

## An Expanding Trade Deficit among African Countries Vis-à-Vis China: Do Population and Governance Policies Matter?

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### Highlights

- The impact of Africa's population density interacting with governance on Sino-Africa trade flows is analysed.
- Africa's population and governance increase China's exports to Africa while they reduce China's imports from Africa.
- Balancing population-governance at a 10% annual rate could reduce Africa's trade deficit with China by 4% annually.
- Trade policy effectiveness in Africa is conditional on balancing population growth with governance.

### Executive Summary

Over the last two decades, Sino-African trade flows have substantially increased. However, there is no empirical evidence to inform policymakers on the factors behind such considerable trade flows to help them develop effective trade policies to be prepared for any effects that may result in any shock in China's production system. This policy brief examines whether population and governance play vital roles in shaping Sino-African trade flows. More generally, this policy brief shows that a concurrent increase in Africa's population density and governance increases the volume of China's exports to Africa. At the same time, it reduces the volume of China's imports from Africa. This policy brief suggests that the effectiveness of international trade policy reforms to ensure sustainable growth in Africa is conditional on implementing efficient mechanisms to balance population growth with improvement in good governance.

### The Context

Sino-African engagement increases African countries' economic growth through capital per-worker efficiency but causes stagnation in their technological progress (Habyarimana & Opoku, 2018). An annual increase in China's exports corresponds to a decrease in African exports (Giovannetti & Sanfilippo, 2016).

However, Sino-African trade has grown considerably, with China's exports to and imports from Africa growing at an annual rate of close to 16.56% and 18.07%, respectively, over the last 28 years (1993–2019). This considerable growth in Sino-African trade has allowed African countries to diversify intra-African exports but has constrained extra-African exports (Drummond & Liu, 2015).

Over this period, the annual growth rate of China's imports from Africa was more volatile than its exports to Africa. Trade statistics over the last 28 years indicate that China dominates this bilateral trade, with an annual average difference between China's exports to and imports from Africa of US\$ 11.47 billion.

### Problem

The Effects of trade system instability is a common socio-economic issue impeding sustainable growth in Africa. Over the past two decades, trade system instabilities in Africa have been caused by different non-tariff barriers imposed by developed countries. Such barriers led to a considerable shift in international trade partnerships between African countries and the rest of the world.

Consequently, China has benefited from such a shift. Noticeably, the growth of Sino-African trade flows is currently much higher regardless of the long distance between China and Africa compared to the distance between African countries and Europe, the United States, and Middle Eastern countries (Habyarimana, 2024). Notably, this trend has resulted in a considerable trade deficit among African countries vis-a-vis China, implying that a shock in China's production system would significantly affect the trade system in Africa more than a shock in the production system in other parts of the world.

However, there is no empirical evidence to inform policymakers and development practitioners on the factors behind these considerable trade deficits to help them develop effective international trade policies to prepare for the effects that may result in any shock in China's production system.

## Methodology

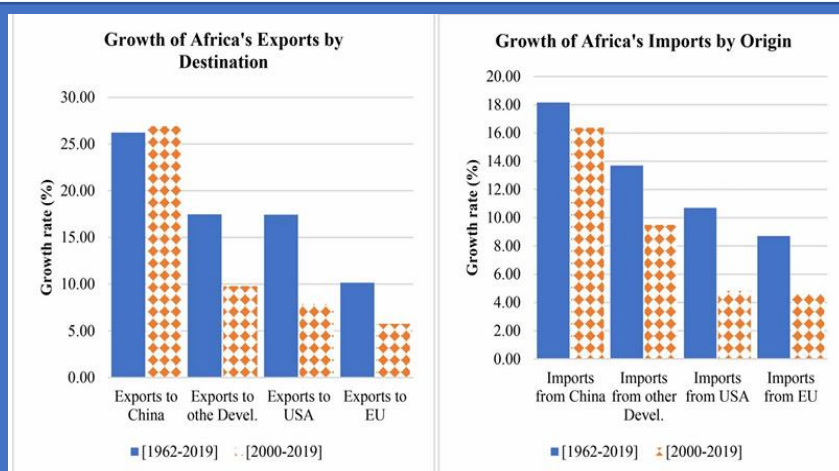
The study does not attempt to resolve the puzzle of persistently high distance effects on international trade, as previous studies have. However, it attempts to provide an alternative extension of the gravity model for analysing trade flows based on the interaction between population density and governance. It augments the gravity model with the interaction between population density and governance. It uses a balanced panel dataset of 51 African countries from 2000 to 2019 with 1,020 observations.

## Findings

Findings show that increasing Africa's population density by 1% increases the volume of China's exports to Africa by 2.03 percentage points while improving governance in Africa by one standard deviation decreases the volume of China's exports to Africa by 0.15 percentage points. Noticeably, changes in population density and governance in Africa do not significantly impact the volume of China's imports from Africa.

The coefficient on the interaction between Africa's population density and governance is between 0.036 and 0.058 for China's exports to Africa, depending on the control covariates included in the model. This coefficient is between -0.117 and -0.102 for China's imports from Africa. On average, increasing the interaction between Africa's population density and governance by 10% increases the volume of China's exports to Africa by 0.60 percentage points. At the same time, it decreases the volume of China's imports from Africa by 1.00 percentage points.

The estimated impact on Sino-African trade openness is between 0.026 and 0.036, which predicts that increasing the interaction between Africa's population density and governance by 10% improves Africa's openness with China relative to Africa's global openness by 0.30 percentage points. In other words, the polarisation of Sino-African trade flows shifts to China as Africa's population density and governance improve concurrently.



## Conclusion

African countries are experiencing a substantial trade deficit vis-a-vis China, and the deficit will continue to expand unless mechanisms are undertaken to consider the role of population growth and governance when designing international trade policies for Africa. As a result of an increase of 10% in the interaction between Africa's population density and governance, the volume of China's exports to Africa increases by 0.60 percentage points. In contrast, the volume of China's imports from Africa decreases by 1.00 percentage points.

This evidence was missing since Sino-Africa trade flows started to dominate trade flows between Africa and other parts of the world. However, this policy brief shows that population growth and good governance-based mechanisms are still open to improve the trade balance between African countries and China. A mechanism to balance population growth with improvement in good governance at the rate of 10% per year could reduce the trade deficit among African Countries vis-a-vis China by 4% per year. However, the short- and long-run outcomes would depend on African governments' population and governance policies—a choice, not destiny.

## Policy Recommendations

- To ensure short- and long-run trade system stability, African countries must implement efficient mechanisms to balance population density with improvement in good governance. The evidence shows that a concurrent improvement in Africa's population density and governance is a significant factor leading African countries to depend more on imports from China and reduce their exports to China.
- Given that improving Africa's population density together with governance leads to the polarisation of Sino–African trade flows, which causes the revaluation of the Chinese Yuan and devaluation of African countries' currencies, monetary policies to stabilise inflation and exchange rates in Africa must be based on balancing bilateral trade flows between Africa and China.
- Further, in the context of Africa, it is critical to design effective international trade policies without considering the role played by the effect of concurrent changes in population density and governance on global trade polarisation.

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## Acknowledgements

I am very grateful for the research grant from the University of Rwanda's WTO Chairs Programme, which enabled the development of this policy brief.

The policy brief was developed from a research paper titled «Sino–Africa Trade Flows: Effect of Interaction Between Africa's Population Density and Governance», published in May 2024 in *The Chinese Economy*, <https://doi.org/10.1080/10971475.2024.2346573>.

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