

Input-Output Analysis for African Economic Growth and Employment amid Trade Wars

Topic: Input-output Analysis for Policy Making (4)

Author: Eleanor Carys Jerram Keeble

Abstract: Input-Output Analysis for African Economic Growth and Employment amid Trade Wars
Africa's pursuit of sustainable growth stands at a crossroads of dependence on low value traditional primary products versus diversification in the uncertainties of a fast-changing global economy. This paper employs Input-Output (I-O) analysis to explore the policy options. It examines economic interdependencies across African economies, leveraging backward, and forward linkage assessments to determine optimal industrial strategies.

Traditional orthodoxies about the economic benefits of specialisation have trapped in poverty those African economies dependent on downstream commodities. Given global uncertainties, specialisation in one low value item is especially risky.

This paper assesses Africa's position within global value chains (GVCs) and identifies some of the continent's competitive advantages. It does so using IO models and integrating Trade in Value Added (TiVA) analysis, so that our conclusions are based on robust statistical data. Our findings shed light on the industrial specialisation paradox (Carbonell & Nass, 2020), in which nations juggle between exporting raw commodities and moving up the value chain through industrial upgrading.

Methodology and Scope

Using I-O tables, we identify sectors with the highest multiplier effects in terms of domestic value-added, employment, and industrial transformation (Ojaleye & Narayanan, 2022). Backward linkage analysis highlights industries that are highly integrated within domestic economies, fostering local supply chain development, while forward linkage analysis reveals sectors with high export potential. Trade disaggregation by partner country allows us to evaluate Africa's shifting trade patterns in response to US-China trade tensions and increased competition for African resources.

Key Findings and Policy Implications

1. Sectoral prioritisation – Manufacturing and agro-processing emerge as industries with strong linkage effects (Ferraz et al., 2021), that require targeted industrial policies to deepen local supply chains and reduce reliance on imported intermediate goods.
2. Trade resilience amid geopolitical uncertainty – Disruptions to global trade, particularly under a second Trump administration, along with China's expanding presence in Africa, underlines the need for diversified trade partnerships and regional value chain integration.
3. Employment-centric industrialisation – While natural resource exports remain dominant, their limited multiplier effect in terms of local job creation and exposure to commodity price shocks underscore the importance of expanding labour-intensive manufacturing and service sectors (Frankel, 2012).
4. Regional collaboration for added value – The findings indicate that African policy-makers should prioritise regional trade agreements (e.g., AfCFTA) to build intra-African supply chains, mitigating exposure to external trade disruptions (Carbonell & Nass, 2020).
5. Specialisation vs. diversification – Balancing specialisation (leveraging comparative advantages) and diversification (reducing economic fragilities) is essential (Boschma, 2016). The TiVA analysis provides insights into optimising economic complexity and industrial activities while managing risk exposure (Ferraz et al., 2021).

Conclusion

Africa's optimal growth trajectory lies in strategic specialisation with industrial policy interventions to foster downstream processing, expand employment-intensive industries, and reinforce regional economic networks. In the face of geopolitical shifts and heightened protectionism by traditional partners, Africa must proactively shape its trade and industrial strategies to ensure equitable and

sustainable development.

This study provides a robust analytical foundation for policymakers seeking to harness input-output linkages, trade diversification, and industrial upgrading as mechanisms for inclusive growth and employment generation.