Sub-Saharan Africa's Economy: Exports as a share of world trade

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Introduction to Sub-Saharan Africa

Sub-Saharan Africa is a vast and diverse geographical region that encompasses all African countries located south of the Sahara desert. It is home to over 1 billion people[1] and includes 48 countries[2], ranging from small island nations to larger countries like Nigeria and South Africa. Sub-Saharan Africa's population has the world's highest growth rate and current estimates indicate that it will double within the next 20 years. Only ⅓ of the region's population live in cities, among which around 70% are located in slums. Although urbanization is constantly increasing, Sub-Saharan Africa is still largely rural.

In terms of politics, Sub-Saharan Africa has a varied mix of democratic and non-democratic regimes that were set up after the long process of decolonization started after WWII. While some countries, such as South Africa and Botswana, have well-established democratic systems, others saw the rise of authoritarian regimes. In recent decades, many countries have experienced political instability, civil wars, and conflicts and many still struggle with issues such as corruption and human rights abuses.

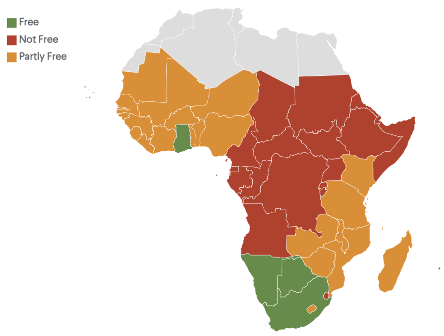

Figure 1 - Freedom House in Sub-Saharan Africa (2018)

Only nine countries in the region are ranked as "free/democratic" on the Freedom House's 2018 Freedom[3] in the World ranking, whereas 40% of the region's forty-nine countries ranked as "not free/non democratic".

Economically, sub-Saharan Africa is home to some of the world's fastest-growing economies, but also some of the poorest. The region faces many economic challenges, including high levels of poverty, unemployment[4], and a lack of infrastructure. The economy of the Sub-Saharan Africa region heavily depends on natural resources, such as oil, minerals (diamonds and gold), and agricultural products, but also on a growing service sector. During the colonial era, European powers formally controlled Africa's resources and created export-oriented economies. Today, most of Sub-Saharan Africa's exports remain raw materials. Moreover, the increasing deforestation and environmental damages have worsened the region's agricultural situation, resulting in widespread famine especially in rural areas.

[1] 43% of whom are people under the age of fourteen.
[2] This range varies from 46 to 48 depending on the international organization describing the region (e.g. UN, WHO, World Bank, etc…).
[3] Freedom House is a measurement that involves consideration of outcomes of democracy, such as political rights and civil rights.
[4] Of the region's ten to twelve million young people who enter the workforce each year, only three million find employment. That means that one in three sub-Saharan Africans (aged 15-35) is unemployed.

However, Sub-Saharan Africa has experienced some promising developments. For example, several countries have seen strong growth in their scientific production, including Ethiopia, Ghana, Mozambique and Rwanda.

Socially, sub-Saharan Africa is a diverse region with many different ethnic groups, languages, religions[5] and cultures. The region faces many social challenges, including high levels of inequality, social tensions, as well as issues related to health, such as HIV/AIDS, malaria, and other infectious diseases. A massive problem remains migration[6] caused by conflict, persecution and environmental changes, but also driven by the desire of seeking economic opportunity.

Education is a key issue in sub-Saharan Africa, with many countries struggling to provide access to quality education for their populations, particularly in rural areas. The region has some of the highest rates of education exclusion along with the lowest literacy rates in the world, and there are also significant disparities in educational accessibility between different demographic groups. For example, girls are often less likely to be enrolled in school than boys (according to the UIS[7] data 23% of girls are out of primary school compared to 19% of boys and this gap increases as they become older), and children from urban areas are more likely to receive a quality education than those from rural areas.

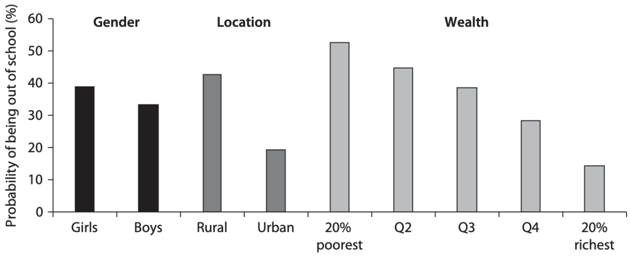

Figure 2 - Risk of being out of school by gender, location, and wealth, aggregate for low-income Sub-Saharan African countries (2003)

In recent years, there have been efforts to improve access to education and to improve the quality of education in the region, such as through the United Nations Sustainable Development Goals and initiatives such as the African Union's Agenda 2063[8].
Overall, sub-Saharan Africa is a complex and diverse region with a mix of political systems, economic conditions, and social challenges. While there have been many positive developments in recent years, there is still much work to be done to address issues such as poverty, political instability, and educational inequality that are slowing down the region’s progress.

Sub-Saharan Africa’s exports

[5] Christianity, Islam, and animist beliefs intertwine with small but important communities of Jews
[6] Between 2010 and 2017, people from sub-Saharan African countries made up nine of the ten fastest growing groups emigrating. Nearly million Sub-Saharan Africans applied for asylum in Europe.
[7] The UNESCO Institute for Statistics (UIS) is the official and trusted source of internationally-comparable data on education, science, culture and communication.
[8] “A prosperous Africa based on inclusive growth and sustainable development requires that Africa makes significant investments in education with the aim of developing human and social capital through an education and skills revolution emphasizing innovation, science and technology”.

Exports from sub-Saharan Africa as a share of world trade have grown over the past few decades, from around 1% in the 1980s to around 3% in recent years. This growth has been driven by a number of factors. One factor driving export growth in Sub-Saharan Africa has been the increase in foreign investments, particularly in the extractive industries as many countries in the region are rich in natural resources. This has led to increased exports of these resources to global markets. In addition, many countries in the region have implemented trade liberalization policies, such as reducing tariffs and other barriers to trade, which have also helped to boost exports[9].

However, despite this growth, there are still significant challenges. One major challenge is the region's heavy dependence on natural resource exports that makes these economies vulnerable to fluctuations in global commodity prices[10]. For example, Nigeria and Angola, Africa’s two largest oil-producing countries, earn 70 to 75% of export revenue from oil and frequent changes in global oil prices drastically expose these two countries to broad economic instability. Another challenge is the lack of economic diversification in many countries in the region. While some countries have managed to diversify their economies beyond natural resources, many others have struggled to create a broad-based economy with a range of industries. In addition, sub-Saharan Africa faces significant infrastructure challenges. Although there have been improvements in infrastructure, such as ports, roads, and telecommunications that have made it easier and more cost-effective for businesses to export their goods abroad, lack of reliable and affordable electricity, poor road networks, and limited access to finance still represent a big problem slowing down the region’s economic growth.

Between 2016 and 2020 Sub-Saharan Africa’s exports reached over 205 billion dollars, while imports reached 249 billion dollars. The main country to which the region is exporting is China, with whom shares 12.68% of its export trades and 20.50% of its import trades, for a total value of over 78 billion dollars. Instead, the market value of trade with other countries is far smaller. Other major countries to which Sub-Saharan Africa is exporting are India, South Africa, USA and Switzerland, but usually the share rate with these countries isn’t higher than 6%. The region exports to China, USA and India mainly raw materials, oil and gas, while exports to Switzerland usually consist of intermediate goods, natural resources and precious metals.

[9] In 2018 the African Continental Free Trade Agreement (CFTA) was introduced that will progressively eliminate tariffs on intra-Africa trade, making it easier for African businesses to trade both between the continent and abroad.

[10] African exports dipped sharply during the 2008-09 financial crisis.

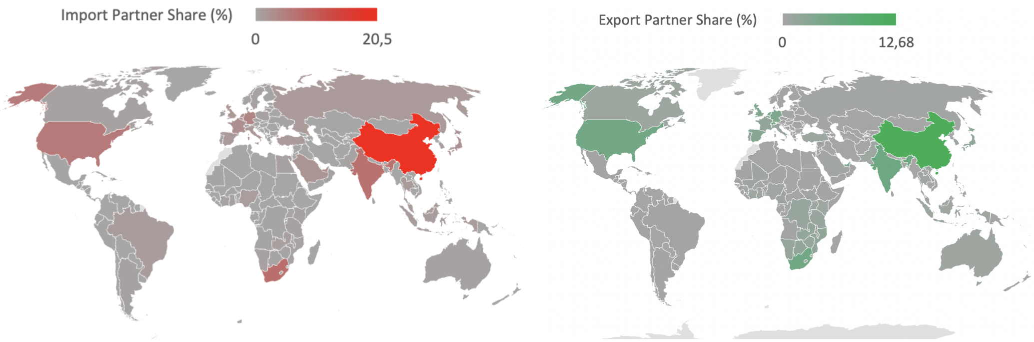

Figure 3 - Import and export shares of Sub-Saharan Africa

The significant difference in trade with China as compared to the rest of the world is the result of years of collaboration started in the second half of the 20th century.
From the 1950s to the 1970s, African countries gained independence from their European colonizers. Throughout colonization the US and European powers had found much-needed infrastructures across the continent, such as railways, highways, ports,… that were quite efficient and effective due to the large investments coming from organizations like the IMF and World Bank. However, one of the things that can be noticed in Africa is that once the former colonial governments left the Sub-Saharan countries, they stopped investing in these infrastructures that soon after became completely neglected.

As early as the 1970s, China got on the field building the Tazara Railway, a link between the Zambian town of Kapiri Mposhi and Dar es Salaam port in Tanzania. At the time it was the longest railway in Sub-Saharan Africa, allowing Zambia to ship copper, bypassing white-ruled Rhodesia and South Africa. It also gave China much-needed political allies. Indeed, from that years Beijing started to sow those seeds that later will clearly define the current division between West and East, as far as China's involvement is concerned.
In the early 2000s, as China looked to expand markets and political influence abroad, its investment in Africa ramped up. This is where politics and economics intertwined. Since countries in Africa were receiving help from China, they were also expected to side with the "donor" or at least not to participate in the condemnation at the UN level of China on key issues, including Taiwan and allegations of forced labor in Xinjiang.
Furthermore, there are many common characteristics between China and Sub-Saharan Africa, as many of those African countries are experiencing the same situation as Beijing 30 years ago: they have a lack of infrastructure and a large population that is growing quickly. They also share a history of colonialism: suffering from the same cause and struggling for the same aim, Asian and African peoples have found it easier to understand each other and have long had deep sympathy and concern for one another. Therefore, it is quite understandable why these states might be keeping a distance from Europeans, since they have been exploited for centuries by them. Moreover, the Chinese are the best in the world at producing large-scale infrastructures fast and cheaply, they have a surplus of capital to loan and all the skill and stability to deliver in a quick and low-cost way. Another relevant aspect is that there are noticeable differences between Chinese financing and how the West lends, particularly related to the low-interest rates and flexible terms that the former offers. China is more

inclined to finance large-scale infrastructures, even if it might be riskier, mainly for the political interest they have in the region, whereas Western countries are more inclined to give humanitarian aid to Africa, not treating African governments completely as partners.

These could be the reasons why Africa nowadays is more leaning towards China rather than Western powers in terms of support.
China is currently involved in around 35 Sub-Saharan African countries and has made significant contributions to its infrastructure, including ports, railways, and power plants.
It is estimated that the Chinese have invested more than 340 billion dollars in Africa, not as much as compared to the amount of money that China is using to fund countries across the world, however this represents a big investment for Africa considering the huge infrastructure gap that the region is facing.

Can sub-Saharan Africa exploit its growing population and low cost of wage to substitute China as the new "factory of the world"?
In 2100, according to UN projections, more than one person out of three will live in Sub-Saharan Africa. The region's population is currently growing at a rate of 2.7% per year, which is equivalent to adding the entire population of Italy every 2 years. Notably, sub-Saharan Africa will account for over half of the global population growth in the next 30 years, according to the United Nations (2019b). All the top 20 countries with the highest population growth rates in 2021, as reported by the CIA, are located in sub-Saharan Africa.

Eastern Asia also went under a similar booming demographic trend in the 1960s, 1970s, and 1980s, that sharply increased the ratio of working-age to non-working-age population in the area.
According to a phenomenon called by demographists "demographic dividend", they were able to exploit its growing population, that is estimated to account for up to one-third of the increase in incomes seen in East Asia between 1965 and 1990. This, combined with low cost of wages, allowed countries like China to become the main world exporter in manufacturing, and be often referred to as the "factory of the world".

Can Africa gradually replace Asia as the world's center for labor-intensive, semi-skilled manufacturing? Africa's rapidly growing labor force can be seen as a big advantage compared to the declining labor forces in China. However, in low-wage economies in southern-east Asia (Cambodia, Laos, Myanmar, and Vietnam) the working-age population will continue to grow, namely, the share of population aged 15-64 years will increase from 1.3 billion in 2015 to 1.7 billion in mid-century (UN Population Division 2015).
Therefore, a critical role will be played by how many manufacturing jobs the world economy will require in the next decades. While from 1990 and 2008 there has been a modest upward trend in the total number of manufacturing jobs globally, the World Bank forecasts future stability or even decline, largely because of productivity gains. If this prognosis is correct, Africa's growth in the working-age population is not of great advantage.

Nevertheless, the answer to the question posed in this paragraph depends on many factors. Harrison, Lin, and Xu (2014) compared manufacturing firms in Africa with firms in other low-income countries and concluded that the poor performance in Africa could be largely attributed to inadequate infrastructure and lack of access to finance, factors that could be improved in a reasonable time span. Other relevant factors may be wage costs, productivity, and human capital formation.

Cleland and Machiyama (2017) analyzed relative wage costs in sub-Saharan Africa compared to southern and east Asia, concluding that a wage-cost advantage should be excluded in most African countries. Moreover, any wage-cost advantage disappears when productivity and the cost of raw materials are considered. In furniture production, for instance, Chinese workers produce 4.5 chairs per day, Vietnamese 1.9, and Ethiopians 0.3 (Dinh et al. 2012). In addition, the costs of most raw materials, such as timber, steel, and cotton, are higher in Africa than in East Asia, mainly because of undeveloped primary industries and high import tariffs.

However, skills and ability of the labor force may be more important for industrial development than wage levels, because they constitute the basis of human capital. According to the Wittgenstein Centre[11], the proportion of the adult population in Africa with at least some secondary or higher schooling will roughly double between 2015 and 2050 (except in Southern Africa where the number is already high). Nevertheless, human capital formation also requires an effective educational system, and in Africa it has often been criticized for the lack of vocational training needed for expansion of manufacturing.

In conclusion, sub-saharan Africa's growing population represents undoubtedly a significant opportunity for the development of the region. However, to be fully exploited, it requires further investment in both human capital and infrastructure, and a higher level of industrialization, to compete with south-east Asia's manufacturing economies.

<u>Conclusion and reflections</u>

After gathering all this information, we have seen how the political scenario of Sub-Saharan Africa might resemble more the one of China with respect to the Western world. In particular, the common experience of being under the power of another country, made these two realities get closer after decolonization. Moreover, Sub-Saharan countries seem to have similar political institutions to China, which are more authoritarian than democratic - in the way we define democracy. As a consequence, the economic relation has rapidly increased with China, which invested and still invests mainly in infrastructures and in extractive industries. Instead, the USA and Europe seem to face more challenges in establishing prosperous partnerships with local leaders.

This gap of commercial trades between China and the rest of the world might increase even more in the following decades, leading to the possibility of a complete disappearance of Sub-Saharan Africa's exports towards the Western side of the world.

[11] It is a collaboration among the Austrian Academy of Sciences (ÖAW), the International Institute for Applied Systems Analysis (IIASA) and the University of Vienna that aspires to be a world leader in the advancement of demographic methods and their application to the analysis of human capital and population dynamics

Considering the possibility of Africa threatening eastern Asian economies as the new world hub of low-wage manufacturing, China’s increasing interest in Sub-Saharan Africa might not be a case, on the contrary, it can be also seen as a long term strategy: given the rising wages in eastern Asia, developing investments and solid commercial relationship with Africa can be a way for China to benefit from low-wages in manufacturing also for the following decades.

Bibliography

Cleland, J., & Machiyama, K. (2017). The Challenges Posed by Demographic Change in sub-Saharan Africa: A Concise Overview. *Population and Development Review*, *43*, 264–286. http://www.jstor.org/stable/26622882

United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population
Prospects 2019, Volume II: Demographic Profiles (ST/ESA/SER.A/427).

Bloom, David E. & Humair, Salal & Rosenberg, Larry & Sevilla, J.P. & Trussell, James, 2013. "*A Demographic Dividend for Sub-Saharan Africa: Source, Magnitude, and Realization,*" IZA Discussion Papers 7855, Institute of Labor Economics (IZA): https://ideas.repec.org/p/iza/izadps/dp7855.html

World integrated Trade Solution (WITS). *Sub-Saharan Africa Trade Summary 2020 Data*: https://wits.worldbank.org/CountryProfile/en/Country/SSF/Year/2020/Summary

Stephen Broadberry, Leigh Gardner (2022). *Economic growth in Sub-Saharan Africa, 1885–2008: Evidence from eight countries*: https://www.sciencedirect.com/science/article/pii/S0014498321000462

The World Bank Research Observer, Vol. 22, No. 1 (Spring, 2007), pp. 103-130. *The Growing Relationship between China and Sub-Saharan Africa: Macroeconomic, Trade, Investment and Aid Links*: https://www.jstor.org/stable/40282338?seq=2

Unesco, Institute of Statistics. *Education in Africa*: https://uis.unesco.org/en/topic/education-africa

Shabtai Gold (10 February 2022). *World Bank: Sub-Saharan Africa must boost 3% global trade share*: https://www.devex.com/news/world-bank-sub-saharan-africa-must-boost-3-global-trade-share-102611

Adam Gerval and James Hansen (2022). *Sub-Saharan Africa's Reliance on Oil Exports Leads to Decline in Agricultural Imports During Pandemic*: https://www.ers.usda.gov/amber-waves/2022/september/sub-saharan-africa-s-reliance-on-oil-exports-leads-to-decline-in-agricultural-imports-during-pandemic/