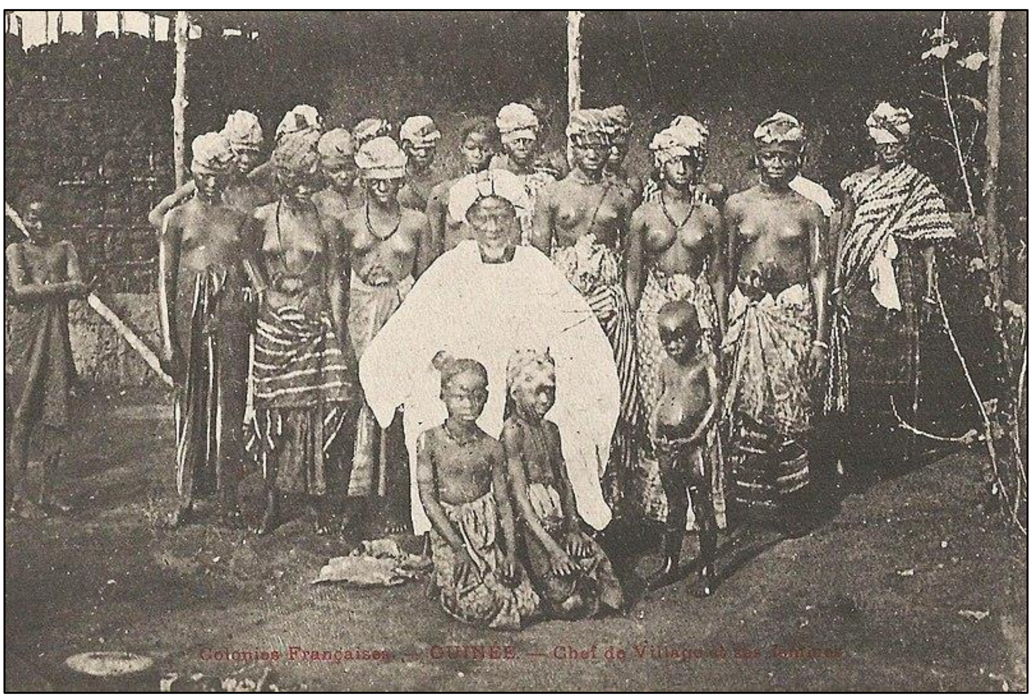


Source: Alsan, M. (2012). The Effect of the TseTse Fly on African Development. Unpublished manuscript Harvard University, p. 41.

Despite these problems, people settled in these areas, probably drawn there largely by the labour-saving fertility of the soil. Newly cleared forest land was very fertile and suitable for labour-saving crops that enabled many farmers in the forest regions to produce a surplus for the market. Clearance of forest land, however, required large initial investments to make it usable for planting. The occupation of the forest areas was a heavy task requiring many strong labourers. It has been estimated that to clear enough forest land to support one family in East Africa required up to 150 man-days of labour. The forest clearers were generally young men who worked in groups and then shared the land among themselves. Labour shortages can lead to social conflict.

The chronic labour shortages made competition over labour common, so institutions that regulated access to labour were of crucial importance. The family was the main source of labour for the farmers and social status was closely associated with the number of children a household was blessed with. Men competed intensely for women and tensions arose because of inequality in access to them. All societies in the forest zones observed the custom of bridewealth, by which the husband's family paid compensation to the bride's family for the loss of her fertility and labour. Forced marriages, abduction of women, and polygamy (having more than one wife) were all fairly common.

The ideal social organisation in the forest region was a large complex household headed by a 'Big Man' surrounded by his wives, married and unmarried sons, younger brothers, poor relations, other dependents, and numerous children. Labour was shared out in various ways between men and women, depending on the job. Women's share of agricultural labour varied. Heavy clearing work was usually a job for men, planting and weeding were for women, and peak activities like harvesting were for both. The children were used as soon as possible for domestic and farm labour.



Chief with his wives in Guinea, c. 1900. Source: Wikimedia.

The savannah

Land in the savannah was generally less fertile than land in the forest zones. But the environment was less hostile, so there was a better chance for agricultural, agropastoral and pastoral economies to develop, at least in southern Africa.

Farmers in the savannah mainly grew grain such as millet and sorghum. Millet was most common in the dryer savannah regions of West Africa and sorghum was most common in southern Africa. In the pre-colonial savannah regions the population was very unevenly distributed. Islands of intensive agriculture were isolated amidst huge areas of pasture and sparsely populated land. Not surprisingly, most of the densely populated areas were on lake shores, in river valleys or along the coast.

The densest population concentration was in the Great Lakes region of Central Africa. In this region farming was less labour-intensive than in the forest zones. Along the shores of the lakes it was not necessary to clear the land regularly to open up new areas for cultivation. Here people grew yams, sorghum and bananas. Bananas were important for the survival of the agricultural societies in this region. A banana grove could last for 50 years and produce food to support several people. In some areas farmers deliberately established groves by fertilising the soil with grass and manure carried there from pasture areas.

Like the people in the forest zones, the savannah people were constantly threatened by endemic diseases such as malaria. In the late 19th century, colonial doctors estimated that up to 20 percent of all young children living near the shores of Lake Nyasa (now known as Lake Malawi) died from malaria. Leprosy was common, especially in the humid areas, and smallpox posed a threat all over the savannah. Women in these agropastoral societies of the savannah played a bigger part in farm labour than the women in the forest zones. Men were mainly responsible for clearing land and taking care of the cattle, while women were in charge of all remaining tasks.

Because of this division of labour, men competed intensely for women, and bridewealth was, just as in the forest region, the common strategy to regulate the competition. Polygamous households were fairly common. The wealthier you were as a man the more wives were you able to marry. Occasionally, a poor man who lacked the means to pay bridewealth could still marry by working for his father-in-law, but he could not take his wife to his own village or gain control over her children. And again just as in the forest region, young men quite often resorted to capturing women through minor raids on neighbouring societies. But although women were valuable, and female labour was crucial to the survival of these societies, their status was low. Women often lacked access to land and in the unlikely case of a divorce they lost their rights to the children.

The highlands

The highlands are not one specific ecological region but are found in various regions in Africa. The most famous are the highlands of northern Tanzania, central Kenya and Ethiopia. We discuss the highlands separately because the socio-economic organisation of these areas was very different from that of the forest zones and the savannah. The well-watered highlands enabled Africans to develop systems of intensive agriculture. This can be compared with the extensive agricultural systems of the forest zones and savannah, where farmers used only minimal inputs and simply moved on when the soil became depleted.

Here in the highlands, instead of extending the frontiers of their lands, farmers worked on improving the land they had. They found methods to prevent the cultivated land from deteriorating over time. Some of these methods were terracing, manuring, mulching, and in a few places irrigation. Terracing was necessary to exploit the land on the hill slopes. The slope was cut into a series of receding flat levels, like steps. To keep the land productive, farmers protected the land from erosion by covering the topsoil with a layer of bark chips, or mulch. They increased its fertility by digging in animal manure, which added nutrients such as nitrogen to the soil. And a few farmers in the highlands took extra advantage of the many streams and rivers – they constructed irrigation furrows to lead the water to their land, ensuring that it was well watered throughout the year.

Intensive agriculture made it possible for populations to grow. So, unlike most other regions of pre-colonial Africa, the highlands were quite densely populated. For the people in the highlands, land and not labour was the scarce resource. Men and women commonly worked together in the fields, sowing and harvesting. Men were usually responsible for the heavier work, such as ploughing and construction of terraces. When extra labour was needed during the agricultural peak seasons, for jobs like clearing land and bringing in a big harvest, a farmer could arrange a work party of men from his village. After the work was done they would be invited to a feast where meat and beer were served. Women played a central role in the work parties, as they were in charge of cooking food and brewing beer. Households that could not provide a good spread of food and plenty of beer would be unlikely to get many villagers to help with their work.

The most prevalent sign of wealth was in fact not the size of a farmer's land but his control and ownership of terrace walls, irrigation canals, and other land conservation devices. Richer and wealthier farmers employed rural wage labourers, not to help with agriculture but to maintain the land and improve its quality.

The Ethiopian highlands deserve special mention, as this area was different from the rest of pre-colonial Africa because their use of ox-ploughs. The topsoil in Ethiopia was generally deeper than in other regions of Africa, making the use of ploughs beneficial. The biggest expansion of plough agriculture in Ethiopia took place between the 16th and early 20th centuries. Because the plough made farming more efficient, farmers in Ethiopia could produce a surplus, rather than just what they needed to survive. This in turn boosted their economy and made it possible to develop a centralised political system.

Ploughing with cattle in the Ethiopian highlands. Source: Wikimedia.

While people in the other highlands fought over the control of conservation and water resources, social conflict in the Ethiopian highlands was over oxen. And oxen were an important source of wealth. People gained access to and control of oxen through complex institutional arrangements of social cooperation, rental agreements and labour exchange. There was not enough land to raise sufficient livestock in the highlands. Instead, to acquire oxen the farmers in the Ethiopian highlands depended on regular market exchanges with the surrounding lowlands.

This brief summary above may give the impression that production systems in pre-colonial Africa were static. That was not the case. The most important economic change for our period, with notable long-term effects, was the introduction and spread of new crops. The introduction of rice, Asian Yams and banana plantains were important changes. We do not know the date for the introduction of these crops, but it most likely happened before the 16th century and via the Indian Ocean trade. Cassava and maize arrived to the African continent from the Americas. Scholars have called the introduction of maize an agricultural revolution in Africa. We do not know exactly when maize was introduced into Africa, but historical sources suggest that it was brought by missionaries and traders from Latin America to West Africa in the 16th century. This crop spread slowly. It became a major staple crop in sub-Saharan Africa only in the late 19th century. The introduction and spread of maize increased the productive capacity of Africa farmers, as the yields per hectare were far higher than the yields of crops like millet and sorghum. The downside was that maize is more vulnerable to unsuitable environments and bad weather. The production of maize in pre-colonial Africa probably fluctuated more than the production of other crops, in other words it varied more and was less reliable.

The introduction and spread of maize affected the ecological regions in different ways. In the forest zones of West Africa it was soon integrated as a major crop and stimulated farmers to create complex fallow systems in the 17th and 18th centuries. In these systems the land was rested between crops, or planted with a different crop, to allow it to recover its fertility. Maize provided the people in the forest region with much needed carbohydrates and thus enabled population growth. In the Ethiopian highlands, however, farmers did not adopt maize in this way, but treated as a garden crop throughout the pre-colonial period. Crops already being grown in these highlands satisfied people's demand for nutrients and so there was no incentive to invest in the risky business of cultivating a new crop like maize on a large scale. Women, and not men, were mostly in control of maize production in the highlands and the crop was sown on ground opened by hoe and not the plough.
Although subsistence agriculture played a major role in pre-colonial Africa it was not the only economic activity and that Africans were not producing for the market. Trade and economic specialization were important strategies to generate wealth in the various African societies.

3. Specialization, adaptation and crises

Two inter-related factors are important for understanding economic development over the centuries. One is the ability of the societies to adapt to changing circumstances. The other is their inability to avoid recurring crises such as disease, droughts and famines.

Let us look first at West Africa. The pre-colonial West African societies were more specialised than societies in the rest of Africa, and their specialisation seems to have increased over time. Trade and the use of slaves were far more developed in West Africa, in both the forest and the savannah regions. At first the gold trade dominated, but later the trades in copper and salt became more important. These valuable goods were used for long-distance trade across the Sahara desert. in the forest areas, gold mining developed in specific locations. Indigenous gold production was well established by the 13th century and gold was traded with the Islamic merchants on the East African coast. This trade was disrupted by the arrival of the Portuguese in the 16th century. The Portuguese wanted monopoly rights over the gold trade with Africans and thus waged war on the coastal Islamic traders. These wars, together with the rise of the Atlantic slave trade and the spread of diseases from Europe, led to a drastic decline in gold production. By the end of the 18th century gold mining and trade were only marginal activities in the region.

Further south, gold mining continued to be an important source of wealth. Estimates from 1800, for example, suggest that Great Zimbabwe had become the largest supplier of gold in the world.

Gold mining, however, did not do much to change the lives of ordinary people in pre-colonial Africa. It did not provide them with many job opportunities and the surplus was commonly controlled by the people in power, the political elite.

Aerial view of Great Zimbabwe's Great Enclosure. Source: Wikimedia.

Another kind of specialisation in West Africa was the development of commercial centres. New centres became important and older ones lost their importance as the types of trade and the goods traded changed over time. Hausaland, for example, was a leading regional centre in the 16th century. Hausaland was a collection of states situated between the Niger River and Lake Chad in what is modern day Nigeria. It grew in strength because of its successful engagement in the gold trade. But as the gold trade became less important in the 17th century, Hausaland was replaced as a major commercial centre by the Dahomey kingdom, in the area known today as Benin. This kingdom had become a key player in the growing trade in people as goods – in other words the slave trade. It grew richer and richer as it profited from the 17th century trans-Atlantic slave trade. The cities in southern and eastern Africa were seldom centres of trade and exchange. We might wonder why commercial centres were more common in West Africa. There are two possible answers. Perhaps people in West Africa could produce a much bigger surplus and this stimulated trade and specialisation. Or perhaps the larger population densities of West Africa decreased the cost of trading and this encouraged specialisation. Whatever the reason, it is clear that there was a significant difference between West African societies and systems and those of the rest of sub-Saharan Africa.

Most of the trade in pre-colonial Africa was not with countries beyond the continent but consisted of local exchange. Local trade was commonly highly organised. Market days rotated between different villages and in some cases the markets were organised on neutral land between the villages. Trade within regions was supported by regional currencies, such as small imported sea shells or locally produced cloth.

Despite the expansion of trade and specialisation, no society in pre-colonial Africa managed to escape the traps of recurrent crisis. From what we know about the forest and savannah regions, it seems likely that hunger was common, and famines occurred quite regularly. In the forest region it seems that one third of babies may have died in the first year of life and most likely an even larger proportion died during the next four years because of malaria and the widespread lack of animal milk.

The crises often had severe effects on the populations. At Cape Verde, for example, three well-documented great famines between 1773 and 1866 killed roughly 40 percent of the population. Desperate people responded to these major crises in the only ways that they could. In the history of southern Africa there are examples of people living on grass and in West Africa of people selling themselves as slaves. Diversification rather than specialisation was the most important strategy for coping with hunger crises and famines. People grew a variety of crops and tried, as far as possible, to exploit a variety of environments. Cultivation of drought-resistant crops like cassava continued to be an important strategy despite the spread of maize, and people invested in livestock even where there was a shortage of grazing land.

4. Pre-colonial Africa: between development and stagnation

The aim of this chapter has been to provide a very brief summary of the variety of economic activities in pre-colonial Africa. The three main ecological zones – forest, savannah and highlands – all experienced periods of economic growth and increased trade. New divisions of labour were introduced. People planted new crops and adopted or created new technologies. Complex arrangements of rules and customs came into being to regulate social cooperation and enhance production. Pre-colonial Africa was developing. At the same time, recurrent crises such as drought and famine meant that periods of development were seldom sustained over long periods. The obstacles were too huge to allow Africans, at their stage of economic and technological development, to move towards sustained wealth. Pre-colonial Africa faced greater economic and ecological challenges than many parts of the rest of the world. The continent thus began to lag behind as the rest of the world became steadily wealthier from the 18th century onward.

Study questions

1. Africa is commonly divided into five major ecological regions. Name them and explain why pastoral and agro-pastoral societies developed in the savannah but not in the forest region.
2. Bridewealth was an important practice that existed in most parts of pre-colonial Africa. Explain why the practice was so widespread.
3. The introduction of maize signified a major change in pre-colonial Africa. How and when did maize arrive to Africa? What are the major advantages and disadvantages of maize compared to indigenous African crops like sorghum and millet?
4. Explain why maize soon became a major staple crop in West Africa wand not in the Ethiopian highlands.
5. Trade and specialisation was more prominent in pre-colonial West Africa than the rest of sub-Saharan Africa. The chapter provides two explanations for these regional differences. Summarise the two explanations and discuss which one you think is most accurate.

Suggested readings

Alsan, Marcella (2015). The Effect of the TseTse Fly on African Development. *American Economic Review* 105(1): 382-410.

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About the author

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Chapter 3

The Slave Trades out of Africa

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1. Introduction

The institution of slavery is of ancient origin and we still today see both traces of slavery and legacies of historical slavery. Examples of the latter are the large populations of descendants of Africans in the Caribbean, the United States and Brazil, or Asian descendants in South Africa. Some of the earliest evidence of enslaved humans come from the Middle East and date from several thousand years ago. Over the following millennia, the institution of slavery waxed and waned in importance throughout the societies around the world. Slavery had a very large impact upon the African continent, not the least since many societies around the world came to acquire all or most of their slaves from Africa.

At the same time domestic slavery was a common feature in several African societies. Slavery in Africa was to a large extent transformed in the wake of the major growth and eventual abolition of the external slave trading, from around the 16th to the 19th century. The magnitude of Africa's external slave trades has been hotly disputed. Figures in the range of several tens – or even hundreds – of millions have sometimes been suggested. Many such claims are now generally recognized to have been vastly inflated. The impact of the external slave trades upon African demography and economic development was nonetheless substantial.

This chapter will in the following section first discuss the trans-Saharan, Red Sea and Indian Ocean slave trades. Section 3 focuses on the trans-Atlantic slave trade. Section 4 describes who the slave traders were. Section 5 highlights the main consequences of the external slave trades for the development of African societies. Finally, the chapter discusses the abolition of the slave trades, and what this meant for the African continent.

2. The Trans-Saharan, Red Sea and Indian Ocean slave trades

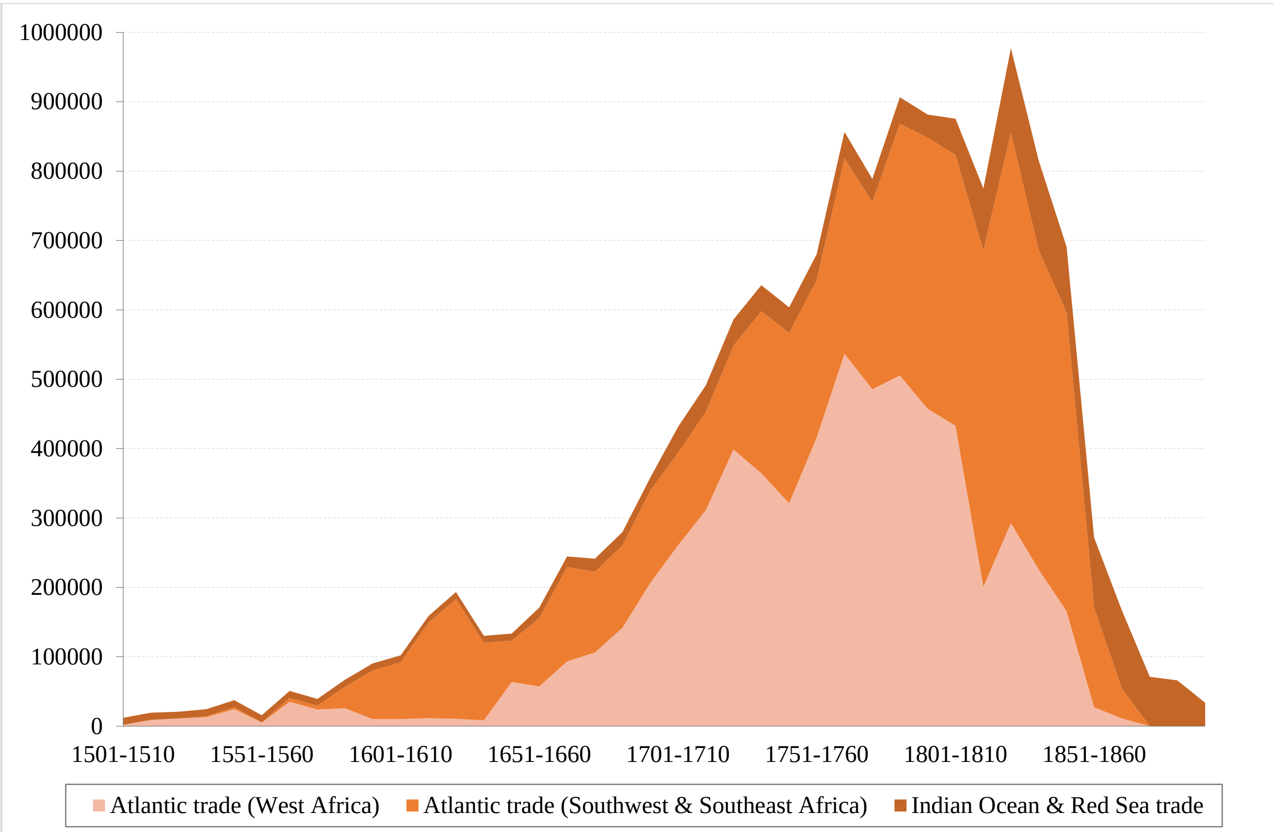
The slave trades north- and eastwards out of Africa have in the past not received as much attention as the slave trade to the Americas. There probably existed a trade in slaves from Africa to the Middle East since ancient times, but this might have been of a comparatively small magnitude, and therefore left few traces compared to the large diasporas of people of African descent that one can find in the Americas.

The militaristic expansion of Muslim caliphates in the Middle East and North Africa from the 7th century onwards, and later of the Ottoman Empire (an empire which from the 14th century onwards expanded from current-day Turkey to at its peak control much of the Balkans, the Middle East and North Africa), created large numbers of prisoners of war. These prisoners of war were in many cases enslaved. The slaves imported into the caliphates and the Ottoman Empire at first originated from many different parts of the world, including the Balkans, Central Asia and Sub-Saharan Africa. The slaves were exploited for a wide variety of purposes, including military service and manual or skilled labour for men, and household work or concubinage for women. Trading in African slaves started to increase following the Islamic conquest of North Africa from the 9th century onwards. While many of these enslaved people most probably remained in North Africa, some of them were potentially trafficked elsewhere, including most importantly to the Middle East. Once the expansion of the Ottoman Empire slowly stopped in the 17th century, fewer prisoners of war were taken. There was nonetheless still demand for coerced laborers in the empire. As a consequence, this stimulated the purchase of slaves particularly from Sub-Saharan Africa.

The magnitude of the Trans-Saharan, Red Sea and Indian Ocean slave trades are still not well-known. Vastly different figures have been suggested and numbers for the 650-1400 period can only be guessed at. However, scholars have suggested that it might have amounted to a couple of million people in total during this period. Figures possibly increased during the Muslim conquest of North Africa from around the 9th century, and then decreased again in the following centuries. More is certainly known about the slave trades from the 16th century onwards, but scholars do nonetheless not have an entirely clear picture of the magnitude of the Trans-Saharan, Red Sea and Indian Ocean slave trades. The most authoritative estimates by leading scholars in the field suggest that around 5 million people were trafficked from Sub-Saharan Africa during the period from the 16th to the 19th century. The vast majority of these slaves– about two-thirds of the total – were trafficked on the Trans-Saharan route, and were probably to a large extent purchased by slave-buyers in North Africa. These slaves would thus in reality have stayed on the African continent. It has therefore been argued that only a minor share of this trade should be labelled as “external” from the African continent.

Figure 1 shows how the magnitude of the trade on these routes, as well as the Atlantic trade, changed over time. In this figure, the Atlantic slave trade from West Africa and South-Western/South-Eastern Africa are reported separately as they exhibited quite different patterns over time. In total, the slave trades increased until the early 19th century. By the last decades of the 18th century, the trade had increased to around 900,000 people being shipped out of Africa per decade, i.e. almost 90,000 people per year. Overall, the trade peaked in the 1820s when close to one million people were coercively transported out of Africa. The figure also shows that the Indian Ocean and Red Sea trades were much smaller than the Atlantic slave trade. The Indian Ocean trade was furthermore most intense during the 19th century: perhaps as much as two-thirds of all slaves trafficked across the Indian Ocean were trafficked during the 19th century.

Figure 1: Magnitude of Africa's external slave trades (number of people trafficked per decade), 1500-1900



Sources: Red Sea and Indian Ocean Slave Trades estimates based on Lovejoy (2000); Manning (2010); Toledano (2011); Ware (2011) and Manning (2014); Atlantic slave trade based on Transatlantic Slave Trade Database, online at slavevoyages.org.

3. The Atlantic slave trade

The European colonization of the American continent after 1492 brought back slavery to centre stage of the early modern economy, from the 16th to the 18th century. The vast natural resources available in the "New World" created a large European demand for laborers to work on plantations and in mines. Many indigenous populations in the Americas had been almost completely wiped out by the European colonizer's military conquest and lethal germs. Too few Europeans were at the time desperate enough to accept the terms offered by landholders and other potential employers to migrate to the "New World" voluntarily to satisfy the demand, especially to the regions where labour demand was the highest – the tropical and sub-tropical zones of the Americas.

The solution that came to be preferred by the European colonizers was instead to purchase slaves. Most societies throughout history have prohibited the enslavement of their own population and have only allowed for the enslavement of "others". This was also the case in Europe during the early modern period. While there were small trickles of criminals sentenced to be transported to some distant colony, and a slightly larger trickle of so-called "indentured servants" transported to the Americas, there was no enslavement of any Europeans at the time. The issue instead became one of finding some "others" that could be enslaved and transported to the Americas.

Slaves, many Europeans found, could in many cases be acquired from Africa, and racist ideas – widespread in Europe at the time – provided a justification for an inhumane treatment of the Africans enslaved. The general, highly ignorant discourse in Europe at the time had it that Africans in general were lazy and primitive. In particular, the fact that Europeans thought of Africans as lazy – a racist stereotype that survived well into the 20th century – would become important, as many therefore also came to believe that the only way Africans could be made to work was through coercion. Some would even go on to argue that this coercion was virtuous according to how they interpreted Christian dogma, since it was a deadly sin to be lazy.

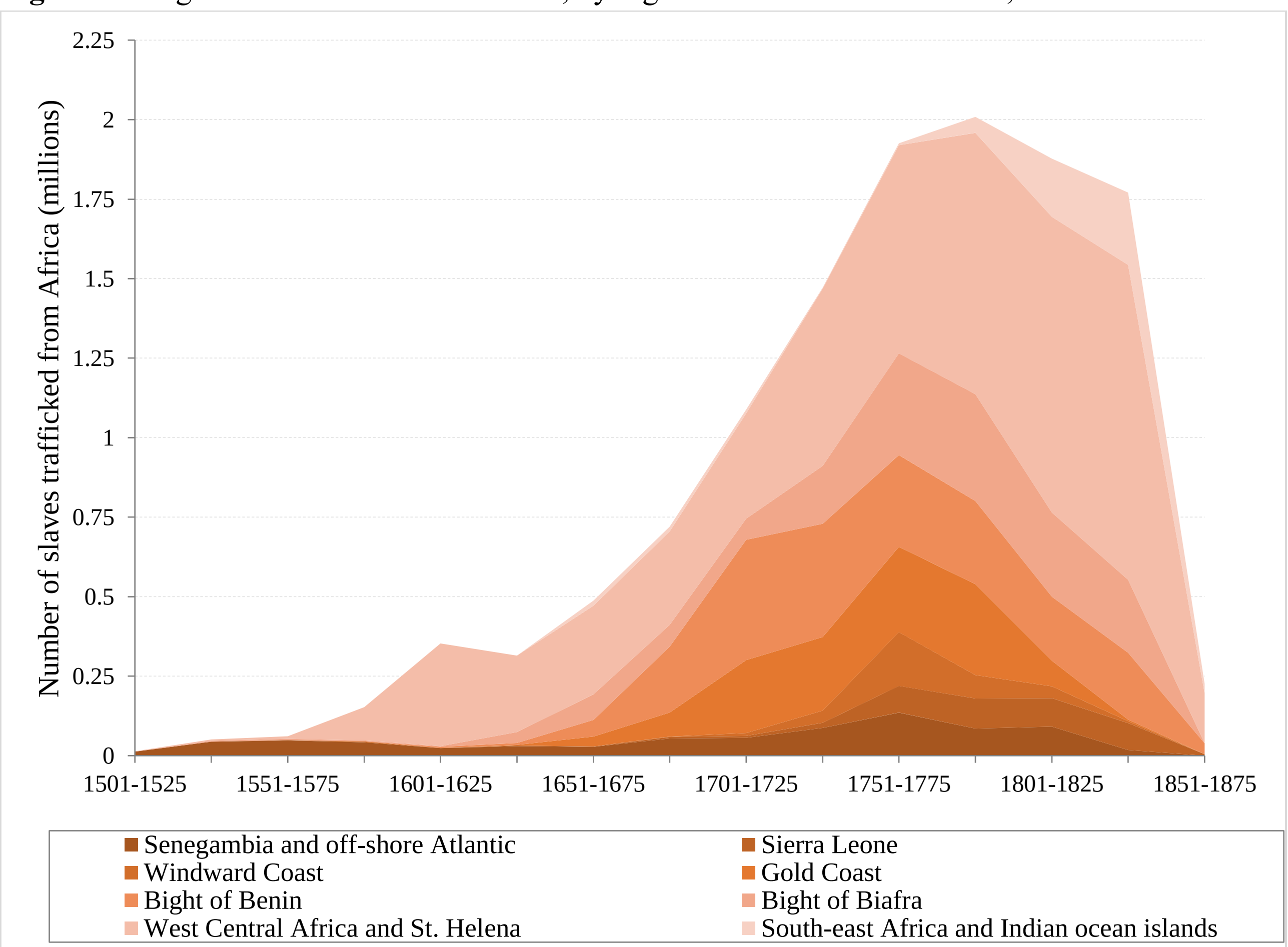
Figure 2: Directions of the transatlantic slave trade, 1501-1866 (number of people trafficked)

Source: Statista (accessed 2020-05-07).

This came to create the single largest coerced movement of people in history, from Africa across the Atlantic Ocean to various places in the Americas. Following much scholarly research during the latest decades, the magnitude of the Atlantic slave trade is by now well-known. All the research has been pooled in an online-database called the *Trans-Atlantic Slave Trade Database* (shortened TSTD), where the data is available for free (via the website slavevoyages.org). In total, it is now estimated that more than 30,000 ships carried some 12.5 million humans away from Africa over the whole period of the Atlantic slave trade, from the 16th to the 19th centuries. Most of the slaves were carried to Brazil or to the islands in the Caribbean, as can be seen in Figure 2. It created some of the most intense slave societies known in history (in terms of the share of the population being enslaved), in the Caribbean, Brazil and the southern states of what came to be called the United States.

The trade was to a large extent concentrated to a small number of ports in Africa. Three ports in particular – Whydah, Bonny and Luanda – were the ports of embarkation for more than 2 million slaves shipped over the Atlantic.

Figure 3: Magnitude of Atlantic slave trade, by region of African embarkation, 1500-1875



Source: Transatlantic Slave Trade Database, online at: slavevoyages.org.

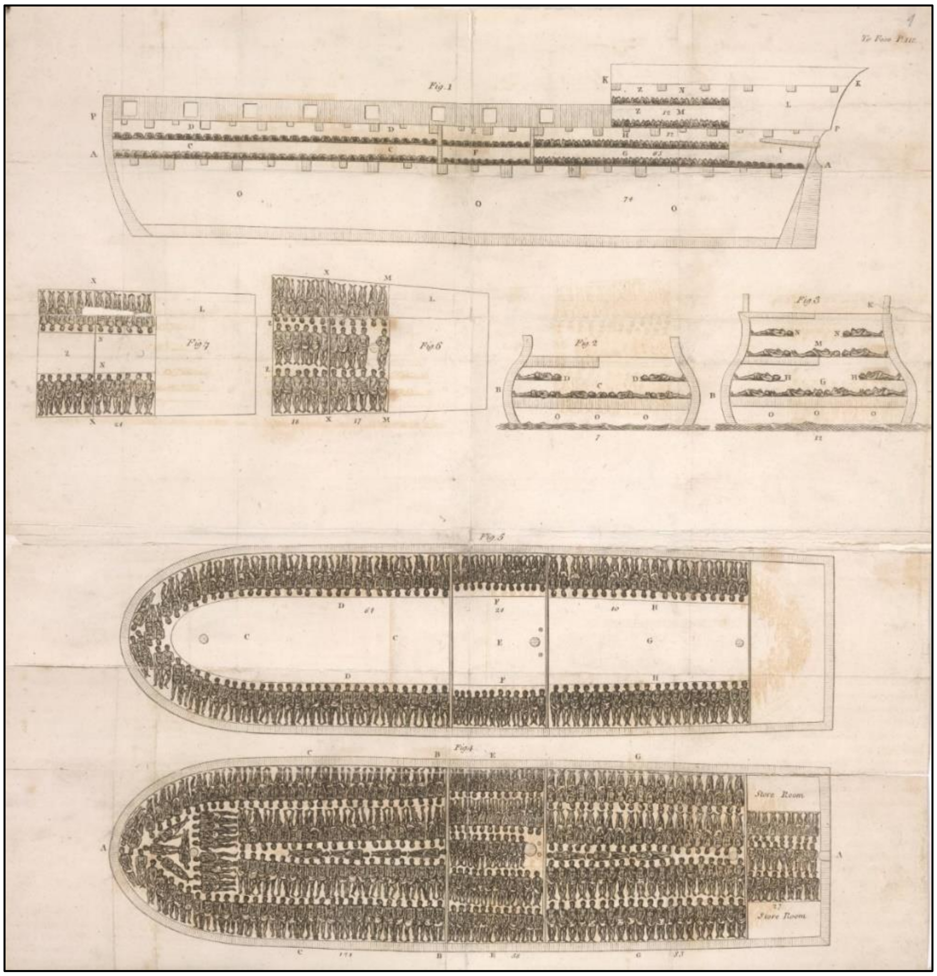
The trade in human beings across the Atlantic was one leg of what long has been called the "Triangular Trade", due to the supposed geographical patterns of the trade. First, European and Asian manufactures such as textiles, alcohol or firearms were exported from Europe to Africa and exchanged for slaves. Then the slaves were transported across the Atlantic and exchanged for colonial commodities produced in the mines or on the plantations in the Americas, such as sugar, tobacco, coffee and cotton. Finally, the colonial commodities were exported back to Europe for refining and final consumption. The key drivers of this "Triangular Trade" were thus, on the one hand, the growing demand for these types of colonial commodities in Europe, and, on the other hand, the European merchants and planters interested in profiting from satisfying this demand. Most of the slaves ended up working on sugarcane plantations in Brazil and the Caribbean. Estimates from the TSTD suggest that 44 percent of all slaves trafficked across the Atlantic were headed for Brazil, and 38 percent were headed for the Caribbean, while the remaining 18 percent were headed primarily for the Spanish Americas or the North American mainland.

We now know that the image of a "Triangular Trade" is a simplification that is somewhat misleading. Ocean currents and winds instead created two quite separate systems of trade: one in the North and one in the South Atlantic. The North Atlantic trade was to a large extent dominated by English slave traders, and primarily carried slaves from West Africa to the Caribbean or to North America. While all ships in this system of trade certainly did not follow a "triangular" route, it is perhaps fitting to talk about such a pattern to the trade on an aggregate level. The South Atlantic slave trade was, in contrast, almost completely dominated by Portuguese-Brazilian slave traders. These carried slaves primarily from West-Central Africa to Brazil. This trade was to a large extent not "triangular", instead it exhibited a bilateral pattern.

The transportation of Africans across the Atlantic came to be called "the Middle Passage". The horrors of the Middle Passage have been much emphasized in both scholarly literature and popular culture. Many slaves were forced on board the small slave ships, leading to enormous crowding in the slave holds. One example of this can be seen in the famous picture of the slaves carried on board the slave-ship *Brookes* in Figure 4. As horrible as the illustration suggests that the conditions must have been aboard *Brookes*, the reality was actually even worse. The picture shows the situation after certain pieces of legislation had been imposed in Britain that limited the number of slaves that a slave-trader could carry in order to reduce crowding of the slaves – in the hope that this could reduce the mortality among the slaves transported across the Atlantic. It is known from primary sources that the very same ship, *Brookes,* on some previous journeys had carried almost twice as many slaves across the Atlantic as is shown in the figure.

On average, it took the ships around two months to go from the African coast to the destination in the Americas. Estimates are that, on average, around 12 per cent of those forced to embark on a ship never reached the intended destination, but died on board from epidemic diseases or accidents. The suffering was further intensified as the slaves often were confined below deck for more or less the whole time of the voyage, and not rarely chained together in shackles. No wonder that the slaves in many instances rebelled during the Middle Passage. One example of such a revolt was when 96 slaves embarked on the Guinea Coast on the ship *Little George* rebelled a few days after the ship had left the African coast. The slaves managed to imprison the slave traders, and take control of the ship, which they then sailed back and abandoned at the Sierra Leone river. More common was perhaps that the slaves mutinied while the slave ships still lay for anchor in the African ports or were just about to leave.

Figure 4: A contemporary illustration of the slave-ship Brookes



Source: © British Library Board, shelfmark 522.f.23 volume 2, fold out.

4. Who were the slave traders?

The Atlantic slave trade was organized by slave traders from various European nations, including most importantly Britain, France, the Netherlands, Spain, Portugal and Denmark. The two major slave-trading nations in Europe were, as was noted above and as can be seen in Table 1, Britain and Portugal (the latter mainly via traders from the Portuguese colony Brazil). The slave trade towards the Middle East and the Indian Ocean was instead mainly conducted by Arabs.

Even though several European nations attempted to do so already from an early date, they were unable to do so throughout most of the continent prior to 19th century developments in medicine and military technology. The European slave traders were therefore for the most part confined to establishing minor footholds in the form of trading stations or forts along the African coast – often with the acceptance of local African rulers. African agents many times therefore also came to participate in the slave trades, as sellers of slaves to the Arab or European buyers. This has occasioned a large debate on why these people participated in such a business. There are comparatively few sources that can shed light on this topic, as few of these agents left any sources behind revealing their intentions. We can be quite certain that the motives varied between the individuals involved in the trade. It is also impossible to understand this issue without recognizing that many African societies were stratified societies, with substantial differences in terms of wealth, status and power between elites and the majority of the population.

Table 1: Number of slaves transported across the Atlantic, by flag of the slave-ship

	Spain	Portugal/ Brazil	Great Britain	USA	France	Others
1501-1600	119,962	154,191	1,922	0	0	1,365
1601-1700	146,270	1,011,192	428,262	4,151	38,435	247,322
1701-1800	10,654	2,213,003	2,545,297	189,304	1,139,013	397,348
1801-1900	748,639	2,469,879	283,959	111,871	203,890	19,342
Total	**1,061,525**	**5,848,265**	**3,259,440**	**305,326**	**1,381,404**	**665,377**

Source: Transatlantic Slave Trade Database, online at slavevoyages.org.

There were clearly some African rulers who were quite explicit about not wanting to participate in the trade at all. There were, at the same time, some rulers and merchants who chose to participate in the trade, seemingly with little or no regard for the fate of the enslaved. The institution of slavery had existed in many African societies long before the external slave trading took off during the 15th century. Through this institution, some members of the elites in these societies could gain access to foreign commodities – to a large extent luxury products including textiles and alcohol – which could further elevate their status. One rare example of an agent who left a diary of his own behind was the chief and slave-trader Antera Duke from Old Calabar, in current-day Nigeria. The entries in the diary suggest that Duke's motives largely were of this type. Some rulers might also have believed there were few options to participating in the trade, as a guns-for-slaves cycle developed in the wake of the slave trade (see more on this below). A key method of getting access of firearms to defend the own population therefore was through selling slaves.

There were clearly conventions for who was eligible for being enslaved in Africa, just as there were elsewhere in the world. Several African societies thus seem to have adhered to similar ideas as many other societies, that only "Others" could be enslaved. There was at the time no pan-African idea, so people would not have perceived of themselves or others as Africans, but as belonging to a number of different ethnicities and nationalities. In such a context, the perception that it was legitimate to enslave “Others” meant that Africans of other ethnicity or nationality, in practice very often prisoners of war, were enslaved. Another category of people that could be enslaved in several African societies were people who had committed crimes, similar to the transportation of convicts that took place in many other societies around the world at this time.

5. The consequences of the slave trades for Sub-Saharan Africa

The consequences of the external slave trades for African societies varied considerably geographically and over time. Though slaves had been transported from African shores for several centuries or even millennia, the overwhelming share of the trade – in terms of the numbers of slaves transported – took place during the 18th and 19th centuries in particular. It is thus during these two centuries that we can expect the impact upon African societies to have been the largest.

Box 1: The story of Ottobah Cugano

For the individuals who became the victims of the slave trades, this was of course an enormous tragedy. Comparatively few of these victims were able to produce any testimonies of their sufferings that have survived to this day. There were, however, a few individuals that managed to do so. One example is Ottobah Cugoano, who had been enslaved on the Gold Coast (in present-day Ghana) at the age of 13, and transported to the Caribbean. Cugoano was eventually liberated, and became a learned scholar and an abolition activist. In 1787, he published his *Thoughts and Sentiments on the Evil and Wicked Traffic of the Slavery.* In this book, Cugoano recaptured his enslavement as a child:

I was early snatched away from my native country, with about 18 or 20 more boys and girls, as we were playing in a field. We lived but a few days journey from the coast where we were kid-napped [...] we travelled on, and in the evening came to a town, where I saw several white people, which made me afraid that they would eat me, according to our notion as children in the inland parts of the country. [...] the horrors I soon saw and felt, cannot be well described; I saw many of my miserable countrymen chained two and two, some hand-cuffed, and some with their hands tied behind. [...] I was soon conducted to a prison, for three days, where I heard groans and cries of many, and saw some of my fellow-captives. But when a vessel arrived to conduct us away to the ship, it was a most horrible scene; there was nothing to be heard but rattling of chains, smacking of whips, and the groans and cries of our fellow-men. Some would not stir from the ground, when they were lashed and beat in the most horrible manner.

When, how and where people were enslaved certainly differed between the individuals. The horrors experienced once they had been enslaved were, however, for all of them most certainly comparatively similar to what Cugoano here describes.

On a societal level, the slave trades had several consequences. A first, and the perhaps most obvious, consequence for African societies was a loss of population. During the 18th and 19th centuries, around 13 million people were thus transported away from African shores. How many further might have died when forced to march to the African coasts (or while waiting to be sold) is not known, but anecdotal evidence from some specific cases suggest that this figure might have been in the millions, too. No reliable figures exist neither on how many people might have lived in Africa, nor on the population growth rates in African societies at the time. It has, however, been estimated that there possibly were around 60-70 million people living on the whole African continent by the early 18th century. Some scholars have therefore suggested that the annual population loss from the slave trade may have exceeded the population growth rates – leading to a net population drain for many African societies – at least during the 18th and 19th centuries, the two most intensive centuries of the external slave trades.

As the majority of the slaves purchased were people in the prime of their productive life, this would have put a further strain upon African societies. The different slave trades would, however, have different demographic impacts upon different parts of the African continent. Westwards, in the Atlantic trade, the demand was primarily for young male slaves that could be coerced to work on the plantations and in the mines in the Americas. Roughly two-thirds of the slaves transported across the Atlantic are thus estimated to have been men or young boys (one quarter of all slaves shipped across the Atlantic were actually recorded to have been children). Eastwards, in the Red Sea and Indian Ocean trades, there was in contrast a comparatively large demand for young females, to be exploited as domestic workers or as concubines in *harems*. This would have important demographic consequences for these African societies, skewing the sex ratios. When primarily women were trafficked from a region, this would reduce the number of people who could bear a child, thereby reducing further population growth. Skewed sex ratios due to men primarily being trafficked might in other places have contributed to a pattern of polygamy, as there remained fewer males per females in these societies.

The potentially most devastating effects of the external slave trade came from the spirals of internal violence that it initiated or reinforced. The vast majority of all slaves exported were originally prisoners of war. Historians have certainly debated the direction of causality. Were the wars fought primarily in order to acquire prisoners that could be sold as slaves, or were the wars fought primarily for other reasons, with slaves more or less a side-effect? It is often very hard to disentangle the direction of causality given the scarcity of historical sources surviving on this topic. The process might furthermore very well have been dialectical (factors mutually influencing each other) rather than unidirectional (one factor causing another). What seems safe to conclude, however, is that the external slave trades at least reinforced spirals of violence in several parts of the African continent. In current-day Ghana, for example, there were recurrent wars between several of the polities in the coastal region during most of the years of the late 17th and early 18th centuries.

These spirals of violence also led to the consolidation of several "predatory states" (states promoting the interests of a small elite, at the cost of the own or other populations) in Sub-Saharan Africa. In the wake of the slave trades, several new – and generally highly militarized – states emerged, for example in West and West-Central Africa. Their growth in terms of territory and power was to a large extent associated with the Atlantic slave trade. Military conquests led to geographical expansion but also to the taking of large numbers of prisoners of wars. These prisoners could then be sold as slaves, in exchange for firearms and other goods, to the slave-traders. These goods, in turn, further increased the military strength and power of the predatory states, and thereby enabled further military conquests. This pattern has been labelled a "guns-for-slaves" cycle of trade. The Jolof Empire, Asante, Oyo and Dahomey in West Africa, and the Lozi, Lunda and Luba in West-Central Africa, are all examples of polities that have been described as having had such predatory states at the time.

We know from many historical examples that wars as a rule retard economic development. They lead to substantial losses of life, primarily among the younger strata of a society. Wars also lead to destruction of capital and infrastructure, necessitating heavy investments for rebuilding what was destroyed during the war. If people anticipate wars to occur again in the future, they also negatively impact people's willingness to invest in capital, as any investments run the risk of being destroyed. Over the long-term, wars can also be very negative for the level of trust in a society, or between different societies, thus for example hampering the development of peaceful commercial activities. All these effects would probably have affected African societies as the slave trades increased the level of violence across the continent, even though some of them might have been more severe than others.

As a rule, African societies resisted enslavement of the own population in various ways. Most societies thus had social conventions completely prohibiting or at least limiting enslavement of the own population. In order to maintain control over people, rulers also had an interest in defending subjects against enslavement by foreigners. Enslavement was therefore primarily a risk for peoples living in polities with weaker states, unable to defend the population against foreign slave-catchers, and particularly then people living at or close to the border-zones between different polities. Many people were therefore making attempts to defend themselves from enslavement, in various ways.

Scholars have noted that walled towns and villages, which helped to protect the population from slave-raids, were common in all areas where slave raiding was a threat. Relocation of villages was another option used in several instances. In some cases, the relocation simply meant migrating to areas that were considered less at risk from slave raids. It also meant the concentration of people into larger villages or towns, as people sought security in living together in larger numbers. Relocation sometimes also meant taking advantage of specific geographic locations, so that villages for example might be located in more inaccessible places, including taking refuge in hilly or mountainous areas – such as the Gurunsi (in current-day Central African Republic) or the Kabre in Togo – or in riverine or marshy areas. Another option employed was to build villages on stilts in lakes, such as Ganvié and other towns in current-day Benin, or Nzulezo in Ghana. Resisting slavery in some cases took the form of the construction of underground shelters, which sometimes were developed into veritable fortresses, such as in some parts of the Sokoto Caliphate. In some instances, documented for example from the Balanta of Guinea-Bissau, African societies also mobilized counter-offensives against slave raiders, which gave them a reputation as resisting enslavement. While many of these defensive strategies might have been necessary given the high risk of enslavement, they came at a cost to the African societies undertaking them. Erecting fortifications or building shelters could for example require considerable investments, in practice in the form of labour that needed to be invested into construction. Relocation to geographically safer areas – including mountainous or marshy areas – could mean moving to more marginal lands, with a lower productivity of agriculture as a consequence.

There were, however, also African agents that gained from the slave trades, both directly and indirectly. Some members of the elites that participated in the trade, and sold other people as slaves, could certainly gain economically and socially from the trade by getting access to foreign commodities, including many high-status consumer goods, in exchange for the slaves that they sold. The forts established by European slave trading companies in some parts of West Africa, such as Gorée in Senegal or Elmina and Cape Coast Castle in Ghana, could also create a certain demand for local laborers, including craftsmen and hired day-laborers, in small enclaves around the forts. The wages paid were certainly not high for day-laborers such as canoemen but could at least provide a livelihood for those employed. The slave trade also created a certain demand for supplies. Most importantly for foodstuffs to feed the enslaved during the Middle Passage, which arguably contributed to a commercialization of some societies in coastal West Africa. Recent research has, however, shown that this demand must have been rather marginal compared to the output possible in the region at the time, and the demand already present from urban centres. Also, because many slave-traders brought along most of the required supplies from Europe, rather than having to rely on the possibilities to purchase them in Africa, the demand for agricultural products was kept down.

6. The abolition of the slave trades

By the late 18th century, an abolitionist movement started to develop, primarily in certain parts of Europe. In some circles, slavery as a whole started to be questioned. Rising prices for slaves in Africa, presumably as a consequence of the drastic increase in the numbers of slaves exported during the century, furthermore drove up the costs for the buyers in the Americas, and hence made the institution less profitable than it previously had been. Political struggles in European metropoles – primarily in Britain – as well as in the Americas, eventually came to lead to the Atlantic slave trade being banned in one nation after another.

The first major slave-trading nations to abolish the Atlantic trade for all subjects of their nations were Britain and the United States. Both abolishing the trade in 1807. Although some trade continued illegally despite the ban, it had large ramifications for the North Atlantic slave trade, as demand from the Americas dried up quite considerably. Slave-exports from regions in Africa where slave-traders from these two nations previously had dominated, such as the Windward Coast and the Gold Coast, hence experienced a drastic drop in the number of slaves trafficked in the following years. Other European nations, such as France, would some years later impose a similar ban on the Atlantic slave trade, reducing the demand for slaves in for example Senegambia. In some parts, most notably in West-Central Africa, the Atlantic trade would however continue unabated for several more decades. Brazilian merchants (by the 19th century independent from Portugal), and merchants from the Spanish colony of Cuba, would continue to trade in slaves well into the 1840s and 1850s, and it was only following political pressure from Britain that these nations too, started to abolish the trade in slaves.

As for the Red Sea and Indian Ocean slave trades, these flows also continued largely unabated during much of the 19th century. Slavery was certainly officially abolished in the Ottoman Empire in 1847, as part of the process of modernization of the Ottoman society (*tanzimat*) during the 19th century. For a long time, however, comparatively little was done to enforce the law, so the trade could in practice continue for several more decades. It was only by the late 19th century that the trade in slaves to the Ottoman Empire really seems to have started to decrease.

Abolition of the external slave trades did not end slavery in Africa. Instead, the abolition led to a transformation of slavery in Sub-Saharan Africa. While domestic slavery had existed throughout many parts of Africa even before the external slave trades began, the institution was not always very intensive. As demand in the Americas rose, so did the prices paid for slaves in Africa. This prohibited domestic demand for slaves to grow in Africa, as there were limited opportunities as to where slave labour profitably could be exploited when the purchase price of the slaves was high. Within Africa, large – and geographically extensive – networks supplying the external slave trades, had however, developed over the centuries as a response to the growing external demand for slaves. These networks did not disappear just because the Atlantic slave trade was abolished, but rather continued to acquire and supply slaves in various places across the continent. Following the abolition of the Atlantic slave trade, external demand declined in region after region of West Africa, in tandem with a continued supply. As a consequence, prices of slaves in West Africa started to decline. One key consequence of this, in turn, was that it started to become economically feasible for local agents in Africa to purchase the slaves and exploit them as a labour force on locally established plantations.

Ironically then, the abolition of international slave trade caused an expansion of slave systems in Africa itself. Plantation economies, based on slave labour, experience a substantial growth in several parts of the African continent, for example in the Sokoto Caliphate in West Africa, or on the island of Zanzibar off the east African coast. The output from these plantations, along with other products, were to a large extent exported, primarily to the burgeoning industrial economies in Europe. This trade eventually came to be labelled the "legitimate commerce", as Europeans –

after the abolition of the Atlantic slave trade – came to consider slave-trading “illegitimate”, and were ignorant of (or turned a blind eye to) the conditions under which many of the products of this “legitimate commerce” had been produced.

7. Conclusion

The slave trades out of Africa were of major historical importance, not only for the African continent, but for the whole world. It is hard to imagine how the American continents would have developed without all the enslaved laborers from Africa. The descendants of these slaves still make up a substantial – or in some cases even the vast majority – of the population in these countries. It is likewise hard to imagine that Europe would have been able to industrialize at the same pace in the 18th and 19th centuries without access to all the raw materials, such as cotton, produced by all these slaves. Meanwhile, the activities of the slave traders were devastating for the African continent and its populations. Recent research has suggested that African countries on average would have experienced a much higher economic growth rate, and thus have been much more affluent today than they currently are, had there been no slave trade and the negative consequences associated with this trade. Despite more than 200 years having passed since its initial abolition, the international slave trade therefore continues to matter for us today.

Study questions

1. Which were the main driving factors behind the development and growth of the slave trades out of Africa?
2. What were the magnitudes of the slaves trades out of Africa, and how did they change over time?
3. How large were the Transatlantic, Red Sea and Indian Ocean slave trades, respectively?
4. What were the main consequences suggested in the text of the external slave trades for African societies?
5. How did the abolition of the external slave trades impact upon African societies?

Discussion exercise

Divide the class in sub-groups of three to five students. Let each group discuss what they believe to be the most important consequences of the external slave trades for African societies in general, and how and to what extent the slave trade has impacted the country that they are living in.

Suggested readings

Diouf, Sylviane (2003). *Fighting the Slave Trade: West African Strategies.* Athens: Ohio University Press.

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Whatley, W.C. (2014). The Trans-Atlantic Slave Trade and the Origins of Political Authority in West Africa. In E. Akyeampong, R.H. Bates, N. Nunn, J.A. Robinson (eds.), *Africa's Development in Historical Perspective*, pp. 460-488. New York: Cambridge University Press.

About the author

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Chapter 4

Commodity Trade and Development: Theory, History, Future

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1. Introduction

Many of the goods and services that we consume are not produced by ourselves. We rely on others to provide these goods. We trade. This is truer, the more complex and more advanced an economy becomes. Like people, countries trade too. This is called international trade. Why is commodity trade of such vital importance? Does free trade foster economic development? Do historical trade patterns affect us today? What are the risks of international trade? What insights does history teach us with respect to the recent commodity trade boom in Africa? These are the questions that we cover in this chapter on trade. We first look at the benefits of trade through the lens of trade theory. We then describe the development of trade in Africa from early times to today. We finally discuss the lessons trade history provides when it comes to the recently good performance of Africa countries.

2. Trade Theory

Why do people trade? Because *voluntary* trade must *necessarily* improve the situation of both, buyer and seller. Take two individuals: Saba and Bakari. Also, take one good that they both value: a chicken (it can be any other good; it just happens that Saba and Bakari both like to eat chicken). We can find out how much Saba and Bakari *value* a chicken by asking: “How much are you *willing to pay* for a chicken?”

Saba: “I am willing to pay up to 10,000 shillings for a chicken.”
Bakari: “I love eating chicken. I am willing to pay up to 20,000 shillings for a chicken.”

Their answers inform us about how much they value a chicken. Both would *gain* from buying a lower price than what they are willing to pay. For example, if Bakari pays 10,000 shillings for a chicken, he *gains* because he is paying 10,000 shillings less than what he would be willing to pay (which is 20,000 shillings).

Now assume that Saba owns a chicken. Should Saba eat the chicken herself or sell the chicken to Bakari? This depends on the price that Bakari pays her.

a) She will *keep* the chicken for any price lower than 10,000 shillings, because it is less than she values the chicken herself.
b) She will *sell* the chicken for any price higher than 10,000 shillings.

Because Bakari is willing to pay up to 20,000 shilling and this is more than what the chicken is worth to Saba, there are *gains from trade*. Independent of the actual price they negotiate, the total gain (Total gain = Seller‘s gain + Buyer’s gain) in any trade will sum up to 10,000 shillings.

This is just an example, but it highlights a basic principle of trade. Traded goods have value to both, buyer and seller. Sellers would never produce or sell anything, if they did not get “something better” in return. The good will be passed to the buyer, because the buyer *values* the good more than the seller. It also follows that trade is a *win–win situation*: buyer and seller both gain. If we observe voluntary trade, the alternative of no-trade must have been worse.

Comparative advantages

Trade and economic growth go hand in hand. However, there are reasons to think that trade fosters development. Trade can deepen specialisation. Famous 18th century thinker Adam Smith described how division of labour, through specialisation, can increase productivity: more output can be produced without increasing the amount of labour or capital. The 19th century economist David Ricardo showed that countries can benefit from trade, even if a country has an *absolute advantage* in everything. With “absolute advantage” we mean that a country is better (=uses less resources/inputs) in producing any product. Ricardo‘s theory of comparative advantage remains a very important argument in favour of international free trade.

Economist David Ricardo 1772-1823. Source: Wikipedia.

We can understand the argument best by looking at a simple, hypothetical case: Two countries produce only two commodities using only one input, labour. Say, Malawi and Brazil produce tobacco and textiles. Brazil can produce one unit of tobacco in one hour and one unit of textiles in two hours. Let's say Malawi is less efficient. Malawi needs to employ more labour: two hours to produce one unit of tobacco and ten hours to produce one unit of textiles. Table 1 lists the hypothetical production costs of tobacco and textiles in Brazil and Malawi.

Table 1: Working hours to produce one unit of tobacco/textiles

	Labour costs		Opportunity costs of producing one unit of	
	Tobacco	Textiles	Tobacco	Textiles
Brazil	1 hours	2 hours	½ textiles	**2 tobacco**
Malawi	2 hours	10 hours	**1/5 textiles**	5 tobacco

Are there gains from trade? One would think the answer is 'no', because Brazil needs less labour in producing both tobacco *and* textiles than Malawi. But this is wrong.

The production of a good comes at a cost. No country has unlimited resources. The same hour of work used in tobacco production cannot be used in textiles production. With this idea in mind, we can now express production costs in terms of foregone production of the other good. This is what economists call *opportunity costs*.

- Brazil needs to give up 2 units of tobacco to produce 1 unit of textiles. This is because after two hours of work, Brazil produced either 2 units of tobacco or 1 unit of textiles. This means 2 units of tobacco "cost" 1 unit of textiles; or every unit of tobacco costs Brazil half a unit of textiles.
- Malawi can produce tobacco relatively cheaper than Brazil. Malawi can produce one unit of tobacco at the cost of 1/5 (0.2) textiles. In contrast, if Brazil produced that unit of tobacco she had to forego half a unit of textiles, hence the Brazilian cost of one unit of tobacco is 1/2 (0.5) textiles. Malawi has a *comparative advantage* in producing tobacco. Malawi needs to give up less units of textiles than Brazil. Brazil in turn has a *comparative advantage* in textiles production.

The two countries would gain from trade. Brazil should specialise in the production of textiles and Malawi should specialise in the production of tobacco. The countries should then trade their surplus products in exchange for the other good that they do not produce. Comparative advantages also affect the prices of the goods involved. With trade, the market price will fall between the opportunity costs of both countries. In the above example, the world market price of textiles will be between 2 and 5 tobacco. Malawians will pay less for textiles buying textiles on the world market than if they produced it on their own. Brazilians will pay less for tobacco than they would pay if the two countries were producing both goods for themselves. Without increasing inputs (more labour/capital) or technological change, trading partners benefit from a more efficient international allocation of resources.

It is important to understand the concept of *comparative advantage*. Firstly, it explains trade patterns. It is often argued that Africa has a *comparative advantage* in agricultural products such as cocoa, coffee, cotton or groundnuts.

- This does not mean that African countries are the only possible producers of these commodities. The United States, for example, can produce cotton, groundnuts and tobacco (and does indeed produce them more efficiently).
- This does not mean that African countries are unable to produce sophisticated manufacturing goods like cars or mobile phones.

By *comparative advantage* we mean that African countries can produce agricultural products at lower opportunity costs than other countries. Instead of producing *one* mobile phone, African countries can use the same amount of resources, produce agricultural products, and exchange them on the world market for *more than one* mobile phone.

Other ways how trade can influence development

Scholars have identified various other ways how trade can boost economic development. Firstly, trade attracts Foreign Direct Investments (FDIs). FDIs are inflows of physical investments from individuals or companies abroad. Physical investment means capital such as tools, machinery, and factories (not buying bonds or stocks). FDIs add to a country's capital stock. Capital accumulation is needed, because workers equipped with more capital can produce more goods.

Secondly, trade may enhance technological progress, which is the ultimate engine of economic growth. Technological progress means that more can be produced with the same amount of production factors. The two production factors economists have in mind are capital and labour. Trade can generate technological progress. For example, openness to trade may let highly efficient foreign firms choose to locate production in a developing country. These foreign firms hire and train workers. When those trained people leave and take a job at a domestic firm, they take their knowledge and skills with them and may apply them in their new firm.

Thirdly, international trade can introduce or intensify competition. Obviously, competition is good for consumers, because competition will drive down prices. But what about the producers? In order to survive domestic firms have to improve production processes, reduce costs, improve quality and innovate. Competition provides the incentive to do this. There is large evidence that firms that engage in international trade are more efficient and innovative. Remember the Saba-Bakari trade example above. If Bakari has to pay a lower price for the chicken, he will receive a larger gain; with the saved money he can buy something else. Saba in turn will need to make chicken production more efficient, if she wants to have a larger gain. For example, she can use a different breed of chicken that gives more meat or has a better taste, or she increases her farm size, or looks out for cheaper ways to feed the chicken. If Saba can't match the market price without making a loss, she will go out of business. But then, she will be "freed" from inefficient chicken production and re-direct her resources and energy to something else that fetches a better return. This may be painful in the short-run, but directing resources to activities which give the highest return is essential in an efficient economy that does not waste resources.

Static and dynamic gains from trade

So far we have drawn a very rosy picture of international trade. However, advantages of trade can be limited. Many gains from trade are *static*. With "*static*" we mean "one time off" gains: Income and consumption increases only once. Once these gains are realised there will be no further gains in the future. For example, international competition that breaks a state monopoly and reduces the consumer price is such a static gain. Once the price is lowered, there may be no further gains for domestic consumers or producers. The same can be said with respect to comparative advantages in agriculture. After opening to trade and specialising in the product in which the country has a comparative advantage, consumption possibilities do increase, but then no further gains may be achieved.

It is important to consider *dynamic* gains. With "dynamic" we mean gains from trade that multiply over time. Dynamic gains can *sustain* economic growth. If developing countries specialize in their *current* comparative advantage such as agriculture, they will not make steps towards manufacturing such as textile production. Is this bad? It is *not* bad, if we only consider static gains. By specialising in agriculture and trading on the world market, African countries will receive more textiles in exchange for their agricultural products as if they produced textiles themselves. Specializing in *current* comparative advantages *might be* bad, however, if we consider *dynamic* gains. It is often argued that there are no dynamic gains from specialising in agriculture, while there are dynamic gains from specialising in manufacturing.

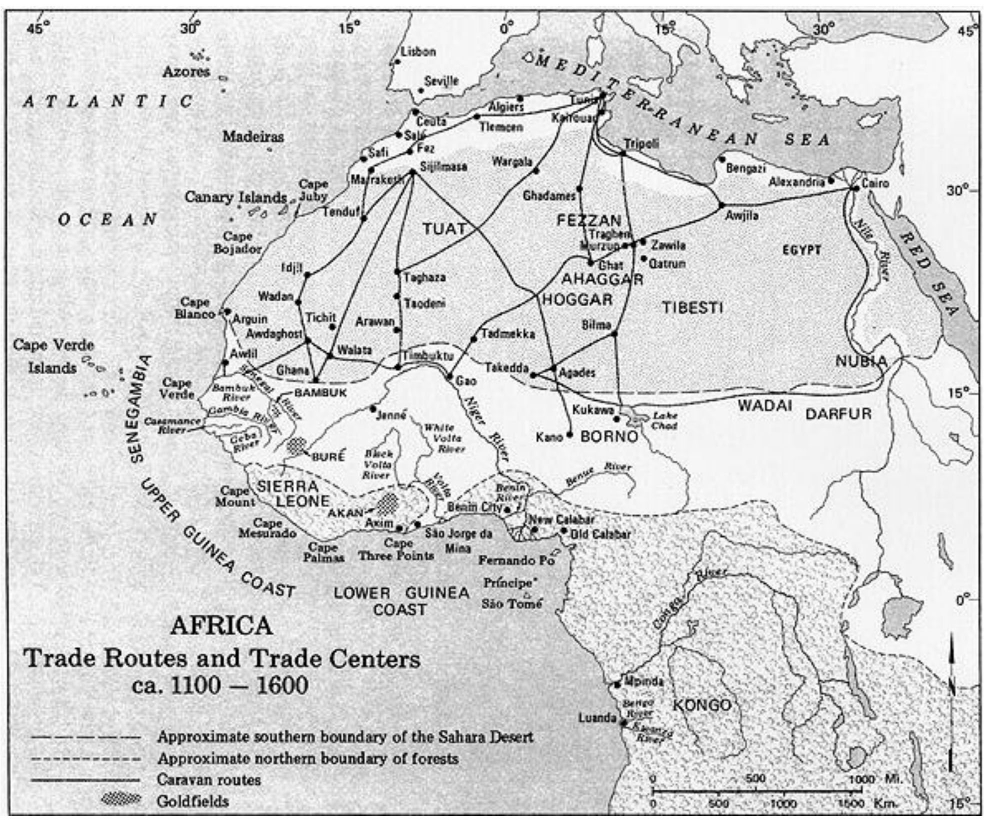
Why are there no dynamic gains in agriculture? The reason is that the scope for productivity gains is limited in agriculture. For example, Ghana specialised in cocoa production. Ghana became the world's largest producer in 1911 and stayed so until 1977. However, agricultural techniques and yields have hardly changed between 1930 and 2000. Hence, the average cocoa farmer produced about the same amount of cocoa in 1930 as in 2000. Cocoa farmers would only earn a higher income if they receive a better price for cocoa on the world market. In contrast, manufacturing allows productivity gains over time: with the same amount of capital and labour, more goods can be produced every year. The gains in productivity can offset increases in labour costs. Workers can earn more and more over time.

In addition, economic activities are interlinked. Some sectors positively influence other sectors in the economy. For example, a large car industry creates demand for steel, which might develop as a result of having a car industry. Engineers (and businessmen) trained in the car industry can use the set of skills in the tool manufacturing industry. It often reduces costs if industries locate at the same place. Hence, the creation of one industry will create or attract other industries. These linkages are often associated with manufacturing. These linkages do rarely exist in agriculture. Skills and inputs used in producing agricultural exports do not benefit other industries. We will now turn to the history of trade in Africa. We will come back to trade theory later.

3. The Trans-Saharan Trade

For at least 2,500 years there has been trade between sub-Saharan Africa and North Africa and the Middle East. This trade is called “Trans-Saharan Trade”, because it required traders to cross the Sahara. As shown in Map 1, the Sahara separates the Mediterranean economies from the economies of the Niger basin. The Sahara is the world’s largest desert. It is about 2,000 km wide north-south. The desert consists of sand and stone. Temperatures are very high at day and very cold at night. There is no water except in the few oases. This makes the Sahara very difficult to cross.

Map 1: Trade routes in West Africa, 1100-1600



Source: Phillips (1985, p. 115).

Trade was only made possible by the camel. A camel could carry up to 450 kg of goods, make a distance of about 40 km per day and survive without food or water up to 10 days. Caravans consisted of hundreds, sometimes even thousands, of camels, moving from oasis to oasis until they reached the markets in the Sahel region. The photo below shows how goods are transported by camel along the old caravan routes even today.

Camel train from Agadez to Bilma in today's Niger. Source: Wikimedia.

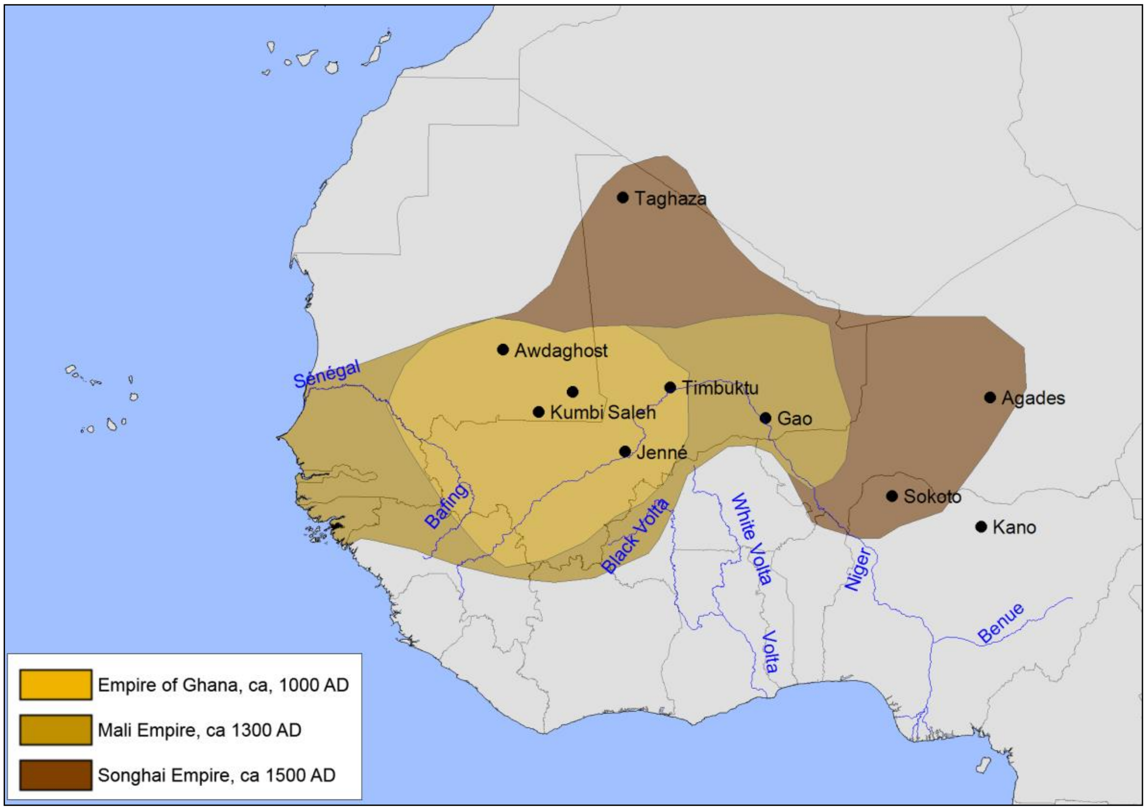
The height of the Trans-Saharan Trade was between 700 and 1600. Gold dust was the most important export commodity for those West African economies involved. Western Europe and North Africa used gold for coinage, but lacked gold deposits and therefore imported the gold. It is estimated that two-thirds of all the gold circulating in the Mediterranean area in the Middle Ages was imported across the Sahara. In Map 1 gold producing areas are shown as shaded areas and labelled as "Goldfields". These areas are located in what is now Ghana and Guinea. Other exports included slaves (an estimated 12 million in total between 700 and 1900) and commodities such as ivory and ostrich feathers/ eggs.

The Trans-Saharan trade did not only allow Africans to sell and export their goods but also to import foreign goods, in exchange for West African export goods. A major import good was salt. Major deposits are located in northern Africa at Idjil, Taodeni and Taghaza, as shown in Map 1. Salt makes food taste better. Other import commodities include dates (from the oases), iron tools, copper and brassware, beads, woven cloth, paper and books. Imports as well as exports were luxury items – goods that had a high value to weight ratio. Trade in bulk items was not profitable due to high transportation costs despite of the camel.

Trade gave rise to powerful African empires that controlled and taxed trade. Map 2 shows the Ghana kingdom (nothing to do with present-day Ghana) occupied the transit territory of the Trans-Saharan trade covering areas of Senegal, Western Mali, and Southern Mauritania. The kingdom was first mentioned in 800 AD and lasted until 1240 AD, when it was incorporated into the Mali Empire. In ca. 1350 the Mali Empire stretched from Senegal to Mali. The Songhai Empire (1430-

1591) was even larger stretching to what is now Niger down to the savannah regions of West Africa. Its capital was Gao, and Timbuktu was an important centre of Islamic study and learning. With trade, a new religion - Islam - spread throughout the Sahel region.

Map 2: Trans-Saharan Empires of Ghana, Mali, Songhai



In the 15th century Portuguese voyages opened a new trade route. The maritime route was cheaper than the Trans-Sahara route. In 1471, for example, the Portuguese opened a trading station "Elmina" at the "Gold Coast" (close to "Cape Three Points" in Map 1). However, the real blow to the Trans-Saharan gold trade came after Europeans discovered the Americas. Gold was imported from Central and South America much cheaper and in vast amounts. Consequently, the Trans-Saharan gold trade declined.

Other trade routes also existed. For example, West Africa had trade links with East Africa. This is documented, for example, by cowries which were used as shell money, coming from the Indian Ocean and appearing in Sahelian cities as early as 900 AD. Eastern Africa also had contacts with traders from Middle East and as far as Indonesia. Swahili language is a reminiscent to Arab and Persian traders.

4. Legitimate trade

With the discovery of the Americas and European ships came the *transatlantic slave trade*. European products, such as firearms, copper and cloth, were exchanged for slaves. Slaves, back then, were Africa's major export commodity. An estimated 12 million Africans were shipped across the Atlantic Ocean to the Americas to work as labourers, mainly on plantations and in mines. This is a very important element of trade that caused immense human misery, reduced African populations, and disrupted development. It is treated extensively in a different chapter of this textbook.

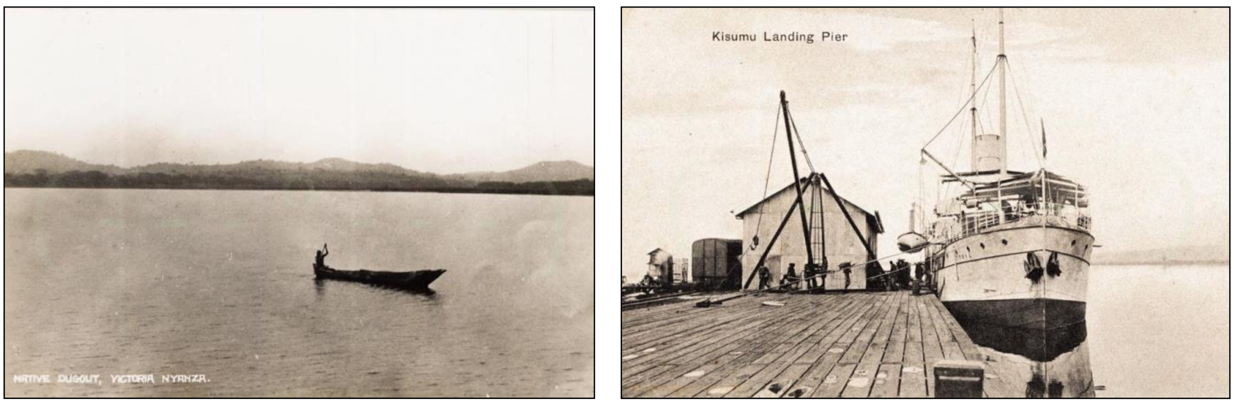
In 1807, Britain abolished the slave trade; that is Britain declared the trade as illegal. Not all European trading nations followed suit. Nevertheless, transatlantic slave trade declined significantly, because the British navy was patrolling the sea, fining slave ships and setting slaves free. The abolition of the transatlantic slave trade did not mean a trade embargo. Slave trade was replaced with so called "legitimate trade". Legitimate trade included trade in any commodities except slaves. Remember there are gains from trade.

A commercial shift to agricultural exports indeed took place, to palm oil, ground nuts and gum arabic (harvested from the acacia tree) in particular. The shift had implications for West African societies. Profit margins were lower. African elites probably lost out, because they were less able to participate in small-holder production or effectively tax it.

5. The transport revolution

Transportation costs greatly matter for trade. Why do transportation costs hold back trade? Transportation costs create a price wedge between buyer and seller and can undo gains from trade. Again, take Saba and Bakari. If it costs 10,001 shillings to transport the chicken from Saba's farm to Bakari's home, there will be no gains from trade and hence, no trade. This is because either the buyer or seller has to pay the transportation costs. If Saba pays the transportation costs of 10,001 shillings and she values the chicken herself at 10,000 shillings, she will ask for a price of at least 20,001 shillings. However, Bakari is not willing to pay this price. If Bakari pays for the transportation, the maximum price he would be willing to offer to Saba is 9,999 shillings (Bakari's willingness to pay 20,000 minus the transport costs of 10,001). You can see what happens when transportation costs decline below 10,000 shillings: We observe trade between Saba and Bakari. With every further decline, gains from trade will increase. Note that reducing transportation costs can benefit both producers and consumers.

Early trade was held back by extremely high transportation costs. Geography is to blame. Typically, water transport is the cheapest means of transport. Africa, however, lacks navigable and inter-connected waterways. Canoes were used along some rivers such as the river Niger and on Lake Victoria (some 700 km away from the sea). Large reductions in transportations costs came with big vessels and modern steam ships in the late 19th century. However, steamships could not navigate on African rivers because of frequent rapids and low water levels during the dry season. The next best transport option for inland traffic would be draft animals such as horses, oxen and donkeys. However, because of the presence of animal trypanosomiasis draft animals and cattle herding could not be used in large parts of Africa. Trypanosomiasis, is a parasitic disease transmitted by the tsetse fly. Draft animals infected with trypanosomiasis are likely to die. Map 3 shows the absence of cattle in tsetse areas.



Shifting transportation technologies on Lake Victoria. Dugout canoe (left). Steamship (right) at Kisumu, ca. 1910.

Hence, head-loading was the main mode of transport. This was extremely costly. Much of the cargo consisted of provisions for the voyage itself. Only low weight - high value goods were carried through the hinterland. The slave trade was cheap, because slaves could be walked. The photo below shows a caravan transporting highly valuable ivory from Uganda to the coast, some 1,000 km faraway. Bulky items were transported over very short distances only.

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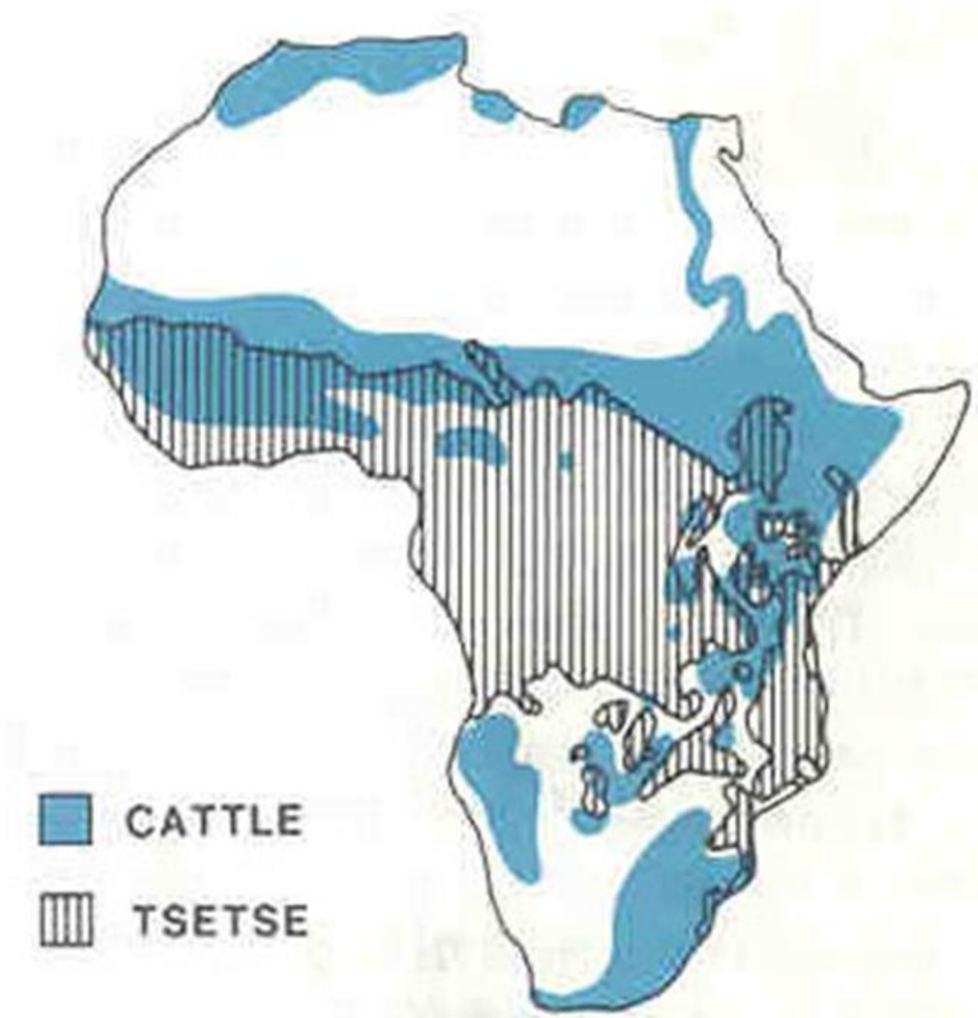
Map 3: Cattle and Tsetse distribution in Africa

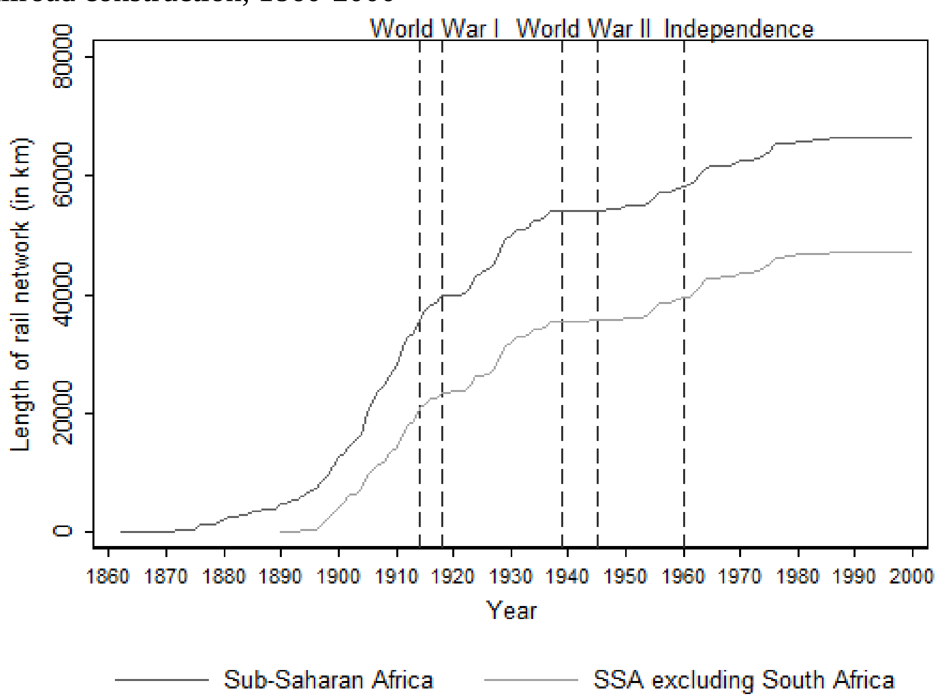


A new technology brought a transport revolution: Railroads. The first railroad was built in 1862 in South Africa to facilitate the export of gold and diamonds. From 1883 on, railroads were built in other sub-Sahara African countries. Figure 1 shows the expansion of railroad coverage. The phase up to 1914 was most dynamic: More than 21,000 km of rail were built. The speed slowed down in the 5 years after World War I (which ended in 1918), but caught up in the interwar period. By 1937 the rail network reached 35,000 km of length. The year 1937 marks the end of the dynamic: 75 percent of today's rail network (ca. 47,000 km) has been established by then. Recently, rail saw a comeback due to Chinese investments. Motor roads started in the 1930s. At the beginning, roads were often feeder roads, directing traffic to the railroad. Later, in the 1950s and 1960s, motor roads became the dominant transportation technology.

Ivory trade in Uganda 1899. A caravan on its way to the coast.

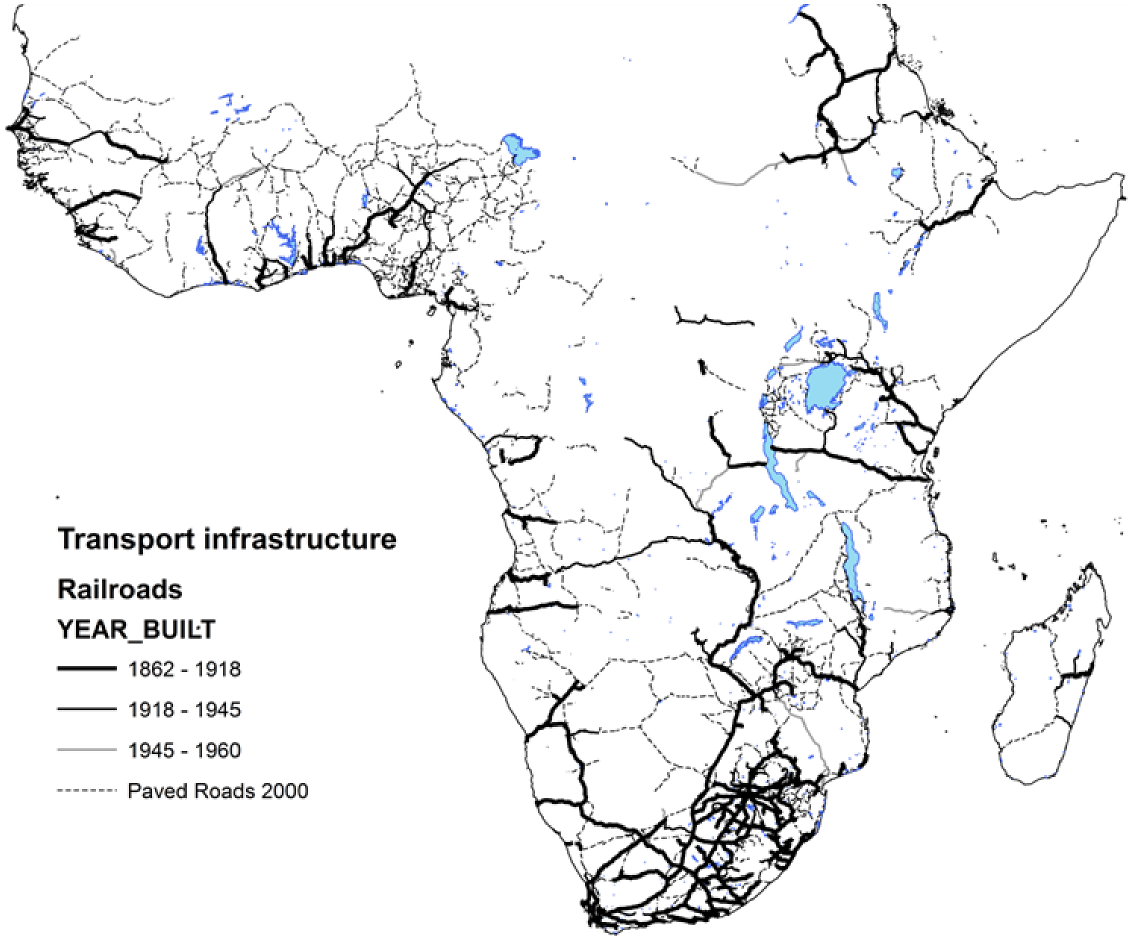
Colonial administrations heavily invested in physical infrastructure (education and health expenditures were negligible by contrast and typically left to Christian missionaries). This was not unselfish (economic and political choices are rarely unselfish). As you can see in Map 4, railroads lead to a terminus at the sea port. The purpose of the railroads was to open the hinterland to trade. Colonial administrations succeeded on this account.

Figure 1: Railroad construction, 1860-2000



Source: Data from Mitchell (2007).

Map 4: Railroads and roads in sub-Saharan Africa, 1862-1960



Note: No road data available for Chad, Equatorial Guinea, Gambia and Somalia. Hence, the territories of these countries appear as white even though there might be paved roads.

Transportation costs of pre-modern transportation technologies were extremely high making export production unprofitable. For example, the Gambia and Senegal groundnut production was only profitable close to the Gambia River that flows into the sea. Ghana's cocoa production was profitable only up to a 50 km distance from the coast. In Kenya, coffee growing would have been profitable only up to 300 km from the coast (not reaching the fertile soils of the Kenya Highlands).

Table 2 shows the massive reduction in transportation costs by the railroad. In Ghana, carriers would move one ton of goods over one mile at the cost of 5 shilling. In contrast, the railroad charged 0.8 shilling. Hence, the railroad did the same service at only 16 percent of the costs. In Nigeria, carriers were paid less and therefore head-loading costs were lower. Still, the railroad charged only 7.6 percent of the price of head-loading. Transportation in Kenya was particularly expensive before the railroad. Part of the high porterage costs can be explained by marauding Maasai warrior parties at that time. Caravans needed large numbers of armed guards for protection. Porters probably asked for a higher salary as well to be persuaded to take the dangerous journey through Kenya.

Table 2: Transportation costs: Head-loading versus Railroad (in shillings per ton mile)

Country	Head-loading	Railroad	Ratio
Ghana (1902)	5	0.8	16%
Kenya (1902)	11	0.09	0.8%
Malawi (1900)	3		
Nigeria (1910)	2.5	0.19	7.6%
Sierra Leone (1910)	2.5	0.27	10.8%
Tanzania (1896)	3.5		

Source: Jedwab, Kerby and Moradi (2014).

Note that railroad costs were decreasing further over time. The railroad contributed to the expansion of African exports. Cocoa farming in Ghana became profitable up to 250 km from the coast. There are many more examples: Groundnut production in Nigeria, cotton in Uganda, wheat and coffee in Kenya, mineral commodities such as copper in Zambia and iron ore in Sierra Leone.

6. Trade under colonial rule

In the introduction we said that trade cannot be bad if it is voluntary. In some parts of Africa trade under colonial rule was *not* voluntary. The worst example is the Congo Free State, the territory what is now the Democratic Republic of Congo. Villagers were told to deliver a certain amount of rubber, which would then be exported. Failing the quota was punishable by death. Many, many people were killed. Many, many people were also mutilated. Soldiers were ordered to bring the hand as evidence that the punishment was executed and a bullet was shot. Soldiers started to cut off hands. Moreover, 35 percent of the population was under forced labour – slaves in all but name. Colonisers also used subtle methods as well: hut taxes. Households had to pay a tax in coins. These coins had to be earned first, e.g. by working as labourers or producing and selling goods for the market. By and large, however, export production and trade was voluntary.

There were also trade restrictions in place that favoured the coloniser. For example, the coloniser's trading firms received favourable treatment, exports had to be shipped to the coloniser, or exporters had to ship goods solely by that coloniser's shipping agencies. Table 3 shows export values of selected countries. Export values are expressed in constant 2000 US-Dollars. Using „constant values" eliminates inflation effects, because all goods are valued by prices that existed in the year 2000. The method is useful, because it makes figures from different years comparable. For example, one US dollar earned in 1883 expressed in constant 2000 US-Dollars, would buy the same goods as one US dollar earned in the year 2000.

Table 3: Export values 1883-2000 (in constant 2000 US-Dollars millions)

Country	1883	1913	1960	2000
Former British				
Gambia	18.5	55.8		202.0
Ghana	33.3	460.0	1996.6	2429.1
Nigeria	146.0	575.0	2257.4	24820.5
Kenya-Uganda	5.5	125.5	2105.5	3399.4
Malawi	0.0	19.2		446.4
Sierra Leone	40.7	116.7		115.0
Tanzania	5.5	68.0		1526.9
Zambia	0.0	17.4	2244.4	877.6
Zimbabwe	1.8	34.8		2659.7
Former French West Africa	4.0	73.9	535.7	2049.7
Other				
Democratic Rep. Congo	40.7	203.9	3773.9	963.8
Angola	37.0	97.6		8182.0

Sources: Meier (1975), p. 442 and World Development Indicators (World Bank, 2014). No export data available for Guinea, Mali and Mauritania in 1960. For calculating exports of former French West Africa in 1960, we assumed that these three countries exported 77 percent, which was about the case 1986-2005. Prices deflated by US consumer price index.

Table 3 shows that trade expanded massively under colonial rule. In 1883, Kenya-Uganda's exports were worth a meagre 5.5 million US dollars. By 1913, exports increased 23-fold. By 1960, the exports grew ten-fold. After that, export growth slowed down. In 2000, exports exceeded the level of 1960, but by only 61 percent. Most African countries show similar patterns up to 1960. Countries like Zambia and Sierra Leone have even lower export volumes in 2000 than in 1960. Nigeria and Angola are big exceptions. Their export strength in 2000 is mainly due to crude oil.

What did African countries export? Primary commodities! This is in line with Africa's comparative advantages. Africa's workforce was skilled with respect to agricultural techniques, cultivating in climatic and ecological complex environments. But Africa had an unskilled workforce with respect to manufacturing. Africa had abundant land. But Africa had little capital. Hence, it was *relatively* cheaper to produce agricultural products. And this is what African countries did. Table 4 shows the principal exports of a selection of African countries over the colonial era and 1990.

Table 4: Principal exports of selected African countries, 1900-1990 (percent of total export value)

	1900	1930	1960	1990
Gambia		Groundnuts: 99%	Groundnuts: 27% Groundnut oil: 13%	Groundnuts: 20% Groundnut oil: 14%
Ghana	Rubber: 37% Palm oil: 27% Palm kernels: 11% Gold: 10%	Cocoa: 78% Gold: 12%	Cocoa: 60% Wood: 15% Gold: 10%	Cocoa: 29% Aluminium: 18% Gold: 13% Wood: 11% Diamonds: 10%
Kenya		Coffee: 50% Sisal: 15% Maize: 10%	Coffee: 33% Sisal: 12% Tea: 12%	Tea: 19% Coffee: 14% Oil: 13%
Malawi	Tobacco: 75%	Tobacco: 73% Cotton: 11%	Tobacco: 77% Tea: 13%	Tobacco: 68% Tea: 11%
Nigeria	Palm kernel: 46% Palm oil: 21%	Palm kernels: 25% Palm oil: 22% Ground nuts: 15% Cocoa: 12%	Groundnuts: 27% Cocoa: 23% Palm kernels: 16% Palm oil: 10%	Petroleum: 96%
Sierra Leone	Palm kernels: 47%	Palm kernels: 64%	Diamonds: 54% Iron ore: 16%	Titanium minerals: 52% Aluminium: 19% Diamonds: 15%
Uganda		Cotton: 71%	Cotton: 40% Coffee: 34%	Coffee: 74%
Zambia Zimbabwe		Zinc: 27% Asbestos: 18% Iron ore: 13% Tobacco: 10%		Copper: 88% Tobacco: 24%

Sources: Commodities with 10 percent or more of total exports. 1990 figures are from Deaton (1999). Other figures are from 1960 Blue Books and FAOSTAT (http://faostat.fao.org/site/342/default.aspx). Nigeria before 1930 refers to South Nigeria.

The type of primary commodity may differ across countries and time, due to differences in soils, climate, altitude, and world market prices. For example, Senegal specialised in groundnuts, Ghana (see Table 4) and Cote d'Ivoire in cocoa, Kenya in coffee (see Table 4), Malawi in tobacco (see Table 4), Mozambique in maize.

Is specialisation in agriculture bad for development in the long run?

- No, because Africa's comparative advantages are in agriculture. Hence, specialisation in the agricultural sector offered the highest gains from trade: Instead of producing consumer goods, Africans could produce agricultural products and exchange them for a larger quantity of consumer goods imported.
- Possibly yes, if we consider dynamic gains of trade. By specialising in agriculture, Africa's labour force has not acquired skills to turn the comparative advantage to manufacturing. Compare section 2 of this chapter.

Table 4 shows a different aspect of specialisation in Africa: Heavy dependence on a very small number of commodities. In 1930, Gambia, groundnuts contributed to 99 percent of export earnings. In Ghana, cocoa was the main export earner, contributing 78 percent in 1930. In Malawi, 75 percent of export earnings were achieved by tobacco. This hasn't changed over a century.

7. Trade policies after independence and the economic crisis of the 1980s

After independence, African governments were free to choose their own trade policy and trading partners. The 1960s was a time of optimism. There was a strong belief that a country could be transformed using developmental policies – which colonial administrations have not followed. Trade policies were part of the mix of developmental policies. Almost all African governments followed a policy of import substitution. Import substitution policies aimed to substitute foreign goods (=imports) with domestically produced goods. This can be achieved by using quotas – allowing only a small quantity of imports, or tariffs making imports more expensive and hence less desirable for the domestic consumers. The hope was that as a result domestic industries would develop.

Initially, consumer goods were substituted. Reducing the trade bill for consumption goods and keeping export earnings unchanged means more foreign exchange (US dollars) can be used to import capital goods. Capital goods are machinery, factories, and intermediate goods. This would lead to industrialisation increasing output and income. African governments also heavily taxed agricultural exports. This was done using parastatal marketing boards. Farmers had to sell their harvest to marketing boards. Only marketing boards were authorised to sell (or „market") to the world market. Hence, farmers had no other choice than to sell their produce to the marketing boards. Marketing boards, however, paid producers a price much below the world market price. By selling the good at the higher world market price, African governments made a profit (at the expense of the farmers). This profit, in turn, was meant to be used to finance industrialisation.

Unfortunately, these policies have failed to achieve their goal.

- Manufacturing industries did not develop. In the 1990s, the share of manufactures in total exports was tiny. In Gambia, for example, the share of manufactures exports was 0.6 percent. Figures for the other countries are as follows. Ghana: 3.2 percent, Malawi: 4.9 percent, Nigeria: 0.9 percent, Sierra Leone: 2.6 percent, Uganda: 0.8 percent, Zambia: 4.0 percent. Kenya (21.1 percent) and Zimbabwe (34.4 percent) are exceptions with very high shares of manufacturing exports (though the shares used to be high in the 1960s too).

- Commodity dependence remained strong, see Table 4. Note that the shifts you can see in Table 4 were not due to trade policy. Shifts in commodities mainly occurred because of the discovery of mineral resources or changes in world market prices. For example, Sierra

Leone's main export commodity used to be palm kernel up to the late 1930s, when diamonds, iron ore and ilmenite were found. Only 20 years later in 1960, Sierra Leone transformed to an economy mainly exporting mineral resources. There is a similar story for crude oil in Nigeria which was discovered in the Niger delta in the late 1950s. In Kenya, coffee was the main export commodity but with the decline in coffee prices in the 1980s, Kenya switched to tea. Low cotton prices pushed Uganda towards coffee.

- Africa's share in world trade fell from 4 percent in the 1950s to under 2 percent in 2000. This can be partly attributed to the fact that primary commodities decreased in importance in world trade. However, African countries even lost market share to Latin America and Southeast Asia. In shelled groundnuts, for example, Africa's combined market share shrunk from 93 percent in 1960 to 2 percent in 2000. The market share in palm oil shrunk from 60 percent in 1960 to 14 percent in 2000. Coffee shrunk from 18 percent in 1960 to 12 percent in 2000. Cocoa shrunk from 76 percent in 1960 to 71 percent in 2000. Copper shrunk from 23 percent to 4 percent. Increases in market shares are modest by comparison. Cotton slightly increased from 10 percent to 14 percent. Tobacco increased from 12 percent to 17 percent, and tea from 6 percent to 23 percent (mainly because of Kenya which alone accounts for 20 percent of world production).

Why has import substitution failed? Some scholars say these policies were doomed to fail because they would not change comparative advantages. African manufacturing products remained relatively more expensive to produce than agricultural products.

There are many more reasons:

- Restrictions on imported machinery, equipment, and raw materials drive up the prices of these inputs to all domestic firms. Would-be exporters cannot sell their products on world markets at competitive prices and quality.

- Also, remember that the purpose of trade is to exchange something that you value less (e.g. a chicken) for something that you value more (e.g. money that allows you to buy something better than a chicken such as a mobile phone).
  - When restricting the import of consumption goods, their price will increase. Exporters loose an incentive to supply export goods.
  - When lowering the price to exporters, exporters lose an incentive to produce export goods. For example, in 1984, Ghanaian cocoa farmers received 20 percent of the world market price. In 1991, Ugandan coffee farmers received about 30 percent of the world market price. Instead of increasing government revenues, lowering the producer price to these levels did reduce agricultural production. Governments killed the goose that laid the golden egg.

- State led industrialisation is problematic if it encourages mismanagement.
    - Many of the policies created opportunities for Africa’s political and economic elites to enrich themselves. For example, the exchange rate was often manipulated. The exchange rate is the price for which the domestic currency can be exchanged for another country's currency such as US dollars. The manipulation took the form that state selected firms imported using an “official” exchange rate. This official rate was much lower than the market exchange rate. The goal was to reduce import costs for selected firms deemed to be important for industrialisation. However, a frequent practice was to make money by claiming “discounted dollars” from the government and change the dollars at the much higher exchange rate offer on the black market.
    - State industries are prone for inefficiencies. State firms can employ a large number of employees, and pay them high wages, without producing something valuable. The firm will survive because the state pays for the losses.

Hence, many of the government revenues were wasted rather than put into productive purposes.

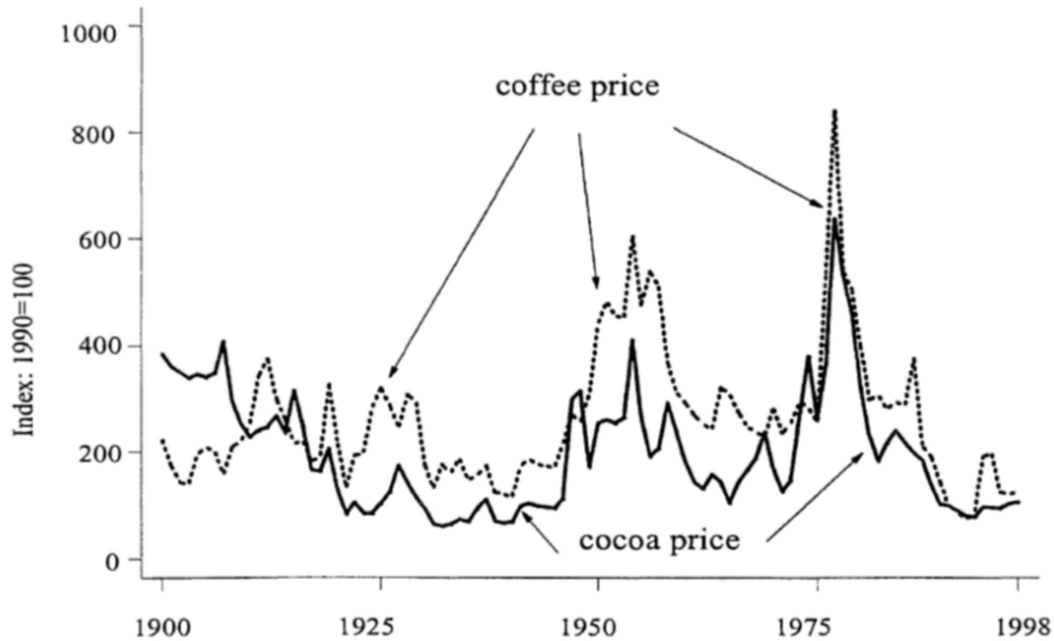
Expansion in trade is what matters for economic development. If exports decrease, imports must decrease at some point too. This is because countries cannot run trade deficits forever. Trade deficit means that the value of imports is larger than the value of exports. Foreign countries (or the international capital market) would not be willing to finance this trade deficit forever. Persistent trade deficits contributed to the economic crisis that gripped many African countries in the 1980s. The International Monetary Fund (IMF) and the World Bank were instrumental in “restructuring the economy”. Many of the trade restrictions were lifted.

8. World market prices and terms of trade

Prices are important, because they determine how gains from trade are divided between sellers and buyers. At a chicken price of 10,000 shilling, Bakari gains more, than at a price of 19,999 shillings. In international trade, commodities are traded on the world market. Hence, world market prices are relevant.

How did world market prices develop in the long run? Figure 2 shows the development of coffee and cocoa prices over one century. The prices are compared to the price in the year 1990, which is set to 100. For example, when you see a cocoa price of 150, it means that the price is 150 as compared to 100 in 1990, or the price is 1.5 times higher than compared to 1990. A cocoa price of 75 reads as 75 percent the level as compared to 1990 or 25 percent lower than in 1990. When you see a cocoa price of 400 – as was the case in 1907 and again in 1954 – it means that prices were 4.0 times higher than in 1990. This means that a cocoa farmer could buy four times as much from the proceeds of his cocoa farm in 1907 and 1954 as compared to 1990.

Figure 2: Real coffee and cocoa prices 1900-1998



Source: Deaton (1999).

Figure 2 conveys two insights:

1. There were large ups and downs between 1900 and 1998. Price volatility is a problem:
   - Production that was profitable at last year's price can be loss-making in the next year. This volatility is a problem for producers. It is very difficult - if not impossible - to predict prices. For example, frosts reduced Brazil's coffee harvest in 1976. Because Brazil is the world's largest coffee producer, world market supply was seriously reduced driving up the world market price for coffee. African coffee producers (well, African governments' marketing boards) were lucky in 1976, because they benefitted from higher world market prices.
   - Because of the heavy dependence on one or two commodities (see table 4), price volatility threatens a country's macroeconomic stability. Government revenues fluctuate yearly. Expenditures may need to be adjusted (or financed by debt). Lower prices and income for exporters mean less income spent for other sectors of the economy such as for non-tradable goods, schooling, health, etc.

2. There apparently is a downward trend in the long run. So in addition to large volatility, world market prices for coffee and cocoa tended to fall over time. This means that coffee and cocoa farmers would earn less income, unless they were able to increase yields. However, African farmers were typically not able to increase yields by much. In Ghana, for example, yields per acre in 2000 were very similar to the ones in 1930.

We discussed world market prices for export goods. In international trade, world market prices for import goods do matter as well. This is where the concept of Terms of Trade (TOT) becomes useful.

To better understand TOT, we start with an example. Take a country that only exports coffee and only imports machinery. It is bad news for this country, if the world market price for coffee stays the same whereas the world market price for machinery doubles. In this case TOT worsened:

- The country now must export twice as much coffee to import the same quantity of machinery as before.
- If the country cannot expand coffee production, which is probably the case, it must reduce imports by half.
- If the country keeps exporting the same amount of coffee and importing the same amount of machinery, it will run a trade deficit. More goods are imported than exported. The trade deficit can be financed by debts – repaid if the quantity of coffee exports doubles in the future or TOT shift back to the advantage of the country.

Obviously, in the real world more products are traded than coffee and machinery. TOT takes into account the complexity of export and import goods by using the export and import price indices. The export price index reflects the prices of all the goods that a country exports (such as coffee in our example). The import price index reflects the prices of all the goods that a country imports (such as machinery in our example).

Terms of Trade are then defined as the ratio of the export price index to the import price index. Similar to the example of coffee and machinery, TOT measures the amount of import goods a country can buy per unit of export goods.

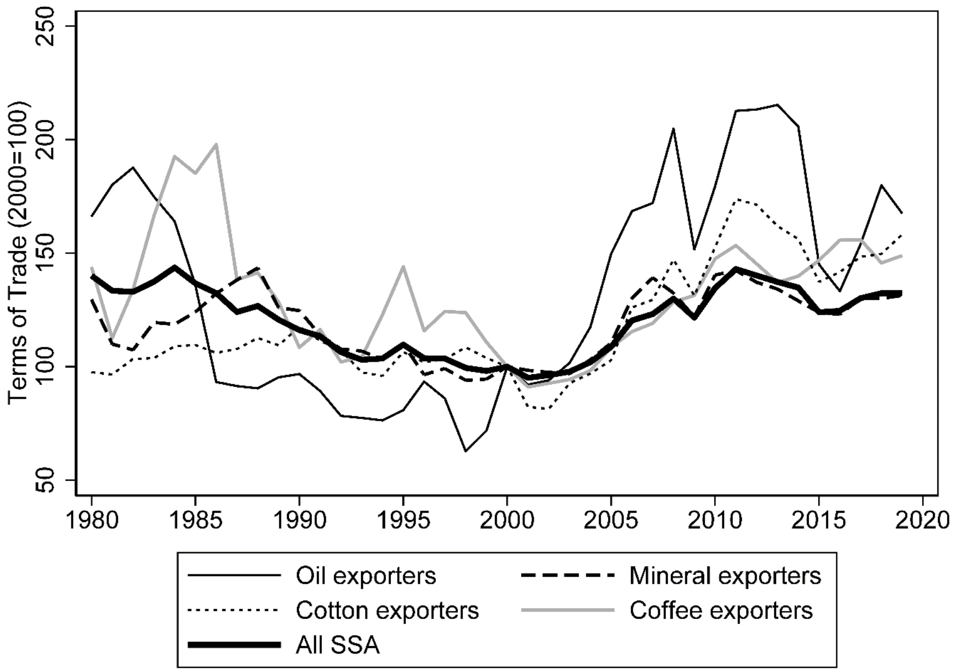
Changes in TOT have far-reaching welfare implications. TOT were falling between 1900-2000. So, who determines or what causes TOT to change? There is no evil mastermind behind changing TOT. Supply and demand on the world market determine world market prices. Whatever shifts world supply and demand of traded goods will affect TOT. There are forces, however, that tend to erode TOT to the disadvantage of African countries:

- Supply: Competitors - Latin American and South East Asian producers of tropical products - enter the market for commodities. This increases supply. The price of tropical products tends to fall.
- Demand: As people get richer, they consume fewer primary commodities and spend more of their income for manufactures and services. The writer of this text, for example, is a passionate coffee drinker. A rough calculation suggests a yearly consumption of about 10 kg per year, which is about the average consumption of worldwide leading Scandinavian coffee drinkers (Finland: 12kg, Norway 10kg). A pay rise would not be spent for increased coffee

consumption, but instead pay for a cleaning robot produced by a South Korean manufacturer. The example highlights general consumption patterns in rich countries.

- Some commodities exported by developing countries were substituted by synthetic (or chemical) products. Natural rubber (or caoutchouc) is an excellent example. Natural rubber is a tropical product tapped from rubber trees. Rubber is used for car or bicycle tires and other components in cars and many other machines. In 1900 rubber prices were very high and Africa contributed about half of world supply. During World War II chemists developed a new synthetic rubber, which is made from petroleum; it is cheaper and better for some purposes. Today, natural rubber is still used but less so than if synthetic rubber did not exist.

Figure 3: Terms of Trade 1980-2020 (2000=100)



Notes: Oil exporters include Angola, Cameroon, Congo (Brazzaville), Gabon and Nigeria. Mineral exporters include Botswana, Congo (Kinshassa), Guinea, Mauritania, Niger, Zambia and Zimbabwe. Cotton exporters include Benin, Burkina Faso, Chad, Mali, Sudan and Togo. Coffee exporters include Burundi, Ethiopia, Rwanda, Tanzania and Uganda.
Source: World Development Indicators (World Bank 2022).

How was the recent development in TOT? Figure 3 shows the terms of trade for the last 40 years for African countries. You can see how TOT worsened between 1980 and 2000. However, in the 2000s we observed a turnaround in TOT. In 2011, TOT reached the same level as in 1980 before the major economic crisis set back African countries to pre-independence levels. Since then, TOT have remained at relatively high levels.

What caused the improvement in TOT since ca. 2000? It is China mainly, and partly India. The effect of China's phenomenal growth is twofold:

- China produces manufactured goods such as textiles, mobile phones, fridges and motor cycles much cheaper than other countries. Hence, China's cheap production and exports reduced the import price index of African countries. You can see Chinese products in daily life in every corner of Africa. African consumers benefit from this.
- China buys commodities on the world market. Because China is such a big country, the increased demand affects prices. So far, the increased demand was not matched by big shifts in supply. Hence, prices of African export commodities increased.

9. Future outlook

In the last 20 years many people became optimistic that finally "Africa is rising". The economic history of trade suggests being cautious. The recent performance is fuelled by an increased demand for African primary exports. The Terms of Trade were improving. Is this sustainable? History saw many price cycles, but no upward trend in the long run. African governments often took periods of high world market prices and spent heavily and inefficiently, wasting the revenues. We should not be overoptimistic. Prices may drop in future.

However, this time the situation may be different. The current demand is fuelled by a very big economy - China. With all likelihood the Chinese demand is about to stay for a longer time. Imagine what happens if the two billion consumers in China and India start to eat chocolate like Europeans (5.7 kg per capita per year). Demand will increase. Prices will increase. African cocoa producers will gain. Today represents an opportunity to make a leap forward. Government revenues are likely to increase. As for trade, trade patterns will only change if comparative advantages will change.

Study questions

1. Chicken trade between Saba and Bakari
    a. Is it smart if Bakari wants to trick Saba by insisting that he would be willing to pay only 3000 shilling? What would happen? Would the outcome make Bakari happy? Why would Bakari loose?
    b. The price for a chicken at the nearby market is 8,000 shilling. This means the price is lower than what Saba would be willing to pay for a chicken (10,000 shilling). Would she sell her chicken at a price of 8,000 shilling? Or would she *buy* a chicken for that price? Does her situation improve?

[To make it more fun you can do a play. One student plays the buyer (Bakari) and the other student plays the seller (Saba). Make sure Saba and Bakari know their willingness to pay. Calculate the gains from trade for a) Saba, b) Bakari and c) the two of them (Total gain = Saba‘s gain + Bakari's gain).

2. What hindered trade in African history? What hinders trade nowadays?

3. If one shilling in 1900 is worth about US$6.5 in 2006, what is the daily wage of a 1900 Nigerian porter in today's terms? Assume that a porter can carry 30 kg over 12 miles per day. Do you find such job attractive at this pay?

    Hint: First, calculate how many days a porter needs to carry one ton (=1000 kg) over one mile. You can then assume that for this work the porter is paid the cost for head-loading reported in Table 2. In 1900, being a porter was not an attractive activity/occupation. This implies that in 1900 many Africans had better opportunities than porterage.

4. What trade policies did African countries follow after independence? Why did it harm trade?

5. What is the general trade pattern in sub-Saharan Africa? When did this pattern emerge? Is this a problem?

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Chapter 5

The Partitioning of Africa

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1. Introduction

During the first phase of the colonial period, between roughly 1880 and 1914, the African continent was partitioned into more than 50 colonies. The process of carving up the continent and creating new political entities had important long-term consequences. First, European powers developed a large scale, centralized bureaucratic apparatus and established new rules and laws to govern their colonial territories. Further, they established a much firmer control of geographical boundaries than had previously existed in the region.

The creation of new geographical entities determined which previously independent states and societies would, from then on, live within the same geographical boundaries. It also determined which societies were left undivided, and which were cut across by international boundaries. And it determined the *size* of the new entities. Sometimes very large and diverse areas and peoples were incorporated into one large colony, such as Nigeria. In other instances, very small colonies were created, such as the Gambia. In order to understand why Africa was colonised at the time and how colonies were created we need to understand the process of partitioning.

Prior to the establishment of formal control after 1880, commercial ties had connected Africa and Europe from as early as the 15th century when the Portuguese landed on the coast of West Africa. This contact intensified with the rise of the slave trade, which was at its height in the 1700s until the mid-1800s. To facilitate trade, Europeans established various coastal trading posts and forts, mostly along the West African coast, but also in Northern and Southern Africa. Over time, some of these posts developed into proto-colonies, or colony-like entities. The Cape Colony in Southern Africa for example, came under colonial control already in the mid-17th century. Further, small colonial administrations were established during the first half of the 19th century along the coast of Sierra Leone, the Gold Coast (present-day Ghana) and Algeria. Still, Africans effectively prevented Europeans from extending their presence into the hinterlands up until 1880. Hence, before the start of colonial expansion, Europeans knew very little about the continent's interior. This all changed rapidly at the end of the 19th century with the partitioning of Africa by European colonial powers. This process is also called the Scramble for Africa.

The aim of this chapter is to explain how the partitioning of Africa evolved and to look at the role that both Africans and Europeans played in the process. We will start by discussing the technological factors that enabled the European powers to occupy Africa. This will be followed by an overview of the process of partitioning. The chapter ends with a discussion of the various driving forces that have traditionally explained the partitioning of Africa.

2. Key factors that enabled European colonial expansion

Until well into the second half of the 19th century, African societies successfully guarded their continent against unwelcome European invaders. However, in the decades leading up to the 1880s, a number of rapid technological developments took place that shifted the balance of power in favour of the Europeans. At the same time, European countries had been developing stronger state and administrative capacity in Europe already since the 16th century. The combination of strong state capacity and technological advances enabled the Europeans, for the first time in history, to expand into the African interior. In the next section the five key factors that enabled European colonial expansion in Africa are discussed.

Quinine

Until the first half of the 19th century, the disease environment in parts of Africa was exceptionally hostile to Europeans. Out of every 1000 European individuals travelling to tropical Africa between 250 and 500 would die, mostly as a result of contracting malaria. Therefore, the tropical parts of Africa were not considered a suitable or attractive place for European settlement. For Africans, malaria was often not as deadly. First, because when children survived malaria attacks, they developed natural immunity. Second, due to past exposure, malaria had caused the development of the sickle cell gene in humans which also provided some resistance to malaria. But the sickle cell trait does not provide the cure to malaria as only people that inherit one sickle cell gene from their parents are less susceptible to falling ill from malaria. In contrast, when people inherited two copies of the gene they die before reaching the adult age.

For Europeans, the deadliness of malaria was reduced with the use of the anti-malaria drug *quinine* from the 1840s onward. Quinine was extracted by grinding the dried bark of a cinchona tree (originally found in highland Peru) into a fine powder, as shown in Figure 1. This was mixed into a liquid before it could be drunk as medicine against malaria. European death rates from tropical diseases dropped substantially in the decades following the availability of this effective treatment. Thus, it was quinine that first made possible the presence of Europeans on the western coast. Matters improved once again in 1901-02 when Europeans found out that mosquitoes were the actual source of malaria and other tropical diseases. Armed with this information they launched campaigns to distribute mosquito screens and bed nets alongside quinine to the European population mostly, which further reduced the number of deaths.

Figure 1: Quinine extracted from the bark of the cinchona tree

Source: Wikimedia.

Iron metallurgy: stronger and cheaper weapons

During the 19th century, the technology used to produce iron improved substantially. In Africa, the most significant impact of these improvements was in the supply of better and cheaper firearms. Europeans initially held most of these weapons and, naturally, this gave them a military advantage. The development of the *Maxim-gun*, a semiautomatic weapon, later proved a crucial factor in the establishment of European military superiority. Due to its increased speed of firing, and the fact it was relatively light to carry, it became the standard machine gun of Europeans in Africa. Between 1880 and 1920, the disparity in military power between Africans and Europeans was at its height. Nevertheless, many African societies possessed firearms, sometimes in large quantities. Most guns were initially obtained in return for trading slaves. All West African states owned substantial quantities of firearms, and some states in the interior of East Africa also possessed large arsenals of weapons. However, most of these were old and heavy firearms, and rarely included machine guns. Moreover, many African armies initially lacked any training in how to handle firearms. The military advantage meant that the conquest of territory was relatively easy and comparatively cheap for Europeans.

Steamboat

Another important technological discovery that preceded the partitioning was the invention of the steam engine. The steam engine had transformed industrial production and the transportation of goods over land in Europe. It also revolutionised the transport of goods by sea through the dramatic reduction of transport costs and time making direct trade between Europe and Africa profitable. In the second half of the 19th century, European ports – previously used for the trade of slaves and manufacturing goods – evolved into havens for the trade of manufacturing goods and tropical foodstuffs such as groundnuts, cacao, and palm oil. These steamboats, carrying goods between Africa and Europe, also transported a new generation of explorers.

The most famous of all was David Livingstone. Livingstone travelled from the UK to Africa in 1840 as a Christian missionary. His initial aim was to spread the gospel among Africans in southern Africa. During his first decade in Africa, he made three long journeys northwards which showed him the social devastations that the slave trades had caused. This convinced him that to abolish the slave trade, it was important to advance European commercial interest as an alternative to the slave trades and to evangelize African populations. His motto became 'Christianity, Commerce and Civilization'. Livingstone believed that the key to achieving these goals was to explore Africa's interior. In doing so, he was the first to demonstrate that quinine was the key to surviving the continent's hostile disease environment.

Administrative capacity

Improvements in the 'technology of government administration' also played a role in the conquest of Africa (Curtin, 1995: 401). Since the 15th century, Europeans had been strengthening their administrative powers. This development accelerated first in France, following the French revolution and during Napoleonic rule. Later also in Britain and other parts of Europe, where successive administrative reforms were implemented. As a result the major powers in 19th-century Europe were better able to administer an overseas empire and could set up a colonial government more efficiently than in the past. Within Europe, there was great confidence in the ability to manage and rule large overseas empires.

Racism, racial superiority, regeneration of African peoples

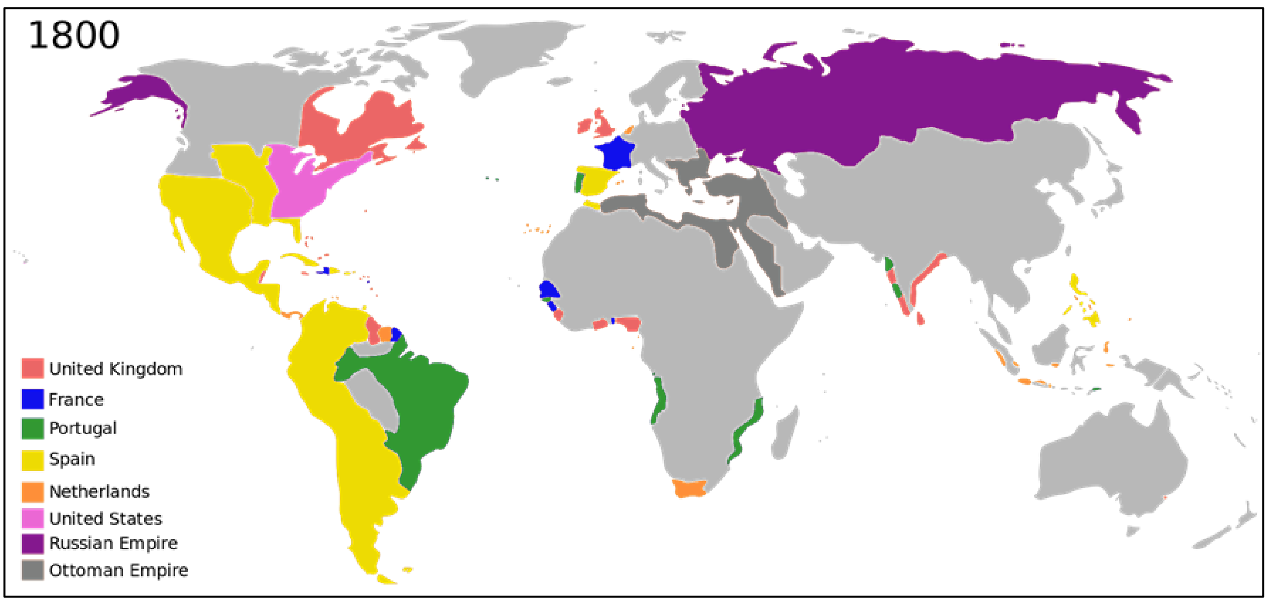
The confidence in ruling overseas areas was part of a more general European attitude towards the world. Driven by its material prosperity and supremacy, Europe reassessed its position towards the rest of the world. This was combined with a firm belief in a 'natural order of things', an idea that gained prominence with the appearance of Darwin's *On the Origin of Species*. Darwin's work was understood by some to provide scientific confirmation of the supremacy of the white race. Thus, Europeans felt entitled to rule others. The conquest of the 'backward' races by the 'superior' race was seen as part of an inevitable, natural process. Racism flourished during the period, peaking between 1880 and 1920. This had a profound influence on how the colonial regimes were organised. In this view, colonisation was also seen as a form of imperial responsibility, which provided a justification for colonial conquest.

3. The process of colonisation

Although the above set of factors facilitated the colonization process at the end of the 19th century, it is still not straightforward to determine the moment at which partitioning officially began. It is perhaps best understood as an evolutionary development in which various African and European interests and actions interacted in what seemed an unstoppable process. What started as commercial contact led to increasing influence of European powers in various coastal regions in Africa. Map 1 indicates the regions in which European powers were present prior to the partitioning, and in which direction they advanced to seize territory.

Initially, European territorial annexation advanced most rapidly in the northern and the southern parts of the continent. At South Africa's southern tip, the Dutch had founded the Cape Colony in 1652. From the early 19th century onwards, the British started to take over control of this region. The discovery of diamonds and gold in the 1860s and 1870s increased the pace at which Britain annexed territory. The balance of power that had previously been established between Africans and Europeans came under pressure. The Zulu in particular, and also the Xhosa, put up such determined resistance that the British were forced to halt their expansion, at least temporarily. In 1879, the Zulu even defeated the British in the famous battle of Isandlwana. However, some months later a reinforced British army eventually defeated and destroyed the Zulu kingdom. In the meantime, the struggle between the British and the Dutch Boers for power in the region intensified. This ultimately led to the Anglo-Boer wars at the end of the 19th century. In 1910, the British eventually defeated the Boers and established the Union of South Africa.

Map 1: European presence in Africa prior to the partitioning in 1800



Source: Wikipedia.

In 1869 the Suez Canal, an important route towards India, was completed in Egypt. The Suez Canal connected the Mediterranean Sea to the Red Sea. After it's completion, ships from Europe did not have to go around the southern cape to reach the east African coast. This reduced the travel distance by ca. 7000 kilometres. In the following period the French and British presence in the area rapidly increased and they started to control Egyptian finances. In 1882, the British felt they had to defend the Suez Canal from Egyptian nationalists. Fearing that France would establish itself as Egypt's rulers, the British decided to take over control of Egypt's territory. This sparked intense competition between France and Britain over the Nile valley.

Although annexation occurred most forcefully in the northern and southern parts of Africa, there were other parts of Africa in which the pressure of competitive annexation was felt before the beginning of the partitioning. Since the 1870s, King Leopold of Belgium had been fascinated by the potential prestige and profitability of creating a Belgian empire in Africa. He was convinced that the future of the Belgian economy depended upon acquiring an overseas market and resources. In his quest to realise this he hired the American journalist and explorer Henry Morton Stanley to explore the river Congo. The goal was to obtain extensive economic concessions from local African rulers which gave an exclusive right to natural resources and trade. At the same time, a French-Italian naval officer on leave, de Brazza, had been exploring the area of Gabon and northern Congo, and signed a number of treaties with chiefs in the Congo basin in the name of France. Competitive annexation meanwhile also reached Algeria, the western Sudan, and Madagascar.

The competition between France and Britain over the Nile valley escalated in 1884, bringing both countries at the brink of war. Chancellor Bismarck of Germany began to fear that those two countries would claim all territory in Africa. Although unconvinced of the usefulness of colonies, Bismarck claimed protectorates over Togo, Cameroon, and German West Africa (now Namibia). At the same time, he called for an international conference in late 1884 to discuss the increased tensions over Africa. In what became known as the Berlin Conference (officially named 'West Africa Conference'), the ground rules for the rest of the European conquest of Africa were established. At the conference, two major decisions were made: first, King Leopold's presence in the Congo Basin was recognised in return for free trade in the area; and, second, any European power could prohibit others from challenging certain territory by bringing it under effective control. Preferably, control should be established by signing treaties with African chiefs or alternatively by military conquest.

4. The involvement of Africans: resistance and adaptation

During this era of increasing intrusion by the Europeans, the invaders faced a large number of different opponents. Map 2 shows where various important political entities were located on the eve of the partitioning.

African societies were not submissive bystanders during the partitioning. Indeed, various strategies were employed to deal with the invaders. Some societies fought colonial rule from the onset and resisted until the end; other societies fought and only surrendered when defeat was inevitable; still others tried to bargain the terms of cooperation; and, finally, some societies used the colonial presence to their own strategic advantage.

Map 2: Political entities prior to the partitioning in 1880

Source: Wikipedia.

Menelik II, Emperor of Ethiopia, shown in Figure 2, employed the ‘fight from the onset’ strategy most successfully. In the famous battle of Adwa, in 1896, Ethiopia defeated the Italian invaders and escaped colonial rule, with the exception of the brief Italian occupation between 1935–1941.

Other African states did not escape colonial rule, but some managed to survive within the colonial structure. Various African rulers managed to retain their power by timely surrender and collaboration with the Europeans. For example, in northern Nigeria, Rwanda, and Burundi, the old ruling class remained in power throughout colonial times. In northern Nigeria for example, the Sokoto Caliphate and British colonial authorities forged an alliance after the Caliphate was integrated into the British empire. This allowed the Sokoto Caliphate to keep its authority over its subjects.

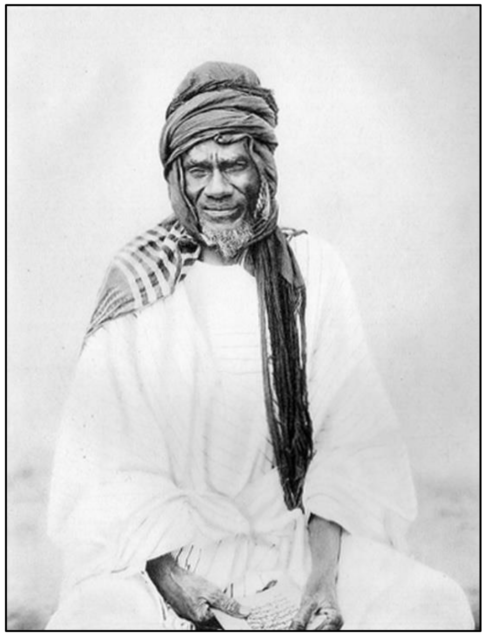
Figure 2: Emperor Menelik II of Ethiopia (1844-1913)

Source: Wikipedia.

Given that the Europeans had more and lighter weapons which they could operate more quickly, one of the defence strategies employed by African societies was guerrilla warfare. This proved a very effective strategy, occupying European troops for years. However, these tactics were not broadly applied, as most local economies could not afford this kind of warfare: feeding and supporting a full-time army was often beyond their economic means. Moreover, the guerrilla tactics could even ruin their economic capacity. For example, Samori (ruling the Madinke empire in western Africa), shown in Figure 3, employed scorched earth tactics. While very effective in slowing the advance of the French, these tactics also destroyed the region's agricultural resources. This put at risk the Madinke empire's ability to feed and support its own communities and army.

In other areas, African societies exploited local rivalries and used the European presence to their own advantage. When the British tried to establish influence over the Buganda Kingdom (in present day Uganda) and the surrounding areas, the Buganda elite used the British assistance to strengthen its own position. During the early 1890s, the Buganda elite offered both military and political assistance to the British in the subjugation of surrounding and rival kingdoms such as the Toro, the Bunyoro and the Ankole (all in present-day Uganda). In return, they received a favoured status within the protectorate.

Figure 3: Samori Toure (1828-1898), ruler of the Madinke empire in western Africa



Source: Wikipedia.

Europeans also exploited local rivalries. When rival states did not combine forces to meet the invaders, the Europeans would face one opponent at a time. For example, the British in Western Africa first fought the Yoruba, in 1892-93. Then they fought the centralised state of Benin, in 1897. And, finally, in a longer war they took on the Sokoto Caliphate in northern Nigeria. Due to pressure from various sides, every emirate (province) of the original Caliphate had to fight alone which was much easier for the British. Eventually the whole Caliphate fell in 1903. Similarly, the French exploited the rivalry between the Tukulor and the Mandinke empires when they extended their presence into the western savannah (coming from Senegal). The French first made a series of treaties with both the Tukulor and Mandinke. The rulers of the empires saw these treaties as guarantees against French attacks. The Tukulor even helped the French in their campaign against other societies in the region. Yet, only a few years later, the French still attacked both empires, conquering the Mandinke in 1893 and the Tukulor by 1898. The Portuguese also exploited intra-African conflicts and increased their influence on modern Mozambique and Angola by letting African armies do the fighting. In Angola, however, the Portuguese themselves also had to face those armies and it was not until well into the 20th century that the Portuguese could claim control over the territory.

Some of the most successful challenges to colonial rule came from various stateless societies. These societies had no central authority that could function as a main contact for negotiation or, indeed, that could formally surrender. For example, in fighting the Igbo of Southern Nigeria, the British had to defeat many different subgroups. When they had conquered one area, other subgroups rose to resistance again and the British had to redirect their campaigns. As a result, it took the British until 1910 before they could declare victory over the Igbo society in Nigeria. Similarly it took them years to conquer the subgroups of the Tiv of the Benue valley. The French, in turn, needed 20 years to subjugate the array of decentralised communities in the forests of the Cote d'Ivoire.

Not all areas became the subject of battles. The Europeans obtained many regions through treaties with African chiefs. The African chiefs typically regarded these treaties as pacts of friendship. Or they considered them as safeguards from attack. The Europeans, meanwhile, took these treaties back to Europe as proof of their effective occupation of a territory. As described in section three above, King Leopold hired the explorer Stanley to explore the Congo river and to obtain extensive economic concessions from local African rulers. During the Conference of Berlin these treaties formed the basis upon which King Leopold claimed the area of the Congo Free State. At the same time de Brazza, who explored the area of Gabon and northern Congo and signed a number of treaties with chiefs in the Congo basin did the same for France. He founded Brazaville in 1880, and thereby gave France a gateway to the heart of Africa. And in Eastern Africa, Karl Peters signed treaties with African chiefs on behalf of Germany. In 1885 Germany declared the protectorate over Tanganyika (now Tanzania).

Another form of European occupation was giving the rights to rule an area to private companies. These companies acquired territories both by signing treaties with local rulers and by fighting. In the lower Niger, the Royal Niger Company ruled on behalf of the British government, and the Imperial British East Africa Company was active in the area north of Lake Victoria and in British East Africa (later Kenya). In Tanganyika the German East Africa Company was given the responsibility of ruling the area on behalf of Germany. And in Southern Africa, the British South African Company (BSAC) occupied territory initially in Shona territory and later also defeated the Ndebele kingdom. Both areas became part of Rhodesia (now Zimbabwe). Later, the BSAC would also occupy the territory of modern Malawi.

In many areas, the rule of these companies was met with fierce resistance and European governments were forced to take over. In Tanganyika, a number of serious uprisings against the German East Africa Company forced the German government to send in reinforcements and take over direct control in 1889. Nevertheless, fighting in the area continued. The Hehe in the south fought until the end of the 1890s, and the Maasai resisted German rule in the north. The most famous resistance in the area, the Maji Maji revolt, was launched in 1905. This was an armed rebellion of Africans against German colonial rule in German East Africa (modern-day Tanzania). The uprising was triggered by the resistance against a policy of the Germans that forced Africans to grow cotton for German colonial export. In Rhodesia, after an initial defeat the Shona and the Ndebele rose in resistance to colonial rule under the BSAC. The uprising was so fierce that the colonists were nearly fought off the territory. Only when the BSAC received reinforcements from the Cape Colony ruled by the British did the revolt end.

The era of partitioning officially ended in the early 1900s. Yet, some areas were never really controlled by colonial governments – such as parts of Central Africa. In other regions, such as Angola and Somalia, resistance continued for at least another decade. Moreover, it took until the 1920s to settle all the colonial boundaries. The boundary between Nigeria and Cameroon, for example, was subject to various negotiations, as were the borders between Ghana and Togo, and between Kenya and Tanzania. The British sought information on indigenous settlement patterns and on several occasions tried to adjust the border to reunite political groups as it understood them. The border between Ghana and Togo was redrawn a number of times after World War I to reunify the states of the Dagomba and the Mamprusi which had originally been partitioned in the north. In other instances claims for reunification, from the Ewe for example, were dismissed.

Map 3: Africa in 1914

Source: Frankema, Williamson and Woltjer (2018: 260).

When the partitioning was completed the British possessed African territories stretching from Egypt to South Africa, divided only by German East Africa. In West Africa, British diplomacy initially proved no match for French military action in the upper Niger basin. France extended its rule from Senegal far into Central Africa. Still, the British claimed the Niger river mouth, and a substantial part of the hinterland to form present Nigeria. Looking at the map of West Africa it is clear that the British carved out the areas that were most suitable for international trade, but they left large parts of the West African interior to the French. In East Africa, however, the British claimed large parts of the hinterland. Finally, Portugal obtained large territories on both the East and West coast of the African continent.

Map 4: Africa in 1965

Source: Wikimedia.

5. Theories on the colonisation of Africa

Now that we understand the major technological factors that enabled the colonial conquest, and how the process of partitioning unfolded, we can turn to the question of *why* Africa was colonised. In the literature various, sometimes conflicting, explanations are offered. In the remainder of this chapter we will discuss the most important theories, and evaluate their validity in the light of the process of partitioning discussed above.

The African dimension

The African Dimension theory focuses on the role of Africans in the partitioning of Africa. It suggests that the European colonial conquest was provoked by two related phenomena. The first was the abolition of the slave trade. This enforced a shift to legitimate trade, primarily of cash crops. As a result, both exports and imports began to decline. The indigenous rulers that had become rich through predatory activities such as the slave trade, adopted reactionary attitudes. They started to resist increasing European influence. Their resistance, in turn, provoked European reactions and ultimately hastened the actual military conquest.

The second phenomenon was that during the second half of the 19th century, instability increased due to conflicts between those African elites that exercised informal European control, and the African movements that opposed European incursion. Opposition movements used imported weapons to fight the old elite. As these weapons became more widely available, more people became involved in the struggle for power. Thus, local conflict and instability intensified. This instability was not only bad for trade, but it also created a possible foothold for European rivals. These developments also advanced European military conquest.

How well does this theory explain what happened during the partitioning of Africa? The explanation focusing on opposition movements turning against the old elite originates from an analysis of the Egyptian developments during the 1880s. Hence it fits that situation well. It can also to some extent explain what happened in Tunisia and Zanzibar. Yet, it is only partially applicable to Anglo-Boer relations in South Africa, and it cannot explain the battles between the Zulu and the Xhosa and the British. Moreover, it cannot explain the French expansion in the Niger Sudan, as the Muslim states usually went to great lengths to avoid war. Furthermore, the exploratory and treaty signing activities employed by Leopold and de Brazza in the Congo basin do not fit this theory well. Finally, the territory acquired by Italy in Somalia, and by Germany in West and East Africa formed part of areas where the informal influence had actually been British, not German or Italian.

Political and strategic theories

Among the most powerful imperialist theories are the political and strategic explanations for the partitioning. The start of the partitioning of Africa is often associated with how the balance of power within Europe evolved during that period. Wars and rivalries between European nations had brought the balance of power in Europe under pressure. Any actions by one European nation required an immediate response from other countries to keep the balance. In order to preserve the power and diplomatic balance at home, European powers felt that carving up the African continent to settle conflicting interests in Africa was the only option. In this process, European did not form one homogenous group, but instead acted often individually and focussed on their own self-interest.

The desire to own African colonies was also a matter of European national *prestige*. The French, for example, had lost territory during a war with Germany and sought to compensate for that loss in Africa. The Portuguese, having had historic connections to Africa dating back to the 15th century, felt the British ignored their 'historic claim' on Africa. In response, they started claiming control over very extensive territories both on the west and east coast of the continent. Finally, Germany's chancellor, Bismarck was frustrated with British behaviour in Africa. The British policy at the time was to exclude other powers from any political influence over territories, even when the British did not occupy or had any legal claim themselves. Moreover, due to the intensifying competition between France and Britain after the events in Egypt, Germany was worried it could lose out in claiming territory in Africa. In response, Bismarck claimed territory in West Africa and at the same time organised the Berlin Conference. Finally, even the British, whose dominance in the world had started to decline during the 1880s, began to become deeply concerned about their national prestige and credibility as a great power.

In addition to national prestige, personal prestige was also involved. European's in Africa, as 'men on the spot', sought to extend control, for their own esteem, to further their own career, or for the prestige of the country they served. This often happened independently of the desires of the country they served. It was especially relevant for the Niger and Sudan region where troops were staffed at outposts that had survived from the slave trade era. Without clear missions and lacking regular communication with their home country in Europe, these troops grew increasingly anxious and restless. Combined with military supremacy, thus having the power to simply overtake neighbours, it was tempting to annex alien societies across the frontier. In various cases, they started to conquer land on their own. A well-known case is de Brazza's exploring activities in the Congo Basin, which he embarked upon on his own initiative. There were also 'men-on-the-spot' in the Gold Coast, Senegal, and South Africa who worked on their own initiatives because they felt that the governments at home were too slow or ignorant of what was happening on the ground. This uncontrolled occupation of territory, which in some cases mounted to the occupation of significant areas, is often cited as one of the triggers for competitive European annexation.

The need to protect strategic European interests was another factor driving the partitioning of Africa. The global strategy view of imperialism argues that the partitioning of Africa originated from proto-nationalist movements within Africa that were threatening European interests elsewhere. In 1880, the British were not particularly interested in acquiring territory in Africa as they were preoccupied with protecting the empire they already had in India. Thus, in 1882, they engaged in military action to defend the Suez Canal, a key route towards India, from Egyptian nationalists. However, this explanation seems too circumstantial to the two cases of Egypt and South Africa, to be generally applicable to explain the grand partitioning of Africa.

The main criticism of this theory is that for European rivalries, prestige, and strategy to be convincing explanations for the partitioning, there must have been something (economically) valuable at stake. Why would European countries quarrel over land if there were nothing to be gained from it in economic terms? Hence, the underlying notion in Europe during the run-up to the partitioning was that there was at least some (potential) gain to be made.

Economic theory

The (potential) economic gain from acquiring colonies has indeed been very powerful in explaining the rapid expansion of European countries into Africa after 1880. According to this theory of imperialism, Europe needed Africa for new markets for selling their industrial products, for obtaining raw materials for production and for investing their surplus capital (an argument often associated with work of Hobson, and later Lenin).

During the 19th century Europe underwent rapid industrialisation. However, at the end of the century Western Europe in particular found itself in a long depression, leading to decreased consumption and overproduction. Instead of reducing production, industrialists looked for new markets. In the same vein, the factories needed raw materials for production. And finally, European capital owners were looking for a field for investment of surplus capital. For the first time, Africa was considered an important factor for the development of European economies.

At this time, when Europe found itself in the depression described above, the reports of explorers on the African continent that reached Europe never failed to emphasise the riches of the continent. By the 1880s, the general belief in Europe was that Africa was '[…] the world's last great untapped reservoir of markets, resources and possible investment opportunities [.]' (Sanderson 1985: 103). Yet, Europe's commercial interests in Africa were still mainly limited to certain areas in the West coast. Actual trade between the continents represented only a fraction of the total trade for most European countries. So it was the potential, rather than the actual gain, that made Africa so attractive and motivated the partitioning.

Finally, the idea that there was a need to invest excess capital has lost its explanatory power during recent decades as it is became clear that investments outside South Africa and Egypt were marginal. The precise timing of the partitioning is thus hard to explain by theory. Why did the partitioning not occur a few years earlier or later? For Britain, which was really the only industrialised power in the 19th century, it would have been sufficient to maintain an informal empire in Africa. France and Germany, which were only starting to industrialize in the late 19th century, had not experienced significant problems in growth that needed to be solved by the establishment of an African empire. And Portugal, a country with great colonial ambitions, was a pre-industrial power in the 1880s and yet took control over very extensive territories in West and East Africa that, for long, remained a heavy burden on the country's underdeveloped economy.

Civilisation/Christianity

In many regions, formal colonisation of Africa was preceded by and to a large extent coincided with the increase in missionary activities. It is sometimes suggested that the activities of the missionaries were responsible for starting the partitioning of Africa. But although Christian missionaries were often the first Europeans to enter a region, the eventual coloniser was often from a different country than the missionaries. Only in a few cases is there a clear connection between pre-colonial missionary activity and subsequent colonial occupation. In the case of the Buganda kingdom, the British government was initially very reluctant to annex the kingdom. The costs were considered too high. However, the missionaries demanded annexation because without formal occupation they feared expulsion from the area where they had established themselves. The missionaries won the bid for the public opinion and the British government, although not keen, permitted the annexation of the Buganda Kingdom and its surrounding areas, which later would become the Uganda Protectorate. In Nyasaland (now Malawi), again, the British government was averse to occupying the area because the only convenient access to the sea was through Portuguese Mozambique. Yet, the British government was afraid of becoming unpopular in Scotland, an important region in the northern part of Great Britain, if they allowed the Scottish missionary presence in the area be taken over by Portuguese Catholics. Thus, eventually the British occupied the area.

Generally, the direct missionary influence on partitioning was limited. It has been argued, however, that Christianity invoked a broader missionary and humanitarian impulse within European society that aimed to enlighten and civilise the African peoples. Moreover, missionaries supported colonialism out of the conviction that European control would facilitate missionary activity in Africa. So while the missionaries probably did not actually cause the partitioning, their support for colonialism certainly played a vital role in legitimising colonial occupation among Europeans.

To summarise, it seems that some explanations are applicable to certain regions and periods while others seem more adequate for other cases. Together, the combination of all these motives seem be exhaustive in explaining the partitioning of Africa. There is no agreement in the literature as to which is the most important, although the combination of strategic/political and economic theories seem to prevail. Together, these factors constituted a series of triggers. If one of the triggers had not gone off, a combination of the others may well have sufficed to bring about the same result. How the eventual partitioning evolved was the result of the interplay between European objectives and actions, and African reactions and adaptation strategies.

6. Conclusion

As we have seen, medical innovations made the presence of Europeans in Africa possible, and European military superiority enabled the relatively rapid partitioning of Africa. But there is no one clear reason *why* Europe colonised Africa in the first place. A combination of motives ranging from economic gain and national prestige to African provocation all interacted in what became an unstoppable process. How this process subsequently evolved was in turn shaped by a combination of actions and reactions of both Africans and Europeans.

The conquest initially developed most rapidly in both North and South Africa, for historical reasons, but also because the environment was less hostile for Europeans. Within a few decades the entire continent was under colonial rule. Even though the number of Europeans that eventually went to Africa to settle was very low, the colonial period had major consequences. European powers carved up the continent, established nation-states and started to develop national economies. However, as there were so few Europeans actually there, it was the Africans that worked in construction, agriculture, and industry. Hence it was the Africans that built up the colonial states, and paid the taxes to maintain them.

Most African countries became independent halfway through the 20th century and kept the same boundaries that were drawn during the partition. The creation of these countries had important long-term consequences. It determined not only the location, shape, and size of nations but also which societies, from then on, shared the same nationality. Hence the creation of countries during colonial times decided the geographical and ethnic basis of African countries today.

Study questions

1. Name three technological developments that enabled the European partitioning of Africa.
2. In which African regions did the annexation of territory initially develop most rapidly, and why?
3. Name two strategies employed by African societies to confront European invaders. Can you give an example of societies that followed those strategies?
4. Give two explanations for why Europe colonised Africa. Which one seems the most convincing to you?
5. Name some of the long-term consequences of the partition. Can you give an example of how it affects your life today?

Discussion exercise

Divide class in sub-groups of three to five students. Let each group discuss what they believe to be the three most important long-term consequences of colonial rule in their country and rank these in order of importance. One student per group will be asked to present the list and offer a short discussion of the arguments in support of this list.

Suggested readings

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About the author

Jutta Bolt is Professor in Global Economic History at the University of Groningen and Lund University. Her research focusses on long-term comparative economic and social development patterns, with a special focus on Africa. Current research projects include understanding long-term disease patterns in Africa (Wallenberg Academy Fellowship extension grant), understanding the historical origins of present-day income inequality in Africa and studying the historical development of local and central government capacity in Africa.

Chapter 6

Health in African History

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1. Introduction

A population's health, the diseases from which people suffer, and the nature of social response to illness are profoundly revealing of the core characteristics of human societies. Human wellbeing is deeply influenced by economic conditions, accounting for 10 percent of global GDP (Gross Domestic Product) today. While it is common to focus on the scientific identification of disease causation and the technicalities of medical treatment, health is also considered a key factor influencing productivity, governmental expenditure, and aid flows. As this chapter will show, moreover, African societies have organized themselves to manage their disease environments, the diagnosis of illness has invariably been shaped by cultural preconceptions, and the costs of care have threatened the viability of individual households and indeed social stability.

This chapter explores the long history of health and disease in African history. First, it will begin by asking how health can be measured, and what the metrics used reveal about African societies. Second, attention will then turn to an evaluation of disease and healing in Africa's pre-colonial past, emphasizing the continent's unique disease burden, and how this both influenced indigenous cultures and external stereotypes. Such preconceptions of a sickly continent in need of Europe's "civilizing mission" helped propel colonial conquest, which, ironically, triggered several decades of population decline. Third, the chapter will discuss how a gradual expansion of colonial healthcare, and a marked improvement in the efficacy of western ("scientific") biomedicine in the 1940s and 1950s, saw African levels of disease and mortality fall as independence approached. The optimism of the first years of decolonization regarding health and healthcare were challenged by economic and political instability, structural adjustment, and HIV/AIDS. The chapter will close with an evaluation of the recent history of medical change across the continent, how concepts such as global health, health for all, and securitization created a situation where health indicators were improving, but the structures and sustainability of healthcare provision remained uncertain.

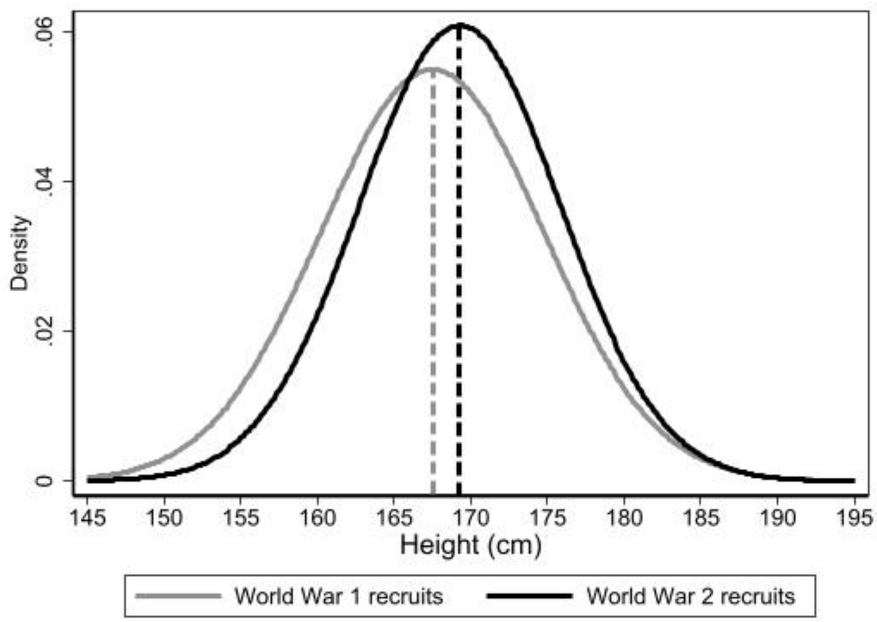
2. How do we measure and evaluate health?

Health and disease are complex phenomena affected by multiple factors. They are profoundly local in nature, shaped by cultural norms and disease ecologies. Understanding of what a disease is, or what terminology should be used, has changed over time. Yet, researchers feel compelled to try to compare levels of illness in different regions and across different periods. It is necessary then to think about what can be measured, and what the measures mean. It is also worth keeping in mind that different disciplines prioritize different metrics. Demographers might emphasize population-level measures like the *infant mortality rate* (how many babies died in their first year of life per 1,000), or the *crude death rate* (how many people died during a year per 1,000). Health economists consider factors which have cost implications such as the *average length of stay for patients* in a hospital, while epidemiologists record disease-specific metrics such as the *disease prevalence rate*, which reflects the proportion of a population with a health condition at one moment. Some metrics, such as *life expectancy at birth*, are used in multiple disciplines. How long the average person lives for is of course central to demography and medicine, but is also used by the United Nations Development Programme to provide one third of the data that make up its *Human Development Index*.

These are all valuable measures, but need to be interpreted and used with care. For example, before the mid-20th century few people in Africa recorded dates of birth, so working out the duration of infancy involved a degree of guesswork. To ensure that interventions reflected the reality that many children in Africa died after infancy the Millennium and Sustainable Development Goals shifted away from infant to under-five mortality. Africa today has a lower crude death rate than Europe. But that is more because Africans are on average much younger than Europeans. It does not mean the average person in Africa is healthier. Historical evidence suggests that early in the 20th century people stayed in hospitals for a long time not only because, compared to today, patients were sicker when they were admitted and drugs were less effective, but also because Christian missionaries, who ran most hospitals in early colonial Africa, viewed inpatients as prime candidates for religious conversion. Changes in *average length of stay* then may not necessarily indicate improvements in treatment or underlying health conditions. Calculating a prevalence rate requires precise means of diagnosis of a disease, but accurate laboratory testing is not universally available even today, and was relatively rare during the colonial period. It is also difficult to test a representative sample of an entire population. Often in the past doctors overestimated the prevalence of a disease in an African society because they relied on the only data they had access to, for example, the frequency of a disease among people admitted to hospital or women attending maternity clinics. But patients are by definition sick, and pregnant women are particularly vulnerable to specific illnesses – this was not a representative sample.

So in the past, measurements of African health were not always accurate or representative. Historians have often been able to derive useful information by interpreting the available data with care. But they have also looked for alternative measures of health. For example, enlistment records have been analysed. Colonial armies required African soldiers to be reasonably tall. Because adult height is a good indicator of levels of nutrition and health during childhood, it has been possible to evaluate the impact of economic and social development on male living standards, over time. An analysis of changes in the average height of African recruits in Ghana indicates a steady increase in heights from the 1890s until the 1970s. Figure 1 shows the height distribution of Ghanaian recruits in the First and Second World Wars. It seems likely that the sharp rise in average incomes associated with expanding cocoa production stimulated a ca. 2 cm increase in Second World War recruits' average heights. However, the same is not true for the many African soldiers who grew up further away from the coast.

Figure 1: Male heights in colonial Ghana by birth cohort

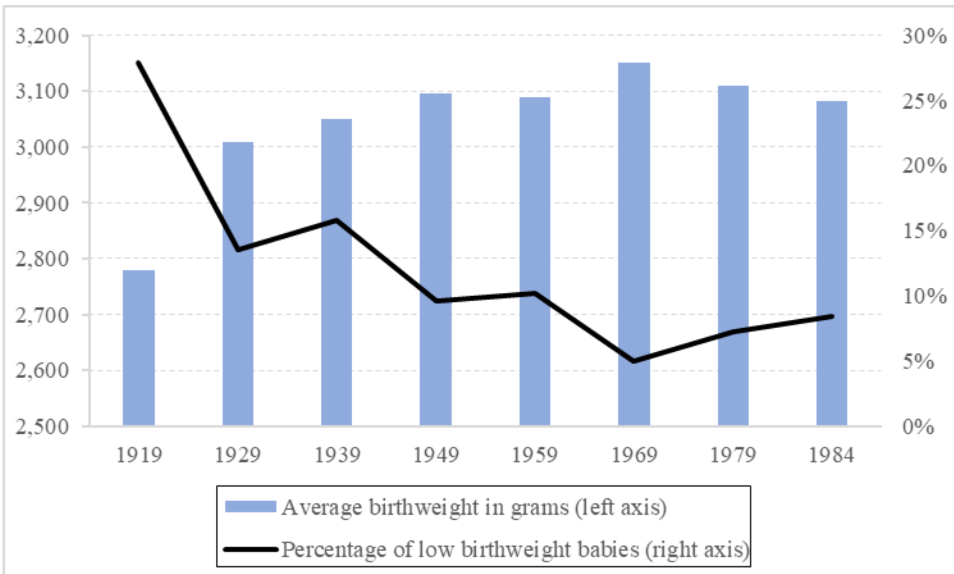


Source: Moradi, Austin and Baten (2013).

An alternative source are maternity registers recording the weight of babies born in hospitals. Figure 2 shows a substantial increase in the average birthweight of babies born in mission hospitals between the 1930s and 1950s in colonial Uganda's capital city Kampala. At the same time the share of low-birthweight (< 2,500g) babies was declining (black line). Birthweight is a good indicator of changes in maternal diet and disease exposure, and also a good predictor of future health and longevity. It is of course possible that women who came to the maternity clinic before the 1930s were significantly poorer than those who gave birth in medical settings in the later period, but there is no evidence indicating such a change. Overall, it seems safest to assume that the period of colonial rule was overall neither catastrophic nor hugely beneficial in terms of its impact on human growth.

As for the pre-colonial period – this was an era when very little usable quantitative data were generated or retained. Rather, historians have tended to rely on qualitative documentary records, typically produced by European observers, which describe African healing practices, standards of health and longevity. These tend to be more revealing of European prejudices than African realities. However, mid-19th century accounts by thoughtful, long-resident, medically-trained observers such as the famous missionary doctor, David Livingstone, suggest that while the causes of disease were often different in Africa, Africans were not substantially more likely to suffer illness or early death than European peasants and town-dwellers in a normal year. Normal years, however, were not so frequent during an era defined by the slave trade and imperial conquest.

Figure 2: Mean birthweights (grams) in Ugandan hospitals



Source: Doyle (2013, pp. 272-3).

3. Patterns of pre-colonial disease

In the broadest comparative terms, Africa appears to have possessed a uniquely hostile disease environment for two key reasons. First, the African continent was home to a particularly diverse and deadly set of tropical diseases. Some of these, such as sleeping sickness or human *trypanosomiasis*, a disease spread by the tsetse fly, were found only in Africa. Others, such as the mosquito-borne infection malaria, were common in many parts of the world, but were especially virulent in African settings. The form of malaria that was most common in Africa, *Plasmodium falciparum*, was more commonly fatal than *Plasmodium vivax*, the form found most frequently in Asia and the Americas. Even in 2020, 96 percent of malaria deaths globally occurred within the African continent, with most fatalities occurring before the age of five in children who have not yet built up immunity against the disease.

The severity of insect-borne disease partially explains the paradox that modern humans (*homo sapiens*) have lived in Africa for two to three times as long as any other continent, yet population densities in the African continent remained comparatively low until very recently. Table 1 places sub-Saharan Africa's population densities in comparative perspective with other world regions, showing that over the past 500 years Africa had the lowest population density. Low population densities also resulted from obstacles to the intensification of agriculture. Patterns of rainfall were often low and unpredictable; soils were relatively lacking in fertility. In addition, domesticated animals as well as humans suffered heavy disease burdens. For example, due to conditions such as *nagana*, the animal form of trypanosomiasis, and tick-borne East Coast Fever, using oxen or horses for transport or to pull ploughs to loosen or turn the soil before planting was, with few exceptions, impossible in infested regions.

Table 1: Average population densities per world region

	1500	**1750**	**1900**	**1975**
Sub-Saharan Africa	1.9	2.7	4.4	13.6
Japan	46.4	78.3	118.2	294.8
South Asia	15.2	24.1	38.2	100.3
Europe	13.7	26.9	62.9	99.9
China	13.4	22.2	45.6	91.1

Source: Frankema (2015, p. 276).

The second major factor was that Africa was connected to Eurasia by Egypt's Sinai land bridge, and later through maritime traffic, and so Africans suffered repeated infiltration of pandemic diseases which emerged in Asian or European cities and spread through these continents' dense networks of commercial trade. Perhaps the worst example was the Black Death, an exceptionally lethal form of plague spread by fleas which arrived in North Africa in 1348 and quickly reversed several centuries of sustained population growth. Africa then suffered disproportionately from the disadvantages of urbanism in an era when cities generated wealth but also facilitated the transmission of disease. However, the continent's long-term exposure to some of the illnesses circulating in Europe and Asia created a degree of immunity. This meant that conquest in Africa would have less devastating consequences than in more isolated populations in the Americas, Caribbean, and the islands of the South Pacific.

Pre-colonial ideas of health and medical/cultural responses to disease

In many African societies, faced with high levels of day-to-day, endemic disease and occasional episodes of intense epidemic outbreaks, cultures of healing extended beyond the realm of the sick individual and the techniques of surgical or herbal medicine. European commentators often noted the technical skill of African surgeons and the range of roots and leaves used by herbalists to treat multiple illnesses. Herbal medicine was also employed to prevent illness and protect health, particularly during conception, pregnancy, childbirth, and breastfeeding. Such practices are illustrated by the sculpture from modern-day Democratic Republic of the Congo below, which depicts a breastfeeding mother with patterns of scars on her skin which were achieved by rubbing herbal medicine into small incisions. As historical anthropologists across the continent have observed, direct attempts to alleviate symptoms of disease formed only part of African healing practices. Instead, emphasis was placed on working out *why* an individual had become ill. These pragmatic African healing cultures then often involved both clinical and spiritual interventions. They also commonly required the engagement of kin or peers who formed therapy management groups who organized and evaluated treatment options. This understanding of healing as involving both spiritual and corporate elements shaped many societies' public cultures of political engagement. Rituals of healing the land or healing the state were understood as crucial for the achievement of collective prosperity and social integration, and also for the mitigation of the interpersonal tensions arising from disruptive forces such as the slave trade or long-distance commerce.

Scarification protecting women during conception, pregnancy, childbirth, and breastfeeding
Source: Commons Wikimedia.

Integration into global markets, 15th-19th centuries

International trade, involving enslaved peoples and primary commodities, not only hastened Africa's integration into global markets from the late 15th century onward but also accelerated the continent's integration within a quickening process of biological globalization. Commerce brought new sources of infection to the continent's shores, and also facilitated the dispersal of long-established pathogens. During the second half of the 19th century, for example, as goods and people circulated faster and further across East Africa, epidemics became almost annual occurrences. Outbreaks of cholera, dysentery, influenza, measles, plague, smallpox, and a host of other diseases, brought devastation to the region. West Africa's suffering was more prolonged. With tragic irony, the perception that West Africans' acquired immunity to malaria heightened their advantage over other forms of labour in the Americas would propel the trans-Atlantic slave trade to new heights, with grim demographic consequences. It is estimated that 12.5 million people were exported as slaves, and that as many captives died of disease or violence before reaching the Americas, during capture, transfer to the coast, imprisonment there, and finally during the voyage.

4. Colonial conquest and early colonial rule

In the European imagination Africa was, by the late 19th century, categorized as a diseased continent in need of redemption, whose inhabitants' adaptation to seemingly hostile environments reinforced assumptions of their racial inferiority. For several centuries, Europeans' incredibly high levels of mortality in tropical Africa protected the continent from conquest. Half of the Christian missionaries who arrived in the Gold Coast before 1850 died within three years, reinforcing the idea that Africa was "the White man's grave". Imperial conquest was motivated by a growing sense of racial superiority within European powers, but it was enabled by a pragmatic willingness to exploit the disease resistance that Africans necessarily acquired if they survived childhood. Across the continent, European expansion was largely achieved through the employment of African soldiers. Conquests could then be consolidated because Europeans' life expectancy on the African continent rose to sustainable levels in the 1880s and 1890s due to crucial scientific discoveries. Drinking water was made safe by filtering and boiling, and European administrators and soldiers began to use the herbal medication, quinine, systematically to prevent as well as cure malaria.

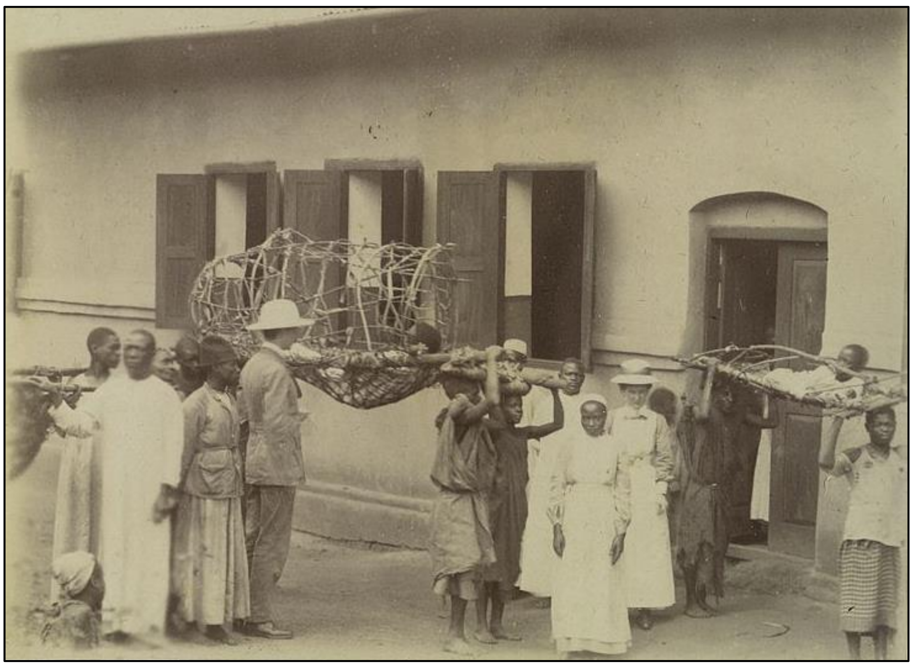
Early colonial medicine focused intently on the consolidation of white power, with outbreaks of plague legitimizing the racial segregation of urban space, and the devastating epidemics of sleeping sickness which accompanied the disruptive nature of conquest provoking a remodelling of rural societies. African populations defined as at risk of sleeping sickness were relocated by the colonial state in part at least to facilitate the extraction of tax and labour. Colonial governments were concerned that epidemics of communicable disease would reduce the size of the working and taxpaying population. But, in addition, sleeping sickness outbreaks often occurred on islands and lakeshores that were remote from colonial control.

This forced the inhabitants of such environments to move to villages near major roads to ensure that they could be made to work for the colonial economy and pay taxes to sustain the administration. Coercion also characterized controls against plague infection, the provision of mass inoculation against diseases such as smallpox, as depicted in the photo above, and campaigns against syphilis, the most common sexually-transmitted infection of the period. The first decades of the 20th century featured population decline of such apparent severity that extreme measures appeared justified. It seems likely that basic sanitation and vaccinations had immediate beneficial effects on life expectancy. In the longer-term, medical interventions that were commonly punitive or unexplained appear to have contributed to doubts within indigenous society about whether the intent behind western biomedicine was benign. This early experience of aggressive western medicine may explain why medical authorities in later periods often complained of African societies' lack of trust in, and incomplete compliance with, health interventions.

Smallpox vaccination in colonial Kenya. Source: Commons Wikimedia.

In the early colonial period, missionary medicine provided the bulk of African healthcare in hospitals and dispensaries. The photo above shows the arrival of patients, who had often been carried over long distances, at one of Uganda's first mission hospitals in Uganda. Indeed, Christian missionary societies invested substantially into African healthcare long before the colonial state. By 1925, Protestant missions alone ran 116 hospitals and 366 dispensaries, treating about 660,000 African patients. Medical missionaries viewed the hospital as an ideal opportunity to engage with a captive audience, a chance to demonstrate Christianity's caring, and occasionally miraculous, healing power. Christian symbolism in missionary medical activities, including blessing of the sick, sign of the cross, prayers and the social support available in missions may have aligned Christian mission practices more closely with African traditional therapeutic systems, which understood disease as signs of individual and community imbalance which could be most effectively treated by including the entire social body, as suggested by the Congolese sculpture above.

More broadly, missionary healthcare was a means of inculcating Christian morality within the household. In the early colonial period medical missionaries, convinced that population decline was due above all to Africans' sexual immorality, placed the prevention and treatment of sexually-transmitted infections at the heart of their endeavours. By the 1930s, belatedly recognizing the scale of the misdiagnosis on which previous campaigns against syphilis had rested, missionary medicine had turned towards a focus on maternal and infant health, which it would continue to dominate for decades.



Patients arriving at Mengo Missionary Hospital, Uganda. Source: Commons Wikimedia.

5. Later-colonial rule

In the period between the First and Second World Wars a major change in medical provision occurred. Healthcare was gradually secularized, as the capacity and ambition of the colonial state expanded. From the 1930s onwards the colonial state increasingly invested into the provision of African mass healthcare. This involved both an expansion of curative provision, and a refocusing of preventive healthcare. While investment in sanitation and vaccination continued, new energy was devoted to efforts to affect popular understanding of disease transmission and avoidance. These would, however, have limited effect until healthcare systems were substantially Africanized in the later colonial period, as African personnel proved better able to translate medical concepts into local idioms.

In the 1940s and 1950s the curative power of colonial healthcare was transformed. The frequency with which Africans engaged with biomedical care increased enormously, partly because of major investment in medical training, institutions, and staffing, but also because the curative capacity of western biomedicine was transformed. The introduction in the 1940s of new antimalarials, like chloroquine, and antibiotics, such as penicillin, underpinned a substantial fall in mortality, particularly for infants and younger children, and a sharp reduction in the average length of stay in hospital, permitting a dramatic rise in the number of patients each unit could treat.

The impact of those medical advances can be best studied when observing disease patterns over time. Table 2 shows the frequencies of the most commonly diagnosed diseases at a mission hospital in rural Uganda during the early and mid-20th century. Diseases like syphilis and tropical ulcer had required very long periods of painful, and often unsuccessful, hospital treatment during the early decades of the 20th century. From the late 1940s, as penicillin was introduced, patients admitted with these conditions experienced almost miraculous cures. For many diseases, rapid cures meant they featured less prominently in hospital over time. Table 2 illustrates a pronounced relative decline in the hospitalisation of patients with skin and sexually-transmitted diseases between from 1940s that could be treated with antibiotics. For other diseases which were very common, but had previously been expensive or impossible to treat, such as malaria and tuberculosis, the introduction of effective and affordable medications stimulated a substantial rise in hospital admission (see Table 2). While colonial medicine improved over time in terms of its effectiveness, it is important to note that its early focus on communicable disease – conditions that could increase rapidly in prevalence and potentially infect functionaries of the colonial state – was sustained through to independence. With few exceptions, non-communicable conditions such as cancer and heart disease, were given less attention than they merited.

Table 2: Disease incidence (%) among in-patients at Toro hospital in Uganda, 1908-70

Disease category	1908-19	1920-29	1930-39	1940-49	1964-70	Examples
Skin diseases	14.1	12.9	17.2	8.2	2.4	Ulcers, Sores, Abscesses
Sexually transmitted inf.	11.8	20.1	10.8	4.1	0.7	Syphilis, Gonorrhoea
Respiratory diseases	9.1	8.3	9.6	11.6	17.2	Pneumonia, Bronchitis
Infectious and parasitic	8.0	9.9	8.3	5.5	13.4	Influenza, Measles, TB
Malaria	6.8	5.8	6.5	14.3	11.2	Malaria
Digestive system	6.6	4.9	4.4	2.1	3.7	Constipation, Dyspepsia
Injury	5.6	5.9	3.8	2.0	1.9	Burns, Wounds, Fractures
Gastroenteritis	4.2	1.7	2.2	3.9	14.2	Gastroenteritis, Dysentery
Genitourinary system	3.6	3.8	3.4	4.2	9.2	Urinary infection, Cystitis
Maternity complications	3.5	4.9	8.0	12.2	3.1	Incomplete abortion
Worms	1.6	2.4	6.0	11.0	4.3	Tapeworms, Roundworms

Source: Doyle, Meier zu Selhausen & Weisdorf (2020).

While these broad trends were visible universally, medical systems varied in character across the continent. For example, probably the most intrusive healthcare system in colonial-era Africa was that of the Belgian Congo, distinctive for the government's delegation of responsibility for healthcare to corporate and missionary providers until the 1950s. Meanwhile, the French imperial system was noteworthy for its dependence on military doctors and the persistent prominence of medical campaigns against particular diseases, most notably sleeping sickness, right through to decolonization. Rather than focus on receiving patients who chose to seek treatment for a range of maladies, French medical strategy instead focused on trying to cure a small number of illnesses at any one time. Medical teams moved around from village to village, testing and treating an entire community for one disease, and then leaving that area without medical provision for perhaps six months until it was time for a new campaign. This prioritization of mobile diagnosis and intense treatment of high-profile ailments reached a high point with the programme against sleeping sickness. In 1937 alone, almost 600,000 injections were given in French Equatorial Africa against sleeping sickness. While these kinds of vertical campaigns could also be found in British colonies, over time the trend was towards the development of a pyramidal referral system. With this approach the entire population should in theory have access to local, basic healthcare, often in the form of a dispensary. Complicated cases would be referred upwards to larger hospitals with more specialized staff and equipment.

During the era of segregation and Apartheid in South Africa medicine played a key role in sustaining an economy based on cheap black labour. In the mining industry, for example, cramped living conditions, inadequate food, and poor ventilation resulted in shockingly high levels of illness and mortality, particularly due to respiratory disease. When mine owners were informed of the costs of improving miners' working and domestic environments, they chose instead to create a laboratory for the development of a pneumonia vaccine. This was 30 times cheaper, albeit completely unsuccessful. Medical concerns that vaccine research would not address underlying issues were in turn effectively silenced by the categorization of the migrant labourer as 'the tropical worker'. Mine owners established the South African Institute for Medical Research, funding research which stigmatised Central African migrants as being biologically weak. The worker, not the working environment, was to blame for death rates exceeding 10 percent per annum.

All medical systems involve a compromise between cost and efficacy, and between the breadth and depth of patient engagement, and those of colonial Africa were certainly no exception. That the medical institutions of the Belgian Congo were so frequently targeted during the conflicts of the 1960s is perhaps unsurprising given the striking slowness of the Africanization of the workforce within both mission and state healthcare systems as well as hospitals' and dispensaries' enduring association with the "civilizing mission" and extractive capital in the form of plantation and mining corporations. Medicine in the Congo had often been presented as an example of European technological superiority and moral generosity and guidance. Meanwhile, healthcare had been used to aggressively monitor and transform Africans' lives, particularly through maternity clinics (see photo below) and within mining communities. The vertical French system disadvantaged those who fell ill with the ‘wrong’ diseases or at the wrong time – many communities had very limited access to local healthcare in the months between each visit by mobile clinics, and a system that prioritized some diseases inevitably under-resourced treatment for others.

Baby clinic Leopoldville, Belgian Congo. Source: Manchester University Press Open Hive.

The British pyramidal system in theory ensured that most people could access basic, local healthcare, and that dispensary staff would refer complicated cases upwards, to health centres or hospitals. In practice, however, such a model relied heavily on the diagnostic capacity of the least-qualified staff, and, perhaps unsurprisingly, saw its referral hospitals swamped with patients who sought direct access to the highest-quality care. South Africa’s segregationist healthcare racially discriminated against African workers in ways which saved employers money in the short term, but at the cost of workers’ health and long-term economic growth. Preferring to dismiss employees who fell sick instead of improving unhealthy working and living conditions, treating workers as disposable and replaceable, ultimately contributed to the low productivity and antagonistic labour relations that undermined Apartheid.

6. Early Independence

Across the continent in the age of decolonization nationalist politicians promised that independence would permit the removal of the gross health inequities which had characterized colonial rule. Given the prominence of doctors within many nationalist movements, it is perhaps unsurprising that substantial investment in healthcare did in fact ensue in most former colonies. In the first six years of independence in Ghana, for example, the number of health centres quadrupled and doctors and nurses (depicted in the photo below), often presented as highly-trained symbols of the new nation's progressivism, trebled.

Nurse Training in Ghana, 1957. Source: Commons Wikimedia.

Yet within this broad trend, healthcare expansion took several distinct forms. Some newly-independent countries like Uganda sought to bring high-quality healthcare to all geographical regions, by ensuring that each district would have its own referral hospital. In others, such as Tanzania, policy sought to ensure that every village possessed effective basic healthcare provision. Such strategic or ideological variation did result in substantial structural divergence, yet in all cases the redistribution of investment and personnel towards rural communities was limited by the concentration of resources in the capitals of these new nations. The development of medical schools, the establishment of research institutes, and the commitment to world-class provision created centralizing forces which deepened the advantages enjoyed by urban populations under colonial rule. Uganda's flagship national hospital, Mulago, received 60 percent of the health budget in 1964. Even in egalitarian Tanzania the doctor-to-patient ratio in 1967 was 150 times higher in urban centres compared to rural areas. In 1971, rural Tanzanian health centres received only 4 percent of the national health budget. Despite these divergent approaches, and structural imbalances, the first decade of independence typically brought substantial improvements in life expectancy. In part this simply reflected a major upwards shift in the numbers of patients treated, as new medical units were established and Africanization programmes improved nurse-to-patient and, more slowly, doctor-to-patient ratios. This broadening of access to treatment was typically matched by an expansion in preventive healthcare, particularly through vaccination programmes against common childhood diseases such as measles and polio.

7. Later independence

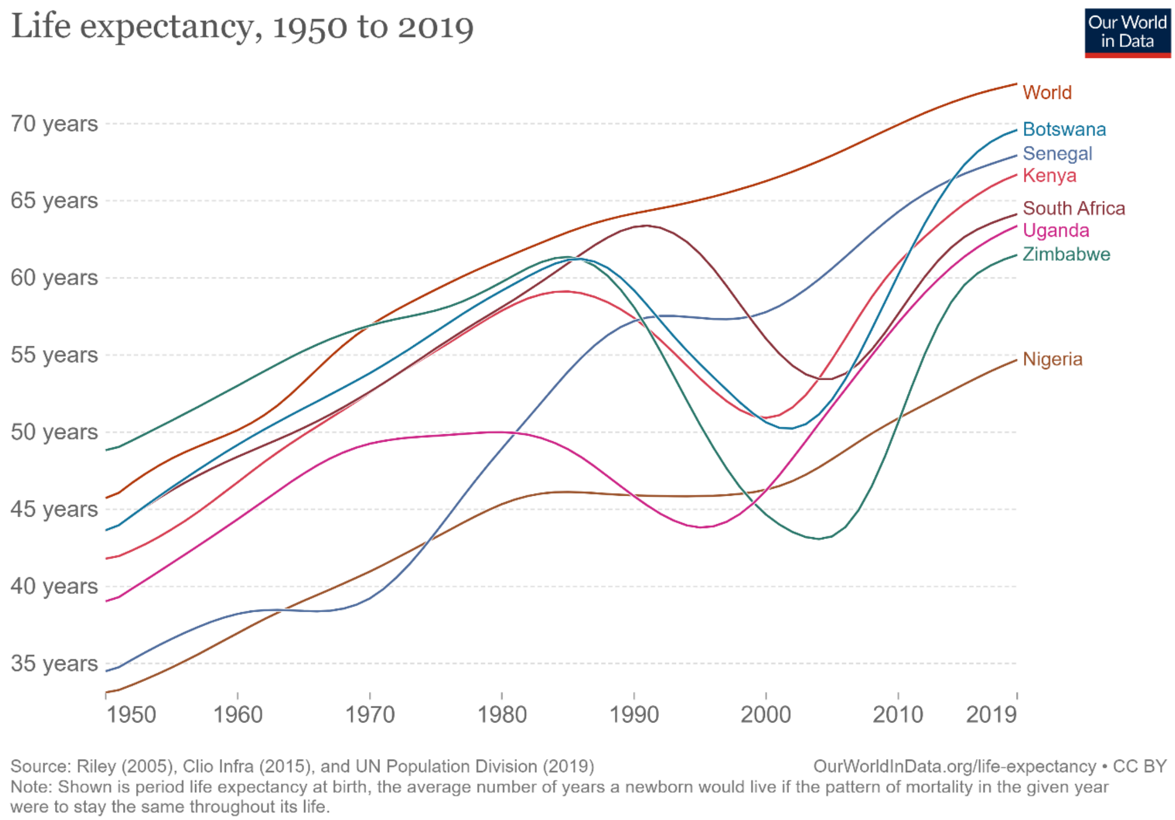
The progress that had characterized most early independence-era health programmes faltered during the 1970s. In reality, several countries had fallen behind during the 1960s. Often this was due to civil war, as state revenues reduced and were diverted from health and education increasingly to military ends. In addition, in such situations insecurity and underfunding refocused medical systems on emergency care and, generally unsuccessful, attempts to slow the emigration of healthcare personnel. For example, in the Democratic Republic of Congo, long-lasting president Mobutu Sese Seko's (1965-1997) mismanagement saw the number of hospital beds almost halve in the first decade of independence. In the decades that followed civil conflict grew more frequent and longer-lasting. Angola's civil war, which lasted from 1975 until 2002, saw one third of the population displaced, and two-thirds of medical facilities destroyed. The number of doctors per 1,000 people fell threefold from 0.12 in 1970 to 0.04 in 1990. In southern Sudan not one single doctor was practicing in 1983. In 2016 alone, 18 African countries experienced some form of civil war, with tragic health consequences, particularly for the continent's 12.4 million internally displaced persons.

Even more universal was a slowdown in economic growth and an increase in income inequality. Even Nigeria, which saw the value of its exports increase elevenfold between 1960 and 1990 due to the discovery of crude oil, experienced deepening poverty. However, oil production skewed the value of Nigeria's currency to such a degree that its agriculture and manufacturing sectors, the main source of income for the great majority of the population, became profoundly uncompetitive. As a result, official figures reported that the proportion of the population living in poverty rose from 15 percent in 1960 to 43 percent in 1992. State investment in Nigeria's health system was reduced, reaching a mere 1 percent of all government expenditure in 1990. Accordingly, Nigerian health indicators stagnated. Figure 3 shows that between 1980 and 2000, life expectancy only rose by one single year to 46 years while infant mortality fell marginally from 134 to 119 per 1,000.

The 1970s and 1980s were not lost decades everywhere. In Senegal, as shown in Figure 3 life expectancy during this period rose from 39 to 57 years, and infant mortality halved. To a large degree this reflected Senegal's commitment to the principles of the *Alma Ata Declaration* of 1978. This declaration became so influential because the World Health Organization accepted its key principle, that the provision of universal basic healthcare was the approach which would lead to 'Health For All'. Alma Ata discussed health in terms of wellbeing rather than the absence of disease, defined it as a human right and a socio-economic as well as a medical issue, and advocated the reorganization of medical systems around the principles of comprehensive primary healthcare. In Senegal, aligning with the WHO's new strategy resulted in a gradual refocusing of rural medical provision around public health, and a shift in resources from hospitals to village health posts under the supervision of a health centre. By 1990 a third of the population benefited from an effective system of Universal Health Coverage.

For most African countries, lying somewhere between the extremes of Nigerian underperformance and Senegalese overperformance (Figure 3), the situation in the mid-1980s was one of faltering gains and weakening investment. At this point, two new factors profoundly reshaped the medical environment: AIDS and SAPs (structural adjustment programmes).

Figure 3: Life expectancy in select African countries 1950-2019



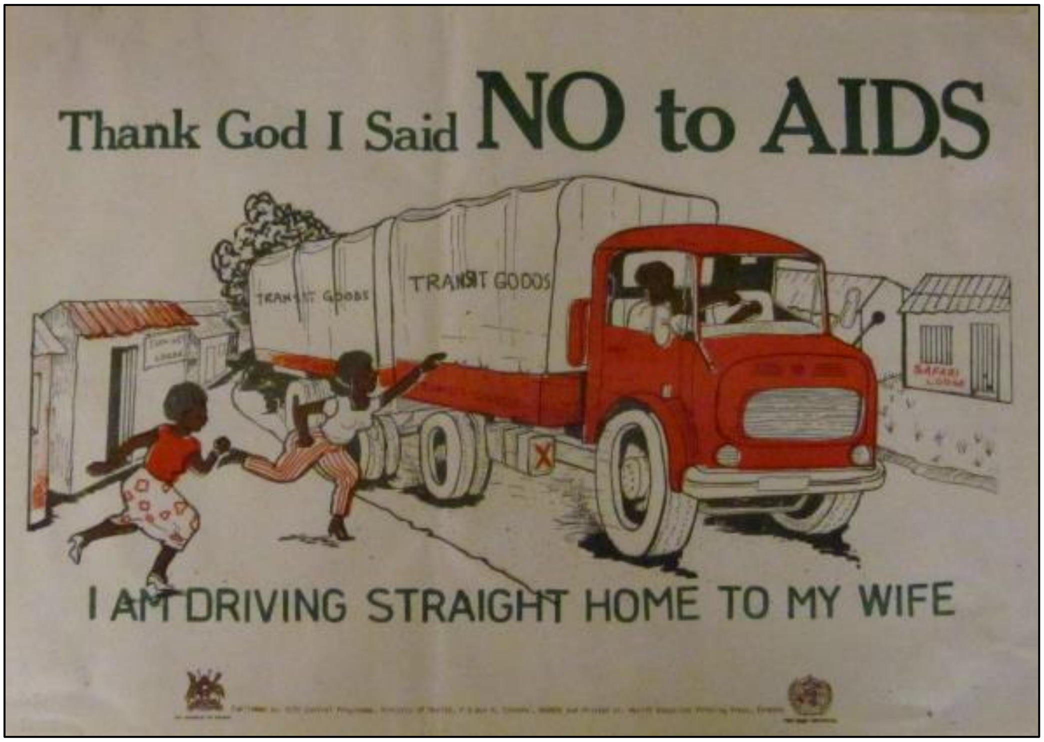
Source: Roser, Ortiz-Ospina & Ritchie (2013), Our World in Data.

In 1983, the first cases of AIDS were recognized in Uganda. AIDS is a disease which is almost always fatal without treatment, and is spread when people are exposed to bodily fluids containing the HIV virus, through for example sex or blood transfusion. By the mid-1980s a third of pregnant women in Uganda's capital Kampala tested positive for HIV. By the early 1990s the epicentre of the pandemic shifted southwards. In 2002, it was estimated that 36 percent of sexually-active adults in Botswana were infected with HIV. At that time a 15 year old boy in that country had an 80 percent chance that his eventual cause of death would be AIDS. As can be seen from Figure 3, across southern Africa (Botswana, South Africa, Zimbabwe), all the hard-won gains in life expectancy achieved since 1960 were lost within a few years. AIDS was a particularly devastating disease because it primarily affected young adults in their peak productive and reproductive years. Affected families often fell into deep poverty as they not only lost a prime income-earner, but also took on long-term costs to care for the sick and the orphaned children left behind. Across the continent, AIDS was estimated to have killed well over 20 million people by 2020, but the impact of the pandemic was very uneven. North and West Africa were affected only to a limited degree – in Niger 48,000 people carried the virus in 2017, a prevalence rate of 0.4 percent. In that same year, by contrast, 7.5 million people in South Africa were HIV positive.

South Africa suffered so severely in part because of the legacies of Apartheid. A sexual culture reshaped by labour migration and gender and racial inequalities facilitated the rapid spread of HIV. Africans' rural economies had been structurally undermined to force male labourers to accept underpaid urban employment, while Apartheid rules aimed to prevent men from bringing their families to the cities with them. This fracturing of family life underpinned the world's worst AIDS epidemic. The National Party ignored AIDS as a disease of immorality and Nelson Mandela baulked at the scale of HIV control, fearing that addressing AIDS adequately would mean the ANC would be unable to deliver its commitments to racial justice; his successor, Thabo Mbeki, was repelled by analyses of HIV causation which seemed to reinforce tropes of African hypersexuality, and attributed AIDS to structural inequities rather than HIV infection.

This approach was particularly unfortunate given that effective antiretroviral treatments became affordable during Mbeki's presidency. Antiretrovirals are not a cure for AIDS, but they stop the virus from replicating in a person's body, enabling their immune system to repair itself, greatly increasing an infected person's life expectancy. In 1996 trials established that a combination of three drugs dramatically reduced the amount of virus in people's bodies, but the cost was prohibitive for people living in the developing world. Popular protest challenged the moral basis for pharmaceutical companies' profit-making from AIDS, and led to a huge reduction in the cost of drugs. Beginning in 2002, South Africa gradually developed the largest antiretroviral treatment (ART) programme in the world. By 2017, it was costing the government $1.5 billion annually. The economic and social benefits of the programme were clear, however, as only 0.9 percent of HIV positive South Africans died of AIDS in 2020.

Many African countries had struggled to confront a disease which required their governments to discuss topics typically excluded from public discourse. One early exception was Uganda, whose new government in 1986 regarded AIDS as a national emergency and worked closely with civil society organizations to engender sexual behavioural change. In Uganda, HIV featured prominently in presidential speeches, religious sermons, civil society activism, and above all in public health information posters, as shown below. HIV prevalence rates quickly fell as Ugandans' use of condoms outside marriage doubled between 1995 and 2000, and girls' reported age of first sexual contact rose from 15 to 17.3 years during the 1990s. Senegal, meanwhile, rapidly integrated HIV prevention into its effective primary healthcare system, building on an already well-established sexually-transmitted infections programme and investing heavily in public education and coordination with community leaders. While Uganda's achievement was in bringing an explosive epidemic to manageable levels, Senegal's was to prevent AIDS from ever getting out of control.



AIDS prevention poster from Uganda
Source: Commons Wikimedia.

In the same year that Africa's HIV epidemic was first detected, Ghana entered into Structural Adjustment. SAPs were developed by major global lenders (the International Monetary Fund and World Bank) in the early 1980s with the intention of increasing developing economies' competitiveness, and ensuring that their exports would cover the cost of their imports. In order to reduce the enormous debts that had been accumulated by governments across the developing world, the lenders offered additional loans, with strict conditions. Governments were required to accept the privatization of state-owned industries, facilitate international investment and competition, and reduce expenditure on the civil service and public services. Initially confined to countries like Ghana and Uganda whose economies were in a state of collapse, SAPs were rolled out across the continent in the later 1990s. Typically SAPs involved an immediate shift in the funding models which underpinned Africa's healthcare systems. Gone was the nationalist-era commitment to free healthcare as a right of citizenship. Instead, patients were required to shoulder some or all of the direct costs of their treatment in the form of user fees that patients had to pay for medical consultations and drugs. Where the state's provision of healthcare had effectively broken down, as in Ghana, where collapsing budgets meant that staff were unpaid and medications became unavailable, user fees could facilitate a gradual recovery in public healthcare. But in many countries the poor were disadvantaged by a shift from a semi-functioning free system to a user fee model. In Zambia, user fees in urban health centres saw attendances fall by four-fifths. SAPs, by requiring governments to reduce their expenditure, also contributed to a relative decline in medical training.

By 2004, Africa made up a seventh of the global population and accounted for a quarter of the world's disease burden, but only one healthcare worker in 77 was based on the continent. And of these, an ever-growing proportion worked in the private sector, catering primarily for Africa's small middle class. Structural Adjustment, by accelerating the marketization of healthcare, prompted a shift of personnel from state to private practice. In Kenya, the number of private hospitals, which had grown steadily since the 1960s, doubled between 1993 and 1994. For the African poor the impact of liberalization was a return to traditional healers and an epidemic of self-medication, dependent on a mushrooming number of untrained pharmaceutical retailers.

8. The new millennium: successes and emerging challenges

The history of health in Africa since 2000 has to some degree been shaped by a reaction against the twin crises of AIDS and SAPs. Inequitable access to AIDS treatments brought a renewed moral commitment to affordable healthcare for the developing world. Awareness of the marginalization of the poor within marketized economies influenced the development of the Millennium and then the Sustainable Development Goals set by the United Nations, which highlighted the weakening of public health within Africa in particular. The evolving, imprecise concept of Global Health, of a shared responsibility for a basic standard of wellbeing for all, inspired an enormous uptick in health-related aid transfers to the African continent. Most significantly, the Global Fund, instituted in 2002 by a coalition of the UN, donor nations, and charities to focus on HIV, malaria, and tuberculosis, had by 2019 committed to a total expenditure of US$31 billion. In addition, the American government's PEPFAR invested US$90 billion in AIDS prevention and treatment campaigns between 2003 and 2019. These targeted health commitments have achieved impressive results. Malaria mortality, for example, fell by 45 percent in countries in which the Global Fund operates (shown in photo action below), and recent successes with vaccine trials hold out the hope that further improvements lie ahead. Meanwhile childhood immunization was re-energized, resulting in the eradication of polio and enormous declines in cases of measles and meningitis across the continent.

There are, inevitably, concerns about the imbalances which such transformative funding created. In a number of African countries the combined budgets of the Global Fund and PEPFAR exceeded those of national Ministries of Health. The shift towards 'projectification' brought a healthcare arena dominated by fixed-term interventions, focused on specific medical conditions within narrow geographical boundaries, and displacing personnel from governmental institutions. The intense focus on infectious disease to some degree reflected Northern governments' concerns about the biosecurity of their national borders, and has hampered recognition of the reality that Africans suffer a double burden of communicable *and* non-communicable diseases. Across the continent, increased longevity and dietary change has brought increased incidence of conditions such as diabetes, heart disease, and hypertension, which in 2019 were responsible for almost as many deaths as AIDS, malaria, and tuberculosis combined (14.9 percent of total deaths compared to 15.5

percent). In that year non-communicable diseases such as these accounted for 36 percent of all deaths in sub-Saharan Africa, up from 24 percent in 2000. Of course, this redistribution in cause of death was not only because diseases like diabetes were becoming more common in Africa, but also because of improved prevention and treatment for conditions like AIDS and malaria.

Donor-funded malaria control in Uganda
Source: Commons Wikimedia.

Moreover, for countries such as Ghana inward aid has enabled the reconstruction of entire public health systems, and a very substantial expansion of specialist training. Uganda in particular has drawn on international recognition of its success in combating AIDS to influence the development of global health policies. In addition, the era of 'projectification' has coincided with a new interest in 'health for all'. Pioneered by countries such as Ghana and Rwanda, community-based health insurance has revived the goal of Universal Health Coverage. By 2012, 92 percent of Rwandans had joined its contributory insurance scheme, which promised to eradicate the impoverishment which out-of-pocket user fees always risked, and reduced the marginalization of the poor through subsidized subscription rates. Other, similar experiments have struggled to retain members and limit demand. The ambition that marked the first years of independence has been partially renewed, but the fragility of healthcare systems to shocks such as Ebola and the prioritization of national self-interest over Global Health during the COVID-19 pandemic must temper optimism.

9. Conclusion

The centrality of health within African history is clear. In economic terms, precolonial African societies typically managed the risks involved in agriculture and trade through healing rituals. European empires' medical policies were intimately connected to core concerns relating to the colonial economy, such as productivity, labour supply, and tax revenue. The ebb and flow of postcolonial governments' attitude to public investment can be traced through their fluctuating health strategies. Concerns about disease have also been at the heart of religious life – from pre-colonial drums of affliction, through missionary medicine, to contemporary healing churches – and politics. Epidemics have long been viewed on the continent as both a threat to stability and an opportunity for empowerment.

This was seen clearly during COVID when the pandemic was used as a justification to close down opposition politics in several countries. COVID has also reinforced global health inequities, most clearly in regards to access to vaccinations, is likely to have heightened mortality due to worsening poverty and interrupted access to medical treatment for other conditions. Many African countries appear to have outperformed richer nations in terms of the development of a coherent strategy against coronavirus and popular acceptance of necessary restrictions. But data are so far lacking on whether such achievements translated into substantially lower excess mortality. Nonetheless, there are many other positives on which to focus, with the recent introduction of an effective vaccine against childhood malaria, the rapid recovery of life expectancies due to AIDS drugs, as shown in Figure 3, and substantial increases in health expenditure across the continent since 2000. How the continent will adapt economically to the population growth and ageing that are anticipated in decades to come is a fascinating question. It can be hoped that the history of resilience and adaptation to new challenges will provide a legacy on which African states can draw.

Study questions

1. Why did Africa, the cradle of humanity, have lower population density than other continents in recent millennia?
2. How did the health priorities of pre-colonial African communities differ from those of colonial states?
3. How have health policies been affected by economic strategies over the past century?
4. Which factors were most significant in reducing African mortality during the colonial period?
5. How do patterns of disease and mortality differ in Africa today compared to the global north?

Suggested readings

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About the author

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Chapter 7

African Demographics: How many People are too many People?

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1. Introduction

Africa's population growth over the past 50 years has been unprecedented. By 2050, the continent is expected to make up a quarter of the global population, compared to one-tenth in 1980. Such rapid population growth has also made Africa the most youthful continent with 60 percent being younger than 25 years. Mapping and analysing patterns of population growth is key when planning for and understanding changes in economic processes over time. The number of people in a society can be seen as either a burden or a strength. On the one hand, with rapid population increase there is a need for a parallel increase in production if people are not to become worse off and this, in turn, can put significant strain on both natural resources and systems of production. On the other hand, the stock of health, nutrition, education, skills, and knowledge embodied in a country's population and labour force is a fundamental productive asset. In this chapter we discuss the pros and cons of Africa's population growth. The chapter is divided into two separate but interconnected parts. The first one is of a more theoretical nature and deals with various aspects of demographic theory, while the second is empirical with a focus on selected African characteristics.

The following section, provides some context, reviewing the over-population scare from the 1950s onwards; where did it come from and how well has it stood the test of time? Next, we present the Malthus-Boserup debate and the fundamental principles for how the negative and positive effects of population growth have been understood. In section 3, we move on to the demographic transition model, which lays out the move from a relationship of high mortality and high fertility to a stage of low mortality and low fertility. We also identify five different pathways in the demographic transition based on empirical experiences. Section 4 presents selected data on the historical population growth in sub-Saharan Africa. While Africa used to be perceived as a continent with low population density, i.e. scarce labour and abundant land, that image has changed as contemporary societies experience significant population increase. In the final section, we reflect on the factors that can drive further demographic change in Africa.

2. Demography

The over-population scare

In the 1950s, many economists and policy makers became increasingly concerned with the relationship between economic growth and population increase. There were a few explanations for this newfound interest:

- The rate of *economic growth* in the western world, made up of North America and Western Europe, was unique in world history.
- There was a wave of *decolonisation* as the old empires crumbled, but the newly formed countries were poor.
- *Population growth* was at a pace never before seen in history, but the population increase was unequally spread. While population in the industrialised countries was steady, the increase was taking place in the developing world.

Therefore, the major global development question in the 1950s became: How could economic growth and potential improvements in living standards spread to poor parts of the world when the population in these areas was constantly increasing? The challenge seemed enormous. The UN was assuming a 2-3 percent annual population growth and global population increase did hit an all-time high in 1963 with an annual growth rate of 2.2 percent. With a 2 percent annual population increase the world population (in billions) was estimated to be: 7.4 in 2000, 32 billion in 2075 and 500 billion in 2200. Luckily, Table 1 shows that the prognosis turned out to be a scare and the population increase has instead been slower than predicted:

Table 1: Global population, 1800-2100

	Population (billions)
1800	1
1925	2
1960	3
1974	4
1987	5
1999	6
2011	7
2021	8
2050*	10
2100*	11

Note: * Latest projections by the United Nations (2019).

The explanation for the manageable population figures, compared to the prognosis 70 years ago, is a drastic decline in fertility in many world regions. In the period 2010-2015, fertility was below 2.1 children per woman, which is the replacement level, in 83 countries comprising 46 percent of the world's population, e.g. in China, USA, Brazil, Russia, and Japan. However, just as discussed in the 1950s, it is still a concern that current and future population increase takes place in countries with poor economic growth. More specifically in South Asia and sub-Saharan Africa, which are also the regions with the highest poverty rates. Therefore, the question of how to give a growing population a decent standard of living remains.

Is the world overpopulated? In the city of Lagos in Nigeria live 15 million people.

Malthus-Boserup debate

Fear of overpopulation and concern with the relationship between population increase and poverty are not new issues. Thomas *Malthus* (1766-1834) lived in England. He was both a priest and an economist specialising in issues of poverty and population increase. He claimed that:

- Human beings need food to survive, i.e. they will always eat.
- Love between the sexes will prevail, i.e. humans will always reproduce.

Malthus stated that a population has a tendency to grow faster than food production and therefore the amount of food per person would decrease as the population increased. This scenario would go on until a situation was reached where further population increase was hindered by some increase in mortality caused by lack off or conflict over food, e.g. wars, epidemics, or starvation. Alternatively, humans could set up systems for keeping fertility down by enforcing preventive actions, e.g. no sex before marriage, higher age for marriage and a larger part of the population staying unwed.

Malthus died before the agricultural transformation and the industrial revolution in England had come into full force. Consequently, he was unable to take into account the drastic increase in production and productivity in the agricultural as well as the industrial sectors that were the result of those processes. He neither experienced revolutionary technological change nor significant improvement in standards of living. The Malthusian debate, however, is still alive today and *neo-Malthusians* claim that even if food is not the problem it once appeared to be, energy and non-renewable resources, e.g. minerals, are still heavily stressed by a growing world population. In addition, there is the concern with how we are to harmonise all three dimensions of sustainable development – economic, social, and environmental – expressed in the UN Agenda 2030 Sustainable Development Goals. When a growing number of people in poor countries can afford to consume as many material assets as people do in the rich world, the global ecological footprint, how much nature we use to sustain our lifestyles, also grows. Before we asked: How many people are too many people? Now the question is also: How much consumption is too much consumption?

A very different point of view has been represented by the Danish economist Ester *Boserup* (1910-1999), who saw a direct and positive link between population increase and technological advances within the agricultural sector. Because there is always an opportunity for technological change to increase food production, her model lacked any incentive for lowering fertility, especially for agricultural economies based on family labour. Boserup draws on examples from various time periods as well as geographic locations and claims that:

- When there is population growth in an agricultural society, pressure on land will increase.
- To deal with land scarcity, farming methods will become more intense in order to produce enough food.
- This intensification brings:
    - increased use of labour
    - more intense use of land
    - farming on marginal (less fertile) lands
    - technological change in the form of new crops, tools, machinery, etc.

Indeed, there have been numerous technical advances in agriculture all over the world responding to the demand for increased production due to population increase.

Malthus' and Boserup's opposing arguments for population increase being either a negative or a positive force in agriculture both have their merits and continue to be of high relevance. Also, today we know that the problem that we are facing is not necessarily the ability to feed the world population in the future. Instead, the issues are:

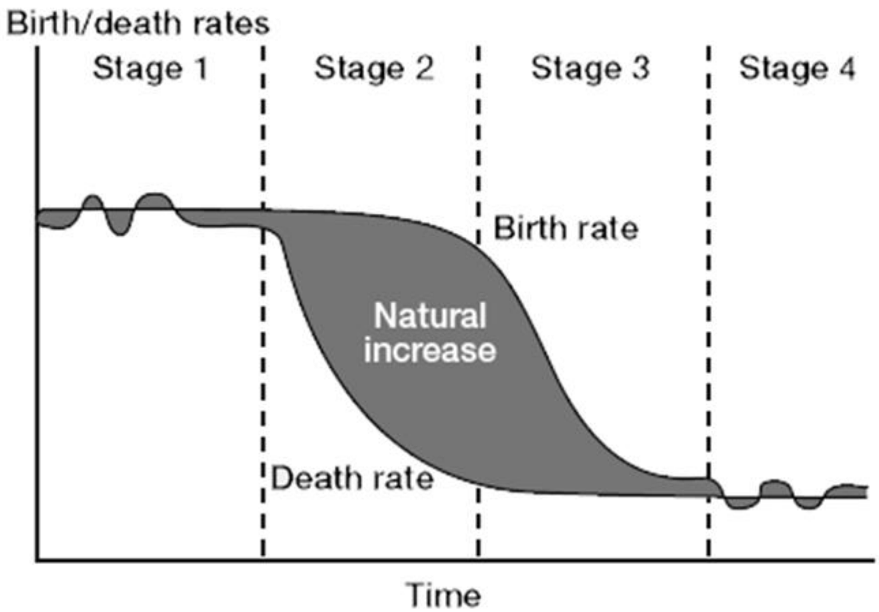
- How do we divide what we produce between us? A large share of the global population live in plenty and waste food while others are starving.

- What are the limitations of continuous growth? We are depleting non-renewable resources and bio-diversity, and we do not know what to do when they are gone.

3. The demographic transition

The *demographic transition model* captures changes in population dynamics and offers an explanation as to how an end to continuous population growth can come about. Traditionally, it contains four stages and societies move along these stages from one to four (see Figure 1). While there are a few examples of societies moving backwards in the process, e.g. the HIV/AIDS epidemic in some African countries, these are only temporary episodes.

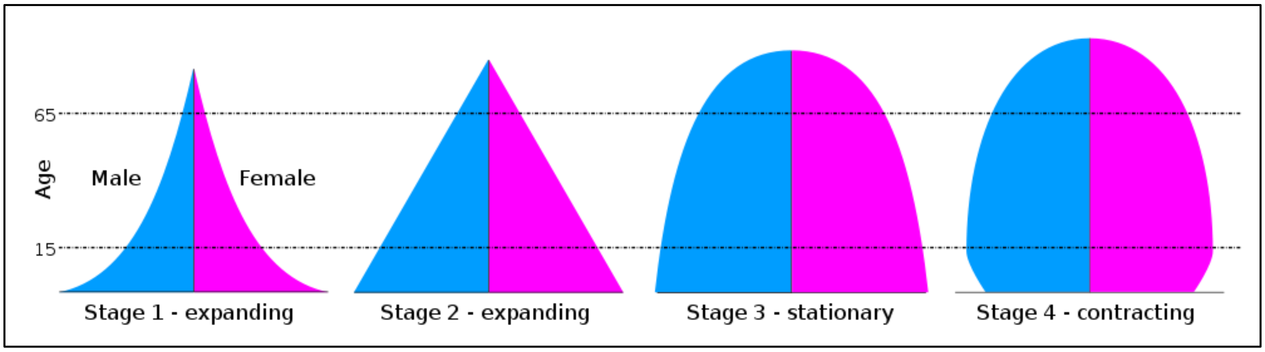
Figure 1: The four stages of the demographic transition



Stage 1: All societies have started out with both high levels of mortality, primarily child mortality, and high levels of fertility together resulting in slow population increase. These societies are characterised as agricultural, low productive and pre-modern, where family labour is required for agricultural production and where there is no modern health sector to reduce mortality. They evolve in accordance with the Malthusian paradigm, with population essentially being determined by the food supply. It was not until the agricultural transformation and industrialisation in Europe that we saw some countries move out of this first phase. In the world today, there is only a small number of isolated, indigenous communities who remain in the first phase.

Stage 2: There is a decline in mortality, primarily child mortality, due to progress in public health, medical advancements, improved personal hygiene, increasing standards of living and better nutritional diets. The fall in mortality leads to rapid population growth and the increasing survival of children results in an increasingly youthful population (see Figure 2). In Europe 100-200 years ago, the move into the second phase was intertwined with other economic processes such as the agricultural transformation and change was slow. It happened through the modernisation of society and was not promoted by the state. Today, medical advances can be imported from outside and advancements in nutrition and public health can be instigated by governments and aid donors. Through programs focused on reducing infant (under the age of 1) and child (under the age of 5) mortality results can be achieved quickly. Once mortality has gone down, it does not come up again unless there are exceptional circumstances such as an epidemic or pandemic, e.g. HIV/AIDS or Covid-19, extreme violence, or high incidence of substance abuse. Many African countries can be found in this second phase and it is especially applicable to rural areas.

Figure 2: Age distribution during the four stages of the demographic transition



Stage 3: Fertility is finally coming down and as a consequence population increase becomes less dramatic. Especially, it is the decrease in child mortality which makes parents realise that they do not require so many children to secure labour and old age security. Again, in Europe this was a slow and gradual process that was tied to processes such as urbanisation, employment outside of agriculture, the establishment of a formal labour market, etc. With these types of changes children were no longer used as family labour, and instead became a financial burden as parents invested in them, e.g. with schooling. The processes found in developing countries today are much the same, although there is the difference that change is moving much more rapidly and is helped along by government policies, e.g. family planning programs. The world in its global total has by now come quite a long way into phase three. On the African continent, an increasing number of countries are in the third phase, e.g. Botswana, Ghana, Kenya, Lesotho, Namibia, Senegal, South Africa, Swaziland and Zimbabwe.

Stages 4: There are low levels of both mortality and fertility, and low population increase. This has been the normal stage found in developed countries. In Africa, Mauritius is an example of a whole country being in this phase. Otherwise, it is commonly associated with the urban middle class in cities such as Johannesburg, Cape Town, Nairobi, or Accra.

Additional stage 5: The demographic transition model itself ends with low mortality, low fertility, and low population increase. However, processes of demographic change continues beyond this equilibrium. A growing number of developed countries are experiencing higher mortality rates than birth rates, not because of increasing mortality, but because of fertility constantly being below the replacement rate of two children per woman on average. This results in a problem with an aging population. In Europe, 25 percent of the population is already aged 60 years or over, and that proportion is projected to reach 35 percent in 2050. We can see similar development in North America and Southeast Asia. Meanwhile, the African population will remain relatively young for several more decades. The percentage of its population aged 60 or over was 5 percent in 2017, but it is expected to increase to around 9 percent in 2050 and nearly 20 percent by the end of the century.

Pathways in the demographic transition

With the big population scare, academics and policy makers became interested in understanding what could be the drivers of the demographic transition process and if there were ways to steer and speed up the process. As is captured by the demographic transition model, history teaches us that mortality decline is a necessary step prior to fertility decline. Mortality had started to decline in the industrialised countries of the North in the early 19th century and it spread to other regions of the world during the first half of the 20th century. Most importantly for future fertility decline was lower infant and child mortality and these were also areas that could later be easily targeted through political decisions also in poor countries. The drivers of mortality decline resulted from economic and technical advances such as:

- Improved nutritional intake due to increased and more varied food consumption.
- Improved sanitary conditions, especially in urban areas.
- Medical discoveries and expanding health services.

Still, the exact causal relationship between mortality and fertility decline has in each case been difficult to pinpoint and the time lag between the start of the two processes has varied. Still, based on our historical experiences, we could tease out five different, more or less successful, pathways in the demographic transition. Focus is on the extent that decreasing mortality has been followed by declining fertility.

Traditional capitalist: Represented by the experiences in Europe and North America primarily in the 19th century and Latin America from the mid-20th century. Here it is the development process itself, including industrialisation, urbanisation, etc. that resulted in both mortality and fertility decline. In the agricultural society children were an asset as they worked on the farms and limited costs were added for each extra child. Eventually, agricultural productivity improved, people transferred to work in other sectors, and they moved to the cities. In the urban areas child mortality declined. Meanwhile, costs went up as children were provided with more expensive housing, schools fees, purchased food, etc. and the family no longer needed children as labour. In this pathway, the state was not actively involved in the fertility decline apart from encouraging economic and social development and offering basic social services.

Growth with equity: Southeast Asia from the 1950s and onwards is yet another example of how economic development went hand-in-hand with the demographic transition. The difference between this model and the ‘Traditional capitalist’ is that the state was more active, although not coercive. In addition to offering opportunities to regulate family size government promoted general development-oriented policies such as equal opportunities, rural development, education, employment for women, etc., reforms that sped up the demographic transition both directly and indirectly. The pathway was then a mix between overall development and active family-oriented policies.

Soft state: This pathway is mostly represented by states in South Asia from the 1970s. Mortality decline was already underway due to some economic progress and basic social services and then the state became active in reducing fertility through family planning policies. Efforts mostly took the form of information, persuasion, providing contraceptives, etc., but there were also occasional coercive actions such as forceful sterilization. These countries are still struggling to achieve economic development and consequently, they have not to any significant degree been aided in their demographic transition by that process. Fertility decline has occurred, but it has been slow and the region has continued to experience severe population increase even since the commencement of state intervention in family planning.

Radical devolution: The main example is China and its one-child policy, which was put in place in the 1970s. Here mortality had been dropping and life expectancy increasing for much the same reasons as in other parts of the world, but the communist party feared that the country would get stuck in Phase 2 in the demographic transition and eventually find itself in a Malthusian crisis. Consequently, the one-child policy was designed to push for a move into Phase 3. This policy, which could only have been enforced by a strong state that is also non-democratic, caused a significant decline in total fertility rate. Still, the state story is not the full story, because proceeding and parallel to the one-child policy, fertility decline driven by a development process has taken place, e.g. in larger modern cities like Shanghai. The Chinese state has abandoned the one-child police and is now even trying to push for a new three-child family norm to counter the threat of labour shortage and high costs for an aging population. However, people are not too eager to follow the new directives as it is very expensive to raise children.

Lineage dominance: This is the type that represents the overall African experience. Up until the present the demographic transition has only reached Phase 2 in many areas, and we need to look for an explanation why. Mortality has been declining since the 1930s, for much the same reasons as in other regions. Of late, targeted efforts have been implemented to reduce infant, child, and maternal mortality, and now the major challenge is to decrease fertility. While states have been promoting family planning, their efforts have been hindered by other structures, the most important being the role played by lineage in African societies. Within this system the costs of children are shared by the lineage and therefore economic incentives for parents to reduce family size are not as strong. As long as most households are active within agriculture, children will be appreciated as family labour. and as long as there is no social security from the state, children are also expected to provide for relatives during old age. Costs of more children are then low and benefits high, counteracting government efforts to promote smaller families. The exceptions are the expanding urban areas and the growing educated middle class where the lineage is less dominant and fertility levels are dropping.

An inference to be drawn from the above pathways for the demographic transition is that *development is the best driver of both mortality and fertility decline*. There is no government policy that has been as efficient in lowering fertility and driving the demographic transition process as incentives given by the overall development of society. Change in population is then a natural part of the larger process together with other factors such as labour moving out of agriculture, urbanisation, economic growth, human development through education and healthcare, and increased gender equality.

Many children in Africa grow up in extended families.

4. African demographic characteristics

Historical population growth in sub-Saharan Africa

We know little about historical population size in Africa. The further we go back in time the more unreliable are the numbers, something that is exemplified by the estimates for 1850, shown in Table 2, which vary between 100-150 million, a 50 percent difference, depending on which sources we use. It is not until roughly the 1960s that we have more reliable population data, although even contemporary population statistics for Africa are considered less reliable than the same type of statistics for developed countries.

Table 2: Population numbers for Africa, 1850-2050

	Population (millions)
1850	100-150
1950	220
2000	800
2050*	2,500

Note: * This is the latest prognosis by the United Nations (2019).

Rapid population increase and higher population density is a rather late phenomenon in Africa compared to other continents. Today, Africa's population is growing at 2.6 percent per year and African woman can be expected to have 4-5 children on average. Meanwhile, population growth in South Asia is 1.2 percent and in Latin America it is 0.9 percent. Because of continued high fertility rates, the African population is expected to double between now and the year 2050 when Africans will represent a quarter of the world's population.

However, the African population is unevenly spread over the continent. There are large differences in both population size and population density between countries. This is exemplified by Table 3 showing population numbers 1960-2020 in a selection of African countries including both Nigeria with the largest population of 206 million and Botswana with 2.4 million, one of the smallest populations on the mainland. In fact, one in five sub-Saharan Africans are from Nigeria in 2020.

Table 3: Population (million) in selected African countries, 1960-2020

	1960	1970	1980	1990	2000	2010	2020
Botswana	0.5	0.7	1.0	1.4	1.8	2.0	2.4
Burundi	2.9	3.5	4.1	5.6	6.4	8.4	11.9
Nigeria	45.9	57.4	75.5	97.6	123.7	159.4	206.1
South Africa	17.4	22.1	27.6	35.2	44.0	50.0	59.3

Source: World Development Indicators, World Bank (2021).

Meanwhile, statistics on increase in population density in Table 4, calculated as people per square kilometre of land area, shows a somewhat different story. For example, while Burundi does not have an exceptionally large population, it is a small country which has experienced a drastic increase in population density during the last 50 years, hitting 463 persons per square kilometre. Botswana is an opposite case with a small population and a large landmass, meaning that population density is only roughly 4 persons per square kilometre.

Table 4: Population density (people per km² of land area) in selected African countries, 1960-2020

	1960	1970	1980	1990	2000	2010	2020
Botswana	1	1	2	2	3	4	4
Burundi	117	137	161	218	248	326	463
Nigeria	52	63	83	107	136	174	226
South Africa	15	18	23	29	36	41	49
Sub-Saharan Africa	10	12	16	22	28	36	48

Source: World Development Indicators, World Bank (2021).

The demographic transition in Africa

Although tracking far behind other continents, the demographic transition has started in Africa. Mortality has been declining since the 1930s, although the continent is still home to countries with some of the highest rates of infant and child mortality in the world, e.g. Sierra Leone with 81 infants dying per 1,000 live births and child mortality rates at 109 per 1,000 live births. Another way of indicating decreasing mortality is by showing increased life expectancy at birth (the number of years an individual is expected to live according to statistics). In sub-Saharan Africa generally, life expectancy has increased from 40 years in 1960 to 62 years in 2019. The lowest life expectancy figures are found in the Central African Republic where it is only 53 years, and the highest are 74 years in the Seychelles. Due to the recent spread of antiretroviral drugs for treating HIV/AIDS, countries such as South Africa are again doing better, and a person is expected to live just over 61 years. Despite the above mentioned concerns, mortality decline is not what has been holding back the demographic transition process – it is the late and slow decline of rate of fertility (see Table 5).

Table 5: Fertility rates (number of children born) in sub-Saharan Africa, 1980-2100

	Number of children per woman
1980	6.7
2020	4.5
2050*	3.0
2100*	2.1

Note: * These are the latest prognoses by the UN.

There are, however, significant differences between different countries. This is illustrated by Table 6, which presents statistics on declining fertility for the same countries that were examined in Tables 4 and 5. It shows, that while South Africa has experienced a fertility decline from six children per woman on average in 1960 to 2.4 children per woman in 2019, Burundi has only experienced a decline from 6.9 to 5.3 children per woman on average during the same period.

Table 6: Fertility (average number of births/woman) in selected African countries, 1960-2019

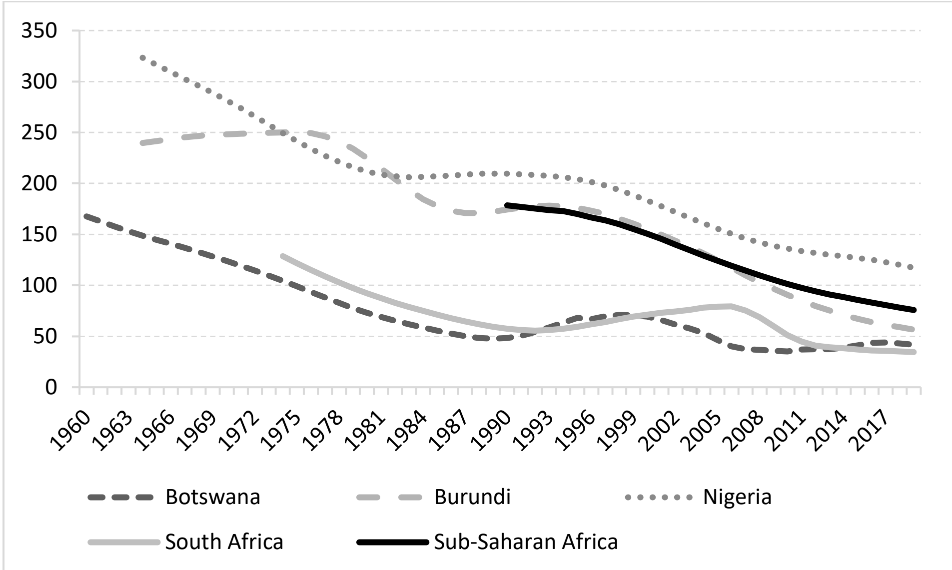
	1960	1970	1980	1990	2000	2010	2019
Botswana	6.6	6.6	6.2	4.5	3.3	3.0	2.8
Burundi	6.9	7.2	7.4	7.4	6.9	6.2	5.3
Nigeria	6.4	6.4	6.8	6.5	6.1	5.8	5.3
South Africa	6.0	5.7	5.0	4.0	2.7	2.6	2.4
Sub-Saharan Africa	6.6	6.7	6.8	6.3	5.8	5.3	4.6

Source: World Development Indicators, World Bank (2021).

Since the turn of the millennium, the continent has also experienced the period of fastest-ever economic growth and during the commodity boom roughly during the years 2005-2015, Africa was even the fastest growing and urbanising continent in the world in an international comparison. The old inference that ‘development is the best contraceptive’ is then also holding true for Africa. This is the reason why the largest demographic differences on the African continent are not between countries, but between the urban and the rural areas, or between the areas that are experiencing economic growth and development and those that are not. Let us move on to look at some of the most important aspects of the development process in regard to the onset of the demographic transition in Africa.

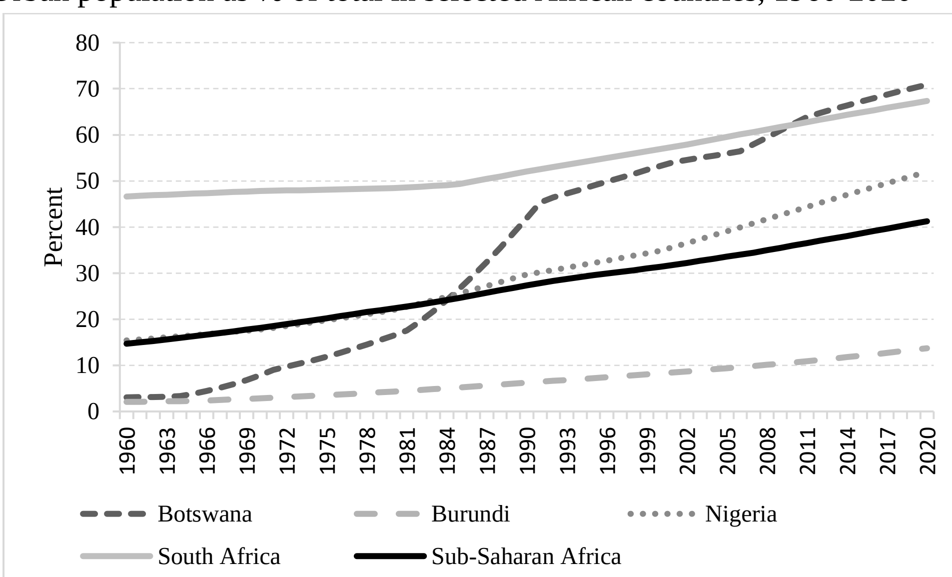
Child mortality: Most research has shown a strong causal link between high child mortality and high fertility. When parents know that it is likely that several of their children will die before reaching adulthood, they will spread their risks by having a large family. In the model of the demographic transition phase one with high levels of mortality is driven mostly by high child mortality. Phase two is specifically signified by declining child mortality eventually leading to stage three with declining fertility. Africa is a continent where child mortality rates are still among the highest in the world and unless there is a general decline in child mortality there will be limited advances in the demographic transition. Figure 3 show clearly that all countries from Table 4, as well as sub-Saharan Africa in general, have experienced significant child mortality decline, which gives hope for the future. South Africa has the lowest levels of child mortality and is also the countries with the lowest fertility rate. At the other end of the scale Nigeria is above the sub-Sahara African average for child mortality as well as for the fertility rate.

Figure 3: Child mortality rate per 1,000 live births in selected African countries, 1960-2019



Source: World Development Indicators, World Bank 2021.

Figure 4: Urban population as % of total in selected African countries, 1960-2020

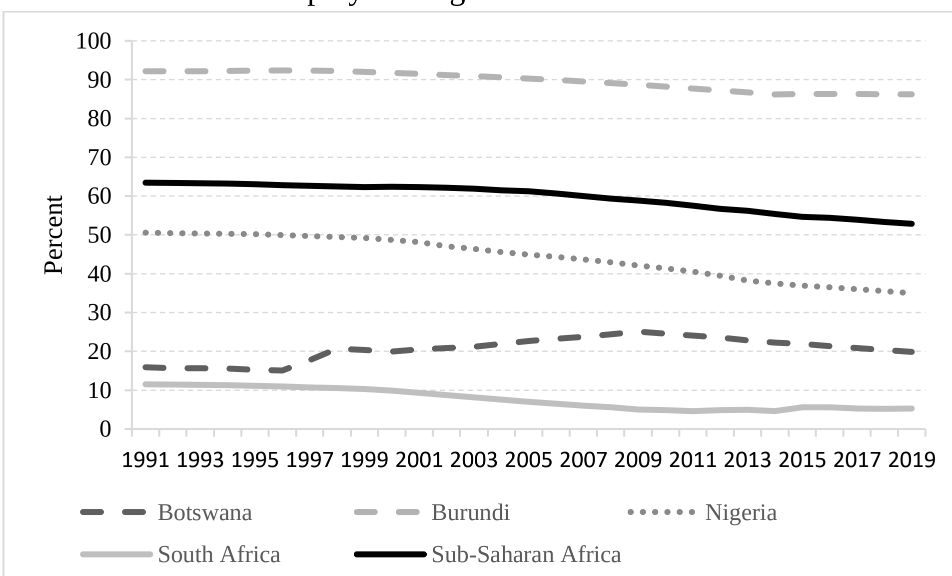


Source: World Development Indicators, World Bank 2021.

Urbanisation: Africa is the least urbanised continent in the world, but it is also the one with the fastest urbanisation rates. In 1950, there were only two cities on the continent with more than one million inhabitants, Alexandria and Cairo in Egypt. In a near future, there may be more than 80 cities with more than one million inhabitants. Further, there will be a cluster of mega cities (total population above 10 million), with Kinshasa, Lagos and Cairo among them as well as thousands of intermediary towns of 50,000-100,000 inhabitants. In our discussion above, we showed that urban families have higher costs for their children and that this drives fertility decline in urban areas. Figure 4 shows that South Africa and Botswana have the highest degree of urbanisation within our sample and this correlates with them having the lowest levels of fertility. For the other countries, the evidence is not as clear.

Labour transfer: With agriculture being challenged by the overall development process as being the main sector of the economy, labour is transferred from agriculture to the service sector or industry (also indicated by urbanisation). In this situation, children lose their value as additional family labour and instead represent a cost to the family. In Figure 5, we can see how the share of the total labour force employed in the agricultural sector is slowly declining in out sample countries and in sub-Saharan Africa in general. The trends are mirroring the urbanization rates above. South Africa has the highest rates or urbanization and the lowest share of the labour force in agriculture while Burundi represents the opposite. In addition, it is commonly recognized that women moving out of subsistence farming and into the formal labour market has a powerful effect on the number of children as work and family are no longer easily combined.

Figure 5: Share of labour force employed in agriculture



Source: World Development Indicators, World Bank (2021).

Women's education: For a long time economists and demographers have searched for ways to measure the economic and social status of women in order to see how it affects fertility patterns. One popular indicator is female literacy, which is assumed to affect fertility decisions in several ways: increased education raises a woman's age of marriage, it increases the economic value of a woman's time, brings empowerment and self-esteem and tends to decrease child mortality as literate mothers are better equipped to care for their children. However, while female literacy is part of a good spiral of development and increased equal opportunities, it is often difficult to show a direct causal link between female literacy and declining fertility. The relationships are more indirect than direct.

State policy: While the African states have offered family planning to their citizens, efforts have been less active and intrusive compared to South Asia or China. A key government effort is the spread and availability of contraceptives, but user levels in Africa are low by international standards. Roughly 6 percent of the population used contraceptives in 1995 on a continent average, and now it has potentially increased to some 30 percent. While this constitutes a positive development, it is difficult to know to what extent this has a direct impact on fertility decline.

Is the young population Africa's future?

5. Conclusion

Historical experiences clearly indicate that the demographic transition is a natural part of any socio-economic development process. From the above sample of African demographic statistics, we can clearly see that the trends are moving in the right direction, indicating that the demographic transition in Africa is on its way, but it will still take some time. While the original over-population scare from the 1950s has been proven wrong, the challenge of achieving poverty reduction and improved standards of living in Africa during population increase continues to be high up on the development agenda. Also, the concern is no longer only whether people will have food security today, but how we achieve economic, social, and environmentally sustainable development for the future. Therefore, Africa's demographic transition is of critical importance not only for the region, but for the whole world.

Study questions

1. What are the main arguments in the Malthus-Boserup debate?
2. What are the four stages in the demographic transition model?
3. Relate the demographic transition model to the African context. What can you say about current changes in mortality and fertility in various African countries?
4. What are the five pathways to demographic transition suggested in the text?
5. What are the five indicators mentioned in the text that the demographic transition is currently spreading on the African continent?

Suggested readings

Boserup, Ester (1965). *The Conditions of Agricultural Growth: The Economics of Agricultural Change under Population Pressure*. London: Allen and Unwin.

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United Nations (2019). *World Population Prospects 2019*. New York. https://population.un.org/wpp/ (accessed 27 December 2021)

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About the author

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Chapter 8

The Rise of Education in Africa

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1. Introduction

In a world where we routinely overexploit our resources in an unsustainable way, the development of human talent has endless potential. When a person is given an education, it both improves that individual and develops the society as a whole. All humans can contribute to economic, social, and political development; therefore, educational opportunities must be provided to as many people as possible. The importance of education for all is clearly expressed in the United Nation's Sustainable Development Goal, SDG 2 – *Quality of education*.

The value of education touches upon nearly all aspects of our societies. From the point of view of economic progress, it is centred on our abilities to become more productive. This would include finding information in books and websites, making mathematical calculations, innovating and adopting new technologies, passing on our knowledge and experience to others, and so on. The basis for it is the ability to read (literacy) and count (numeracy). Education, skills, experience, character, and creativity together correspond to what the economists call 'human capital'. When combined with new technology and modern machines, this human capital makes each worker more productive. The lesson is clear: To grow richer, we need to improve education and skills.

In Africa, the history of education and the development of specialised skills in literacy and numeracy can be traced back to ancient Egypt. But although education has a long history on the continent, many African countries today struggle to offer good quality education to their citizens, and the value of the region's human capital is low overall. Considering the substantial current and future population growth, human talent is a force that could drive socio-economic development in the region.

In this chapter, we will discuss how Africans acquired new skills, in the past and in the present. To do so, we begin with a short review of the economic benefits of education and then proceed to a discussion of education in Africa today and in the past. We consider the role of Islam, Christianity and colonisation, and follow the development of education in Africa during the period of independence.

2. Specialization and returns to education

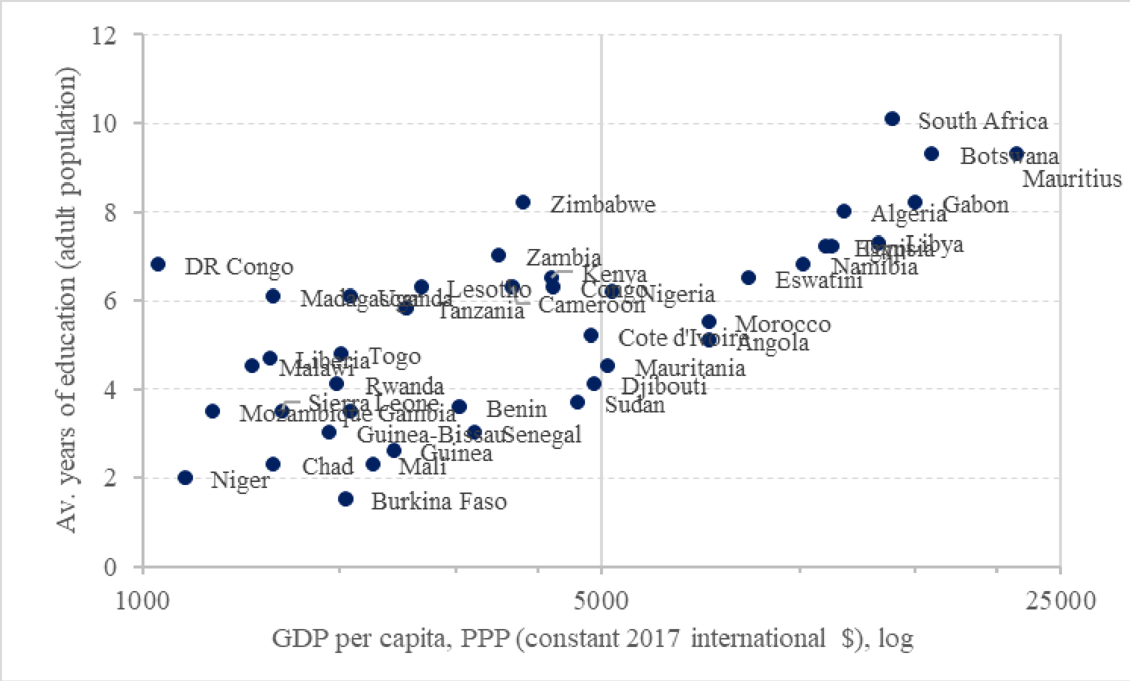
For most of human history, we needed more workers when we wanted to increase production. In many industries (though not all), that is not the case anymore. Instead of using *more* workers to produce things, we use *educated* workers combined with *technology*. Educated people use their knowledge and skills, gained through formal education or learning-by-doing, to specialise. Specialisation means being able to do one particular thing very well. Today's engineers responsible for large construction projects do not have to know how to grow food or weave clothes. They are paid well for their specialised services, which allow them to afford the luxuries of our modern society: a wide variety of food, ready-made and attractive clothing, a mobile phone, a computer and a comfortable house with plenty of space for their family.

The advantages of specialisation are described in detail by the Scottish economist Adam Smith in 1776 in his seminal book *The Wealth of Nations*. The more we specialise, the more extra goods we can produce. When we produce a surplus of goods – in other words, more than we need for ourselves – we can sell them on the market and increase our income. If education is the key to deeper specialisation, then education is also the key to greater prosperity.

Educated people tend to improve the lives of everyone. An educated person can improve our existing physical capital. Take the example of Egypt's pyramids. Our engineers who plan to build a new pyramid must cut large sandstone blocks. It would cost a lot to employ thousands of workers to cut them by hand. And the job would take extremely long. So our engineer, with the help of other specialists, designs a new machine powered by fossil (coal or oil) or renewable energy (solar) to do the cutting automatically. By creating new technologies, educated people boost productivity and increase the wealth of their society. When people obtain an education, we do not just develop specialists and improve productivity and wealth; society tends to benefit as a whole. An educated society is more likely to have a democratic voting system. It is more likely to have citizens who can make informed decisions about who should govern. It is more likely to respect the rule of law. It is more likely to have media freedom. Educated citizens can force governments to be responsive to their needs. They can ensure that the wealth that comes from economic growth benefits them and does not just end up in the pockets of government officials.

Figure 1 demonstrates this positive relationship between education and income in Africa, plotting each African country's average years of schooling of its adult population against its GDP per capita. The positive link between education and income strengthens once countries move beyond a GDP per capita threshold of around 3,000 USD. This trend does not tell us whether more education leads to more economic growth in Africa or whether more prosperous African economies simply have more resources to spend on education. Both may be true.

Figure 1: Average years of schooling and GDP per capita in Africa, 2017



Source: Barro & Lee (2018) and World Development Indicators (2023).

So the best way to create long-lasting prosperity for all citizens of a country is to provide access to education. Although women make up at least one-half of the population, they were in the past and are at present less likely to receive the same level of education as men. Often, resource-constrained parents grant fewer educational opportunities to their daughters because they prefer them to stay and help at home and on the farm. Sometimes cultural or religious beliefs about the role of women prevent them from attending school. Practical difficulties may also limit girls' school attendance, such as a lack of separate and safe toilets for girls at school or the absence of sanitary products.

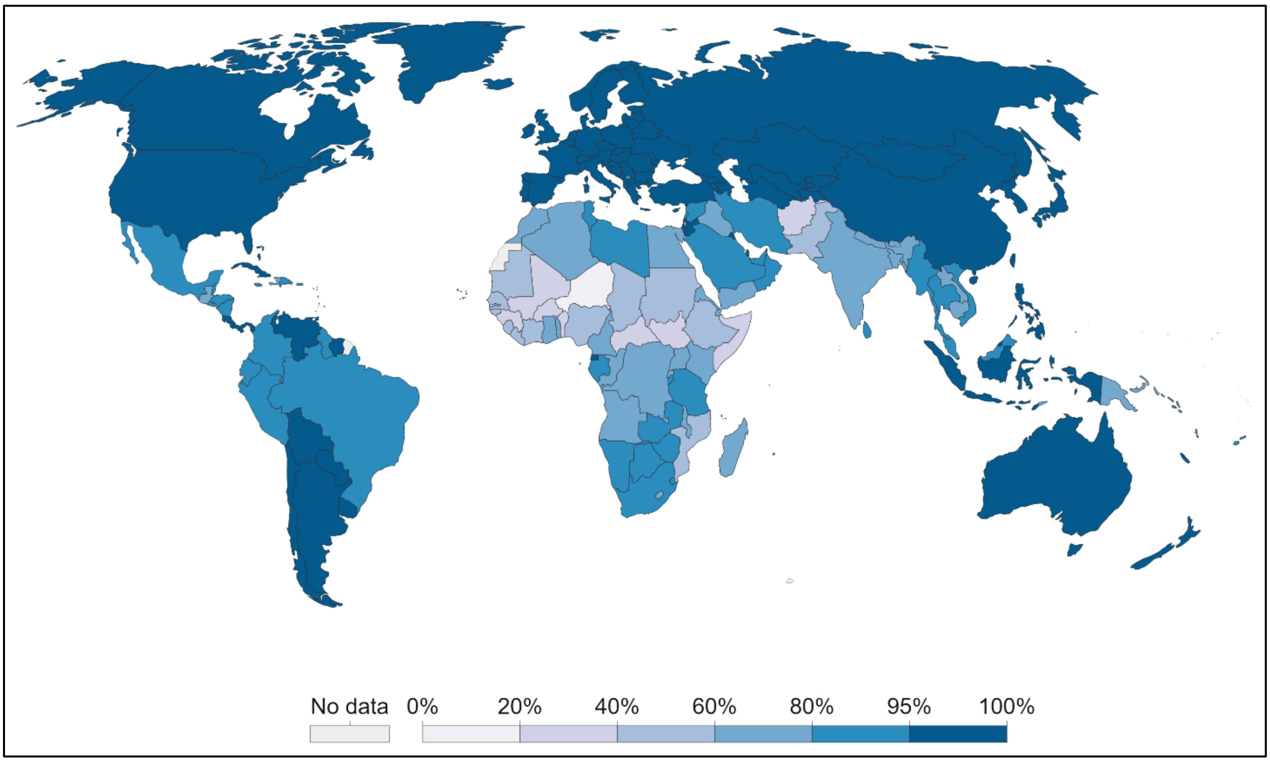
When women are discriminated against accessing education, this bears costs for the whole of society. This is because improving girls' education improves their health and future income. Also, more educated women tend to marry later and give birth to fewer and healthier children than illiterate mothers. The children of better-educated mothers are becoming more educated themselves. They have more freedom to choose a job and have a better chance of building a professional career. This is what American economist Gary Becker famously coined the 'quantity-quality trade-off' in the 1960s, in which he stated that a smaller family size allows for the allocation of more resources (e.g. school fees or buying of school uniforms and books), to each child, which increases the average level of education of a child.

Economists call these additional benefits that education provides 'positive externalities'. A good government works to provide their citizens with these benefits. One meaningful way a government can promote positive externalities is to make education freely available to the people and show them why it is essential, so they will demand it. In summary, education for all is the key to enjoying the rewards of an advanced market economy. Education is also key to building a safe, free and equal society.

3. Education in Africa today

In a global comparison, many African countries have relatively low levels of education today. Figure 2 maps how literacy is distributed globally, showing the literacy rates in 2015 of the population aged 15 years or older. Literacy – the ability to read and write – is typically used to measure basic education. It shows that compared to other regions except South Asia, sub-Saharan African populations have lower basic literacy skills. Figure 2 also portrays substantial differences in literacy *between* African countries. Some African countries score particularly low on this measure. For example, in 2018, only 31 percent of the population aged 15 years and older could read and write in Mali, 43 percent in Sierra Leone and 52 percent in Ethiopia. By contrast, some other African countries have more literate populations. In Namibia, 92 percent can read and write, in Zimbabwe 92 percent and in Cote d'Ivoire 90 percent. The average for sub-Saharan Africa's adult population is about 62 percent. This is much lower than the average for the world, which is 84 percent. Equally, there are substantial differences *within* African countries. Literacy is not shared evenly in these countries. The most significant differences are often between men and women. According to the World Bank, for example, in 2018, 71 percent of Nigerian men were literate, compared to 53 percent of Nigerian women. In Senegal, the gender gap was even bigger, with 65 percent of men being literate compared to 40 percent of women.

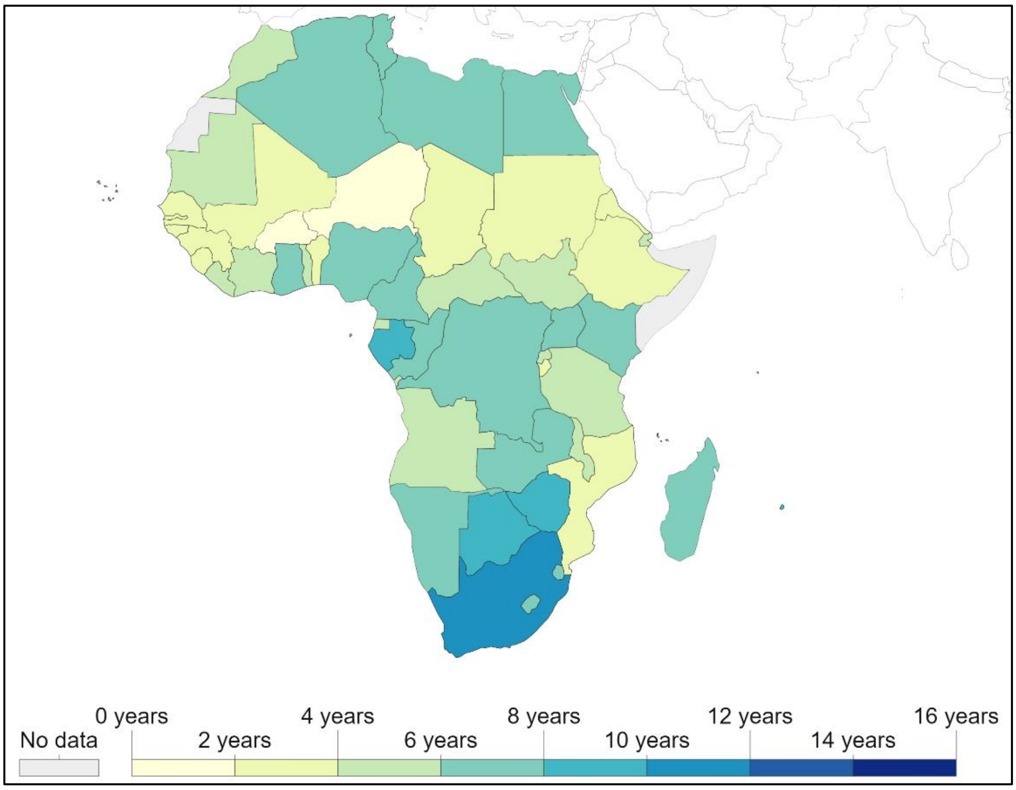
Figure 2: Global literacy rates by country, 2015



Source: Roser and Ortiz-Ospina (2016). Literacy. Retrieved from: *Our World in Data*.

Of course, education is not only about the acquisition of literacy. Education, especially secondary and tertiary education, provides people with various specialised skills that can be applied to improve their incomes and further develop the economy. Learning to read and write at school is only the first step. To build our imaginary present-day pyramid, our engineer must study mathematics and physics for several years at school and university. One way to measure this is to calculate the number of years of schooling each person has acquired over their lifetime. Figure 3 maps each African country's average years of education of adults (older than 25) in 2017. It illustrates that there is much variation within Africa, with adults in South Africa having an average of more than ten years of education, whereas in the Democratic Republic of the Congo, adults have accumulated seven years of schooling and in Burkina Faso, barely two years of education.

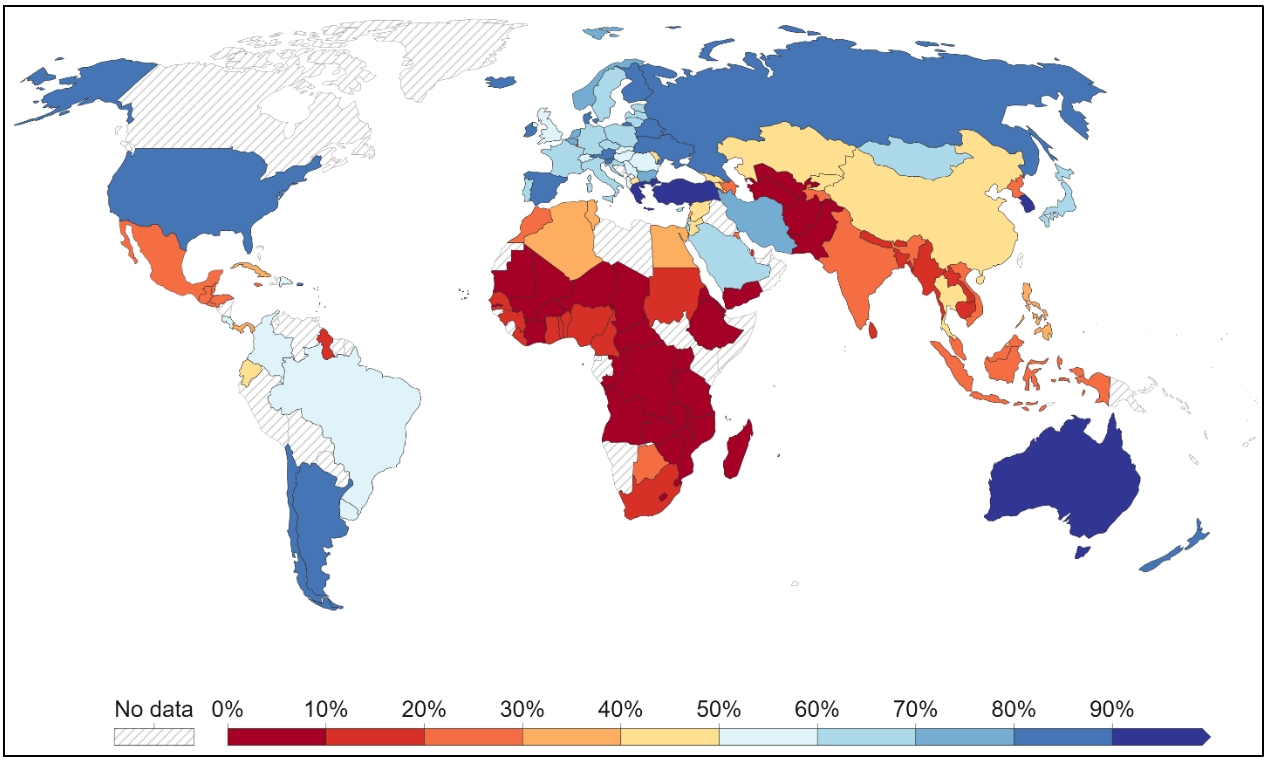
Figure 3: Average years of schooling, 2017



Source: Roser and Ortiz-Ospina (2016). Global Education. Retrieved from: *Our World in Data*.

Figure 4 shows that despite rapid expansion in African tertiary education in the past two decades, in most African countries, of those who graduated secondary school, less than 10 percent were enrolled in universities in 2016, compared to the global average of 34%. Another way to assess Africa's tertiary education level is to compare the quality of its universities with universities elsewhere in the world. What we see here is not a happy picture. The *Times Higher Education* newspaper's World University Rankings for 2022 rank only 4 of the top 400 universities in Africa - all four being located in South Africa.

Figure 4: Gross enrolment ratio in tertiary education, 2016



Source: Roser and Ortiz-Ospina (2016). Literacy. Retrieved from: *Our World in Data*.

In summary, African countries have lower education levels than the rest of the world. And without world-class universities, African countries cannot produce enough human talent to develop their own knowledge-based economies. What, then, are the reasons for Africa's comparatively poor performance?

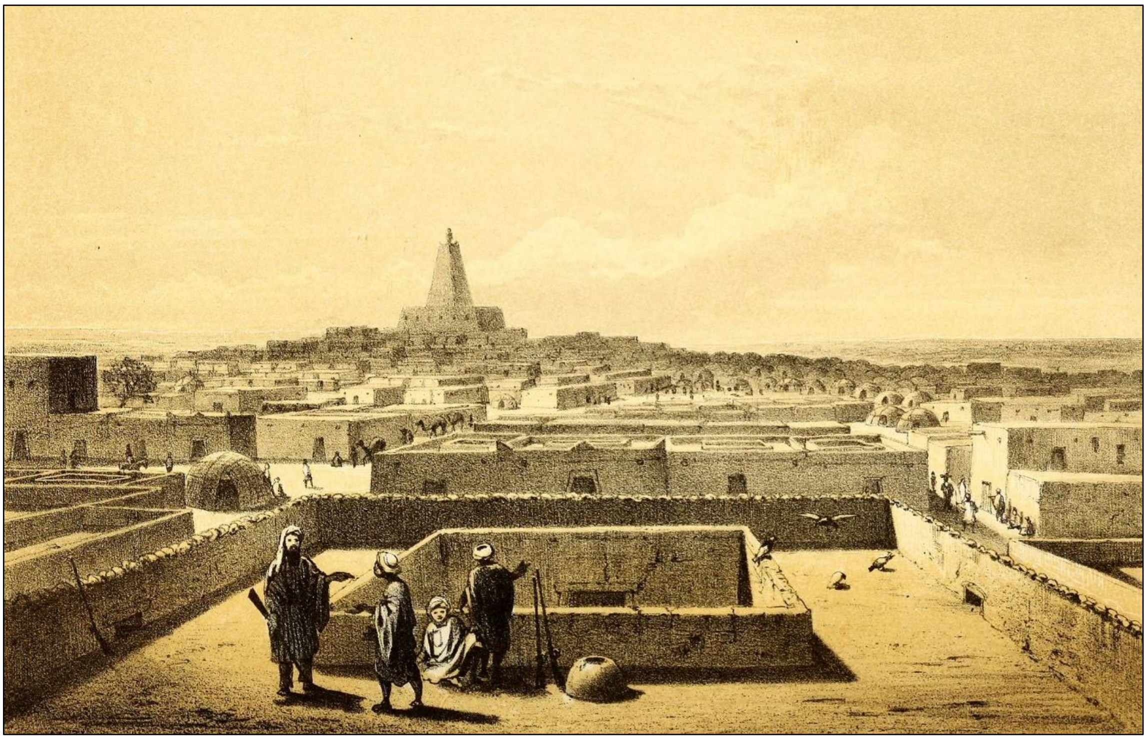
4. The history of education in Africa

To better understand Africa's comparatively poor performance in education, we need to take a historical perspective. Why is it that African countries lag other countries when it comes to formal education? It is not that education only recently arrived in Africa. In Ancient Egypt (between 2500 and 500 BCE), men were formally taught to become scribes and administrators – people who could write and govern. But these were the exceptions. Typically, knowledge was transferred in the *informal* sphere. Children at the time acquired their skills from their parents, relatives, and their village community, who transmitted knowledge from one generation to the next in production skills in agriculture and their ecological environment, as well as social and cultural traditions. This is what economists call 'informal education'. It provided the knowledge and skills needed in the local community and served as the basis for specialisation in crafts, farming, trade and more. However, it did not include teaching literacy and numeracy or other aspects of formal education that enabled people to incorporate new knowledge from outside to increase the productivity of existing economic activities and develop new ones.

Of course, this was how most of the world lived too. Formal education existed only in India and China and in the Mediterranean civilisations of Ancient Greece and Rome. A famous early example is the Platonic Academy of Athens, a school that was founded in 385 BC. But we should note that formal education in these countries was not for everyone either – it was mostly for the rich and powerful, as it was in Ancient Egypt.

Islamic education

The introduction of Islam in North Africa around the year 670 and parts of West and Central Africa around 1075 set off a rapid growth of formal education in these regions. Timbuktu, in modern Mali (picture shown below), became the centre of Islamic learning between the 13th and 17th centuries, especially under the rule of Askia Mohammad I circa 1500. Because of the trans-Saharan trade, trading gold, ivory, slaves and salt across the Sahara between sub-Saharan Africa and North Africa, Timbuktu's economic success attracted many scholars to the town, further strengthening the teaching of art, science and religion. With Emperor Askia Mohammad's support, thousands of manuscripts on art, medicine, philosophy, religion and science were written. About 700,000 of these manuscripts still can be found in Timbuktu's libraries today, and scholars are busy restoring, translating and digitising these valuable documents so that we can learn more about the politics, economy and culture of this early prosperous African civilisation.



Old view of Timbuktu, 1860. Source: Wikipedia.

An interesting question is: why did formal education start in Africa only after the establishment of Islam? One answer is that in most sub-Saharan African societies, language was not written down. Skills and knowledge were passed from generation to generation informally, by story-telling, for example, or on-the-job training in the field. Cultural practices and beliefs were also conveyed through dances and rituals. And we know that hunter-gatherers in sub-Saharan Africa expressed their ideas in cave paintings for thousands of years before written language was developed (somewhere in Mesopotamia and Egypt around 3700 BC). The earliest known cave art, at Blombos on South Africa's southwest coast, dates from 80,000 years ago. But these hunter-gatherer groups – and the pastoral and agricultural groups that replaced them – did not develop or adopt written language.

The most likely reason writing did not develop in sub-Saharan Africa is that the knowledge and technology of Egypt could not reach central and southern African countries because of the climatic differences between the northern Sahel, the tropical forests of central Africa and the savannah of the south. For example, the knowledge of how to make paper from papyrus, a plant common in Egypt, was adopted by societies in the Middle East and Europe, but never by those in Southern Africa. This was because the tropics acted as a barrier to technology transfer: the many diseases in the tropics prevented the use of animals like cattle and horses and prevented, therefore, the large-scale migration of people and their ideas for much of human history.

Without writing, African societies could not develop a system of formal education like the European education system that developed during the Middle Ages (500 to 1600). Instead, most African societies relied on traditional informal education where ritual, games, singing and dancing played an important role. Boys and girls were often taught separately to help prepare them for their adult lives. There were no teachers or lecturers as we know them. Instead, all members of the community did this work, helping to educate the children until their ritual passage ceremony from childhood to adulthood.

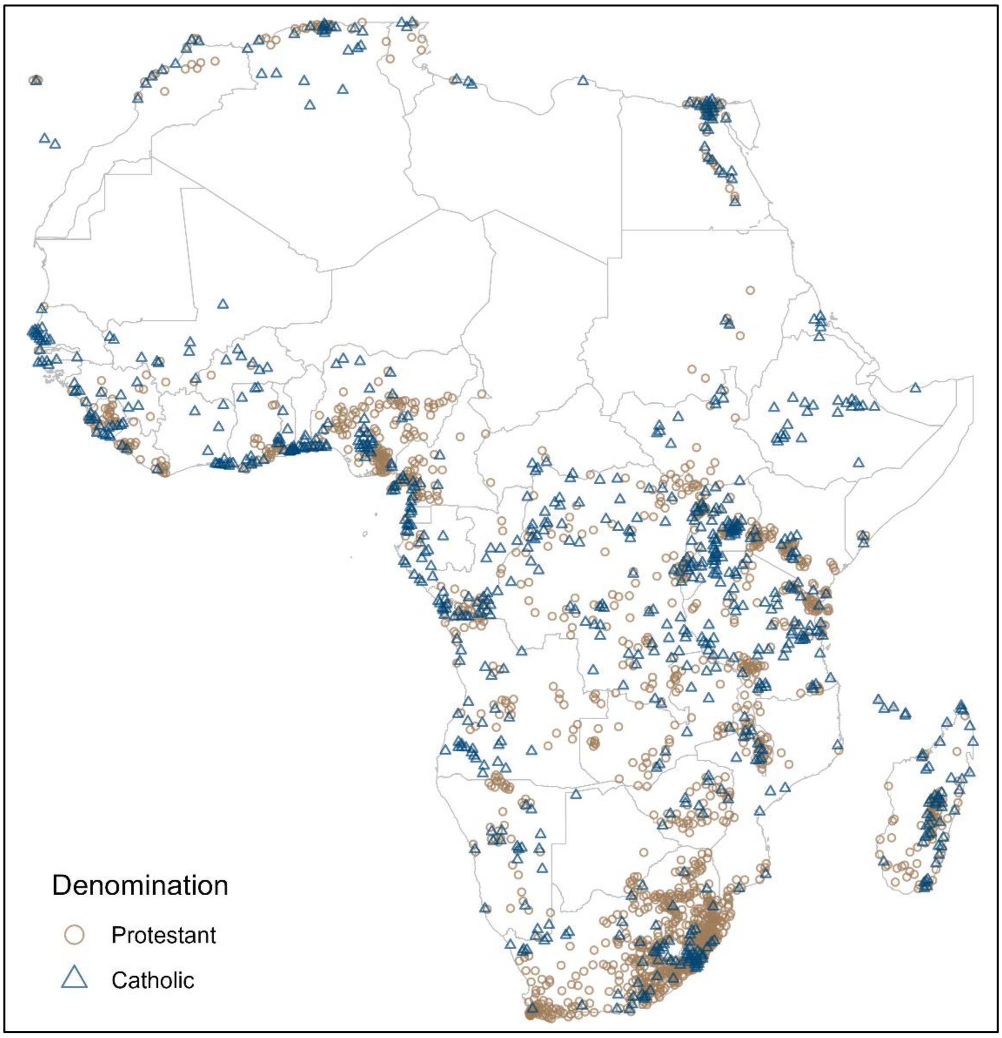
The arrival of Islam introduced more formal models of education to North and West Africa as well as parts of the East African coast. The Muslim conquerors and traders brought with them written texts. This meant that many/certain Africans who adopted Islam and learned Arabic learned to read, write and deepen their knowledge of philosophy, religion, science, medicine and many other subjects. Now Africans could share the knowledge of great thinkers and philosophers who came before them. They could study mathematics, science and medicine by reading what generations of scholars had written on these subjects. Written language gave some access to the works of great scholars. It is important to emphasise that such education was often limited to a small male elite and that most Africans remained illiterate. Such learning was also concentrated in certain areas with high population densities. Yet even with these important caveats, the arrival of the written word meant that Africa could now produce internationally famous scholars. Ahmad Baba al Massufi, for example, studied at Timbuktu and by the time he died in 1627 he had published more than 40 books, mostly on religious law, slavery and grammar, becoming one of Africa's greatest scholars.

The rise of mass-education through Christian missionaries

Small groups of Europeans settled the southern tip of South Africa by the mid-17th century. They brought with them printed books and the ability to read and write. The printing press was invented in Germany by Johannes Gutenberg in around 1450. This technology allowed the mass production of books at low cost. As more people could now afford books, it triggered an increase in literacy among Europeans and the increasingly literate population was, in turn, interested in further expanding *formal* education to reach a growing part of society. Unlike informal education, *formal education* occurs in a classroom setting, is standardised by pre-defined curricula, certified degrees, and applies uniform testing methods.

Aside from the 17th-century Cape Colony, Europeans did not settle in large numbers in Africa before the discovery and availability of quinine, a drug used to treat malaria from the 1850s onward. Where Europeans tried to settle, they would often succumb to tropical diseases like malaria or yellow fever. But by the 19th century, quinine allowed African explorers – like David Livingstone – to reach African societies that had not been in contact with Europeans before. Why were these African explorers so interested to make contact, however?

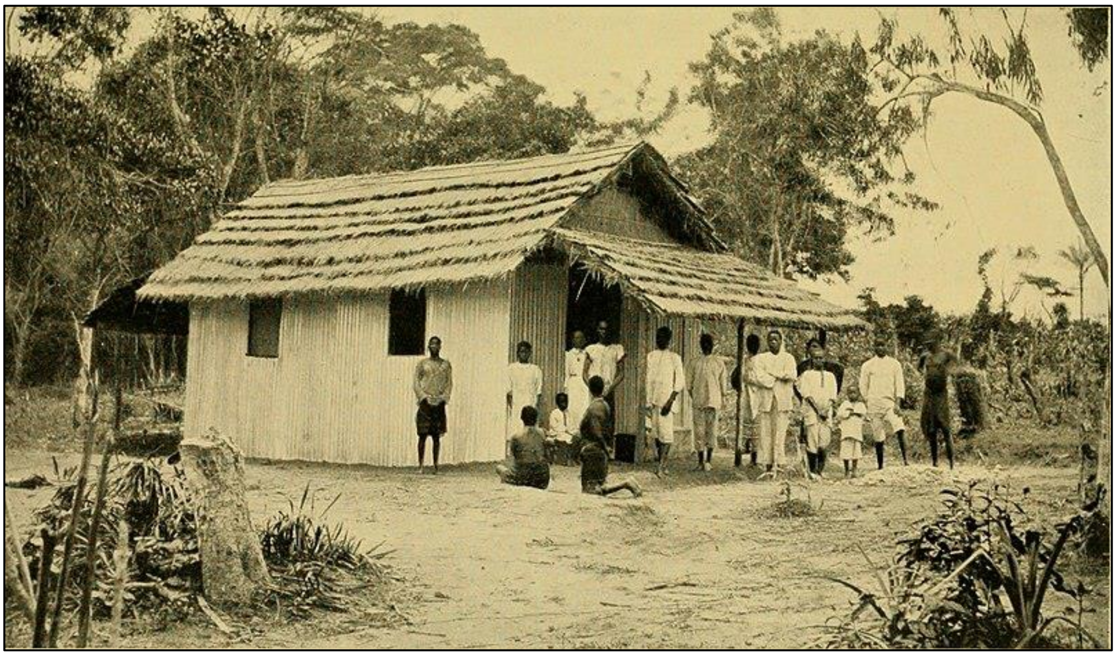
Figure 5: Main mission stations in Africa, c. 1920s



Source: Hedde-von Westernhagen and Becker (2022).

The answer is Christianity. When Gutenberg invented the printing press in Germany, this new technology caused a transformation of society: it allowed new religious ideas to spread rapidly in Europe. The Bible was translated into German (from Latin) into other languages, and a new religious movement was born: Protestantism. One consequence of this was that there was competition within Christianity to spread the gospel to as many people as possible. From the mid-19th century onwards, once quinine allowed Europeans to survive and settle in Africa, it also allowed Western missionaries to establish stations to spread the word of God. Many of these early missions were initially created along the coast of West Africa. By 1910, approximately 4,600 Western and 28,000 African Protestant missionaries were evangelising on the continent. Figure 5 maps the 756 Catholic and 1,522 Protestant main mission stations across Africa by the early 1920s.

Mission stations did more than just spreading the word of God. Formal education was a key aspect of missionaries' conversion strategies, and thus, education became firmly connected to Christian missions. Without major public investments into African education by European colonial states, missions provided the bulk of education in most colonies and relieved colonial governments from financing public education. It was not just European missionaries who taught in mission schools, however. Soon, Africans converted and spread the Christian message along a chain of mission stations, with schools to provide basic education and hospitals to care for the sick.



A rural Christian missionary school with pupils in Cameroon, 1911. Source: Wikimedia.

African agency was key in the rise of mass education in Africa. After all, the lion's share of the missions was run by Africans and not European staff. Table 1 demonstrates this fact by showing the number of Western and African staff employed by the Protestant and Catholic missionary societies across sub-Saharan Africa in the early 20th century. It shows that among Protestant missionary societies, there were 1,566 European missionaries and 2,987 unordained European mission staff active on the continent. With this relatively small number of European mission staff it would have been impossible to convert half of Africans over the 20th century to Christianity. Missionary societies quickly realised that African expertise and initiative were essential in spreading the gospel in the local vernacular. Consequently, by 1908, 1,552 ordained African missionaries and 25,000 unordained mission staff working as catechists, teachers and medical assistants, making up 85 percent of total Protestant and 71 percent of Catholic mission staff, thereby creating opportunities for upward social mobility through mission employment in their schools, churches and hospitals. Moreover, the majority (55 percent) of European Protestant missionaries by 1922 were women who worked as teachers in girls' schools and as hospital nurses – not men who had dominated missionary staff throughout the 19th century. The share of female missionary workers among African staff was smaller, around 6 percent, but equal in numbers.

Table 1: Western and African missionary staff in Africa, c. 1910

	Ordained missionaries		Unordained missionaries		Ordained and unordained staff
	Western	African	Western	African	Share of African mission staff
Protestant	1,566	1,552	2,987	24,933	85%
Catholic	2,078	94	1,307	8,196	71%

Source: Meier zu Selhausen (2019).

The education that Africans received at these mission stations had important consequences for them and their societies. Mission education created opportunities for upward social mobility into clerical, medical and vocational occupations during the colonial era. Mission schools not only taught literacy but also offered training in vocational skills, such as carpentry skills, that introduced students to the construction with new technologies, including newly imported steel tools, electrical machinery, measurement techniques, and algebra. For example, the number of the sons of chiefs who attended local mission schools in colonial Uganda indicates the strong attraction to wage work.

Missionary carpentry institution in South Africa in 1911. Source: Wikimedia.

In the early colonial era, skilled African labour was extremely scarce and, therefore, expensive. Often colonial governments and European companies had to import skilled workers to meet their technical labour needs (e.g. car mechanics, electricians, and carpenters). Carpenter's *skill premiums*, defined as the relative price of skilled versus unskilled labour, were relatively high. Demand for local carpentry skills in the first decade of the 20th century resulted in carpenters earning 400 percent more than an unskilled worker in Malawi or Cote d'Ivoire and 200 percent more than an unskilled worker in Nigeria or Kenya. Skill premiums in Africa started to fall over the course of the 20th century, with more and more people acquiring technical and clerical skills and the rise of mass education. By the late colonial era in the 1950s, missions in British colonial Africa had lost their monopoly on primary education to public schools run first by the colonial government and post-independence by modern African states.

Students in teaching laboratory at Medical School Yakusu, Belgian Congo. Source: Wikimedia.

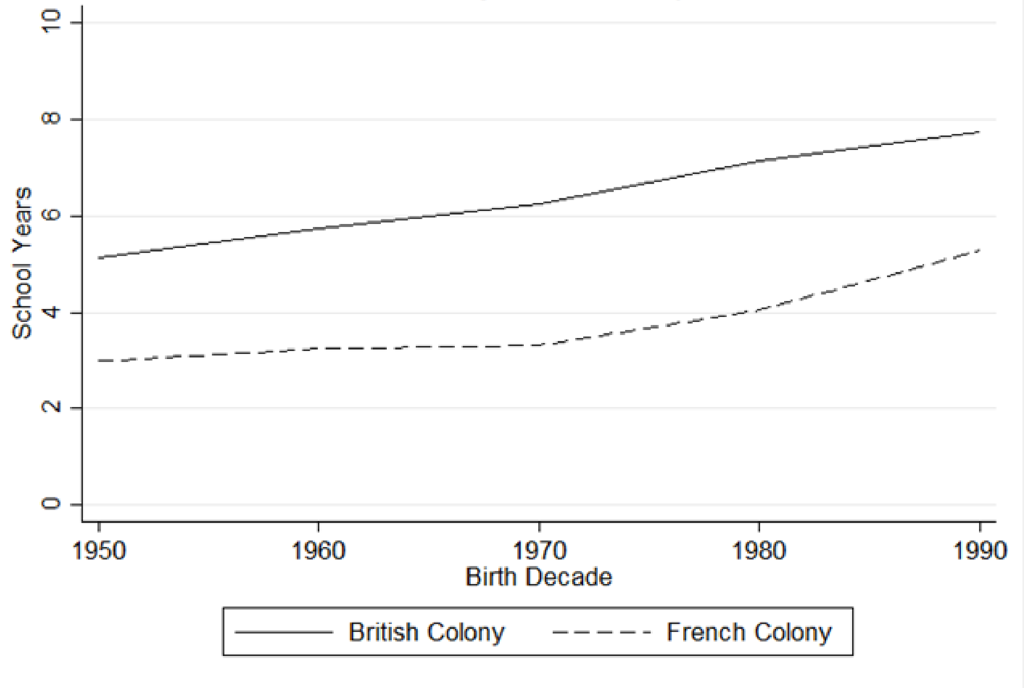
Colonial differences in education

The differences between the education outcomes of African countries are often explained as the effect of the nationality of the coloniser. African countries that were colonised by the British tend to be better-performing economies today than those that were colonised by France, for example.

To look at this difference, we use a dataset that combines several household surveys (USAID's Demographic and Health Surveys and UNICEF's Multiple Indicator Cluster Surveys) and censuses conducted in 42 Sub-Saharan African countries. The data is organised by birth decade, which means, for example, the average number of years of schooling for the 1950s birth decade includes all individuals born between 1950 and 1959. These people went to school at approximately the same time and hence, were exposed to similar conditions. Last, we only look at individuals between 23 and 62. Younger individuals might not have completed their schooling yet. For older individuals, we do not have enough observations across our datasets.

Figure 6 shows that individuals born in countries that had been colonised by the British (black line) have, on average, a higher number of school years compared to those that had been colonised by the French (dashed line). For the 1950s birth decade, individuals from former British colonies had, on average, about five years of schooling, whereas individuals from former French colonies only had about three years. While both regions increased their overall years of schooling, the difference did not change. For the 1990s birth decade, the average in former British colonies is about 8 years versus about 5 in French colonies.

Figure 6: Average years of education in former British and French colonies per birth decade



Sources: Demographic and Health Surveys, Multiple Indicator Cluster Surveys and IPUMS. Individuals aged 23-62 at the time of survey included from 27 sub-Saharan African countries.

Some have argued that this was because the British invested more in education than the other colonisers. But others suggest that this was because the British were more supportive of missionary education than other colonisers, who believed that education was the government's responsibility. British colonial governments 'privatised' their education. They encouraged private organisations in the form of missionary schools to provide formal education rather than providing it themselves. In this way, mission education in British colonial Africa could reach far more children than in the French territories which largely relied on government schools, even though the French colonial state may have spent more on education. We can say that countries that were formerly British colonies are richer today not because they were under British rule but because, a century ago, the residents received an education that enabled them to become part of the market economy.

Independent of the nationality of the colonisers, the need for formal education in Africa was highlighted already during the colonial era. The Phelps Stokes Fund, an American foundation, convened several commissions in the 1920s to study the educational conditions and needs of

Africans and made recommendations for improving access and quality. These recommendations were taken up especially after the Second World War, as European colonisers started to realise that they had to fundamentally change the social principles and legitimisation of colonial governance to maintain power.

Table 2: Gross enrolment rates at primary school level (% of total population at age 5-14), 1938-1960

British colonies	**1938**	**1950**	**1960**	**1938-1960 (total increase)**
Botswana	16	22	29	13%
Gambia	3	5	7	4%
Ghana	8	19	34	26%
Kenya	12	26	33	21%
Lesotho	50	59	58	8%
Malawi	35	39	21	-15%
Mauritius	38	51	59	21%
Nigeria	8	16	25	17%
Sierra Leone	5	7	16	11%
Somalia	1	1	4	3%
Sudan	3	6	10	7%
Swaziland	24	29	41	17%
Tanzania	5	10	20	15%
Uganda	27	18	29	2%
Zambia	30	35	34	4%
Zimbabwe	33	44	48	15%
French colonies				
Benin	7	2	16	9%
Burkina Faso	1	2	5	4%
Cameroon	21	25	39	18%
Central African Rep.	2	7	19	17%
Chad	1	1	10	9%
Congo, Rep.	5	24	47	42%
Côte d'Ivoire	4	6	28	24%
Djibouti	7	9	12	5%
Gabon	5	21	29	24%
Guinea	5	3	12	7%
Madagascar	14	22	31	17%
Mali	2	3	6	4%
Mauritania	2	1	5	3%
Niger	1	1	3	2%
Senegal	6	7	16	10%
Togo	6	17	26	20%
Other colonies or independent territories				
Angola	1	1	8	7%
Guinea Bissau	1	5	15	14%
Mozambique	5	12	24	19%
Equatorial Guinea	15	20	43	28%
Congo, Dem. Rep.	23	33	36	13%
Rwanda-Burundi	7	11	24	17%
Ethiopia	1	2	4	3%
Liberia	6	11	19	13%
Namibia	15	22	28	13%

Source: Frankema (2011).

Independent of the nationality of the colonisers, the need for formal education in Africa was highlighted already during the colonial era. The Phelps Stokes Fund, an American foundation, convened several commissions in the 1920s to study the educational conditions and needs of Africans and made recommendations for improving access and quality. These recommendations were taken up especially after the Second World War, as European colonisers started to realise that they had to fundamentally change the social principles and legitimisation of colonial governance to maintain power.

The subsequent rapid expansion in African primary education can be seen in Table 2, which presents the average enrolment rates (another indicator to measure education) in colonial Africa in 1938 and onwards. It is interesting to note the slower post-1940 growth of enrolment rates in British Africa. In other words, the British lead in African education is mainly due to the high rate of missionary activity in the British colonies before 1940 rather than supposedly effective educational investment policies in the post-war and independence years. The pre-1940 differences in enrolment rates were important because they remained quite persistent over time which we could also observe in the graph of the previous section.

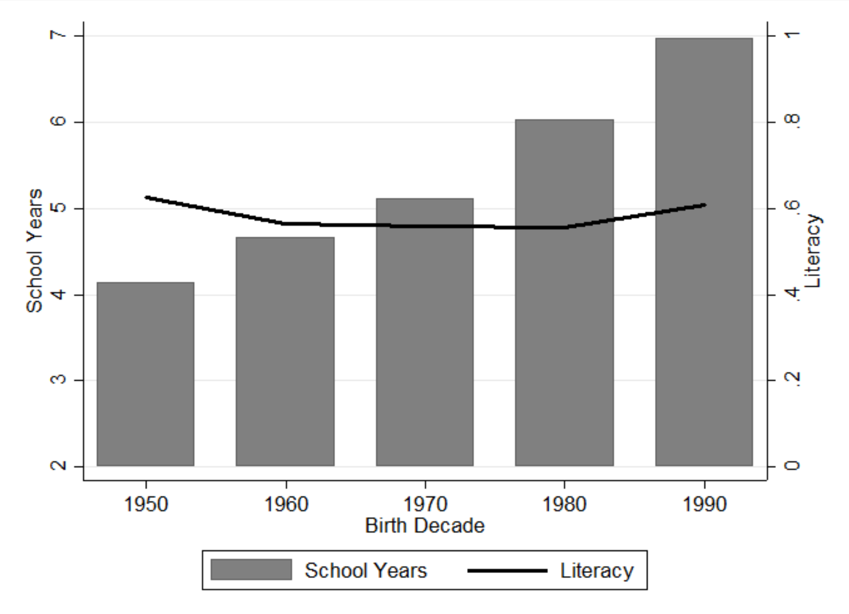
Colonial government and missionary education, as well as African parents, disproportionally favoured male over female education. Research now shows that the gap between male and female educational attainment increased during most of the colonial era (ca. 1880–1960). This had important consequences, with boys benefitting disproportionally from rising education opportunities, allowing to fill formal jobs that women did not qualify for. Although the gap was somewhat closed during independence, as the next section show, there are still large disparities between men and women when it comes to education.

4.4 Educational development post-independence

Education expanded dramatically in Africa post-independence. From 1970 to 2010, the share of children in sub-Saharan who completed primary school rose from 46 to 68 percent and the proportion of children completing lower secondary school increased from 22 to 40 percent. Modern African states invested in formal education, building new schools and providing more and better-qualified teachers. Burkina Faso is a good example: according to Michael Clemens (2004), it has "spent the last few decades bringing children into primary school at more than twice the rate achieved by today's rich countries when they were developing. It has achieved this with an economy far less developed than the leading economies of the 1800s and less developed than the vast majority of countries after 1960." Indeed, a revolution.

On the whole, then, *access* to education improved after independence, though the *quality* of education lagged. In Figure 7, we look at the development of school years and literacy across five birth decades using the same dataset as in the section on colonisation. The left axis refers to the years of schooling shown in bars, and the right axis to the share of literate people shown as the line. This graph includes all 42 countries in Sub-Saharan Africa for which we have data. People born in the 1950s have, on average, about four years of schooling. For the 1970s birth cohort, this number already increased above 5 and for the 1990s birth cohort above 7 years of schooling. However, the figure also displays literacy rates (black line) across birth cohorts, which have barely changed over the same time. There is a high number of pupils who have limited literacy or numeracy skills even after several years of school attendance. Thus, while the quantity of schooling has increased rapidly, its quality has not fully caught up yet. Reasons for this learning crisis include increased class sizes that offer less attention to each student and teachers' absence and qualifications.

Figure 7: Average years of education and literacy in sub-Saharan Africa per birth decade

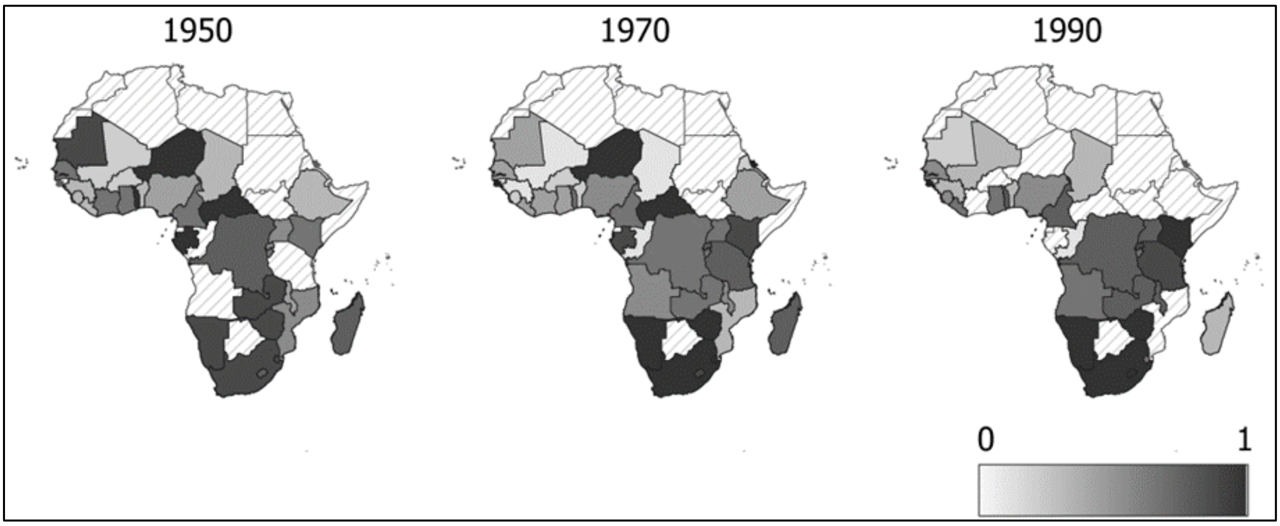


Sources: Demographic and Health Surveys, Multiple Indicator Cluster Surveys and IPUMS.

Yet, the experience of the different countries has been quite heterogeneous. Figure 8 displays the literacy rates across Sub-Saharan African countries for the 1950s, 1970s and 1990s birth decade. There are some countries which have increased the literacy rates, such as Malawi, Namibia and Lesotho, while other countries experienced a downward trend, such as Madagascar or Mauritania. In other countries, little changed. While literacy is only one educational outcome out of many important ones, the numbers show that the basic goal of literacy is not yet achieved in many countries. Hence, improving the quality of education remains one of the big challenges.

The first step is to increase school enrolment. Table 2 indicated that primary enrolment increased in African countries until the 1960s, and Figure 9 shows that this trend continues – school enrolment is still on the rise in Sub-Saharan Africa. First, there is a steady decline in people who have never attended school. In the 1950s birth cohort, more than 50 percent of people never visited a school, but in the 1990s birth cohort, this number fell below 20 people. Similarly, the share of secondary and tertiary-level graduates has increased steadily over the decades, increasing from less than 20 people to almost 40 people. Moreover, in the 1990s birth cohort, more than 10 people have a tertiary degree.

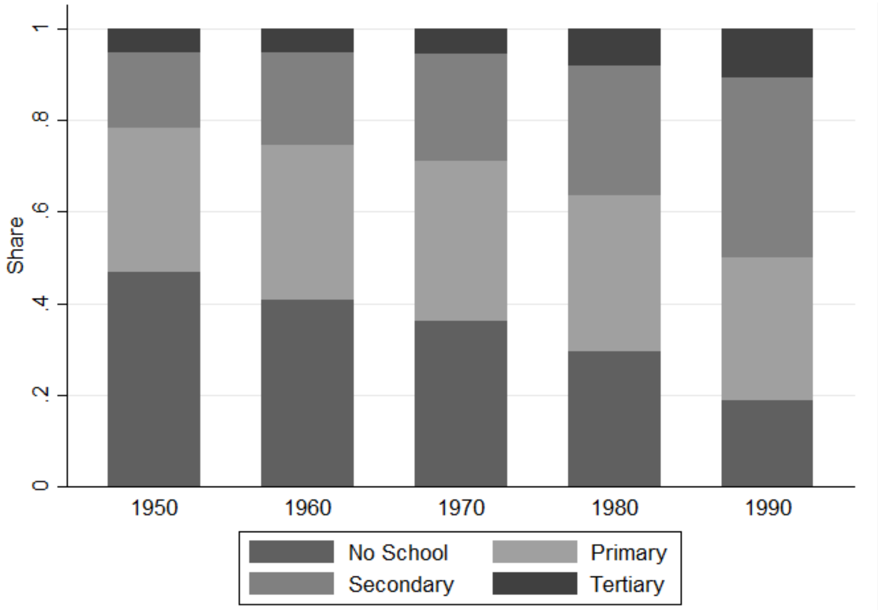
Figure 8: Mean share of the adult literate population in Africa by country per birth decade



Sources: Demographic and Health Surveys and Multiple Indicator Cluster Surveys.

However, of those who managed to get a university qualification, many did not stay in Africa. Some went to Europe or the United States in search of higher salaries. Some of them left because of political unrest in their own countries. This 'brain drain' means thousands of Africa's most brilliant scholars and entrepreneurs live outside Africa. They are not passing on their knowledge and skills to the next generation, which further reduces the quality of education in African countries.

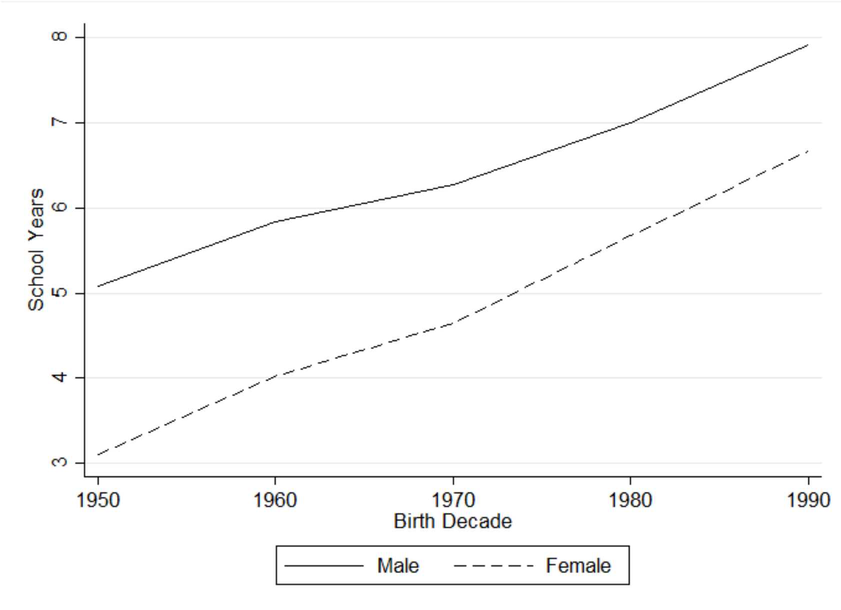
Figure 9: Distribution of educational levels in sub-Saharan Africa per birth decade



Sources: Demographic and Health Surveys, Multiple Indicator Cluster Surveys and IPUMS.

Has the expansion of education post-independence been evenly shared between men and women? Figure 10 shows the average years of education of men (black line) and women (dashed line) born between 1950 and 1990. Today, Sub-Saharan Africa is, in terms of education, the most gender-unequal region in the world. Men born in the 1990s had, on average, 1.3 more years of education and are subsequently more likely to be literate on average. While the gap is slowly shrinking, current and future generations must ensure that girls have equal access to quality schooling. The benefits, as explained earlier, are numerous. The low quality of education children in Africa receive remains Africa's biggest obstacle on the road to prosperity that independence should bring.

Figure 10: Gender gap in mean years of education in sub-Saharan Africa per birth decade



Sources: Demographic and Health Surveys, Multiple Indicator Cluster Surveys and IPUMS.

5. The future of education in Africa

As we have seen in this chapter, there are many reasons for African countries' comparatively lower levels of education. But there are also reasons to be optimistic about the future. Throughout history, better access to education and better quality education have gone hand in hand with better incomes. But it is hard to decide which comes first – the improvement in education or the increase in incomes. Better education helps people to get a higher income, but a higher income also helps people get a better education. The extra income means they can buy goods that help them to benefit from education, from basics such as electric lighting and better food to more advanced educational aids such as books and laptops. So improvements in education and progress in the economy reinforce each other.

The critical point is that as African societies become wealthier, we can expect more Africans to demand better education from their schools and universities. If improvement comes too slowly, they will seek better education elsewhere. This does further damage to Africa, as valuable skills are lost.

In the past, finding better education usually meant leaving Africa, but with the rise of our digitally connected world, high-quality education is just a click away. Modern communication technology is an essential tool in the quest to provide better education for African students. Mobile phones are used everywhere in Africa and offer access to the high-quality education many Africans desire. Several African firms are, for example, producing mobile phone games for children to improve their skills in mathematics or English. But the most significant advantage of better technology is access to the internet. As the libraries of Timbuktu did in the past, it gives access to a large body of knowledge previously unavailable to African students. Information about philosophy, medicine, economics, biology, engineering, statistics, history, geography, chemistry or any other subject imaginable is now at their fingertips.

Not only is this information freely accessible, but the teaching of it is increasingly becoming free too. Several courses from leading universities like Harvard and the Massachusetts Institute of Technology now provide free online courses in several subjects. Instead of enrolling at an African university, students can subscribe for free to these online courses and learn the skills necessary to partake in the advanced market economy. African tertiary education of the future may not only be provided by large universities funded by under-resourced governments. Governments (or local communities) may instead offer computer centres where students can listen to and learn from the world's leading scientists.

Study questions

1. Why is education important for countries' economic development?
2. What are the differences between formal and informal education in traditional African societies?
3. Religion, both Islam and Christianity, seems to have played an important role in the development of formal education in Africa, and therefore on economic development. Do religious organisations still matter for Africa's future development?
4. What can be done to reverse the 'brain drain'?
5. Explain the concept of skill premium.
6. Which school subjects are the most important for economic development?
7. How can African universities become internationally competitive?

Suggested readings

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Chapter 9

Textile Production and Trade

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1. Introduction

Textile industries have historically been a common first step in the industrialization process. For example, traditional handicraft textile manufacturing in Great Britain became mechanized during the Industrial Revolution, a transformation that contributed to rapid economic growth. In Africa, successful textile-based industrialization and related economic development has proven more difficult. Instead, much industrialization in 20th-century Africa was based on extractive industries, like mining and oil drilling. This type of industrialization tends to limit economic growth. Countries that depend on exporting natural resources often invest less in other sectors and can quickly fall into economic crisis due to swings in global prices for their main resource export.

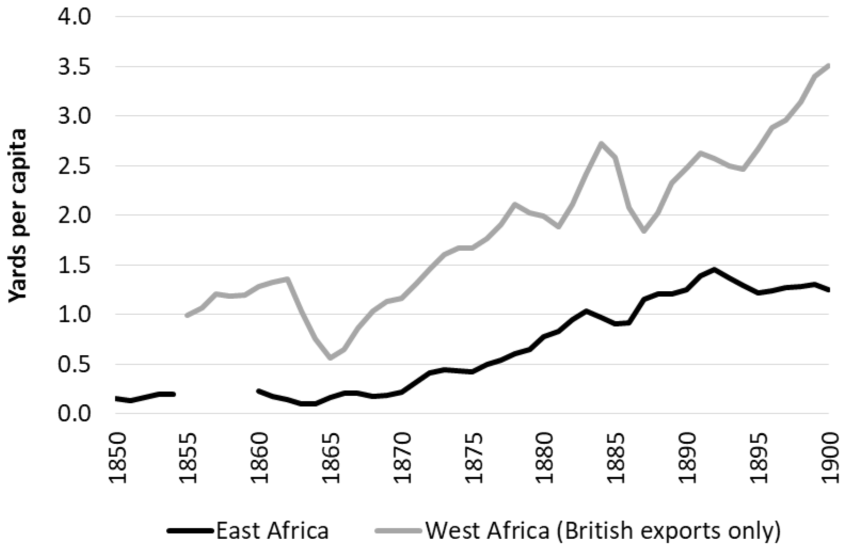
Although textile factories have emerged in some African countries, the industry is still limited, and the vast majority of the cloth consumed in contemporary Africa comes from abroad. This includes new cloth produced in China and India and large quantities of second-hand clothing exported from Europe and the United States. Why does Africa rely so heavily on imported cloth? Did the continent lack the necessary handicraft textile traditions that have elsewhere formed the basis for industrialization? The answer is "no." In fact, there are centuries-old traditions of textile production in much of sub-Saharan Africa, although the development of the industry differed across time and space. In this chapter, we explore the history of handicraft textile manufacturing in Africa. We pay particular attention to East and West Africa, which had very different industrial experiences. As we will see, handicraft cloth industries lasted much longer in West Africa than in much of East Africa.

Why did cloth industries disappear?

Textiles have been made by hand across sub-Saharan Africa for centuries. However, a number of these industries were declining and even disappearing by the start of the 20th century, especially in East Africa. Some theorists have assumed that textile industries declined due to competition with low-cost, factory-made cloth imported from places like Europe, the United States, and India. This, they argue, was related to the 19th-century colonization of Africa, when trade with the external world increased dramatically. This is known as *deindustrialization theory* and became popularized during the 1960s and 1970s. Although the arguments of deindustrialization theory may seem convincing at face value, the theory is based largely on assumptions instead of empirical evidence. Flaws in this theory become apparent when we look more closely at the history of trade and textile manufacturing in different regions of sub-Saharan Africa.

It is true that cloth imports into sub-Saharan Africa grew substantially, especially from the 19th century onward. However, the amounts imported differed between regions. As Figure 1 shows, imports of cloth per capita (per person) were much higher in West Africa than in East Africa. Despite comparatively larger amounts of imported cloth in West Africa, this region's industry remained particularly strong. Meanwhile, cloth production disappeared by the end of the 19th century in much East Africa, where cloth imports were significantly lower. This paradox suggests that the mere presence of imported cloth did not determine whether textile industries survived or disappeared. There is more to the story. In this chapter, we will explore why East and West Africa had such different industrial experiences during the 19th and early 20th centuries. For West Africa, we will highlight the large cloth-producing area encompassing modern-day Nigeria, which included numerous important textile centres. For East Africa, we will consider the decline of textile manufacturing in Tanzania and Malawi. But as we will see, there was some industrial diversity within East Africa. Textile industries were much stronger in the northern parts of the region, particularly Ethiopia and Somalia, than in the rest of East Africa.

Figure 1: Imports of factory-made cloth into East and West Africa, 1850-1900



Sources: British, American, and Indian trade reports and shipping records.
Note: East Africa's imports include cloth exported from India, the United States, and Britain. West Africa's imports include only the share exported from Britain, meaning that even more cloth was probably imported into West Africa than is show here.

We will uncover a number of *regional characteristics* that influenced the ability of a region to sustain viable industries and cope with competition from imported cloth. First, we begin by looking at the importance of a long history of textile manufacturing. Established *textile traditions* are much older in West Africa than in most of East Africa, which allowed strong industries to develop and mature several centuries before the rise of cloth imports. Second, we will consider how the *environment*, *population density* and *trade networks* related to more substantial industries and larger *consumer markets* in West Africa compared with most of East Africa. Third, we will explore how West Africa's local *institutions* (practices and policies) helped encourage industrial textile development before the colonial period. Fourth, we will compare how industries in East and West Africa were affected by increasing *global trade* during the 19th century. Fifth, we will learn how different *colonial institutions* and interventions in East and West Africa impacted domestic textile industries. Finally, we will consider how insights from Africa's industrial past may provide clues for future industrialization on the continent.

2. Cotton textile production in East and West Africa

A first notable difference between the longer-lasting industries of West Africa versus the earlier-disappearing industries in most of East Africa lies in the length of their industrial histories. West Africa has a longer history of established industries. The region's fertile environment enabled high agricultural yields of both cotton crops required to weave cloth and food crops to support a dense population. As we will see, these conditions helped create large consumer markets, stimulated commercial trading, and promoted the development of centralized states that encouraged industrial growth. West Africa's long history of industrial production and trade provided more time to develop techniques, create distinctive products, and establish consumer loyalty to regional "brands" prior to a rapid increase in global trade in the 19th and 20th centuries. These factors gave West African cloth industries a special advantage when competing with imported cloth from Europe and India that most East African industries did not have.

The East-West spread of textile traditions

The earliest cotton textile production on the continent probably occurred by the fourth century in the relatively well-populated areas of the Nile valley in Egypt, where raw cotton could be grown locally or imported from India via the Red Sea and Nile River trade routes. Cotton cultivation and cloth production techniques spread westward as merchants travelled along trans-Saharan trade routes. Weaving and the use of cloth as a form of currency was reported in the Senegal River Valley of West Africa by the eleventh century. Manufacturing techniques reached southern Nigeria by the thirteenth century. This early introduction of cotton cloth in West Africa helped stimulate relatively high levels of cloth consumption in the region. A large local demand for cloth was important for encouraging further development of local industries.

In West Africa, different regions began specializing in particular cloths, and consumer markets for a wide array of domestic cotton textiles developed. This long history of strong local demand for domestic cloth helped local weavers compete with foreign-made cloth once imports started gradually increasing from the fifteenth century as European merchants began trading along the African coast. In particular, the growth of the trans-Atlantic slave trade from the sixteenth to the early 19th century caused an increase in cloth imports. European merchants brought an array of manufactured goods to exchange for slaves, especially European firearms and Indian and European cloth.

These imported cloths were certainly consumed in West Africa, but European and Indian cloth did not fully meet the diverse demands of West African consumers, which had developed over the preceding centuries. In fact, in the seventeenth and eighteenth centuries, European merchants acquired varieties of West African cloth from the Bight of Benin for bartering along the coast. Dutch traders found that they needed domestic striped cloths if they wanted to barter for gold on the Gold Coast, whereas indigo-dyed blue cloths were used to purchase ivory and slaves in Gabon and Angola.

Delayed development in East Africa

In contrast with West Africa, cotton textile production became established comparatively late in most of East Africa, with clothing long consisting of skins or bark cloth, made by pounding the bark of trees. Cotton textile fragments dating to perhaps the fourteenth or fifteenth centuries have been excavated in the Lower Zambezi River area of Mozambique in southern East Africa. However, German ethnologist Heinrich Schurtz found in the 19^{th} century that the region's cotton cloth industries were still in an early developmental stage. The products and methods of production were simpler than the more complex varieties that had developed in West Africa. Compare, for example, the plain, uniformly grey *machila* cloth characteristic of 19^{th}-century southern Malawi's Lower Shire Valley in Image 1 with the complexity of 19^{th}-century *kente* cloth from Ghana in Image 2, which is comprised of a variety of thin cloth strips woven with coloured yarn and then stitched together to produce geometric patterns.

Image 1: Mang'anja loom and cloth, 19^{th} c.

Source: National Museum of Scotland.

Image 2: *Kente* cloth, late 19^{th} to early 20^{th}

Source: Brooklyn Museum.

Cotton cloth production likely spread even later into the interior of central East Africa. This part of East Africa was secluded due to a lack of riverways linking the coast and interior, which slowed the introduction of cloth-making techniques from abroad. We do know that central East

African weavers were creating patterned cloth in places like Ufipa in southwestern Tanzania by the mid-19th century. But these industries likely developed relatively late since cotton cloth continued to face intense competition from alternative domestic garments (bark cloth, raffia, and skins) up to beginning of the 20th century.

Some parts of East Africa, namely Ethiopia and Somalia in the Horn region of northern East Africa, experienced earlier development of textile industries. For example, in Mogadishu, Muslim immigrants introduced cloth production already by the thirteenth century. These also happen to be the areas of East Africa where textile manufacturing lasted the longest, underscoring the importance of a long history of textile production for the strength of local industries.

Production methods

As we have seen, hand-made cloth products in West Africa tended to be more complex and intricate than in most of East Africa. This was made possible by various production methods that developed in West Africa over several centuries. In some areas of East Africa, fine patterned cloths were manufactured by the 19th century, but the production of these varieties was very slow. In southern Malawi, for example, an intricate patterned cloth could take up to nine months to complete, while a patterned West African *kente* cloth could be produced in one week. This was because *production methods* were less advanced in East Africa. The simple *ground loom* (so-called because it rested horizontally on the ground) used in much of East Africa slowed production. In West Africa, in contrast, a greater variety of looms had begun developing by the seventeenth century. These included varieties of *treadle looms*, which sped up the weaving of patterned cloth through the use of foot pedals to separate different colored threads. West African weavers also used wide vertical cotton looms; the wide frame allowed them to produce large pieces of cloth quickly. These innovations were linked with the longer history of textile manufacturing in West Africa, which provided ample time to develop more advanced production methods compared with much of East Africa.

3. Population density, trade networks and consumer markets

We now turn to two more important factors: *population density* and *consumer markets*. A large population settled closely together is an asset for developing industries. Large populations provide cotton cultivators, textile workers, and consumers for cloth industries. West Africa has historically been more densely populated than most of sub-Saharan Africa. This is related to geographic and environmental characteristics that allow the area to produce enough food to support large groups of people. These environmental conditions also enabled the region to grow large quantities of cotton and indigo (a plant used to dye cloth) to supply the cloth industry with the necessary *raw materials*.

Nigeria, in particular, includes three densely populated areas: the Hausa region in the north, Igboland in the southeast, and the Yoruba area in the southwest. Sophisticated textile industries emerged relatively early here and in much of West Africa. Urban centres began to grow from the fifteenth century, and regional divisions of labour emerged, indicating a maturing economy. An artisan class developed in a number of cities, with distinctive spinning, weaving, dyeing, and embroidering professionals. Importantly, strong demand for cloth among large consumer markets allowed many manufacturers to support themselves almost entirely by their trade. This, in turn, allowed industries to continue to develop.

At the same time, West Africa developed sophisticated *trade networks* across the region that helped create *export markets* for cloth producers. Three distinctive ecological zones – desert, savanna and rainforest, ranging from north to south – became closely integrated through these trade networks. Each zone had its own economic specializations and products, influenced by its particular environment, which stimulated trade between the zones. As a result, textile producers could send their products to consumers living far away. For example, the northern Nigerian city of Kano produced indigo-dyed cotton cloth that was in high demand among consumers in desert regions to the north. Strong connections between these regions also stimulated the flow of *capital* (investment money) and *labour* (cotton cultivators and textile workers), which helped boost West African industry. By the eighteenth century, wealthy desert-zone financiers were investing in textile production in the savanna, while many immigrants moved to major textile centres to work in the industry.

Differences within East Africa

Turning to East Africa, we find more diverse levels of population density and consumer markets across the region. In the north, the fertile highlands of Ethiopia were among the most densely populated parts of sub-Saharan Africa. In the highlands, steady rainfall and various altitudes support a wide variety of high-yielding crops, including cotton used in the textile industry. This region had a much stronger textile industry compared to far less densely populated and less fertile parts of East Africa to the south. The cool climate of the Ethiopian plateau created strong demand for cloth among the region's large population. In fact, nearly all of the cloth made in Ethiopia was consumed within the country. To the east of Ethiopia, in contrast, coastal Somalia's dry climate and lower agricultural yields did not support extensive cotton growing or the large populations that create substantial local markets. However, this coastal region's textile industry enjoyed a strategic *geographic* position that helped solve these problems: coastal producers could import raw cotton from other places, including India, and export cloth to consumers located all along the seaboard and in the large interior markets of southern Ethiopia. For example, the majority of cloth produced in Mogadishu on the Benadir Coast was sent to external consumers.

Lightly populated East African areas further south, in Tanzania and Malawi, did not enjoy the large local consumer markets of Ethiopia, nor did they have the location-related trade benefits of Somalia. Most cloth-producing centres were relatively isolated, situated in fairly small fertile pockets located in the deep interior, so they did not have good access to export markets. Textile producers in southern Malawi's Lower Shire Valley region did send their cloth to Lower Zambezi consumers (in Mozambique) via the Shire River, but the scale of this trade was much smaller than Mogadishu's ocean-based exchange. In river-scarce Tanzania, which lacked waterway transportation, trade between distant communities was even more scarce. Here, cloth could only be transported long distances by foot, making it more difficult and costly to reach distant consumers. A combination of lower population densities and more limited trading opportunities kept the industries in places like Tanzania and Malawi small in scale. This small scale, in turn, slowed the further development of cloth manufacturing since growth tends to stimulate innovation, as we have seen in the case of West Africa.

5. Industry and institutions

We now turn to the role of *institutions* in influencing the development of textile industries in East and West Africa. Institutions are the formal and informal rules and norms that govern society. Many economists believe that the characteristics of institutions strongly impact how societies and economies develop. There were a number of unique institutions in pre-colonial West Africa that were particularly beneficial for the growth of the region's textile industry. Many of these institutions were less common in East Africa.

Cloth as currency

The exchange of currency is an institution based on the agreement among people about what counts as money. In West Africa, traders began accepting and using cloth as a form of money from the eleventh century onward. This was known as *cloth currency*. As we can see in Image 3, which depicts cloth currency from Liberia, it typically consisted of narrow cloth strips wound onto spools that could be cut to a certain length and/or sewn together to form different currency denominations. The popularity of this cloth currency helped boost weaving in regions specializing in the production of cloth strips. For example, this was the case for Tiv weavers in southeastern Nigeria's Tivland. The use of cloth currency continued to stimulate domestic industry in many parts of West Africa into the colonial era. It even circulated in some areas up to the mid-20th century.

Image 3: Cloth currency strips from Liberia

Source: Smithsonian National Museum of African Art.

In East Africa, in contrast, the use of domestic cloth as a form of currency was much less common. Cotton cloth was used as a form of money in Malawi, Tanzania and Mozambique, but it was mostly imported cloth (from the United States, Britain and India) rather than domestic cloth that circulated as currency. Thus, the boost to local industry provided by cloth currency institutions in West Africa was not similarly enjoyed by East African cloth producers.

Large states

Another important regional difference is the early development of large, centralized states in densely populated areas of pre-colonial West Africa compared with a scarcity of such states in much of East Africa. States can help stimulate manufacturing through pro-industry and pro-trade policies. Consider the case of northern Nigeria's large Sokoto Caliphate, which actively encouraged textile production through pro-industry policies. For example, weavers, tailors, and indigo dye producers were often exempted from taxation. At the same time, the government encouraged industrial growth through reduced *costs of production*. This included improved training to increase *labor efficiency* (which determines the amount of product that a single worker can produce) and reductions in the *cost of transportation*. In fact, the already substantial, long-established trade carried on between West Africa's ecological zones intensified during the 19th century under the Caliphate's pro-trade policies.

Image 4: Dyeing pits in Kano, Nigeria

Source: Wikimedia Commons (Andy Musa Chantu, 2015).

The powerful military of the Sokoto Caliphate also played a role in expanding the textile industry. Through military campaigns, the Caliphate acquired many slaves, who were used as laborers in both the textile industry and on plantations that cultivated the raw materials needed for manufacturing (raw cotton, indigo for dyeing, and even food to feed artisans). Recall that a large population is important for supplying both labor and consumers for textile industries. Although enslaved workers with little or no income probably could not purchase large amounts of cloth, the consumption of textiles expanded overall in the Sokoto Caliphate. Rising demand stimulated the development of larger and more efficient operations (referred to as *economies of scale*) in the Caliphate's famous cloth-dyeing industry in Kano. 19th-century producers invented larger dyeing vats that allowed them to dye more cloth using the same amount of labor time. This reduced the costs of production and sped up output. These methods are still in use today, as we can see in Image 4, in which a contemporary cloth-maker uses a large dye pit in Kano.

In East Africa, in contrast, there were few large, centralized states. Those that did exist generally did not focus on the development of domestic industries. The kingdom of Ufipa in Tanzania, for example, was a relatively sophisticated state compared with other, typically decentralized East African societies. The rulers of Ufipa encouraged trade but did not actively invest in industry. This was related to the different evolution of trade in West versus East Africa. West African merchants and states had much to gain by investing in the largescale regional trade of domestic manufactures. But in most of East Africa, trade was mainly focused on exporting profitable raw materials, like ivory, to global traders. States tend to promote sectors and activities that they believe will generate the greatest profit. Thus, the policies of Ufipa's government were focused more on attracting ivory traders than on developing the textile industry. Likewise, many contemporary states choose to focus more on profitable *extractive industries* than on developing manufacturing industries.

6. The impact of global trade

During the 19th century, trade between sub-Saharan Africa and other world regions expanded rapidly. As we learned in this chapter's introduction, proponents of *dependency theory* assume that an increase in cloth imports undermined domestic African industries. Thus, in their view, global trade constrained industrial development in Africa. However, as we will see, West African textile industries actually experienced a number of benefits by engaging with the global economy, more so than was the case in East Africa. This was partly possible because the early industrial advantages in West Africa that we have explored in sections 2-5 put the region in a strong industrial position by the 19th century.

Cash-crop profits and consumer demand

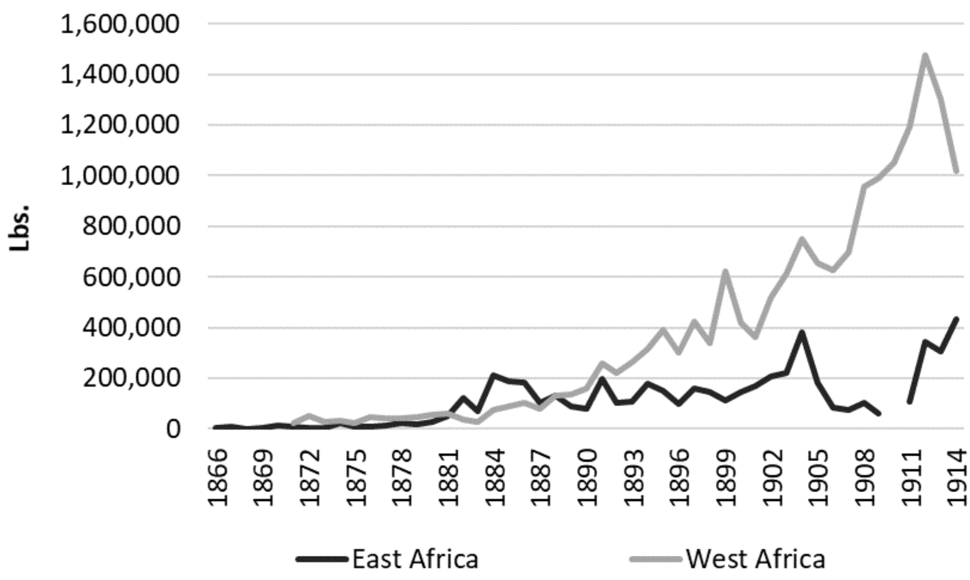
By the 19th century, West Africa was exporting numerous *cash crops* to meet rising demand for raw materials in industrializing world regions. For example, southern Nigeria's Igboland began exporting large amounts of palm oil, which was shipped coastward along riverways. This sort of global trade could help invigorate domestic textile industries. As people became wealthier from the profits of palm oil exports, they could purchase more cloth. Some of the cloth they purchased was imported, especially from Britain, but much of it was locally made. As demand for cloth grew alongside rising incomes, the textile industry expanded. Igbo women even developed new, more intricately patterned cloths called *Akwete*. This helps illustrate the relationship between different sectors within a single economy. Here, expansion in the global-oriented agricultural sector aided growth in the local-oriented industrial sector.

Most East African textile industries did not enjoy the industry-stimulating benefits of increased incomes from cash-crop exporting. This had to do with local geographic factors. East African industrial centers were often situated far inland, with poor access to coastal trading centers. This reduced the potential profits of cash-crop exports. This was the case, for example, for the textile-producing kingdom of Ufipa, which was located deep within the river-scarce interior of Tanzania. The high cost of transporting agricultural products by foot to distant coastal markets made it impossible for the region to raise incomes via cash-crop exports.

The effects of imported manufactures

We have looked at how global exports could stimulate African textile industries, but how did imports of cloth and other cotton products from places like Britain, India, and the United States impact local industries? As we saw in Figure 1, cloth imports grew more quickly in 19^{th}-century West Africa than in East Africa. But many West African textile industries continued to develop in the midst of rising cloth imports from overseas. In fact, *competition* from imported cloth often stimulated local innovation. For example, some Igbo weavers began reproducing popular imported Indian and English patterns. Importantly, the development of new domestic products like these was aided by the increasing use of imported yarn, especially from Britain. Spinning yarn by hand requires a great deal of time, making it a very *labor intensive* part of the production process. The importation of this *industrial input* from Britain thus helped increase *industrial productivity* and also helped broaden the range of possible cloth colors. As Figure 2 shows, imports of British-made yarn into West Africa increased rapidly by the late-19^{th} century, quickly exceeding yarn imports into East Africa.

Figure 2: Yarn imports into West Africa and East Africa, 1866-1914



Sources: British and Indian annual trade reports, 1866-1914.

Yarn imports were nearly non-existent in most of interior East Africa. In the case of Tanzania, largescale importation of yarn was simply not possible due to the high cost of transporting goods by foot to the deep interior. However, yarn imported from both India and Britain *was* used in the more resilient industrial areas of Somalia and Ethiopia in northern East Africa. In fact, most of the yarn imports into East Africa illustrated in Figure 2 went to this region. Weavers in coastal Mogadishu used colored imported yarn to make striped cloth. Increasing amounts of yarn were also imported into landlocked Ethiopia after the Ethio-Djibouti Railway opened in 1901. Imported industrial inputs helped local weavers lower the cost of producing Ethiopian *shamma* togas. This helped them compete with cheap imported cloth from Europe, India, and the United States. But, importantly, producers could not enjoy these benefits unless there was first a cost-effective means of transporting imported industrial inputs to textile-producing regions.

7. The impact of colonial rule

During the 19th century, much of sub-Saharan Africa was colonized by European powers. How did colonial rule affect domestic industries? As we will see, the impact differed per region. This had to do with (1) the types of colonial interventions that each region experienced and (2) the strength of the existing industries, which helped determine how well they could cope with colonial pressures.

Taxation

As we have already learned in section 5, *institutions* influenced the development of industries during the pre-colonial period. During the colonial period, colonizers imposed a number of new *colonial institutions*. Some of these institutions proved disruptive for domestic industries, especially in East Africa.

One such institution was taxation. Colonial powers imposed new taxes on the regions they colonized. These tax demands created problems for households that did not have the money to pay them. In German East Africa (modern-day Tanzania, Rwanda, and Burundi), colonizers levied a *hut tax* on all adult men in the early 20th century. In the cloth-producing Ufipa region, most men did not have the money needed to pay their taxes. As a result, many men migrated to the coast to work for wages on European-owned plantations. This *labour migration* quickly reduced the supply of textile workers living in Ufipa, causing the cloth industry to collapse. These types of taxes levied on individuals (known as *direct taxation*) were common in much of East Africa. In West Africa, in contrast, tax revenue was mostly raised by taxing the region’s extensive trade (known as *indirect taxation*) instead of taxing people. Potentially disruptive direct taxation thus remained comparatively limited in much of West Africa.

Case study: cotton imperialism in British Nigeria

In some cases, colonizers viewed a decline of domestic textile manufacturing as potentially beneficial for the *metropole*, or colonizing country. In their view, European manufacturers could sell more factory-made cloth to the colonies if they did not face competition from locally made cloth. At the same time, they could purchase more raw cotton from the colonies (to use in European industries) if this cotton was not used by African weavers. For this reason, deindustrialization theorists have argued that colonial rule was detrimental for domestic industries. However, as the case of Nigeria in British West Africa illustrates, strong local industries could persevere even when colonial powers tried to interfere with local industries.

During the early 20th century, the British Cotton Growing Association (BCGA) actively attempted to turn Britain's Nigerian colonies into the main source of raw cotton for the British textile industry and a major market for British cloth. Both goals were thwarted by the strong domestic textile industry for two main reasons. First, the BCGA established very low purchasing prices for Nigerian raw cotton in an effort to lower the cost of raw materials for the British textile industry. However, local textile producers in Nigeria were willing to pay much higher prices, so African farmers simply sold their raw cotton to local manufacturers instead of to the British. Second, British-made textiles struggled to compete with locally made cloth. The domestic cloth was reportedly more durable and aesthetically appealing for many consumers.
The British did succeed in securing large amounts raw cotton in another colony: Uganda. The Protectorate of Uganda would eventually become the biggest raw cotton exporter in British Africa. Importantly, however, no cotton textile industry had ever existed in Uganda, so the British faced no competition from local manufacturers.

8. Manufacturing in the 20th century

In West Africa, regional patterns of cloth production and trade continued and evolved during and after the colonial period. As the 20th century progressed, cloth import levels continued to rise. Newly industrialized countries, like Japan and eventually China also began sending large quantities of cloth to sub-Saharan Africa. But local handicraft manufacturers in much of West Africa persevered.

By the mid-1960s, it was estimated that 50 million yards of cloth were annually woven by hand in Nigeria alone. Around mid-century, the Tiv people in the Benue State (in southeastern Nigeria) were still weaving at least half of their own clothing and also produced large quantities for regional trade. The introduction of motor transportation allowed Bùnú weavers in southwestern Nigeria to send increasing amounts of cloth to Igboland, although this trade was eventually disrupted by the Nigerian Civil War in 1967. And in Igboland, *Akwete* weaving techniques continued to spread throughout the region. As we see in Image 5, female weavers in the region are still using these methods. Today, cloth production still thrives and supplements household incomes in southern Nigeria as consumers continue to demand high-quality domestic cloth with strong cultural value.

Image 5: Woman weaving *Akwete* cloth on a broad loom

Source: Wikimedia Commons (photographer: Ekekeh Ubadire Obiama, 2017).

In northern Nigeria, in contrast, hand-loom weaving would show greater decline from around the 1920s. This was likely tied to certain changes in the region that affected its supply of textile *labor* and *consumer markets*. First of all, northern Nigeria's economy had long depended on slave labor, but slavery ended during the colonial period. Formerly enslaved textile workers and cotton cultivators could now choose to pursue other employment opportunities. Secondly, the large trans-Saharan caravan trade began declining by the start of the 1920s. This reduced access to important *export markets* for northern Nigerian cloth. However, the region's ancient textile industry in Kano did not simply disappear. Trade relations with desert people remained intact, if diminished. Even today, Tuareg people continue to wear the characteristic indigo veils dyed in the large vats seen above in Image 4.

Turning back to East Africa, the textile industries of most of the region had already disappeared by the beginning of the 20th century, having suffered from smaller consumer markets and more disruptive colonial interventions. However, in those areas of northern East Africa that had larger consumer markets, production continued much longer. On the Benadir Coast, at least 1,000 households were reportedly weaving in the 1950s. The industry would only substantially fade with the violent social and economic disruption brought by civil war in the late 20th century. In neighbouring Ethiopia, hand weaving traditions were still spreading in the early 21st century, with farmers increasingly taking up weaving to generate additional income.

9. Industrialization in sub-Saharan Africa

As we have seen, handicraft manufacturing has persisted in parts of sub-Saharan Africa. However, these traditional industries did not lead to widespread industrialization. Early post-colonial governments in both East and West Africa attempted to stimulate factory-based textile manufacturing during the 1960s and 1970s by investing in industry and discouraging cloth imports via trade barriers, including tariffs or even bans on imported cloth. This is known as *import-substitution industrialization*. However, these initiatives had only limited success in most African countries, which still lacked the necessary skilled laborers and financial capital to effectively operate and maintain large machine-based factories. These import-substitution industrialization policies were largely abandoned by the 1980s and 1990s when African countries were forced to remove trade barriers in exchange for financial loans from the World Bank and International Monetary Fund. The removal of these barriers opened African countries to vast imports of cheap cloth from newly industrialized countries in Asia, as well as largescale imports of second-hand clothing from Europe and the United States.

However, as we have seen in this chapter, competition from imports does not necessarily mean that local industries cannot develop and even flourish. Conditions are changing in Africa. Perhaps more than ever before, the continent is becoming better positioned to industrialize. First of all, Africa now has far more of the skilled labor that is needed to develop and manage manufacturing industries. At the same time, the continent's population is booming, creating large and growing domestic consumer markets in sub-Saharan African countries, which we have seen is a vital ingredient for developing industries. Moreover, the spread of mechanized transportation in Africa provides opportunities for greater regional trade of domestic manufactures. Finally, Africa is attracting large sums of foreign direct investment (FDI) from Asian countries that are seeking to outsource their manufacturing enterprises. Investments from abroad have already boosted industrialization in places like Mauritius, Madagascar, and Ethiopia. Crucially, however, industrialization requires reliable electricity sources, which much of the continent still lacks. Correcting this deficiency will require targeted state policies. Just as we saw in the case of West Africa's pre-colonial textile industry, governments play an important role in creating the necessary business environment for industries to flourish.

10. Conclusion

Sub-Saharan Africa has had a long history of textile manufacturing, but the development of weaving industries differed between regions. Handicraft textile industries survived and even thrived in West Africa and the northern part of East Africa before, during, and after the colonial period. Meanwhile, many textile industries in the rest of East Africa collapsed by the beginning of the 20th century. Deindustrialization theory points to rising global trade during the colonial period as a cause of industrial decline. But we have seen that there is much more to the story. Rather than only looking at *external factors* (like global trade and colonial intervention), it is important to consider different *regional characteristics* that influenced the strength of domestic industries. By exploring these characteristics we can learn important lessons about what enables industries to grow and thrive.

We have seen that a longer history of textile manufacturing in West Africa compared with most of East Africa provided a longer period of time to develop strong *consumer demand* and more complex *production techniques*. This would, in turn, help the industry compete with machine-made imports from overseas during the 19th century. We also saw that it is useful to have a *fertile environment* that can supply large amounts of raw cotton and feed a *dense population* since people provide both *labor* for industry and *consumers* for products. *Trade networks* that link industrial centers to other areas are also important since they allow manufacturers to send their products to *export markets*. West Africa had all of these production and trade advantages, whereas most of East Africa did not, with the notable exceptions of Ethiopia and Somalia.

Additionally, West Africa had numerous large states that helped develop *institutions* to further stimulate domestic manufacturing and trade. In East Africa, in contrast, large states were rare. Those that did exist focused more on encouraging profitable ivory trading than promoting less profitable industries. Well-crafted *state policies* that promoted industrial growth were a key ingredient for industrial vitality. All of these benefits led to the development of West African industries that were strong enough to compete with imported cloth and cope with colonial interventions by the 19th century. In short, global trade and colonization certainly affected sub-Saharan African textile industries, but the consequences of these external forces were heavily influenced by a number of local conditions.

Africa's handicraft textile traditions did not lead to widespread industrialization in the 19th and 20th centuries. However, today, a combination of higher-quality education, growing consumer markets, and foreign direct investment may provide the necessary boost to jumpstart African industrialization in the years to come.

Study questions

1. What is deindustrialization theory? Is this theory convincing? Why or why not?
2. Textile industries developed earlier in West Africa than in much of East Africa. How did this longer history of manufacturing help West African textile industries compete with rising cloth imports during the 19th century?
3. Large pre-colonial states were more common in West Africa than in East Africa. Why were large states beneficial for the development of textile industries?
4. Historically, West Africa has been more densely populated than most of East Africa. What is population density and why might a higher population density be beneficial for domestic industries?
5. Some scholars have argued that cloth imports into sub-Saharan Africa destroyed local industries in the 19th century. Others have argued that imports helped stimulate local manufacturing. Provide two possible arguments for each perspective. Which do you find most convincing, and why?

Suggested readings

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Chapter 10

From Cowries to Mobile Phones: African Monetary Systems since 1800

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1. Introduction

Stable currencies and effective financial institutions provide a crucial foundation for economic development. Money has three functions within an economy: it acts as a medium of exchange, a store of value and a unit of account. Having a common monetary unit facilitates exchange in several ways. First, it reduces the cost of transactions, both now and in the future, by providing a standard unit by which the value of things may be agreed, and the means with which the transaction can be completed. Second, it allows surplus earnings to be saved and invested. In addition, beyond its economic role, money has considerable political importance, as a symbol of economic unity and prosperity.

The study of financial systems has been shaped primarily by the experiences of advanced economies in Europe and North America. However, the monetary systems of developing economies, including African economies, often differ from advanced economies in important ways. Firstly, formal financial institutions, like banks, tend to be less developed. In sub-Saharan Africa this is partly linked to demography: low population densities, along with low incomes, mean banks have difficulty remaining profitable outside large urban areas. Rural populations therefore have little access to financial services. Where fewer people have access to banks and bank accounts, more transactions are conducted with cash than other financial instruments (such as cheques, or credit or debit cards). It also means that savings tend to be kept by individuals rather than banks. Banks have less money to loan to individuals or businesses, who must look to other 'informal' institutions to obtain credit.

The value of money in terms of prices, or the goods a given amount of money can purchase, also tends to be less stable due to higher rates of inflation. Inflation occurs when the growth of the money supply exceeds the supply of goods, and nominal prices rise. During the height of the Zimbabwean hyperinflation of 2008, for example, the nominal prices of goods doubled in less than 24 hours according to some estimates. In other words, if you received your salary payment on a Friday, the purchasing power of the money would have been cut in half by the following morning. While this is an extreme case, the relatively high rates of inflation across many African countries often makes people reluctant to hold their savings in money, and many people prefer other types of assets such as consumer goods or (in rural areas) livestock.

Fluctuations in the value of currencies relative to other currencies (exchange rates) can also be extremely disruptive to both the private and public sector, which often import substantial shares of consumer goods. A change in the exchange rate can suddenly raise the price of imported goods in terms of local currency. If, for example, someone who is paid in Kenyan shillings wishes to purchase a car produced in South Africa, the price she will pay will depend partly on the rate of exchange between the Kenyan shilling and the South African rand (or, in other words, the number of shillings per rand). Since the original price of the car is in rand, the price in shillings will increase if the shilling depreciates against the rand (meaning it takes a larger number of shillings to purchase one rand). The price paid by the customer in Nairobi will therefore increase, even if the price has remained the same in rand.

Since exchange rate changes can happen very quickly on global currency markets, the effects can be dramatic. For businesses that rely on imported goods, exchange rate shifts can mean a sudden increase in the costs of production, which can decrease profits. For individuals, it can mean a rise in the cost of living if, for example, imported foodstuffs are widely consumed. Governments often take steps to limit the fluctuations of exchange rates. One such step is the fixing of 'official' exchange rates between the home currency and foreign currencies. Such fixed rates are difficult to enforce, requiring extensive bureaucratic controls which impose costs on individuals and companies trying to acquire foreign exchange to purchase imports. To avoid these costs, many such actors will make use of extensive informal markets for currency in which a parallel (or black-market) exchange rate is used that may be different from the official rate.

As an example, consider a Nigerian trader in the 1970s who wished to purchase cigarettes in Niger for re-sale in Nigeria. This was a common strategy during this period, as high tariffs in Nigeria made imported cigarettes more expensive. He or she would first need to exchange Nigerian naira for the CFA francs of Niger. At this period, the Nigerian government restricted the purchase of foreign currencies in an effort to defend the value of the naira. Exchanging money on the official market was therefore costly, involving considerable delays in the processing of applications for foreign exchange and uncertainty about the outcome. So the trader might go to a parallel market for currency, and exchange naira for CFA francs at the parallel, or market rate. In 1977 the parallel rate was 243 CFA francs to the naira, while the official rate was 437. Currency traders were able to earn a profit on the difference between these two figures. Having made this exchange, our trader could then buy cigarettes in Niger and import them for sale in Nigeria in exchange for naira.

An even more dramatic step, which was taken in Zimbabwe following the 2008 crisis, is to adopt a foreign currency (in Zimbabwe's case, the U.S. Dollar), which circulates in place of a local currency. This has the benefit of reducing uncertainty, but also means governments can no longer use monetary policy to mitigate the effect of crises. Further, it is often seen as a symbol of lost political sovereignty, and has considerable political costs. Finally, it can be difficult for such a country to acquire a sufficient quantity of foreign currency to use for daily transactions.

These two examples, the Zimbabwean crisis and the West African parallel market, show how the ways in which money is used in Africa are complicated by local political and economic factors. This chapter will examine the development of Africa's financial and monetary systems since the 19th century. It begins by examining how African currency systems changed along with the dramatic expansion in the export of agricultural products from the early 19th century. The next two sections examine the first introduction of government-issued coins and notes under colonial regimes and then the changes to these systems after independence. The effects of fluctuating exchange rates during the 1970s, 1980s, and 1990s are the subject of the next section, and the chapter concludes by considering the impact of new technologies over the past decade.

2. What is money?

The three currencies mentioned in the previous section (the Zimbabwean dollar, the Nigerian naira and the CFA franc) were all examples of 'fiat currencies'. Fiat money is money that has no fixed value in anything other than itself. Most currencies used today, in the form of paper money and coins, are comprised of fiat money. Fiat money was first introduced in Africa under colonial rule in the 20th century. Prior to that, in Africa as well as much of the rest of the world, the objects used as currency were valued either because they had intrinsic value as goods ('commodity money') or because they could be exchanged for something that did. Gold dust is one example of a commodity currency which circulated in West Africa. The value of the gold dust was determined by its weight, just as gold coins were often weighed in Europe in earlier periods to assess their value in terms of the quantity of gold they contained. Later, under the gold standard regime introduced by colonial powers, gold remained the source of the value of currency but in a different way. Coins were no longer valuable primarily because they continued precious metals but because they could be exchanged for a certain quantity of gold. Such currencies are known as 'representative money'.

Prior to the beginning of colonial rule, commodity money was the most common type of money in sub-Saharan Africa. In addition to gold dust, other commodities such as specific types of shells or cloth were also widely used as currency. Early European observers frequently misunderstood African monetary systems, assuming that the exchange of cloth or shells was merely 'barter' exchange in which money was not used. Subsequent research on the commodity currencies of pre-colonial Africa has shown that, whatever the prejudices of European traders, they formed a sophisticated and versatile monetary system well suited to African conditions. One of the best known examples, which circulated in East and West Africa as well as India and China, was the cowrie shell. Cowries, or more specifically the shells of *Cypraea moneta*, were imported primarily from the Maldive Islands in the Indian Ocean.

The volume of cowrie imports was considerable: by the early 19th century, the English alone were shipping approximately 100 tons of cowries to Africa every year. Individual or small numbers of cowries could be used for small purchases in local markets. They were also exchanged in larger units. On the West African coast, for example, cowries were threaded on strings of forty cowries each, and numbers of strings made up larger units. In 1720, a ‘grand cabess’ of 100 strings (or 4,000 shells) was worth around £1.

As a medium of exchange, cowries had several advantages. They were impossible to counterfeit and durable enough to survive travel over long distances. They also served as a store of value and unit of account. Strings of cowries could also be incorporated into clothing or jewellery, just like precious metals, as a form of savings. In times of crisis, these savings could be dismantled and used to purchase foodstuffs or other consumer goods. They could also be stored individually in large treasure rooms which existed into the 20th century.

From Uganda: Cowrie Shells on a Bark String.

Another major commodity currency was textiles. Portuguese traders arriving on the West African coast in the fifteenth century first encountered a currency system based on locally-produced textiles. As the Atlantic trade expanded, local textile production was supplemented by textiles produced in Europe and Asia, brought to West Africa by traders who exchanged it with African agents for gold, slaves, ivory, gum arabic and other products. As the volume of trade increased, specific kinds of cloth became most important as units of currency. The selection of specific types of cloth served to both maintain stable prices in the context of increasing imports of textiles, and guarantee a certain level of quality. One example, which became one of the most important imports during the Atlantic slave trade, was a type of cotton cloth dyed a striking dark blue produced in India. Known as ‘guinee’ cloth, it had a specific smell which European producers could not imitate and African traders could use to determine if it was genuine. The cloth’s colour and the methods of its production gave it characteristics similar to cowries.

3. A 'currency revolution'?

When colonial rule was established in the late 19th century, colonial governments gradually outlawed the circulation of pre-colonial African currencies. They hoped to replace the simultaneous circulation of multiple currencies with the circulation of single currencies comprised of representative money within the newly established colonial borders. Historians of African monetary history have sometimes referred to the introduction of colonial currencies as a 'currency revolution'. This phrase is based on the idea that colonial currencies lowered transaction costs and helped facilitate the rapid commercialisation of African economies in the late 19th and early 20th centuries. This idea has been debated: given the limited power of the early colonial state, laws banning the use of commodity currencies were often difficult to enforce and many Africans continued to use shells and other currencies from the pre-colonial period. Why did the colonial administration want to remove these currencies from circulation, and why did they initially fail? Answering these questions requires us to look more closely at what influences the practices of people (and governments) in spending or saving particular types of financial asset.

Growing trade with Europe during the 19th century had added foreign coins to the mix of circulating currencies, particularly near the East and West African coasts. Foreign coins were in demand by African traders because they could be exchanged for the growing variety of imported goods becoming available through the coastal trade. In the Gambia in the 19th century, for example, British colonial officials complained that African producers preferred to trade with the French, who paid in 5-franc coins (known as 'dollars'), rather than British companies which tended to use trade goods like textiles or manillas. British traders were reluctant to use coins, because they could earn additional profits through arbitrage, or the difference in the price of consumer goods in Britain and their higher value in West Africa. For example, a unit of cotton cloth purchased in Britain in the mid-19th century for 10 pounds in British currency might have purchased a certain volume of palm oil in West Africa. Because of the high demand for cotton cloth in West Africa, the palm oil purchased with that cloth might have had a higher value in British currency than the cotton cloth. In this case, the West African price of the cotton cloth (in terms of palm oil) was higher than the British price (in terms of pounds). Profiting from differences in the price of the same good between two different markets is known as arbitrage.

Colonial governments, however, had different needs. They had to collect taxes from across their new territories in order to make their new administrations financially viable. They also needed to be able to spend that tax revenue internationally, to pay the pensions of colonial officials or buy equipment from Europe. The system of multiple currencies in place before the colonial period introduced both costs and risks into these transactions. If exchange rates between, for example, a grand cabess and the British pound, shifted, it could have imposed losses on a colonial administration whose expenses and debts were denominated in pounds. It was for these reasons that European traders before the colonial period had been willing to pay for African exports in cowries and cloth, but not to receive such commodities for the purchase of other imported goods such as firearms. Cowries and cloth had a lower value in European markets and therefore could not be exchanged into European currencies which the trading firms needed at the same rate.

A West African shilling from 1916.

By the late 19th century, therefore, colonial governments began enacting legislation banning the importation of cowries and manillas and declaring that they were no longer legal tender within colonial boundaries. They then began to issue new currencies which were intended to replace the old commodity currencies. These included the West African pound, the East African rupee, the East African shilling, and the Congolese franc, among others. These new currencies were intended to serve several purposes in addition to the minimization of exchange rate risk discussed above. They had an important political role in demonstrating the sovereignty of colonial administrations over African territories. The images used on the coins and notes themselves were clearly intended to link their issue with imperial rule. British colonial coins, for example, featured the image of the monarch (see image below). Colonial governments also hoped to use the issue of new currencies to gain greater macroeconomic control over colonial economies.

How successful were these policies in achieving their aims? Like most colonial policies, the impacts were slow and uneven. Colonial currencies were used increasingly as the medium of exchange in the growing trade between African colonies and their European colonizers. However, they did not displace pre-colonial currencies for several decades. Contemporary reports record instances of cowries, manillas and cowries still used as a medium of exchange and store of value through the first decades of the 20th century. Some have interpreted this as an act of protest against the political symbolism of colonial currencies. Other explanations focus on the uses of currencies. In many cases, the smallest denomination of colonial money was too large for small daily transactions.

If colonial regulation was not sufficient to displace commodity currencies, what did? There have been a variety of explanations for the gradual abandonment of commodity currencies. One was inflation linked to the expansion of trade with Europe. The trade boom of the late 19th and early 20th centuries dramatically increased the volume commodity currency imports. Because commodity currencies could not be converted into international currencies, this expansion in volume resulted in inflation in priced denominated in these currencies. Cowries provide a particularly good example. As European demand for African produce grew in the 19th century, traders began importing larger quantities of cowrie shells, supplementing the original cowries from the Maldives with a larger and more abundant species found in Zanzibar (Cypraea Annulus). The 'cowrie inflation' of the 19th century increased the costs of their use as a medium of exchange. This included the costs of physically moving a sufficient number of cowries to make larger purchases and of counting and storing them. This was accompanied by a general inflation in prices which meant that smaller denominations of colonial currency could be used for daily transactions. Another explanation relates to the expansion of the colonial state through the 20th century. A growing number of African employees - members of the colonial armed services or employed in building roads and railways - received their wages in British currency, which expanded its circulation. Finally, with the expansion of colonial infrastructure came a growing commercialization with more and more Africans engaging with the international market, for which colonial currency was necessary.

4. Who issues money?

Commodity currencies fluctuated in value because their supply could not be controlled - it was governed by the market, rather than by an institution. By contrast, representative and fiat currencies are issued by an institution - usually, today, a central bank - which controls the supply of money according to specific rules and policies. As the example of the Zimbabwean hyperinflation suggests, this does not necessarily guarantee stability in prices. This section will review the different types of institutions which have issued currency in sub-Saharan Africa. Each type of institution have different consequences for the stability of the value of the currency.

The supply of colonial currencies was regulated by institutions known as currency boards. The distinguishing feature of a currency board is its limited discretionary power over the supply of money. Under a currency board regime, a local currency (such as the West African pound or Congolese franc) is issued at a fixed exchange rate with an anchor currency (such as the British pound or Belgian franc). Banks can acquire local currency only by depositing an equivalent amount of the anchor currency with the currency board. The currency board holds this deposit as a reserve, which guarantees that people who hold local currency can always redeem it at its fixed value for the same amount in the anchor currency. This guarantee helps maintain its value and avoids depreciation against other currencies. Prioritizing stable exchange rates fit with the desire of colonial governments to use the money they collected locally in taxes to buy manufactured goods in Europe. However, there are several downsides to such an arrangement. One is that colonial governments cannot use the money supply or the exchange rate to stimulate economic expansion or respond to crises. A second potential problem is that the reserves held by currency boards cannot be used for local investment.

It was these two aspects of colonial monetary systems, along with the role of colonial currencies as a symbol of political domination, which prompted many (but not all) African governments to establish central banks after the transfer of power in the 1950s and 1960s. The naira was introduced in 1972 by the independent Nigerian government, replacing the country's first national currency, the Nigerian pound. Its introduction represented the gradual de-linking of the Nigerian monetary system from that of its former colonizer, Britain. The Nigerian pound had replaced the colonial currency, the West African pound, which had circulated in Nigeria, Ghana, Sierra Leone and the Gambia since 1913. Similar processes were taking place in other parts of Africa. In the East, the East African shilling which had circulated in British-ruled Kenya, Uganda, Tanzania and Zanzibar was replaced by the Kenyan, Ugandan and Tanzanian shillings. In the former Belgian Congo, the colonial franc was replaced by the zaire in 1967.

Compared with currency boards, central banks have much greater discretionary power, which means they can be more active in trying to influence economic activity through monetary policy. They can take steps to increase the money supply during economic downturns, and alter fixed exchange rate to change the price of domestic exports relative to imports. They can also lend money to government. In addition, central banks play an important role in the financial system, acting as a lender of last resort for commercial banks if they find themselves in financial difficulty. With discretionary power comes risk, however. If these powers are used badly - often, owing to political interference in central bank operations - it can lead to inflation (as in the case of Zimbabwe above). Further, if the central bank sets the exchange rate above or below the market rate, economic distortions can result. In the 1970s and 1980s, for example, the official exchange rate of the naira overvalued the currency compared to the market rate. This benefitted politically powerful urban consumers by making imports cheaper, but hurt rural agricultural producers by making their exports more expensive.

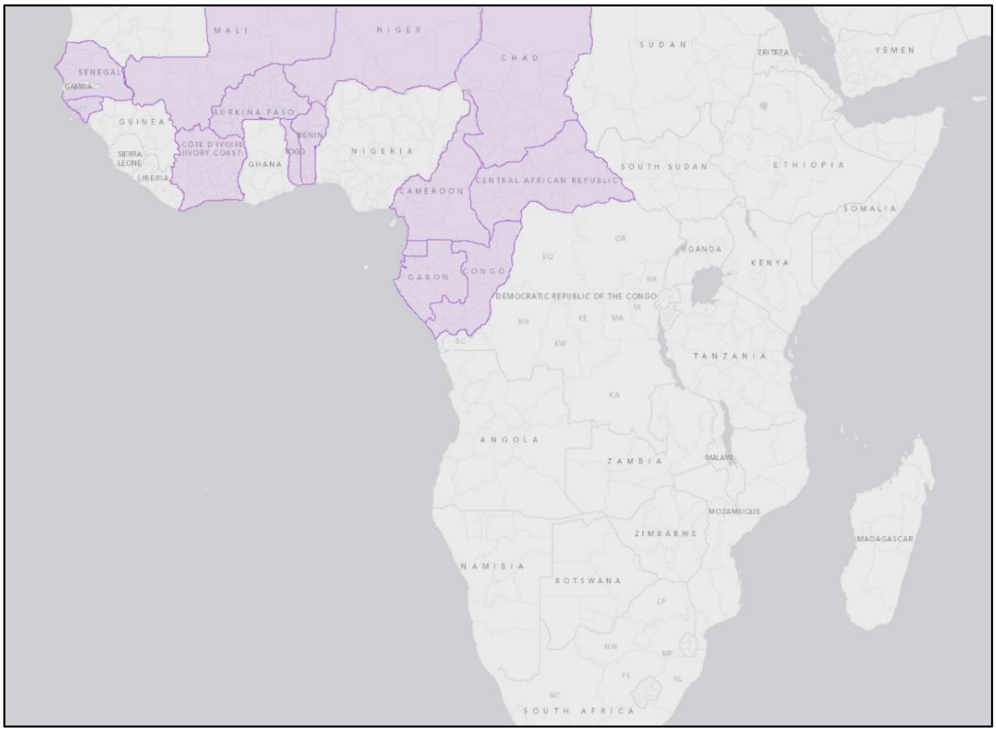
This risk meant that African central banks were relatively slow to make use of their new powers after independence. Many scholars have argued that the initial decision to establish central banks was largely motivated by politics. Central banks, it was believed at the time, were a symbol of national sovereignty and necessary to demonstrate the independence of new states from their former colonizers. Such considerations informed the design of new coins and notes. Newly independent governments often looked to the histories of commodity currencies in designing their own coins and notes in the 20th century. Ghanaian cedi coins, for example, have a cowrie shell on one side. In terms of policy, however, the management of new currencies closely resembled the system in place during the colonial period. New currencies like the Nigerian pound remained pegged to the British pound until the 1970s, and while reserve requirements were decreased slightly and some central bank lending to the government was permitted, most African central banks remained fairly conservative until the 1970s.

Other African countries, most notably the Francophone colonies, chose to retain colonial monetary arrangements. The CFA franc, mentioned in the introduction, was first issued in 1945 by French colonial authorities. The acronym CFA originally stood for Colonies Françaises d'Afrique. The introduction of a new currency for French colonial territories allowed was motivated by the devaluation of the French franc after World War II. The metropole had experienced a higher level of war-time inflation, and the new CFA franc allowed the exchange rate between the two francs to be altered so that 1 CFA franc was worth 1.7 metropolitan francs. Apart from this difference, however, the issue of the colonial CFA franc was similar in many ways to British colonial currency boards at the time. When the French colonies became independent in the 1960s, the leaders of the new states agreed to maintain the monetary union. Regional central banks were established in West and Central Africa, but they retained a close link with the Banque de France in Paris in order to maintain the convertibility of the CFA franc and the French franc (subsequently the Euro).

5. How far should money travel? Monetary unions since 1945

Today, the CFA franc zone, mapped in Figure 1, is known as one of the longest surviving monetary unions of the 20th century. A number of studies have contrasted the economic performance of franc zone countries since independence with that of other former colonies which established their own national currencies. This debate continues to inform current policy, as in the decades since independence numerous new monetary unions have been proposed since that time. One example is the East African Monetary Union (EAMU), which under the terms of a protocol signed by the leaders of Kenya, Uganda, Tanzania, Rwanda and Burundi in late 2013 would be established in 2024. This section will examine the costs and benefits of monetary union in an African context.

Figure 1: The CFA franc zone



Colonial monetary unions were not restricted to Francophone colonies The East African shilling, for example, circulated in Kenya, Uganda, Tanganyika (later Tanzania) and, later, Zanzibar. The West African pound was issued in the colonial Gold Coast (later Ghana), Nigeria, Sierra Leone and the Gambia. The same was true of the Francophone colonies, in which currency zones were established in West and Central Africa. Another currency area - the Rand zone - included the colonies surrounding South Africa. With the exception of the Rand Zone and the Francophone currency areas, the transfer of power meant the collapse of colonial monetary unions.

Events in Africa reflected developments throughout the world in the post-war period, with newly independent nations in Asia and the Caribbean also creating their own national currencies. The growing number of national currencies prompted monetary economists at the time to develop a theory about the economic effects of this new monetary geography. The most important was the theory of optimum currency areas, first conceptualized by Robert Mundell in 1961. Mundell began by asking how we determine the economically optimal area over which a single currency should circulate, and argued that such an area may or may not coincide with national boundaries. He used the example of North America to argue that, from an economic perspective, it might be better to have Eastern and Western currency areas which cut across the boundary between the United States and Canada, reflecting the economic dynamics of the two regions. However, he acknowledged that such a development was unlikely given the political significance of national currencies.

The question of whether national boundaries formed 'optimum currency areas' was particularly relevant for Africa. What became Africa's national boundaries had largely been set during the colonial period, with little regard for existing trade routes or ethnic communities. Mundell argued that if production and trade in one part of a country differed from another part, any efforts made by a national central bank to stimulate the economy may harm one part while helping the other. If labour and capital can move between these regions, this may not be a problem, but in practice people are not always able or willing to move between regions depending on economic trends. This may suggest that optimum currency areas should be small. On the other hand, having a single currency over a larger area eliminates the costs of exchanging currency and the potential risk of exchange rate changes. It can therefore increase trade under certain circumstances. This was why, for example, colonial governments sought to introduce single currencies through their territories. It was also why members of the European Union, for example, adopted the Euro in 2002. An additional potential benefit to monetary union is that, as in the example of the CFA franc zone above, a regional central bank is often less vulnerable to political influence than a national one, which may mean less risks of inflation.

Determining whether countries can profitably form a currency union is complicated, and the answer often depends on existing economic relationships. In the case of the Eurozone, member countries already traded frequently with one another. These trades could benefit from the reduction in transaction costs and expanded after the adoption of the Euro. In contrast, African countries trade very little with one another, at least according to official statistics. This is in part the legacy of colonial infrastructure investments, which focused on linking production centres in the interior with coastal ports. It is also the result of the great specialization in the global economy which began in the 19th century. The key exports of most African economies are primary commodities, while imports are dominated by manufactured goods. Production of manufactured goods in African countries is limited, owing to low average incomes and thin markets. As a result, there may be limited prospects for intra-African trade even with the adoption of a common currency.

Political relationships also play a role. Member states of a monetary union must cede control over their monetary policy to the regional central bank. Monetary unions can therefore struggle if their constituent states have different economic needs, as has been the case in the Eurozone since the beginning of the 2008 financial crisis. Similar political differences undermined efforts after independence to establish an East African Central Bank to replace the East African Currency Board. This was part of a broader effort to create an East African Federation, building on a long history of shared administration and public services in the three territories. Tanzania and Uganda, which were poorer than Kenya at the end of the colonial period, wanted to allow the central bank to lend extensively to their respective governments to fund development efforts. Kenya, on the other hand, insisted on a more conservative policy in order to maintain stability in prices. Exacerbating these differences were the divergent economic policies adopted by socialist Tanzania and capitalist Kenya after independence. In the end, all three countries established their own central banks in 1965. Whether similar political differences can be overcome in current efforts to create an East African Monetary Union in 2022 remains to be seen.

The risk of political interference harming the stability of currencies and the development of financial systems was not merely theoretical. The consequence of such interventions can be understood by following the histories of the Kenyan, Tanzanian and Ugandan shillings after 1965. The three currencies were initially issued at parity, with the intention of maintaining this parity in order to facilitate trade between the three countries. Inflation rates rose in Tanzania and Uganda rose much faster than in Kenya, as did budget deficits. By the time the protocol for the new EAMU was signed in 2013, someone traveling across the border between Kenya and Uganda who exchanged 100 Kenyan shillings would receive nearly 3,000 Ugandan shillings in return.

6. Political intervention and parallel markets

The divergence in the value of the Kenyan, Ugandan and Tanzanian shillings did not happen right away. Rather, it was a reflection of the downturn in African economic performance which began in the 1970s. Before that point, most African countries had enjoyed a post-war boom in economic growth. This growth, along with new flows of foreign capital, helped fund ambitious government projects intended to promote economic development. Spending on education and healthcare - areas long neglected by departing colonial governments - increased rapidly, as did investment in new infrastructure projects. Standards of living increased and ever more people moved into cities. The expansion of state intervention in the economy served a further purpose in helping to maintain political support for governments which often had limited legitimacy amongst their citizens.

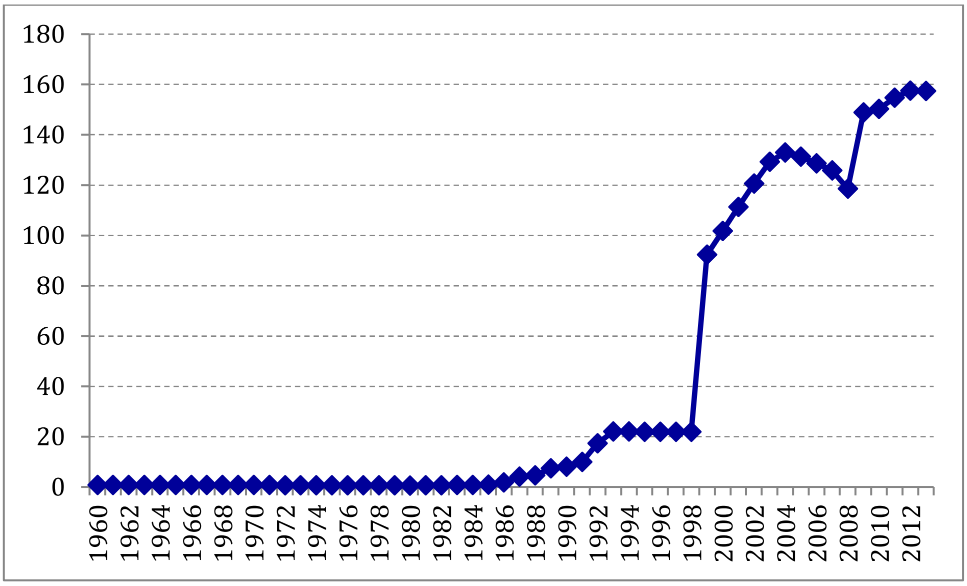
The global economic downturn of the 1970s cut both government revenue and aid flows, making continued spending at that level unsustainable. This represented both an economic and political threat to African governments. Falling demand for exports threatened to undermined gains in living standards achieved since independence. At the same time, diminished state resources made it more difficult to use government budgets to reward supporters, thus making political survival more difficult.

One tool that governments with central banks did have left was monetary policy. This could be used in several ways to help sustain government spending and political stability. One was in fixing the exchange rate. The exchange rate, as discussed above, can influence the prices of both imports and exports. A currency that is overvalued relative to others will make imports cheaper for consumers, but exports more expensive. A currency that is undervalued will have the opposite effect. In the 1980s, many African governments were accused of overvaluing their currencies - that is, setting an official exchange rate in which local currency was more valuable relative to others than the 'unofficial' or market exchange rate. It was argued that this served the interests of urban consumers, who were more politically influential, by lowering the cost of imported goods. At the same time, exports of African produce became more expensive, limiting demand and harming both the interests of rural producers and undermining economic growth as a whole.

Beyond serving the interests of urban consumers, overvalued fixed exchange rates also provided an opportunity to supplement government revenue earnings. Governments are the primary recipients of foreign exchange in Africa, and many African governments earned a premium by receiving foreign exchange in the form of mineral royalties or foreign aid at the official rate and selling it at the market rate. Another method of using monetary policy to supplement government treasuries is by borrowing from the central bank. One of the key reasons for the creation of central banks was to allow more flexibility in such borrowing than what had been allowed under the rigid colonial regime. However, if used too much this option has the effect of raising the price level through inflation.

To illustrate these issues we can return to the example of Nigeria given in the introduction. Figure 2 shows the Nigerian exchange rate to the US-Dollar since 1960. In the first years after independence, most African currencies retained a fixed exchange rate with the currency of their former colonizers. In Nigeria, for example, the Nigerian pound was issued at fixed rates with the British pound, much as it had been under the colonial currency board system. After the Bank of England devalued the pound against the dollar, Nigeria, like most African governments thereafter abandoned their fixed peg and in 1972 introduced the *naira*. It was in this context that the hypothetical trader discussed in the introduction resorted to the 'parallel market' for foreign exchange, in which the naira had a much lower value than at the official rate. The Nigerian government also made use of this market, earning a bonus on foreign exchange received from oil royalties at the official rate and then sold at the parallel market rate.

Figure 2: Nigerian exchange rate (Nigerian pound/naira per US $1), 1960-2013



Source: World Development Indicators (World Bank 2017).

Pressure came in the 1980s and 1990s for African governments to reduce the gap between official and market exchange rates by devaluing their currencies. This was one of the key requirements of structural adjustment programmes proposed by international organizations as a condition of development lending. Debates on the impacts of these devaluations on African living standards continue. Some argue that the devaluations stimulated demand for African produce by making exports cheaper, while others claim that such gains were outweighed by the cost of living for the urban poor. Complicating this debate is the fact that reform were often implemented only partially by governments - in Nigeria, for example, reform of the foreign exchange market led to slow convergence in the official and parallel market rates.

Since the adoption of structural adjustment programmes, most African countries have adopted floating exchange rates. This has resulted in some cases - like Uganda - with greater stability relative to the 1980s. In other cases, like Zimbabwe, inflation has run out of control. These outcomes depended on a complex interaction between political and economic factors individual to each country.

7. The future of African monetary systems

New innovations in African financial systems since the adoption of floating exchange rates have prompted speculation about a new 'currency revolution'. One of the most important of such innovations is mobile money. The use of mobile phones for financial services has widened the use of formal banking and other financial institutions in several African countries, streamlining transactions and allowing savings to be put to use more effectively. This is linked to a second innovation, that of micro-credit, which has pioneered the granting of small loans to individuals, helping to overcome the limited access to funds which has hindered economic development in the past.

The challenges of financial development, as this chapter has illustrated, have influenced African monetary history since the pre-colonial period. Commodity currencies like cowrie shells and cloth provided the foundation of a monetary system that was well adapted to pre-colonial economies. These currencies continued to be used following the introduction of representative and fiat moneys under the colonial powers in the 20th century. However, they imposed significant costs in their use as both a medium of exchange and store of value - in the case of cowries, for example, they were expensive to move in large quantities and, as trade expanded, inflation eroded their value for savers.

These problems were not entirely eradicated by the introduction of currencies managed by, first, colonial currency boards and, second, post-independence central banks. Under colonial regimes, commodity currencies or small-denomination coins were still used for most transactions and suffered from the same transport costs. After independence, extensive political intervention in monetary policy was often linked to high levels of inflation. Meanwhile, limitations in the provision of financial services meant most transactions remained in cash.

African monetary history is a reflection of its broader economic and political history. The slave trades of the early modern period, the cash crop revolutions of the 19th century, the rise and fall of colonial rule and the difficult decades after the 1970s have all left their mark on the monetary systems of African countries. Like other areas of state intervention, monetary policy is often informed as much by political imperatives as economic ones and can be shaped by both short- and long-term priorities. The development of monetary systems can also be overtaken by external events, including both global economic crises and technological innovation.

Study questions

1. What have been the advantages and disadvantages of the different types of money used in Africa since the 19th century?
2. In what ways do political institutions influence the effectiveness of money in fulfilling its roles as a medium of exchange, unit of account and store of value?
3. What would be the costs and benefits of having a pan-African currency union?
4. What are the advantages and disadvantages of a fixed exchange rate between two currencies?
5. What might motivate consumers to choose one currency (e.g. naira or CFA franc) or form of currency (e.g. coin or bank balance) over another?

Suggested readings

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About the author

Leigh Gardner is Professor at the Economic History Department of the London School of Economics and Political Science. Her work focuses on the economic and financial history of sub-Saharan Africa during the 19th and 20th centuries, with an emphasis on Africa's global connections. My first book, Taxing Colonial Africa: The Political Economy of British Imperialism (Oxford University Press, 2012) uses taxation and public spending as a lens to view changing economic and political links between colonial administrations, the people they governed, and metropolitan institutions. She is a research associate at Stellenbosch University.

Chapter 11

Growing Cities: Urbanization in Africa

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1. Introduction

Urbanization, greater economic growth and rising living standards historically have gone hand in hand and are central facts of our modern world because urban areas account for a large percentage of GDP in most countries. No country in the world has ever reached middle income status without a considerable population shifting into cities. Over the past 200 years while the world population expanded considerably people everywhere in the world have shifted from almost exclusively living in rural areas to living in cities. At the same time there has been a transformation in the structure of the global economy from the majority of people working in the agricultural sector to mainly working in urban manufacturing and service based sectors. In most countries urbanization is a natural consequence and stimulus of economic development based on industrialization.

Although African societies have been predominantly rural for most of their history, urban settlements have existed for centuries and have been an important feature of Africa's history. The earliest known cities of Africa emerged around the Nile Valley - the most famous being Alexandria in Egypt. Also the kingdoms of highland Ethiopia organised themselves around towns two thousand years ago. Later, in the 11th century the kingdom of Great Zimbabwe in southern Africa constructed a complex stone-walled city. In West Africa, the trans-Saharan trading town of Timbuktu (Mali) emerged as an intellectual and spiritual capital and as centre for the spread of Islam throughout Africa in the 15th century. Meanwhile, on the East African coast the Arab trading hubs of Mombasa and Zanzibar grew in size. Towns and cities functioned as centres around which societies were organized – as focal points of trade, political authority, military garrison, religious and cultural ceremonies, or served as refuge and collective shelter in troubled times.

However, it was not until the second half of the 20th century that rural-to-urban migration and population growth accelerated urbanization to unprecedented levels in Africa. Whereas, until 1960 there were two cities with more than one million inhabitants in Africa, by 2010 there were 56 cities on the continent with more than one million inhabitants. Today, Africa has the fastest growing urban population in the world and both urbanization and urban growth is taking place in every African society. The growth of African cities is one of the most significant transformations taking place in contemporary Africa revealing the changing modern face of Africa starkly (see photo below). This phenomenon has resulted in a profound reorientation of peoples social and economic lives, bearing both major challenges and opportunities for actors engaged in all aspects of urban life.

The urban face of Africa – Lagos (Nigeria) is Africa's largest city.

The main purpose of this chapter is to present the urban dynamic for Africa in a global perspective and to explain the causes and consequences of urbanization and urban growth for African countries. The following section sets-off by introducing some of the key-concepts and explaining the processes behind urbanization. Section 3 reviews the historical origins of urban settlements in Africa and compares Africa's urban development in a long-term perspective with other regions in the world. This is followed by a discussion of the economic aspects associated with urbanization. Section 5 explores what drives urbanization in Africa, while Section 6 examines some of the opportunities and consequences of growing cities in Africa. Finally, we conclude by summarizing the lessons from this chapter.

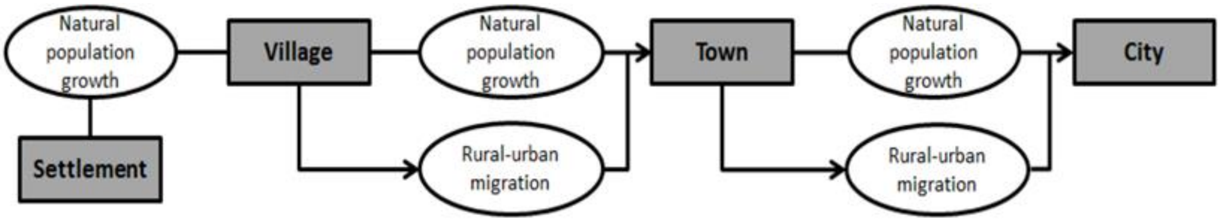
2. Key concepts of urbanization

We know what we mean when we say "I live in a city" or "I am moving to a city" because we have certain images of cities in mind: its bright nightlights, the busy shopping centres, the tall buildings or traffic jams. But how do we define places as urban and how do we distinguish a city from a "town" or a "village"? To begin with, the definition for what constitutes an "urban area" varies considerably in different parts of the world. The major institution that documents both population and urban growth is the United Nations. In preparing estimates of the urban population, the United Nations relies on data produced by national statistical offices in all countries in the world. However, each country uses different criteria in order to distinguish urban from rural areas, and thus a standardized definition does not exist. The majority of countries define urban areas applying certain requirements regarding the density of settlement, population size or the share of a population employed in agriculture. Also, for African countries the definition of urban areas varies. For example statistical offices in Botswana and Zambia define an urban area as settlements of 5,000 or more inhabitants of which the majority is not employed in the agricultural sector, while in Ethiopia and Liberia urban areas are classified as places of more than 2,000 inhabitants. However, there is agreement that urban areas are characterized by higher population densities than rural areas, which means that many people are concentrated in a small space rather than being spread out over a large territory.

Let us continue by clarifying and distinguishing the concepts of urbanization and urban growth as both terms will be used repeatedly henceforth. The term urbanization refers to the process whereby an increasing percentage of a country's population comes to live in urban areas (i.e. towns or cities). Urbanization occurs when the urban population grows at a faster rate than the rural population. In other words, if the rural population and the urban population grow at the same pace, the rate of urbanization will not change. The principal source of this process of urbanization is people migrating out of rural areas to come to live and work in urban areas.

The term urban growth is used to refer to the percentage change in the total number of people living in urban areas from year to year. In Africa urban growth is caused by three factors: natural population increase among city residents; migration to cities from rural areas; and statistical reclassification of previously rural areas as urban, as they became built up. In theory it is possible for a country to experience urban growth without urbanization. This is the case, if the number of people living in urban areas is increasing, but at either the same or slower rate than the rural population. However, this is rare and over the past decades the majority of world regions have seen urban growth and urbanization simultaneously.

Figure 1: The urban growth process



Source: Derived from United Nations (2012).

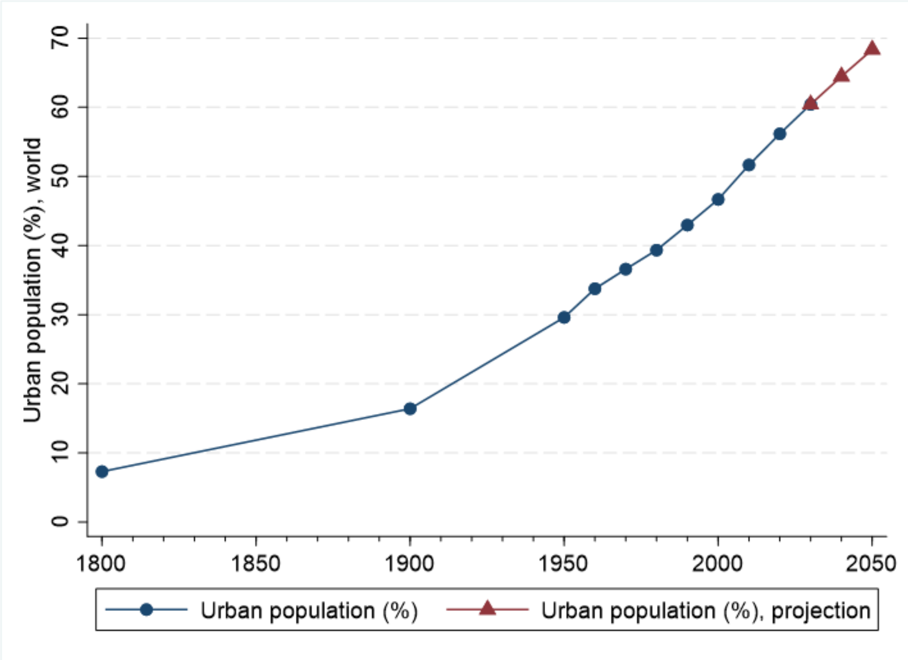
The urban growth process (from human settlement to cities) is simplified and summarized in Figure 1. The urban growth process entails the process from human settlements becoming villages, villages growing into towns, and towns being transformed into cities. First, when the urban population is relatively small (e.g. village) – rural-to-urban migration is the principal contributor to urban growth. However, as the urban population becomes larger, urban natural population increase tends to play the greater role for urban growth (unlike urbanization). An increase of the natural urban population occurs when the number of births exceeds the number of deaths within an urban population. In the past, urban areas often tended to have higher death rates than rural areas. About 400 years ago, in Europe it was not uncommon that the death rate was even higher than the birth rate, causing the urban natural population to decrease. The reason was that infectious diseases were the main causes of death and that these diseases tended to spread more rapidly in towns where people lived in close proximity and social interaction. Until today rudimentary water and sanitation infrastructure can turn urban areas into breeding grounds for bacteria. For example, the outbreak of cholera (caused by water contamination) has been most common in slum areas of cities. In addition, the standing water of open sewage systems offers a breeding ground for anopheles mosquitoes, the carriers of malaria. Moreover, many people living close together may result into urban congestion, referring to the many cars and motorbikes on the roads that cause considerable air-pollution and bring cities to a standstill in particular during morning and evening rush hours. Moreover, industries' and cars' high concentration of suspended smoke and dust from fuel combustion adversely affects the quality of air that people breathe and therefore can affect human health.

On the other extreme, living close together bears important advantages for industries. When factories and people are located near each other in cities, they can benefit in various ways. Factories tend to locate in urban areas in order to benefit from *economies of scale* and the existence of a sizable and growing market to sell their produce and take advantage of the transport infrastructure for distributing their produce nationally and exporting it to other countries. The term *economies of scale*, describes the benefits that factories obtain when locating their economic activities close to each other. As a result of related factories grouping in urban areas, their production costs may decline significantly, because if there is a network of many factories in the same area, this attracts other businesses to establish and supply the latter with production materials and customers than a single firm could alone. As a result of more factories in related industries locating close to each other (or 'agglomerating'), makes production cheaper for factories which can be a major contributing factor for the growth of cities and wage employment.

3. African urbanization in a global and historical perspective

Historically, widespread urbanization is a recent phenomenon of economic development in our world. Today, different countries stand at different stages of urbanization and economic development. However, the world's urban population remained small and unchanged for thousands of years, before experiencing a rapid and sustained expansion beginning in the late 19th century. Figure 2 portrays that in 1800 about 8 percent of humanity in the world lived in urban areas. Back then London was the only city in the world with a population exceeding one million. Only from 1800 onwards people moved from rural areas into cities in much greater numbers than before. The fundamental event was the Industrial Revolution taking place in 18^{th} and 19^{th} century Western Europe. The rapid expansion of industries required more and more people to work in urban factories, which attracted people looking for employment and a better life. At the same time major changes in agricultural technologies increased agricultural productivity which allowed feeding an ever growing urban population, outside the agricultural sector.

Figure 2: Global urban population estimates, 1800-2050



Source: United Nations (2018). Hannah Ritchie and Max Roser (2018), Our World in Data.

Figure 2 shows that the pace of urban population growth accelerated in the 20th century. In 1900, 16 percent of the global population lived in cities. By 1950, these urban population rates doubled. However, the largest and fastest growth in the world's populations has taken place after 1950. From both Table 1 and Figure 2 we can see that between 1950 and 2020 the level of urbanization in the world rose from 30 to 56 percent – meaning that for the first time in history more people live in urban than in rural areas. The speed of contemporary urban growth rates experienced by developing countries over the last 70 years is exceptional by historical standards. Table 1 (left columns) shows that the three regions with the highest percentage of people living in cities in 2020 could be found in North and Latin America, followed by Europe. Table 1 (right columns) also presents the average urban growth rates for the last 70 years. We can clearly see that all regions in the world experienced its greatest urban population growth between 1950 and 1980 and slowed down notably thereafter. Looking ahead, Figure 2 also presents future projections by the United Nations which tells us that the global urban trend will continue so that by 2050 two-thirds of humanity will live in urban areas.

Table 1: Urban population share and urban growth by world region, 1950-2010

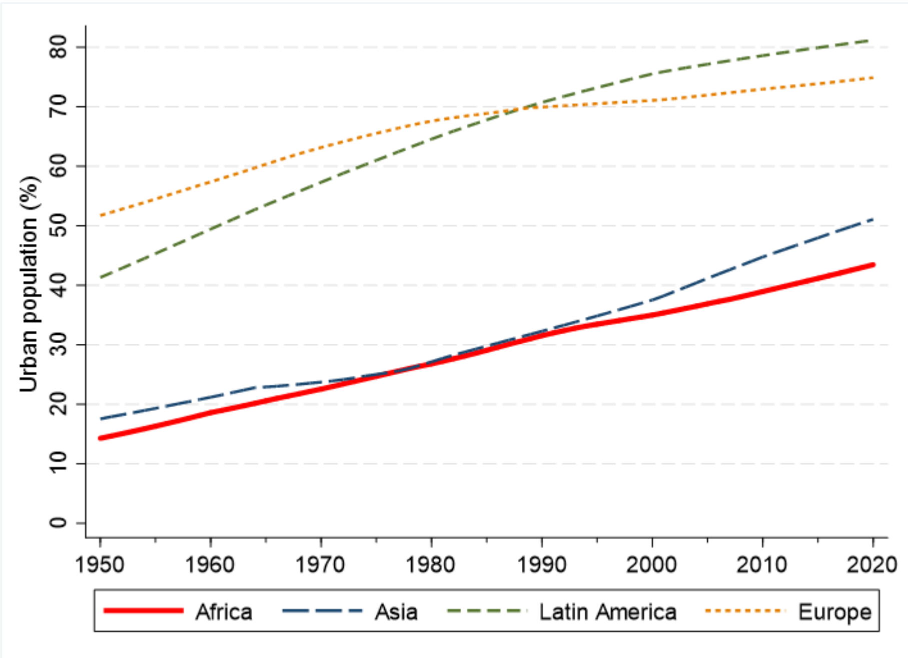
	Share urban (%)			Urban growth rate (%)		
	1950	1980	2020	1950-80	1980-2000	2000-20
Africa	14.3	26.8	43.5	4.6	4.0	3.6
Latin America	41.3	64.6	81.2	4.1	2.6	1.5
Asia	17.5	27.1	51.1	3.6	3.3	2.6
Europe	51.7	67.6	74.9	1.7	0.5	0.4
North America	63.9	73.9	82.6	1.8	1.4	1.0
World	**29.6**	**39.3**	**56.2**	**2.8**	**2.5**	**2.1**

Source: United Nations (2018).

Both Table 1 and Figure 3, put Africa's urbanization experience into a long-term comparative perspective. We can see that Africa over the past 70 years has been the least urbanized region in the world, but at the same time it had the highest urban growth rates, ranging between 3.6 and 4.6 percent (Table 1). In 1950, only 14 percent of Africans were living in cities while 41 percent of the people in Latin America and 52 percent of Europeans lived in urban centres. By 2020, 43 percent of Africans lived in urban areas, whereas in North and Latin America as well as in Europe this proportion was almost twice as high.

In 2020, Africa's total population exceeded 1.3 billion of which approximately 588 million lived in urban settlements. According to future projections this urban population number will triple in the next three decades reaching 1.5 billion in 2050 by which time almost 60 percent of Africans will be living in urban centres. Meanwhile, already densely urbanized regions, such as Latin America, North America and Europe will grow much slower and therefore their urbanization trends become flatter over time (Figure 3). Also, from Table 1 we can observe that the growth rates of urbanization tend to decline as the overall urbanization in each region rises, as there is an upper limit to how urban any population can become. Considering that Africa and Asia show the highest urban growth rates in the world since the mid-20th century (Table 1), mirrored by dynamic urbanization trends shown in Figure 3, it strongly suggests that urbanization for Africa and Asia will continue vigorously in the next decades – catching up considerably with Europe and the Americas.

Figure 3: Share of urban population in world regions, 1950-2020

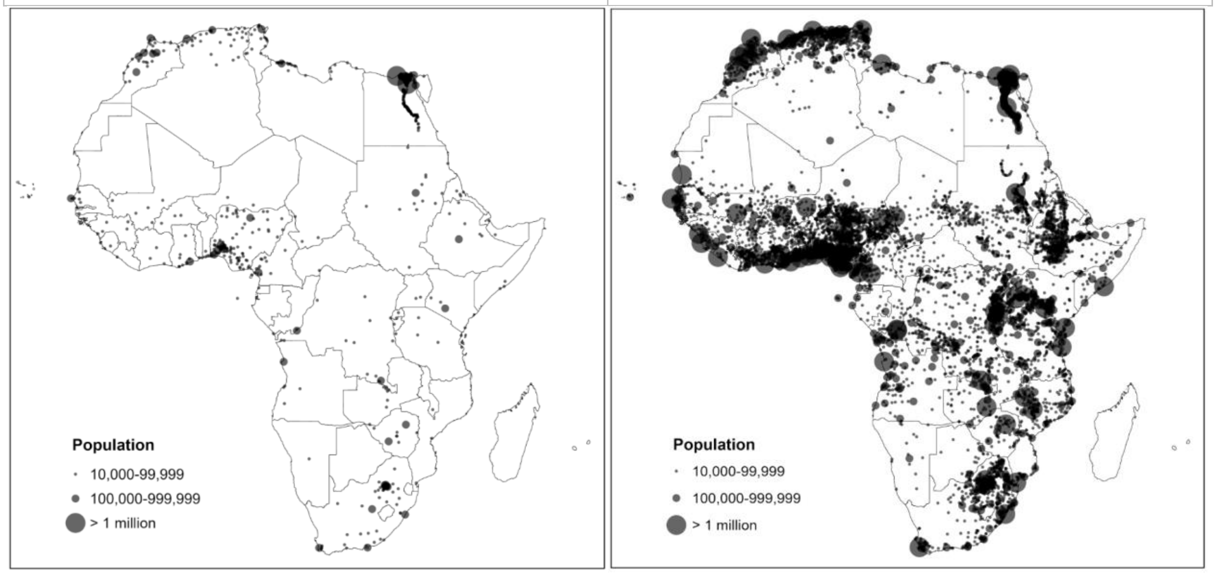


Source: United Nations (2018).

Map 1 plots African cities by size in 1950 (right) and 2015 (left) respectively. Comparing the two maps visualizes Africa's rapid pace of urbanization even better. As you can tell from the two maps, both the number of towns larger than 10,000 and cities larger than 100,000 (small and medium grey circles) and the number of cities with more than one million inhabitants (large grey circles) have increased significantly over the last 65 years. Until 1950 there were no cities with more than one million inhabitants in Africa except Alexandria and Cairo in Egypt, as well as Johannesburg in South Africa. By 2015, there were 57 cities on the continent with more than one million inhabitants. The top 5 African 'mega-cities' in terms of population (per area of agglomeration) in 2015 were: Cairo (Egypt, 16.2 million), Lagos (Nigeria, 10.8 million), Johannesburg (South Africa, 7.2 million), Kinshasa (Democratic Rep. Congo, 5.8 million), and Luanda (Angola, 5.1 million). Figure 3 and Map 1 taught us that rapid urbanization is a relatively recent phenomenon for Africa. Next we seek to explain why and how urban areas have developed in Africa over the last century.

Map 1: African cities by size, 1950 and 2015

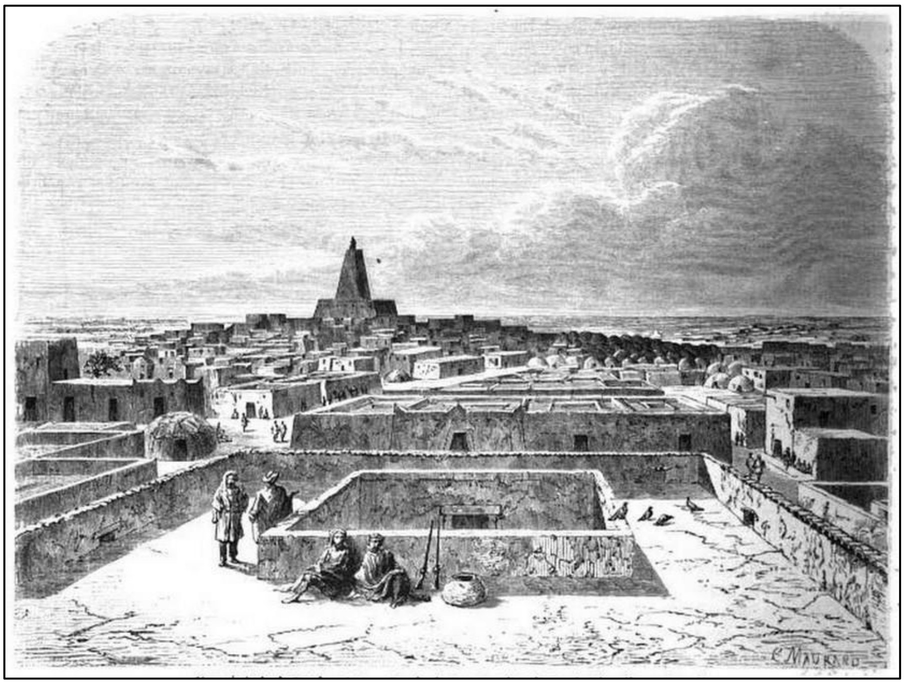
1950	2015



Source: Meier zu Selhausen (2022).

First, geographical location matters for human settlement. Usually in the past as in the present, there have been good reasons why towns developed where they currently are. For some of the larger areas of settlement in Africa the location of natural resources (e.g. water, energy sources, copper, gold and diamonds) was important in determining where people settled and migrated to in the first place at the beginning of the colonial era in the late 19th century. For example, completely new industrial-urban economies emerged as a direct consequence of the discovery of minerals in Southern and Central Africa. Rapidly urban areas started to grow around industrial plants and housed the mining companies' administration and workers. The first mineral discoveries in the late 19th century regions that attracted migrant labourers were for example Johannesburg, Witwatersrand (gold) and Kimberly (diamonds) in South Africa, Kitwe and Ndola in Northern Rhodesia (now Zambia), and Lubumbashi (copper and cobalt) in the southern Congo (now DRC). Those areas grew rapidly into industrial mining, smelting and refining towns creating vast employment opportunities in the factories as well as offering a market for agricultural produce for surrounding farmers. South Africa became the largest producer of gold in the world and the majority came from the mining town of Johannesburg which already by then had a population of 250,000, making it the largest urban centre south of the Sahara. Mining created an urban-industrial civilization with high speed contrary to the more gradual development of towns in non-mining areas. The construction of the railway by colonial administrations for the extraction of natural resources and cash crops (e.g. cocoa, cotton, coffee, tobacco, sugar, and palm oil) to the coast also played an important role in determining the location of harbour towns for exports. For example, Nairobi was an uninhabited swamp and only started to attract settlement in 1899 when it became the colonial railway depot and headquarters during the British construction of the railway line that connected Mombasa on the Indian Ocean coast with Uganda. Another driver behind initial urbanization in white settler colonies, such as Kenya, Southern Rhodesia (now Zimbabwe), and South Africa concerned the expropriation of fertile land from Africans which was parcelled out to white settlers. The clearance of African inhabitants from their land by the colonial government marginalized Africans economically. They were forced into reserves or drifted into cities in search of work contributing to the rapid growth of Nairobi in Kenya and Salisbury (now Harare) in Southern Rhodesia for example.

Contrary to those recently built towns stand ancient towns in Africa. Location mattered for their existence as much as for natural resources described above. However, those towns originated mainly because of their geo-political location to control and manage ocean, river and land trade rather than the mining of minerals. In East Africa, the trading centres of Mombasa and Malindi on Kenya's coast exported spices, gold and ivory to Arabia and Asia whereas Zanzibar (now Tanzania) became the largest slave market in East Africa. Even older are the towns of Cairo and Alexandria in Egypt along the river Nile and its fertile plains. Moreover, cities in the West African Niger Valley, such as Timbuktu and Djenné (Mali) emerged as thriving centres of the trans-Saharan trade and Islamic scholarship many centuries ago. For this reason, Timbuktu is recognized by the United Nations as world heritage site. The drawing below displays an old view of Timbuktu around 1500.

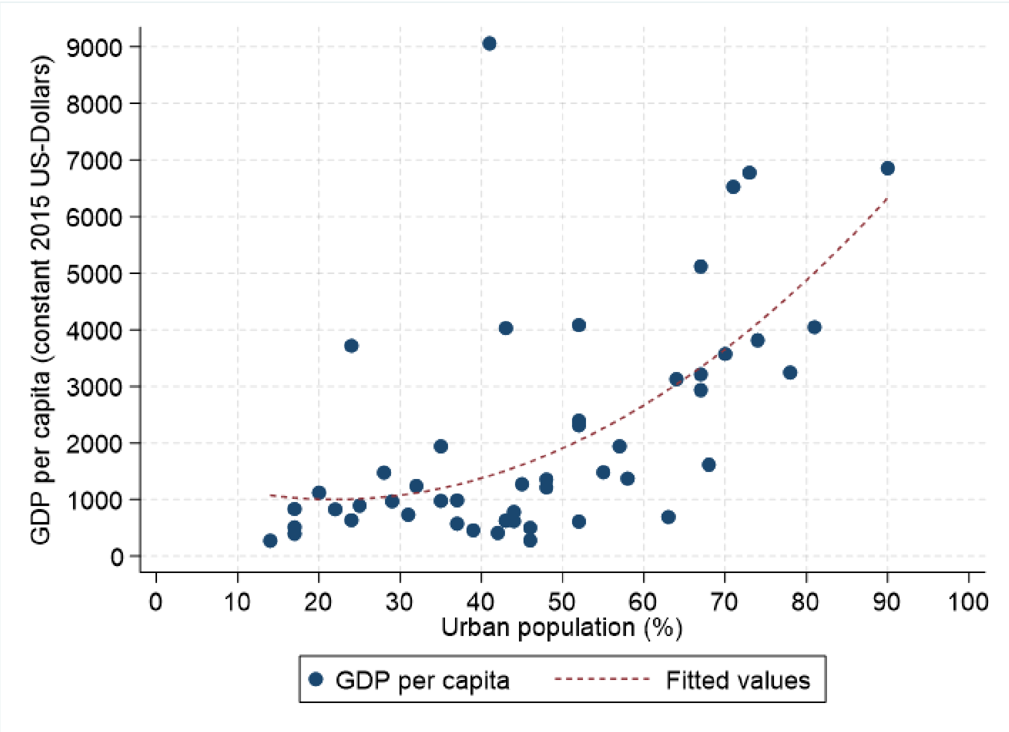


Ancient trading town - Timbuktu (Mali), UNESCO-World Heritage site since 1988

4. The economic perspective of urbanization

Historically, there has been a close relationship between urbanization and economic development. However, this account is mainly drawn from the experience of Europe and North America during the 19th and 20th century that experienced economic growth, development and urbanization at about the same time. In recent decades, similar processes of economic development and urbanization can be observed in many Latin American and Asian countries. One of the underlying reasons for this relationship is that when the economy of a 10 country grows, usually more jobs are created which are concentrated in urban areas. When cities can offer better employment opportunities in combination with higher wages than found in rural areas, people tend to move out of the rural based agricultural sector to try their "luck" in the urban-based industry and service sectors. In an economy, the long-term shift of people working in the rural agricultural sector to working in urban manufacturing and service based sectors is referred to as *structural change*.

Figure 4: GDP per capita and urbanization rates in 46 African countries, 2020

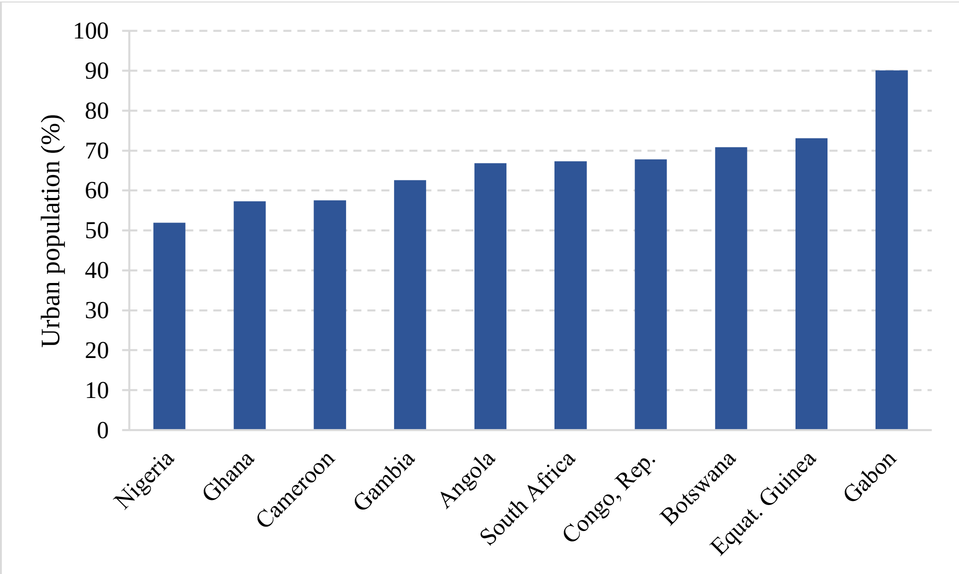


Source: World Bank (2021), World Development Indicators (WDI).

Next, we want to compare in how far this historical and global relationship can also be applied to African countries. Our departure point is Figure 4, which indicates on its y-axis GDP per capita, expressed in US dollars of the year 2015 and on the x-axis the urban urbanization rate. Each dot represents one African country in the year 2020. Three things stand out. First, the trend line through the dots gives the impression that African countries with higher levels of economic development (measured as GDP per capita), are also more urbanized and vice versa. Second, the positive relationship between urbanization and GDP per capita however only seems to materialize once countries have reached the 50 percent urbanization rate. Before that there is no relationship whatsoever. In other words, urbanization has not been accelerated by economic development and vice versa in those African countries where less than 50 percent of the population lives in urban centres. Third, almost all African economies before the 50 percent urban threshold are relatively poor, have GDP per capita levels below $1,500 (with the exceptions of four countries), but many have at the same time comparatively high urbanization rates between 30 and 50 percent. This gives the impression that urbanization in many African countries preceded greater economic development and rising living standards.

Figure 4 illustrated the positive relationship between African economic development and urbanization and vice versa *after* an urbanization rate of 50 percent. Next, we want to find out whether this link also remains true on a country level.

Figure 5: Urbanization rates in a selection of highly urbanized African countries, 2020

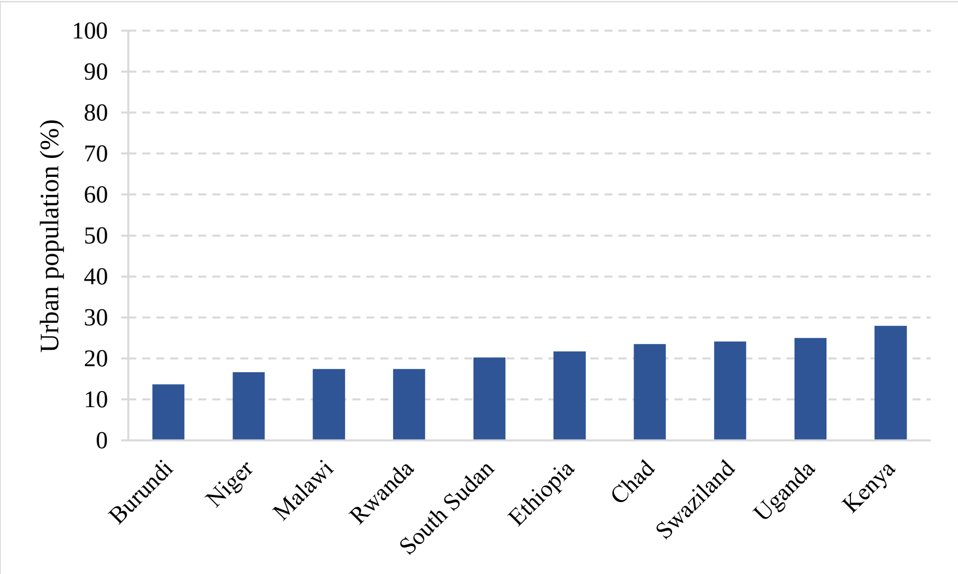


Source: World Bank (2021).

To do this we compare the ten most urbanized and least urbanized countries in sub-Saharan Africa shown in Figures 5 and 6. Differently put, we compare those countries before and after the 50 percent urbanization threshold from Figure 4. The average GDP per capita in 2020 for the ten most urbanized sub-Saharan African countries is $4,500 whereas for the ten least urbanized countries it comes to $1,100. In other words, the most urbanized African countries have GDP per capita levels four times the least urbanized nations in Africa – supporting the overall trend we observed in Figure 4. One of the explanations is that six of the top-ten urbanized countries have vast oil reserves (Angola, Cameroon, Congo Rep., Gabon, Ghana, and Nigeria) which contribute to higher GDP levels and resources to invest into the development of cities and associated industries. Moreover, all countries (with the exception of Botswana) have access to the sea and therefore direct access to world markets via ocean trade (export and import) which generally favours economic development through cheaper transport costs. At the same, time all top-10 countries (except Botswana) are located in western Africa, which has historically been more densely populated and commercialized. All of the least urbanized

African countries (with the exception of Eritrea) are landlocked. Access to the sea is very important to foreign companies when determining whether to open a factory (typically in urban areas) in Africa because it reduces transport costs for export significantly. As factories typically locate close to each other to benefit from economies of scale the geographical advantage seems to have added to economic development and urbanization. In sum, we can find a positive relationship between the level of urbanization and the level of economic development and vice versa for African countries if we compare the least and most urbanized African countries. However, an overall statistical relationship between urbanization and economic development seems to be restricted to African countries that have reached the 50 percent threshold of urbanization.

Figure 6: Urbanization rates in a selection of less urbanized countries in Africa, 2020



Source: World Bank (2022).

5. What makes African cities grow?

Urbanization (unlike urban growth) is the result of rural Africans coming to live in urban areas in search of employment and a different lifestyle than known from the countryside. However, the rapid pace of urban growth in Africa is caused primarily by the natural increase of the urban population and secondary by rural-to-urban migration. Africa's urban population started to grow rapidly since World War II when European colonial governments, especially Britain and France, started to prepare colonies for independence which brought about an expansion of the general public health and sanitation, especially in urban settings, built clinics and hospitals and made basic medicines widely available.

Over the last decades improved health care services, mass-immunization programs, access to cheap medicines, and diffusion of basic knowledge about personal hygiene and sexually transmitted diseases led to sharp reduction in mortality. In particular child mortality began to fall due to better treatments for polio, measles, diarrhoea and malnutrition. Those interventions reduced infectious and parasitic diseases that used to thrive in densely populated urban settlements in the past and determined to a large amount urban population growth. A reduced disease burden in towns then resulted into lower urban (infant) mortality rates, allowing for an increase in the natural urban population. In addition, improved access to surplus food and energy supplies, partly through productivity and infrastructure improvements as well as imports and international aid over the last 60 years led to significant improvements in life expectancy in urban and rural areas across Africa. In combination with persistently high fertility rates of 5 children born on average per woman, this led to a population boom of 13 historically unprecedented size which also drives rapid population growth in urban areas which is independent of rural-urban migration. In other words, the rapid growth of Africa's urban population (unlike urbanization) is driven primarily by rapid population growth in urban areas, while rural-to-urban migration is the prime driver of urbanization.

Subsequently, we want to understand why people from the rural countryside decide to move to urban areas? People choose to move to the city for various individual reasons. Those motives can be summarized as so-called push and pull factors. A push factor is something that can force or encourage people to move away from rural areas to urban sectors. Such a decision can be influenced by environmental factors such as land scarcity, famine, drought, and flooding in rural areas. Other push factors may include war and conflict, lack of employment opportunities in rural areas, poor education and medical services, extreme rural poverty, or the desire to escape from unhappy family circumstances and gender discrimination (e.g. early marriage).

On the other hand, pull factors encourage people to move to urban areas. Those include the chance to get employed in the urban industrial and service sectors that provide higher urban wages while urban centres provide better access to medical and education services. Certainly, one important incentive that "pulls" people into cities is the prospect of finding a job. In most regions in Africa we can observe a strong link between urbanization and the settling of industries and service providers. The industrial and service sectors of the economy are usually located in urban areas. As economic growth sets off in the urban sector, factories tend to be located in urban areas in order to reap the benefits of economies of scale explained in Section 2 and the existence of a sizable and growing market for manufactured goods. It is important to note that these increasing returns to scale for firms are a major contributing factor to the growth of cities, as they contribute significantly to employment opportunities (or probabilities). When a city's economy is prospering it attracts people, not only because cities offer better employment opportunities but also higher wages than rural agriculture. In addition, industries that provide services to consumers, such as for example lodging, catering, and, printing also tend to be attracted to urban areas by the growing numbers of people to reside. Moreover, firms also value the proximity to administrative institutions which regulate commercial activities and a larger concentration of consumers - "the market".

However, although the economic attraction of cities for rural people are certainly important for rural-to-urban migration, it is worth noting that social and cultural attractions also play an important role for why people migrate, as city residents have access to a completely different lifestyle almost unknown in rural settings. In particular for young adults cities are the more dynamic and interesting places as it gives access to exciting social and cultural events. The much higher density of people living together also provides increased social interaction and a larger marriage market for men and women. Furthermore, many rural-to-urban migrants are only temporary urban citizens in order to spread risk in household income earning strategies, where some family members remain at the farm and others try their 'luck' in the cities. Villagers who migrate from towns moreover hope to obtain better income, to save money to pay a bride price upon return to the village, to find jobs which they consider more suitable for 14 literate persons than farming or to escape tribal discipline. Also the costs of migration play an important factor when people take the decision to move from rural areas into urban areas. Those include for example: transport costs, higher living costs than in rural areas, and psychological or social adjustment to a new environment.

6. Challenges of urbanization in Africa

Cities' promises however are not always fulfilled. Cities may be known for greater employment opportunities, higher wages and higher living standards on average, but not everyone who migrates to an urban centre, or is born there, benefits from it. Intense demographic pressure in urban areas has been a source of reasonable concern for African governments and the international aid community. Urbanization and urban growth without accompanying economic growth and structural change in many African countries has resulted in a situation whereby cities grew in tandem with slums and informal economic activity. Slums (also referred to as townships or squatter settlements) are perhaps the best indicator that urban growth with limited economic growth has not improved the living standards of all city inhabitants. The United Nations have introduced a definition of slums:

"A slum household is defined as a group of individuals living under the same roof lacking one or more of the following conditions: access to improved water; access to improved sanitation facilities; sufficient living area (not more than three people sharing one room); structural quality and durability of dwellings; and security of tenure." (UN-HABITAT, 2008).

The two largest slums in Africa, Kibera in Nairobi (Kenya) and Khayelitsha in Cape Town (South Africa) symbolically stand for the discussed unequal economic and urban growth where its residents live in shacks build from discarded wood, cardboard or iron sheets without running water and electricity. Often they appear to be heavily polluted by human waste, garbage, and dust. The open sewage systems exacerbate the threat of illnesses and diseases for residents of slums, and are particularly harmful to children and pregnant women. Also, unplanned and rapid urban expansion threatens ecologically sensitive areas, such as ocean coasts, rivers and wetlands. The photo above portrays the living conditions in Freetown's Kroo Bay slum (Sierra Leone). Regular flooding threatens both health and housing of its residents.

The shady side of urbanization – Freetown's Kroo Bay slum (Sierra Leone)

Table 2 shows that about six in ten African urban residents are slum dwellers, which is significantly higher compared to the urban situation in other developing regions such as Latin America and Southern Asia. It also presents the ten African countries with the highest percentage of urban population living in slums where at least seven of every ten urban residents are slum dwellers. This strongly suggests that urbanization has taken place in the absence of improved economic opportunities for many urban residents but is taking place because people are physically moving out of the countryside. However, instead of finding employment in the industrial sector it has taken them into employment in the urban informal sector or conditions of unemployment. The parallel increase of slum residents has some serious repercussions for the security of those areas, as criminal rates, drug abuse, prostitution and HIV infection rates appear to be more prevalent in urban areas, and are particularly high in slums, where people live even closer to each other. For example, HIV/AIDS has slowed the pace of urbanization in the countries of eastern and southern Africa, as more people died in urban areas due to AIDS relative to rural areas.

Table 2: Percentage share of slum dwellers among urban population in Africa and developing regions, 2014

	% slum
South Sudan	95.6
Sudan	91.6
Chad	88.2
Guinea-Bissau	82.3
Mauritania	79.9
Madagascar	77.2
Congo, D.R.	74.8
Ethiopia	73.9
Somalia	73.6
Niger	70.1
Malawi	66.7
Sub-Saharan Africa	**55.3**
South Asia	**30.5**
Latin America	**20.4**

Source: UN-Habitat (2016).

7. Conclusion

There is a worldwide trend towards urbanization. For the first time, in 2010, Africa's total population exceeded one billion, of which a population of 395 million Africans lives in urban areas. This urban population is projected to grow to one billion in 2040, and to 1.23 billion in 2050, by which time more than half of all Africans will be living in cities, and consequently cease being predominantly rural. In other words, the ongoing rapid urban transition across Africa is one of the most significant and dynamic transformations taking place in contemporary Africa. Despite the fact that Africa currently has the lowest urbanization rate in the world it has the fastest rate of urban growth of all continents in the world.

Rural-to-urban migration has been the prime driver of urbanization across Africa for which Africans from rural areas respond to individual pull and push factors. Natural urban population increase is the main contributor to urban growth, caused by gains in life expectancy (or urban mortality decline) due to improved disease control and increased access to surplus food supplies which combined with a minimal fertility decline provided the necessary conditions for an unprecedented urban growth to occur in African countries.

Those welfare achievements occurred more rapidly than economic growth and development in many African countries. As a result, many countries in the region experienced urbanization without equal economic development. Moreover, an overall relationship between urbanization and economic development is restricted to African countries where the majority of the population already resides in cities. The unequal combination of rapid urbanization without sufficient economic growth also resulted into low living standards in African cities with the majority of urban residents living in slums. If African cities want to be able to improve the livelihoods and well-being of millions of future Africans coming to live and being born in cities they need to plan for investing into urban infrastructure and housing facilities, since the future of African societies and culture will be played out mostly in cities – not in the countryside anymore.

Study questions

1. Make a list of five things you associate with a city - things that cannot be found in rural areas. Then, explain why you want to remain to live in your city. Or, alternately, describe why you would want to leave your city.
2. Explain the difference between the concepts of urbanization and urban growth? What are the two prime drivers of those processes?
3. In urban areas people live closer together than in rural areas. Name some advantages and disadvantages of living close together in urban areas.
4. What are the challenges caused by urbanization without sufficient economic growth in Africa?
5. Explain the difference between pull and push factors responsible for rural-to-urban migration. Give some examples why people are either 'pulled' into cities or 'pushed' out of rural areas.

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About the author

Felix Meier zu Selhausen is an Assistant Professor at the Department of Economic and Social History of Utrecht University. His research lies at the intersection of economic history, development economics and demography. In particular, his research focuses on the relationship between religion and socioeconomic development in Africa and gender relations in urban and rural contexts. He co-edits the AEHN textbook.

Chapter 12

National Movements in Colonial Africa

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1. Introduction

The history of Africa in the first half of the 20th century is in a large sense a history of colonialism. At the beginning of the 20th century, almost the whole of Africa, with the exception of Ethiopia and Liberia, were under European colonial rule. However, the history of Africa during this period is also a history of intense struggles against colonialism, of decolonisation, and of the national movements that spurred on the process. These movements appeared across cities in Africa in the period between the two World Wars, which took place largely within Europe in 1914-18 and 1939-45 respectively, and accelerated in the post-World War II period (after 1945). Growing out of the most important urban centres in the colonies, these movements soon spread to other towns and into the hinterlands, where they succeeded in bringing different Africans together to join the movement for decolonisation.

However, nationalism in Africa did not begin in the 20th century. Many African colonies had nationalist organisations as far back as the early 19th century. These were not movements in the strict sense of the word, because they were limited to a few elites whose relatively high level of education and distinguished lifestyle set them apart from the rest of the people, even though they claimed to represent them. Although these earlier organisations were not mass movements, they nevertheless sowed the seeds from which the movements of the 20th century would grow. The 20th century national movements, by contrast, made deliberate attempts to connect with the non-literate urban poor, and to actively involve them in anticolonial protests and resistance. In the years leading up to independence, ideological differences arose within these movements which led to splits. These splits subsequently affected the character of the post-colonial African state, and in some countries, continue to exert influence on contemporary politics.

This chapter addresses the historical development of national movements during the colonial period in Africa. It sets off by introducing the concepts of nationalism and social movements. It proceeds to an analysis of the factors that led to the growth and spread of national movements across Africa towards the second half of the 20th century. The following section focuses on national movement activism across colonial Africa, and their role in the struggle for decolonisation. Finally, the chapter concludes by taking a look at nationalism after the end of colonial rule in Africa.

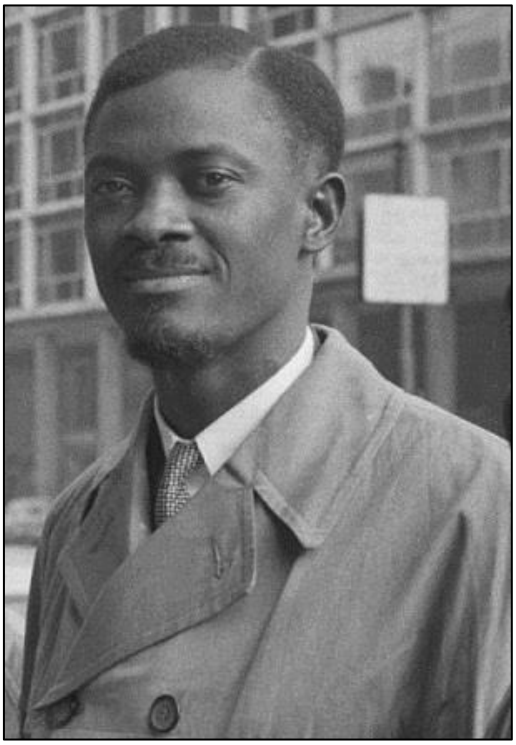
2. Conceptualisation

The term nationalism is derived from the concept of *nation.* A nation is a collection of people who share, or are perceived to share, some common characteristics. These characteristics include, among others, language, ethnicity, religion, and customs. On the basis of these shared values, people are seen as belonging to a 'community.' Scholars of nations and nationalism have come to think of nations as 'imagined communities.' Nations are said to be imagined communities because the sense of belonging exists only in the imagination of 'community members,' since it is impossible for a member of a nation to personally interact with every other member.

Nationalism can be defined as philosophies or beliefs that are intended to promote the interest of the nation. Nationalism has many forms and expressions; such as being a sentiment or a political organisation. As a sentiment, it involves a feeling of strong allegiance to one's national group, and a desire to further the progress and wellbeing of its members. Sometimes, but not always, it involves the sense that one's nation is better socially, morally, economically, or otherwise than other nations, and/or a desire to make one's nation better than others. This manifestation of nationalism is closely related to nationalism as a political or material manifestation.

Nationalism is expressed politically when members feel that the nation is threatened. This often happens during times of economic or political crises. In Africa during the 19th and 20th century, national movements emerged in response to European colonial rule. Hearing the term "colonial rule", everywhere in the world results in the perception of the colonised having their rights and dignity violated by the so called colonisers, and this was no different in the case of Africa. Resentment against foreign rule fed into the growth of nationalist sentiments. In many instances, these sentiments were generated or intensified by charismatic young leaders like Patrice Lumumba (Congo, today's DRC and shown in the photo below), Jomo Kenyatta (Kenya), and Julius Nyerere (Tanganyika, today's Tanzania). These sentiments were channelled into nationalist movements that sought to initially challenge some unfair or oppressive colonial policies, and eventually became the main vehicles for demanding political independence across colonial Africa.

A social movement is a relatively permanent collection of people with some organisational capacity that focuses on specific social or political issues. Social movements are committed to waging a sustained campaign to bring about a desired social aim. Social movements often emerge and thrive when they have a charismatic leader, but they also need bureaucratic organisation to take care of the day to day administration of the movement. Often, the most successful social movements are able to mobilise mass following through creative communication strategies. Movements can either be *reformist*, in which case they seek to change specific aspects of the society, or they can be *revolutionary*, in which case they attempt to totally replace the existing social structure with a radically different one. African national movements in the 19th and early 20th centuries were mainly reformists, but towards the second half of the 20th century, they became increasingly revolutionary, and started campaigning for a total dismantling of the colonial state.



Patrice Lumumba, first post-independence president of the Congo in 1960.

3. Key factors that promoted African nationalism

In Africa, nationalism emerged in the first half of the 20th century as a movement to oppose and/or resist colonialism. After colonialism, it became a central focus for calls for the unification of Africa. The movements attempted to transform conceptions of African identity, from an initial focus on isolated ethnicities to a racial identification, or an identity based on the territorial state carved out by colonial rulers. Edward Wilmot Blyden (1832-1912), a Liberian educator, writer, and politician, was widely regarded as founder of African nationalism. His writings became widely influential across West Africa. He led the call for a revival of African cultures and traditions in response to colonial and missionary denigration of African cultures as backward, barbaric, savage, or uncivilised. Later nationalist figures like James Africanus Horton (1835-83) from Sierra Leone who is depicted in the photo below and S.R.B. Attoh-Ahuma (1863-1921) from the Gold Coast (today's Ghana) followed in his footsteps. The rapid growth of national movements in Africa after the 1940s resulted from a variety of factors. Most of these factors were caused by, or resulted in, resentment against colonial rule. The discriminatory and oppressive colonial regimes across Africa led to a feeling of curtailed freedoms and loss of dignity, as well as economic hardships for the people.

Africanus Horton, a nationalist writer and British army physician from Sierra Leone

The following discussion outlines the most important ten factors that promoted the emergence and growth of national movements across Africa in the 20th century:

(i) Unfavourable economic policies and economic hardship

Colonial governments often imposed unpopular economic policies, such as forced labour, taxation, and compulsory cultivation of cash crops. These policies were unpopular not only because they were arbitrary impositions, but also because they resulted in a lot of hardships for the people. Settlement of Europeans in places like Kenya, Zimbabwe, Tanzania and South Africa, resulted in the displacement of Africans from the most fertile lands. This often increased poverty, malnutrition, hunger, and racial segregation. Because many people were displaced from their ancestral lands, they feared the destruction of their cultures, especially in places where rituals were tied to the land. Economic crises as a result of the First and Second World Wars intensified resentment against colonial authorities. The diversion of resources to prosecute the wars affected development and welfare policies in the European colonies in Africa. The war also negatively affected trade between Europe and its colonies, because African colonies (and their primary commodity producing African farmers) crucially depended on the export of primary commodities (e.g. palm oil/kernels, cotton, coffee), they were seriously affected by the decreased global demand for African primary resources which resulted in a sharp fall in prices for African export commodities. For example, in the Gold Coast the international market price of cocoa beans severely declined during the inter-war years (1918-39), leading to several strikes and hold-ups. Nationalists took advantage of these hardships resulting from African farmers' and traders' reduced incomes from primary exports in order to spread opposition to colonial rule and to press demands for independence. Strikes, boycotts, and other kinds of industrial disturbances were common during this period. There was also the formation of trade unions by mine and railroad workers, especially mine workers unions in South Africa in the 1920s and 1930s.

(ii) Pan Africanist movement

Pan Africanism became a powerful ideological force in the 20th century, and energised national movements across Africa. The movement originated among persons of African descent in the Americas, in Britain, and the Caribbean. One of the key leaders of the movement was Marcus Garvey, a West Indian who moved to the US during the First World War. He called for the return (or remigration) of Africans back to Africa, and founded the Universal Negro Improvement Association in 1914. Another celebrated Pan-Africanist figure was W. E. B. Dubois, the American scholar and activist, who eventually resettled in Ghana when Kwame Nkrumah was president. Pan-Africanists sought to create connections with Africans on the continent and in the diaspora. The fifth Pan-African Congress was held in Manchester in 1945, and was attended by leaders of national movements in different African colonies. Among the many resolutions of the congress was a strong push for the idea of African struggle for independence. Pan Africanism influenced African nationalist leaders like Kenneth Kaunda (Zambia), Haile Selassie (Ethiopia), Albert Lithuli (South Africa), Nnamdi Azikiwe (Nigeria). Some, like Azikiwe, disagreed with Pan-Africanism as a political project, and instead, advocated for informal cooperation rather than a united government on a continental scale. The example of never colonised Ethiopia and Liberia also provided examples of African self-determination. Leaders of African national movements could point to them as evidence that Africans were capable of self-rule and resistance to colonialism.

(iii) Improved transportation and communications networks

Improved transportation and communication networks in Africa brought erstwhile isolated communities into communications with each other. This enhanced the spread of information, including resentment against, and resistance to, colonial authorities. Related to this was the role of urbanisation in Africa. The growth of African towns and cities in the early 20th century brought Africans of different ethnicities together, which generated a sense of community beyond the limited purview of ethnic groups. Also, people were able to link what they previously perceived as individual level problems to policies of the colonial governments. Further, towns and cities acted as powerful centres of youth enthusiasm, arts, activism, and experimentation. The hardships of the early 20th century, partly the result of colonial policies, and partially the results of global factors, were most sharply felt in the urban centres. The experience of unemployment, poor sanitation, inadequate housing, and other hardships led to increasing demands on the colonial authorities. The rise of African political leaders led to these demands being framed in nationalist terms. It was perhaps no accident that the leaders of the national movements themselves emerged from the most important urban centres in the various colonies. The cities were centres of great promise as well as disappointment. In search of better lives young people migrated from rural areas into the cities. However, they often faced many barriers to the desired life after arriving there; some of which included limited options for occupational mobility as a result of racial discrimination, and living in substandard housing or slums as a result of residential segregation.

(iv) Education

Education was one of the most potent factors promoting nationalism and the growth of national movements. Like urbanisation, education brought together people from different ethnic groups in primary and secondary schools, thus generating a sense of shared fate, which promoted the ideal that the national unit was more important than fragmented ethnic entities. Also, the colonial educational system exposed young people to new ideas, resulting into the rise and spread of new ideas of national pride, self-determination, and economic empowerment. In this sense, nationalism was the (unintended) consequence of colonial education. However, there was a gap between these values that colonial education promoted, and the reality that young people experienced after their education. Upon graduation, they typically were faced with limited employment opportunities and discrimination in the work place, because most high level jobs in the government service were reserved for Europeans. This resulted in resentment against colonial authorities. Colonial educational systems bred the generation of nationalist leaders who led the struggle for independence, including Milton Obote (Uganda), Robert Mugabe (Zimbabwe), Nelson Mandela (South Africa), Patrice Lumumba (Congo), and Julius Nyerere (Tanzania).

(v) Religion

Religion played a crucial role in the African liberation movements. The missionary churches across Africa were crucial in this regard. The various narrations in scriptures of oppression, and of the oppressed as the chosen people of God, resonated with Africans under colonialism. Colonial rulers were likened to the accursed oppressors, like Egypt, Babylon, and Rome, in biblical accounts, and the colonised Africans looked for a ‘Messiah’ to free them from their oppressors. This worldview tended to give a moral character to the nationalist struggle, and made religion a powerful tool in the struggle. As the national movement intensified, Separatist Churches emerged. These were popularly referred to as ‘Ethiopian churches,’ to emphasise their independence from European missions. These churches highlighted their African backgrounds by incorporating African rituals, songs, and practices into their services. Breakaway African churches were active in the anti-colonial protest movements. African priests led some anti-colonial protests, including the Chimurenga uprising in 1896-7 in Zimbabwe (“Chimurenga” means uprising in the Shona language) and the Maji-Maji uprising in Tanzania (1905-7) which was led by Prophet Kinjikitile Ngwale, who rallied the people against oppressive labour and tax policies. Across Africa, these churches were formed and grew in memberships; e.g. Kimbaguist Christian Church which was formed by Simon Kimbangu in Congo in the 1920s. The Ethiopian emperor, Haile Selassie, even inspired the Rastafarian movement in Jamaica, whose followers considered him to be the incarnation of God. These influences later returned to shape African nationalism, especially through the Rastafarian movement which founded reggae music.

(vi) The role of women

Women constituted a potent force in the African national movements that fought for independence from colonial rule. For example, Yaa Asantewaa, an Asante queen-mother who is portrayed in the photo below, led the Asante in a battle against the British in 1900, in what has become popularly known as the Yaa Asantewaa War or the War of the Golden Stool (because the war was fought to resist demands of the British Governor, Sir Frederick Hodgson to be handed the Golden Stool on which the King of Asante sits). In 1929, a revolt in Nigeria by thousands of Igbo market women against colonial policies which had limited their roles in politics, led to what became popularly known as the Aba Women's War. The revolt was directed against the warrant chief system in Nigeria which had been instituted by the British colonial government in furtherance of the indirect rule system. In many other colonies, market women were important actors in the anti-colonial movement. They provided needed support for the national movements, especially financial support. In colonies like British Kenya and French Algeria, where the resistance took a violent form, women took active part in the armed struggle. In South Africa, about 20,000 women from different parts of the country famously marched to the apartheid capital of Pretoria on 9th August 1956. And many other examples could be given. Unfortunately, the role of women in African national movements has not gotten enough attention in most historical accounts.

Yaa Asantewaa in battle gear from the Asante kingdom in Ghana.

The next set of four factors to be discussed below can be considered as consequences of the initial growth of the spirit of nationalism. But even though they are the consequences of growing nationalism, they had a feedback effect on national movements.

(vii) Newspapers and pamphlets

Newspapers were a powerful source of nationalist sentiments. Most of these newspapers crafted a public image as outspoken critics of colonial governments. The *Gold Coast Times*, for instance, had this motto on their banner: 'AS LONG AS WE REMAIN WE MUST SPEAK FREE,' shown in the newspaper clipping below. Furthermore, Table 1 provides a list of some of the African-led newspapers published across colonial Africa. African run newspapers were the mouthpieces of the nationalist movements and a crucial means of communication. They were used to disseminate notions of racial and national pride, as well as to voice opposition to unpopular colonial policies. In fact, newspapers were so successful in this that they became targets for suppression. Many colonial regimes introduced laws on sedition and criminal libel in an attempt to silence the press. Using this law, many newspaper editors, like Nnamdi Azikiwe and I.T.A. Wallace Johnson were arrested and convicted for writing what were considered to be seditious articles.


The Gold Coast Times

AS LONG AS WE REMAIN WE MUST SPEAK FREE.

VOL. 3. CAPE COAST, FRIDAY, MAY 30, 1884. NO. 142.

Banner of The Gold Coast Times in 1884.

Table 1: Selection of colonial era newspapers across African colonies

Colony/country	Newspaper title	City of publication
Gold Coast/Ghana	*Gold Coast Chronicle*	Accra
	Gold Coast Aborigines	Cape Coast
	Gold Coast times	Cape Coast
Nigeria	*Lagos Observer*	Lagos
	Times of Nigeria	Lagos
	Nigerian Chronicle	Lagos
Kenya	*East African Standard*	Mombasa
	East African Chronicle	Nairobi
	Times of East Africa	Nairobi
Uganda	*Uganda Herald*	Kampala
Tanganyika/Tanzania	*Dar es Salaam Times*	Dar es Salaam
South Africa	*Cape Town Gazette and African Advertiser*	Cape Town
	Izwi Labantu	East London
	Indaba	Cape Town
Rhodesia/Zimbabwe	*Buluwayo Chronicle*	Buluwayo
	Rhodesia Herald	Harare

(viii) Political parties

Political parties were the quintessential of national movements. They emerged in the period between the two World Wars to give a more organised character to national movements across Africa. Popular parties during this period include the Kenyan African Union, later to become Kenyan African National Union (KANU) in Kenya, National Council of Nigeria and the Cameroons in Nigeria, Tanganyika African National Union (TANU) in Tanzania, Zimbabwe African People's Union (ZAPU) in Zimbabwe, and the African National Congress (ANC) in South Africa. Many of these parties experienced internal conflicts which resulted in party fragmentation. In the Gold Coast, for instance, the Convention People's Party (CPP) broke away from the United Gold Coast Convention (UGCC), and in Zimbabwe, the Zimbabwe African National Union (ZANU) was formed out of ZAPU. These breakaway factions were more popular and more radical than their parent organisations, and many of them became the political parties that finally won independence. For instance, ZANU, under the leadership of Robert Mugabe, was able to win the 1980 Zimbabwean elections. In general, these political parties were led by charismatic nationalist figures like Kwame Nkrumah (Gold Coast), Jomo Kenyatta (Kenya), Nelson and Winnie Mandela (South Africa), Nnamdi Azikiwe and Obafemi Awolowo (Nigeria), Robert Mugabe (Zimbabwe), Patrice Lumumba (Congo), and Julius Nyerere (Tanganyika/Tanzania). They were all ardent proponents of national independence and promoters of the concept of African dignity and the African personality.

(ix) International factors

Africans were recruited (as soldiers, porters, and scouts) to fight for the imperial armies in the WWII against Nazism and Fascism. Returning veterans came home with the same zeal, and expected more freedom and dignity which they had helped the colonisers fight for. Also, the *Atlantic Charter* by Winston Churchill and Franklin Roosevelt declared that:

> 'They respect the right of all peoples to choose the form of Government under which they will live; and they wish to see sovereign rights and self-government restored to those who have been forcibly deprived of them.'

Other international/global factors, like the emergence of the US and Soviet Union as superpowers, and the decline of the powers and influence of European empires like Britain and France, also shaped the emergence and spread of national movements in Africa. The desire of the US to spread capitalism and of Russia to diffuse the principles of communism shifted the balance of power after the Second World War, especially after the weakening of the Western European empires following the War. The formation of the United Nations also popularised notions of national sovereignty and self-determination.

The successful opposition to colonial rule in Asia also provided encouragement to nationalist movements in Africa. India and Pakistan became independent in 1947. In particular, Mahatma Ghandi's programme of non-violent opposition to colonial oppression was emulated in places like the Gold Coast, where Kwame Nkrumah adapted it to his more radical programme of positive action campaigns, including strikes and boycotts. In other places like Kenya and South

Africa, however, where colonial oppression was more ruthless, non-violence was not a viable strategy of opposition. But even in Ghana, the strategy was not always peaceful. In 1948, a peaceful march by ex-servicemen to demand salaries for fighting in the WWII turned violent after the ex-servicemen were fired upon.

In the 1950s and 1960s, struggles by blacks in the US for constitutional rights intensified. African national movements and the Civil Rights Movement in the United States of America mutually affected each other. In 1957, Martin Luther King, Jr visited Ghana at the invitation of the Prime Minister Kwame Nkrumah to witness the official replacement of the Union Jack with the new Ghana flag. Another Civil Rights leader, Malcolm X, travelled widely in Africa, visiting Algeria, Egypt, Ethiopia, Ghana, Guinea, Liberia, Morocco, Nigeria, Senegal, Sudan, and Tanganyika. He met with all the prominent African leaders of the time, including Ahmed Ben Bella (Algeria), Gamal Abdel Nasser (Egypt), and Kwame Nkrumah (Ghana).

(x) Harold Macmillan's 'wind of change' speech

Weakened economically and militarily from their participation in the Second World War, European colonial powers became less able to repress the national movements that were growing across the African continent. They, therefore, became more open to the idea of granting independence. On 3rd February 1960, British Prime Minister Harold Macmillan made what came to be known as the 'Wind of Change' speech to the South African parliament in Cape Town. In his speech after he had visited a number of British colonies in Africa, Macmillan said:

> '...We have seen the awakening of national consciousness in peoples who have for centuries lived in dependence upon some other power. Fifteen years ago this movement spread through Asia…. Today the same thing is happening in Africa, and the most striking of all the impressions I have formed since I left London a month ago is of the strength of this African national consciousness. In different places it takes different forms, but it is happening everywhere. The wind of change is blowing through this continent, and whether we like it or not, this growth of national consciousness is a political fact. We must all accept it as a fact, and our national policies must take account of it…. This tide of national consciousness which is now rising in Africa, is a fact, for which both you and we, and the other nations of the western world are ultimately responsible….'

This speech, coming from a British prime minister from the Conservative Party, signalled to nationalists across the African continent that finally, the colonisers had come to accept the inevitability of decolonisation.

5. National movements and decolonisation in Africa

Having considered above the main factors that promoted the rise of African national movements, next we turn to a more detailed discussion of these movements, and how they led the struggle for independence. By 1950, most African colonies had some organised national movement of one form or another. Most of these were in the form of political parties that led the demand for independence. Before the rise of these political parties, however, there had been earlier movements which had made less radical demands on the colonial government. In the early decades of the 20th century, resistance and opposition to colonialism came in the form of protest against specific colonial policies. The demands during this period were mainly for increased rights and freedoms for African people. In the Gold Coast, the Aborigines' Rights Protection Society was formed to protest against a bill designed to vest all 'unused' or 'waste' lands in the hands of the colonial government. During this period, independence, at least in the short term, was out of the question. As Casely Hayford, a Gold Coast nationalist figure, stated in 1920 at the inauguration of the National Congress of British West Africa:

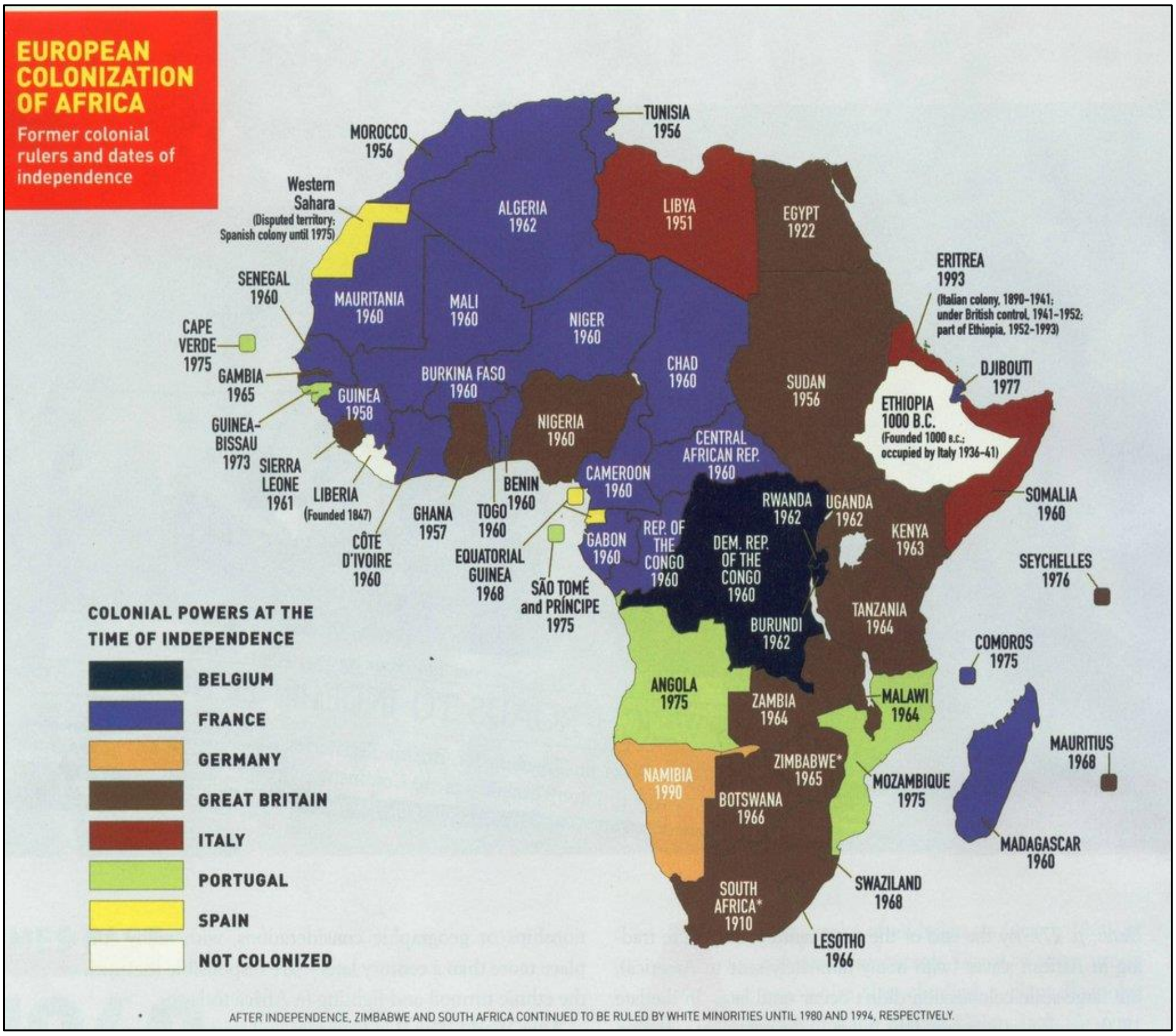
> 'The National Congress was not making any fatuous demand for the Gold Coast to be declared an independent nation or to be allowed to create its own federal government apart from or in substitution of the existing government of the English Sovereign. All that they ask was a right to take a share by representation in the government of their own country.... We do not mind being members of the British Empire, and we do not mind remaining members; indeed we are glad of our membership.... But give us the rights of free members and do not treat us as slaves in the household of the Empire.'

In contrast to the 'movements'/organisations of the early 20th century, the national movements which emerged in the 1940s and 1950s were more broad-based, and appealed to almost all segments of the population, not simply the educated elite. They were also more radical in their demands on the colonial administration. They intensified the calls for independence, and in some colonies, this led to armed confrontations between nationalist insurgent groups and colonial armies. In Kenya, the *Mau Mau* uprising, under the leadership of Dedan Kimathi, carried on guerrilla warfare against the colonial government for most of the 1950s. In Algeria, the National Liberation Front (NLF) led an armed resistance against the French colonial government, but it was violently crushed by the French Army led by General Jacques Massu.

In most colonies, however, national movements used a combination of armed resistance and constitutional protest to fight for independence. Armed struggle was often used only as a strategy of last resort, when other more peaceful means of protest had proven futile or were repressed. The first African countries to gain independence were Egypt (granted limited independence by the British) in 1922 and Libya in 1951. In sub-Saharan Africa, the Gold Coast (Ghana) was the first to gain independence in 1957. Fourteen African countries gained independence in the year 1960. By 1966, most African countries had attained independence from colonial rule. Figure 1 shows a map of Africa indicating the date at which countries attained independence. South Africa became a self-governing British dominion in 1910, and in

1961 became a sovereign republic. Southern Rhodesia unilaterally declared independence from Great Britain as Rhodesia in 1965. However, in both South Africa and Rhodesia, white minority settlers still controlled the government and Africans continued to live under subjection.

Figure 1: Map of African decolonisation



Source: http://thelandofmaps.tumblr.com/post/70536171081/africa-former-colonial-rulers-and-dates-of

As can be seen in Figure 1, after the 1960s, four African countries remained under European rule. Three of these were under Portuguese rule (Angola, Guinea Bissau and Cape Verde, and Mozambique) and one, Namibia, was a Protectorate of South Africa. The reason for this was that the Portuguese state, under the conservative, nationalistic, and authoritarian Estado Novo regime (1933-1974), resisted African demands for independence. White minority governments in settler colonies similarly responded to non-violent demands by the African nationalist leaders with suppression. Many of the leaders of these national movements were arrested and imprisoned for many years; Nelson Mandela, leader of the African National Congress (ANC), for instance, was jailed for 27 years. Robert Mugabe was arrested with other leaders of the Zimbabwean African National Union (ZANU) and Zimbabwean African Peoples Union

(ZAPU), and spent more than 10 years in prison. These suppressive tactics of colonial government force African nationalist leaders to resort to violence.

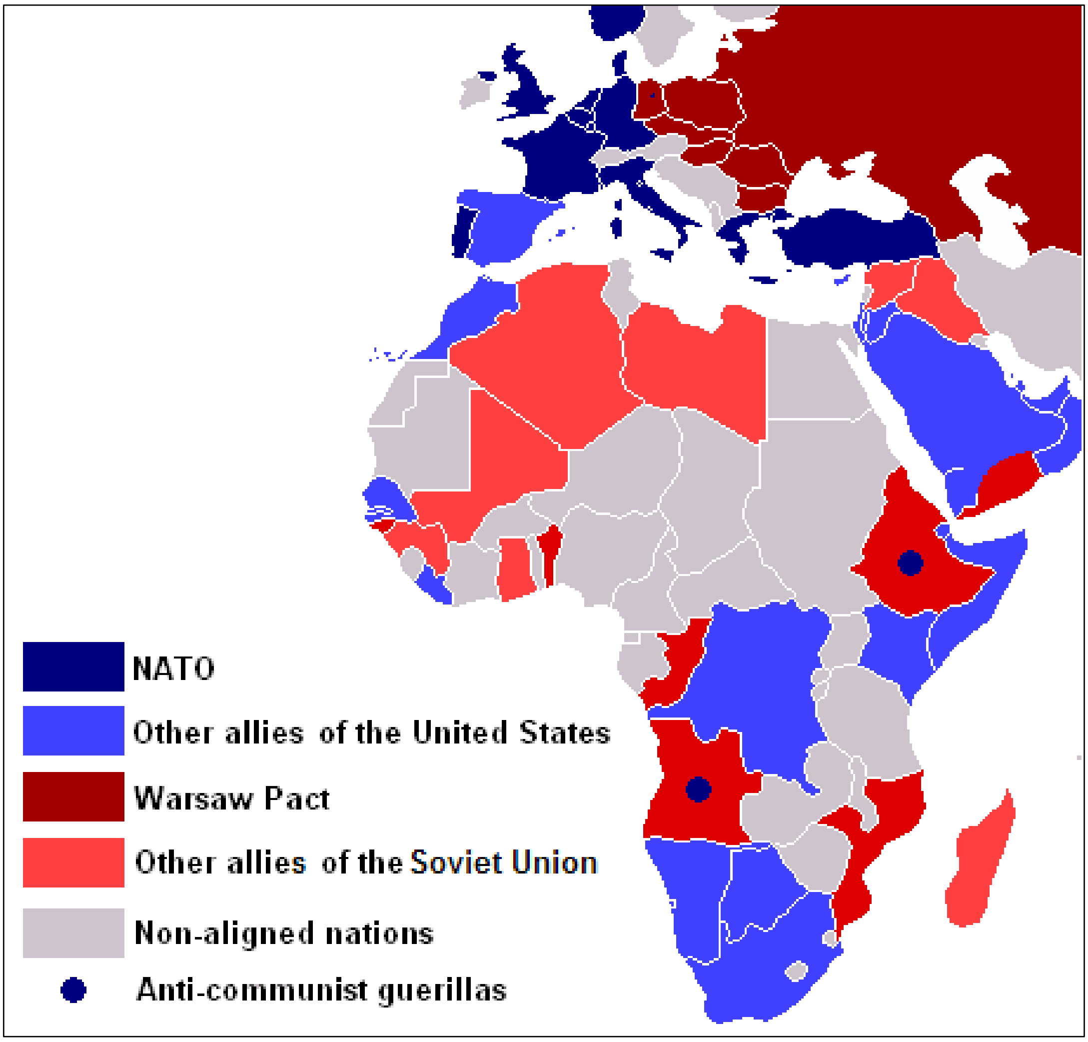
The resulting military contest was an unmatched one. The armies and militias of African national movements lacked well-trained soldiers as well as resources to acquire weapons. Newly independent African countries provided support to these insurgent nationalist armies in the form of logistics, training bases and providing them with weapons. In an attempt to win allies to their sides during the Cold War, the two world powers at the time, the Soviet Union, the United States, as well as countries like China, Cuba, and South Africa, provided military assistance to some of the national movements.

6. Post-colonial nationalism in Africa

Upon attaining independence, most of the national movements that fought against colonialism formed themselves into national governments. African leaders found themselves faced with the task of modernising their economies and inserting themselves into the world economy. Because the Soviet Union had been assisting many of the national movements in their struggle for independence, several newly independent African countries allied themselves to Soviet ideology in the Cold War politics of the 1960s and 1970s. The alignment of the various African countries during the Cold War is illustrated in the Cold War map of Africa in Figure 2. The Soviet allies adapted Marxist economic philosophy into what became known as African Socialism. However, because most African economies had not developed under the era of colonialism, many of these newly independent countries had to continue relying on their former colonisers for investment and technical assistance. Kwame Nkrumah, first president of Ghana, coined the term *neo-colonialism* to describe this situation where African countries had political independence but lacked economic independence.

The Organisation of African Unity (OAU: the OAU was disbanded in 2002 and replaced by the African Union) was formed in 1963 to, among other things, safeguard the independence of African countries. The organisation was founded with 37 member states, with Kwame Nkrumah as the first premier. Headquartered in the Ethiopian capital of Addis Ababa, it was committed to helping countries, like Mozambique, Angola, South Africa, and Zimbabwe that still were under colonial rule to shake off the shackles of colonialism. The OAU also sought to disseminate sentiments of racial pride by invoking histories of glorious African empires. Afrocentric scholars, like the Senegalese Cheikh Anta Diop, were especially crucial in this attempt. They sought to trace a link between ancient Egypt and countries of sub-Saharan Africa. They also recounted achievements of African empires like Asante, Mali, Ghana empires, and Great Zimbabwe. The histories of great African rulers of antiquity, like Sundiata Keita, founder of the Mali Kingdom in the 13th century and others of more recent history, like Shaka Zulu (c. 1787-1828) from eastern South Africa, Osei Tutu (c. 1660-1717) co-founder of the Ashanti Empire in present-day Ghana, and Menelik II (1844-1913), Emperor of Ethiopia were often recounted.

Figure 2: Cold War map of Africa, 1980



Source: Wikimedia.

However, the political and economic pressures that newly independent African countries faced meant that virtually all of them had to effectively abandon the pan-Africanist ideal. They became ever more focussed on their own national states. A wave of political instability starting from the 1960s forced national leaders to focus more on national security and state politics. Furthermore, the devastating economic crises which most African countries experienced in the 1970s and 1980s also led many African leaders to abandon the quest for continent-wide politics in order to focus on domestic affairs.

Pan Africanism was not the only nationalist ideal which suffered in the decades following the attainment of independence. Economic decline and political instability in many African countries in these decades negatively affected national unity. Struggle for the limited resources of the state in many places degenerated into factional disputes, and this resurrected many ethnic antagonisms. Politicians sometimes appealed to their ethnic bases in order to enhance their chances during elections, or to support their governments to hold on to power. These ethnic antagonisms and divisions in many instances blew up into full scale civil wars. Countries like Nigeria, Congo (present-day DRC), Rwanda, among others, have suffered devastating civil wars and even genocides during the post-independence period. Thus, the strong nationalist sentiments which swept across Africa towards the end of colonialism had largely dissipated by the turn of the 21st century.

Study questions

1. What is a nation? What is nationalism?
2. Nationalist political parties were reformist, not revolutionary, social movements. Discuss.
3. Discuss five of the factors that led to the growth of nationalist movements in colonial Africa.
4. Who delivered the 'Wind of Change' speech? Why was this speech so influential?
5. What was the influence of Pan Africanism on African national movements?
6. What has been the faith of nationalism in Africa after decolonisation?

Suggested readings

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William Beinart, *Twentieth-Century South Africa* (Oxford, Oxford University Press, 2001).

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Chapter 13

Democracy and Development in Africa since 1960

Joan Ricart-Huguet
Loyola University Maryland

1. Introduction

African countries often make world news when presidents refuse to leave office after their term limits. In 2019, six out of ten living longest ruling heads of states were from sub-Saharan Africa. How has Cameroon's President Paul Biya managed to stay in office since 1975 and Uganda's President Yoweri Museveni since 1986? Elsewhere, the President of Iran Ali Khamenei has been in power since 1979 and Cambodia's President Hun Sen since 1984. Presidents in semi-democratic and non-democratic countries often try to bend the rules so that they can stay in office for one or more additional terms. In the case of Uganda, Museveni removed age limits by amending the Constitution of Uganda so that he could run for president past the age of 75. His move faced opposition in both Parliament and in the Supreme Court. However, the constitutional amendment was ultimately approved by Parliament and upheld in the Supreme Court, paving the way for his potentially indefinite re-election.

Violations of presidential term limits are the tip of the iceberg: they constitute an important and visible example of democratic shortcomings in Africa and beyond that include corruption, clientelism, and limited respect for the rule of law. The Afrobarometer surveys reveal that African citizens often see these problems as among the most important ones their country is facing. This is the result of valuing democratic norms and of suspecting that not respecting these norms may hurt their civil rights, their political rights, and their welfare. Politics and economics are deeply intertwined, and this chapter pays attention to some of their links to better understand democracy and development in Africa since the 1960s.

In the remainder of the chapter, we begin by defining democracy and discussing its relationship with economic development in Section 2. Section 3 provides a chronology of the three democratic phases in Africa since independence. The continent has been democratizing rapidly since the 1990s, yet bad governance underpins the limited economic development facing many African societies since independence in the 1960s (Section 4). We focus on three political hindrances to further democratization and development that I term "the three Cs of bad governance": corruption, clientelism, and conflict. While outlining general patterns is important, examining differences between African countries is key because the extent to which they are democratic and developed diverges widely. Finally, we contrast two countries commonly hailed as political and economic success stories (Botswana and Mauritius) with two others (Benin and Uganda) that endured decades of political instability and are comparatively less developed.

2. Democracy and development: can we have one without the other?

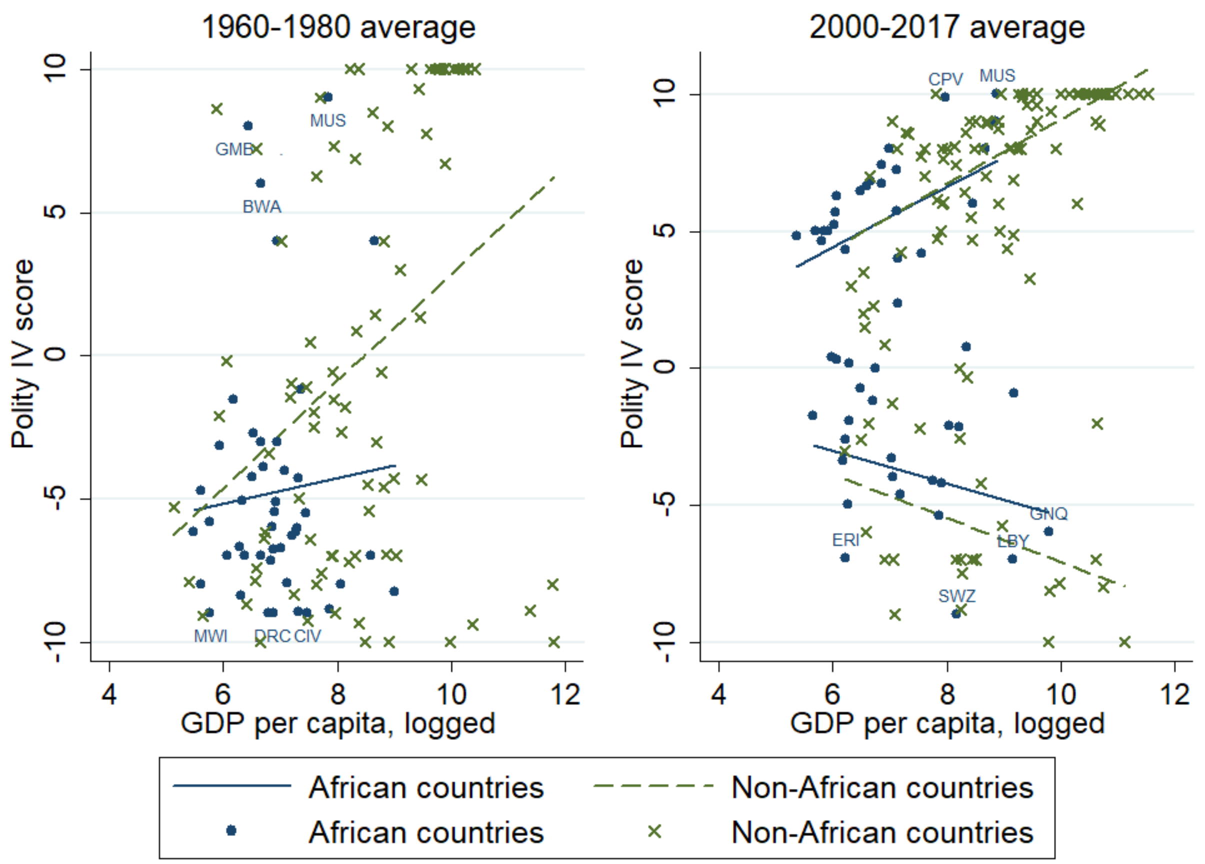
One of the most important questions in political economy concerns the relationship between political and economic development. Almost all developed countries in the world are democratic. Likewise, more democratic countries tend to be more developed. We restrict economic development here to Gross Domestic Product (GDP) per capita, although economic development can also be understood more broadly to consider poverty reduction and economic inequality.

Democracy in the Greek language literally means *rule by the people* because "demos" means *people* and "kratos" means *rule*. Robert Dahl, one of the most prominent democratic theorists, argued that even very democratic countries are closer to "polyarchy" (etymologically, *rule by many*), than rule by the people. Dahl argued that *political contestation* and *political participation* are two key components of democracy: institutions in some countries are more "liberal" (i.e. there is more political contestation via, for instance, alternative media sources) and more "inclusive" (i.e. there is more political participation in public affairs) than in others. By institutions we mean, following the 1993 Nobel Prize winner Douglass North, "the rules of the game in a society or, more formally, humanly devised constraints that shape human interaction" such as a country's constitution, laws, and informal rules that may not be written on paper.

Further, democratic institutions in some countries protect freedom of association, private property, or the right to a free trial better than others. Research has shown that specific institutions common to democratic societies improve governance and foster development. For example, colonial institutions were mainly designed to maximize the extraction of resources, from diamonds in British-ruled Sierra Leone to rubber in the Belgian Congo. These institutions are hostile to economic development because they are usually associated with a disregard of property rights and a non-democratically elected executive power (e.g. president) that is not constrained by the rule of law. By contrast, democratic institutions ensure fair elections and constrain leaders to follow the rule of law while also ensuring citizen rights. Mauritius since the 1980s is a clear example of such institutions, but the early post-colonial period in multiple countries, including Uganda, was also characterized by largely fair and competitive elections—even if those countries often became non-democratic in the 1970s.

Democratic institutions do not come out of thin air. Modernization theorists have argued that urbanization, education, technological change, and other developmental processes are conducive to democratization. For instance, as a society modernizes, the emerging middle class will often demand to participate in the political process (i.e. to be included) and thus contribute to democratization. Many political economists agree that democracy and development reinforce each other, and existing literature has provided evidence for both directions of causality.

Figure 1: Economic development and democracy in Africa after independence and today



Notes: GDP per capita in constant 2005 USD. The Polity IV score ranges between -10 (most autocratic) and 10 (most democratic). The figure highlights highly democratic and highly autocratic African countries. Acronyms: BWA (Botswana), CIV (Cote d'Ivoire), CPV (Cape Verde), DRC (Democratic Republic of the Congo), ERI (Eritrea), GMB (Gambia), GNQ (Equatorial Guinea), LBY (Libya), MUS (Mauritius), MWI (Malawi), SWZ (Swaziland).

What is the relationship between democracy and development in African and non-African countries since the 1960s, when most African countries gained independence? Figure 1 presents average values of GDP per capita in constant 2005 US Dollars ($) on the x-axis and average Polity IV scores in two different time periods on the y-axis: the first two independent decades for much of the continent (1960-1980) on the left-hand-side and the two most recent ones (2000-2017) on the right-hand-side. The GDP per capita measure is presented as a natural logarithm to reduce the influence of extreme outliers (very rich countries). For example, the GDP per capita of Malawi for the 1960-1980 period was around $330. The corresponding natural log is $5.8.

Figure 1 on the left shows that there is a cluster of rich and democratic non-African countries (crosses) in the top right corner in both periods. Those are mostly European countries. Overall, non-African countries range from autocratic to democratic in both periods. Figure 1 also shows that African countries (dots) are clustered towards the bottom left corner during the 1960-1980 period because they were both poorer and less democratic than most non-African countries (crosses). Exceptions include Mauritius, Gambia, and Botswana, which score equally democratic as the group of European countries in the top right corner. However, by the 2000-2017 period (right figure) we observe much more variation in the African Polity IV scores. Many African countries have become more democratic, climbing up the y-axis. In the 21st century, African countries range from democratic (Cape Verde and Mauritius) or mostly democratic (e.g. Botswana and South Africa) to highly autocratic (e.g. Eritrea, Swaziland, Equatorial Guinea).

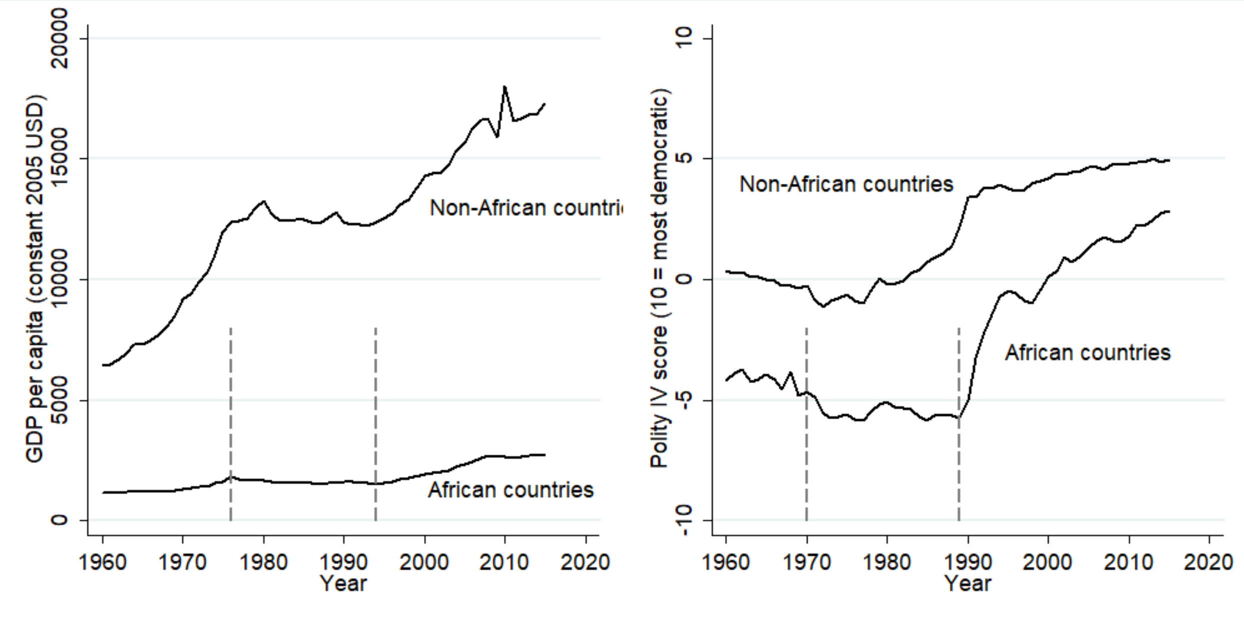
The linear trend lines in Figure 1 indicate that the relationship between democracy and economic development is positive for both African and non-African countries during 1960-1980. However, for the 2000-2017 period the relationship appears conditional: the relationship between democracy and development is positive for more democratic countries (Polity IV score higher than 0) but negative for more autocratic countries (Polity IV score lower than 0). What explains those two different patterns? Scholars Robert Bates, Ghada Fayad, and Anke Hoeffler argue that this negative relationship is in part driven by autocratic countries that are rich in natural resources. The "resource curse" is the idea that non-renewable natural resources, like minerals or oil, can make a country poorer and less democratic because such resources are susceptible to elite capture and are finite, thereby hindering *sustained* economic development even if the country may become richer in the short-run due to its natural resource exports. Libya and Equatorial Guinea, both well-endowed with crude oil, are rich compared to most African countries but at the same time they are also among the least democratic and most economically unequal.

Elites in natural resource-rich states have often managed to exploit their country's wealth without democratizing, and hence have generated a high level of wealth inequality between the political elite (e.g. those proximate to Muammar Gaddafi in Libya and Teodoro Obiang in Equatorial Guinea, respectively) and the rest of the population. However, countries that are already relatively democratic at the time of resource discovery have tended to manage their natural resources better by combining sustained growth with economic redistribution stemming from democratic accountability. Examples include Norway, rich in oil and gas, and Botswana, rich in diamonds since the 1970s. In general, Figure 1 reveals that the relationship between democracy and development remains positive in both African and non-African countries when revenue is not derived from natural resources (e.g. Cape Verde, Ghana, Mauritius). This is consistent both with modernization theory and with the idea that democratic institutions favour economic growth.

3. Main political phases since independence

Figure 2 reveals an important pattern of economic development and democratization over time. Africa is in fact democratizing despite limited economic growth. The left graph shows GDP per capita in constant 2005 US Dollars ($) on the y-axis from 1960 to 2017. The right graph shows average Polity IV scores on the y-axis also from 1960 to 2017. Africa's modest economic growth since 1960, shown in the left graph, runs against the thesis of economists, such as Robert Solow, who expected poorer countries to "catch-up" or converge in GDP per capita to richer ones as long as poorer countries could replicate the savings rate and the technologies of richer ones. In fact, the economic gap between African and non-African countries has actually increased, consistent with domestic factors such as human capital and political institutions affecting development as emphasized by endogenous growth theory. At the same time, however, we have witnessed an impressive reduction of Africa's democratic gap since 1990. The right graph shows that African societies have become more democratic since then and that these gains are more pronounced in African than in non-African countries. We now explain these historical trends in more detail.

Figure 2: Democracy and economic development in Africa from 1960 to 2017



Political scientists generally divide the post-independence period into three phases: (i) the first post-colonial decade (1960s), (ii) the so-called "lost decades" (1970-1989), and (iii) the post-Cold War period (1990-present). The Cold War (1945-1990), during which the United States and the Soviet Union confronted each other, led to instability and conflict in Africa and elsewhere because these two countries fought for the geopolitical control of what was then termed as the Third World, mainly the developing countries of Asia, Africa, and Latin America. In Africa, political independence from colonial rule in the 1960s generated high expectations amidst a wave of pan-Africanist sentiment, especially among the urban elites. However, as shown in the left graph of Figure 2, both economic development and democratization levels were comparatively low in the 1960s. Some early post-independence elections were contested and participatory, but many countries soon became either single-party civilian governments (e.g. Julius Nyerere's Tanganyika African National Union, Léopold Sédar Senghor's Senegalese Progressive Union) or outright military dictatorships (e.g. Gowon in Nigeria, Kérékou in Benin). The weak states and regionally unequal societies that Africans inherited from colonial rule did not favour democratization and development. The poor governance that ensued led to the so-called economic "lost decades" of Africa because real GDP per capita in the continent slightly decreased between 1975 and 1995 (the period between the grey dashed lines in the left graph in Figure 2). Politically, the lost decades began around 1970 and ended around 1990, when the political situation changed drastically for domestic and international reasons.

Domestically, the dismal economic performance of many African countries during the lost decades led to civilian protests that toppled dictatorial regimes. Internationally, the collapse of the Soviet Union in 1990-91 meant the end of the Cold War and led to a liberal hegemony by the United States. It also meant that African countries were no longer the battleground of proxy wars between the United States and the former Soviet Union. Marxist African governments such as the People's Republic of the Congo, Mozambique, Angola, and Benin no longer received the support of the Soviet Union and became increasingly democratic in the 1990s. This so-called "wave of democratization" starting in 1990 meant that there were more and more democratic elections across Africa. In the 1985-1989 period, only nine out of 47 sub-Saharan African countries held contested elections. In all other countries, opposition parties either were irrelevant or illegal. However, the number and intensity of political protests rose dramatically around 1990, and by 1994 the number of countries holding at least somewhat contested elections rose to 38. Consequently, the share of opposition seats in African legislatures increased from only 10 percent in 1989 to 31 percent by 1994. Governments facing political protests allowed or were forced a swift expansion of the right of all adults, male and female, to vote. This right, known as universal suffrage, contributed to the increased political inclusion in that period. This is an important reason why we observe an upward spike in democratization in the right graph of Figure 2 for African countries in the 1990s.

From the 1990s onwards, African democracy scores surged and considerably converged to the global non-African average. More contested and inclusive elections since the 1990s have even led some to consider African countries "democratic overachievers" in the sense that they are more democratic than their level of economic development would predict. The democratic norm of universal suffrage—and hence of at least nominal political inclusion—is widely spread across Africa. According to political scientist Staffan Lindberg, repeated elections, *even when flawed*, make countries more democratic over time. This is because free elections enable democratic behaviour and, with it, the consolidation of democratic values. On the one hand, then, increased political inclusion and contestation meant that Africa is much more democratic today than before 1990. On the other hand, important governance shortcomings explored hereunder hinder further democratization and development.

4. Political hindrances to development: the three C's of bad governance

There are many reasons why a country's economy may be underdeveloped, including low levels of human capital, of technological innovation, and of international trade. We focus instead on three *political explanations* that tend to erode the democratic institutions of a country: (i) corruption (vs. accountability and the rule of law), (ii) clientelism (vs. programmatic policy-making), and (iii) conflict (vs. political stability and peace). The terms in parentheses are their respective good governance counterparts. These three factors help explain why the political and economic gaps still exist in Africa in spite of the impressive “political catch-up” discussed above.

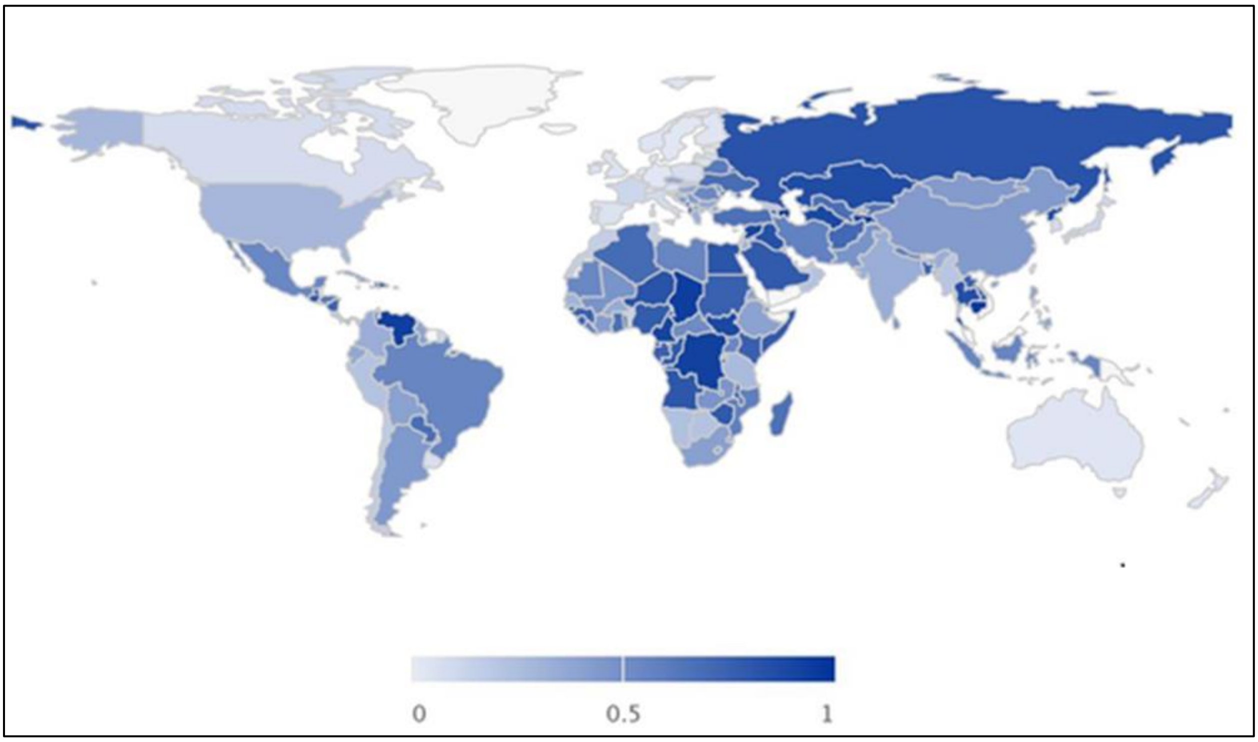
(i) Corruption

Corruption tends to be harmful to society as few people benefit except for those engaged in practices such as bribery, theft, and embezzlement of public funds. In the public sector, corruption usually implies the illegal or deceitful pursuit of personal gain by a politician or a public sector employee (e.g. a civil servant, a judge), typically by leveraging his or her professional position. Privately benefiting from one’s official position is costly for development because efforts that the politician could have otherwise allocated to improve social welfare are allocated instead to increase his/her own private gains. No country is totally free from corruption, but more democratic governments are less corrupt because the citizenry can more easily hold public officials accountable. Data from the Varieties of Democracy Project (V-Dem) shown in Figure 3 indicate the level of government corruption across countries in 2017. The most corrupt (darker shaded) are autocratic governments in countries of the former Soviet Union (Russia, Kazakhstan, Turkmenistan), the Middle East, and Africa. Levels of corruption vary widely within Africa, however. Governments are very corrupt in some cases (e.g. Chad, Democratic Republic of the Congo) but not in others (e.g. Benin, Botswana).

Some public sector corruption is ostentatious and hence easy to detect. For example, Mobutu Sese Seko (1965-1997), the ruler of former Zaire, currently the DRC, became a stark example of “big man” politics, a term used to refer to corrupt and dictatorial leaders. The natural resource curse has favoured the persistence of other corrupt elites such as President Teodoro Obiang (1979-present) in Equatorial Guinea, Omar Bongo in Gabon (1967-2009), and Denis Sassou Nguesso (1979-1992, 1997-present) in the Republic of the Congo and their families. All three countries have been top-50 oil producers in the world in recent years. All three families made headlines in 2013 for possessing multimillion-dollar properties in Paris.

Less ostentatious corruption, such as the syphoning of public funds into private pockets or the embezzlement of foreign aid by public officials, can be more insidious because it is harder to detect. Non-governmental organizations and donor organizations such as the World Bank have investigated this type of corruption, but its true extent is very difficult to ascertain. Unlike the violation of presidential term limits, most corrupt behaviour is easier to conceal. Finally, “petty corruption” is also hard to observe but, in some ways, more pervasive. For instance, recent research has shown that policemen in Kinshasa systematically charge “informal tolls” to drivers in order to achieve the subsistence-level wage the state fails to provide. From heads of state motivated by greed to poor policemen motivated by subsistence, research shows that corruption leads to the erosion of interpersonal trust, social capital, and ultimately economic development.

Figure 3: Corruption index in the executive branch (2017)



Notes: The data come from the V-Dem project and are available online. The corruption index ranges from 0 (no corruption) to 1 (extreme corruption). This graph shows levels of corruption in the government, but V-Dem data shows that government corruption is highly correlated with public sector corruption more generally in both African (ρ = 0.86) and non-African countries (ρ = 0.93).

(ii) Clientelism

Governments in countries where clientelism is pervasive tend to underprovide public goods, such as infrastructure, that would contribute to the country's development. *Clientelism* can be defined as the iterated exchange of benefits between a politician (the patron) and a voter (the client). For example, a politician may offer cash or food only to those voters in the constituency who he or she believes will vote for him or her in the election. This practice is called vote-buying, which is an illegal and undemocratic practice. Clientelism relies on a mutual promise between the politician and the voter. When ballot secrecy holds, this mutual promise results from an iterated rather than a one-off exchange because, in a one-off exchange, the politician would have no reason to believe that the voter would reciprocate. Political parties can rarely monitor individual votes, so some reasonably argue that clientelist politicians have long engaged in "turnout-buying", whereby the politician distributes goods before the election to a targeted set of voters in the hope that voters will reciprocate with votes.

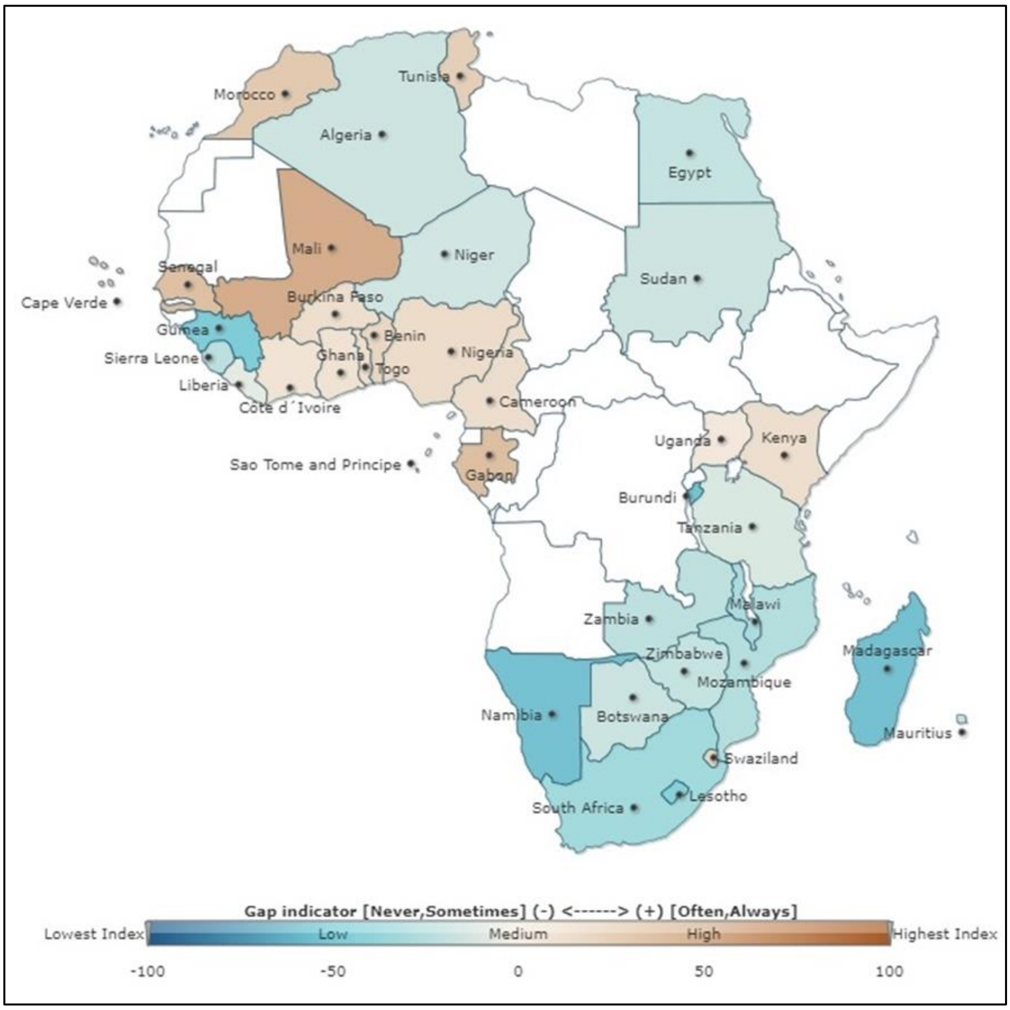
Programmatic policies are often contraposed to clientelism because the resources are disbursed according to clear rules that do not depend on partisan characteristics or on one's voting record. Consider a job training program designed to reduce unemployment. A programmatic policy would consider being unemployed as the only criterion for eligibility. A clientelist approach may favour participants or region that supported the politician or party, not because that participant or region would benefit the most from the program but because it would help the politician's or party's chances of re-election. This contraposition makes clear the economic inefficiencies of clientelism.

Clientelism is different from, and potentially worse for, democracy and development than, *distributive politics*. Distributive politics concerns policies or benefits that target the politician's constituents or a particular group of citizens along for example region, ethnic, or religious lines. Democracies in Africa and elsewhere are not immune to distributive politics. An incumbent politician may allocate more resources to a constituency that voted more in favour of his or her re-election. For example, since the 1960s, co-ethnics of the minister of education in Kenya have been more schooled than children from other ethnic groups. This suggests that education ministers have favoured their own ethnic group over others when allocating educational investments. Clientelism goes one step further by requiring a direct *exchange* between the politician and the voter of the sort "I will only provide more schools if you vote for me in the next election."

Among Afrobarometer survey respondents in 2014 and 2015, 43 percent believed that bribes in exchange for votes are common ("often or always happen") while 48 percent believed that they are uncommon ("never or sometimes happen"). Figure 4 maps the percentage of Afrobarometer respondents in each country who say clientelism is common minus those who say it is uncommon. Thus, the larger the (positive) percentage gap, the more prevalent is vote-buying as perceived by a country's population. The map shows that the perceived prevalence of clientelism varies widely. In Mali, most believed it is common (78 percent) and few believed it is rare (21 percent), hence the gap indicator equals +57 percent. In neighbouring Guinea, few stated it is common (20 percent) and most stated it is rare (71 percent), hence the gap equals -51 percent.

Research shows that the appeal of clientelist offers is lower in richer countries and among richer voters in any given country. Richer countries tend to suffer less clientelism, but development efforts in recent decades have also sought to tackle the other direction of causality, i.e. to reduce clientelism in order to foster programmatic policies and development. For example, an accountable but politically independent civil service is important both to limit clientelism and to implement public policies effectively. These efforts are important because democratization alone does not guarantee the demise of clientelism. For instance, Figure 4 shows that it persists in Ghana, a mostly democratic country since 2004.

Figure 4: Prevalence of vote-buying across African countries (2014-2015)



Notes: There was no data available for white-shaded countries. The data come from the round 6 of the Afrobarometer survey and are available online. The question reads: "In your opinion, how often are voters bribed in this country's elections?" The answer ranges from "never" (0) to always (4).

(iii) Conflict

Non-violent political conflict is commonplace in any polity because individuals and groups have diverse preferences and interests. Politicians devise institutions to allocate scarce resources that can only partially satisfy limitless wants. Therefore, democratic polities in Africa and elsewhere regularly engage in intense debates over policy and the allocation of resources. *Violent conflict,* however, replaces ballots with batons and guns. It refers to instances in which actors use force to influence political outcomes. Besides wars between countries, conflict can take various forms within countries, such as civil wars, armed rebellions, and coups d'état. Violent conflict is the most devastating for society and the economy of the three C's of bad governance because it destroys physical capital, human capital, social capital, and undermines a country's political institutions. A society cannot properly function—much less grow and become democratic—if political stability is lacking.

Over 30 out of 54 countries in Africa have experienced one or more episodes of violent conflict since 1960. Violent political conflict can range from the 1994 Rwanda genocide, where hundreds of thousands were killed, to bloodless and swift coups d'état in Mauritania in 1984 and 2005. In the 2005 coup, the leaders even organized democratic elections that took place two years later.

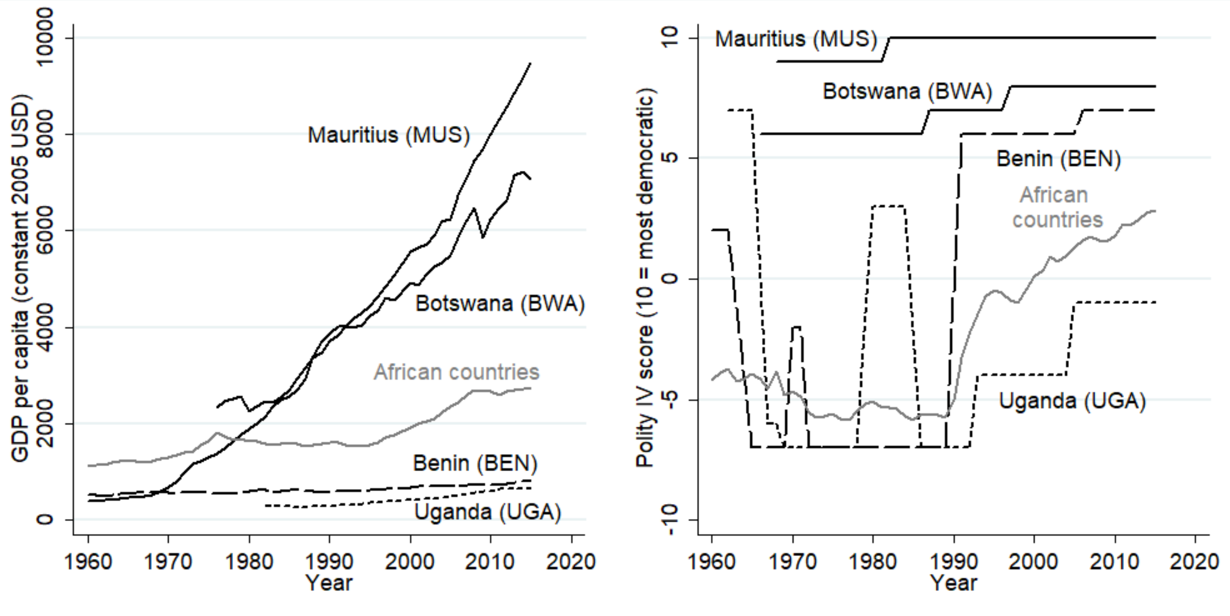
Nonetheless, a few countries, including Botswana, Mauritius, Senegal, and Tanzania, have not experienced any military coups or civil wars since independence. They have at most suffered from low levels of civil conflict, such as in the conflict between Senegal and Casamance in southern Senegal. Senegal and Tanzania were long ruled by authoritarian single-party governments, but those governments managed to keep the army in the barracks and to retain political stability and undemocratic but functioning political institutions.

5. Political and economic development since the 1960s in four African countries

The last section showed three ways in which bad governance hinders democracy and development across Africa. In this section, we zoom into the four African countries of Benin, Botswana, Mauritius and Uganda. Country case studies can help us to better understand how the three C's encountered in Section 4 and their good governance counterparts—accountability, programmatic policies, and political stability—have impacted political and economic development. Benin, Botswana, Mauritius, and Uganda all gained independence from colonial rule during the 1960s, but their political and economic trajectories since then have been very different. Botswana and Mauritius are widely held as economic and political success stories since independence. Benin underwent rapid democratization in the 1990s accompanied by only modest growth. Uganda also experienced only modest growth and remains largely undemocratic.

As in previous figures, Figure 5 shows GDP per capita on the left and the democracy score on the right, both over time. The grey lines show the levels of GDP per capita and democracy for the average African country in the left and right graphs, respectively. They are identical to the lines in Figure 2. In addition, Figure 5 now also includes the trajectories of four African countries that we will study in more depth now. We can see that the GDP per capita of Botswana and Mauritius was similar to the African country average (grey line) in the 1960s but by the 2000s have established themselves as upper-middle income countries (left graph), with incomes per capita above $6,000. The contrast with the very modest growth of Benin and Uganda is stark. Benin's GDP per capita was estimated at $520 in 1960 and $805 in 2015, while Uganda's was estimated at $303 in 1982 and $673 in 2015. The right graph shows that Mauritius, Botswana, Uganda, and to some extent Benin were mostly democratic at the time of independence during the 1960s. All initially organized multiparty elections with universal suffrage upon independence. However, Botswana and Mauritius further democratized while the political history of Benin and Uganda was akin to the roller-coaster that the right graph suggests.

Figure 5: Democratic trends in four African countries from independence to 2017



Note: The World Development Indicators (World Bank) do not include the GDP per capita for Uganda before 1982. The Polity IV scores begin with a country's independence (1968 in Mauritius and 1966 in Botswana).

Understanding these diverging patterns is complex and the result of *proximate* or short-term factors as well as deeper *historical* or long-term factors. For instance, Uganda's political instability in the late 1960s is a proximate cause for the military coup of Idi Amin in 1971 and his subsequent dictatorial regime (1971-1979). The deeper causes for Idi Amin's coup, partly lie in the colonial period. The British colonial government recruited soldiers heavily from Northern Uganda, where Amin came from, creating a regionally and ethnically imbalanced army with many Northerners but few Baganda, the largest ethnic group.

As many other African countries, Benin and Uganda faced two challenges at independence that undermined their political institutions and stability: (i) regional inequality and (ii) low state capacity. Regional and ethnic inequality was pervasive in both colonies. While military recruits came mostly from Northern Uganda, most economic activity including cash crop cultivation (cotton and coffee) was centred mainly around Lake Victoria in Buganda, the Central Region, which was the political and economic centre. Similarly, in Benin, the South remained the centre of trade and of cash crop cultivation (palm oil) after the slave trade came to an end. The North was historically more isolated from coastal trade and remained poorer and less populated during colonialism and until the present-day. In both countries, regional economic inequality heightened political conflict over the distribution of resources after independence.

A second important historical factor is low state capacity. *State capacity* is defined as the government's ability to accomplish its intended policy goals, such as tax collection, public goods provision, and enforcement of law and order. Some refer to low capacity states as "weak states" and to high capacity states as "strong states." Benin and Uganda but also Botswana and other colonial states in Africa were "thin on the ground", meaning that formal state institutions did not extend much beyond the capital because European colonizers tried to keep costs at bay. How could post-colonial political elites promote economic development while using state resources to satisfy clientelist demands at the same time? That is no easy feat for any state, let alone weak a state with a colonial legacy of extraction and ethnic division. Beninese and Ugandans inherited weak colonial states that were expected to suddenly serve all their people as citizens as opposed to colonial subjects. Severe resource constraints led the first presidents, Hubert Maga in Benin and Milton Obote in Uganda, to favour core supporters—usually co-ethnics—at the expense of the rest of the population. To make sense of these patterns, political scientist Nicolas van de Walle has defined *neopatrimonial states* as states that “combine an external facade of modern rational-legal administration with an internal patrimonial logic of dyadic exchange [clientelism], prebendalism, and the private appropriation of public resources by state elites.”

Low state capacity, combined with regional inequality inherited from colonial rule, fostered regional and ethnic tensions in Benin and Uganda that culminated in a series of coups that began soon after independence, in the late 1960s, and continued through the 1980s. In the case of Uganda, the 1980-1986 Civil War brought the rebels led by current President Museveni to power in 1986. Rebel movements may be more prevalent in Africa than elsewhere because it is easy to rebel against weak states. In brief, these two historical and structural factors help explain why good governance and development have proven difficult in Benin, Uganda, and other African countries.

Nevertheless, Benin and Uganda entered periods of relative democratization and political stability since the early 1990s, following the broader trend in Africa that we discussed. In the case of Benin, pro-democracy protests forced out President Kérékou and his single-party regime in 1990 following two decades rife with corruption, clientelism, and economic stagnation. Benin held contested multi-party elections in 1991 that led to the victory of the opposition candidate. Clientelism and corruption still exist but are less prevalent than before 1990. Since then, Benin has held contested and inclusive elections, which is reflected in Figure 5 with democratic score well above the African average. Unlike Benin, in 1990 Uganda had just come out of a civil war. For most, returning to a normal life was more pressing than organizing mass pro-democracy protests. President Museveni governed since 1986 as a military leader and since 2005 as the leader of a multi-party system. While Ugandans enjoy universal suffrage and hence some political inclusion, political contestation is limited. The opposition faces an uneven playing field because the government uses public resources for corrupt and clientelistic purposes. This confers President Museveni an important incumbency advantage.

Botswana and Mauritius remained democratic and their economies developed quickly after independence. Both are usually described as African success stories even though the two countries are very different from each other in many respects, including geography, natural resources, demographics, and culture. Mauritius is an island in the Indian Ocean and is among the 50 smallest countries in the world, while Botswana is a landlocked country in Southern Africa 285 times larger in size than Mauritius. Botswana’s economic growth, visible in Figure 5, has been fuelled by diamonds since the late 1960s. In contrast, Mauritius has no exploitable natural resources. Moreover, the population density of Mauritius is the highest in Africa (620 inhabitants per km^2) while Botswana's is one of the lowest (4 inhabitants per km^2). Ethnic diversity is low in both cases when compared to the average African country. In Mauritius, over 60 percent of the population is of Indian descent, although Indo-Mauritians are a diverse group; a large minority are of African descent; and others are Creoles that combine African, Arab, Indian, and European ancestry. Botswana is rather homogeneous because about 80 percent of the population are Tswana.

Was regional economic and ethnic inequality particularly low, or state capacity particularly high, already during colonial rule? Neither country enjoyed high state capacity and the history of Mauritius is one of inequality. Mauritius was first colonized by the French and then the British. The economy revolved around sugar plantations owned by European planters. As in many Caribbean islands that grew sugar, Africans were imported as slaves. When slavery was abolished in the 1830s, planters brought South Asians as indentured servants. Mauritius gradually developed politically in the 1900s before independence (political rights for people of mixed race, extension of the suffrage), but the colony remained poor and wealth concentrated in the European minority for a long time. The colonial legacy of Botswana was not benign either, but the British footprint was relatively small. The British took control of Botswana only for geopolitical reasons, namely to connect their Southern and Eastern African colonies and to contain the German expansion in south-western Africa. Some have argued that British disregard of Botswana was perhaps a blessing. Because colonial public investments were dismally low (Botswana had almost no paved roads and only two high schools in the 1960s), and perhaps the population had been mostly Tswana for some time, Botswana did not experience the same regional and ethnic inequality of Benin, Uganda, and even Mauritius. Botswana was more uniformly poor than any of the other three. In sum, Benin and Uganda's colonial legacy might have been more harmful, but the history of Botswana and Mauritius was not particularly auspicious either.

For all their differences, Botswana and Mauritius are more ethnically homogeneous than most African countries and both undertook multiple programmatic economic policies. Both factors have likely contributed to their post-independence success. Many have argued that economic and status inequalities between ethnic groups increase conflict and lower public goods provision in Africa and elsewhere. Hence, Botswana in particular may have benefitted from being rather homogenous. Of course, this explanation is far from deterministic: some ethnically homogeneous countries such as Lesotho or Burundi remain underdeveloped, while some ethnically diverse countries such as Ghana and South Africa are quite developed.

Good governance is a central reason for the high levels of democracy and development in Botswana and Mauritius. The political elites designed and implemented programmatic policies—as opposed to clientelism—that strategically favoured long-term development. Both countries have also enjoyed political stability (no coups or large-scale violence), and low levels of corruption. The first two presidents of Botswana, Seretse Khama (1966-1980) and Quett Masire (1980-1998), exercised farsighted leadership by investing early revenues from diamonds—discovered in 1967, a year after independence—in education and health. Since

1994, the government has also invested these revenues in a sovereign wealth fund. In other words, the government turned the usual resource curse into a blessing. The pre-colonial political organization of the Tswana, which included deliberative norms and a popular assembly, may have facilitated Khama's and Masire's programmatic policies. The government was active in managing the economy while largely respecting property rights and the rule of law more generally. Because human capital was low at independence, some civil servants were foreigners who were progressively phased out as more Botswanans completed higher education.

Botswana's governance success was achieved despite limited political contestation: the Botswana Democratic Party has won all elections in the country since independence in 1966. The lack of an opposition victory in Botswana to date suggests an only moderately competitive political system. Accumulation of power in the hands of recent presidents, notably Ian Khama (2008-2018), is also a cause for concern. Botswana suffers from high reliance on diamond revenues and its economy has not diversified, leading to limited economic opportunity outside the public sector and to high unemployment (15-20 percent in 2008-2018). While growth since independence has been spectacular, these are important concerns that are likely related to Botswana's economic slowdown since 2014.

Finally, Mauritius presents a fascinating and complex case. Lacking natural resources, in recent decades the government has tried hard and managed to diversify the economy. Sugar and agriculture remain important exports, but fishing and textile industries gained some ground after independence. More recently, the government has fostered tourism and the information and technology sector. The government has also combined low taxes and secure property rights to attract foreign direct investment and even offshore banking. To tamper inequality, the government developed a welfare state. The Mauritius Labour Party pushed for an incipient welfare state in the latter years of colonial rule. After independence, at a time when international financial institutions were pushing for privatization, the government expanded the welfare state to include a National Pensions Fund, universal healthcare, and free education through university.

Political conflict in Mauritius has at times been heated but never turned violent, leading to sustained levels of high political contestation. Multiple political parties and ideologies have governed Mauritius since independence in 1968. Recurrent coalition governments have been able to manage the country's religious and ethnic diversity in spite of a political crisis in the 1980s. Compared to Botswana, Mauritius enjoys higher economic dynamism and diversification, lower unemployment, higher political accountability (i.e. lower corruption), and higher political contestation. In short, it is more democratic and developed. For all these reasons, many have argued in recent years that Mauritius is a more inspiring success story than Botswana.

6. Conclusion

African countries range from mostly developed and democratic, such as Botswana and Mauritius, to comparatively underdeveloped and non-democratic, such as Uganda and the Democratic Republic of Congo. History teaches us that democratization and development tend to go together. However, in recent decades some African countries, typically resource-rich countries such as Equatorial Guinea and Gabon, have become richer but remained autocratic. Wealth is very unequally distributed in these countries because of the large economic rents generated by the corrupt management of natural resource revenues and because political elites engage in short-term rent seeking rather than long-term programmatic policy-making, as Botswana and Mauritius did.

More surprisingly, a democratic gap between African and non-African countries still exists but it has been closing since 1990 even though the economic gap has widened. Dismal economic performance in the 1980s and the end of the Cold War led to protests that toppled authoritarian governments in the 1990s and some countries, like Benin, democratized. Of course, there remain challenges ahead. The most obvious one is that countries like Benin democratized but did not experience high growth rates despite institutional changes. The impressive "political catch-up" of African countries has so far not translated into an "economic catch-up." To figure out why is and should remain a central concern of scholars and policy-makers alike.

Study questions

1. Are more developed countries more democratic? If so, explain. If not, discuss under what conditions democracy and development may not go hand in hand.
2. What is the "resource curse"? Is it always a curse, or can natural resources foster development and democratization under some conditions? Contrast the case of Botswana to another African resource-rich country.
3. Name and describe the three C's of bad governance? What are their good governance counterparts?
4. How is clientelism different from distributive politics and from programmatic policies?
5. Select an African country you are particularly interested in or care about. Given what you have learned from the cases of Botswana and Mauritius, what might that country do to democratize and develop further?

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Chapter 14

Who got the Power? The Electrification of Africa

Hanaan Marwah
KOKO Networks

1. Introduction

Reasonable access to grid electricity is one of the most important, if not the most important, tipping points for economic development in Africa. About 30 percent of people in Sub-Saharan Africa have access to grid electricity, the lowest of any major region in the world. Per head, Sub-Saharan Africans consume only one fifth the grid electricity of the global average. People who do not have it must rely on expensive diesel generators, kerosene lamps, candles or firewood. This complicates progress beyond basic levels of health care and education. Moreover, without electricity one cannot use electric appliances, which are the foundation of both large and small scale modern industry. Because of low levels of electrification, many things are made by hand in Africa, such as furniture, which in other places are made by machines. The extensive use of firewood as an alternative source of energy incurs great environmental costs, such as deforestation and soil erosion.

There are also important social consequences of lacking electricity access. Many Africans, often women and children, have to spend time sourcing firewood. This is one of the reasons why people living in cities tend to be more productive: urban access rates to grid electricity is, on average, five times higher than in rural areas. Therefore, expanding electricity production and broadening access to grid electricity is of enormous importance. As long as it is done safely and in the interests of communities and not just for large scale industry, it empowers citizens and improves living standards. It enables private individuals to better participate in government and society and it allows for the expansion of other important infrastructure services (e.g. the internet).

This chapter aims to explain how and where electricity has been produced and distributed in Africa and how this links to current development challenges and solutions. From the time most African countries became independent (about 1960) the electricity industry has been primarily government owned and dominated. This chapter will show that the progress of the sector has been a significant feature and consequence of the evolution of stable and responsive government structures.

The chapter has the following structure. Section 2 explains what is meant by electrification and electricity access, explains the key concepts necessary to understand the process of electrification, and gives some examples of how they have worked in practice in the African context. Section 3 reviews the problems of coordination of electricity generation and distribution. Sections 4 and 5 discuss the colonial and post-independence historical development of electricity production and access in Africa. Section 6 discusses some of the causes of intra-regional differences in electricity consumption within Africa. Section 7 explains current development challenges, including who funds and manages power plants and utilities today. It also addresses the potential impact on electricity access of new technologies such as solar and wind energy. Section 8 discusses the conclusions of the chapter.

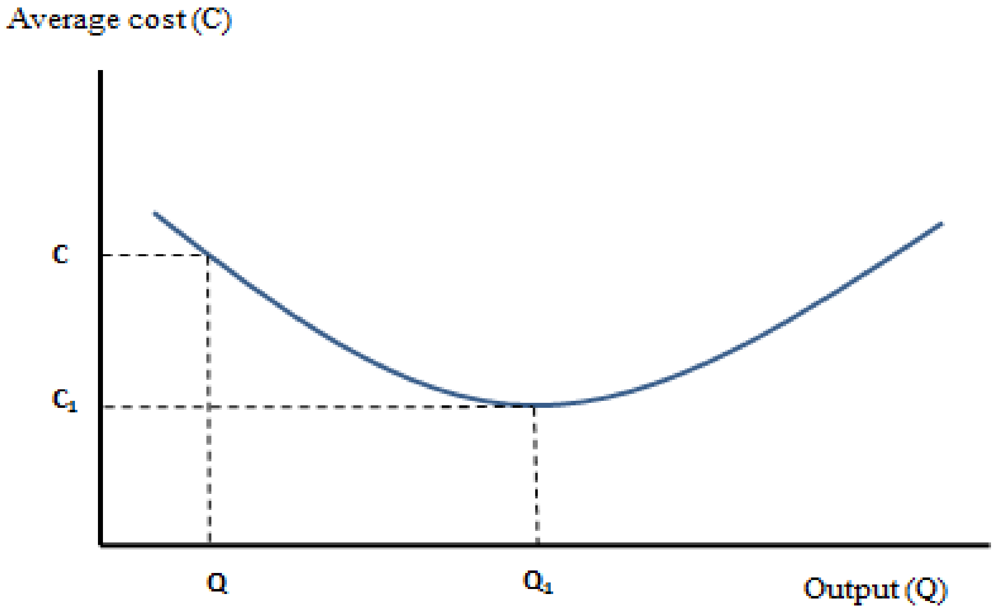
Low voltage electricity poles, the 'distribution network' connecting houses to the electricity grid.

2. Electrification and 'economies of scale'

Electrification can be briefly defined as *the expansion of the use of electricity by consumers (e.g. households, schools, firms, offices etc.) in a specific area*. Electrification usually involves increasing access of consumers to an electricity grid, with energy being centrally produced and then distributed to many metered connection points. However, individuals, households or businesses can also generate their own electricity using a generator or solar panel. A common measure of *electricity access* that scholars, development agencies and governments use is the *percentage of households that have an electricity grid connection, and consume a minimum level of electricity*. It is possible, however, to have electrification without an increase in household access to electricity. This occurs if electricity production is developed (and often funded) by one or more industrial companies, which have exclusive use of most of that electricity. As we will see further below, industrial production and use of electricity has often come before household use of electricity in the electrification process of African countries.

Electricity access is important for social and economic development for a number of reasons, but the most important is that the cost of energy is normally far higher for people who are not connected to an electricity grid. This is mostly because there are significant ‘economies of scale’ in the production of energy, including electricity. ‘Economies of scale’ mean that the average costs of one unit of output (e.g. one kWh of electricity) decline if the scale of production increases. Figure 1 offers a graphical representation, where C is defined as the average costs per unit of output, and Q represents total output. The average costs decline if the *fixed costs* of production - investments costs that have to be made before one can even start producing a single unit of output – are spread over more units of output. Diseconomies of scale also exist. As shown in Figure 1, these may emerge after reaching a certain point (Q_1), for instance if one approaches the capacity limits of one power plant and will need to build another power plant to further increase production. Compared to the small scale production of households, large companies usually also enjoy access to cheaper fuel costs which they can buy in bulk. This means that they have lower *variable costs* in production. Variable costs are costs that are directly and positively related to the amount of production.

Figure 1: A graphical representation of economies of scale



In other words, once the electricity plant is running, the marginal cost of a unit of electricity is always cheaper to produce in a large power plant, which is then distributed over a grid, than by a small home generator. Without grid access you need to purchase a generator (fixed cost), find and buy kerosene, diesel, candles or firewood, and you have to invest time in bringing all this together (all variable costs). Indeed, there are great efficiency gains by coordinating all these activities at a central level, but the way it is coordinated can differ a lot: electricity can be provided by a private company, it can be provided by a state-led organization or it can be done by the cooperative effort of a large group of households who pool resources to buy or produce electricity.

There is another dimension to 'scale economies' which is related to the distribution of electricity to end users: the more households, firms, shops or offices demand electricity from the grid, the cheaper it will be, on average, to build the grid, since the costs of this infrastructure can be spread among more participants. This creates opportunities to lower the tariffs that people have to pay to get connected.

Finally, the way electricity is generated also impacts the cost structure of production and the ongoing risks to production. Hydroelectric plants are very expensive and complex to build, often taking five years or even longer, but because an ongoing water flow powers the generators there are hardly any fuel costs. Because of *high fixed costs, but very low variable costs* such plants normally provide cheaper electricity in the long run than other sources. However, electricity generated from hydroelectric plants is dependent on water flow, which can be affected by periodic droughts. Oil, gas or diesel powered plants are cheaper but are subject to fuel costs which vary according to the local and global market for oil and gas, which can be unstable. The fuel efficiency of the plant also depends on the size and design of the plant. In particular the smaller, mobile or temporary thermal units that many governments order because they have emergency needs tend to have inefficient and expensive fuel consumption, that is, they have *lower fixed costs, but much higher variable costs*.

3. The challenges of finance and coordination

One major reason that there is so little electricity and electricity access in Africa is the problem of coordination. Power plants are expensive, take a long time to build (often more than four years) and require considerable organizational capacity to arrange for the financing, as well as the technical operations and maintenance of both the plants and the transmission and distribution networks. Today, the construction of a power plant requires a series of contracts between various parties. This includes a long term (often 10 to 20 years) power purchase agreement (PPA) which determines who will buy the energy, and a fuel supply agreement, which secures the fuel (if necessary) for the power plant. In order for a power plant to get the necessary debt financing from a bank, its PPA needs to be 'bankable', or signed with a creditworthy counterparty, like a large industrial company or a well-funded government or utility. Such investments are usually supported by collecting tariffs from customers or a credit support letter from the government.

However, governments and utility companies are not always creditworthy enough to get financing for a large power plant. African governments are also often reluctant to raise tariffs when fuel costs rise, because most utility customers (e.g. wealthier urban residents, businesses) represent politically powerful groups. This means that tariffs end up being subsidized by state-owned utility companies, so that the difference between the energy price paid by people connected to the grid and people who are not can be even larger than the difference in the cost of production. It also means that these state-owned companies are financially unsustainable and unable to raise funds required to expand and maintain their production capacity and infrastructure. But even African governments that are resource rich (e.g. major oil exporters) and can thus afford the construction of sufficient power plants from direct state budgets have often lacked that organizational capacity and long-term outlook.

To understand the complexity of developing a well-functioning national electricity sector, it is also important to consider that coordination is required between three fundamental parts: generation (plants producing electricity), transmission (high voltage lines which send electric currents from the plant to medium and low voltage networks) and distribution (typically the function of the electricity utility, which runs low and medium voltage power lines into communities and connects homes and businesses). There are typically one or more transmission grids which connect the three parts of the system and allow energy generated to be distributed over a large area. All these three parts need investment and maintenance. Generation 'comes first' because if there is not enough energy generated, homes and businesses connected to the grid will suffer from blackouts. However, if a transmission line is not maintained it may lose a lot of its current and if transmission lines are not extended, large parts of the country cannot get connected. Likewise distribution networks need investment to reduce technical losses of electricity, and need attention to metering and billing, to reduce so called 'commercial losses' from fraud, incorrect billing, and non-payment of bills.

To overcome coordination problems, in many African countries all three parts of the sector, generation, transmission and distribution, are run together by the same government controlled entity, and this is called a 'bundled' sector. In some cases the parts have been split out and are either run independently from each other, or one or more parts have been privatised and are owned by different parties. This is called an 'unbundled' sector. It is also possible to have a 'bundled' sector which has been privatised in its entirety, such as was done in Cameroon in 2001, though this is quite unusual.

In sum, there are various causes of low and insecure access to electricity in Africa. Lack of production capacity and a growing demand for electricity are part of these, but coordination failures can also be a reason for regular black-outs. Power outages raise the costs of production for businesses and complicate domestic work. It is now time to look a bit deeper into the historical development of the electricity sector.

4. Electricity production during the colonial era, c. 1890-1960

Electricity was first generated in Sub-Saharan Africa for a grid in the late nineteenth century and the early decades of the twentieth century. Table 1 presents some landmarks in the colonial history of African electrification, showing the early transmission of electricity technology to a number of African countries. Kate Showers has written a number of survey articles describing the beginning of electricity across Africa. She has noted that developments in technology to produce and distribute electricity came to Africa not long after they were developed in Europe and North America. She also notes, however, that in Europe and North America small thermal plants were quickly replaced by large facilities which could produce electricity much cheaper because of economies of scale, whereas in most parts of Africa, access rates spread at a much slower pace and that small, comparatively expensive plants continue to be used until today.

Table 1: Early efforts to produce and distribute electricity for a sample of African countries

Ethiopia	The first diesel generator was reportedly a gift from the German government to the Emperor in the 1890s
Ghana	The Gold Coast railway introduced the first electricity supply for public use in 1914
Nigeria	The Public Works Department was already supplying electricity to government buildings in Lagos by 1896
Sierra Leone	The colonial government installed a diesel generator in Freetown in 1928
South Africa	The first African city with electric street lights was Kimberly in 1882
Tanzania	Dar es Salaam had street lights before 1900
Zambia	A thermal station was in use by 1906

Source: K. Showers (2011). Electrifying Africa: An environmental history with policy implications. Geografiska Annaler: Series B, *Human Geography* 93:3: 196-197.

By the end of the colonial period in Africa, there was hardly any electricity access outside of the major cities and even in cities there was very limited household access. This is confirmed by a 1964 United Nations (UN) comprehensive report of the state of electrification of Africa (for more information about this see suggested readings at the end of this chapter). Colonial governments had concentrated their efforts on installing small generation facilities for colonial settler communities, and limited urban areas such as government quarters. Only in a few places did they invest in larger power facilities, especially responding to demands of large mines or industrial plants. Sometimes these were thermal stations fuelled by wood, coal or diesel, sometimes these were hydroelectric stations. Commercial enterprises during the colonial period also sometimes installed facilities for their own use, and in some situations sold the electricity generated privately to other users. Although electricity access was limited this does not mean that the facilities which were developed during the colonial period were unimportant. Many colonial facilities remained the foundation for electricity infrastructure for many decades after independence and in some places are still important sources of electricity today (even though they were insufficient to meet rising demand).

The UN report suggests that colonial governments up to the 1960s, or even the UN itself, did not see widespread household use of electricity for most Africans as practical or affordable. With very few exceptions (Nigeria possibly being one) colonial governments were only confident about the potential of large multinational industrial companies to pay for electricity. It was well known at the time that Africa's rivers had potential for hydroelectric power which required huge investments, but once undertaken, could provide relatively cheap energy in large quantities. In the late colonial era, many colonial governments thus conducted studies into, and developed plans for, the construction of large hydroelectric plants for industrial purposes.

Countries with great hydroelectric potential (Congo, Zimbabwe) or other abundant sources of fuel such as coal or oil (Nigeria, South Africa) had a clear advantage in the development of their electricity sector. In most cases colonial African governments would sign a long term contract with a major European or American company (often more than 10 years) to buy power at a fixed pre-determined price, which is called an 'off-take' arrangement. The contract with a long term client gave banks and other financing institutions the confidence to offer credit needed for the construction project. Under these arrangements, a number of large scale hydroelectric plants for large industrial projects took off. One example is the hydroelectric plant Edea, in Cameroon, which was built in 1953 in order to supply energy to a large aluminium smelter (now called Alucam, see photo below). In Mozambique the Portuguese colonial government finished building the large Cahora Bassa dam in 1974, after contracting out almost the entire amount of energy produced on long-term contracts to South Africa, who planned to use the electricity for industry. Likewise, the Kariba dam was built to supply large copper companies in the 1950s by the quasi-colonial regime of the Central African Federation (now Zambia, Zimbabwe and Malawi). The Owen Falls dam, in Uganda, was built in the 1950s with copper and other mineral processing in mind.

The building of these large dams had significant environmental and social consequences. They often required the physical relocation of thousands of people and disrupted the living environment for many more people. In some cases dams were build making use of forced or indentured labour, working under dangerous conditions. There have been a number of works describing the building of these dams and some of their consequences, by scholars including Julian Tischler (the Kariba dam) and Allen and Barbara Isaacman (Cahora Bassa dam).

View of the aluminium smelter Alucam from the Edea hydroelectric plant, Cameroon.

5. Growth and stagnation during the post-independence era

After independence, many African governments with hydroelectric potential continued to look for industrial off-takers to help develop their energy resources. Cameroon, for example, continued to expand and build more power plants primarily to support aluminium smelting. The newly independent government of Ghana likewise contracted with an international company to build an aluminium smelter, Valco, to develop a large hydroelectric plant at Akosombo. Another major example is the Inga Falls project 1 and 2, planned during the colonial period but commissioned by the Democratic Republic of Congo government in 1972 and 1982 respectively. Enormous dams were built in the Lower Congo river to supply electricity for the copper sector and other mining activities. However, these projects were never cost efficient, one of the problems being that the envisaged consumers (the mines in Katanga, Southeastern Congo) were located more than a thousand miles away from the production site (near Kinshasa, Western Congo).

Although generally the independent governments made a greater effort to electrify households than the colonial governments, progress remained slow, so that fifty years after independence most African households still lack access to electricity, even in places where there is significant electricity being produced. The main problem is that industrial consumers have nearly always been granted priority over households, partly because of their strategic position and partly because they often helped co-finance power plants. In some places the cheap rates of electricity and long term contracts for ore smelters have reduced the availability, and thus raised the price, of electricity for households. When droughts occurred (for example in West Africa in 1972-74), industrial consumers were served first, while households suffered from increased load shedding, with all its social and economic consequences.

Nevertheless, in most places access rates did increase over time, despite growing demand for electricity by households and business (partly driven by rapid population growth). One of the main reasons was the rapid rate of urbanisation across Africa. As cities grew, it became feasible to expand grid access making use of scale economies. This also meant that industrial users had to start competing with households for scarcely available energy. Yet, the better bargaining position of large industrial firms and their legal expertise (use of penalties in contracts for non-compliance) usually meant that industry maintained its preferential position vis-à-vis individual households.

Hence, for example, in Cameroon the aluminium smelter still consumes about 25 percent of the country's electricity, in spite of the fact that there is barely enough supply to meet the growing demand of the general public. The smelter also pays the local utility much less per unit of electricity than other users. In Mozambique too, very few households profit from the energy generated by the Cahora Bassa dam. According to the International Energy Agency only 20 percent of Mozambique's households had electricity access in 2011.

Taking into account all of the structural challenges and constraints of the power sector described here, the slow electrification of African countries after 1960 can be explained, firstly, by the diseconomies of scale of distributing electricity to a largely rural population scattered across vast hinterlands and, secondly, by the poor organizational capacity of African governments (some African states have collapsed all together). But the third constraint, the complications of arranging funding for the sector, has also continued to play a role.

The most significant single entity in the development of the global power sector after the Second World War was the World Bank, or as one of its predecessor entities was initially known, the International Bank for Reconstruction and Development. It was and is important in helping to plan and fund power projects all over the world, and particularly in post-independence Africa. The World Bank helped finance strategic plans, rural electrification programs and power plants. In order to understand the history of the African electrification, it is important to understand how changing power financing trends over time interacted with World Bank policies and global capital market developments. We may distinguish four phases.

In the first phase, during the 1950s and 1960s, the World Bank started to support a few African governments developing their energy sector. Despite there being a dire need, most countries did not start trying to connect the rural population until decades later. However, in a few countries, among them Cote d'Ivoire, the government did see the inclusion of the rural areas as a priority and consequently started electrification programs to extend access right after independence. Close to half of the people in Cote d'Ivoire was recorded as having a connection by 1980.

The second phase started with the oil crisis of the early 1970s. Those governments with rich oil resources like Nigeria found themselves with extraordinary resources to plan much more ambitious power sector expansion, but these projects took some time to plan and execute, generally until the 1980s. Countries without oil were forced by high fuel prices to look for alternatives, in particular hydroelectric capacity. Around the same time, a series of droughts forced governments with hydroelectric plants to look for alternative thermal power generation which could be relied upon during times of drought. Many governments could not pay back their power sector loans to the World Bank and other funding bodies.

The third phase started with the implementation of structural adjustment programs (SAPs) from the mid to late 1980s, when most African countries had become heavily indebted, and funding for the sector slowed. Government budgets were cut under the influence of the International Monetary Fund (IMF). A few countries with programmes which had been planned from the late 1970s continued, such as the ambitious Nigerian programme. However, although three billion US$ was invested in new generation capacity in Nigeria, poor organizational capacity jeopardized proper maintenance of existing capacity, so that the program had a disappointing net impact on the sector.

The fourth phase was the reforms of the 1990s and 2000s. Because of the problems with debt accumulation and debt repayment, including the loans to the electricity sector, the World Bank encouraged reforms. At the same time, the World Bank and other development finance institutions (DFIs) started providing funds for rural electrification programs. The reforms involved the commercialisation of utilities, unbundling of the sector, and privatization. However, these reforms did not have much success in attracting private capital, as the investment in climate in Africa was still regarded as comparatively risky, and power sector deregulations in the US and Europe offered more attractive investment opportunities. There were exceptions, however. The electrification programs of Ghana and Cameroon, for instance, were highly successful. Since 2000, companies and organisations backed by the Chinese government are playing an increasing role in funding and building large scale infrastructure projects, including power generation. The website http://china.aiddata.org/ maintains a database of Chinese involvement in African infrastructure projects. In a few African countries, such as South Africa, commercial lenders have also become important for financing power projects.

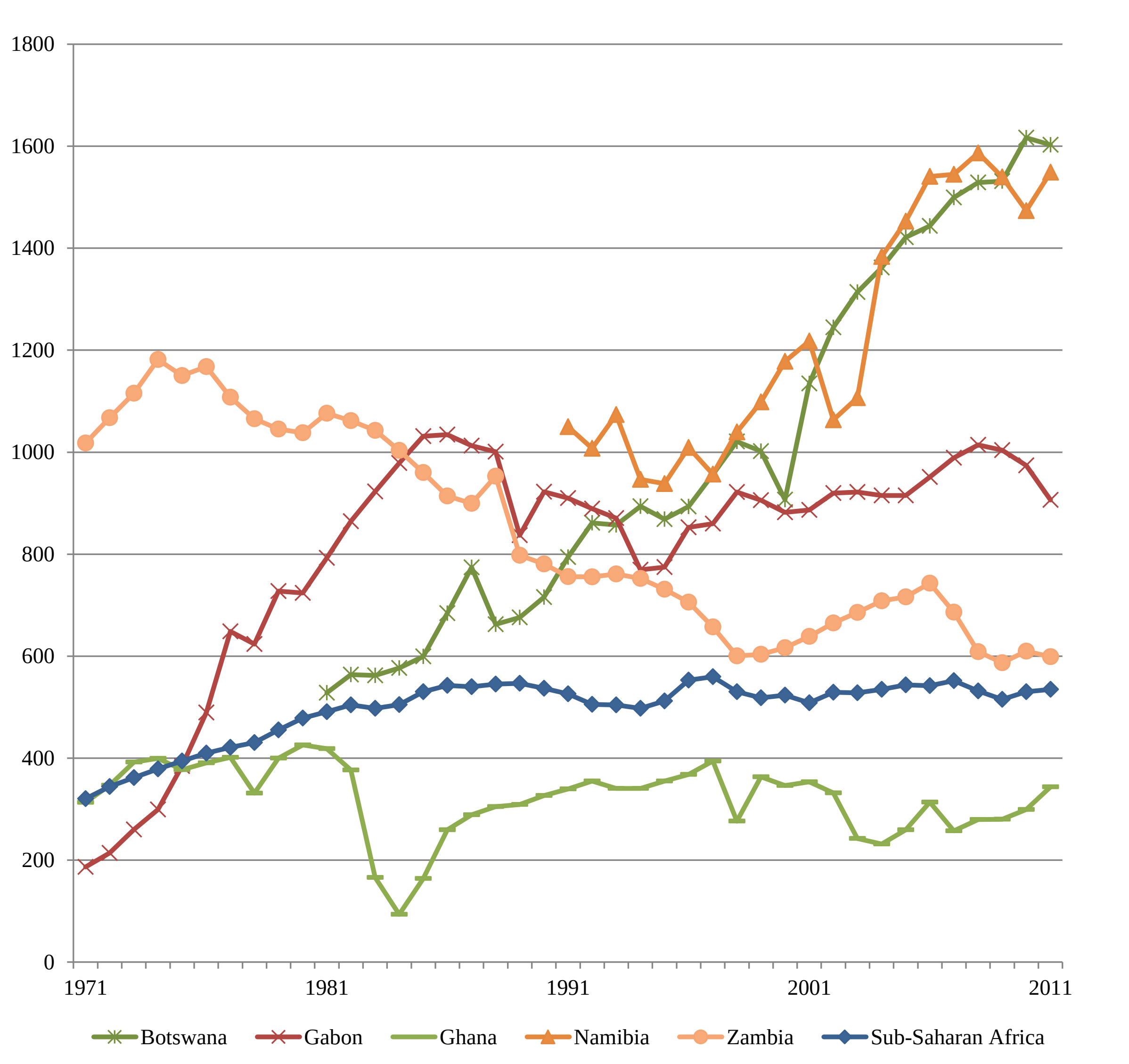
6. Understanding intra-African differences in electricity consumption

In the post-independence period, as in the colonial period, the countries where it was easiest to get low cost and large scale electricity generation were the same ones which either had hydroelectric potential or a large industrial client who could help to finance a power plant. A considerable number of countries in Africa, however, lacked commodity wealth, hydroelectric potential or a large dense population. But there are also exceptions to the rule. Some countries, such as Nigeria, had a large and relatively dense population, and so could support a large hydroelectric building program on a mixture of industrial, small commercial, and household demand, and Nigeria in the 1960s had a very ambitious program to expand its generation. Nigeria later funded even more expansion in the 1980s with the revenues from its oil wealth, though as noted above this generation capacity was not maintained and so the country still suffers from an acute shortage of electricity.

Figure 2 below (and Appendix A at the end of the chapter) shows World Development Indicators data compiled by The World Bank on a few African countries on electricity consumption per capita. In this case, consumption is defined roughly as production which can be sold. Electricity is generally not produced unless it can be sold and in the post-1970 years demand tended to outweigh production. In 2011 (the most recent estimate), most Sub-Saharan African countries had a per capita electricity consumption of less than 400 kWh. The Sub-Saharan African regional aggregate, including South Africa, was less than 550 kWh per capita. To put this in global perspective, the United States in 2011 consumed 13,246 kWh per capita. OECD countries consumed 8,173 kWh and India 684 kWh per capita.

Figure 2 shows some leaders in African electricity production per capita currently including Botswana (which showed steady growth from early 1980s when data was first collected), Namibia (growth from early 1990s when data is first available), and Gabon (growth during 1970s, but no growth thereafter). Zambia had relatively high levels of consumption per capita in the early 1970s which has declined since then. These however are the exceptions, on which more research should be carried out in order to explain, and verify, the trends in more detail. It is clear from the Sub-Saharan Africa regional aggregate that most of the other countries, such as Ghana, have had consistently low use per capita over time. Since all of this data is done on a per capita basis, population size and growth relative to resources and other factors, as opposed to the development of the power sector alone, are a strong determinate of each country's place in the chart.

Figure 2: Electric power consumption for a selection of countries (kWh per capita)



Source: World Bank, World Development Indicators (International Energy Agency (IEA Statistics © OECD/IEA, http://www.iea.org/stats/index.asp), Energy Statistics and Balances of Non-OECD. See http://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC/countries?display=default, accessed 17.7.14). *Note:* Electric power consumption measures the production of power plants and combined heat and power plants less transmission, distribution, and transformation losses and own use by heat and power plants.

As already noted, total electricity consumption and production is an important indicator of electrification, but electricity access indicates the proportion of households that actually benefit from this electrification. Global sources of data about electricity access are scarce, especially historically. Information on access is normally gathered from electricity utilities who know how many metered connection points they have, and then can estimate how many households they serve and the average size of the household. Information is also collected from household surveys and the census, where people are asked if they have a connection at home. Because of these various information sources, and because many people have illegal connections or share meters with many other families, it is very hard to get accurate estimates of electricity access, especially over time. Many surveys only started to include questions on electricity access during the 1990s, so it can be challenging to get long term historical data on electricity access from anyone other than the electricity utilities.

Regarding electricity *access*, The World Bank's World Development Indicators only have data for 2010-2011 from a minority of African countries. The International Energy Agency has the most commonly used current estimates of household electrification, showing that in 2011 just 32 percent of people in Africa (as measured by households) had access to an electricity grid. This compares to 75 percent in India, 95 percent in Latin America, 91 percent in the Middle East. Within Sub-Saharan Africa, there are also big differences in access rates. Mauritius and South Africa have the highest rates, of 99 percent and 85 percent respectively (the energy sector development of South Africa was exceptional in Sub-Saharan Africa, and is not examined in detail in this chapter). There is a group of West and Central African countries with relatively high rates of access of about 50-60 percent, and these include Nigeria, Ghana, Gabon, Cote d'Ivoire, Senegal, Cameroon. At the same time, there are some Eastern and Central African countries with very low access, including among others Zambia, Mozambique, Uganda and Kenya.

In addition to the development of large hydroelectric dams and oil wealth already discussed, there are many other reasons why some countries have more electricity production and greater levels of access than others. An overview of some of these reasons, with country examples, is provided in table 2 below. More research is still needed to find out how each of these factors has affected access rates of individual countries.

Table 2: Major reasons for differences in electricity access in Africa

Resource endowments	Whether the country has rivers and potential for hydroelectric plants, gas, oil or coal reserves, solar irradiance or wind resource or a port which makes it easier to import fuel. For example, during the 1980s Nigeria funded electricity generation investment from its oil revenues, though it failed to maintain the plants and many fell into disrepair.
Urbanisation and topography	It is easier and cheaper to connect new customers if they are concentrated in cities, or if the landscape makes transportation and network extension easy. Almost all African countries have seen higher rates of electricity access corresponding to growth in urbanisation.
Colonial policy and legacy	Some countries had more colonial settlers with access to a grid, or colonial governments had specific industrial or infrastructure needs which helped get generating plants built. For example, South Africa had an advanced electricity sector built for its settler population but there are very few other examples of this.
Utility, regulatory management	During certain periods some countries had better organised utilities and power plants, with high quality management, or very poor organisation.

Political stability	If a country has war or civil unrest it is unlikely to be able to extend network access and the existing grid is often destroyed. For example, countries such as Liberia, Sierra Leone, Democratic Republic of Congo and Rwanda made very limited grid investment during their periods of conflict.
Affordability	As countries and households have more income, governments have more stable fiscal and monetary policies, investment becomes more likely. For example, in Cote d'Ivoire electricity access and generation capacity received significant early investment because of its large population of farmers who could afford to pay for electricity.
Resources to attract industrial clients	If a country has mineral wealth such as bauxite, copper, etc, this made it more likely that an industrial client could support the building of a power plant, which in time may facilitate access for households. For example, Zambia and Zimbabwe (as the Central African Federation), Democratic Republic of Congo and Uganda all received investment in hydroelectric plants because of mining potential.
Government policy and donor attention on access	Some governments prioritized access early after independence, such as Cote d'Ivoire, while other government saw other infrastructure projects such as roads as more important priorities. Also some countries, such as Ghana, were able to attract and organise donor funding for rural electrification from the 1990s onwards.

7. Development challenges and opportunities

In Africa governments generally own power plants and utilities and so are limited to their own institutional capacity and affordability to get plants constructed and funded. However, even though very few electricity sectors were fully privatized in Africa, most countries have introduced some reform in order to bring in private sector investment and expertise, with mixed success. As with electricity access, Cote d'Ivoire was quite advanced in its power sector reform. The first privately funded independent power projects (IPPs) in Africa were there, CIPREL and AZITO in the 1990s. In addition, Cote d'Ivoire privatized its electricity utility in 1992, and it performance is very advanced compared to other African countries. There are just a handful of other privately owned utilities in Africa, and they mostly became private during the World Bank-driven reforms of the 1990s and early 2000s, such as Cameroon and Uganda.

The frequent instability of African governments and their fiscal regimes in the post-independence era has complicated debt or equity financing for power plants. In the last two decades the World Bank developed two tools for governments and investors which are now important in alleviating these risks and attracting power sector investment in Africa. These are Partial Risk Guarantees (PRG) and Multilateral Investment Guarantee Agency (MIGA). They use the World Bank's relationship with governments to provide private debt and equity providers with guarantees that a state will uphold its part of the contract in a private project, ringfence funding to ensure that financing providers will be paid for a period of time if contracts are not honoured in good time, and provide political risk insurance. Many private projects use these instruments, often together, and they have been effective because they structure a way for the World Bank to intervene and mediate with governments when there seems to be a risk that the guarantee and insurance will be required.

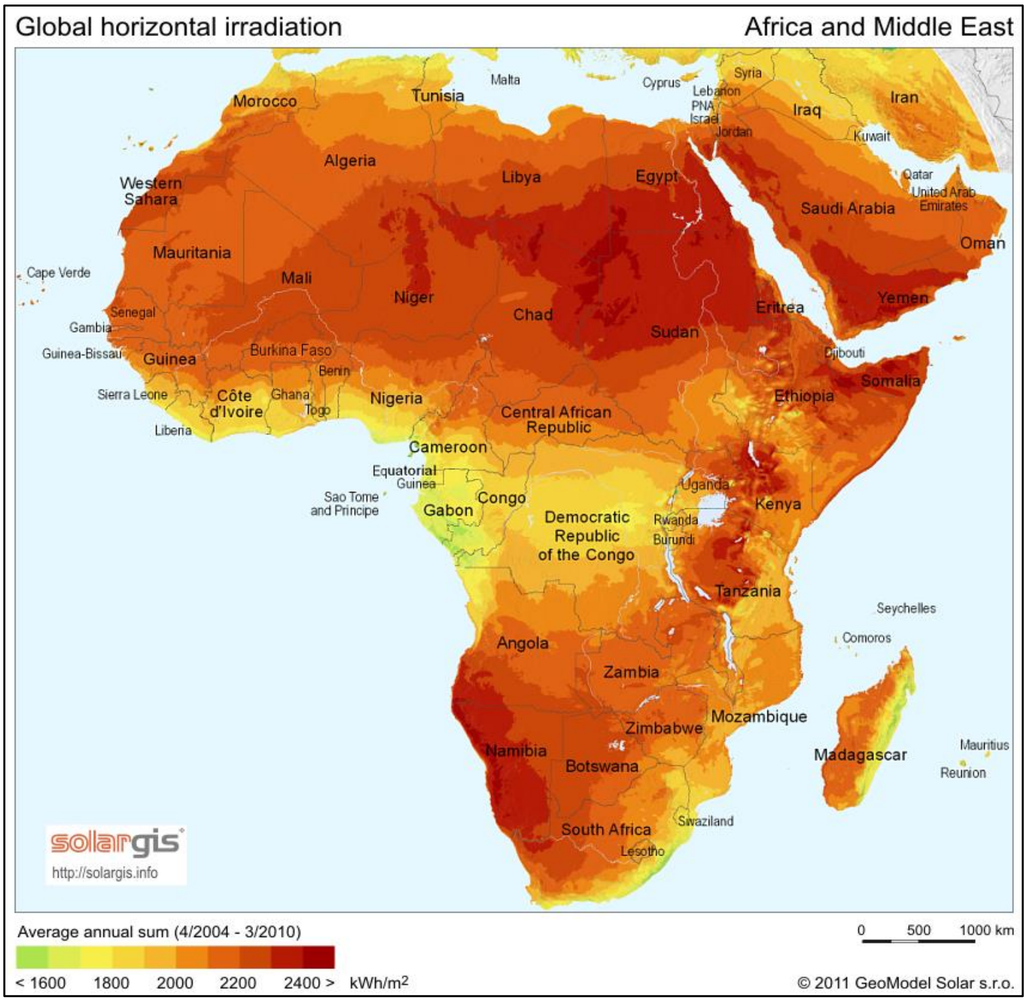
A modern African electricity substation.

As an alternative to privatization, a number of countries have instead chosen to offer management contracts of parts of their sector to international expert firms, with mixed success. In Zambia, for example, there is a large private company which supplies energy to mines, called Copperbelt Energy Corporation (CEC), but energy supply to households is mostly done by the government. Anton Eberhard of University of Cape Town and his co-authors have written a series of books describing the regulation, structure and state of the sector across Africa, which are available for free online (see suggested readings).

Although many parts of Africa, as shown in the irradiance map in Figure 3 below and in similar maps showing wind strength data, have strong potential for solar and wind energy, they have not yet been very significant sources of electricity in Africa.

In order for these renewable energies to be viable on a large scale (i.e. connected to a grid), their costs need to become lower than the costs of their primary substitute: diesel generators running on diesel oil. As solar and wind energy expand in the rest of the world the cost of turbines and solar panels have decreased. The technology becomes more mature and economies of scale have driven down prices. Wind became widely cost competitive in 2007, and solar is only just (2013-14) becoming cost-competitive against the price of diesel in some places in Africa, so we can expect it to increase further in places with high solar energy potential. Construction started on the first large-scale wind and solar farms in South Africa in 2012, which were some of the first in Sub-Saharan Africa. In both 2012 and 2013, there was over $10 billion of new investment in this ‘clean’ energy in the Middle East and Africa. Before 2012, investments had never exceeded $4.5 billion per year.

Figure 3: Solar irradiance in Africa



Source: http://solargis.info/doc/_pics/freemaps/1000px/ghi/SolarGIS-Solar-map-Africa-and-Middle-East-en.png

8. Conclusion

Electricity has come slowly to Africa and many Africans are still excluded from access or live in areas with insecure supplies. There are clear reasons for this lack of access. Four key trends should be noted from this chapter:

First, a limited colonial legacy: very little electricity generation or household access was achieved during the colonial period. In some countries with hydroelectric potential, some sizable assets were built in selected African countries to support industrial activity, but household demand remained largely neglected. Secondly, industrial rather than domestic consumers have continued to be the main beneficiaries of efforts after independence: since independence, the early investments have been both a blessing and a curse, as they created capacity which would otherwise not have been built, but then industrial consumers got preference on capacity when households were eventually connected and demand rose. Thirdly, resource endowments, such as availability of gas, oil, coal or hydroelectric power potential have all been instrumental in determining how countries have developed their electricity supply. Solar and wind electricity potential are bound to play a major role in the future and offer new opportunities to enhance energy security. Fourthly, government institutional capacity has been crucial: electricity infrastructure has been and continues to be largely government owned and/or regulated. Regardless of a country's factor endowments, the organisation and ability of a government to implement and maintain investments has been a crucial factor in the development of its energy sector. Funding bodies like the World Bank have been important in providing both financing and institutional support for raising production capacity and extending electricity distribution networks.

Study questions

1. What was the colonial legacy of electricity in Africa?
2. What has been the role of the World Bank in the electrification of Africa?
3. What are the main reasons why Africa does not have sufficient electricity generation capacity for its needs?
4. Why are there such large difference in electricity access rates between various countries and regions within Africa?
5. What has been the development, social and environmental impact of Africa's hydroelectric dams?
6. Has private sector investment in the African electricity sector been a success? What about private management contracts?

Suggested readings

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Electricity access data: *World Energy Outlook 2012* – Electricity Access Database. Data as of 2010. See International Energy Agency, 'World Energy Outlook – Methodology for Energy Access Analysis' (2012).
www.worldenergyoutlook.org
www.worldenergyoutlook.org/media/weowebsite/energymodel/documentation/energyaccess_methodology_2012_FINAL.pdf

About the author

Hanaan Marwah both works in the African power sector and researches the history of African infrastructure. She was formerly a teaching fellow at London School of Economics in the Department of Economic History and received her doctorate in Social and Economic History from the University of Oxford.

Appendix: Electricity consumption in a selection of African countries, 1971-2011 (kWh/capita)

	1971	1981	1991	2001	2011
Angola	92	64	63	97	248
Botswana		528	794	1,134	1,603
Cote d'Ivoire	94	184	146	187	212
Cameroon	147	192	188	161	256
Congo, Rep.	56	69	183	105	172
Eritrea				47	49
Gabon	186	792	910	887	907
Ghana	313	418	340	353	344
Mozambique	49	35	53	269	447
Namibia			1,050	1,218	1,549
Nigeria	28	51	89	75	149
Sudan	26	34	48	53	143
Senegal	75	106	103	124	187
Togo	64	67	84	100	
Tanzania	30	38	54	60	92
Congo, Dem. Rep.	162	136	124	96	105
Zambia	1,018	1,076	756	638	599
Zimbabwe	661	959	852	826	757
Sub-Saharan Africa	**320**	**491**	**526**	**508**	**535**

Source: World Bank, World Development Indicators (International Energy Agency (IEA Statistics © OECD/IEA, http://www.iea.org/stats/index.asp), Energy Statistics and Balances of Non-OECD. See http://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC/countries?display=default, accessed 17.7.14)

Chapter 15

Natural Resources: A Blessing or a Curse?

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1. What is the 'resource curse'?

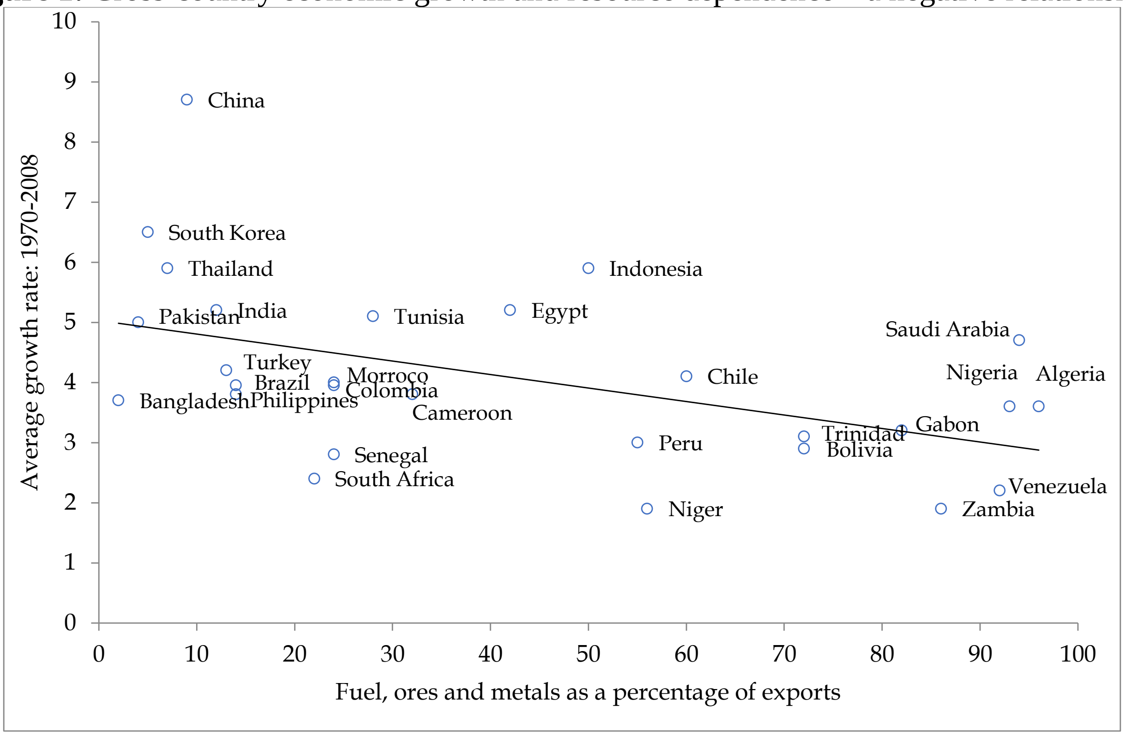
"*We are in part to blame, but this is the curse of being born with a copper spoon in our mouths*" – Kenneth Kaunda, First President of Zambia

The term 'resource curse' refers to the idea that the possession of natural resources (particularly in the form of oil or minerals) does not necessarily lead to economic success, and that resource wealth can even have a structural negative impact on long-term economic development. While it seems strange to suggest that a country could be economically (as well as socially and politically) hindered by its possession of a valuable – and often essential – economic input, scholars who believe in the resource curse suggest that, more often than not, resource-rich or resource-dependent countries are worse off compared to countries with few natural endowments.

Since the Scramble for Africa began in the 19th century, Africa's natural resources have attracted a lot of attention. It may come as somewhat of a surprise that the African continent was not the main supplier of any of the central raw materials of great importance in the 19th century global economy. For instance, of the natural resources coal, iron, oil, cotton, rubber and copper, only rubber was a primarily colonial product, and four-fifths of the world's supply was derived in British Malay and the Dutch East Indies. More recently, many African countries are increasingly rich in oil, diamonds and minerals. Yet, African countries have and continue to experience low levels of economic growth and development.

By contrast, in the second half the 20th century many East Asian economies have experienced very rapid economic growth and achieved Western living standards despite having no exportable resources. In 1993 Richard Auty, an economic geographer, coined the phrase 'natural resource curse' to describe this counter-intuitive phenomenon. Two years later, the economists Jeffrey Sachs and Andrew Warner initiated the big statistical literature on the subject. They found that dependence on natural resources was connected to low levels of economic growth. As shown in Figure 1, the relationship between economic growth (measured by the average annual growth of per capita Gross Domestic Product) and resource dependence (measured by the share of natural resources in total exports), is negative: this means that, at least for the period 1970 to 2008, the economies of countries whose wealth consisted mostly of natural resources grew at a slower rate than those with a lower share of resource wealth. Many scholars have argued that this relationship holds, on average, over different sample periods and for different measures of resource wealth. Sachs and Warner, for example, claimed their findings are not easily explained by other factors or by alternative ways of measuring resource abundance or dependence. More recently, Frederick Van der Ploeg has pointed out the variety of experiences of resource rich countries, though noting that the resource curse is primarily a phenomenon of the last 40-50 years. He points to the benefits of natural resources for countries with "good institutions", free trade and high levels of investment in extractive technology. A key lesson from American history, according to Van der Ploeg, is to invest in the technologies needed to explore and develop natural resources. Yet, he still acknowledges there is an apparent curse present for many resource dependent countries, and particularly in presidential democracies with underdeveloped financial systems.

Figure 1: Cross-country economic growth and resource dependence – a negative relationship



Sources: Penn World Tables and World Development Indicators

2. Five explanations for the resource curse

The resource curse is not universal. There are many examples of resource abundant and economically successful countries such as Norway and Australia. Within the African continent there are differences too. Furthermore, countries can experience turnarounds. Former successful countries such as Venezuela (rich in oil), have had downturns whereas Chile (rich in copper) has seen great improvement in the management of its natural resource wealth.

Historically, natural resources such as coal and iron were a geographic blessing. The Industrial Revolution in England and the subsequent economic development of the lower Rhine and the

United States were achievable in part due to access to natural resources. There are many historical examples of countries that developed their resources as part of strong economy-wide growth. Examples of economic growth tied to natural resource wealth include:

- the United States during 19th century industrialization period
- Venezuela from the 1920s to the 1970s
- Australia since the 1960s
- Norway since its oil discoveries of 1969
- Chile since adoption of a new mining code in 1983
- Peru since privatization in 1992
- Brazil since the lifting of restrictions on foreign mining firms in 1995
- Botswana (more on this later)

In spite of these success stories, the resource curse idea persists and has been a strong feature of the economics of developing regions since the 1960s. The dynamics of the curse are puzzling and several primary explanations have emerged.

Explanation 1: Long-term declines in commodity prices

The first major explanation for the economic hardship induced by natural resources emerged in the late 1940s by two economists, Hans Singer and Raúl Prebisch. The Singer-Prebisch hypothesis maintained that the terms of trade (the value of a country's exports relative to its imports) worked against countries that exported primary products (which include unprocessed natural resources). In other words, in the long run prices of primary products like cotton declined relative to manufactured goods such as cars. This led many development economists of the post-World War II era to recommend import substitution industrialization policies (ISI). ISI policies involve a rise of import tariffs in order to encourage domestic manufacturing and industry and, ultimately, long-term economic development. Economic historians and economists have tested the Singer-Prebisch hypothesis with mixed results. The general conclusion is that there has not been an overall decline in resource prices.

As shown in Table 1, there is some evidence of what is often called "super cycles" in commodity prices: that is, long boom periods – lasting several years – in which prices rise, followed by similarly lengthy periods of decline. Over the long run, however, there is little evidence of the sustained fall in commodity prices Singer and Prebisch predicted. What is much clearer is that resource prices have been extremely volatile, something we discuss next.

Table 1: Historic Commodity Super Cycles (1788–2011)

Start date	End date	Size of cycle (nominal price change)	Length of cycle (years)	Index
Mar-1788	Dec-1814	135%	26.8	Warren and Pearson
Dec-1814	**Feb-1843**	**-62%**	**28.2**	Warren and Pearson
Feb-1843	Aug-1864	208%	21.7	Warren and Pearson
Aug-1864	**Jun-1896**	**-70%**	**31.8**	Warren and Pearson
Jun-1896	April-1920	218%	24.0	Warren and Pearson
Apr-1920	**Jun-1932**	**-80%**	**12.2**	CRB monthly
Jun-1932	Jan-1951	689%	18.6	CRB monthly
Jan-1951	**Jul-1968**	**-40%**	**16.6**	CRB monthly
Jul-1968	Oct-1980	215%	12.3	CRB monthly
Oct-1980	**Oct-2001**	**-31%**	**21.0**	CRB monthly
Oct-2001	June-2011	145%	9.8+	Spot Index (Bloomberg)

Sources: Warren and Pearson (1933) and public data from Commodities Research Bureau and Bloomberg.
Note: based on US commodity price cycle. Contractionary cycles in bold.

Explanation 2: Volatility

The problem of volatility is the second major explanation for the resource curse. Volatility refers to the ups and downs of the price of a natural resource. The price of natural resources is, for the most part, set by world markets. In other words, resource-rich countries are price-takers not price-setters. Commodity prices are far more volatile than those for manufactured goods and services. Take oil for instance. James Hamilton argued in 2008 that the best predictor of future oil prices is the current oil price. Historically, oil prices have been completely unpredictable. The volatile price of a resource affects an economy through a number of channels. Governments of resource dependent countries collect a large part of their budgets from taxing natural resource exports. If the price of a resource drops considerably in a given year then the government will have less revenue. Because the government's income can drop unexpectedly it does not allow for accurate long-term planning. Governments of resource dependent countries can also get into trouble when the prices of natural resources are high. During these boom times, these governments find it easy to borrow money (banks are willing to lend to resource rich countries when prices are high), creating debt for their countries that becomes harder to pay when a downturn in prices occurs.

Economists have identified a tendency towards what they call a "procyclical" relationship between key economic variables and commodity prices in many resource-rich countries. This means that a number of key economic variables – like wages or government spending – tend to increase as the price of the commodity (such as oil) increases. Similarly, when the price of the commodity falls, so too do wages and government spending. The procyclical relationship between commodity prices and a range of other important economic variables reflects the fact that the economy's fortunes are tied to the fluctuating price of the commodity it is dependent on. Van der Ploeg suggests that volatility is the central problem of the resource curse.

Explanation 3: Lack of diversification

The third explanation for the resource curse is that natural resource wealth undermines broad based economic development. From this perspective a country must diversify its economy in order to develop. In economics this phenomenon is referred to as the Dutch Disease (a term coined by *The Economist* in 1977 referring to the discovery of natural gas in the Netherlands in 1959). Dutch Disease is the observation that a country's currency becomes more valuable (known as currency appreciation) as it is exporting lots of natural resources. As a result, the country's other exports become more expensive, and so more likely to be undermined by cheaper competing goods from other countries. This hurts the resource exporting country's manufacturing sector, whose development typically requires significant growth in exports. These problems are compounded and reinforced when economic input, such as labour and capital, are then allocated to non-tradable sector (because the tradable sector is no longer competitive and the non-tradable sector offers better wages and profits), further damaging the country's ability to develop an export-orientated manufacturing. Again, this is connected to the idea that industrialisation is necessary for development. The lack of industrialisation is particularly problematic in the long run. Whenever resource prices drop or resources are depleted, these countries do not have another sector of the economy to rely on.

Explanation 4: Poor institutions

The fourth explanation for the resource curse has become increasingly influential over the past two decades. For some economists, such as Dani Rodrik, "institutions trump everything else", such as geographical factors or particular policies, as an explanation for development failures of resource-rich countries. One of the strands of this argument is that countries with few natural resources have a greater need to establish stable, market-based economies in order to raise government revenues. According to this view, governments in relatively resource-poor countries have a vested interest in ensuring rising incomes on the part of citizens and private businesses, as this creates a tax base that government needs to finance itself. In contrast, government resource-rich countries face weaker incentives to promote this kind of economic development, as they can finance themselves (at least temporarily) by revenues derived from natural resources. Rather than promote sustainable income growth of businesses and citizens, resource-based economies can be characterized by an unproductive race to capture the profits and benefits from the resource sector.

There are a number of criticisms on the institutional perspective. For example, it is unclear whether "good" institutions are the *cause* of good economic performance, or rather the *result* of it – that is, the direction of causality is not evident. Or even more fundamentally, there is little certainty about what "good" institutions for economic development are. Economists often refer to general institutions, such as the rule of law, the protection of property rights, and constraints on the executive branch of government. Quantitative studies have argued that the general relationship between resource wealth and the quality of these institutions is negative. However, note that this negative relationship does not by itself tell us anything about the causal relationships between institutional quality, resource dependence and economic growth and development. Moreover, it is far from clear that these general institutions are powerful predictors of economic growth – many countries with “good” institutions (as per these measures) have failed to achieve sustained economic growth, while others with much poorer measured institutions achieved strong growth.

Explanation 5: Conflicts

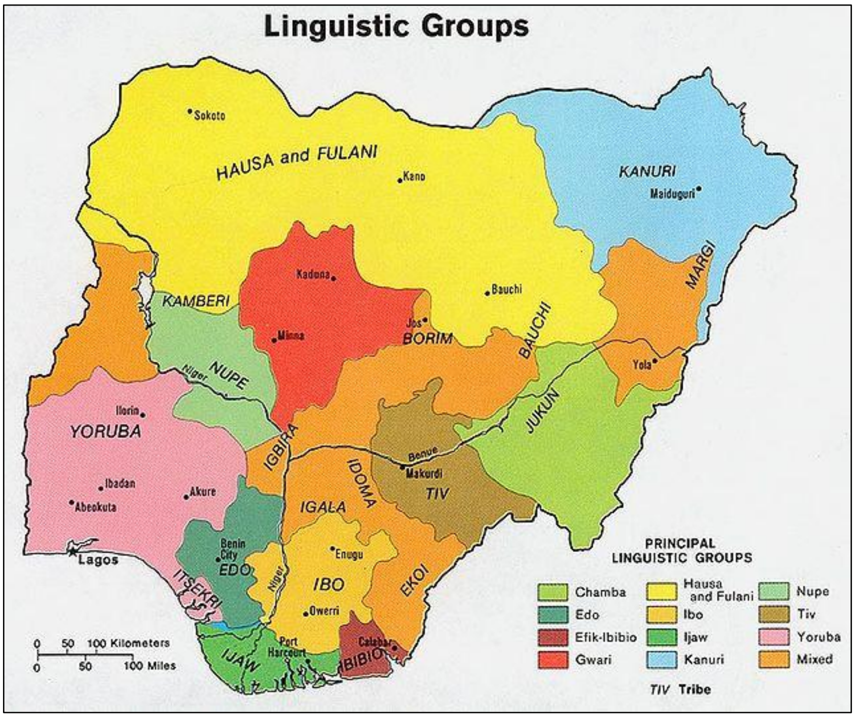
A final explanation relates to the higher risk of conflicts in resource rich countries. Conflicts, disputes and wars arise from people contesting the ownership of natural resources. Some scholars also suggest that the risk of such resource-driven conflicts are accentuated in countries with greater ethnic diversity, particularly when resources are located in an area controlled or dominated by one particular ethnic group. Paul Collier has further argued that if resources are easily (or cheaply) accessed, like certain diamond deposits, they become a way to finance war and conflict. This is most clearly demonstrated by the tragedy of “blood diamonds” and “conflict minerals”. The most famous examples of the “blood diamonds” come from West Africa, particularly Sierra Leone and Liberia, where from the 1990s diamonds were mined, sold illegally and used to finance civil conflict. “Conflict resources” such as gold and titanium have been used to finance civil war in the Democratic Republic of the Congo, which since 1996 has been the deadliest conflict since World War II. Again, the relationship between natural resources and conflict has been questioned on the grounds of unclear causality and the ability to generalize about complex and often highly context-specific forms of conflict. However, what is beyond dispute is that many historic and current conflicts have either been fought over, or financed by, resource rents – and that these conflicts and wars are very costly in terms of economic performance.

The resource curse is not universal but we do know that, on average, resources have been more of a curse than a blessing, especially since World War II. There are several ways of understanding why this is the case. Different explanations for the resource curse lead to different ways of solving the problem. A question we need to ask is can the resource curse be lifted? One way of answering this question is by looking at two real-world cases from the African continent, Nigeria and Botswana.

3. Nigeria: the ultimate example of the resource curse

Nowhere are all the pathologies associated with the resource curse as clearly manifested as in Nigeria. Oil was discovered in the Niger Delta region of Nigeria in 1956, four years before the country achieved its independence from Britain. Nigerian oil is relatively pure and easy to extract and refine. It is almost exclusively found in the Niger Delta region of the country. Nigeria, a country with a population of about 170 million people has over 300 ethnic groups as well as a substantial religious divide between Muslims in the north and Christians in the south. The Niger Delta, in particular, is an ethnically diverse part of the country, as shown in Figure 2.

Figure 2: Linguistic Groups in Nigeria

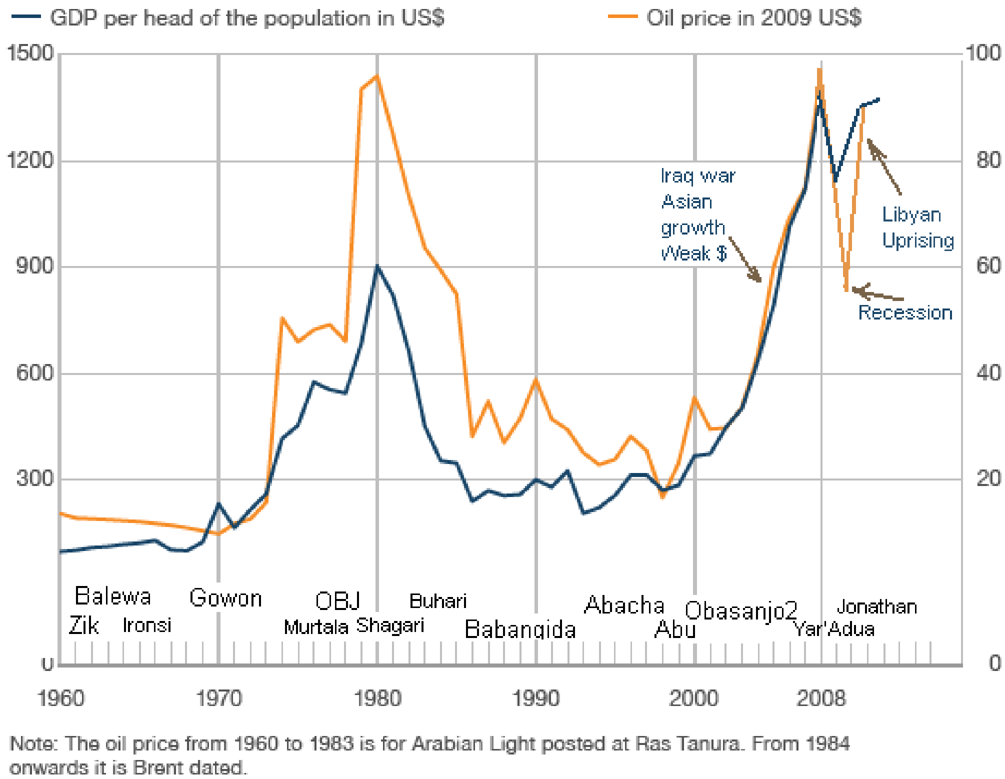


Source: Central Intelligence Agency (1979).

Nigeria is Africa's largest producer of oil and it is fifth globally. Despite the oil revenues, Nigeria's per capita Gross Domestic Product in 2000 was 30 percent lower than it was in 1965. In fact, Nigerians living below 1USD per day has risen from 27 percent in 1980 to 61 percent in 2012. Why has oil been more of a curse than a blessing in Nigeria?

The Nigerian example can be used to justify aspects of all of the arguments for the resource curse discussed above. One of these aspects is resource dependence. Rather than oil being one of many exports, the Nigerian economy is almost wholly dependent upon oil revenues. For example, in 2011, crude petroleum (or oil) accounted for 78 percent of all of Nigerian exports. Volatility increases with resource dependence. Nigeria's economy and government is reliant upon a source of income that fluctuates greatly depending on the international price of oil (see Figure 3). As a result, public investment has been stop-start (what we call procyclical) depending on the price of oil. This leads to problems such as large public investments in infrastructure that are left unfinished. During periods of oil price booms, the government initiated unsustainable levels of spending. When the price of oil dropped in the early 1980s, the Nigerian government borrowed a great deal leading to high debt levels that worsened with government debt mismanagement. Ultimately vast sums of money were spent on paying interest and penalties on loans (this has been more recently addressed with a debt relief programme initiated in 2006).

Figure 3: Oil price and Nigerian growth source



Source: World Bank Development Indicators/BP/BBC.

A related problem is that the revenue and public investment boom associated with and financed by a resource-revenue boom can lead to inefficiencies, wasteful spending and bottlenecks. In essence, the question is whether developing economies can absorb the rapid increase in spending associated with resource booms. Nigeria has a long-standing problem with poor institutions and the government has not acted responsibly with its oil revenues. An example of bad government investing is the Ajakouta steel complex constructed in the 1970s, which, until today, has not produced a single commercial ton of steel. While the causes of Nigeria's weak institutions are debated and run deep, economic historians will point to aspects such as ethnic diversity and fragmentation, the damage from its colonial legacy, and a system of rent-seeking and corruption.

Economic historians emphasize the role of "divide and rule" colonialism in Nigeria. Colonial powers emphasized ethnic divisions in order to maintain control. With the concentration of oil in one major ethno-geographic region, tensions have arisen. Furthermore, the government realizes that oil is an "exhaustible resource"; there is an increased race to capture rents in such a situation. The government is also less accountable to its citizens because it gains the majority of its revenue from oil rather than from taxes. The government does not need to appease the agricultural sector, for example, because it is not reliant on a diversified tax base. Nigeria has a history of successive military dictatorships that have plundered oil wealth. The country has witnessed the assassination of two leaders, had six successful military coups and four failed ones as well as 30 years of military rule. Conflict, often associated with the resource curse, has been prevalent in Nigeria's post-colonial history. The Biafran war of the late 1960s was Africa's deadliest civil war with anywhere from 1 to 3 million deaths. It was, in part, an attempt by the eastern, predominantly Igbo region to gain control over oil reserves. There has been almost continuous conflict in the Niger Delta regions between government officials and rebel forces since 1990, although the extent of the violence has declined in recent years.

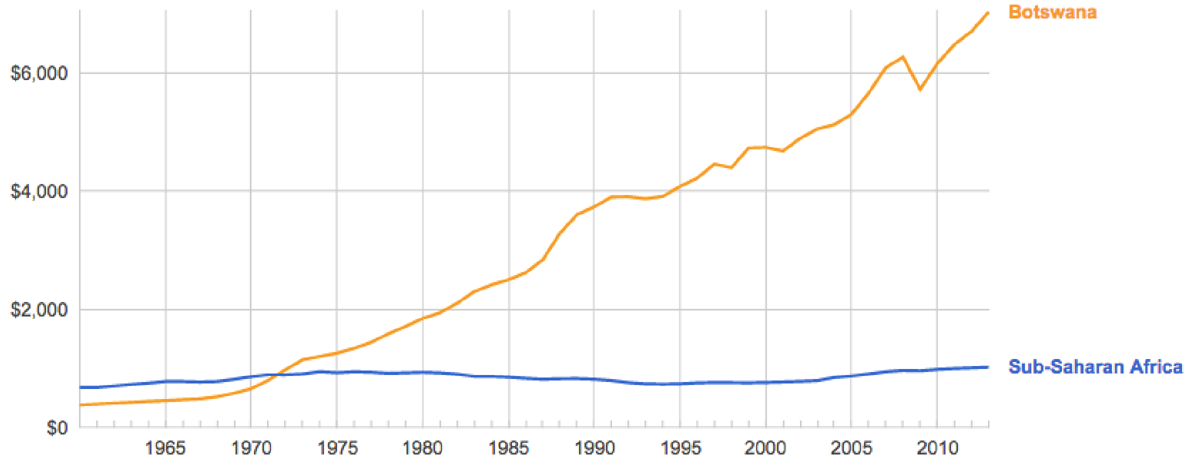
There is some reason for optimism, however. Recently, a decline in oil prices has renewed government focus on expanding other sectors of the economy such as agriculture and services. Nigeria has consistently ranked as one of the most corrupt countries in the world and it is making efforts to combat this. The country enjoyed a credible election and turnover of power in 2015. Over the past few years, there have been talks of government efforts to increase transparency and accountability, and even of investing the oil revenue rather than spend it immediately. However, few of these ideas have materialized yet. Production levels of oil are decreasing and there is an ongoing problem with oil theft where hundreds of thousands of barrels of oil from the Niger Delta are illegally siphoned off and sold. All of this means Nigeria is under increasing pressure to be responsible with its oil wealth.

4. Botswana: a role model of resource-led development?

The case of Botswana demonstrates some positive ways to help overcome the natural resource curse in Africa. The first diamond mine came into operation in Botswana in 1972, 6 years after the country achieved independence. In 1966 Botswana, a landlocked and dry country, it was the third poorest country in the world with 12 km of paved roads and only 22 university graduates. Since then, Botswana has enjoyed sustained, high levels of economic growth (averaging over 9 percent per year from 1966 to 1999) as shown in Figure 4. It has over 6,000 km of paved roads and adult literacy has increased to 81 percent by 2006. Botswana transformed from a largely livestock economy in 1967 when mining's contribution to GDP was a mere 1.6%. By 1989 mining accounted for 51 percent of the GDP, though this has declined in more recent years. The contribution of mining to government revenue skyrocketed to roughly 45-65 percent by the 2000s. Though this is still lower than Nigeria, it is substantial. Given these conditions, how did Botswana avoid the resource curse?

Economic historians have pointed to three sound economic policies that were adopted soon after the discovery of diamonds. First, the government committed to avoiding external debt and stabilizing its own spending. It avoided excessive spending when the price of diamonds was high on the international market. Instead, during these boom times it built up its savings. When the price of diamonds dropped and exports declined, the government did not have to borrow or cut public spending drastically. Instead, it could spend the money it had saved. The government budgeted for 6 year National Development Plans which were approved by parliament. These plans have controlled its level of domestic spending and ensured projects are not started that cannot be sustained. The result of this approach has been that Botswana has largely been successful at avoiding boom and bust cycles. Additionally, its level of debt relative to the size of its economy is incredibly low (roughly 14 percent).

Figure 4: GDP per capita (constant 2000 US$) of Botswana and sub-Saharan Africa, 1960-2013



Source: World Development Indicators

Second, the government has closely managed its exchange rate in order to avoid the Dutch Disease (when a currency appreciates due to increased resource exports crowding out other sectors of the economy). In other words, it used its exchange rate to help encourage diversification of its economy. Unfortunately these efforts have largely been unsuccessful. While manufacturing has grown in absolute terms, relative to the mining sector it has not, so the Botswanan economy is still heavily dominated by mining.

The third aspect of Botswana's tackling the problems of the resource curse has been the government's ability to successful invest part of the mining revenue it receives. It invests this money in the domestic and international markets. Domestically, its investments have been conservative and based on expected profits in the medium and long term. The government of Botswana has also invested its proceeds from mining internationally through something called the Pula Fund. The Pula Fund earns income from foreign investments and has become the largest government source of non-diamond revenue. It provides a relatively stable source for the government to rely on for its spending. It has also helped Botswana avoid the Dutch Disease. Even more importantly the Pula Fund will exist and generate government revenue after the last diamond is mined in Botswana.

These government policies have helped to address the problems of the resource curse. Why was Botswana able to implement these policies were Nigeria was not? One answer economic historians give is that Botswana has historically had better institutions. Botswana has been a constitutional multi-party democracy since 1966. The elections in the country have been largely free and fair as well as conflict free. Levels of corruption have been consistently measured as the lowest in Africa and amongst the lowest in the world by organisations such as Transparency International. These stable institutions extend beyond the federal government into an independent judiciary and central bank as well as a free and vocal media. Good institutions have allowed for a stable framework for taxing mining companies, a system of private property rights where the "rules of the game" do not change dramatically.

Again, we must ask why has Botswana been able to have such stable institutions? Acemoglu, Johnson and Robinson have pointed to the importance of understanding local historical contexts. Good policies were a result of good institutions which in turn stem from inclusive pre-colonial institutions that have constrained elite power. For example they point to the high prevalence of popular assemblies amongst the Sotho and Tswana relative to other tribes. They argue that because Botswana was a protectorate, the effect of British colonialism was minimal in terms of altering the institutions and after independence, existing institutions such as private property were maintained. These scholars also attribute part of the continued success to forward-thinking post-independence leaders such as Presidents Seretse Khama and Quett Masire. In fact, President Masire is quoted as saying "we intend to conserve our resources wisely and not destroy them. Those of us who happen to live in the 20th century are no more important than our descendants in centuries to come". Botswana has also benefited from a high level of cultural-linguistic homogeny. Although largely constructed, it does differ dramatically from the fragmentation found in countries like Nigeria.

Nevertheless, Botswana still has many institutional failures and some have argued that the country, while growing at a rapid rate, has failed to develop. For example, by most measures Botswana has the highest infection rate of HIV/Aids in the world. It does have a democratic government but the country has been ruled by one party since independence. There are ethnic problems with the treatment of minorities such as the San in the Kalahari. Finally there are massive problems with inequality and unemployment. In fact, Botswana is one of the most unequal societies in the world. Due to the nature of diamond mining, the industry only employed around 4 percent of the labour force by 1990. According to official statistics unemployment is about 18%, but by some other measures, it is currently around 35-40%. Poverty has declined but it is still relatively high. Additionally, Botswana's avoidance of the resource curse is also under threat. Although the government has tried to diversify the economy to other areas such as the service sector, the country is still reliant upon the export of diamonds. The state remains the largest employer of people, especially as diamond mining is a comparatively low labour intensive natural resource. Finally, the diamond supply in Botswana is dwindling and eventually the country will not be able to rely on the influx of new diamond revenues.

Concluding remarks

Since World War II, natural resources in Africa have been more of a curse than a blessing. However, the resource curse is not universal and inescapable. Different problems associated with the curse point to varying ways of solving the problem. As we saw, a unique historical and institutional setting in Botswana has allowed the country to escape many aspects of the resource curse, though it still has a lot to overcome. Nigeria's history, on the other hand, represents a classic case of the resource curse. While African countries that have recently discovered resources (such as Angola, Ghana, Namibia, Uganda and Mozambique) have cause for concern, recognizing the dangers of the resource curse is the first important step in trying to combat it.

Study Questions

1. What are the 5 most important explanations for the resource curse?
2. What are the dynamics of the Dutch Disease?
3. How does Nigeria's institutional history relate to its suffering from the resource curse?
4. What policies did Botswana adopt to help fight the resource curse?
5. What is, in your view, the most challenging aspect of the resource curse to overcome? Why?

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Chapter 16

Poverty in Africa since Independence

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1. Introduction

Most African countries gained independence in the early 1960s. At that time, their average income levels were higher than in many Asian countries and on par with some Latin American countries. Since then, however, Sub-Saharan Africa has become associated with economic stagnation and persistent poverty. Especially during the so-called 'lost decades' of the 1970s to 1990s poverty rates in Africa rose while other developing regions took large strides in poverty eradication. Today, many of the poorest countries in the world are found on the African continent, although there is a significant spread in income levels across countries. Average regional poverty expressed as the *share* of the population living in poverty is declining since the 2000s, but at a slower pace than in has been observed in many Asian countries. Moreover, due to rapid population growth, the *total number* of Africans living in poverty has grown and may well continue to rise for decades to come.

Rising poverty levels stand in sharp contrast to the large natural resource wealth and overwhelming young labour force of many African countries. The rising global and local demand for agricultural commodities, and mining and forestry resources has not created a solid basis for sustained poverty reduction. Despite improving pre-conditions for sustained economic growth and a durable improvement in living standards, the revenues of Africa's natural wealth are too often unequally distributed and/or invested in activities that create little extra jobs for growing numbers of un- and underemployed people. In some countries, such as Botswana, the governance of national wealth works relatively well and such examples provide optimism and hope for the future, but in other countries corruption, elite capture and violent conflicts hamper alleviation of mass poverty.

This chapter focuses on economic forms of poverty, which can be defined in terms of *material* living standards. We will discuss two different dimensions of poverty, at the national and at the individual level. We will explain how both dimensions are measured and compared internationally. We will present estimates of absolute poverty and poverty rates and explore the trends in Africa in a global comparative perspective. While this may sound straightforward, it is important to note that human wellbeing entails much more than material conditions. For example, aggregated measures of economic poverty exclude access to health care and education; environmental sustainability and resilience to climate change; empowerment and agency; political freedom and acceptance of independent of sexual orientation, gender, and ethnicity. These aspects remain beyond the scope of this chapter. Further, this chapter focuses on poverty in Africa since independence. We begin in the 1960s, a decade that marks African independence and the beginning of annual poverty data provided by the World Bank. We explore the data up to 2016, which is the most recent year for which the World Bank offers data on poverty levels.

The chapter is structured as follows. It begins with a discussion on how poverty can be defined and measured. We then proceed to present global and African poverty trends, which also entails a discussion of rural versus urban poverty. This is followed by a discussion of both African and international poverty-mitigating strategies. Finally, we dare to look ahead to future opportunities and challenges affecting African poverty.

2. Defining and measuring national and individual poverty

Before we can study levels and trends in national and individual poverty we need to understand how poverty is commonly defined and measured. The definitions we adopt in this chapter refer to economic poverty, which is usually measured in terms of *material* living standards. The most common measures are GDP per capita and the number or share of people living under the poverty line. Both measures are used by international organisations such as the United Nations and the World Bank. The advantage of using a widely accepted definition and measurement standard for all countries in the world is that it facilitates international and inter-temporal comparisons. The disadvantage is that these measures are rather rough and miss much of the regional, national and local context that matters for living standards at communal or personal levels. Moreover, these measures also contain no information on how the poor perceive their living conditions.

What does it mean when we say that a country is “poor”? *National poverty* is for all intents and purposes the same as the lack of economic growth. A country’s wealth is measured in terms of GDP (Gross Domestic Product), which is the total value added to all goods and services produced in a national economy per year. Because the size of any country’s economy is related to the number of inhabitants, GDP is commonly divided by total population to obtain *GDP per capita*. This measure allows us to compare income levels across countries and to compute income growth over time. The World Bank classifies economies into four income groups: lower income (up to $1,005), lower-middle income ($1,006 - $3,955), upper-middle income ($3,956 - $12,235), and higher income ($12,236 and above) (*these are official standards for Gross National Income in 2018*).

GDP growth is measured as the increase in total value added from one year to the next. *GDP per capita growth* is measured as GDP growth divided by population growth. So, for nations to become richer it is important that growth of GDP outpaces population growth. Yet, growth in GDP per capita doesn’t necessarily mean a reduction of poverty, defined as the share of people living at or below the poverty line, because this crucially depends on how national income and the growth of GDP is distributed across the population. Hence, it is possible to have *inclusive* or *pro-poor* growth, that benefits the society at large, including the poor. But there are also examples of *exclusive* growth, which only makes the rich richer.

In general, countries with high GDP per capita levels find it difficult to grow fast. Their income levels can rise especially because of a steady growth in GDP per capita over time, without too many years of negative growth. Poor nations, on the contrary, often record higher rates of GDP growth, which is called *catch-up* growth, but whether they close the gap with richer nations crucially depends on the stability and long-term sustainability of their growth path. Especially in sub-Saharan Africa, many countries have recorded high rates of GDP growth in the past 20 years, but also years with considerable set-backs. For instance, Botswana in the 1970s and Rwanda in the 2000s had spectacular annual growth rates of 11 and 8 percent respectively, but to consolidate these gains and reduce poverty at a structural level, such episodes of growth have to be continued for many decades.

To compare GDP per capita across countries we need to express income levels in a single common currency, usually US-Dollars (henceforth $). There are two ways to do this. The first is to use exchange rates between the local currency and US-Dollars. This has the disadvantage that sharp fluctuations in exchange rates affect the international comparison of income beyond 'real' changes in comparative economic performance. Therefore, the second approach is considered to be more accurate, since it focusses on changes in domestic prices levels rather than the value of the national currency. To convert GDP into US-Dollars economists use so-called Purchasing Power Parities (PPPs). A PPP is constructed by composing a basket of goods and services and comparing the price levels of this basked across countries. The PPPs thus obtained can be almost equal to the official exchange rate, but there are also many cases where the PPPs (relative domestic price level) are considerably lower than the official exchange rate. In this case using the exchange rate would make the country appear poorer, and would make the purchasing power of its population appear lower than it really is. Another way of understanding the difference is that PPPs allow for an estimation of what the exchange rate between two currencies would have to be, in order to perfectly reflect relative prices levels in countries.

Individual poverty levels are clearly affected by GDP per capita levels, but also depend on how income is distributed among national populations. In 2008, the World Bank set a new standard by defining the *extreme* poor as people who, on average, live on less than $1.25 per day. Again, PPPs are being used to make this poverty line comparable across countries. This line changes over time as prices increase, which they tend to do in the long-run. Hence, in 2015, the World Bank updated its calculation of the cost of a subsistence consumption basket and increased the global poverty line to $1.90. This poverty line is commonly used to estimate the number of people living in *extreme poverty*. Of course, this doesn't mean that people who can spend a little bit more than $1.90 per day have escaped from poverty. In fact, billions of people today are living just above that poverty line, as the number of extreme poor are declining. This trend is also visible in Africa.

But even for those who live on $1.90 the context of poverty matters a lot. Poverty is not a static condition. Just as individuals can move out of poverty, they can fall back into poverty again. Many people today who are no longer considered living in poverty have only managed to improve their incomes on the margin and they are extremely vulnerable to any change in their incomes. In an effort to address these shortcomings, the United Nations introduced a Multidimensional Poverty Index (MPI), which measures not only income, but also health, education and some other components of living standards since 2010. Another important dimension of poverty is how people perceive poverty in *relation to* the communities and societies in which they live. *Relative* poverty refers to people's living standards as measured against the average living standards of a particular society. It makes a big difference to be poor in a rich country, or to be poor in a poor country. To be poor in a rich country may ingrain the poor with a pervasive sense of injustice and be mentally more difficult to cope with. On the other hand, being poor in a rich country may have the positive side that opportunities to escape from poverty are larger because social mobility is higher.

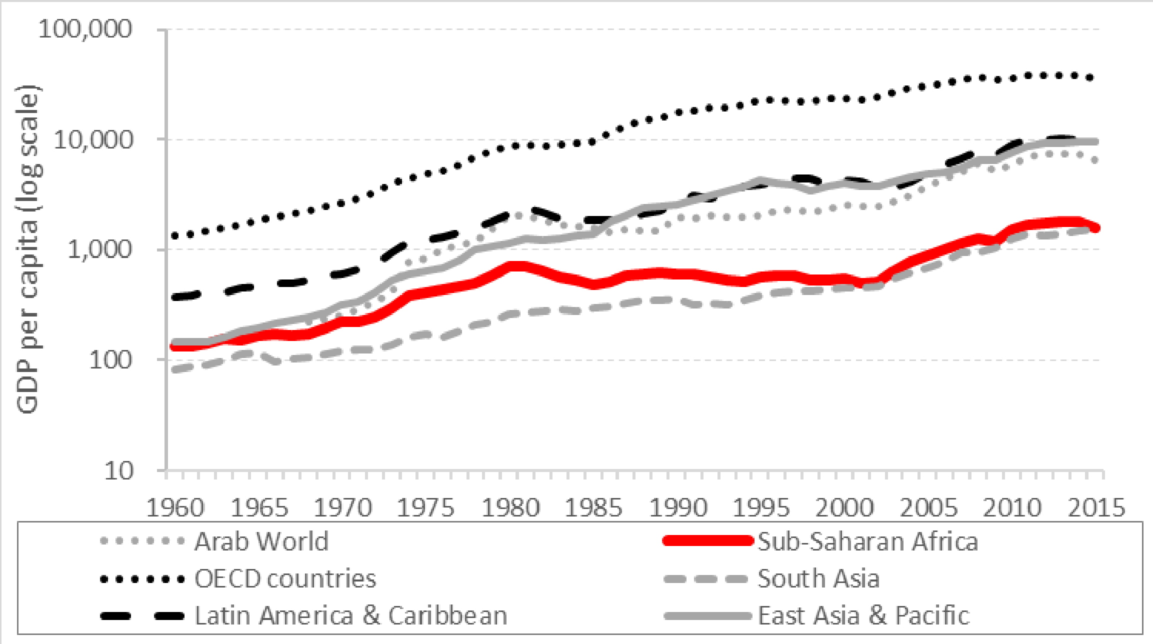
3. Poverty trends in Africa

In this section we map and compare African poverty trends using GDP per capita; levels and shares of populations living in poverty; and rural versus urban poverty. It offers a comparison between Sub-Saharan Africa and other world regions, and a presentation of a number of country cases showing the diversity within the region.

National poverty in a global perspective

Figure 1 presents GDP per capita trends by world region. The OECD countries (Organisation for Economic Co-operation and Development), the richest countries situated in Europe and North America, have been placed on the right-hand axis – OECD (black dotted line; axis $ 0-40,000) and the developing regions on the left-hand axis ($ 0-12,000). The graph shows that during the past half century, there has been a sharp divergence in GDP per capita between sub-Saharan Africa and South Asia and other regions such as Latin America, East Asia and the OECD countries. Until 1980, GDP per capita in all regions, except the OECD countries, was below $2,000. However, since the 1980s all world regions expect Sub-Saharan Africa and South Asia, have surpassed the $2,000 benchmark. Latin America and East and Pacific Asia have grown beyond $8,000.

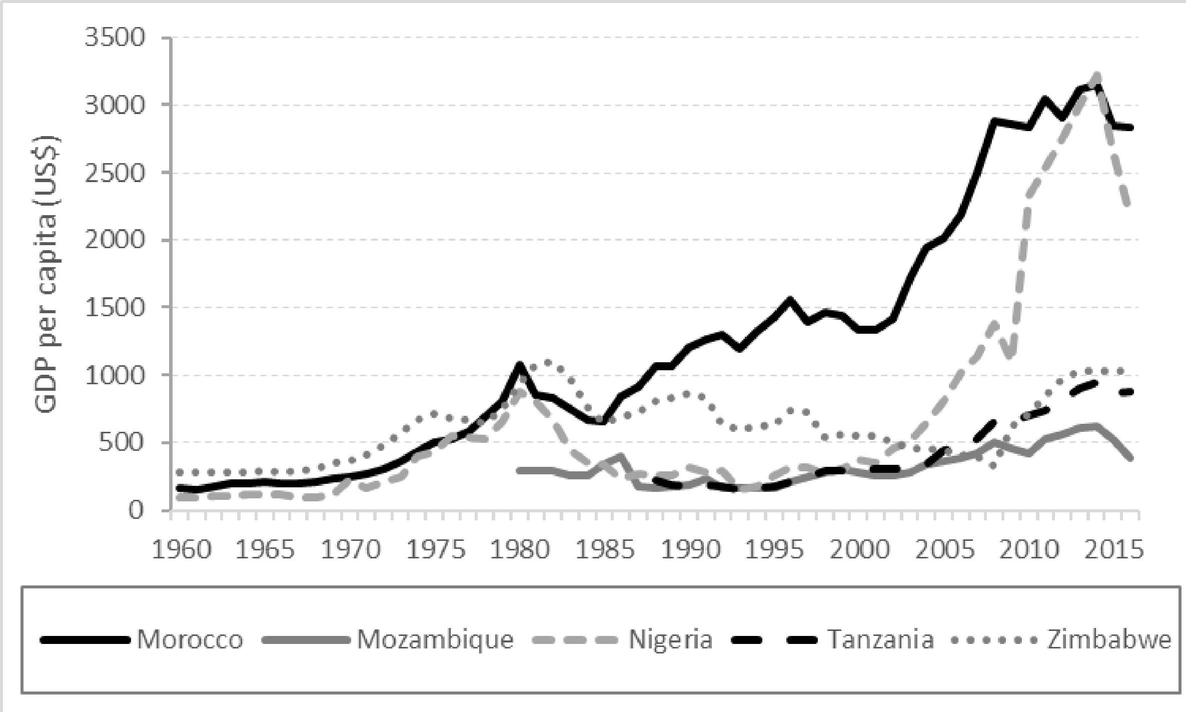
Figure 1: GDP per capita in US-Dollars (log scale) regional trends, 1960-2015



Source: World Bank, *World Development Indicators* (WDI).

The comparison *between* regions shows how sub-Saharan Africa has developed in a global perspective. In Figure 2 we explore the variation within sub-Saharan Africa. We selected five countries – Morocco, Mozambique, Nigeria, Tanzania and Zimbabwe – which offer a good impression of the diversity in growth trajectories. Morocco's economy took off in the mid-1980s and has since developed comparatively well. Nigeria follows – after the significant commodity boom with increasing oil prices in the early 2000s the oil-dependent economy has experienced significant growth. However, there is a large risk this growth spurt will turn into a bust if world market prices for oil continue to fall or stabilize at the low levels they have attained since 2015 - the last year in this graph. The economy of Zimbabwe grew in the 1970s and 1980s, but has experience decline and stagnation as a result of the political turmoil in the 1990s and 2000s. Zimbabwe recovered after 2008, but is not clear to which extent the growth rates have been manipulated by the regime – as it is well known that there are reliability issues with many African income statistics. Mozambique has been entrenched in a long civil war up to the 1990s and has recovered slightly in the years of peace since 2000, but the growth of GDP has been partly erased by rapid population growth. In Tanzania population growth remained high as well, but GDP growth has been more impressive than in Mozambique, so that there was a notable divergence in per capita growth in these neighbouring countries in the past decade (2005-2015).

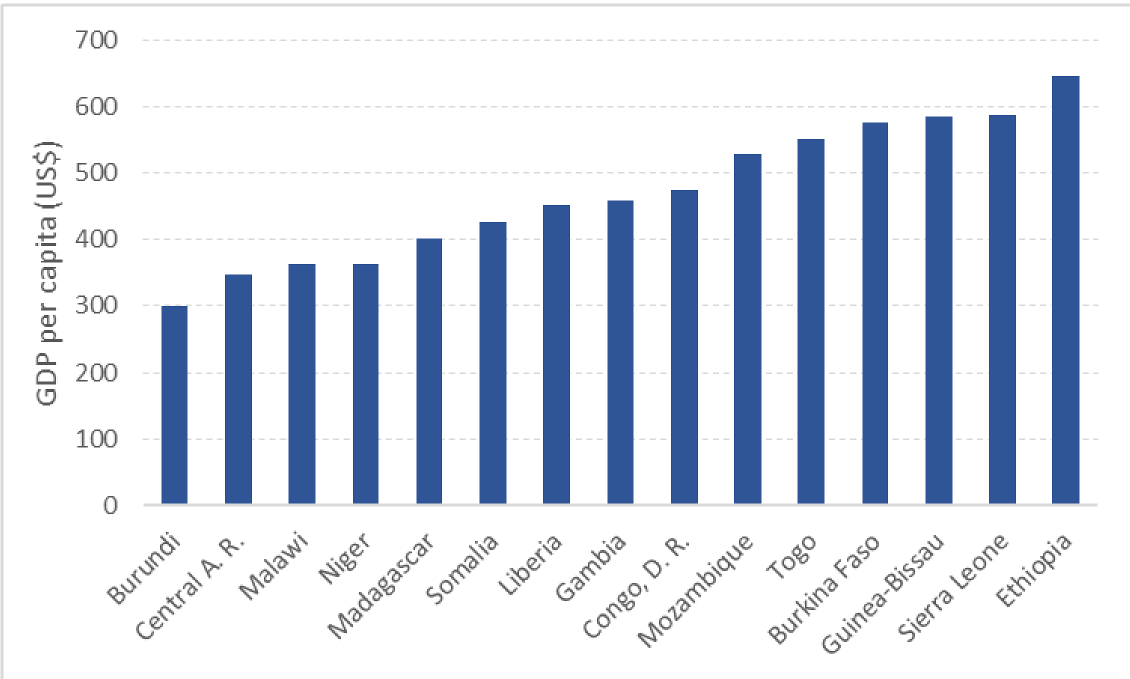
Figure 2: GDP per capita (in US-Dollars) trends in 5 African countries, 1960-2015



Source: World Bank, *World Development Indicators* (WDI).

While the commodity boom since the mid-1990s has led to considerable economic growth in many African countries, it has not yet been enough to reduce the number of poor countries significantly. Figure 3 shows the poorest 15 African economies in the year 2016. At the bottom we find Burundi and the Central African Republic, Malawi, and Niger with a GDP per capita lower than $400.

Figure 3: The 15 poorest African countries in 2016

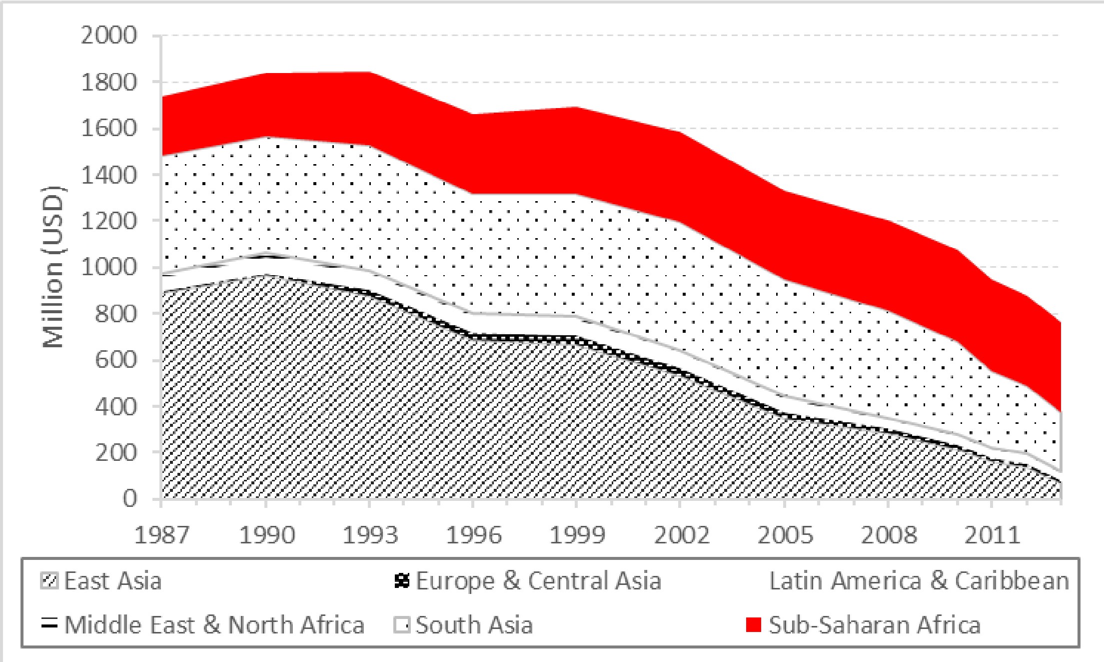


Source: World Bank, *World Development Indicators* (WDI).

Individual poverty in a global perspective

Figure 4 presents the total number of people living in poverty by world region. It reveals that global poverty levels have been falling at impressive rates since the early 1990s. Between 1987 and 2013, the number of extreme poor more than halved from 1.7 billion to 766 million people. By 2013, the most recent years for which reliable data exist, 11 percent of the world's population was living in poverty compared to 35 percent in 1987. During the past quarter of a century, poverty has fallen in particular in Asia and Latin America. East Asia (bottom) and South Asia (second from top) have been largely responsible for this dramatic decline. China alone is responsible for two-thirds of the overall drop in poverty between 1987 and 2013. India, Indonesia and Vietnam are also seeing poverty gradually disappear. Yet, the total number of Africans living in poverty (red top area) has increased from 250 million in 1987 to 390 in 2013. Half of the world's population living in poverty are now thought to be African.

Figure 4: Total population living in poverty by world region, 1987-2013

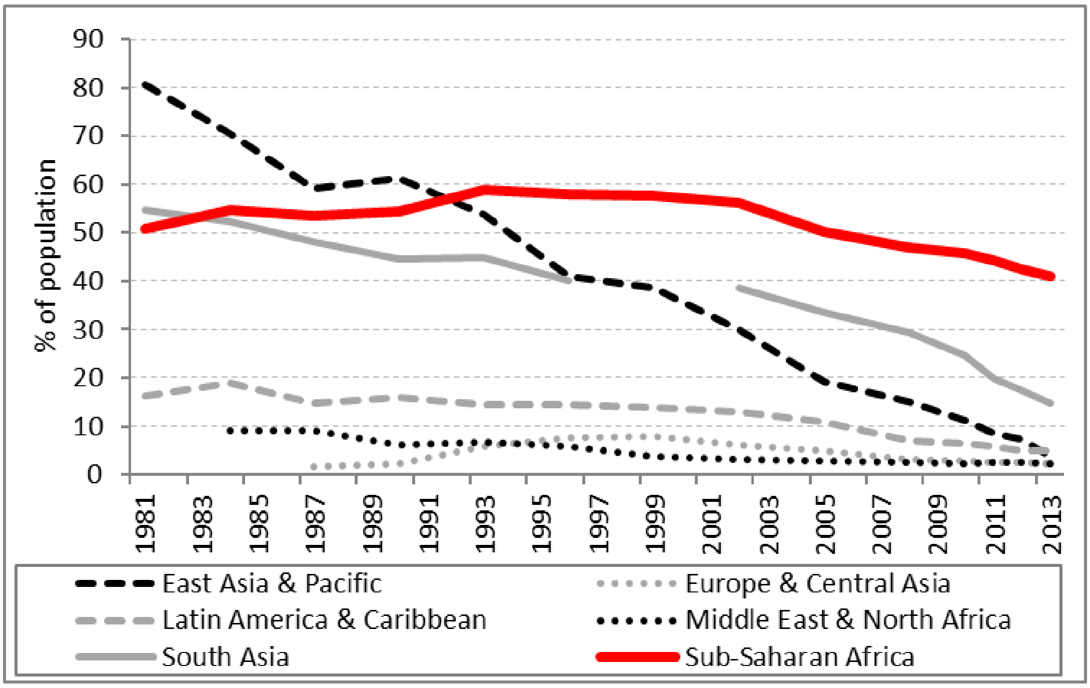


Source: World Bank, World Development Indicators (WDI).

While Figure 4 displayed absolute poverty *levels*, Figure 5 compares the *percentage share* of the African population living on or less than $1.90 (thick red line), i.e. the poverty rate, with other world regions. It shows that globally, the share of populations living in poverty has been in decline since the 1980s. Most impressive has been the decline in East Asia and Pacific and South Asia, but also Latin America more than halved its poverty rate. Figure 5 also shows that Africa's poverty rate has fallen from 51 percent in 1981 to 41 percent in 2013. Thus, while *absolute* poverty in Sub-Saharan Africa remains on the rise, relative poverty levels have been declining. This paradoxical situation can be explained by the fact that relative poverty rates are not declining fast enough to outweigh Africa's rapid population growth (by about 2.5 percent a year, compared with 1 percent for Asia). Hence, the number of Africans living in poverty today (2018) is higher than it was in the 1990s. No doubt, while the reduction in relative poverty can be seen as a positive trend in line with the renewed growth experience of many African economies after 1995, poverty remains a major development challenge for the region for decades to come.

Figure 6 presents poverty rates in a number of African countries in 2012. We can see that there are singular cases, i.e. Mauritius, where poverty has more of less been eradicated. In this island state, which is one of the African growth miracles, only 0.5 percent of the population lives under the poverty line. In the other growth miracle, Botswana, the share of people living in poverty is still 18 percent. The highest poverty rates are recorded in the Democratic Republic of Congo (77 percent), Burundi (74 percent), Central African Republic (66 percent), Zambia (58 percent) and Nigeria (54 percent).

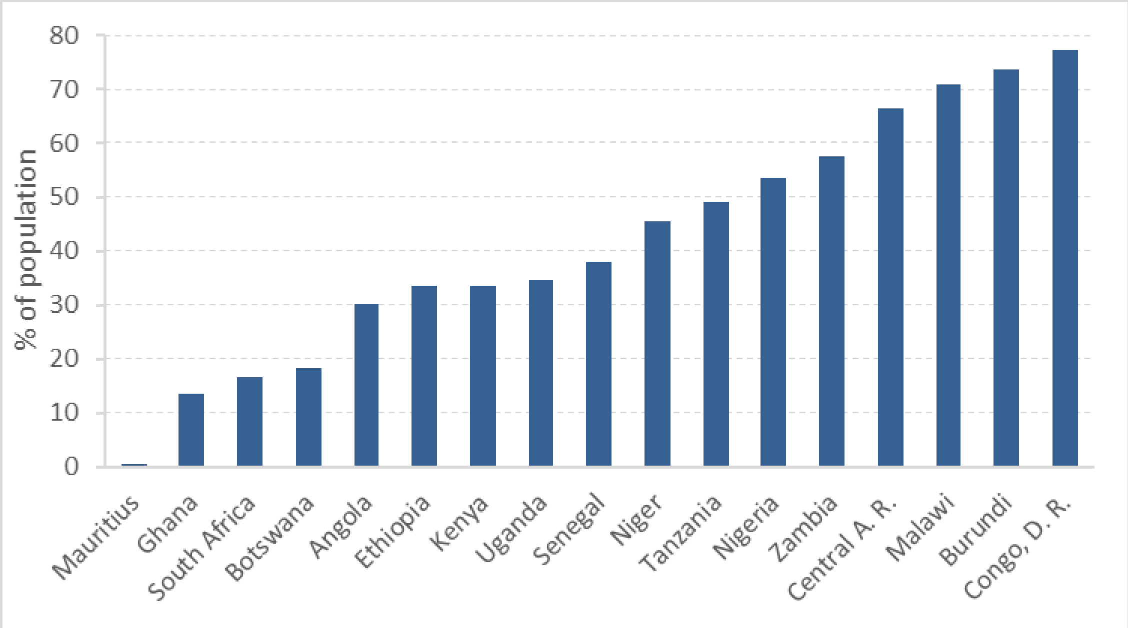
Figure 5: Regional poverty rate at $1.90 a day (2011 PPP) (percent of population)



Source: World Bank, *World Development Indicators* (WDI).

Why are so many Africans still stuck in poverty today? The reasons for the continued high rates of Africans living in poverty are various and complex, and also range from deeply historical (ultimate) causes to more proximate causes. But let us highlight three important factors. First, poverty is related to the region's high population growth of 2.6 percent a year. While African economies are generating more income, that income has to be shared among an ever-growing number of people. The second factor is related to the depth of Africa's poverty compared to poverty elsewhere. Even if the continent's income is growing, it is often not enough to push people over the $1.90 threshold. Thirdly, it is related to unusually high levels of income inequality or uneven income distribution among a population causing a wealth gap between the rich and people living in poverty. Where initial inequality is high, economic growth delivers less poverty reduction and the proceeds primarily goes to the already well off.

Figure 6: Poverty headcount ratio at $1.90 a day (2011 PPP), percentage of population, 2012



Source: World Bank, *World Development Indicators* (WDI).

Poverty in rural and urban Africa

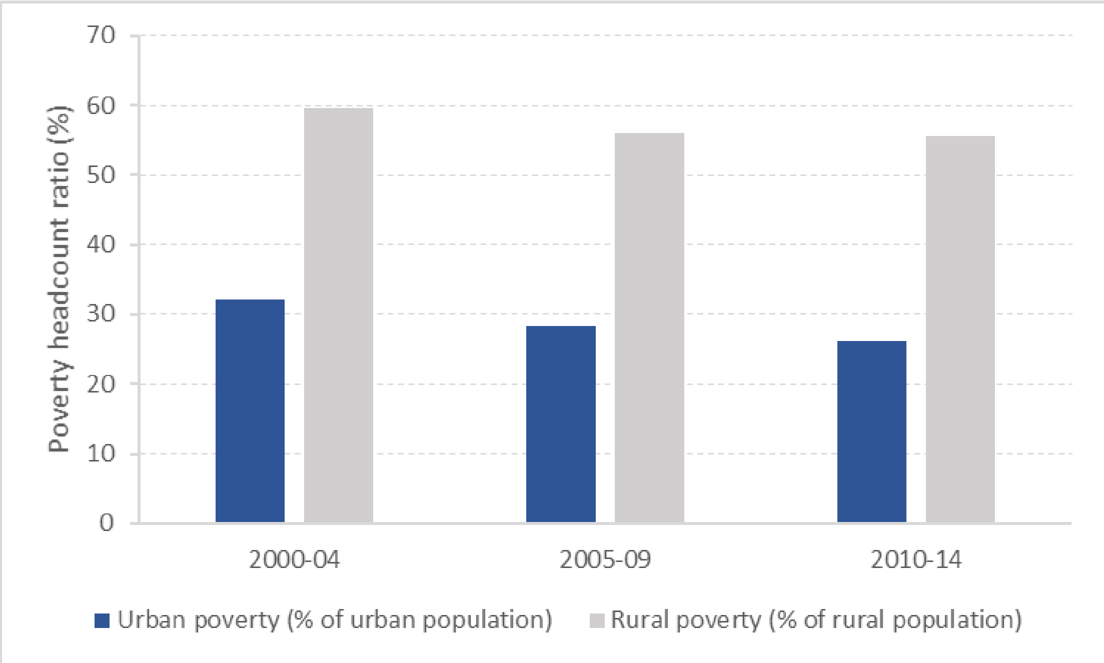
So far, we have discussed national averages, but *within* countries there are different groups of people living in poverty and their challenges for getting out of poverty vary. The most important divide is between the urban and the rural poor. These two groups depend on and relate to each other in many ways, but urban poverty manifests itself in quite different forms than rural poverty.

Figure 7 presents the average percentage share of rural and urban populations that live in poverty. It shows that, although both African rural and urban poverty has been declining during the 21st century, rural poverty remains twice as high as urban poverty.

However, poverty is not predominantly a rural phenomenon anymore. Research shows that soon, urban areas could increasingly become the new home of the majority of impoverished people. Urbanization is one of the most significant trends in 21st century Sub-Saharan Africa, with rural populations, in particular young men and women, migrating at unprecedented rates to urban areas in search of employment and economic growth. Africa is the world’s fastest urbanizing continent. In 2016, about 38 percent of Africans resided in towns and cities, compared to 15 percent in 1960. Rural-urban migration is not only a coping mechanism to escape poverty, it represents a perceived opportunity particularly for young people to improve their status, learn new skills, and send money back to their rural families. However, the reality for rural migrants in cities is often a different one. Urban areas are becoming extremely overcrowded and overburdened, putting pressure on insufficient infrastructures, schools, health facilities, sanitation and water systems. This escalating urbanization has created a new context of poverty in which urban centers are unprepared to absorb increasing youth unemployment.

According to a 2007 study, Africa appears to be the only region amongst developing regions where urbanization is not correlated with poverty reduction.

Figure 7: Rural and urban poverty headcount ratio (percent), Sub-Sahara Africa



Notes: Data not available for each country in Sub-Sahara Africa. Includes closest year within year ranges.
Source: World Bank, *World Development Indicators* (WDI).

The consequence of fast-growing urban centers without sufficient economic growth includes, among others, the mushrooming of slums (also referred to as townships or squatter settlements), expansion of informal activities, pressure on infrastructure and the social problems that accompany unemployment in an urban setting. The large slums of Africa's mega-cities are perhaps the best indicator that urbanization has not improved the living standards of all urban dwellers. In 2010, the United Nations recorded that 62 percent of the Africa's urban population lives in slums, which is the highest rate in the world. Rapid growth of slums has some serious repercussions for the security of those areas, as poverty, criminal, violence, drug abuse, prostitution and HIV infection rates appear to be more prevalent in urban slums. Failing to prepare for these, or to address them adequately, could see Africa fall into the trap of replacing rural poverty with urban poverty.

4. Responses to poverty in Africa

There have been various responses and strategies by African peoples and the international community aimed at eradicating African poverty.

African responses to poverty

Most people living in poverty seek to help themselves and each other. The African poor are not just victims of poverty, they also show a great capacity to anticipate and find solutions to their everyday problems. Money management is for the poor a fundamental and well-understood part of everyday life. It is a key factor in determining the level of success that poor households enjoy in improving their own lives. Most poor households do not live hand to mouth but employ a variety of informal financial tools. For example, people organize themselves in informal self-help associations such as rotating saving schemes (popularly known in some parts of Africa as 'Round' or 'Stokvel' and money clubs) as well as informal savings clubs, savings with a money guard and burial insurance societies. Poor entrepreneurs also overcome their lack of access to formal banking by becoming customers of microfinance institutions. In addition, Africa leads the world in mobile money and technological innovations have made it possible to extend financial services to millions of poor people at relatively low cost. For example, Safaricom's M-Pesa ("pesa" means "money" in Swahili) pioneered mobile phone banking in Kenya in 2007 and since has made a dramatic impact. Seven in 10 adults in Kenya use M-Pesa, making 9 million transactions daily in 2016, which provide the livelihoods of 130,000 agents. Across Africa, similar schemes operate that offer a range of services including transfers, savings, loans, and health provision that boost financial inclusion and create greater financial stability for African families. Also, African farmers increasingly seek membership in agricultural cooperatives to gain access to capital to invest and commodity markets to sell their produce at reasonable prices. They also, exhibit awareness and cope with risks of climate change with increasingly unpredictable rainfall and rising droughts by growing short season crop varieties (e.g. smaller grains) from improved seed varieties that are drought resistant to minimize the risk of famine.

These examples demonstrate that poor households in Africa lead rich and complex financial lives. They often find innovative solutions to their everyday financial problems (e.g. paying school fees, affording health care, contributing to social ceremonies) by employing a variety of strategies.

Global responses to African poverty

The reduction of extreme poverty and hunger was the first so called Millennium Development Goal, as set by 189 United Nations Member States in 2000. Specifically, it set a target of reducing the poverty rate in half by 2015, a goal that was met in 2010. Now the United Nations have set a new ambitious target to end extreme poverty by 2030. There are many international and African NGOs and development charities that contribute to efforts for global poverty reduction but the lion's share comes as official development assistance or ODA.

ODA is financial aid given by governments and other agencies to support the economic, environmental, social, and political development of developing countries. It is distinguished from humanitarian aid by focusing on alleviating poverty in the long term, rather than a short-term relief after natural disasters, wars and famines. Such aid may be bilateral: given from one country directly to another; or it may be multilateral: given by the donor country to an international organization such as the World Bank or the United Nations Agencies (e.g. UNDP, UNICEF, UNAIDS). The proportion is currently about 70 percent bilateral 30 percent multilateral. African countries received about one third (34 percent) of total ODA, which is the largest regional share. Table 1 lists the top African recipient countries and its international donors in 2015. Over the past two decades, China has also become an important donor, although the bulk of Chinese spending does not classify as ODA as it is primarily intended for commercial and infrastructure projects.

Table 1: African ODA recipients and international donors, 2015

Top 10 ODA recipients	**billion ($)**	**Top 10 ODA donors**	**billion ($)**
Ethiopia	3.23	USA	9.32
Congo, D. R.	2.60	European Union	6.25
Tanzania	2.58	IDA	5.18
Egypt	2.49	UK	4.20
Kenya	2.47	Germany	3.04
Nigeria	2.43	United Arab Emirates	2.84
Mozambique	1.82	France	2.29
Ghana	1.77	Global Fund	2.21
South Sudan	1.68	African Dev. Bank	2.18
Uganda	1.63	Japan	1.76
Other African recipients	28.34	Other donors	11.77
Total	**51.04**	**Total**	**51.04**

Source: OECD (2018), *International Development Statistics (IDS) online database.*

5. Outlook: Can Africa grow out of poverty?

The debate on whether Africa will grow out of poverty or not involves a discussion of the opportunities available to the continent for poverty reduction on the one hand, and its challenges to achieve this, on the other hand. Sub-Saharan Africa's recent economic boom has raised hopes and expectations to lift the region out of poverty by 2030. Also, African poverty reduction over the past two decades nourishes hopes that further declines can be achieved in the near future. Substantial African economic growth over the past two decades has revealed Africa's economic potential. Consequently, perceptions of a perennially poor Africa are changing as parts of the continent have witnessed positive changes in political democratic systems, less armed conflicts, increased macroeconomic stability and consistent growth in agriculture and industry. This has also been acknowledged by one of the leading international newspapers, *The Economist*, that wrote off Africa as "the hopeless continent" in 2000, only to correct itself recently in 2011 and 2013, describing African growth potential as "rising" and "aspiring" respectively.

Figure 8: *The Economist* newspaper cover in 2000, 2011 and 2013

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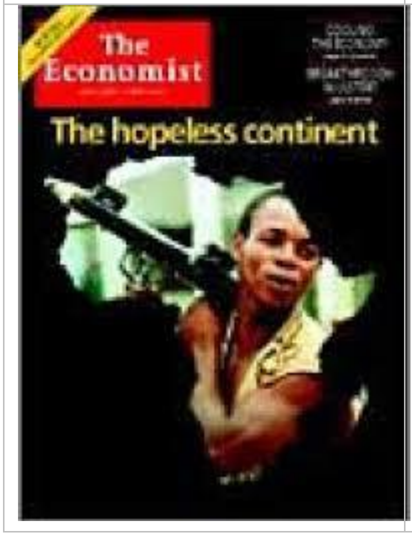
<td>
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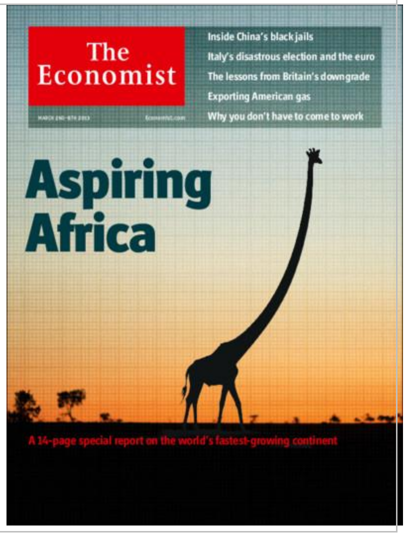
<td>
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Source: The Economist, various issues.

The growing global demand for various agro-commodities, mining and forestry products is stimulating traditional and non-traditional markets for Africa's exports, resulting in a rise of economic growth rates in some cases. In the majority of African states, peaceful transitions of power and enhanced levels of stability and good governance seem to be the hallmark of economic success and poverty reduction for the future.

However, while the case for Africa as a continent of opportunity is supported by numerous positive indices and trends, the prevailing image still is of a continent trapped in a cycle of national and individual poverty, widespread corruption and weak checks and balances on abuse of power by African governments. And this picture is aggravated by a number of developments that may jeopardize poverty reduction in the coming decades. Let us mention three of these concerns. First, it remains very insecure what the effects of climate change will be on agricultural production in large parts of the region. Some regions may become wetter, others dryer and hotter. In any case, it means that farmers, a lot of whom live under the poverty line, will have to adapt to changing weather conditions, while they may lack the (financial) means to do so.

Second, is the intimate link between natural-resource abundance, economic growth and (rising) income and asset inequality in African countries. To what extent will the benefits of on-going resource exploitation be distributed more evenly in the future? Will the mining, plantation and forestry sectors generate sufficient jobs to provide a descent income to expanding new generations of job-seekers? It remains unclear to what extent African economies can diversify into a wider range of internationally competitive manufacturing and service industries in order to reduce their dependence on primary commodities and natural resource revenues.

Third, and this turns back in many poverty-related issues, what will be the long-term effect of demographic growth and urbanization? Will the exceptional pace and scale of population growth accelerate ecological degradation, raise youth unemployment, intensify resource conflicts and provoke mass emigration? Or will growing concentrations of urban consumers and better connected rural hinterlands open-up new opportunities for market development, infrastructural investment and new divisions of labour? In the latter scenario Africa's population boom may enhance the development of internationally competitive manufacturing and service industries as an alternative to the region's long dependence on primary commodity exports. Yet, as we have seen above, at the moment demographic growth pushes up the number of African poor. But perhaps it is generating conditions for a sustained reduction in poverty at the same time?

Study questions

1. Define poverty and explain the main methods of measuring it.
2. How does Africa fare in an international comparison of poverty at the national level, i.e. GDP per capita?
3. Which trends can we see when comparing changes in different African countries' GDP per capita levels?
4. What has happened to the reduction of the total number and share of people living in poverty in Africa over the last couple of decades?
5. What strategies are employed by Africans, organisations and governments to reduce poverty levels?

Suggested readings

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Chapter 17

Intra-Regional Trade and African Economic Integration

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1. Introduction

Intra-regional trade refers to the exchange of goods and services between countries located in the same geographic region. With growing trade, regions become increasingly economically integrated. From around the world, we can find examples of how countries have come together to promote intra-regional trade and sometimes also collaborate around economic policies, for example the European Union (EU) or the United States-Mexico-Canada Agreement (USMCA). Africa is a continent with more than a billion consumers, but it is composed of many sparsely populated countries, often landlocked, with small domestic markets and 'hard borders' that isolate neighbouring countries, their population and markets from one another. Because of this economic fragmentation, Africa provides an especially compelling case for economic integration through intra-regional trade. Over the years, there have been several attempts to improve such integration towards a "United States of Africa", implying a single African military force, a single currency and a single passport for Africans to move freely around the continent. In this chapter, we investigate the development of these efforts with a focus on the period since 1995.

Africa could reap large economic gains by furthering its long-standing efforts to integrate economically. We see four main paths in which those may materialise. First, integration enlarges the size of markets by combining the small domestic market of each nation into one larger-integrated-regional market with more consumers, producers, and hence greater levels of competition. Second, such competitive markets require producers to lower prices and improve quality, which ultimately benefits consumers. By purchasing goods at lower costs, consumers will be able to increase their disposable incomes. Third, the increased disposable income can be spent on new goods and services. The growing demand may then encourage entrepreneurship and creates new business opportunities for firms and enhanced employment opportunities. Fourth, larger markets spur innovation and enable efficiency gains, thereby achieving economies of scale as firms keep costs down while assuring quality. For example, they can utilise more advanced technology, and produce in larger batches to reduce the per-unit costs of production.

The chapter is structured as follows. The next section gives a brief historical background of intra-Africa trade during pre-colonial and colonial times. We then describe Africa's many intra-regional integration arrangements post-independence. Subsequently, we explore the types of trade agreements and their benefits and different institutional forms. Further, we estimate the volume of intra-regional trade flows in Africa's major trading blocs. Thereafter, we highlight some of the challenges that remain as African nations seek to integrate their economies further, and finally conclude.

2. Intra-regional trade in historical perspective

The pre-colonial era

Intra-regional trade in Africa goes back to pre-historic times as evidence exists of the earliest African communities exchanging items such as metals, stone tools, and shells. Trade accelerated with the emergence of agricultural settlements, the establishment of towns, and the development of complex political systems such as chiefdoms, kingdoms, and empires. Trade patterns in the pre-colonial period were shaped by variations in local resources as well as differences in climate, geography, technology, and population density. For example, trade in North African salt, cloth, beads, and metal goods, exchanged for West African commodities such gold, ivory and slaves, pre-dated colonial rule by at least a millennium. Similarly, cotton cloth – manufactured and dyed in Kano's flourishing textile industry in today's Northern Nigeria – was to be found in many parts of West Africa since the 18th century. Also, traders of wool from the Atlas Mountains in Morocco, ivory from the forests and grasslands south of the Sahara as well as slave traders engaged in West Africa's long-distance trade. Another telling sign of economic integration was the widespread use of similar commodity currencies such as iron, salt, gold dust and cowrie shells across distant regions. Despite its importance and duration, intra-regional trade within Africa has always been constrained by high costs of transporting goods over land and negotiating and enforcing trade agreements on a continent that is not only vast in size, but extremely fragmented socially, linguistically, and politically.

Transportation costs are higher in Africa than in many other regions of the world. One reason is that relative to its large area, the continent has few navigable waterways. Rivers and lakes have long been catalysts to inland trade as it takes less energy to move cargo, especially bulky goods, from one point to another across water than land. Also, inland transportation by horses, camels and oxen in tropical Africa was hindered by the prevalence of the tsetse fly that transmits sleeping sickness (trypanosomiasis) to draught animals. Therefore, human head-loading became the default mode of transport in the tropics. However, the cost of porterage was high relative to the value of the cargo porters carried. Porters were also limited in how far they could travel and how much weight they could carry. Meanwhile, in the dry areas of the Sahel and Sahara there was no sleeping sickness. Here major trade centres concentrated in the Niger River Basin such as Timbuktu, Gao, and Djenné connected sub-Saharan regions to areas north of the Sahara Desert including the rich trading regions along North Africa's Mediterranean Coast.

Another impediment to regional trade was the large number of independent chiefdoms. Each chief would tax traders crossing through their territory without regard to how much neighbouring rulers had already charged. When goods were moved over long distances, the total amount paid in taxes could reach a level that would make trade unprofitable. The ability to lower tax burdens by reducing the number of tax levying authorities may explain the durability of large and powerful empires that flourished in pre-colonial times, for example Ghana, Mali, Songhai, and Borno-Kanem.

In addition, trade tends to flourish when trading parties trust one another because they share a common language, belief system, and legal framework that they may refer to during negotiations or dispute resolutions. Pre-colonial Africa was, however, very socially diverse and this made trade costlier. Therefore, particular ethnic groups who had members dispersed across large areas often organised and carried out inland trade. The Mande (in West Africa), the Tuareg (in the Sahara), or the Fulani (in West-Central Africa) are examples that highlight the way in which the sharing of language, religion, and kinship fostered trust and familiarity which in turn helped to lower the costs of trading goods across the cultural, geographic, and political divides. A major reason why regional trade flourished along the trans-Saharan route was that Muslim traders spread Islam throughout West Africa and thereby introduced a common legal code. Muslim traders brought commercial innovations such as contract law that lowered the costs of resolving disputes and their use of a common language – Arabic – widened information networks and facilitated access to credit.

The colonial era

By the late 19th century, most of sub-Saharan Africa was colonised by European powers. The division of the continent into competing European-administered zones and the promotion of extractive industries such as mining (e.g. gold, diamond, copper) and cash crop cultivation (e.g. cotton, palm oil, groundnuts) for export to Europe led to a relative decline in the importance of intra-Africa trade. Colonial rulers built ocean ports and railways to facilitate extraction and export of precious African minerals and agricultural commodities to overseas markets. Although railways were commonly built to integrate colonies with their European 'mother country', in a limited number of cases, railway infrastructure facilitated the integration of contiguous African regions ruled by different European powers. For example, the Katanga-Benguela Line linked the copper mines of the Katanga region in Belgian Congo (DR Congo today) to ocean ports in British Tanzania as well as Portuguese Angola. More often, however, intra-regional rail links were blocked because competing colonial powers refused to allow railway tracks of rival powers to cross their territory.

With the coming of colonialism, pre-colonial trade structures increasingly steered away from addressing African consumer needs by exploiting the comparative advantage of regions, towards integrating African colonies into the global export market. European powers made efforts to integrate their African colonies with their own national economies at times by linking their African territories more closely together using new institutions such as customs unions and currency boards. Customs unions introduced a common external tariff for all goods imported into the colony while allowing for a tax-free movement of most goods within the customs union area. Currency boards were some of the institutions that played an important role in furthering the economic integration of colonial regions.

Today, we can still find examples of intra-regional trade with roots in the colonial period. The British formed Africa's first customs unions in their Southern and East African colonies at the end of the 19th century, mainly to facilitate the free flow of goods between the colonies. Still, the Southern African and East African blocs, known as the *Southern African Development Community* (SADC) and the *East African Community* (EAC), have the highest levels of intra-regional trade in Africa. The roots of Southern Africa's relatively high level of economic integration date back to 1889, culminating in the establishment of the *Southern African Customs Union* (SACU) in 1910. SACU integrated the economies of the British Cape Colony (the southern half of today's South Africa) and the Orange Free State (present-day South Africa's Free State). SACU expanded gradually until 1915 when it comprised present-day South Africa, Namibia, Swaziland, Botswana and Lesotho. In East Africa, the first colonial customs union was founded in 1900 as the East Africa Customs Union Collection Centre. This colonial antecedent of today's EAC was established in the Kenyan port of Mombasa to collect customs duties for imports to Uganda.

Another example of a colonial legacy on contemporary African economic integration is the continued use of currencies. The West African and Central African CFA Franc, first introduced in 1945, are still used in all regions of West and Central Africa (except Mauritania) that were French colonies. The common regional currency has eased intra-regional trade by eliminating the need to convert funds into a foreign currency before buying foreign goods.

3. Post-colonial regional economic integration

By the end of the 1960s, most African countries had gained independence, and started to experiment with regional integration. In this section we highlight a few examples of regional integration post-independence. Post-colonial integration had potential obstacles but also some opportunities to build on. The arbitrary colonial borders placed as well as the various colonial structures set to serve the interests of the colonial masters were potential obstacles. For example, French West Africa was more entangled in France's economic and political systems than with its neighbouring British West Africa. This divide continued even after independence. At the very least, this sowed seeds of language barriers between the Anglophone and Francophone neighbours. African colonial economies were export oriented and deeply entangled in the global capitalist economy as producers of raw materials for their colonial masters. However, there was also some head-start towards integration achieved during the colonial period in the form of various efforts at colonial intra-trade and co-operation. The EAC, established by colonial Britain to facilitate free trade between its colonies in the East African region, is a good example of colonial networks of trade integration. It involved the establishment of a customs union in 1917 between British Tanganyika (present-day Tanzania), Uganda and Kenya, and later in 1948 the creation of a common market and common services such as harbours and railways, as well as cross-border investments in postal and telecommunication infrastructure.

In the euphoria of independence, discussions about integration emerged from the late 1950s and early 1960s. There were two dominant views about Africa's regional integration. The first was a Pan Africanist vision of a political union including all African nations – the "United States of Africa" and the second a more gradualist approach. Both approaches underscored the need to move towards a political union of Africa as a way to achieve decolonisation and avoid or even reverse further *balkanisation*, a process of dividing a region into smaller countries, usually operating with minimal co-operation with each other.

The African Union, founded in 2002, consists of 55 member states and is based in Addis Ababa, Ethiopia. Official bodies include the Peace and Security Council and the Pan-African Parliament.

The gradualist approach considered Africa's regional blocs as the building blocks of an increasingly evolving political and economic ties paving way for the integration of the entire continent. Leopold Sedar Senghor of Senegal and other African leaders thus founded the *Organisation of African Unity* (OAU) in 1963. In 2002, it was disbanded and replaced by the *African Union* (AU, see image above), with 55 member states representing all the countries on the continent. The AU aims at achieving greater unity and peace between African countries, defending the sovereignty of member states, accelerating the integration of the continent, and co-ordinating and harmonising policies between existing and future regional economic blocs for the gradual attainment of the Union's goals. Hence, the importance of the regional economic blocs to the AU cannot be overemphasised, and these goals led to the creation of many political and economic unions in different regions of the continent. We introduce some of the major unions below, followed by a detailed analysis of how the blocs' traded evolved over time in Section 6.

Following the gradualist path, Tanzania, Uganda and Kenya came together and created the *East African Community* in 1967. The agreement aimed at maintaining a common external tariff on imports from non-members and free trade within the bloc. This agreement ended in 1977 due to a power tussle over control of the bloc's resources and differences in economic and political ideologies pursued by members, amongst other reasons. It was only in 1999 that the EAC was revived when a treaty to re-establish the bloc was signed in Arusha (Tanzania). Burundi and Rwanda later joined the founding members of the bloc in 2007, and South Sudan in 2016.

Established in 1975 ECOWAS consists of two institutions to implement policies: ECOWAS Commission in Abuja (Nigeria) and ECOWAS Bank for Investment and Development in Lomé (Togo), shown in picture.

In West Africa, the post-colonial period witnessed the emergence of the *Economic Community of West African States* (ECOWAS, see image above). ECOWAS was established in 1975 in the treaty of Lagos (Nigeria) and it is made up of 15 Francophone and Anglophone countries; these are Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo. Its objective is to create a large West African market through free trade and a monetary union. Building on these goals, the *West African Economic and Monetary Union* (WAEMU), a sub-regional bloc of ECOWAS, was established in 1994 in the Treaty of Dakar (Senegal). This is a bloc comprising eight West African countries that share a common currency, the CFA franc, and French as an official language; these are Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal, Togo and Guinea-Bissau. WAEMU's objective is to promote regional economic integration and a common market.

Further, the *Southern African Development Co-ordination Conference* (SADCC) was founded in 1980 by 9 member states, including Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. In 1992, it was replaced by the *Southern African Development Community* in Windhoek (Namibia) with the adoption of the 9 SADCC pioneer members and newly independent Namibia. South Africa joined later after apartheid in 1994, and other members namely Mauritius, Comoros, DR Congo, Madagascar and Seychelles joined afterwards. Originally, SADCC was established to reduce economic dependence on South Africa and mobilise resources to implement intra-and interstate policies. Later, SADC's objectives were reformulated to include achieving economic growth and development, peace and security, alleviate poverty and enhance the standard and quality of life of the people of Southern Africa.

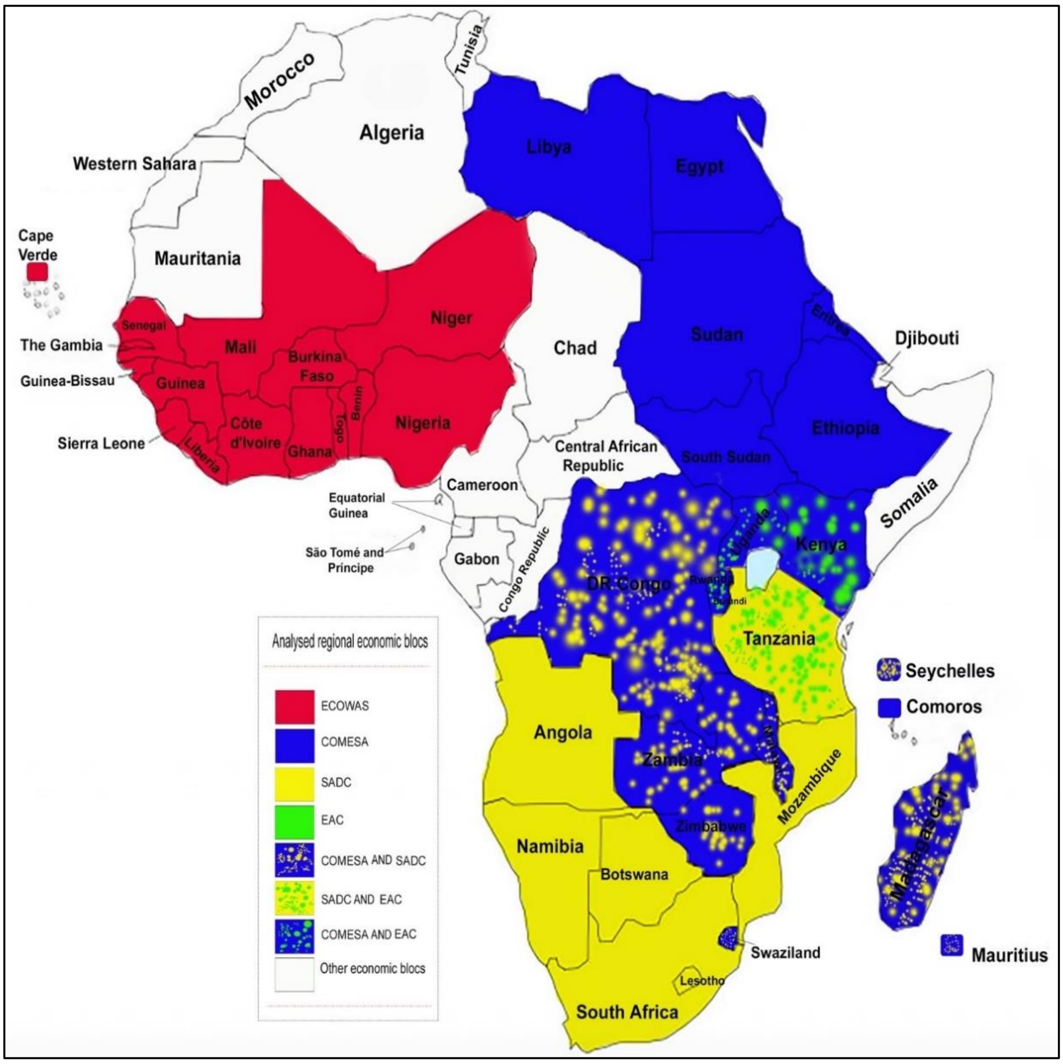
Finally, the *Common Market for Eastern and Southern Africa* (COMESA) was established in 1994 in the treaty of Lilongwe (Malawi). This agreement replaced the Preferential Trade Area of Southern and Eastern Africa which existed since 1981. COMESA is a union of 19 countries mainly from eastern and southern Africa; namely Burundi, Comoros, DR Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe. The bloc was established to abolish obstacles to free trade between members, and co-operate in developing its natural and human resources.

While the regional economic blocs were established to primarily pursue sustained economic growth and development between member countries, they have also been drawn into the resolution of conflicts and other peace and security matters due to the appreciation that peace and security is a necessary prerequisite to stability and economic development. For example, amongst others, ECOWAS intervened in the civil conflicts in Liberia and Sierra Leone, and SADC in the DR Congo. The AU itself has supported military deployments in Burundi, South Sudan, Central African Republic and mandated the Multi-national Joint Task Force against Boko Haram in the Lake Chad Basin. The AU now has at its core the regional economic blocs as a cornerstone of its peace and security architecture in the continent.

Figure 1 shows countries' membership in the above mentioned Africa's major regional economic blocs. Countries coloured in pink, blue, yellow and green represent ECOWAS, COMESA, SADC and EAC regional economic blocs, respectively. Some countries on the map appear in a dotted-combination of colours indicating that those countries are members of multiple economic blocs, hence, their colouring overlap. For example, DR Congo, Zambia, Zimbabwe, Seychelles, Madagascar, Swaziland, Mauritius and Malawi belong to both COMESA and SADC. Similarly, Burundi, Uganda and Kenya are members of both COMESA and EAC.

The white areas mapped in Figure 1 belong to regional economic agreements not covered by the four regional blocs presented earlier. For example, Algeria, Tunisia, Morocco, Mauritania, and Libya are members of the *Arab Maghreb Union*. The four regional economic blocs explored in the chapter cover the majority of countries in all African regions.

Figure 1: A selection of Africa's major economic blocs



4. Trade agreements across Africa

The establishment of trade agreements is an imperative aspect of regional economic integration. The degree of economic co-operation varies between the types of trade agreements. Table 1 presents the different types of collaborations, extent of economic co-operation and provides some examples. It shows a progressively stronger level of economic co-operation between countries, indicated by the grey shaded major trade objectives in each stage of economic integration.

A type of agreement requiring only limited commitments toward economic integration is the *preferential trade area*. This is an agreement where member states charge lower tariffs on imported goods from participating countries, while imposing higher tariffs on imports from non-member states. Preferential trade agreements can be bilateral (between two countries) or multilateral (between more than two countries). An example of this sort of an agreement is the *Preferential Trade Area of Eastern and Southern Africa* (PTAES) between Zambia, Burundi, Ethiopia and Lesotho, among others.

Table 1: Stages of economic integration

Stage of economic integration	Diminishing trade barriers between countries	Common external tariffs	Freedom of movement of factors of production	Common currency & economic policy	Integration in non-economic areas	Example
1. Preferential trade area						Preferential Trade Area for Eastern and Southern Africa
2. Free trade area						South African Development Community
3. Customs union						East African Community
4. Common market						European Union

The *free trade area* is a regional trade bloc whose member countries have signed an agreement that removes all tariffs and quotas on imports from member countries. For example, as indicated in the preceding section the PTAES transformed into COMESA, a free trade area. The SADC is another example. Internationally it compares to the USMCA, between the USA, Mexico and Canada.

A more advanced stage of the free trade area is the *customs union*. This is essentially a free trade area with the additional feature of member countries charging common tariffs on imports from non-members. Hence, the customs union could be labelled as a free trade area with common external tariffs. The EAC is an example of this trade agreement.

Finally, the *common market* is a more integrated version of a customs union. It is essentially a customs union with the added feature of free movement of factors of production, such as labour and capital, between member states. The European Union is the only existing example of such advanced regional economic integration.

5. Benefits from regional economic blocs

There are numerous advantages associated with abolishing barriers to free trade and forming regional economic blocs. Its potential benefits are five-fold: (i) consumer welfare, (ii) productivity gains, (iii) enhanced capacity and capability to undertake regional infrastructure development projects, (iv) greater economic diversification, and (v) strengthened political ties and enhanced bargaining power in global markets. Some of these benefits are related.

(i) Improved consumer welfare

Removing trade barriers increases the flow of goods and services within a trade bloc. This is because reducing the costs associated with transporting goods from one country through reductions or the elimination of customs fees and tariffs increases the volume of goods and services that are traded. An increase in the number of goods in the market typically results in lower prices for consumers. Moreover, increased trade between members of a trade bloc may also increase both variety and quality of consumer goods. As trade barriers are lowered, prices decline and consumer welfare improves. The general population can save money from purchasing at lower prices.

(ii) Increased economic growth and productivity

As countries specialise in exporting commodities that they produce at lower costs than their trading partners, domestic producers gain foreign customers who buy at higher prices than the domestic consumers. The economy becomes more efficient when producers get higher incomes by selling their goods in foreign markets at higher prices while domestic consumers save by purchasing imported goods that are cheaper than the domestically produced alternatives. Companies may also become more efficient and produce goods at lower cost because the costs of producing and distributing goods in bulk for both the domestic and foreign markets may be lower, a term referred to as '*economies of scale in production*'. The combined gains for consumers and producers, in the form of decrease in prices, increase in output, and the growing efficiency of firms that export goods can contribute to economic growth.

(iii) Enhanced capacity and capability to undertake regional infrastructure development projects

As countries productivity increases the infrastructure that underpin and accelerate growth need to be enhanced. Thus, there could be co-operation in the development of transport infrastructure such as roads and railways across international boundaries to reduce the high costs of intra-regional trade. An example is the Arusha-Namanga-Athi River road that connects Tanzania and Kenya, completed by the EAC in 2012.

(iv) Economic diversification

One virtue of intra-Africa trade is that the goods currently exchanged between African countries are more diversified than those traditionally exported to other continents. African countries that trade extensively with other African countries also happen to be the least dependent on revenues from oil, gas, and precious metals. There is a striking contrast in the types of goods that African countries trade within the continent versus those which are exported to foreign markets. In 2018, 60 percent of Africa's intra-regional trade value was made up of agricultural commodities and manufactured goods, whereas only 28 percent of African exports outside the continent were agricultural or manufactured commodities; the other 72 percent consist mostly of crude oil, natural gas and minerals. Agriculture and manufacturing tend to require a lot of labour, in contrast to mining and drilling where production depends more on having advanced technologies and capital. Therefore, there is reason to expect that growth of intra-regional trade will improve employment opportunities within the African continent. Another long-standing concern is that African economies are mostly mono-cultural and exports such as minerals and agricultural commodities (e.g. cocoa, coffee, cotton and palm oil) are characterised by large and sudden price fluctuations. In the event of a sharp fall in prices for a country's major export, this may lead to a revenue crisis and it can reduce a nation's overall growth. A more diversified set of export goods would shield African economies from instability by providing alternative sources of export revenue.

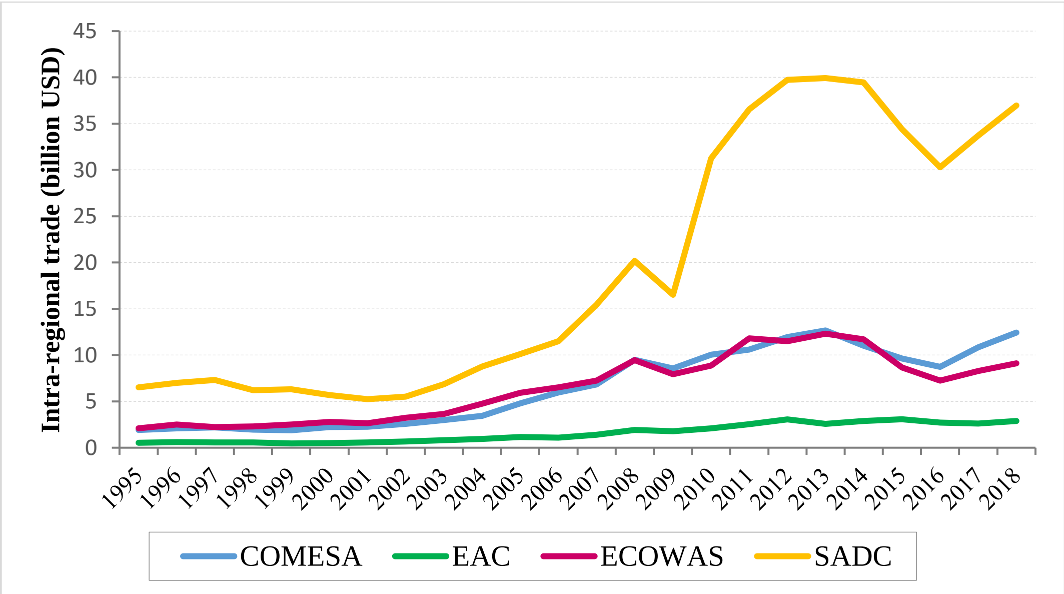
(v) Strengthened political ties and enhanced bargaining power in global markets

Increasing economic interaction between member states of a trade bloc may also strengthen political ties. This can help when addressing international, political and civil conflicts. For example, the Economic Community of West African States Monitoring Group (ECOMOG), a multi-national military force, was established by the Economic Community of West African States (ECOWAS). ECOMOG was instrumental in mitigating some of the political and civil conflicts in Liberia, Sierra Leone and Guinea-Bissau from 1990 to 2003. We take a final example from African countries negotiations with international organizations such as the World Trade Organization (WTO) and the United Nations (UN). If these were to be undertaken as a bloc of nations, rather than as individual countries speaking on their own behalf, African states would have more political and economic leverage.

6. Comparative analysis of trade flows in Africa's regional economic blocs

It is useful to analyse first, the development of the extent of African intra-regional trade over time in each of Africa's major trading blocs before proceeding to analyse how the shares of the blocs' trade have evolved over time. To do this, data for the period 1995-2018 was retrieved from an open-source online database maintained by the United Nations Conference on Trade and Development. The data consists of annual time-series of each bloc's intra-regional trade flows, trade flows with other regions within and outside Africa (all measured in million USD), as well as the population of each trading bloc.

Figure 2: Intra-regional trade flows in Africa's major regional economic blocs, 1995-2018

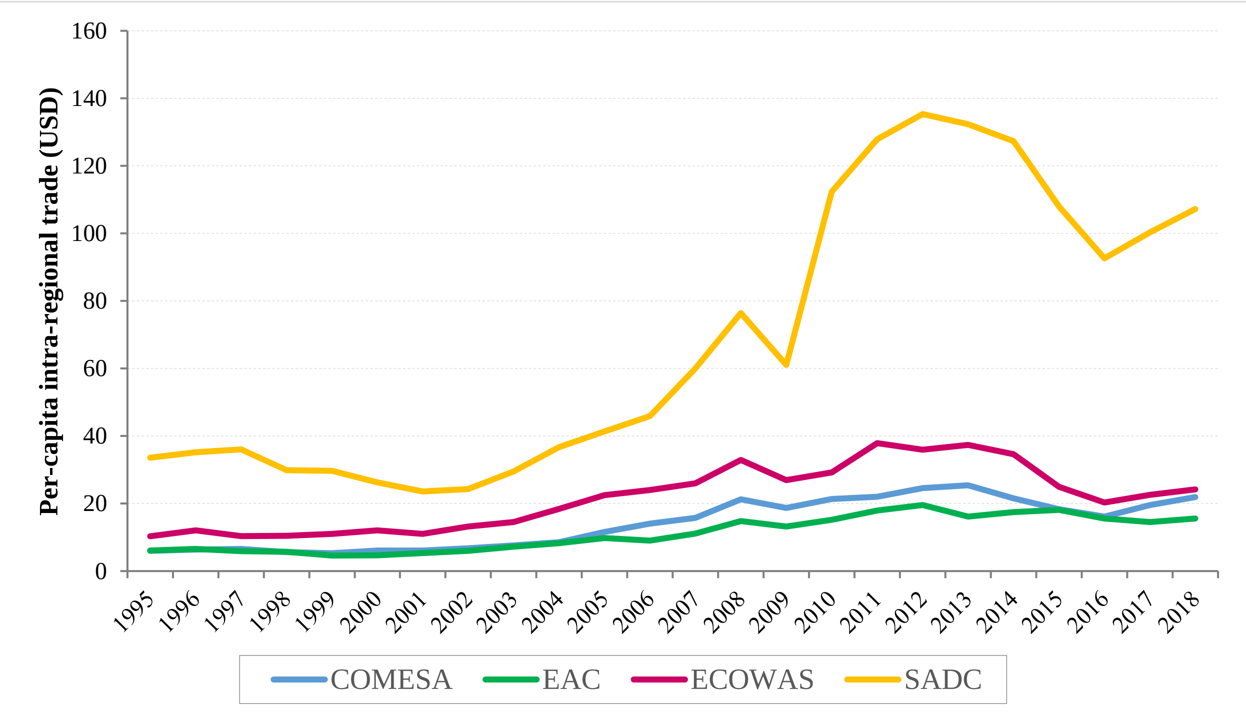


Source: UNCTAD (2020). UNCTADSTAT.

Figure 2 presents the trends of intra-regional trade flows in Africa's regional economic blocs, showing a growing volume of intra-regional trade over the past 15 years. A similar set of trends is depicted in Figure 3 showing per-capita volumes of intra-regional trade (in USD), defined as the ratio of the total volume of intra-regional trade divided by the population of a bloc.

Though the trends depicted in Figures 2 and 3 are similar, it is worth noting the growth and divergence of the SADC curve from 2008 onwards, relative to the trends depicted by the curves for other blocs. SADC established a free trade area in 2008, abolishing tariffs on 85 percent of the goods traded between member states. This agreement made SADC more open to intra-regional trade, although this trade is largely driven by South Africa, the most industrialised country in the region. For example, South Africa's exports to SADC rose from about US$9 billion in 2008 to US$23.6 billion in 2013, indicating a growth rate of exports to SADC countries of over 160 percent. Meanwhile, its imports from other SADC countries also rose from about US$5 billion in 2008 to US$7 billion in 2013, i.e. a 40 percent growth rate.

Figure 3: Per-capita intra-regional trade flows in Africa's major regional economic blocs, 1995-2018

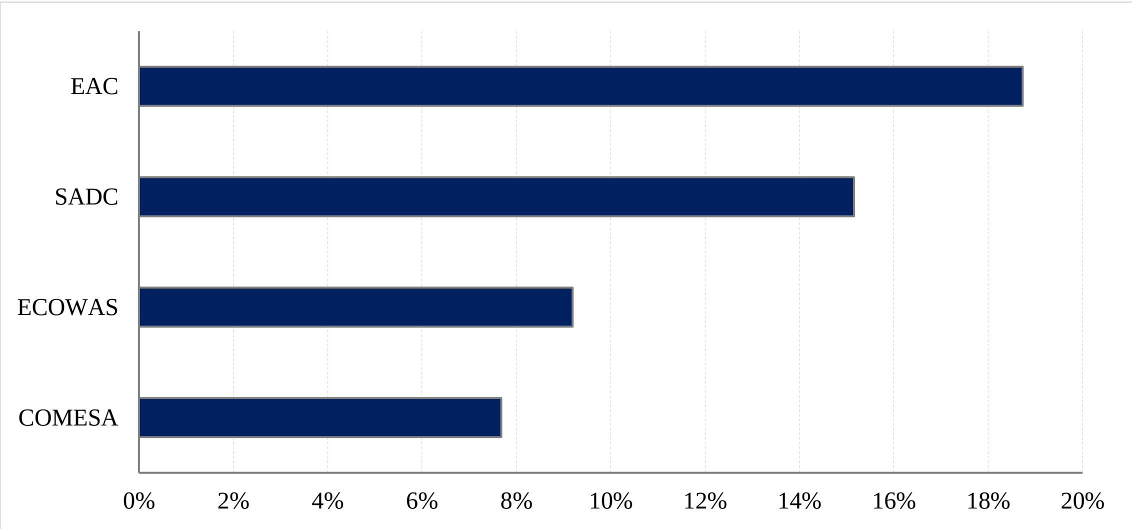


Source: UNCTAD (2020). UNCTADSTAT.

For the analysis of how the shares of the blocs' trade have evolved over time, we measure the level of economic integration by the share of intra-regional trade. This is defined as the ratio of within- bloc trade to the total trade carried out by bloc members. For instance, considering a regional economic bloc such as COMESA, our measure of integration compares the volume of trade flows between members of COMESA, to COMESA's total trade flows.

Figure 4 presents each trade bloc's average share of intra-regional trade in the period 1995-2018. The EAC is the most integrated bloc in Africa with a 19 percent share of intra-regional trade, followed by SADC (15 percent), ECOWAS (9 percent) and COMESA (8 percent). What explains the EAC's leading performance based on this measure of integration? First, the founding EAC members had the advantage of having the same colonial administration. Following independence, the colonial infrastructure and institutions (railways, ports and trade boards) which were created for colonial purposes provided a good foundation for the EAC compared to other regional blocs. Second, the fact that the EAC is a customs union appears to place it at a more advanced stage of economic integration. Meanwhile, the other blocs remain at the stage of either a preferential trade area or a free trade area. The EAC also records the highest share of trade with other regions in Africa (see Figure 5). The EAC carries on 16 percent of its trade with the rest of Africa while the other blocs record considerably lower volumes: SADC 3 percent, ECOWAS 5 percent, and COMESA 5 percent. Within the EAC bloc, Kenya is the most industrialised country and the major source of exports generally, while Uganda is the largest importer, sourcing mostly from Kenya.

Figure 4: Average share (%) of intra-regional trade in total trade flows, 1995-2018

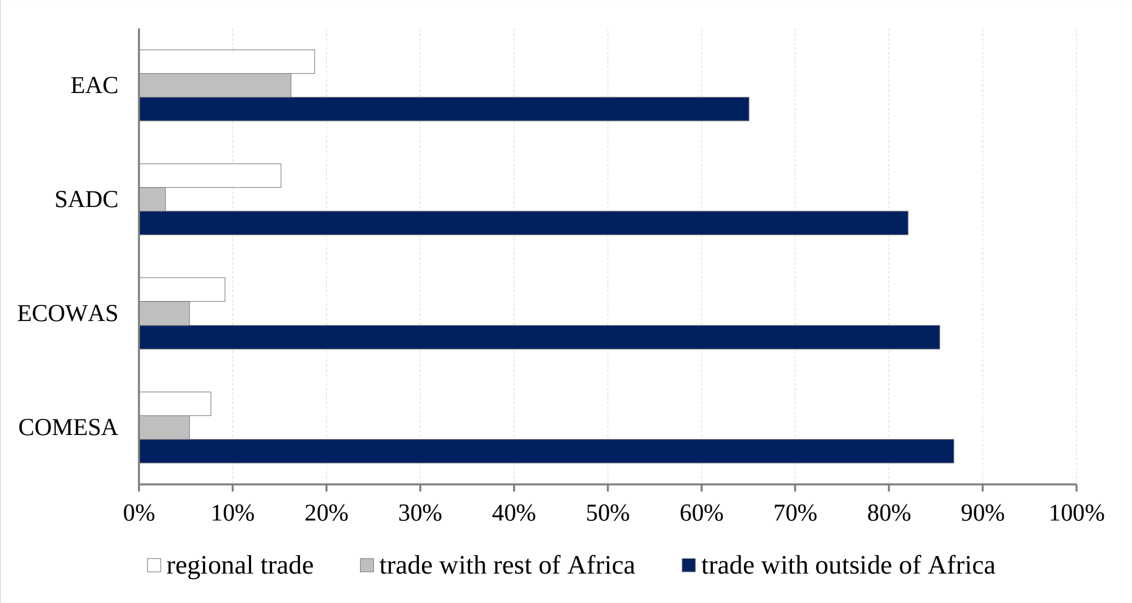


Source: UNCTAD (2020). UNCTADSTAT.

Figure 5 shows that EAC is also the most successful trading bloc when it comes to the magnitude of trade with other regions within the continent. While Kenya mainly exports manufactured products and imports food items, especially cereals, the imports and exports between Tanzania, Uganda, Rwanda, Burundi and South Sudan, are largely composed of food and agricultural products. By and large, the region has been successful in utilising the internal differences in comparative advantage in the production of various commodities needed by members to boost trade within the bloc. For example: Rwanda and Burundi import dairy products from Uganda; Tanzania and Uganda export wheat and maize to Kenya; and Burundi exports sugar to Rwanda. Moreover, a common official language, Swahili, is shared by three big players in the bloc, namely Kenya, Uganda and Tanzania. This promotes the idea of sharing a similar historical background and social ties, thereby making member countries more receptive of integration.

Figure 5 also illustrates that in the years 1995-2018 on average about 80 percent of African trade was done with regions outside the continent. This indicates that compared to the continent's engagement in global import and export markets, Africa's own economic integration is relatively limited. Notwithstanding, this pattern has recently begun to change. Between 2011-2018 the average share of within African trade by our blocs in Figure 5 was about one-quarter, while three-quarters of trade was with the rest of the world.

Figure 5: Intra-regional, intra-Africa and foreign trade in sub-Saharan Africa, 1995-2018



Source: UNCTAD (2020). UNCTADSTAT.

7. Challenges and opportunities for future intra-Africa trade

Intra-regional trade as a percentage of total African trade (the value of total exports and imports), remains the lowest in the world. Intra-regional trade accounts for only 10 percent of total trade in Africa, but comprises 70 percent of all trade in Europe, 48 percent of all trade in Asia, and 20 percent of all trade in Latin America. So, why is Africa's intra-regional trade comparatively low? And why does it grow so slowly? The answer is not that African countries have failed to sign a sufficient number of agreements liberalising trade within the continent. Instead, there are other trading costs and obstacles that seem to be impeding the realisation of the greater economic integration and intra-Africa trade.

First, African trade blocs have long focused on reducing tariffs, but have ignored non-tariff barriers such as sourcing rules, labelling requirements and other country-specific standards that can be even bigger obstacles to promoting regional trade. In cases of overlapping membership, countries make multiple financial contributions to economic blocs while overlapping bloc memberships can complicate tariff reforms when changes by one bloc conflict with rules set by another. For instance, to qualify for preferential access to markets in SADC countries, textiles must be manufactured and sourced entirely in the SADC region, but very few textiles from SADC qualify. As a result, trade in garments is stifled and the SADC area imports most textiles from non-SADC countries.

Second, efforts to liberalise regional trade may flounder for political reasons. Domestic support for free trade is often weak and the increased competition from imported goods often galvanises groups such as labour unions to oppose further liberalisation. African trade blocs do not have a way of compensating domestic producers hurt by import competition and that weakens the political case which leaders must often make to their constituents about the benefits of free trade. African states themselves often lack the will to reduce import tariffs because tariffs provide an important source of government revenue and they are especially vital because governments often have great difficulty raising revenue through income taxes.

Third, if integration is to progress further, Africa's regional trading blocs will have to widen their focus from tariffs and trade in goods to liberalising trade in services. To make it easier for bankers, building contractors, accountants, lawyers, and other service providers to do business in a multinational region, policy makers will have to harmonise rules about professional licenses to remove restrictions that prevent service providers with licenses earned in one country from serving clients in other nations where licensing requirements may differ. Africa's trade blocs will also have much work to do to harmonise rules about competition, investment, and intellectual property. Failure to consider these areas will cause future conflicts as bloc members intent on protecting domestic producers from foreign competition may claim that foreign governments are giving their own firms unfair advantages by setting rules on competition, investment, or intellectual property that stymie foreign competition.

Fourth, the costs associated with the transportation, handling, and inspection of goods often exceed the costs of tariffs. According to a World Bank report *Doing Business* 2008, the cost of delays at African borders was four times higher than the cost of paying foreign tariffs. Whereas Canada and Estonia only require 3 documents to legally export goods, Burkina Faso requires 11 documents and Angola requires 12. The average time spent in clearing goods at the Danish border was 5 days in 2007, whereas the delay that year was 69-71 days in Rwanda, Burundi and Eritrea. Transport costs are also high in African countries compared to Asia, Latin America and Europe, partly because Africa has fewer paved roads than other world regions. In 2009 the World Bank found that 19 percent of African roads were paved versus 53 percent in China, 80 percent in Russia and almost 100 percent in Germany. Generally, transportation costs across the African interior are often at least two times higher than most world regions.

8. Conclusion

This chapter examined Africa's historical trajectory of regional economic integration, highlighting its benefits, the various initiatives that African governments have pursued to enlarge and integrate its regional markets, the nature of the integration process and its contemporary challenges. The chapter also presented the current level of economic integration in Africa by comparing the volume of intra-regional trade flows of each major trading bloc. Despite the many challenges to integrating African economies, progress is being made. As of July 2019, the leaders of 54 African nations signed a landmark agreement to create the *African Continental Free Trade Area* (CFTA) with a plan to eliminate tariffs on 90 percent of all products within 5-10 years, to create a continent-wide free trade area in services, and to end restrictions on the movement of capital and business persons. In terms of the number of signatory nations, CFTA is already the world's largest free trade agreement.

Study questions

1. Did colonial rule both expedite and impede African inter-regional economic integration?
2. What are the most significant differences in the sorts of goods which African countries export to other regions in the world versus the type of goods traded with other African nations?
3. Discuss, using examples, the stages of economic integration starting from the earliest to the most advanced forms of economic and political co-operation between countries.
4. Discuss the rationale for economically integrating African countries. How successful have Africa's regional blocs been in achieving their goals of economic integration?
5. Compare African experiences with regional integration after independence.
6. Discuss three factors that impede regional economic integration among African economies and proffer solutions to these impediments.

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