

# Taking Stock of Africa's Economic Transformation: Rethinking Sources of Productivity Growth

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Industrial Policy for Africa Conference

Nairobi

Feb 17, 2026

# Introduction

- Most African countries are growing—e.g., in 2023 at least 15 African economies grew by over 5% (AfDB, 2024).
- Africa's recent growth has largely occurred without broad industrialization; growth is mainly from structural change toward services.
- Modern manufacturing has expanded little and absorbs limited labor despite high productivity, as rising skill-intensity makes it a weak match for abundant low-skilled labor.
- Some African policymakers still view manufacturing as the only possible engine of transformation.
  - ▶ **Ethiopia:** State-led industrialization
  - ▶ **Ghana:** One district one factory (1D1F)

# Introduction

- However, current patterns of structural change suggest that there may be benefits if governments focus on a broader set of sectors.
- To understand the transformations in Africa and policy direction, we begin by taking stock of Africa's transformation.
  - ▶ Using GGDC/UNU-WIDER Economic Transformation Database
  - ▶ We supplement with data from WDI/ILO and sectoral value added and employment in exports (Mensah and de Vries, 2024)
- Across all our data sources, the picture that emerges is that structural transformation in Africa is **services-led**.

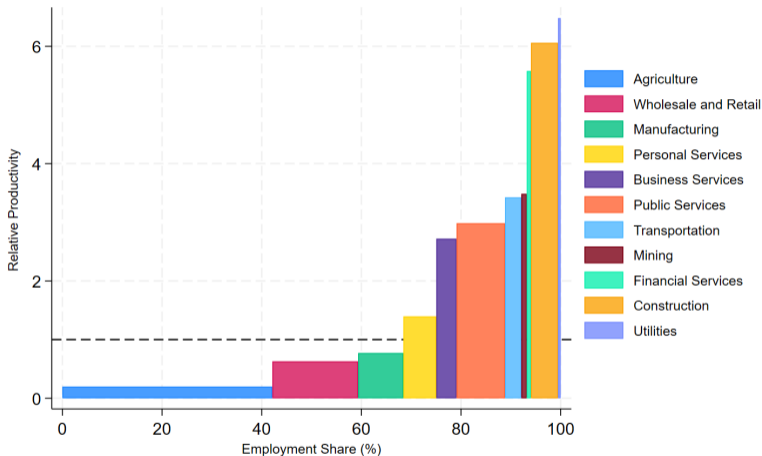
# Introduction

- We consider the implications for strategies to increase productivity growth in Africa.
- Review **export-oriented industrialization** (historical role) and why it may be unwise as the **centerpiece**.
- Consider feasibility of **services-led development**; optimistic recent work (Fan et al. 2023; Nayyar et al. 2021).
- Broader, **non-sector specific** transformations (Gollin & Kaboski 2024): **within-sector** changes, informal → formal, household enterprises → organized production, home → market production.
- Policy: distinguish **structural constraints** vs **policy distortions**; address education, infrastructure, health to shift the feasible frontier.

# Contributions

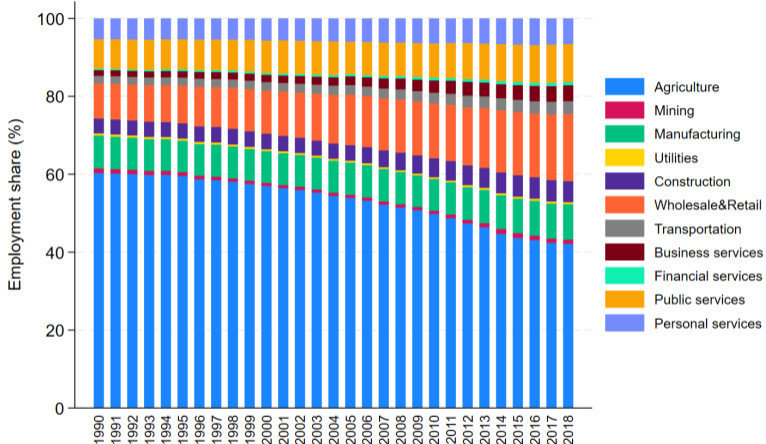
- 1 We provide the most accurate and comprehensive disaggregated evidence on structural change in Africa, emphasizing the **centrality of services**.
- 2 We situate these findings in a broader discussion of **constraints and distortions**, highlighting poverty, infrastructure, skills, and health.
- 3 We connect these insights to a plausible vision for Africa that moves beyond **manufacturing-centric** models and enables productivity growth **wherever** it emerges.

# Relative sectoral productivity and employment shares in African countries



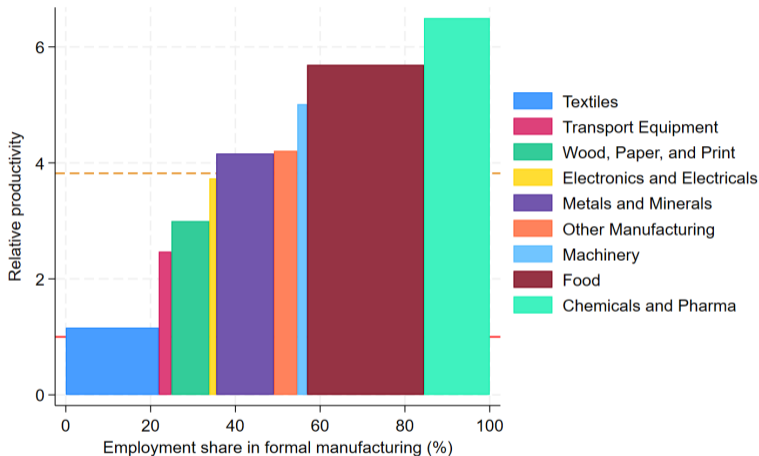
*Note:* Computed from ETD (Kruse et al., 2023) and Productivity Level Database (Inklaar et al., 2024).

# Sectoral employment share in African countries



Note: Illustration using the ETD (Kruse et al., 2023).

# Figure 3: Productivity differences in African manufacturing industries



*Note:* Illustration using the ETD and its 2-digit manufacturing database (see Kruse et al., 2023).

# The last big evidence

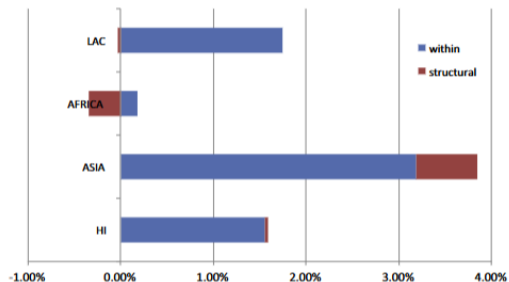


Figure 17a. *Decomposition of productivity growth by country group, 1990–1999 (unweighted).*

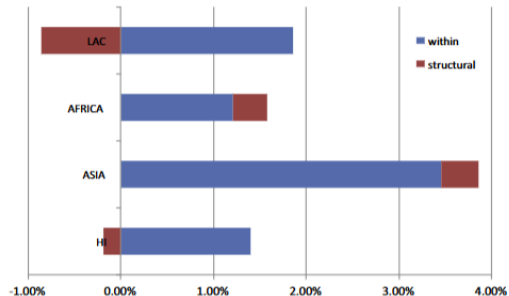
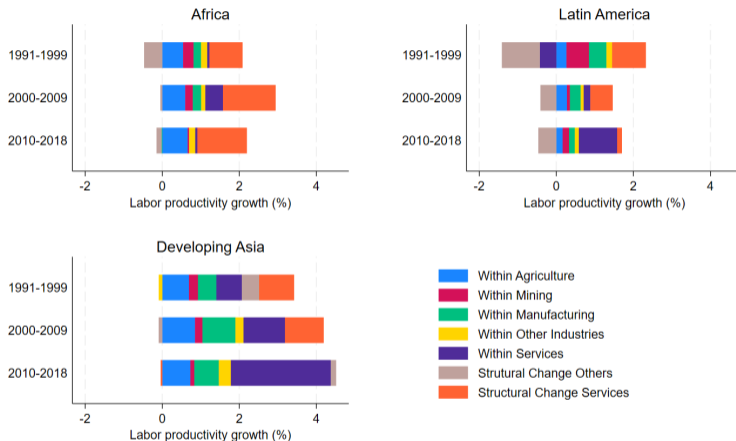


Figure 17c. *Decomposition of productivity growth by country group, after 2000 (unweighted).*

Source: McMillan et al. 2014

# Structural change in Africa and other developing regions

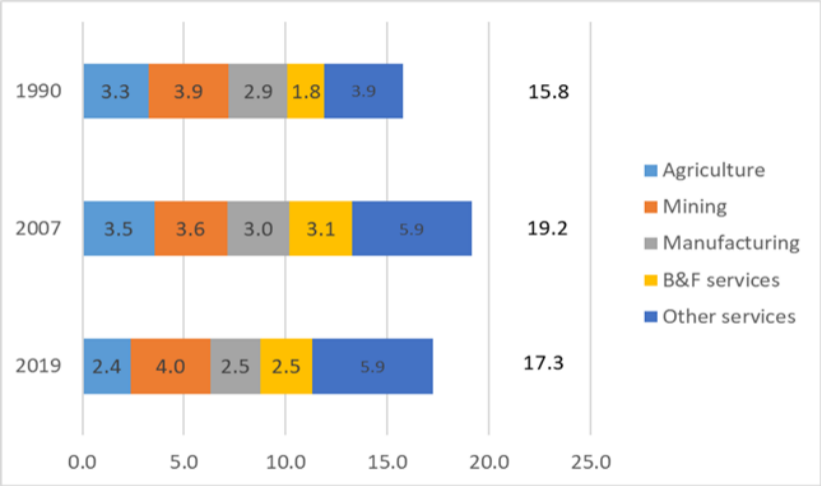


Note: Authors' calculation using the ETD (Kruse et al., 2023).

# Rapid growth in income and jobs embodied in services exports: New evidence

- Demand matters: Goldberg & Reed (2023) highlight foreign demand and integrated markets as constraints/drivers of structural change
- Small market size makes external demand key; regional integration (AfCFTA) helps relax the market-size constraint.
- Since the 1990s, African countries opened to regional and global markets: has market access shifted exports, productivity, and jobs?
- Mensah & de Vries (2024) use the ASUT Database and the hypothetical extraction method (Los et al., 2016) to measure domestic value added and jobs embodied in exports; results show striking sectoral changes over time.

# Sectoral domestic value added embodied in exports



Note: Reproduced from Mensah and de Vries (2024).

## Number of jobs embodied in exports

	Jobs induced by foreign demand (thousands)			Share (in total employment)		
	1990	2007	2019	1990	2007	2019
Agriculture	6,406	10,430	7,858	6.3%	6.6%	3.2%
Mining	1,895	2,715	2,392	1.9%	1.7%	1.0%
Manufacturing	4,077	7,746	8,643	4.0%	4.9%	3.5%
B&F services	106	425	1,106	0.1%	0.3%	0.4%
Other services	1,146	3,027	6,545	1.1%	1.9%	2.6%
Total	13,628	24,343	26,544	13.3%	15.5%	10.7%

*Note:* Reproduced from Mensah and de Vries (2024).

A new development strategy for Africa?

# Change in Academic Thinking

- Academic thinking has changed:
- Rodrik (2011): mistake to ignore the imperative of building a manufacturing sector.
- Rodrik (2022): the bulk of jobs will come from services; industrial policy for services.
- However, policy making in Africa has not evolved to match this change in academic thinking.
- Why? Historical development success stories.

# Manufacturing and a changing world

- **Advantages of manufacturing**

- ▶ High productivity potential, scale economies, tradability, strong linkages, and absorption of low-skilled labor.

- **Industries without smokestacks (Newfarmer et al, 2018)**

- ▶ Share characteristics traditionally associated with manufacturing.

- **The world is changing**

- ▶ This path is harder to emulate today; manufacturing labor shares are peaking at ever-lower levels (Rodrik, 2022).
- ▶ Technology makes capital a stronger substitute for low-skill labor, weakening the comparative advantage of labor-abundant countries.
- ▶ Reversal of globalization complicates export-oriented strategies; global value chains are being rebuilt around geopolitics (Shivakumar et al., 2022).

## Can services drive productivity growth?

- Growth and structural transformation without industrialization in Africa (Gollin et al., 2016).
- New evidence on service-sector productivity (Nayyar et al., 2021; Fan et al., 2023; Hamilton et al., 2025).
- Limited evidence that manufacturing is crucial for long-run growth; manufacturing productivity not systematically faster than agriculture/services (Herrendorf, Rogerson & Valentinyi, 2022).
- Services-led development as a serious strategy: World Bank “At your service?” (Nayyar et al., 2021).

## Stylized facts: why services could fit Africa (Nayyar et al., 2021)

- Services firms are smaller on average than manufacturing firms (see also Bento & Restuccia, 2021).
- Size matters less for productivity: small service firms can be as productive as large ones (OECD; Nayyar et al., 2021).
- Physical capital plays a smaller role in services relative to manufacturing.
- Productivity growth within services is similar to that in manufacturing (Nayyar et al., 2021).
- Implication: promising where labor is abundant, capital is expensive, and small firms dominate.

## Evidence, open questions, and policy relevance

- Services typology: high-skill tradables (ICT/finance), low-skill consumer services (wholesale/retail, accommodation/food), and social services (education/health).
- India: strong within-sector productivity growth in consumer services (Fan et al., 2023); method separates demand vs productivity (Fan, Peters & Zilibotti, 2023).
- Africa: services can be more productive than manufacturing (Côte d'Ivoire evidence; Foltz & Jing, 2023).
- Key concerns: foreign exchange needs (jobs/productivity sectors may differ from FX-earning sectors), distributional impacts, and complementary public investments (infrastructure/urbanization).
- Tradable services still matter: tourism, ICT, business/finance (Nayyar et al., 2021; World Bank, 2023).

# The role of non-sector specific transformations

- Sectoral changes are only one part of broader structural change; sectoral change may be a *response* to other transformations (e.g., urban vs rural amenities: health, education, water, electricity).
- Beyond sectors (Gollin & Kaboski, 2024): urbanization and growing spatial integration; localized autarkic production → integrated domestic markets, economies of scale, specialization.
- Production transforms: home → market; micro firms → larger businesses; self-employment → hierarchies; informality → formalization; changing social norms (e.g., women's labor participation).
- Policy space is broader than industrialization/exports: reduce frictions and misallocation; enable land, labor, capital, talent to move into productive uses.

## Structural barriers to transformation (1/2)

- Structural transformation is underway and services-led, but modest within-sector productivity growth reflects deeper structural constraints
- Policy distortions (overvalued exchange rates, trade restrictions) are secondary to structural constraints (Hausmann, Rodrik & Velasco, 2008);
- Decades of “dismantling distortions” (World Bank, 1981; Easterly, 2005; Page, 2012; Konte et al., 2022) delivered limited transformation; focus on structural (and political) constraints (Dercon, 2022).
- Foundational barriers: limited infrastructure, human capital, and productive capacity ⇒ weaker productivity growth and quality job creation.
- Extreme poverty limits domestic demand: non-tradable services need local purchasing power; poverty keeps activities at subsistence levels (Rodrik, 2016).

## Structural barriers to transformation (2/2)

- Lack of access to electricity constrains productivity in modern activities and services (Foster & Steinbuks, 2009) and affects women's labor participation (Dinkelman, 2011).
- Poor health directly undermines labor productivity and cognitive development (Weil, 2007); health improvements have large returns (Miguel & Kremer, 2004; Baird et al., 2016; Lucas, 2010).
- Lack of literacy and numeracy constrain possibilities: low effective schooling limits upgrading in services and adoption of technologies (Herrendorf & Schoellman, 2018; Pritchett, 2013; Nunoo et al., 2024).
- Implication: African-led policy to relax structural constraints and raise productivity within and across sectors.

## Conclusion (1/2)

- Expanded/updated dataset (incl. previously uncounted activities) revisits Africa's structural transformation over 35 years.
- Evidence confirms limited industrialization alongside rapid expansion of employment in non-tradable services; patterns extend beyond value added/employment to international trade data.
- Input–output analysis: domestic value added and jobs embodied in exports are declining in manufacturing and rising (from a low base) in services.
- With reasonably robust growth in many countries, and new evidence on productivity potential of non-tradable services (Fan, Peters & Zilibotti, 2023), development strategies should reframe the role of manufacturing and services.

## Conclusion (2/2)

- Any strategy must confront structural barriers; modest productivity growth in expanding services reflects insufficient foundational capacity.
- Reconsider foundational investments: electricity access, health systems, basic education, rural income generation (examples: Ethiopia, Kenya, Rwanda).
- Context-specific approaches: different entry points depending on state capacity; sequencing/prioritization remain open research questions.
- Rethink international partnerships: beyond policy reform/market liberalization toward long-term investments aligned with African-led priorities; trade/investment may need to adapt to a services-led path.
- New framework: deepen domestic and regional market integration (Industries without Smokestacks; Newfarmer et al., 2018)—link rural–urban economies, lower internal trade costs, build connecting infrastructure; research agenda on integration, firm behavior, labor reallocation, long-run growth.