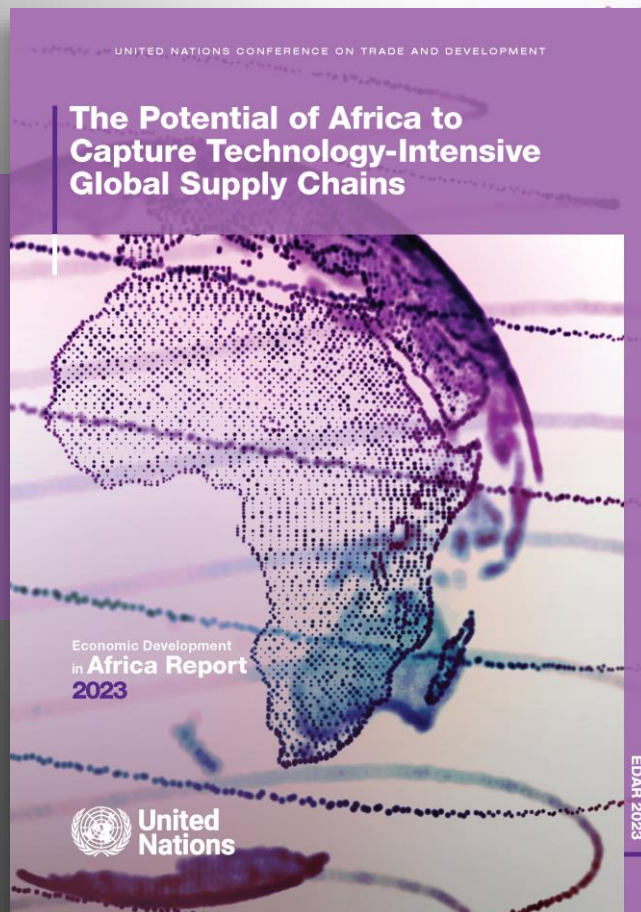


Economic Development in **Africa Report** **2023**



The Potential of Africa to Capture Technology-Intensive Global Supply Chains



UNITED NATIONS
UNCTAD

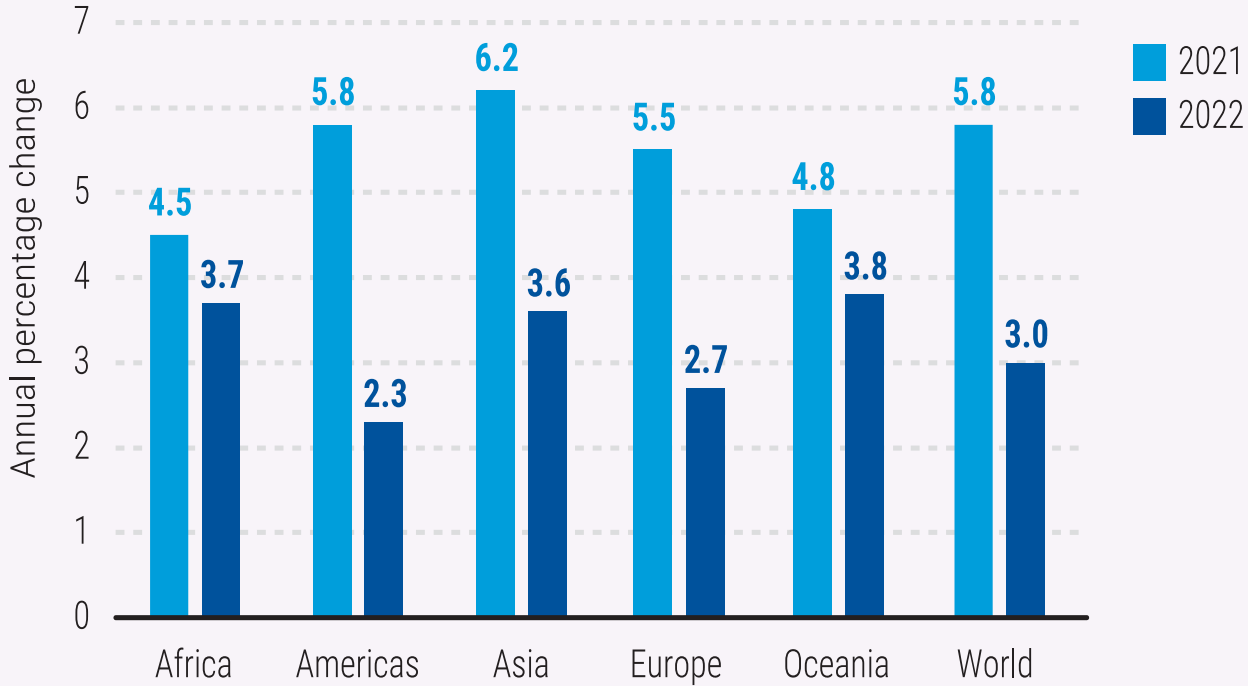


Background

Global economy prone to shocks

- The global supply chains ecosystem has been disrupted by unprecedented trade turbulence due to *economic uncertainty*, *geopolitical events* and *natural disasters*.
 - But African economies are poorly integrated into global supply chains.
 - This notwithstanding, disruptions in global supply chains have a disproportionate effect on African economies.

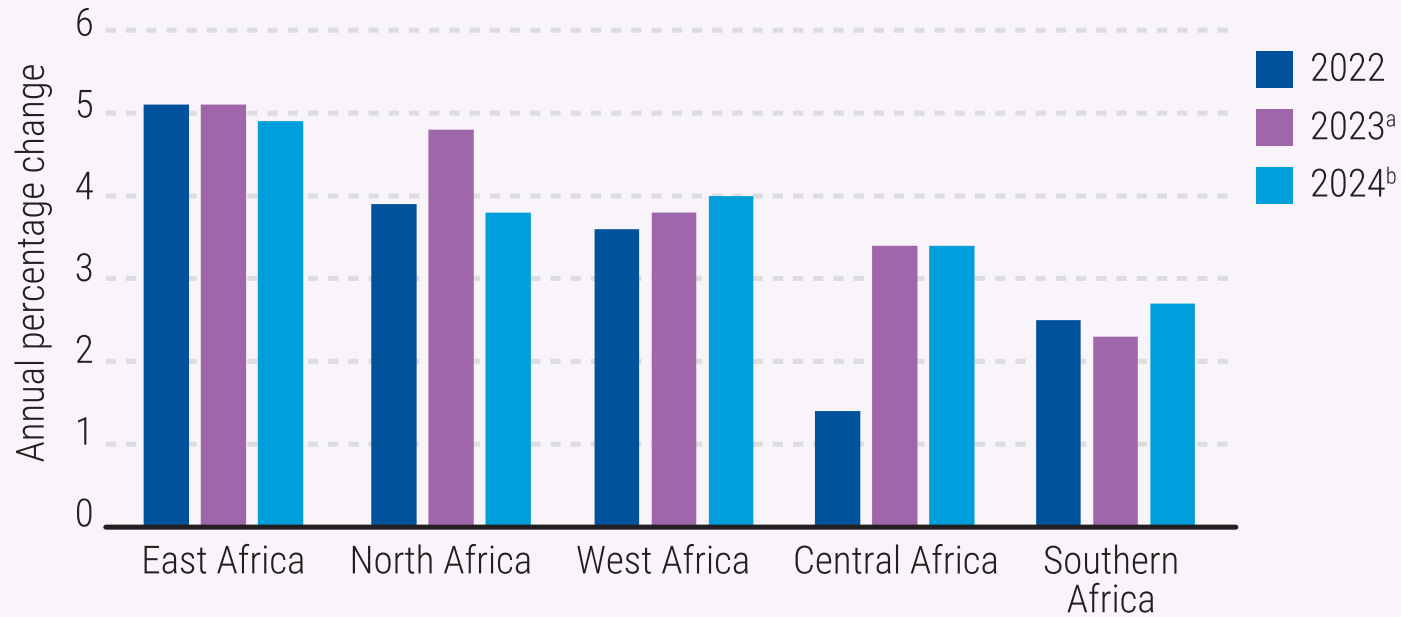
GDP Growth by region (%) change



Africa’s economy was not spared with GDP declining from 4.5% in 2021 to 3.7% in 2022.



Africa: Gross domestic product growth by region, 2022–2024



Source: UNCTAD, based on data from United Nations, 2023.

GLOBAL SUPPLY CHAIN VULNERABILITIES CALL FOR MORE DIVERSIFIED SUPPLIERS AND CONSUMERS

The cost of shipping a 40-foot container from Shanghai to New York rose **5x** in just three years

FROM

\$2,325

IN SEPTEMBER 2019

TO

\$11,778

IN SEPTEMBER 2021

THIS RESULTED IN HIGHER PRICES FOR:



Sourcing inputs and materials

Manufacturing products

Supplying and delivering goods to consumers



Concepts in Supply Chain Diversification

1. Supply base diversification and customer base diversification

- Supply base diversification – diversification in number of suppliers
- Customer base diversification – diversification in number of customers

2. Supply chain flexibility

- Supply chains responsiveness to customer needs

3. Supply chain resilience

- Diversification and flexibility ensure resilience
- the ability of a supply chain to return to its original state or move to a more desirable state after being disrupted

Features of supply chain diversification



Source: UNCTAD.

Difference between a supply chain and a value chain

Criteria	Supply Chain	Value Chain
Definition	Businesses, people and activities involved in the procurement, logistics, transformation and delivery of finished goods.	Activities involved in analysing customer needs, planning production and adding value at each step of the process.
Goal	To produce and distribute goods so as to increase customer satisfaction.	To increase the value of a good so as to create competitive advantage.
Processes	Operational management.	Business management.
Main activity	Facilitating production and distribution of a good.	Adding value to a good during each step of the process.
Stages	Begins with a request from suppliers for a specific good and ends with its delivery.	Begins with a customer's request and ends with the development of a specific good.

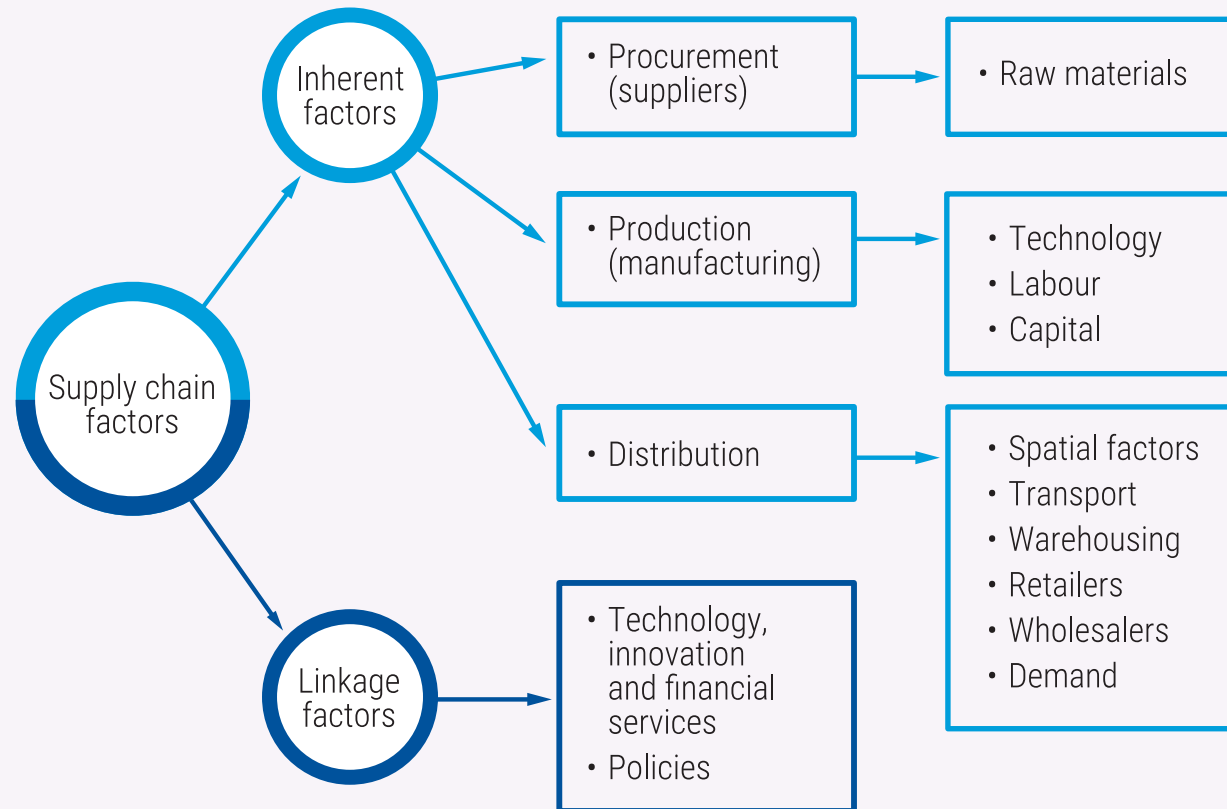


Turning disruptions into
opportunity

Turning disruptions into opportunity

- Two birds, one stone: Does the crisis provide opportunity for Africa and a solution for global supply chains?
 - Are there prospects for African countries to integrate into higher-value knowledge and technology-intensive supply chain activities?
 - What policies should be adopted to strengthen prospects for integration into supply chains?
 - What would be the role of regional integration in fostering entry into supply chains?

Inherent and linkage factors of the supply chain



Source: UNCTAD.

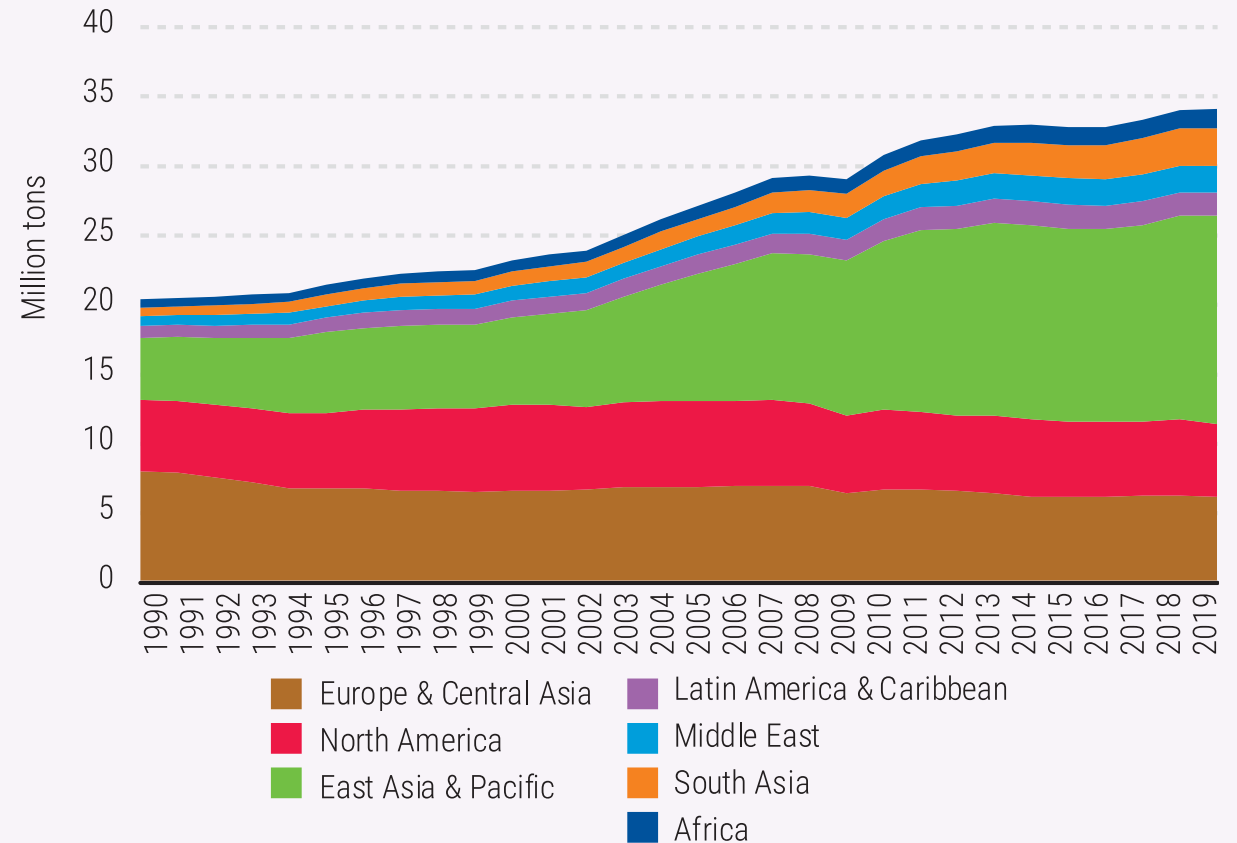


Inherent Factors

Procurement

- Global production patterns are expected to evolve, taking into account climate change, by lowering greenhouse gas (GHG) emissions, in the low carbon transition.
- Dynamic production processes will require alternative inputs, with low carbon technologies expected to increase significantly.
- Consequently, there will be a rise in demand for specific metals with utility in the low carbon transition, for instance lithium, aluminum, copper, manganese and cobalt.
- Africa is a key source of metals for the carbon transition, in 2022, Copper, cobalt, natural graphite and lithium amongst other metals were produced in African countries – Zambia, DRC, Madagascar, Mozambique, Burundi.
- African countries also hold large reserves – For instance Zambia and DRC hold 59 % of copper reserves globally (chapter 2: battery manufacture).

Global increase in CO2 emissions, 1990–2019



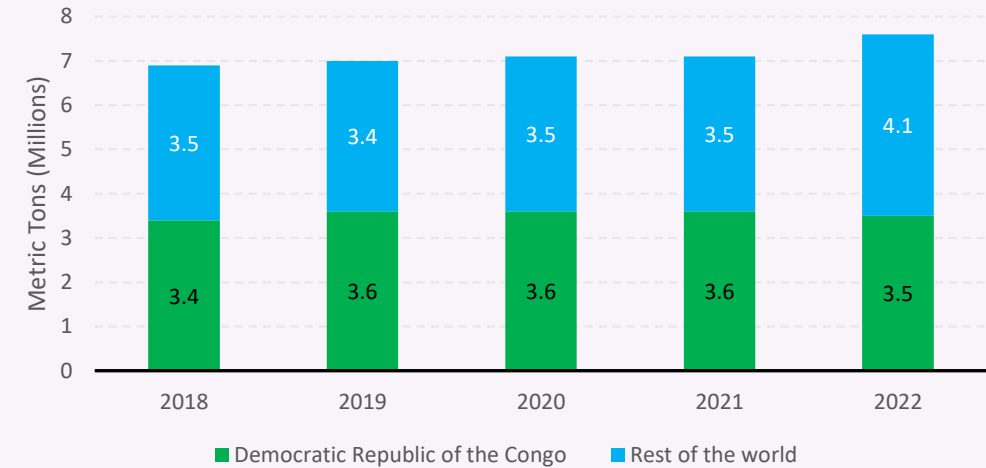
Source: UNCTAD calculations, based on data from the World Development Indicators database (World Bank).

Cobalt and manganese reserves in selected African countries

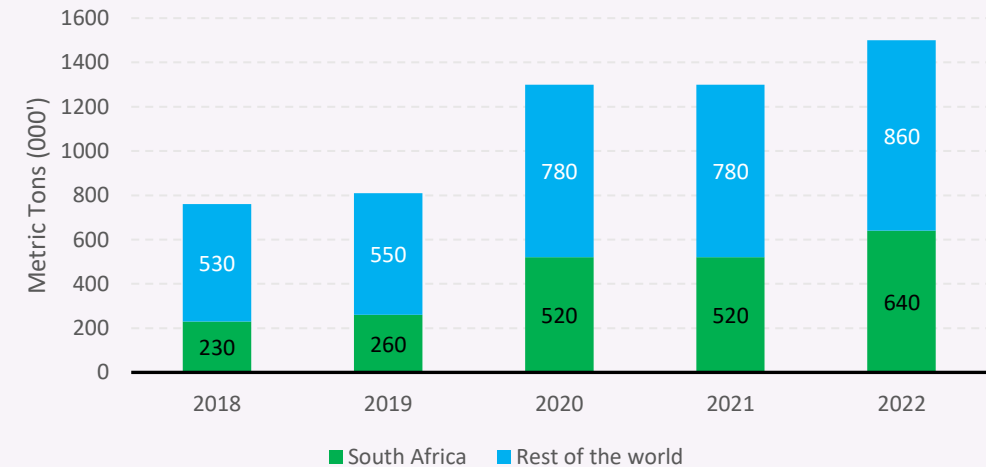
Source: UNCTAD calculations, based on data from the Knoema database, 2023.



(a) Cobalt Reserves



(b) Manganese Reserves



Production

Africa's comparative advantage:

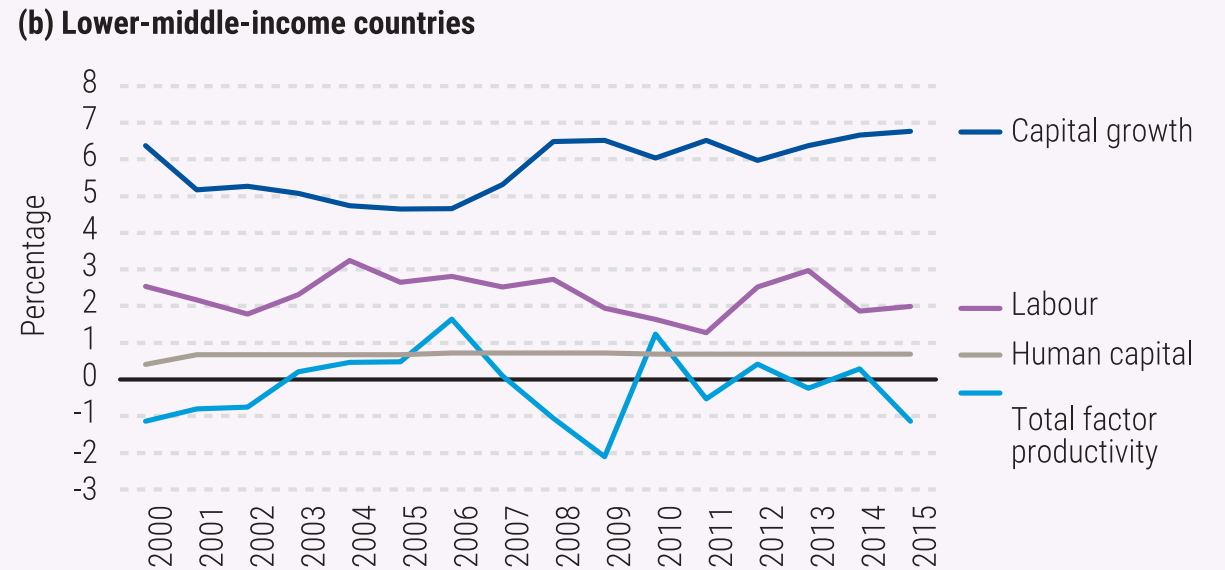
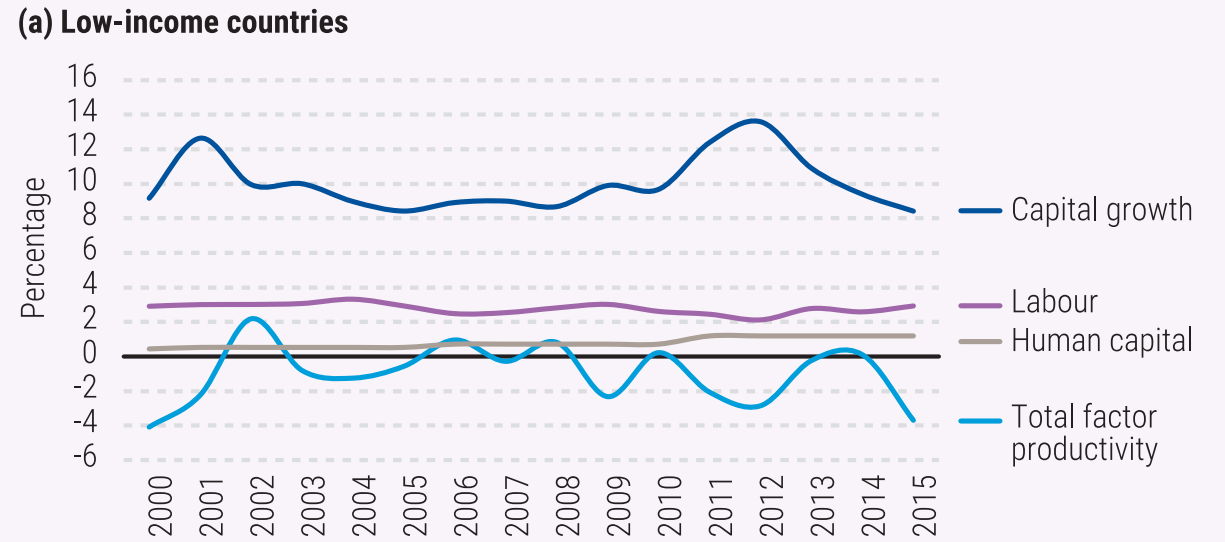
- Demographic make up!
- However, production technology is reliant on capital and labor, low on technology.
- For instance, the level of transformation of raw materials for high-skill technology-intensive manufactures is low, limiting opportunities for value capture.

that

Policy solutions:

- A recalibration of factor inputs, such as substituting labor for capital where possible, in addition to utilizing technology services in the production process, could increase productivity, providing employment opportunities.

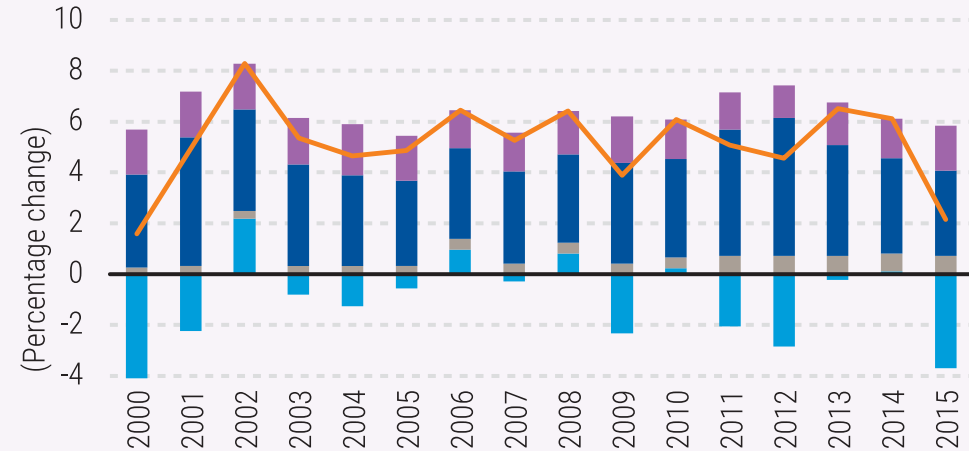
Growth rate of factor inputs



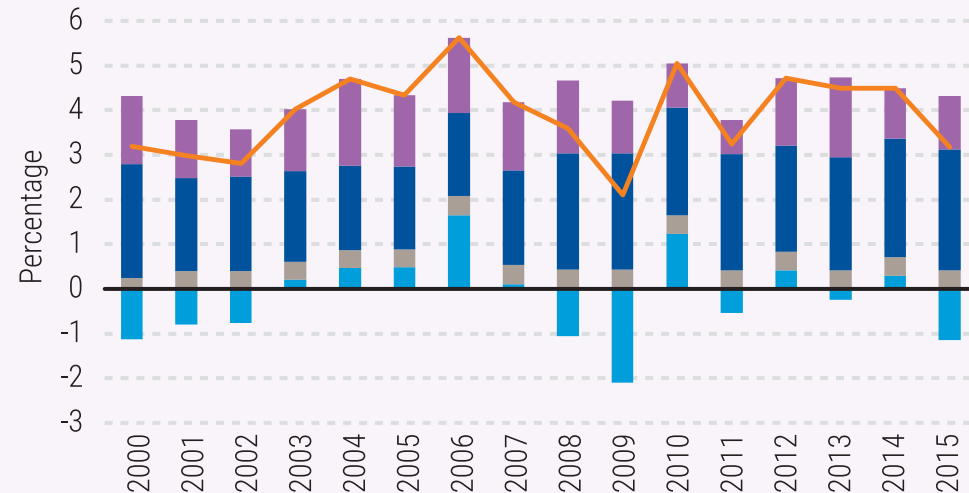
Source: UNCTAD calculations, based on data from the World Development Indicators database (World Bank).

Contribution to output growth

(a) Lower-income countries



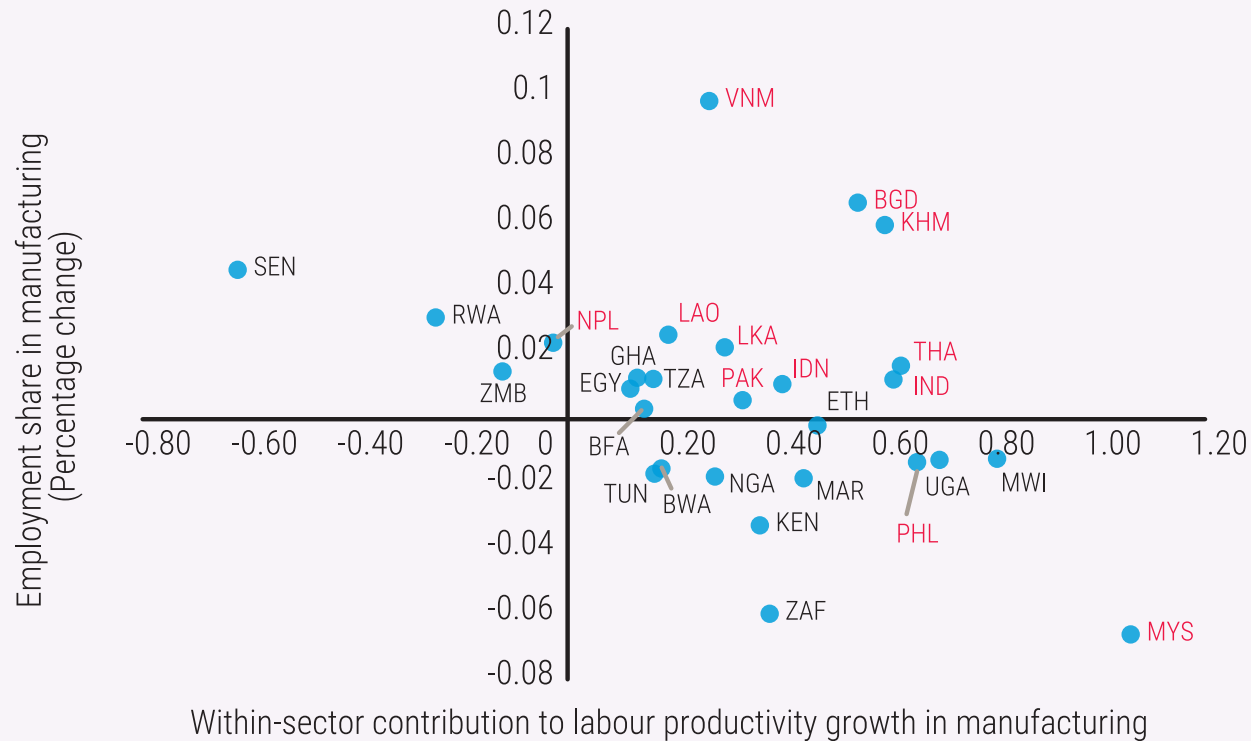
(b) Lower-middle-income countries



Source: UNCTAD calculations, based on data from the World Development Indicators database (World Bank).

■ Total factor productivity ■ Capital — Gross domestic product
■ Human capital ■ Labour

Labour productivity growth in selected African countries, 2001–2019



Source: UNCTAD calculations, based on data from the International Labour Organization and UNCTADstat databases.

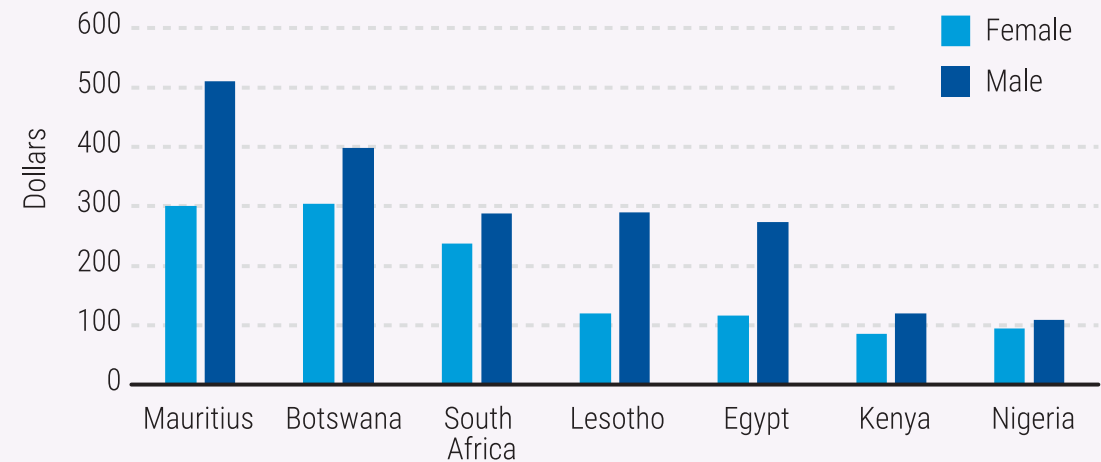
Average monthly earnings in selected African countries and by gender, 2019

Source: UNCTAD calculations, based on data from the ILOSTAT database (International Labour Organization).

(a) By selected countries



(b) By gender



Distribution

Hard Infrastructure the worst performing category in Africa logistics:

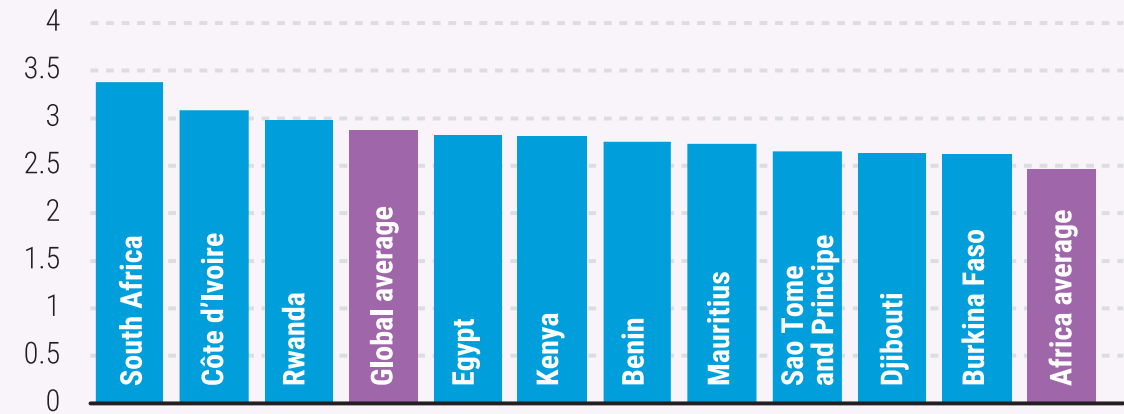
- South Africa, Cote d'Ivoire, Rwanda, Egypt and Kenya the top performing countries in infrastructure (LPI, 2018).
- Hard Infrastructure worst performing category, while areas with technology have improved – a sign that governments are investing in IT technology.

Key issues to note:

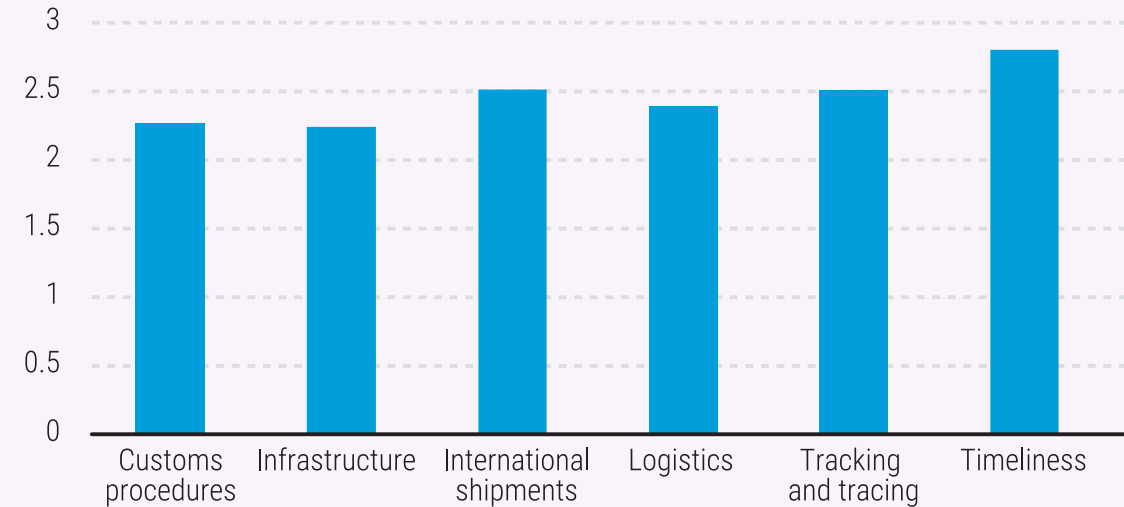
- African countries, through Programme for Infrastructure Development in Africa (PIDA), are investing in Infrastructure. E.g. Ports (Box 4)
- Demographic growth could bolster future growth potential for consumer markets in Africa, which are increasingly young, sophisticated, globalized and cost conscious.

Logistics performance index score, 2018

(a) Selected African countries



(b) Africa as a whole



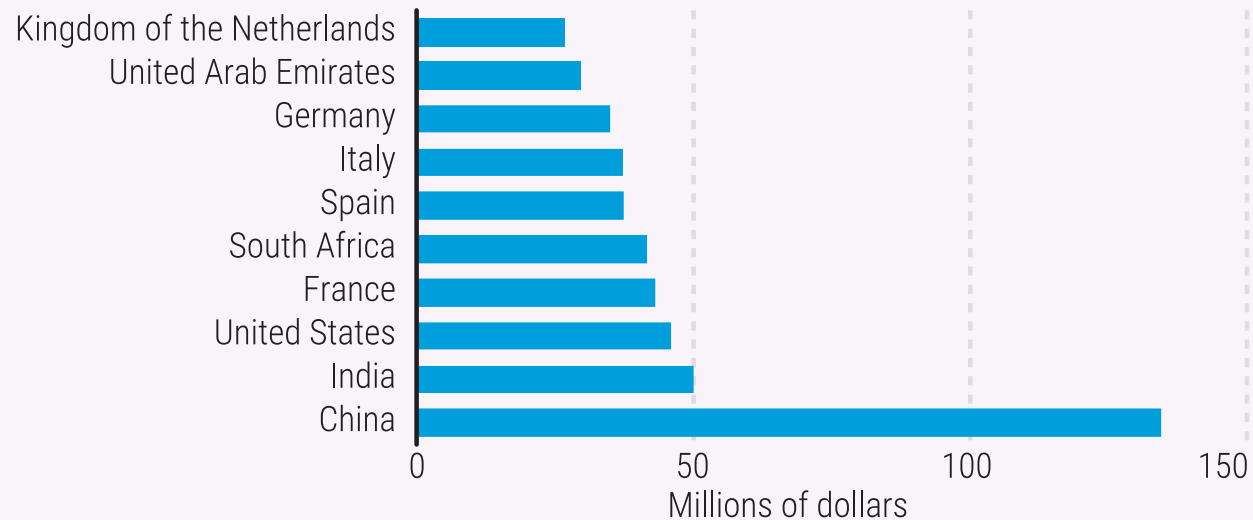
Source: UNCTAD calculations, based on the World Bank logistics performance index.

Trade Policies and Incentives

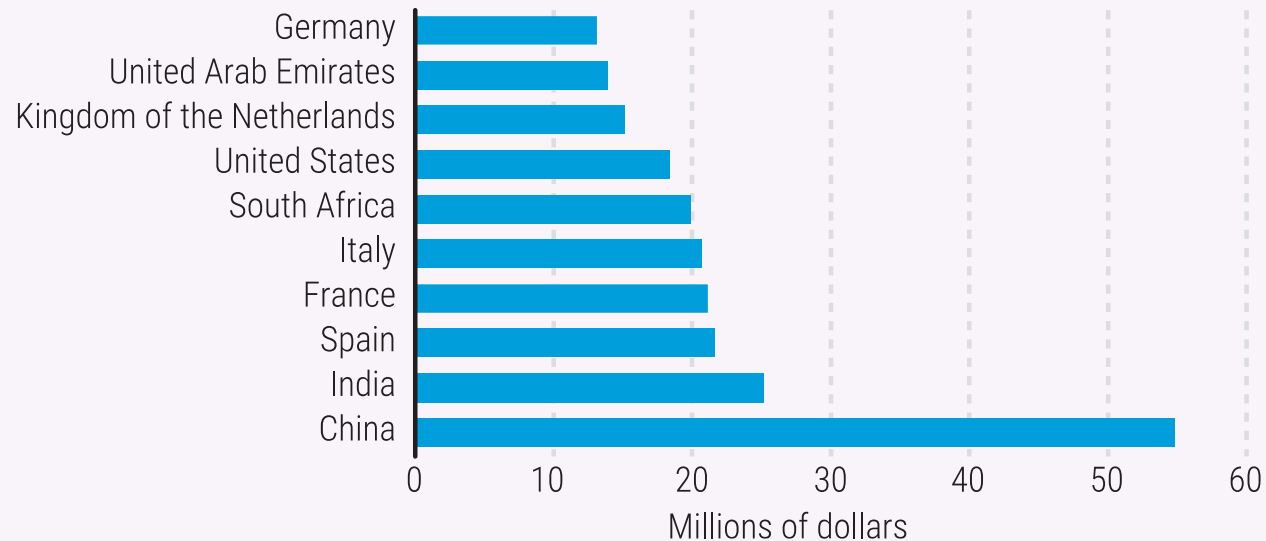
- Trade agreements such as AGOA have been shown to be beneficial for some African countries.
- In addition, South-South cooperation has improved immensely over the last two decades though initiatives such as BRICS and the Silk Road Economic Belt and 21st Century Maritime Silk Road (over 94% membership from Africa).
- Trade (2018 – 2020): China and India remain important trading partners, while the European Union is a key trading Partner for Africa (France, Germany, Italy and Spain).
- **AfCFTA** : likely to have immense benefits for Africa (SDG 1 and SDG 8). Also a *de facto* industrial policy (Country specific AfCFTA strategies), that is likely to strengthen green economic diversification.

Top trading partners of Africa, 2018–2020

Average imports



Average exports

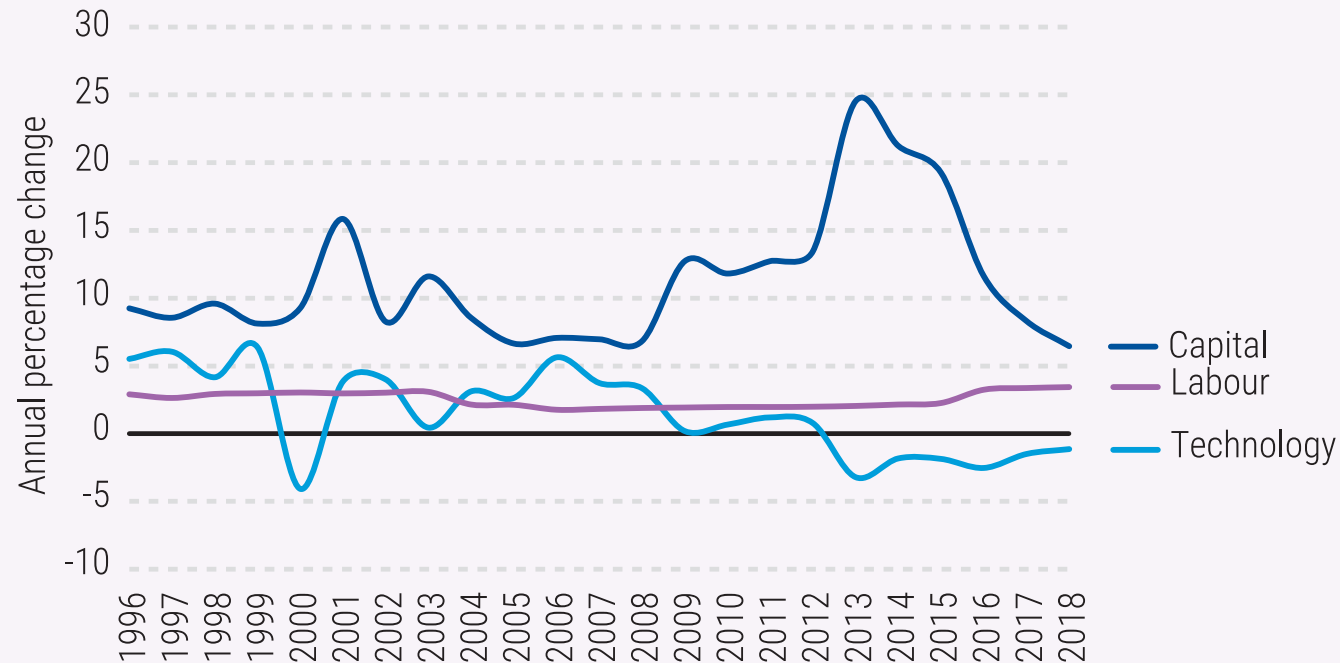


Source: UNCTAD calculations, based on data from the United Nations Comtrade and World Integrated Trade Solution databases.

In Focus: Mozambique

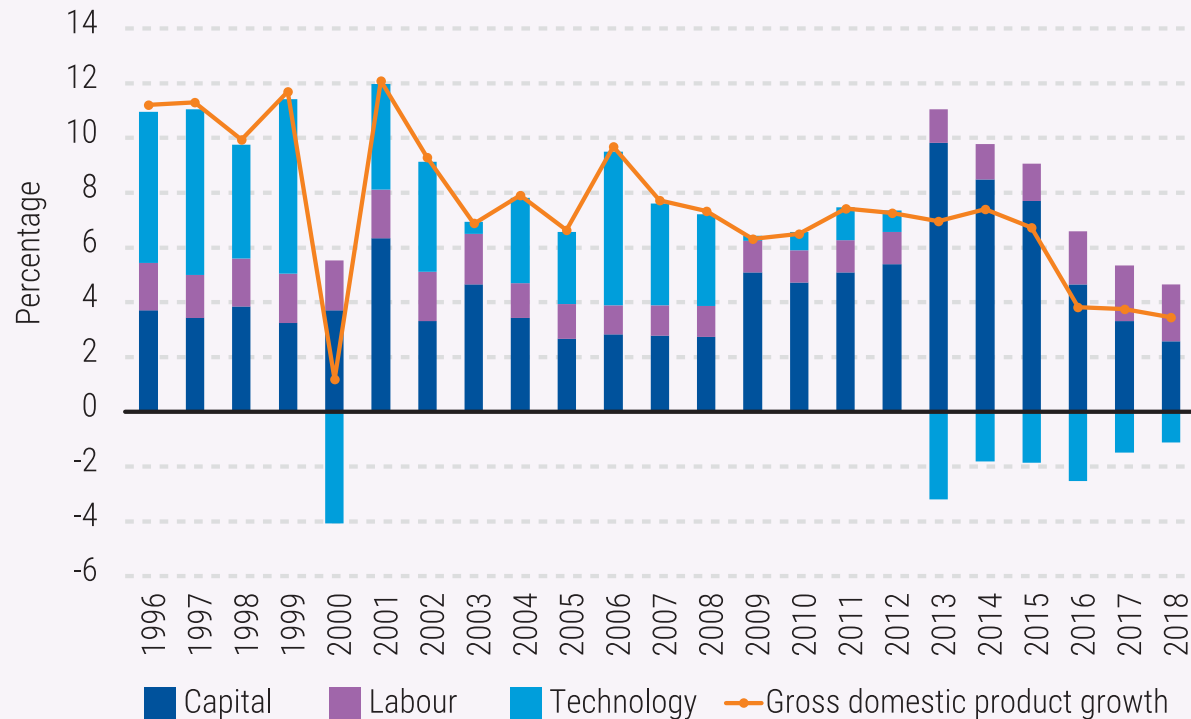
- As at 2022, Mozambique was one of the world's leading suppliers of graphite, producing 30,000 tons per year, with an estimated 25 million tons in reserves.
- At 2028 demand levels, indicates a capability to meet global needs for 12 years as a solo supplier of graphite.
- Graphite is used in battery anodes, with demand expected to exceed 2 million tons by 2028.
- Although graphite is not used in conventional vehicles, about 66.3 kilograms of the mineral are used in electric vehicles.
- *Since 2013, the Government of Mozambique has ramped up spending on infrastructure aimed at increasing the efficiency of inland infrastructure.*
- *The extensive and accessible coastline of Mozambique makes it an excellent trade gateway to the rest of Africa, as well as to Asia and Europe.*

Growth of factor inputs in Mozambique



Source: UNCTAD calculations, based on data from the World Development Indicators database (World Bank).

Contribution of factor inputs to growth in Mozambique



Source: UNCTAD calculations, based on data from the World Development Indicators database (World Bank).

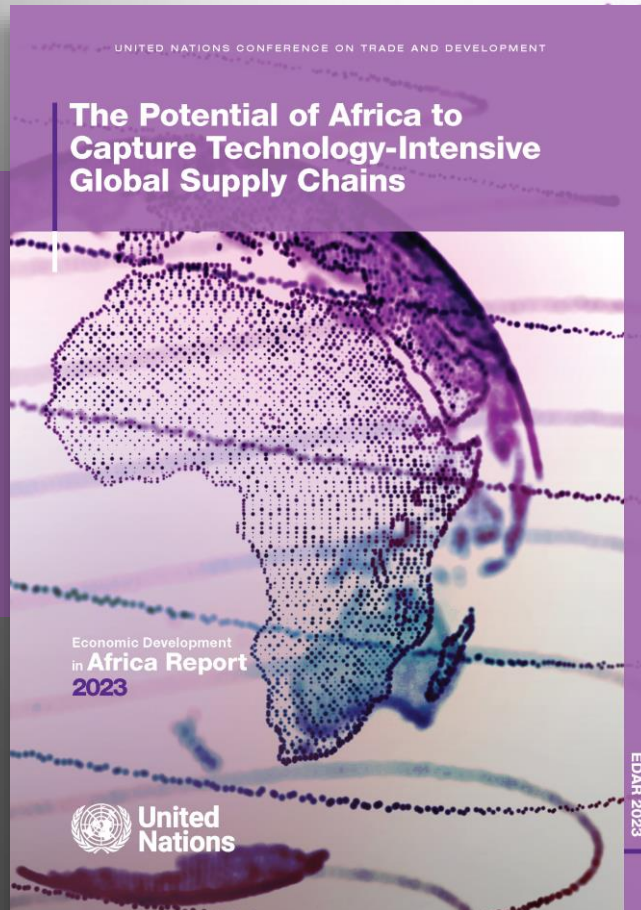


Conclusion

Conclusion

- Going forward, disruption of supply chains is going to become the norm, rather than the exception.
- Discourse on near or friend shoring of supply chains could provide an opportunity for African countries to diversify their economies.
- Factors inherent to the supply chain can be divided into three stages, namely, procurement, production and distribution. Within all three stages, we find that African countries provide opportunities for near and friend shoring.
- Trade plays an important role in Africa – Trade agreements and trade Partners matter.
- Finally, a key advantage for Africa as a supply chain frontier is its relatively low carbon emissions.

Economic Development in **Africa Report** **2023**



**THANK YOU
MERCI**



